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APPENDIX TABLE OF CONTENTS

- I. A. FIELD WORK PLAN
- B. LABORATORY WORK PLAN
- II. ENTRAINMENT WORK PLAN
- III. IMPINGEMENT WORK PLAN
- IV. WATER QUALITY
 - A. TWICE-MONTHLY WATER CHEMISTRY (20 and 60-FT STATIONS):
 SELECTED PARAMETERS
 - 1. Chlorophyll a
 - 2. Dissolved Oxygen
 - 3. Ammonia Nitrogen
 - 4. Nitrate Nitrogen
 - 5. Total Solids
 - 6. Temperature
 - 7. Total Suspended Solids
 - 8. Silicate
 - B. MONTHLY WATER CHEMISTRY (20 and 40-FT STATIONS):
 SELECTED PARAMETERS
 - 1. Calcium
 - 2. Dissolved Oxygen
 - 3. Sodium
 - 4. Sulfate
 - C. WATER CHEMISTRY PROGRAM (25 and 45-FT STATIONS):
 SELECTED PARAMETERS
 - 1. Calcium
 - 2. Chloride
 - 3. Dissolved Oxygen
 - 4. Sodium
 - 5. Ammonia Nitrogen
 - 6. Nitrate Nitrogen
 - 7. Sulfate
 - 8. Total Suspended Solids
 - 9. Total Dissolved Solids
 - 10. Total Solids
 - 11. Silicate
 - 12. Organic Nitrogen

D. COMPOSITE PROGRAMS: SELECTED STATIONS

1. Specific Conductance
2. Dissolved Oxygen and Percent Saturation at Selected Depth Contours
3. Silicate
4. Total Dissolved Solids

V. PLANKTON

A. PHYTOPLANKTON

1. Depth of Whole Water Phytoplankton Collections at the 50, 25, and 1% Light Transmittance Levels at the NMPE-40-ft Station
2. Abundance of Selected Taxa in Whole Water Collections
 - a. Bacillariophyceae
 - b. Chlorophyceae
 - c. Chrysophyceae
 - d. Cryptophyceae
 - e. Dinophyceae
 - f. Euglenophyceae
 - g. Myxophyceae
 - h. Total Phytoplankton
3. Biovolume of Selected Taxa in Whole Water Collections
 - a. Bacillariophyceae
 - b. Chlorophyceae
 - c. Chrysophyceae
 - d. Cryptophyceae
 - e. Dinophyceae
 - f. Euglenophyceae
 - g. Myxophyceae
 - h. Total Phytoplankton
4. Abundance of Selected Species in Whole Water Collections (Data Presented by Taxon)
 - a. Bacillariophyceae
 - Asterionella formosa
 - Cyclotella atomus
 - Melosira italica var. subarctica
 - b. Chlorophyceae
 - Ankistrodesmus falcatus

- c. Chrysophyceae
 - Chrysochromulina parva
 - d. Cryptophyceae
 - Katablepharis ovalis
 - Rhodomonas minuta var. nannoplanctica
 - e. Myxophyceae
 - Coelosphaerium kuetzingianum
 - Coelosphaerium naegelianum
 - Chroococcus dispersus var. minor
 - Oscillatoria limnetica
5. Biovolume of Selected Species in Whole Water Collections
- a. Bacillariophyceae
 - Asterionella formosa
 - Cyclotella atomus
 - Melosira italica var. subarctica
 - b. Chlorophyceae
 - Ankistrodesmus falcatus
 - c. Chrysophyceae
 - Chrysochromulina parva
 - d. Cryptophyceae
 - Katablepharis ovalis
 - Rhodomonas minuta var. nannoplanctica
 - e. Myxophyceae
 - Coelosphaerium kuetzingianum
 - Coelosphaerium naegelianum
 - Chroococcus dispersus var. minor
 - Oscillatoria limnetica
6. Chlorophyll a Concentration in Whole Water Collections
7. Phaeopigment Concentration in Whole Water Collections
8. Primary Production After 4-hour Incubation Period

B. ZOOPLANKTON

1. Abundance of Selected Taxa

- a. Calanoida
- b. Cyclopoida
- c. Copepoda nauplii
- d. Copepoda
- e. Cladocera
- f. Protozoa
- g. Rotifera
- h. Total Zooplankton

2. Abundance of Selected Species (Data Presented by Taxon)

a. Cladocera

- Bosmina longirostris
- Daphnia retrocurva

b. Rotifera

- Asplanchna priodonta
- Kellicottia longispina
- Keratella cochlearis
- Keratella crassa
- Keratella earlinae
- Keratella quadrata
- Ploesoma truncatum
- Polyarthra major
- Polyarthra vulgaris
- Synchaeta lackowitziana
- Synchaeta pectinata
- Synchaeta stylata

C. MACROZOOPLANKTON AND ICHTHYOPLANKTON

1. MACROZOOPLANTON

a. Abundance of Selected Species in Day Collections

- Chaoborus
- Diptera
- Hydroida
- Leptodora kindtii
- Gammarus fasciatus

b. Abundance of Selected Species in Night Collections

- Gammarus fasciatus

2. ICHTHYOPLANKTON AND FISH EGGS

a. Larval Abundance of Selected Species in Day Collections

- Alewife
- Johnny darter
- Mottled sculpin
- Rainbow smelt
- White perch
- Yellow perch

b. Larval Abundance of Selected Species in Night Collections

- Alewife
- Johnny darter
- Mottled sculpin
- Rainbow smelt
- Threespine stickleback
- White perch
- Yellow perch

c. Egg Abundance of Selected Species

- Alewife: Day
Night
- Rainbow smelt: Day and Night Collections
- White perch: Day and Night Collections

VI. BENTHOS

B. NATURAL HABITATS

1. Organic Carbon in Bottom Sediments at Selected 40-ft Benthic Stations
2. Grain Size Analysis at 40-ft Benthic Stations
3. Qualitative Description of Substrata of Benthic Samples: April, June, August, October, December Collections
4. Diver Observation of Sediment Accumulation Near Buoy Periphyton Anchors
5. Abundance and Biomass of Selected Taxa of Macroinvertebrates
 - a. Annelida
 - Oligochaeta
 - Polychaeta

b. Arthropoda

- Acari
- Amphipoda (Crustacea)
- Decapoda (Crustacea)
- Diptera (Insecta)
- Ephemeroptera (Insecta)
- Isopoda (Crustacea)
- Mysidacea (Crustacea)
- Ostracoda (Crustacea)
- Trichoptera (Insecta)

c. Aschelminthes

- Nematoda

d. Bryozoa

e. Coelenterata

- Hydrozoa

f. Mollusca

- Bivalvia
- Gastropoda

g. Platyhelminthes

- Turbellaria

h. Rhynchocoela

6. Abundance of Selected Species of Macroinvertebrates

a. Annelida: Oligochaeta

- Nais bretscheri

b. Annelida: Polychaeta

- Manuyunkia speciosa

c. Arthropoda: Amphipoda

- Gammarus fasciatus
- Pontoporeia affinis

d. Coelenterata: Hydrozoa

- Cordylophora lacustris
- Hydra americana

e. Mollusca: Gastropoda

- Amnicola limnosa
- Valvata perdepressa

f. Total Macroinvertebrates

7. Abundance of Larvae and Fish Eggs in Benthic Collections
8. Biomass of Cladophora Collected with Benthos Samples

C. ARTIFICIAL SUBSTRATES

1. Buoy Periphyton

- a. Percent Light Transmittance Values
- b. Chlorophyll a Concentrations
- c. Phaeopigment Concentrations
- d. Biomass
- e. Abundance of Selected Taxa of Phytoperiphyton

- Bacillariophyceae
- Chlorophyta
- Chrysophyta
- Euglenophyceae
- Myxophyta

f. Abundance of Selected Species of Phytoperiphyton

- Bacillariophyceae
 - Diatoma elongatum
 - Diatoma vulgare
 - Fragilaria vaucheriae
 - Gomphonema olivaceum
 - Nitzschia dissipata
 - Synedra cyclopus
- Myxophyta
 - Lyngbya diguetii

- g. Abundance of Selected Taxa of Zooperiphyton.
by Month: Ciliata, Suctoria, and Rotifera

2. Bottom Periphyton

- a. Percent Light Transmittance Values
- b. Biomass
- c. Abundance and Percent Composition of Selected
Taxa of Phytoperiphyton by Month: Bacillariophyceae,
Chlorophyta, Chrysophyta, Dinophyta, Euglenophyta,
and Myxophyta
- d. Abundance of Selected Species of Phytoperiphyton
- Bacillariophyceae
 - Asterionella formosa
 - Diatoma elongatum
 - Fragilaria capucina
 - Fragilaria vaucheriae
 - Gomphonema olivaceum
 - Navicula cryptocephala
 - Navicula tripunctata
 - Nitzschia dissipata
 - Synedra cyclopum
 - Synedra ulna
 - Chlorophyta
 - Pediastrum boryanum
 - Scenedesmus obliquus
 - Scenedesmus quadricauda
 - Myxophyta
 - Lyngbya digueti
 - Phormidium minnesotense
- e. Abundance and Percent Composition of Selected
Taxa of Zooperiphyton by Month: Ciliata,
Suctoria, and Rotifera

VII. NEKTON

A. SEINE COLLECTIONS

1. Alewife
2. Brown trout
3. Coho salmon
4. Emerald shiner
5. Gizzard shad
6. Rainbow smelt
7. Spottail shiner
8. Threespine stickleback
9. White perch
10. Yellow perch

B. BOTTOM TRAWL COLLECTIONS: OTTER AND STANDARD YANKEE TRAWL

1. Alewife
2. Brown trout
3. Gizzard shad
4. Johnny darter
5. Rainbow smelt
6. Smallmouth bass
7. Spottail shiner
8. Threespine stickleback
9. Trout perch
10. White perch
11. Yellow perch

C. ABUNDANCE OF SELECTED SPECIES IN YANKEE TRAWL COLLECTIONS

1. Abundance (No./Acre) of Selected Species in Special Yankee Trawl/Otter Trawl Program: Alewife, Johnny darter, Spottail shiner, Rainbow smelt, and Threespine stickleback
2. Abundance (No./1000 m³) of Selected Species in Special Yankee Trawl/Otter Trawl Program: Alewife, Johnny darter, Spottail shiner, Rainbow smelt, and Threespine stickleback

D. SELECTED DAY/NIGHT GILL NET COLLECTIONS

1. Master Time Sheet for Selected Gill Net Collections
2. Abundance
 - a. 15-ft Depth Contour
 - Alewife
 - Brown trout
 - Coho salmon
 - Rainbow smelt
 - Smallmouth bass
 - Spottail shiner
 - Trout-perch
 - White perch
 - White sucker
 - Yellow perch

b. 40 ft Depth Contour

- Alewife
- Brown trout
- Coho salmon
- Rainbow smelt
- Smallmouth bass
- Spottail shiner
- Trout-perch
- White perch
- White sucker
- Yellow perch

3. Biomass

a. 15-ft Depth Contour

- Alewife
- Brown trout
- Coho salmon
- Rainbow smelt
- Smallmouth bass
- Spottail shiner
- Trout-perch
- White perch
- White sucker
- Yellow perch

b. 40-ft Depth Contour

- Alewife
- Brown trout
- Coho salmon
- Rainbow smelt
- Smallmouth bass
- Spottail shiner
- Trout-perch
- White perch
- White sucker
- Yellow perch

E. REPRODUCTIVE CYCLE: SELECTED SPECIES: EXPERIMENTAL VS.
CONTROL SITES

1. Smallmouth bass

F. FECUNDITY DATA FOR SELECTED SPECIES: EXPERIMENTAL VS.
CONTROL SITES

1. Smallmouth bass
2. White perch
3. Yellow perch

G. GUT CONTENTS OF SELECTED SPECIES

1. White perch

H. LENGTH FREQUENCY FOR SELECTED SPECIES

1. Yellow perch
2. Smallmouth bass

VIII. ENTRAINMENT

A. JAMES A. FITZPATRICK NUCLEAR POWER PLANT (FITZ) PHYTOPLANKTON

1. Abundance and Biovolume of Phytoplankton in Surface
Whole Water Collections: Discharge Aftbay

a. Major Taxa

- Bacillariophyceae
- Chlorophyceae
- Chrysophyceae
- Cryptophyceae
- Dinophyceae
- Euglenophyceae
- Myxophyceae
- Total Phytoplankton

b. Selected Species

- BACILLARIOPHYCEAE

Cyclotella atomus
Melosira binderana
Stephanodiscus hantzschii
S. niagarae
S. astrea var. minutula
Asterionella formosa
Tabellaria fenestrata

- CHLOROPHYCEAE

Eudorina elegans
Ankistrodesmus falcatus
Coelastrum microporum

- CRYPTOPHYCEAE

Cryptomonas erosa
Katablepharis ovalis
Rhodomonas minuta var. nannoplanctica

- DINOPHYCEAE

Peridinium cinctum

- EUGLENOPHYCEAE

Euglena gasterosteus

- MYXOPHYCEAE

Anacystis aeruginosa
Chroococcus dispersus var. minor
Coelosphaerium kuetzingianum
C. naegelianum
Oscillatoria limnetica

2. Chlorophyll a concentrations: Intake and Discharge
Bays, Simulations, and Lake Zones: Day/Night
Collections

- a. Immediate Analysis
- b. 7-hour Incubation Period
- c. 24-hour Incubation Period
- d. 48-hour Incubation Period
- e. 72-hour Incubation Period

3. Phaeopigment Concentrations: Intake and Discharge
Bays, Simulations, and Lake Zones: Day/Night
Collections

- a. Immediate Analysis

4. Primary Production: Intake and Discharge Bays,
Simulations, and Lake Zones: Day/Night Collections

- a. 4-hour Incubation Period: Day Collections
- b. 7-hour Incubation Period: Day/Night Collections
- c. 24-hour Incubation Period: Day/Night Collections
- d. 48-hour Incubation Period: Day/Night Collections
- e. 72-hour Incubation Period: Day/Night Collections

B. FITZ ZOOPLANKTON

1. Abundance of Zooplankton: Discharge Aftbay
2. Mortality of Selected Taxa Observed in In-plant Viability Studies: Intake and Discharge Bays, Simulations: Day/Night Collections
 - a. Arthropoda: Copepoda
 - Calanoida
 - Cyclopoida
 - Copepoda
 - b. Arthropoda: Cladocera
 - c. Protozoa
 - Ciliata
 - Suctoria
 - Total Protozoa
 - d. Rotifera
 - e. Total Zooplankton
3. Mortality of Selected Taxa Observed in Lake Viability Studies: 3 F and 2 F Plume Isotherm
 - a. Arthropoda: Copepoda
 - Calanoida
 - Cyclopoida
 - Copepoda
 - b. Arthropoda: Cladocera
 - c. Protozoa
 - Ciliata
 - Suctoria
 - Total Protozoa
 - d. Rotifera
 - e. Total Zooplankton

4. Mortality of Selected Species Observed in In-plant Viability Studies

a. Cladocera

- Bosmina longirostris

b. Copepoda: Cyclopoida

- Tropocyclops prasinus mexicanus

c. Rotifera

- Keratella crassa
- Keratella quadrata
- Polyarthra dolichoptera
- Polyarthra major
- Synchaeta lackowitziana
- Synchaeta pectinata
- Trichocera multicroinis

5. Mortality of Selected Species Observed in Lake Viability Studies: 3 F and 2 F Plume Isotherm

a. Cladocera

- Bosmina longirostris

b. Copepoda: Cyclopoida

- Tropocyclops prasinus mexicanus

c. Rotifera

- Keratella crassa
- Keratella quadrata
- Polyarthra dolichoptera
- Polyarthra major
- Synchaeta lackowitziana
- Synchaeta pectinata
- Trichocera multicroinis

C. FITZ MACROZOOPLANKTON

1. Abundance of Gammarus fasciatus: Intake Forebay

2. Mortality of Gammarus fasciatus from Day/Night Collections: Intake and Discharge Bays, Simulations, (3/2 F Plume Isotherm)

D. FITZ ICHTHYOPLANKTON

1. Abundance of Selected Species: Intake Forebay

a. Larvae

- Alewife
- Rainbow smelt
- Yellow perch

b. Fish Eggs

- Alewife
- Rainbow smelt

2. Mortality of Larval Fish from Day/Night Collections:
Intake and Discharge Bays, Simulations, 3/2 F Plume Isotherm

a. Pro-larvae

- Alewife
- Carp
- Johnny darter
- Rainbow smelt
- White perch
- Total Ichthyoplankton

b. Post-larvae

- Alewife
- American burbot
- Johnny darter
- Mottled sculpin
- Rainbow smelt
- White perch
- Total Ichthyoplankton

c. Juvenile

- Alewife
- Rainbow smelt
- Total Ichthyoplankton

E. NINE MILE POINT NUCLEAR STATION UNIT 1: ICHTHYOPLANKTON

1. Abundance of Selected Species of Larvae: Intake Forebay

- a. Alewife
- b. Rainbow smelt
- c. White perch
- d. Yellow perch

2. Abundance of Selected Species of Fish Eggs: Intake Forebay

- a. Alewife
- b. Rainbow smelt
- c. White perch
- d. Yellow perch

IX. IMPINGEMENT

B. JAMES A. FITZPATRICK NUCLEAR POWER PLANT

1. Length Frequency

- a. Smallmouth bass
- b. Threespine stickleback
- c. Yellow perch

C. NINE MILE POINT NUCLEAR STATION UNIT 1

1. Length Frequency

- a. Smallmouth bass
- b. Threespine stickleback
- c. Yellow perch

APPENDIX IA

FIELD WORK PLAN - LAKE COLLECTIONS

1976 NINE MILE POINT AQUATIC ECOLOGY STUDIES FIELD WORK PLAN

A. GENERAL ECOLOGICAL

1. Fish - Trawl

(i) Gear

- trawl nets
- two 400-ft tow lines
- two 200-ft color-coded tow lines
- four bottom doors (2 port, 2 starboard)
- two bell timers
- two spare cod ends
- two snatch blocks
- one 4-liter Van Dorn sampler
- one hand-held thermometer
- one Whitney thermistor

- Flat Otter Trawl:

A flat otter trawl is used, of 2-inch stretched mesh in the wings and body and 1-1/2-inch stretched mesh in the cod end, which is lined with 1/2-inch stretched mesh. The net has a 30-ft footrope, a 27-ft headrope, and measures 23 ft from the middle of the headrope to the end of the cod end. The net mouth opening is 6 ft measured from the headrope to the footrope. The doors are 32 x 16 inches with hydrofoils. The approximate tow line lengths for the specified sampling depths are listed below:

| <u>BOTTOM OTTER TRAWL</u> | <u>TOW LINE LENGTH</u> |
|---------------------------|------------------------|
| 60 ft depth | 200 ft |
| 40 ft depth | 150 ft |
| 20 ft depth | 100 ft |

- Standard Yankee Trawl:

A standard Yankee trawl is used, of 3-1/2-inch stretched mesh in the wings, 2-1/2 inch stretched mesh in the body, and 1/2-inch stretched mesh in the cod-end. The net has a 51-ft footrope, a 39-ft headrope, and a mouth opening of 8 x 20 ft. The doors are 2-1/2 x 5 ft and each weighs 125 lbs.

(ii) Method of Collection

Tows are made parallel to shore along the specified depth contour. A bottom tow of approximately 15 minutes is conducted in an east-to-west direction at each sampling site. All fish collected are identified and enumerated on the boat and preserved in 10% buffered formalin. The presence of tags is noted in the field. All crayfish are counted.

(iii) Temperature

Surface and bottom temperatures are recorded at the termination of each tow.

(iv) Sampling Frequency*

Twice monthly (approximately 15 days apart) day and night collections beginning in April and continuing through

*All sampling frequency is contingent on weather conditions.

December. Night trawls commence two hours after sunset, and day trawls two hours after sunrise. Transects are sampled in a random sequence on each sampling period.

(v) Sampling Locations (Figure IA-1)

Standard Yankee trawl: the 40 and 60 ft depth contours of the NMPE transect from 29 June through December.

Flat otter trawl: the 20 ft depth contour of NMPE, NMPP/FITZ, and NMPW transects and the 40 and 60 ft depth contours of NMPP/FITZ and NMPW transects from April through December and the 40 ft and 60 ft contours of NMPE transect from 9 April to 24 June.

2. Fish - Trawl Comparison

(i) Objective of Study

To compare the fishing efficiency (i.e., species diversity and abundance) of the two types of trawls.

(ii) Gear

- Flat Otter trawl
- Standard Yankee trawl

(iii) Method of Collection

Three bottom tows, each of 15 minutes duration, are made parallel to shore in an east-to-west direction along the

FISH SAMPLING STATIONS NINE MILE POINT VICINITY - 1976

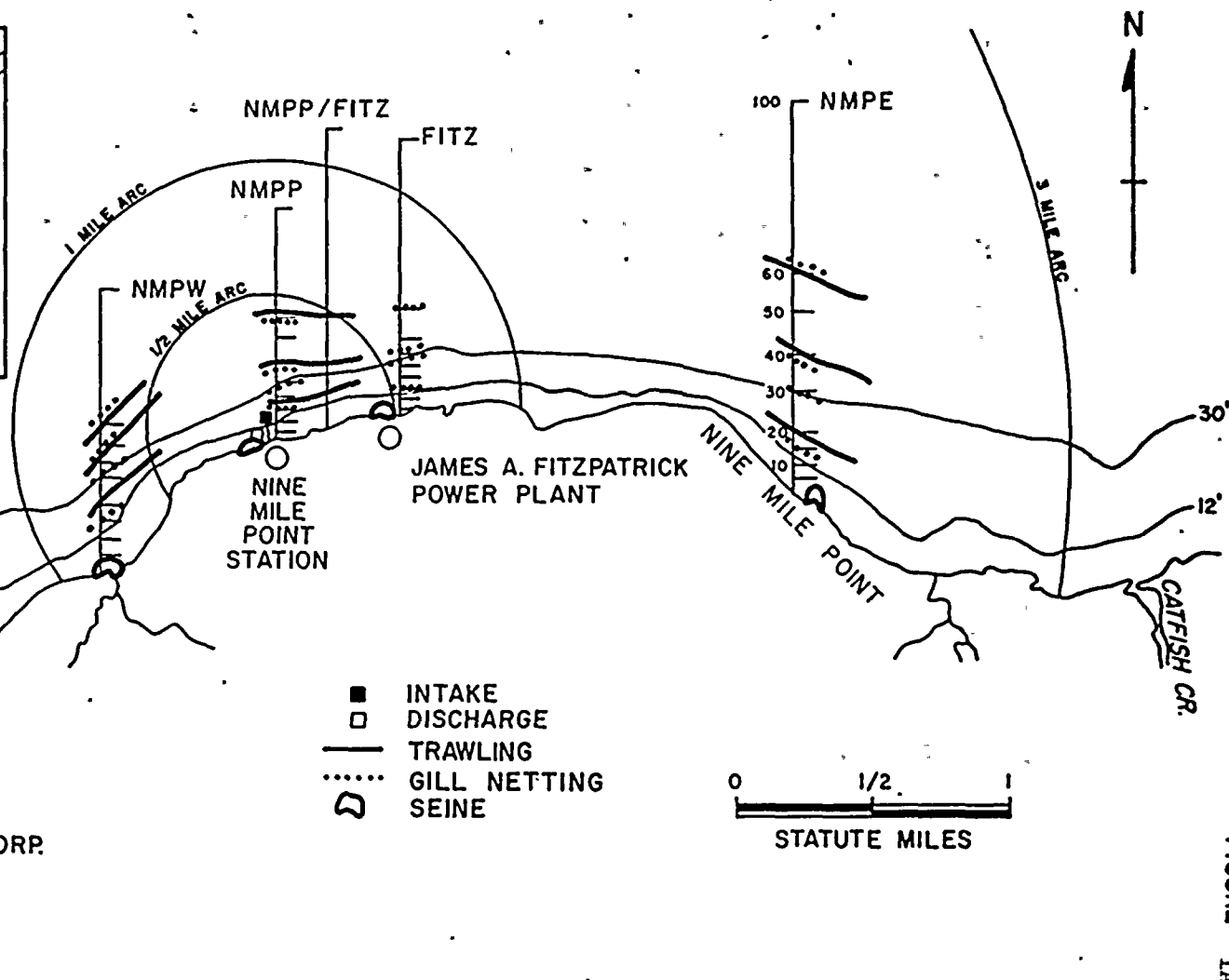
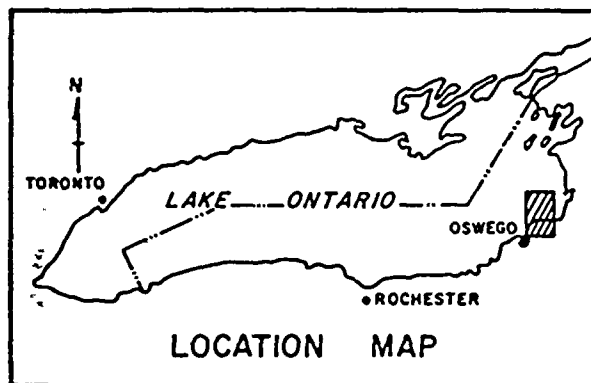


FIGURE 1A-1

specified depth contour; the order of the collection of the samples is determined with a random number table. The two types of gear are simultaneously towed at each sampling site. All fish collected are identified and enumerated in the field, preserved in 10% buffered formalin, and returned to the laboratory for secondary analysis of length and weight.

(iv) Sampling Frequency

Once for both day and night collections in one month; June. Day trawls commence two hours after sunrise, and night trawls commence two hours after sunset.

(v) Sampling Locations. (Figure IA-1)

The 40 and 60 ft depth contours of NMPE transect.

3. Fish - Seine

(i) Gear

- A 50 x 8 ft soft bag seine of 1/2-inch stretched mesh;
the bag measures 8 x 8 x 8 ft
- two 100-ft bridle lines
- one hand-held thermometer

(ii) Method of Collection

The two crew members remain approximately 50 ft apart throughout the operation; one sample is collected at each station. A seine haul is considered successful only if the

net does not hang up during the haul and if fish are not observed escaping under or around the net. All fish collected are identified and enumerated in the field, and preserved in 10% buffered formalin. All crayfish are counted.

(iii) Temperature

Surface temperatures are recorded 100 ft offshore of the seine haul site on each collection.

(iv) Sampling Frequency

Twice monthly (approximately 15 days apart) during daylight hours from April through December. The order of the stations sampled is determined at random.

(v) Sampling Locations (Figure IA-1)

The NMPW site is located at the shoreline of NMPW transect, 10 yds west of a creek. The NMPP site is located approximately 10 yds west of the storm drain discharge pipe which is located west of the Nine Mile Point plant building. The FITZ site is located west of the James A. FitzPatrick plant on the pebble beach, the only beach in the area. The NMPE site is at the shoreline of the NMPE transect, located at the base of Shore Oaks Road.

4. Fish - Gill Net

(i) Gear

- 16 bottom gill nets
- four surface gill nets
- 32 bottom anchors
- eight surface anchors
- eight 15-ft bottom floats
- eight 30-ft bottom floats
- eight 40-ft surface floats
- eight 40-ft bottom floats
- eight 60-ft bottom floats
- one 4-liter Van Dorn sampler
- one Whitney thermistor
- one hand-held thermometer

A 150 x 8 ft experimental multifilament gill net is used, constructed with six 25-ft panels having 1/2, 3/4, 1, 1-1/2, 2, and 2-1/2 inch bar mesh. Four bottom and one floating nets are used for each transect.

(ii) Method of Collection

All nets are set parallel to shore, and carefully extended to their maximum length. A bottom net only is set at the 15, 30, and 60 ft depth contours, with both a surface and bottom net at the 40 ft depth contour (a surface net for night collection, and a bottom net for day collections). All fish collected are identified and enumerated by panel size, and subsequently composited and placed in plastic bag-lined barrels to which 10% buffered formalin is added. All crayfish are counted.

(iii) Temperature

Surface and bottom temperatures are recorded at each station when the nets are set and after each harvest.

(iv) Sampling Frequency

Twice monthly for a scheduled 48-hr period from April through December. The nets are harvested at sequential day/night intervals (approximately 12 hrs).

(v) Sampling Locations (Figure IA-1)

The 15, 30, 40, and 60 ft depth contours of NMPW, NMPP, FITZ, and NMPE transects.

5. Fish - Gut Analysis Collection

(i) Gear

- four bottom gill nets
- eight bottom anchors
- four 15-ft bottom can floats
- four 15-ft bottom flag floats
- two coolers
- rock salt, ice
- one 4-liter Van Dorn sampler
- one Whitney thermistor
- one hand-held thermometer

Experimental gill nets are used which are 150 x 8 ft with six 25-ft panels, three panels each of 2 x 2 inch and 2-1/2 x 2-1/2 inch bar mesh.

(ii) Method of Collection

Bottom gill nets are set one hour before sunrise and harvested twice at two-hr intervals. If the morning set does not yield 25 fish/species/transect, the nets are set again at sunset and harvested as above. A maximum of four efforts may be conducted per scheduled sampling period. Species selected for gut analysis are white perch, yellow perch, and smallmouth bass. Immediately after removal from the nets, all white perch, yellow perch, and smallmouth bass are laid flat in a container containing a solution of ice water and rock salt for anesthetization, and then transported to the laboratory. Other species of fish collected in the nets are either released if they are alive or put in bags and discarded when the crew returns to the laboratory.

(iii) Temperature

Surface and bottom temperatures are recorded at each station when the nets are set and after each harvest.

(iv) Sampling Frequency

Fish for gut analysis are collected once during August.

(v) Sampling Locations (Figure IA-1)

The 15 ft depth contour of the NMPW, NMPP, FITZ, and NMPE transects; no fish of the selected species were collected from gill nets set at NMPW-15 ft station.

6. Benthos

(i) Gear

- 11 hp Midland Mid-Whirl[®] impellerless vacuum pump
- collection screen cone (420 μ mesh)
- metal ring (1/2-m diameter) with float attached
- No. 40 U.S.G.S. geological sieve (420 μ)
- 10 32-oz Mason jars per transect, plus extra jars
- 20 1-qt plastic containers with lids (grain size analysis; in June and October only)
- six 1-liter water-tight plastic containers with snap-on lids (Organic carbon analysis; alternate months)
- two coolers, ice
- one 4-liter Van Dorn sampler
- one Whitney thermistor
- one hand-held thermometer

(ii) Macrofauna Collection

The boat anchors at each sampling site and the hose is lowered a few feet below the water surface and the pump primed and started (run at high idle for 1-2 minutes to purge the intake hose of trapped air). After purging, the pump is set at low idle for collection.

All non-Cladophora benthic samples collected during a month are taken from the same substrate type if available, and this is consistent among collection dates per station. If a specific substrate type is not available, the substrate type present is sampled. A non-Cladophora area is defined as an area containing Cladophora less than 1 inch thick throughout the sample area. The area within the ring is thoroughly vacuumed to a depth of approximately 5 cm by several circular sweeps with the hose. Two samples are taken in the same type substrate whenever possible.

The substrate type sampled is determined by the diver's visual inspection. Sediments are described according to the following definitions (Folk, 1968):

| | | |
|---------|---------|-------------|
| Boulder | >256 | - 4096 mm |
| Cobble | >64 | - 256 mm |
| Sand | >0.0625 | - 2.00 mm |
| Silt | >0.0039 | - 0.0625 mm |

Excess water is removed from the sample using a No. 40 U.S. geological sieve (420 μ). The sample is transferred to a one-qt Mason sample jar to which ten drops of menthol (relaxant) are added; the jars are stored on ice and returned to the laboratory.

(iii) Bottom Sediment Collection (for grain size analysis)

Divers scoop a minimum of 200 grams of sediment into a one-qt plastic container, which is stored on ice for transport to the laboratory; no replicate is taken. A sediment sample is collected at only the 40 ft stations.

(iv) Bottom Sediment Collection (for organic carbon determination)

Scuba divers hand scoop approximately two 200-g samples of sediment at each sampling location into 1-quart plastic containers. The samples are placed on ice for transportation to the laboratory.

(v) Temperature

Surface and bottom temperatures are recorded at each benthic collection site at the time of sampling.

(vi) Sediment Accumulation

Divers record substrate elevation to the nearest cm by measuring the staffs with metric rulers.

(vii) Sampling Frequency

The non-Cladophora benthic community is sampled during April, June, August, October, and December. Sampling dates are approximately 60 days apart.

Bottom sediment for grain size analyses is sampled during June and October.

Sediment accumulation is determined monthly from April through December on the same date as buoy periphyton collections.

Sediment samples for organic carbon analysis are collected during April, June, August, October and December in conjunction with the macrofauna collections.

(viii) Sampling Locations (Figure IA-2)

The non-Cladophora benthic community (macrofauna) samples are collected at the 10, 20, 30, 40, and 60 ft depths along NMPW, NMPP, FITZ, and NMPE transects. The sample for grain size analysis is collected within the same immediate area as the non-Cladophora benthic sample at the 40 ft depth stations; and the organic carbon sample is collected at the 40 ft depth contour of NMPW, FITZ, and NMPE transects. Sediment accumulation is recorded from staffs installed at the buoy periphyton stations (NMPW-40 ft, NMPP/FITZ-40 ft, and NMPE-40 ft).

7. Water Chemistry

a. Water Quality - 48 Parameters

(i) Gear

- two PVC Van Dorn samplers (8.1 liters)
- one Whitney thermistor
- five 1-gallon bottles
- five 1-liter polyethylene bottles (TKN, SiO_2)
- five sterilized 300-ml glass BOD bottles (coliforms)
- five 500-ml glass bottles (phenols)
- ten 300-ml glass BOD bottles (DO and BOD)
- two coolers, ice
- one hand held thermometer
- four 1/2 gallon polyethelene bottles (radioactivity)

(ii) Method of Collection

The boat is anchored at each sampling location. A water sample is collected 0.5 m below the surface and 0.5 m off

BENTHOS SAMPLING STATIONS NINE MILE POINT VICINITY - 1976

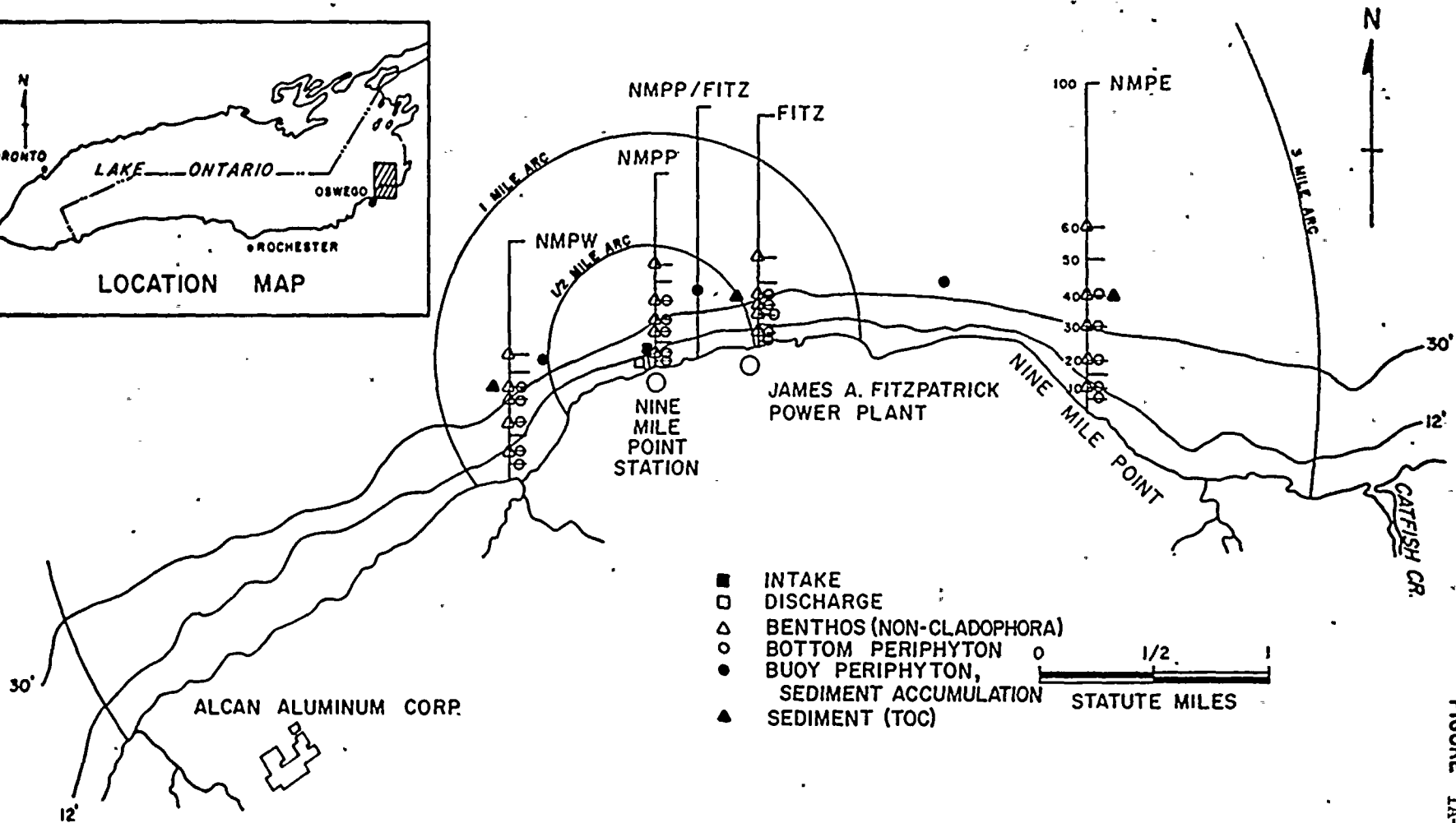
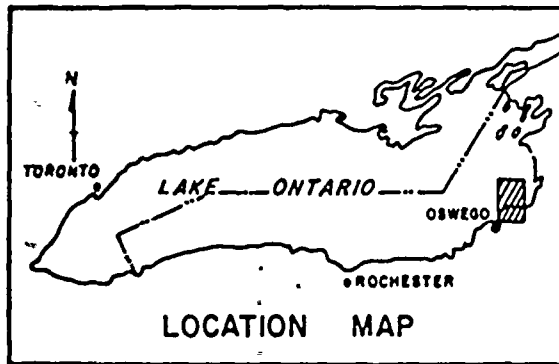


FIGURE 1A-2

the bottom utilizing the PVC Van Dorn sampler. Each sample is dispensed into one 1-gallon and one 1-liter polyethylene container, one 500-ml glass bottle, and one 300-ml sterilized glass bottle. Samples are cooled below ambient lake temperature.

Surface and bottom temperatures are determined in situ at each sampling location utilizing a Whitney thermistor or a hand held ASTM thermometer.

In addition, two 300-ml glass BOD bottles are filled, allowing each bottle to overflow two or three times its volume. One of the two bottles is fixed with DO reagents in the field. The BOD bottles are placed in a plastic bag for transport to the laboratory. Unfixed BOD bottles are placed in an incubator (20°C) upon return to the laboratory for BOD₅ determination.

Half-gallon water samples are collected with Van Dorn samplers from 0.5 m below surface and 0.5 m above the bottom and sent to Teledyne Isotopes for gross alpha, beta, gamma, and tritium determination.

(iii) Sampling Frequency

Once monthly, from April through December.

(iv) Sampling Locations (Figure IA-3)

The 25 and 45 ft depth contours along the NMPP/FITZ transect.

WATER QUALITY SAMPLING STATIONS NINE MILE POINT VICINITY - 1976

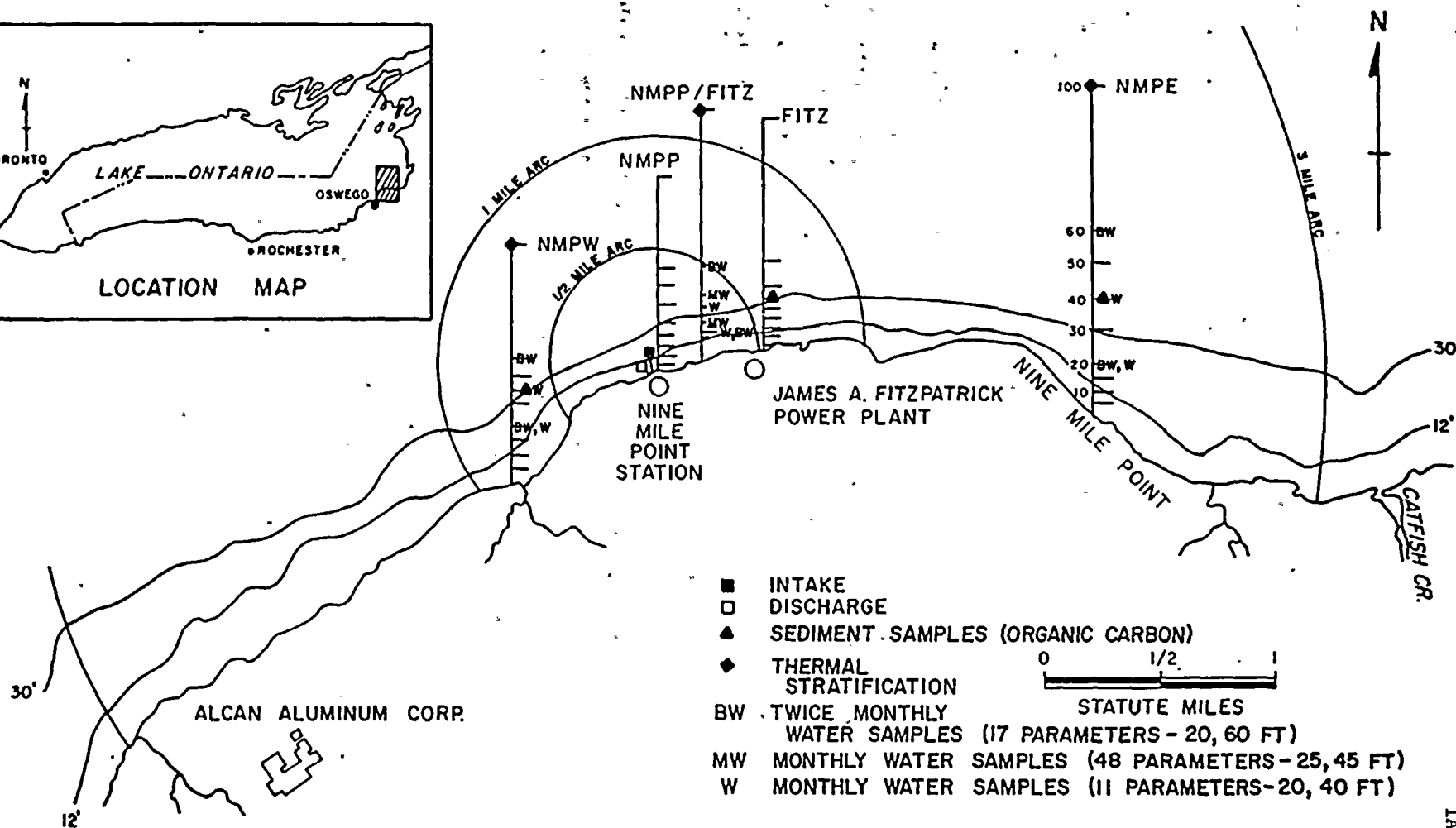
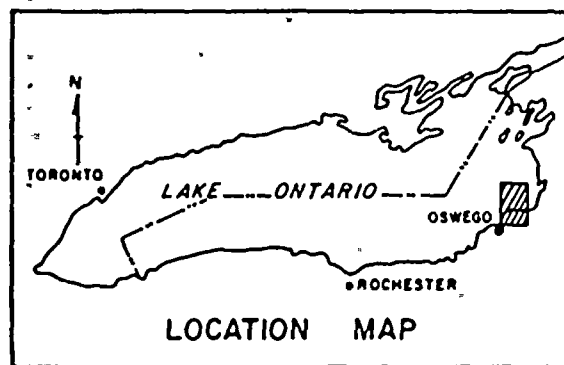


FIGURE
IA-3

b. Water Quality - 11 and 17 Parameters

(i) Gear

- two 8.1-liter PVC Van Dorn samplers.
- one Whitney thermistor
- seven 1-gallon polyethylene bottles
- seven 1-liter polyethylene bottles.
- One CO₂ field kit.
- 14 300-ml glass BOD bottles.
- six 1/2-gallon polyethylene bottles (radioactivity program: once/month)
- three coolers, ice
- one hand-held thermometer

(ii) Method of Collection

The boat is anchored at each sampling location and a water sample is collected within 0.5 m below the surface with the PVC Van Dorn sampler. Each sample is dispensed into one 1-gallon and one 1-liter polyethylene container. Samples are cooled below lake ambient temperature. Temperature is determined in situ utilizing a Whitney thermistor or a hand held thermometer. Free carbon dioxide is determined for the surface samples utilizing the CO₂ field kit; 100 ml is designated from each sample for this measurement. In addition, two 300-ml sterilized glass BOD bottles are filled, allowing each bottle to overflow two or three times its volume. One of the two bottles is fixed with DO reagents in the field. The BOD bottles are placed in a plastic bag for transport to the laboratory. Unfixed BOD bottles are placed in an incubator (20°C) upon return to the laboratory for BOD₅ determination.

Half-gallon water samples are collected with Van Dorn samplers, from 0.5 m below the surface at the 20 and 40 ft depth contours of NMPW, NMPP/FITZ, and NMPE transects and sent to Teledyne Isotopes for radiological analysis.

(iii) Temperature

Surface and bottom temperatures are recorded at each sampling location.

(iv) Sampling Frequency

Twice monthly (17 parameters), from April through December, on the first and third week of each month; monthly (11 parameters), from April through December. The monthly collection date corresponds to one of the twice-monthly collection dates; thus, 22 parameters are analyzed from each water sample collected at the 20 ft contour of NMPW, NMPP/FITZ, and NMPE transects once a month.

(v) Sampling Locations (Figure IA-3)

Twice monthly: 20 and 60 ft depth contours of NMPW, NMPP/FITZ, and NMPE transects. Monthly: 20 and 40 ft depth contours of NMPW, NMPP/FITZ, and NMPE transects.

c. Thermal Stratification

(i) Gear

- one Montedoro Whitney thermistor, Model TF-20 or Model TC-5C

(ii) Method of Operation

The boat is anchored at each sampling location. Temperature determinations are made at one-meter intervals throughout the entire water column.

(iii) Sampling Frequency

Weekly, April through December.

(iv) Sampling Locations (Figure IA-3)

The 100 ft depth contour of NMPW, NMPP/FITZ, and NMPE transects.

8. Periphyton

a. Bottom

(i) Gear

- 40 new replacement plexiglass substrates
- five specially constructed coolers with ice (1 inch of water will be maintained in each cooler).
- one Whitney photometer
- one Gossen hand-held light meter
- one 4-liter Van Dorn sampler
- one Whitney thermistor
- one hand-held thermometer

(ii) Method of Collection

The plexiglass substrates are harvested by Scuba divers or with the aid of a winch. Those harvested by Scuba divers are immediately placed in the underwater collection box for transport to the surface. Replacement substrates are set after each collection. A percent light transmittance reading is taken directly above the concrete structure supporting the plexiglass substrates at the time of collection. Total incident solar radiation is measured just above the water surface.

(iii) Temperature

Surface and bottom temperatures are recorded at each sampling location at the time of sampling.

(iv) Sampling Frequency

Two plexiglass substrates are placed at each sampling location in the middle of the month and harvested approximately 30 days apart from April through December weather permitting. During November and December plates were set for less than 30 days, approximately 23 and 10 days respectively, due to inclement weather. Whenever possible, all transects are harvested on the same day.

(v) Sampling Locations (Figure IA-2)

Substrates are located at 5, 10, 20, 30, and 40 ft depth contours at NMPW, NMPP, FITZ, and NMPE transects.

b. Buoy

(i) Gear

- 24 new replacement plexiglass substrates
- four specially constructed boxes with ice
(1 inch of water will be maintained in each cooler)
- one Whitney photometer
- one Gossen hand-held light meter
- one 4-liter Van Dorn sampler
- one Whitney thermistor
- one hand-held thermometer

(ii) Method of Collection

The plexiglass substrates are harvested by Scuba divers or with the aid of a winch. Those harvested by Scuba divers are immediately placed in the underwater collection box for transport to the surface. Replacement substrates are set after each collection. A light transmittance reading is taken at each depth at which substrates are suspended. Total incident solar radiation is measured just above the water surface.

(iii) Temperature

Temperatures are recorded at the surface and bottom and at each sample depth at a buoy station at the time of sampling.

(iv) Sampling Frequency

Two plexiglass substrates are placed at each depth the beginning of each month and harvested approximately 30 days apart from April through December weather permitting. During November, plates were set for less than 30 days, approximately 23 days for plates at NMPP/FITZ 40 ft station.

(v) Sampling Locations (Figure IA-2)

Located at the 2, 7, 12, and 17 ft depths at buoy stations on the 40 ft depth contour of NMPW, NMPP/FITZ, and NMPE transects. The specific buoy locations follow:

| | | |
|-----------|-----------|---------|
| NMPW | Lat. 43° | 31.10'N |
| | Long. 76° | 26.21'W |
| NMPP/FITZ | Lat. 43° | 31.72'N |
| | Long. 76° | 24.35'W |
| NMPE | Lat. 43° | 31.77'N |
| | Long. 76° | 23.28'W |

9. Plankton

- a. Phytoplankton (species enumeration, chlorophyll a determination and ¹⁴C analyses)

(i) Gear

- two 4-liter PVC Van Dorn samplers w/calibrated lines and messengers
- 18 350-ml amber glass bottles (identification/enumeration)
- 18 two-liter plastic bottles (chlorophyll a)
- four dark boxes

- 18 dark bottles (150-ml bottles)
- 36 light bottles (150-ml bottles)
- 18 500-ml bottles for TIC
- two Whitney photometers
- one Gossen hand-held light meter
- one Whitney thermistor
- two hand-held thermometers

(ii) Method of Collection

Surface Samples - At approximately 1000 hrs, the water samples are collected. Two 4-liter water samples are collected concurrently (one on each side of the boat) from 0.5 m below the surface and composited at all sampling sites. A 350-ml subsample is withdrawn and preserved with Lugol's solution (APHA, 1976) for species identification and enumeration. An additional 2-liter sample is withdrawn into two 1-liter bottles for chlorophyll a determination, placed in a black plastic bag, and floated in an ice bath. Two light and 1 dark bottles, with each bottle overflowing at least once its volume and a 500-ml bottle labeled Total Inorganic Carbon are also filled. The bottles for ^{14}C analysis are placed in dark boxes and transported immediately to the laboratory where 1 ml of $\text{NaH}^{14}\text{CO}_3$ with a known activity of 1 microcurie per milliliter ($1\mu\text{ Ci/ml}$) is injected into the bottom of each bottle with a repetitive syringe.

Selected Depths in Euphotic Zone - Two 4-liter samples are collected concurrently and composited from each of the 50, 25, and 1% light transmittance levels at the NMPE-40 ft station. The depth of the specific percent incident light transmittance levels is recorded in meters. Total incident solar radiation is measured just above the surface of the

water. Two one-liter water samples are withdrawn from each of the composited samples for chlorophyll a determination and a single 350-ml sample for phytoplankton species identification and enumeration. Two light and 1 dark bottles and a 500-ml bottle for total inorganic carbon are also filled.

(iii) Temperature

Surface and bottom temperatures are recorded at each sampling location, and at the specified sample depths (e.g., 50% [surface], 25%, and 1% light transmittance levels) at the NMPE-40 ft station.

(iv) Sampling Frequency

All samples are collected during the day once monthly, from April through December. Phytoplankton collections by station are random.

(v) Sampling Locations (Figure IA-4)

Surface (50), 25, and 1% light levels at the NMPE-40 ft station, and at the surface at the 10, 20, and 60 ft contours of all four transects and at the 40 ft contours of NMPW, NMPP, and FITZ transects.

b. Zooplankton

(i) Gear

- two 5-inch Clarke-Bumpus samplers with 76 μ mesh netting.
- 32 8-oz glass jars

PLANKTON SAMPLING STATIONS NINE MILE POINT VICINITY - 1976

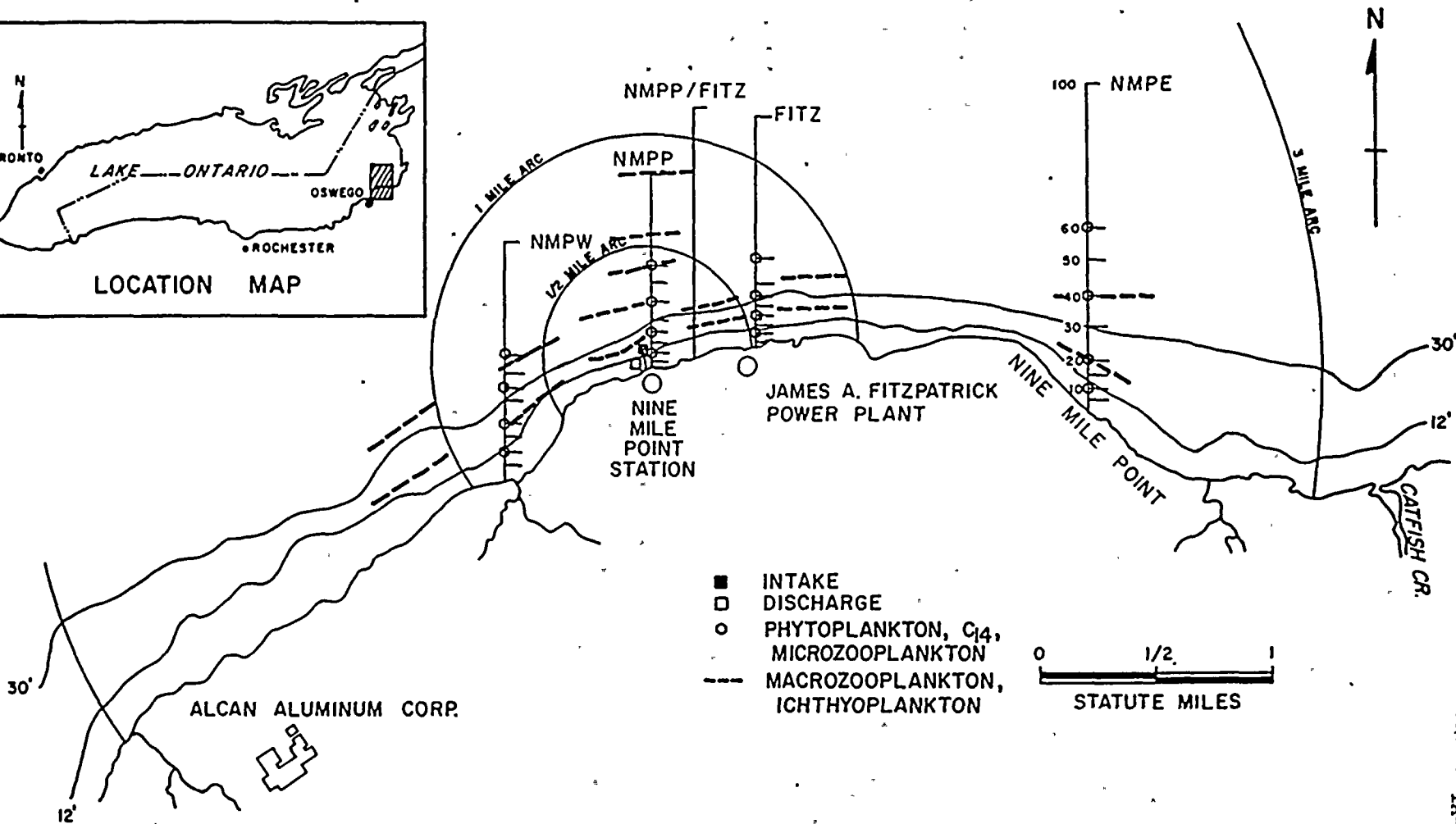
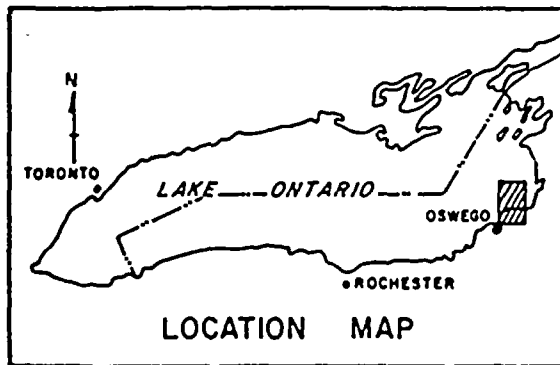


FIGURE 1A-4

- one large white calibrated Nalgene container
- two tandem depressor assemblies
- two lines marked at 10-ft intervals
- one bottle neosynephrine
- one bell timer
- one 4-liter Van Dorn sampler
- one Whitney thermistor
- one hand-held thermometer

(ii) Method of Collection

Two Clarke-Bumpus samplers are lowered simultaneously to the bottom, opened by a messenger, and then towed obliquely to the surface (tow speed 2.5 knots or faster). The tows are approximately 2-4 minutes in duration and a meter reading for each sampler is taken before and after each tow. When the sampler is retrieved, the net is washed thoroughly with distilled water, and samples are adjusted to a 6% concentration of neosynephrine. Approximately 30 minutes after the time of collection, the samples are adjusted to a 5% concentration with buffered formalin.

(iii) Temperature

Surface and bottom temperatures are recorded at the termination of each tow.

(iv) Sampling Frequency

Monthly during the day, from April through December, in conjunction with phytoplankton collections.

(v) Sampling Locations (Figure IA-4)

Ten, 20, 40 and 60 ft depth contours of NMPW, NMPP, FITZ, and NMPE transects.

c. Ichthyoplankton and Macrozooplankton

(i) Gear

- four 1-meter plankton nets of #0 mesh (571 μ mesh) with a calibrated TSK flow meter positioned 6 inches off center in the net mouth opening
- four 15-lb plankton net depressors (mid-depth and bottom sample)
- four 5-gallon plastic containers to serve as floats
- four 40-ft float lines
- four 20-ft float lines
- four 10-ft float lines
- four 200-ft lines
- 45 1-qt or 1/2-qt jars, depending on sample size
- one bell timer
- one 4-liter Van Dorn sampler
- one Whitney thermistor
- one hand-held thermometer

(ii) Method of Collection

An east-to-west tow is conducted parallel to shore at each sampling site; surface, mid-depth, and bottom samples are collected concurrently. The net is towed 200 ft behind the boat for approximately 5 minutes. At the end of each tow, meters are read by two different field personnel to ensure accuracy. Samples are adjusted to a 5% concentration with buffered formalin.

(iii) Temperature

Surface, mid-depth, and bottom temperatures are recorded at the end of a tow. Surface temperatures are also recorded at the start of the tow at the 20 and 40 ft stations of 0.5 mile-NMPE, 1 mile-NMPE, 0.5 mile-NMPW, and 1 mile-NMPW.

(iv) Sampling Frequency

Weekly (approximately seven days apart) during daylight hours in April, May, and from mid-September through December, and weekly, day and night, from June through mid-September. Daytime tows are scheduled to begin two hours after sunrise; nighttime tows are scheduled to commence one hour after sunset. All macrozooplankton are enumerated and identified once a month from day ichthyoplankton collections from April through December; and species of Gammarus, Mysis, and Pontoporeia are enumerated and identified once a month from night collections from June through mid-September.

(v) Sampling Locations (Figure IA-4)

Five transects on each of the three radii, 0.5, 1, and 3 miles. Surface, mid-depth, and bottom samples are collected at each sampling location.

(a) Within a 1/2-mile radius of the Nine Mile Point Nuclear Station.

- (1) 0.5-NMPW-20 ft station - extending from west of the Progress Center to the Nine Mile Point plant.
- (2) 0.5-NMPE-20 ft station - extending from east of the Nine Mile Point plant to the FitzPatrick plant.

(3) 0.5-NMPE-40 ft station - same location alongshore as (2), but in deeper water.

(4) 0.5-NMPW-40 ft station - same location alongshore as (1), but in deeper water.

(5) NMPP-60 ft station - extending across the promontory in front of the Nine Mile Point plant.

(b) Within a one-mile radius

(1) 1-NMPE-20 ft station - approximately 0.8 miles east of the Nine Mile Point plant.

(2) 1-NMPW-20 ft station - approximately 0.8 miles west of the Nine Mile Point plant.

(3) 1-NMPE-40 ft station - same location alongshore as (1) but in deeper water.

(4) 1-NMPW-40 ft station - same location alongshore as (2), but in deeper water.

(5) NMPP-80 ft station - approximately 0.8 miles north of the plant extending across the Nine Mile Point promontory in front of the Nine Mile Point plant.

(6) NMPP-100 ft station - extending across the Nine Mile Point promontory

(c) Within a three-mile radius

(1) 3-NMPE-20 ft station - approximately 2.5 miles east of the Nine Mile Point plant.

(2) 3-NMPW-20 ft station - approximately 2.0 miles west of the Nine Mile Point plant.

(3) 3-NMPE-40 ft station - same location alongshore as (1), but in deeper water.

(4) 3-NMPW-40 ft station - same location alongshore as (2), but in deeper water.

APPENDIX IB

LABORATORY WORK PLAN - LAKE COLLECTIONS

1976 NINE MILE POINT/AQUATIC ECOLOGY STUDIES LABORATORY WORK PLAN

A. GENERAL ECOLOGICAL

1. Fish - Trawl Comparison

All fish were brought back to the laboratory for verification of species identification and enumeration. Length (to nearest mm) and total weight (to nearest 0.1 g) were determined for all fish.

2. Fish (Gill Net, Trawl and Seine Collections)

a. Secondary Analysis - Appendix table IB-1

All fish were brought back to the laboratory for verification of species identification and enumeration (preliminary analysis); the condition of all fish brought back to the laboratory (i.e., intact versus damaged with reference to body weight) was recorded. Total length, total body weight, and sex were to be determined for a maximum of 40 fish per species (randomly selected) by collection (station, day/night, or 12-hr set, and date) per sampling gear (gill nets, trawls, and seines). Scale and gonad and partial weight analysis was conducted on a portion of these fish (Appendix IB-1).

- Stages of gonadal development for both males and females was recorded:

- mature partially spent
- mature spent
- mature developing (female)
- mature resting
- mature spawning ripe
- immature

IB-1

APPENDIX IB-1

SUMMARY OF PARAMETERS MONITORED IN REGULAR LAKE FISH PROGRAM

NINE MILE POINT VICINITY - 1976

| | ALEWIFE | RAINBOW SHELTER | WHITE PERCH | YELLOW PERCH | SMALLMOUTH BASS | ALL SPECIES |
|-------------------------------|---------|-----------------|-------------|--------------|-----------------|-------------|
| TOTAL LENGTH | | | | | | A |
| TOTAL WEIGHT PER INDIVIDUAL | | | | | | A |
| PARTIAL WEIGHT PER INDIVIDUAL | D | D | D | D | D | |
| SEX | | | | | | A |
| CONDITION (intact/damaged) | | | | | | A |
| TAGS | | | | | | B |
| STAGE OF GONADAL DEVELOPMENT | | | | | | A |
| GONAD WEIGHT | C | C | C | C | C | |
| FECUNDITY | E | E | E | E | E | |
| SCALES | F | F | F | F | F | |
| STOMACH ANALYSIS | | | G | G | G | |

- A = ≤ 40 fish/species/collection; collection is defined for gill nets as each harvest
- B = All fish
- C = ≤ 25 fish/sex/species per experimental and control site per gill net set
(50 gonads/sex/species were to have been removed)
- D = 50 fish/species/gill net set
- E = ≤ 16 fish/age class/species per experimental and control site per spawning period
- F = ≤ 150 scales/sex/species/night gill net collection per experimental and control site for the period of peak relative abundance in the lake collections
- G = ≤ 25 fish/species/transect in August

EXPERIMENTAL SITE:

Gill Nets:

NMPP-15 BGN-day/night
NMPP-30 BGN-day/night
NMPP-40 BGN-day, SCN-night
FITZ-15 BGN-day/night
FITZ-30 BGN-day/night
FITZ-40 BGN-day, SCN-night

Trawls:

NMPP/FITZ-20 BOTTOM-day/night
NMPP/FITZ-40 BOTTOM-day/night

CONTROL SITE:

Gill Nets:

NMPW-15 BGN-day/night
NMPW-30 BGN-day/night
NMPW-40 BGN-day, SCN-night
NMPE-15 BGN-day/night
NMPE-30 BGN-day/night
NMPE-40 BGN-day, SCN-night

Trawls:

NMPW-20 BOTTOM-day/night
NMPW-40 BOTTOM-day/night
NMPE-20 BOTTOM-day/night
NMPE-40 BOTTOM-day/night

MISCELLANEOUS STATIONS:

Seines:

NMPW
NMPP
FITZ
NMPE

Trawls*:

NMPW-60 BOTTOM-day /night
NMPP/FITZ-60 BOTTOM-day /night
NMPE-60 BOTTOM-day /night

Gill Nets*:

NMPW-60 BGN-day/night
NMPP-60 BGN-day/night
FITZ-60 BGN-day/night
NMPE-60 BGN-day/night

*Secondary analysis only (total length, total weight)

b. Tertiary Analysis of Selected Species

- Species

alewife
rainbow smelt
white perch
yellow perch
smallmouth bass

- Stations

Experimental site: gill nets: NMPP-15 BGN-Day/Night
NMPP-30 BGN-Day/Night
NMPP-40 BGN-Day and SGN-Night
FITZ-15 BGN-Day/Night
FITZ-30 BGN-Day/Night
FITZ-40 BGN-Day and SGN-Night
trawls: NMPP/FITZ-20 BOT-Day/Night
NMPP/FITZ-40 BOT-Day/Night

Control site: gill nets: NMPW-15 BGN-Day/Night
NMPW-30 BGN-Day/Night
NMPW-40 BGN-Day and SGN-Night
NMPE-15 BGN-Day/Night
NMPE-30 BGN-Day/Night
NMPE-40 BGN-Day and SGN-Night
trawls: NMPW-20 BOT-Day/Night
NMPW-40 BOT-Day/Night
NMPE-20 BOT-Day/Night
NMPE-40 BOT-Day/Night

Miscellaneous stations: seines: NMPW
NMPP
FITZ
NMPE

The summation of the number of fish collected per species per station by sample date from field counts was used to determine the appropriate subsample size per station for gonad and scale analysis. All subsampling for tertiary analysis (i.e., coefficient of maturity, scale analysis, and fecundity) was conducted during the secondary analysis procedure.

(i) Coefficient of maturity

Total weight and partial weight [total weight - (stomach + gonad)] was recorded to the nearest 0.1 g.

A maximum of 50 gonads/sex/date/for each experimental and control sites (composite of gill net and trawl collections) for the selected species were to be randomly subsampled from the fish analyzed per date. The gonads of 25 fish/sex/species/date were to be weighed to the nearest 0.01 g.

$$\text{Coefficient of maturity} = \frac{\text{gonad weight}}{\text{partial weight}} \times 100$$

(ii) Scale Analysis

The age structure of a given population was to have been determined during the period of its peak abundance by reading scales from a random subsample of a maximum of 150 fish/sex/night gill net collection. Up to 200 scales per

species were to have been removed from the total collected at all stations in experimental and control categories. If 150 fish per sex were not collected in the specified time period per site, scales were removed from fish collected in the succeeding month.

| <u>SPECIES</u> | <u>ESTIMATED PEAK</u> | <u>1976 SCALE DATA</u> |
|-----------------|-----------------------|------------------------|
| Alewife | May-June | May-June |
| Rainbow smelt | April | April-May |
| White perch | July-August | July-Sept |
| Yellow perch | June-July | June-Aug |
| Smallmouth bass | July-September | June |

The scales for yellow perch, white perch, and smallmouth bass were read following the procedure outlined in LMS Laboratory Handbook BL-5. The thinner scales of alewife and rainbow smelt were mounted on glass slides to facilitate reading. Yellow perch, which form false annuli, were also aged through the examination of their opercular bones as verification of the scale reading. The total number of annuli was recorded from each scale. Scales were read by two technicians; if their data were not in agreement (e.g., fish >6 years old), a third person read the scale.

(iii) Condition factor

$$\text{Log } W = \text{Log } a + b \text{ Log } L$$

W = partial weight

L = length

a = y-intercept

b = regression coefficient

(iv) Fecundity Analysis

Selection of gonads for fecundity analysis was based on the estimated time of spawning (from 1976 coefficient of maturity plots), visual inspection of the ovary (ovary discarded if it appeared partially spent), and the relationship of the current coefficient of maturity data to the coefficient of maturity plots reported in the literature from the Great Lakes. A maximum of 16 ripe ovaries/age class/species/site/spawning period were randomly subsampled from the ovaries preserved in 10% buffered formalin per date.

The number of eggs per ovary was determined by the gravimetric procedure for yellow perch, white perch; and smallmouth bass, which have large ovaries which remain intact in preservative, and by the volumetric procedure for rainbow smelt and alewife, which have smaller more "delicate" ovaries*.

- The volumetric procedure involves obtaining the total volume of the ovary (as measured after centrifugation) and counting the total number of eggs in three subsamples of measured volumes. The average of the three estimates of the total number of eggs/ovary is the calculated total number of eggs/ ovary. For alewife, mature or spawnable eggs (>0.5mm and opaque) were also counted.

- The gravimetric procedure for determining fecundity is described in LMS Laboratory Handbook: Method BL-6. For white perch, mature and immature eggs were counted.

*Ovaries tending to disassociate when preserved.

The percentage of the total number of eggs in each size category was determined by measuring 100 eggs (to the nearest 0.1 mm) with an ocular micrometer.

Size Ranges for Eggs

| | | |
|-----------------|--------------|-------------------|
| | (white eggs) | (yolk-laden eggs) |
| Alewife | .2 - .4 mm | .5 - .8 mm |
| Rainbow smelt | .4 - 1.1 mm | |
| | (white eggs) | (yolk-laden eggs) |
| White perch | .2 - .4 mm | .5 - .9 mm |
| Yellow perch | .6 - 1.5 mm | |
| Smallmouth bass | 1.2 - 2.5 mm | |

c. Gut Analysis - Food Preference Studies

- Stomachs were removed from anesthetized white perch and smallmouth bass by cutting above the esophagus and below the pylorus. The stomachs were injected with 10% buffered formalin, and stored in vials containing 10% formalin. Only one yellow perch was collected in the special gill net collections, and thus the stomach contents were not analyzed.
- Stomach contents were both picked and flushed from the stomach with 70% ethanol. Food organisms were identified to the most specific taxonomic level possible (Appendix IB-2); where required, organisms were especially prepared for identification (e.g., stained and mounted on slides). Dry-weight biomass (to the nearest 0.1 mg) was determined at the species or genus level. The biomass for chironomids was estimated based on the average weight of chironomids in each species stomach per date. Where amphipods comprised a major portion of the

APPENDIX IB-2

ECOLOGICAL FISH -- STOMACH ANALYSIS DATA SHEET

Bottle No. _____
 Sample Site _____
 Sample Depth _____
 Sample Date _____
 Time of Collection _____
 Date Sample Received _____
 Date Sample Analyzed _____

FISH ANALYZED

Common Name _____
 Length (cm) _____
 Weight (gm) _____
 Sex _____
 Male _____
 Female _____
 Immature _____
 Age _____
 State of Gonad/Testis (ripe/mature spent/immature) _____
 Stomach: Full _____ Empty _____

STOMACH ANALYSIS

| FISH(by species) | Number | Length (mm) | Dry Weight (mg) |
|------------------|--------|-------------|-----------------|
|------------------|--------|-------------|-----------------|

Etheostoma nigrum
 UID Vertebral column
 Fish Eggs

| MACROINVERTEBRATES | Number | Dry Weight (mg) |
|--------------------|--------|-----------------|
|--------------------|--------|-----------------|

NEMATODA
 MOLLUSCA
 Gastropoda
 Pulmonata
Gyraulus parvus
Ferissia tarda
 Pelecypoda
 Sphaeridae
 ARTHROPODA
 Crustacea
 Cladocera
 Leptodoridae
Leptodora sp.
 Mysidacea
 Mysidae
Mysis sp.
 Ostracoda
 Malacostraca
 Isopoda
Asellus sp.
 Amphipoda
Gammarus fasciatus
Gammarus eggs
 Decapoda
 Cambarinae

APPENDIX IB-2 (Continued)

ECOLOGICAL FISH - STOMACHS (Continued)

ARTHROPODA (Continued)

Insecta

Diptera

UID pupae

Culicidae

Chaoborus sp.

Chironomidae

Microcricotopus bicolor

Parametriocnemus sp.

Psectrocladius sp.

Chironomini

Chironomus sp.

Cryptochironomus sp.

Dicrotendipes sp.

Microtendipes sp.

Paracladopelma sp.

Tanytarsini

Micropsectra sp.

Tanytarsus sp.

Tanpodinae

Procladius sp.

Orthocladiinae

Cricotopus spp.

Trichoptera (caddis fly)

Athripsodes sp.

MISCELLANEOUS

Occurrence
(present/none)

Abundance

Plant material

Slide check for chaetae:

capilliiform

non-capilliiform

Internal parasites

stomach contents, a subsample was weighed. The age of each fish was determined by counting the number of annuli on one scale.

3. Benthos

a. Non-Cladophora Community

(i) Sample Preparation

Samples were washed in the laboratory in a #40 U.S. Standard sieve (420 μ mesh) to remove small particles of silt or fine sand, and then preserved in a 5% solution of formalin and the stain phloxine B.

Samples were either picked of all macroinvertebrates, fish eggs and larvae or subsampled and picked according to the criteria outlined in Appendix IB-3. Samples estimated to contain more than 400 organisms of either amphipods or oligochaetes were spread in a plexiglass sampling box, and the amphipods or oligochaetes in one quadrat were picked for identification and enumeration. If fewer than 200 organisms of either taxon were in the chosen quadrat, two quadrats were sampled. If 200 organisms were not found in two quadrats, all remaining quadrats were sampled. All other benthic organisms in the chosen quadrat(s) were picked and enumerated.

(ii) Enumeration and Species Identification

The organisms, which were sorted into major taxa during the picking procedure, were identified at various taxonomic

APPENDIX IB-3

SUBSAMPLE CRITERIA FOR NON-CLADOPHORA BENTHIC SAMPLES - 1976

I. SUBSAMPLE SIZE CRITERIA FOR PICKING ORGANISMS

| SAMPLE QUANTITY (ml) | SAMPLING BOX DIMENSIONS | SUBSAMPLE * ANALYZED |
|-------------------------|--------------------------------------|-------------------------|
| >4000 | 88.3 x 30.5 x 7.6 cm (~12 liters) | 1/4 |
| 750-4000 | 30.1 x 25.0 x 7.6 cm (~4 liters) | 1/4 |
| 600-750 | | 1/2 |

* Sample depth up to 2 inches

II. SUBSAMPLE SIZE CRITERIA FOR PICKING AMPHIPODS AND OLIGOCHAETES^a

| SAMPLE QUANTITY (ml) | SAMPLING BOX DIMENSIONS | SUBSAMPLE ^b ANALYZED |
|-------------------------|-----------------------------------|---|
| 200-600 | 15.0 x 20.0 x 4.0 cm (~800 ml) | 1/4 if >200 amphipods or oligochaetes 1/2 if <200 amphipods or oligochaetes in one 1/4 of box |
| 0-200 | 10.0 x 15.0 x 4.0 cm (~350 ml) | Entire box picked if criteria for abundance of amphipods or oligochaetes not met in 1/2 subsample |

^aEntire sample picked for all taxa except amphipods and oligochaetes

^bSample depth up to one inch

levels (Appendix IB-4); identification was at the species level whenever possible.

Subsampling for identification and enumeration of taxa was done in a gridded petri dish (100 x 15 mm) as follows:

| <u>ESTIMATED ABUNDANCE PER TAXON PER SAMPLE</u> | <u>SUBSAMPLE SIZE</u> |
|---|-----------------------|
| <200 | entire dish |
| 200-499 | 1/2 |
| <u>>500</u> | 1/4 |

(iii) Biomass

The wet-weight biomass of each taxon listed in Appendix IB-4 was determined by the following procedure: the organisms were soaked in water, held in a desiccator with Drie-Rite for one-half hour, and weighed to the nearest 10^{-4} g. The determination of the biomass of oligochaetes and dipterans in a sample was based on an estimated weight per size interval of that organism (Appendix IB-5) multiplied by the number of individuals in the sample. The biomass of several taxa occurring in low abundance (nematodes, water mites, fish eggs, and bryozoans) were similarly determined by multiplying an estimated biomass/organism by the number of organisms collected. Cladophora collected with the benthic sample was weighed (wet weight) to the nearest 0.01g.

b. Bottom Sediment: Grain Size Analysis

Sediment samples were allowed to settle for at least 24 hours after return to the laboratory. The sediment samples were

APPENDIX IB-4

TAXA TO BE PICKED AND THE LEVELS OF
IDENTIFICATION AND BIOMASS OF EACH TAXON - 1976

| PHYLUM | TAXON | LEVEL OF ID | BIOMASS |
|----------------------------|----------------------------|-------------|---------------|
| Platyhelminthes | Turbellaria | Family | Phylum |
| Annelida | Oligochaeta ^a | Species | Class |
| | Hirudinea | Species | Class |
| | Polychaeta | Species | Class |
| Mollusca | Gastropoda | Species | Class |
| | Pelecypoda (Bivalvia) | Genus | Class |
| Arthropoda ^b | Diptera ^c | Genus | Order |
| | Ephemeroptera ^c | Genus | Order |
| | Trichoptera ^c | Genus | Order |
| | Mysidacea | Species | Order |
| | Ostracoda | Order | Order |
| | Isopoda | Genus | Order |
| | Amphipoda | Species | Order |
| | Decapoda | Species | Order |
| | Hydracarina (Acari) | Genus | Order |
| Aschelminthes | Nematoda | Genus | Class |
| Rhynchocoela (Nemertea) | | Phylum | Phylum |
| Bryozoa | | Phylum | Phylum |
| Coelenterata | Hydroida ^d | Species | Order |
| Fish Eggs | | Species | Entire sample |
| Fish Larvae | | Species | Entire sample |

^a Oligochaeta also identified as a group: immature with and without chaetae

^b Cladocerans and copepods collected in the benthic sample are not enumerated

^c All insects are identified at the genus level and weighed at the order level

^d Enumeration of Cordylophora is based on the number of feeding polyps, Hydra on the number of polyps

APPENDIX IB-5

AVERAGE BIOMASS* PER INDIVIDUAL

A. OLIGOCHAETES

| SIZE (mm) | BIOMASS (g) | TAXA CHARACTERISTICALLY COLLECTED IN THESE SIZE INTERVALS |
|-----------------------|-------------|---|
| SMALL 0-2.99 | 0.000097 | Naididae Enchytraeidae Polychaeta |
| MEDIUM 3.0-10-19.9 | 0.00236 | Tubificidae Lumbriculidae |
| LARGE >20 | 0.006872 | <u>Potamothrix moldaviensis</u> |

B. DIPTERANS

| SIZE (mm) | BIOMASS (g) |
|---------------|-------------|
| 0.0 - 2.49 | 0.000107 |
| 2.50 - 4.99 | 0.000301 |
| 5.00 - 7.49 | 0.000887 |
| 7.50 - 9.99 | 0.001882 |
| 10.00 - 12.49 | 0.003157 |
| 12.50 - 14.99 | 0.005138 |

C. MISCELLANEOUS

| TAXA | BIOMASS (g) |
|-------------|-------------|
| NEMATODES | 0.0001 |
| WATER MITES | 0.0003 |
| FISH EGGS | 0.0005 |
| BRYOZOANS | 0.00003 |

*Wet weight

analyzed according to the procedure outlined in Lambe (1951). The data were presented as percent sand and silt.

c. Bottom Sediment: Organic Carbon Determination

A maximum of 10 g of sediment was analyzed following the procedure outlined in Holme and McIntyre (1971). The data are presented as percent organic carbon, chromic acid oxidation values.

4. Periphyton (Bottom and Buoy)
(See Figure IB-1)

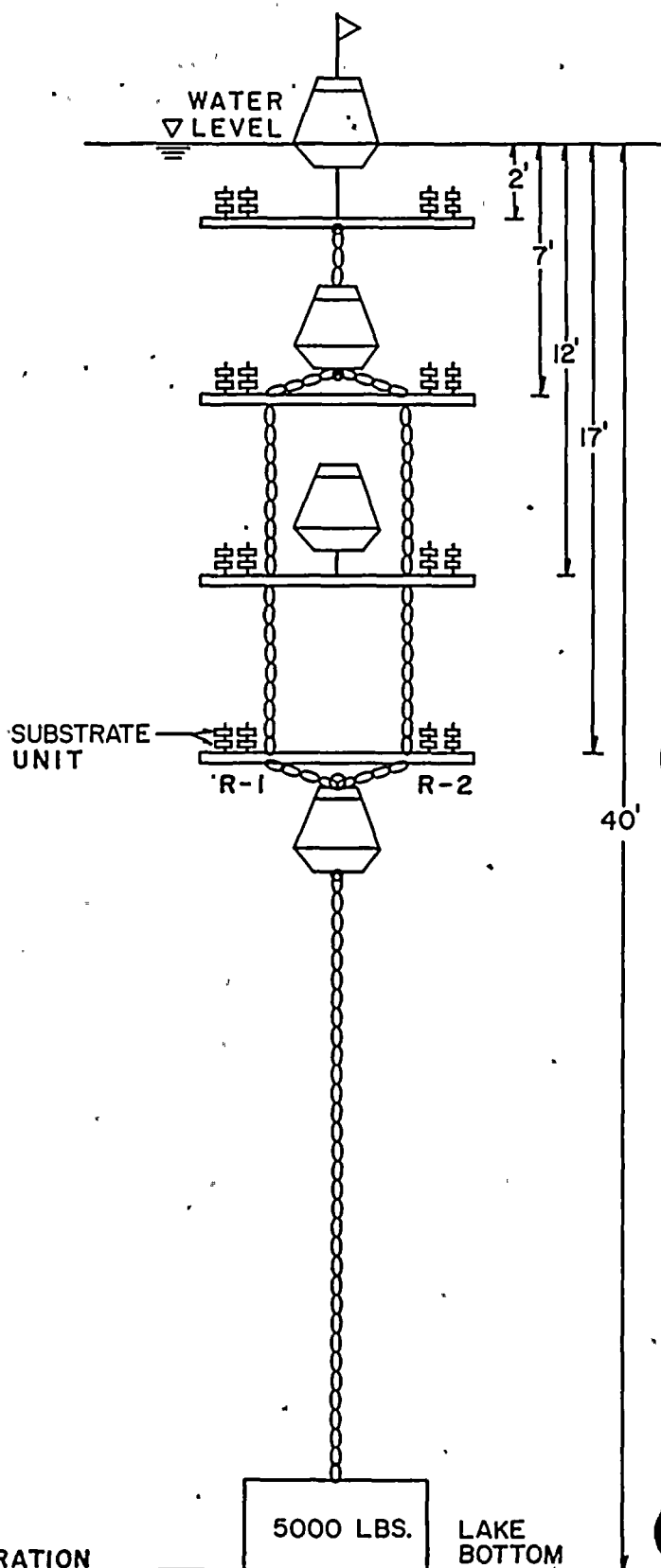
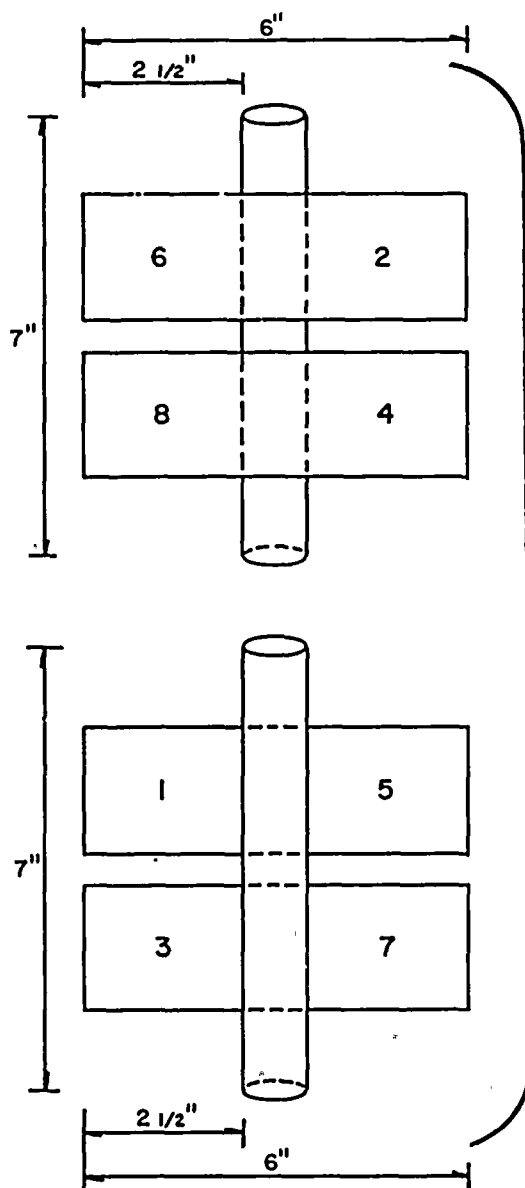
a. Enumeration and Species Identification

Attached flora and fauna were scraped with hard plastic spatulas from two surfaces (2 x 2-1/2 inches) from each of two plexiglass substrate units and preserved in 5% buffered formalin in separate vials. Invertebrates (e.g., protozoans and rotifers) and algae were primary identified at the generic level.

Organisms were enumerated from 10-20 fields of a Whipple grid at 200 magnifications using the Sedgewick-Rafter counting cell; the number of fields was based on counting a minimum of 200 algal units (single cell or colonies). Viable diatoms (containing chloroplasts) were identified to the species level whenever possible; type (centrate or pennate) was recorded in all other cases. Diatoms were cleaned with hydrogen peroxide and mounted on permanent slides using Hyrax mounting medium.

Samples consisting of sheets of filamentous blue-green algae interspersed with a large variety of other algae were analyzed according to the following procedure:

BUOY PERIPHYTON SAMPLING APPARATUS



LEGEND FOR LABORATORY ANALYSIS

- 1-4 BIOMASS (R-1, R-2)
- 5,7 CHLOROPHYLL a R-1
- 6,8 SPECIES DETERMINATION & ENUMERATION (R-1, R-2)

- The sample was mixed with a blender for at least 3 minutes to disperse the clumped algae
- Analysis was completed as described in the work plan with the following additions:
 - An average length of all filaments within each field was estimated during analysis of the random fields
 - The total number of clumps within the counting cell was counted
 - Species counts and average length was determined for five individual clumps selected at random
 - For each sampling data, 20 cells from several filaments of each blue-green species were measured.

Enumeration data, were expressed as cells (for phytoperiphyton and organisms for zooperiphyton) per square decimeter (dm^2) of substrate area/exposure period:

$$\text{Cells/dm}^2 \text{ of substrate} = \left[\frac{\text{Cell Counts}}{\text{Whipple grid Vol. for 1 Field (ml) X Fields Analyzed}} + \frac{\text{Clump count x est. cell count per clump}}{1 \text{ ml}} \right] \times \frac{\text{Volume of Sample (ml)}}{\text{Area of Slide Scraped (dm)}}$$

Algal species identification was conducted on ashed slides and wet mounts prepared from each sample to determine the species proportion of algae. The following procedure was used:

- Ashed slide and wet mount results were compared to the preliminary analysis results to confirm identification at the generic level.

- Species identification of algae was determined by proportional counts from ashed samples and wet mount if the species abundance was greater than 30 on the ashed slide or wet mount, and the abundance at the generic level was greater than 30 for the preliminary analysis results.
- If an abundance of a genus in the preliminary analysis was high and the species composing that genus on the ashed slide or wet mount was low and diverse, the organisms were identified at the genus level only.
- If diverse species of algae were present on the ashed slide or wet mount, but the genus is either not present in the preliminary analysis or in very low abundance, the species was recorded as present only.

b. Biomass

Attached flora and fauna on four 2 x 2-1/2 inch surfaces from each plexiglass substrate unit were scraped separately into aluminum weighing pans with hard plastic spatulas. Samples were dried for 36 hours in an oven set at 105 C, cooled in a desiccator for 1/2 hour, and weighed to nearest 10^{-5} g. Dried samples were then heated for 1/2 hour in a muffle furnace set at 500°C, placed in a desiccator to cool for 1/2 hour, and reweighed to nearest 10^{-5} g. The difference in weight was the quantity of ash-free dry weight per sample.

c. Chlorophyll-a - Buoy Periphyton only.

Attached fauna and flora on two 2 x 2-1/2 inch surfaces of one plexiglass substrate was scraped with hard plastic spatulas into

dram vials containing 90% acetone. The concentration of chlorophyll a and phaeophytin was determined according to Section 1003C APHA (1976).

5. Water Chemistry

Water samples for chemical analyses and primary productivity studies were transported to the Oswego laboratory immediately after collection. There the samples were aliquoted, preserved, or analyzed immediately according to the method set forth by APHA (1976) and EPA (625-/6-74-003). Appendix IB-6 lists the water quality parameters monitored in 1976 and the significance level of the test.

a. Procedure Performed at the LMS Laboratory on Day of Collection

- Analysis

| <u>Parameter</u> | <u>Required Vol.(ml)</u> | <u>Method</u> | <u>Reference</u> |
|------------------------|--------------------------|---|---------------------------|
| 1. Alkalinity | 100 | Potentiometric | EPA p. 3 |
| 2. BOD ₅ | 1000 | Incubation, Modified Winkler | APHA p. 543 Sect. 507 |
| 3. Total Coliforms | 300 | Membrane method | APHA p. 928 Sect. 909A |
| Fecal Coliforms | | Filter method | APHA p. 937 Sect. 909C |
| 4. DO | 300 | Modified Winkler | APHA p. 443 Sect. 422B |
| 5. Ortho- phosphate | 100 | Stannous chloride | APHA p. 479 Sect. 425E |
| 6. pH | 100 | Glass electrode (immediate analysis) | APHA p. 460 Sect. 424 |

APPENDIX IB-6

MONITORED WATER QUALITY PARAMETERS

NINE MILE POINT VICINITY - 1976

| FREQUENCY | PARAMETER | UNITS | LEVEL OF SIGNIFICANCE ^a 1976 |
|-----------|--|------------------------|---|
| W, B, M | pH | units | 10 |
| W, B, M | TEMPERATURE ^b | °C | 10 |
| B, M | SPECIFIC CONDUCTANCE | µmhos/cm at 25°C | 1 |
| B, M | TURBIDITY | FTU | 1 |
| M | COLOR | COL.UNIT | 1 |
| M | ALKALINITY | CaCO ₃ mg/l | 10 |
| B | CARBON DIOXIDE (CO ₂) ^b | mg/l | 1 |
| W, B, M | DISSOLVED OXYGEN (DO) | mg/l | 10 |
| B, M | BIOCHEMICAL OXYGEN DEMAND (BOD ₅) | mg/l | 1 |
| B, M | CHEMICAL OXYGEN DEMAND | mg/l | 1 |
| B | CHLOROPHYLL <u>A</u> | µg/l | 10 |
| W, B, M | TOTAL SOLIDS | mg/l | 1 |
| M | TOTAL DISSOLVED SOLIDS | mg/l | 1 |
| W, B, M | TOTAL SUSPENDED SOLIDS | mg/l | 1 |
| M | TOTAL VOLATILE SOLIDS | mg/l | 1 |
| M | TOTAL COLIFORMS | cts/100 ml | 1 |
| M | FECAL COLIFORMS | cts/100 ml | 1 |
| M | PHENOLS | mg/l | 1000 |
| M | SURFACTANTS | mg/l | 1000 |
| B, M | NITRATE NITROGEN | mg/l | 1000 |
| B, M | AMMONIA NITROGEN | mg/l | 100 |
| B, M | TOTAL KJELDAHL NITROGEN | mg/l | 100 |
| M | ORGANIC NITROGEN [TKN - (NH ₃ -N)] | mg/l | 100 |
| B, M | ORTHOPHOSPHATE | mg/l-P | 1000 |
| W, B, M | TOTAL PHOSPHORUS | mg/l-P | 1000 |
| W, B, M | SILICATE | mg/l | 100 |
| W, M | SULFATE | mg/l | 1 |
| M | ALUMINUM | mg/l | 100 |
| M | ARSENIC | mg/l | 1000 |
| M | BARIUM | mg/l | 100 |
| M | BERYLLIUM | mg/l | 1000 |
| M | CADIUM | mg/l | 1000 |
| W, M | CALCIUM | mg/l | 1000 |

APPENDIX IB-6 (Continued)

MONITORED WATER QUALITY PARAMETERS (Continued)

NINE MILE POINT VICINITY - 1976

| FREQUENCY | | PARAMETER | UNITS | LEVEL OF SIGNIFICANCE ^a 1976 |
|-----------|---|----------------------|-------|---|
| | M | CHLORIDE | mg/l | 1 |
| W, | M | CHROMIUM | mg/l | 100 |
| | M | COPPER | mg/l | 100 |
| | M | CYANIDE | mg/l | 100 |
| | M | FLUORIDE | mg/l | 10 |
| | M | IRON | mg/l | 100 |
| | M | LEAD | mg/l | 100 |
| | M | MAGNESIUM | mg/l | 1000 |
| | M | MANGANESE | mg/l | 100 |
| | M | MERCURY | mg/l | 1000 |
| | M | NICKEL | mg/l | 100 |
| | M | POTASSIUM | mg/l | 1000 |
| | M | SELENIUM | mg/l | 1000 |
| | M | SILVER | mg/l | 100 |
| W, | M | SODIUM | mg/l | 1000 |
| | M | VANADIUM | mg/l | 10 |
| | M | ZINC | mg/l | 1000 |
| W, | M | RADIOLOGICAL | | |
| | M | SETTLEABLE SOLIDS | ml/l | 10 |
| | M | TOTAL ORGANIC CARBON | mg/l | 1 |

^aThe level of significance indicates the appropriate decimal placement for the presentation of data

1 = nearest whole number X
 10 = X.X
 100 = X.XX
 1000 = X.XXX

^bField measurement

B = Twice Monthly - 17 parameters (surface), FitzPatrick Bimonthly Water Quality Program
 M = Monthly - 48 parameters (surface and bottom samples), FitzPatrick Monthly Water Quality Program
 W = Monthly - 11 parameters (surface), Nine Mile Point Monthly Water Quality Program

| | | | |
|-------------------------|-----|---------------|---------------------------|
| 7. Total Organic Carbon | 25 | Cool* | EPA p. 236 |
| 8. Turbidity | 100 | Turbidimetric | APHA p. 132 Sect. 214A |

- Preservation

| | | | |
|--|------|---|--|
| 1. Metals (Al, Ba, Be, Cd, Ca, Cr, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Zn, V, As, Se) | 1000 | Add 2 ml conc. HNO_3 per 200 ml to yield $\text{pH} < 2$ | EPA p. ix |
| 2. TKN | 500 | Add 1.0 ml conc. H_2SO_4 to $\text{pH} < 2$, cool | EPA p. x |
| 3. SiO_2 | 100 | Refrigerate at 4.0 C | EPA p. xi |
| 4. Cyanide | 500 | Adjust to $\text{pH} 12$ with 1N NaOH Refrigerated at 4.0 C | APHA p.42 |
| 5. Phenols | 500 | Adjust pH to 4 with (1+9) H_3PO_4 , add 5 ml 10% CuSO_4 solution Refrigerated at 4.0 C | APHA p. 43 |
| 6. Chlorophyll | 1000 | Filter, desiccate and freeze | APHA p. 42 |
| 7. Ammonia nitrogen and Nitrate-nitrogen | 600 | Add 0.8 ml conc. H_2SO_4 per liter, Refrigerate at 4.0 C | APHA p. 42 ($\text{NH}_3\text{-N}$) EPA p. x ($\text{NO}_3\text{-N}$) |
| 8. Fluoride | 300 | Refrigerated at 4.0 C | EPA p. ix |

* Sample sent to O'Brien and Gere for analysis

b. Sample Analyses Conducted at LMS Laboratories within 24 Hours of Collection

| | | | |
|-------------------------|------|---|---|
| 1. Chlorophyll | | Colorimetric | |
| 2. Color | 50 | Visual colorimetry Nessler tubes | APHA p. 64 Sect. 204A |
| 3. Ammonia-nitrogen | 500 | Distillation, colorimetric or Orion probe | APHA p. 410 & 412 Sect. 418A & 418B or EPA p. 159 |
| 4. Phenols | 500 | Distillation, direct photometric | APHA p. 576 Sect. 510A and C |
| 5. Surfactants | 400 | Methylene Blue | APHA p. 600 Sect. 512A |
| 6. Specific conductance | 100 | Cell | APHA p. 71 Sect. 205 |
| 7. Nitrate-nitrogen | 100 | Brucine sulfate | APHA p. 427 Sect. 419D |
| 8. Settleable solids | 1000 | Imhoff cone | APHA p. 95 Sect. 208F:3A |

c. Sample Analyses Conducted at the LMS Laboratories within Seven Days of Collection

| | | | |
|---------------------|-----|---|---|
| 1. Total phosphorus | 100 | Persulfate digestion, stannous chloride | APHA p. 476 Sect. 425C:III and Sect. 425E |
| 2. Chloride | 100 | Mercuric Nitrate titration | APHA p. 304 Sect. 408B:3 |
| 3. COD | 100 | Dichromate reflux, titration | APHA p. 550 Sect. 508:46 |
| 4. Total solids | 100 | Gravimetric 103-105 C | APHA p. 93 Sect. 208 A |

| <u>Parameter</u> | <u>Required Vol.(ml)</u> | <u>Method</u> | <u>Reference</u> |
|---------------------------------|------------------------------|---|--|
| 5. Total suspended solids | 100 | Glass fiber filtration, Gravimetric, Residue dried at 103-105 C | APHA p. 94 Sect. 208D |
| 6. Total Dissolved Solids | 0 | By calculation | |
| 7. Total Volatile Solids | 0 | Gravimetric, 550 C | APHA p. 95 Sect. 208E |
| 8. Sulfates | 100 | Preserve @ 4 C Turbidimetric | APHA p. 496 Sect. 427C |
| 9. TKN | 500 | Digestion and Distillation, Nesslerization Colorimetric | APHA p. 437 Sect. 421 & EPA p. 175 |
| 10. Organic Nitrogen | | By calculation | |

d. Radioactivity Samples

Radioactivity samples were packaged and sent to teledyne within the week of collection.

6. Phytoplankton

a. Chlorophyll a

The two 1-liter whole water samples were each filtered through a Whatman glass fiber filter GF/C. The concentration of chlorophyll a and phaeophytin was determined according to the method outlined in Golterman (1971) and APHA (1976).

b. ^{14}C - Primary Productivity

Samples were inoculated with one ml of $\text{NaH}^{14}\text{CO}_3$ in the laboratory where they were incubated at a constant 1000 foot candles and ambient lake temperature for four hours. The samples were filtered and washed with prefiltered lake water prior to scintillation counting following the procedure of Vollenweider (1974) and APHA (1976). Total Inorganic Carbon samples were titrated according to the method described in Golterman (1971).

c. Enumeration and Species Identification

The 350 ml whole water sample, which was preserved in Lugol's solution, was thoroughly mixed, and two 10 to 50-ml aliquots (depending on phytoplankton density) were removed and placed in settling tubes for at least 24 hrs. The settled contents in the plate chamber of each replicate were analyzed according to the Utermohl method (Utermohl, 1958; Lund et al., 1958).

A maximum of 300 phytoplankton units (single cells or colonies) were identified and enumerated as cells/ml for each replicate sample.

d. Biovolume and Species Identification

Biovolume determinations for each species were made based upon at least 20 measurements per dominant species per sampling date. Biovolume (μm^3) was expressed as mg/m^3 unpreserved weight (assuming a specific gravity of 1.0 for algal cells).

7. Zooplankton

a. Enumeration and Species Identification

Each sample was thoroughly mixed and a one 1-ml aliquot was withdrawn, using a wide base pipette, and placed in a Sedgewick-Rafter cell. Protozoans, rotifers, cladocerans, and copepods (including juveniles and nauplii) were counted in a minimum of ten horizontal strips as defined by a Whipple grid at 100 magnifications. A minimum of 200 organisms were identified and enumerated as organisms per cubic meter (m^3).

All zooplankton were identified to the species level whenever possible; juvenile copepods were recorded primarily to order (e.g., Calanoid, Harpacticoid, and Cyclopodid) and copepod nauplii were recorded as a group, and copepod adults to the species level.

8. Ichthyoplankton and Macrozooplankton

a. Fish Larvae and Egg Enumeration and Species Identification

All fish larvae were picked from a sample, enumerated and identified, and placed in vials containing 70% ethanol. Sixty larvae of each species per sample per date were measured to the nearest 0.1 mm and the life stage recorded. Life stages are characterized as follows:

• Pro-larva - larva having a yolk sack containing yolk

• Larva - larva having a complete alimentary canal and possibly remnants of a yolk sac containing only oil

Juvenile - a fish possessing all of the morphological characteristics of the adult of the species (i.e., fins fully differentiated, all spines and/or rays ossified and identical in count with those of the adult.

The Folsom plankton splitter was used to subsample fish eggs for enumeration and identification if the sample was estimated to contain >500 fish eggs. Fish eggs were picked from the sample or subsample, enumerated, and stored in vials containing 5% buffered formalin; they were subsequently identified to species, whenever possible.

b. Macrozooplankton Analysis - Day Samples

Ichthyoplankton samples were analyzed once per month for macrozooplankton; the dates were coincident with in-plant sampling dates whenever possible.

Samples were split using the Folsom plankton splitter when the washed sample was too dense to subsample in a 10 ml automatic Pipet (Tipet®). When large amounts of Cladophora (> 200 ml) were present in a sample, benthic subsampling boxes and the same criteria listed in Appendix IB-3 were utilized to obtain a subsample.

Zooplankton > 571 μ (0 mesh) in size were enumerated and identified. Appendix IB-7 lists these organisms and the taxonomic levels of identification.

c. Macrozooplankton Analysis - Night Samples

The same procedure outlined in (b) above was used, with the following exception: all species of the following genera were enumerated: Pontoporeia, Gammarus, and Mysis.

APPENDIX IB-7

LOWEST TAXONOMIC LEVEL OF IDENTIFICATION FOR MACROZOOPLANKTON - 1976

IDENTIFIED TO GENUS

Chaoborus (Diptera)
Crangonyx (Amphipoda)

IDENTIFIED TO SPECIES

Hydra americana (Hydroidea)
Cordylophora caspia (C. lacustris)* (Hydroidea)
Manayunkia speciosa (Polychaeta)
Leptodora kindtii (Cladocera)
Mysis oculata relicta (Mysidacea)
Gammarus fasciatus (Amphipoda)
Hyaella azteca (Amphipoda)
Pontoporeia affinis (Amphipoda)

IDENTIFIED TO ORDER

Odonata
 Trichoptera
 Ostracoda (Podocopa)
 Diptera-pupae, larvae
 Hydracarina
 Lepidoptera

IDENTIFIED TO CLASS

Oligochaeta
 Gastropoda
 Pelecypoda
 Turbellaria

IDENTIFIED TO PHYLUM

Nematoda

*Feeding polyps only are counted

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1976 ENTRAINMENT FIELD AND LABORATORY WORK PLAN

NINE MILE POINT NUCLEAR STATION UNIT 1
AND JAMES A. FITZPATRICK NUCLEAR POWER PLANT

In-plant sampling was conducted on the same days for both power plants and for lake sampling whenever weather and manpower allocations permitted. The field and laboratory procedure, followed as of 20 July, is presented in detail for the FitzPatrick viability program.

I. SPECIES IDENTIFICATION AND ENUMERATION - REGULAR ENTRAINMENT PROGRAM

A. PHYTOPLANKTON - ABUNDANCE AND BIOVOLUME

1. Field Program - Enumeration

a. Gear

- two Kenco[®] pumps
- two 15-gallon Nalgene containers
- two 350-ml amber glass bottles
- Lugol's solution
- one 1-liter graduated cylinder

b. Method of Collection

One 350-ml sample was immediately withdrawn for phytoplankton enumeration and identification from the 15-gallon discharge water sample collected for in-plant chlorophyll a/C-14 determination; there was no replication. The sample was withdrawn immediately after the 15-gallon water sample was collected and subsequently preserved in Lugol's solution.

c. Temperature

Surface temperature was recorded at the collection location.

d. Sampling Frequency

Once a month, day only, from April through December.

e. Sampling Locations

Discharge aftbay only.

2. Laboratory Analysis

a. Abundance

The 350-ml whole water sample was thoroughly mixed and a 10 to 50-ml aliquot (depending on phytoplankton density) was removed and placed in a settling tube for a minimum of 24 hours; there was no replication. The settled contents in the plate chamber were analyzed according to the Utermohl method (Utermohl 1958). Counts were expressed as cells/ml.

A maximum of 300 phytoplankton (single cells or colonies) were identified and counted in one or two horizontal strips at 300 and 600 magnifications; the number of strips analyzed was dependent on the density of the sample.

b. Biovolume

Biovolume determinations for each species were made based upon at least 20 measurements per species per sampling date. Biovolume (μm^3) was expressed as mg/m^3 unpreserved weight (assuming a specific gravity of 1.0 for algal cells).

B. ZOOPLANKTON - ABUNDANCE

See viability program (Section II) for method of collection.
Enumeration data for the discharge viability sample were tabulated.

C. ICHTHYOPLANKTON AND GAMMARUS

1. Field Program

a. Gear

- two 1/2-meter plankton nets of #0 mesh (571 μ aperture) equipped with a TSK flowmeter
- two hand-held thermometers
- 16-oz wide-mouth jars
- one mushroom anchor

b. Method of Collection

- Nine Mile Point

The nets were positioned in two of the three intake forebays, one two feet below water level in the west bay (surface sample) and one thirteen feet below water level in the center bay (mid-depth sample); channel depth variable with lake level.

- James A. FitzPatrick

The nets were lowered simultaneously into the center intake forebay to depths of 14 and 20 ft below water level; channel depth was variable with lake level.

- Nine Mile Point and James A. FitzPatrick

Samples were collected for a 30-minute period, after which the nets were retrieved and the TSK meter readings read by two different field personnel (if available). Samples were adjusted to 5% concentration with buffered formalin.

c. Temperature

Surface temperatures were recorded at the beginning of each sample period.

d. Sampling Frequency

- Nine Mile Point - Ichthyoplankton

Weekly, from May through 8 September, and twice monthly (approximately two weeks apart) in April and from September through October. Collections were made on each of the sampling days at these times: 1100, 1700, 2300, and 0500 hours.

- James A. FitzPatrick - Ichthyoplankton

Weekly, two day and two night samples, from May through 8 September; twice monthly, two day and two night samples, from January through April; twice monthly, one day and one night sample, from 22 September through December.

- James A. FitzPatrick - Gammarus

Monthly, two day and two night samples, from January through September, and monthly, one day and one night sample, from October through December.

- James A. FitzPatrick - Sampling Periods

Day samples were collected at 1100 and 1700 hours or at 1100 hours and night samples at 2300 and 0500 hours or at 2300 hours.

e. Sampling Location

- Nine Mile Point

The two intake forebays between the trash racks and the traveling screens.

- James A. FitzPatrick

Entrainment rack in the center intake forebay in front of trash racks.

2. Laboratory Analysis

All fish larvae were picked from a sample, counted, and placed in vials containing 70% ethanol. The Folsom plankton splitter was used to subsample fish eggs and Gammarus (FITZ only) for enumeration when the sample was estimated to contain >500 fish eggs or if the sample was too dense to subsample in a 40-ml automatic Pipet (Tipet®). When large amounts of Cladophora (>200 ml) were present in a sample, benthic subsampling boxes and the same criteria listed in Appendix IB-3 of the Laboratory Work plan were utilized to obtain a subsample.

Fish eggs and Gammarus (FITZ only) were picked from the sample or subsample, counted, and stored in vials containing 5% buffered formalin. Fish eggs were identified to species whenever possible;

the random number tables were used to select those fish eggs for identification from the total number of eggs in the sample or subsample.

All larvae in each sample were enumerated by species. Sixty larvae of each species per collection were measured to the nearest 0.1 mm and the life stage recorded. Life stages were characterized as follows:

Pro-larva - larva having a yolk sac containing yolk

Larva - larva having a complete alimentary canal and/or remnants of a yolk sac containing only oil

Juvenile - a fish possessing all of the morphological characteristics of the adult of the species (i.e., fins fully differentiated, all spines and/or rays ossified and identical in count with those of the adult).

II. VIABILITY PROGRAM

A. GENERAL NOTES ON VIABILITY SAMPLING

1. Viability studies were conducted only if the plant was on-line.
2. Discharge samples were collected a specified length of time after sampling was begun in the intake forebay; the time lag corresponded to the flow rate through the plant system as a function of the number of circulating water pumps operating (See table below).
3. All discharge samples were held in the discharge water for a specified time (measured from midpoint of sampling interval) after collection to simulate passage to the diffuser (See table below).

| No. of Circulating Water Pumps | Approximate Travel Time (minutes) | | |
|-----------------------------------|---|------------------------------|---------------------------------|
| | Intake to Discharge Sampling Locations | Discharge to Lake Structure | |
| | | April-23 June Collections | 28 June-December Collections |
| 1 | 9-12 | 12 | 18 |
| 2 | 5- 6 | 6 | 9 |
| 3 | 3- 4 | 4 | 6 |

4. All ΔT simulations were done according to the following schedule:

| Dilution from ΔT_1 to ΔT_2 | Time Increment of Dilution |
|--|----------------------------|
| 31.5 to 7 F | 20 sec |
| 7 to 5 F | 40 sec |
| 5 to 3 F | 340 sec |
| 3 to 2 F | 300 sec |
| 3 or 2 F to intake temperature or ambient lake temperature | 600 sec |

The dilution scheme was based on full plant load conditions. When other operating conditions existed, the dilution volumes and the dilution times indicated for full-load conditions were followed; the ΔT and the change in temperature during dilutions were recorded. Water temperature was measured between dilutions, and at the end of the dilution series at an accuracy of 0.1 C.

5. Simulated laboratory studies were conducted when sampling was not scheduled in the lake as part of the lake monitoring ecological program and during inclement weather.

B. PHYTOPLANKTON - C-14, CHLOROPHYLL a

1. Field Program

- C-14 determination

Day samples: 4, 7, 24, 48, and 72-hour incubation periods

Night samples: 7, 24, 48, and 72 hour incubation periods

- Chlorophyll a determination

April-December: immediate analysis:

22 September-December: 7, 24, 48, and 72-hour incubation period

a. Sampling Table (See Appendix II-1)

b. Gear

- 48 light, 40 dark bottles (in-plant day collections)
- 32 light, 32 dark bottles (simulated laboratory studies)
- 32 light, 32 dark bottles (in-plant night collections)
- four dark boxes
- one 3/8-inch Tygon tube for siphon
- two 15-gallon Nalgene containers
- one 5-gallon bucket
- one 2-liter plastic beaker
- one 4-liter plastic beaker
- two 1-liter graduated cylinders
- sixteen 2-liter plastic bottles (chlorophyll)
- sixteen 1/2-liter plastic bottles (TIC)
- two Kenco[®] submersible centrifugal pumps (model 139A)

APPENDIX II-1

PHYTOPLANKTON^a VIABILITY SAMPLING PROGRAM

JAMES A. FITZPATRICK NUCLEAR POWER PLANT AND VICINITY - 1976

| SAMPLE TYPE | FREQUENCY ^b | DAY/NIGHT ^c | LOCATION OF SAMPLING | PROCEDURE OUTLINE ^d |
|--|----------------------------------|---------------------------|---|--|
| INTAKE | 2/MON(Apr-Dec) | Day and night | INTAKE FOREBAY ^e | Pump |
| DISCHARGE | 2/MON(Apr-Dec) | Day and night | DISCHARGE AFTBAY | Pump; hold for travel time to diffuser; put in ice bath until within 3°F of intake water temperature |
| SIMULATION ^f 3°F | 1/MON(Apr-Dec) 2/MON(Apr-Dec) | Day Night | DISCHARGE AFTBAY (May -June Collections) DISCHARGE AFTBAY (Jul-December Collec- tions) | Pump; hold for travel time to diffuser; instantaneous dilution of discharge water with unfiltered intake water following dilution ratios (Figure 1) appropriate for recorded ΔT Pump; hold for travel time to diffuser; dilute discharge sample with unfiltered intake water, time series dilution scheme |
| SIMULATION ^f 2°F | Same as 3°F simulation | Same as 3°F simulation | Same as 3°F simulation | Same as 3°F simulation |
| 3°F PLUME ISOTHERM (LAKE) ^b | 1/MON(Apr-Dec) | Day | VISIBLE BOIL (0.5 m below surface) | Pump |
| 2°F PLUME ISOTHERM (LAKE) ^b | 1/MON(Apr-Dec) | Day | 1200-1500 ft FROM BOIL ALONG TRAJECTORY OF PLUME | Pump |

2/MON = Twice monthly
1/MON = Once monthly

^aChlorophyll a and ¹⁴C determination

^bFrequency of lake collections contingent on weather conditions

^cDay = 1000 hrs; Night = 2200 hrs

^dIncubation periods variable:

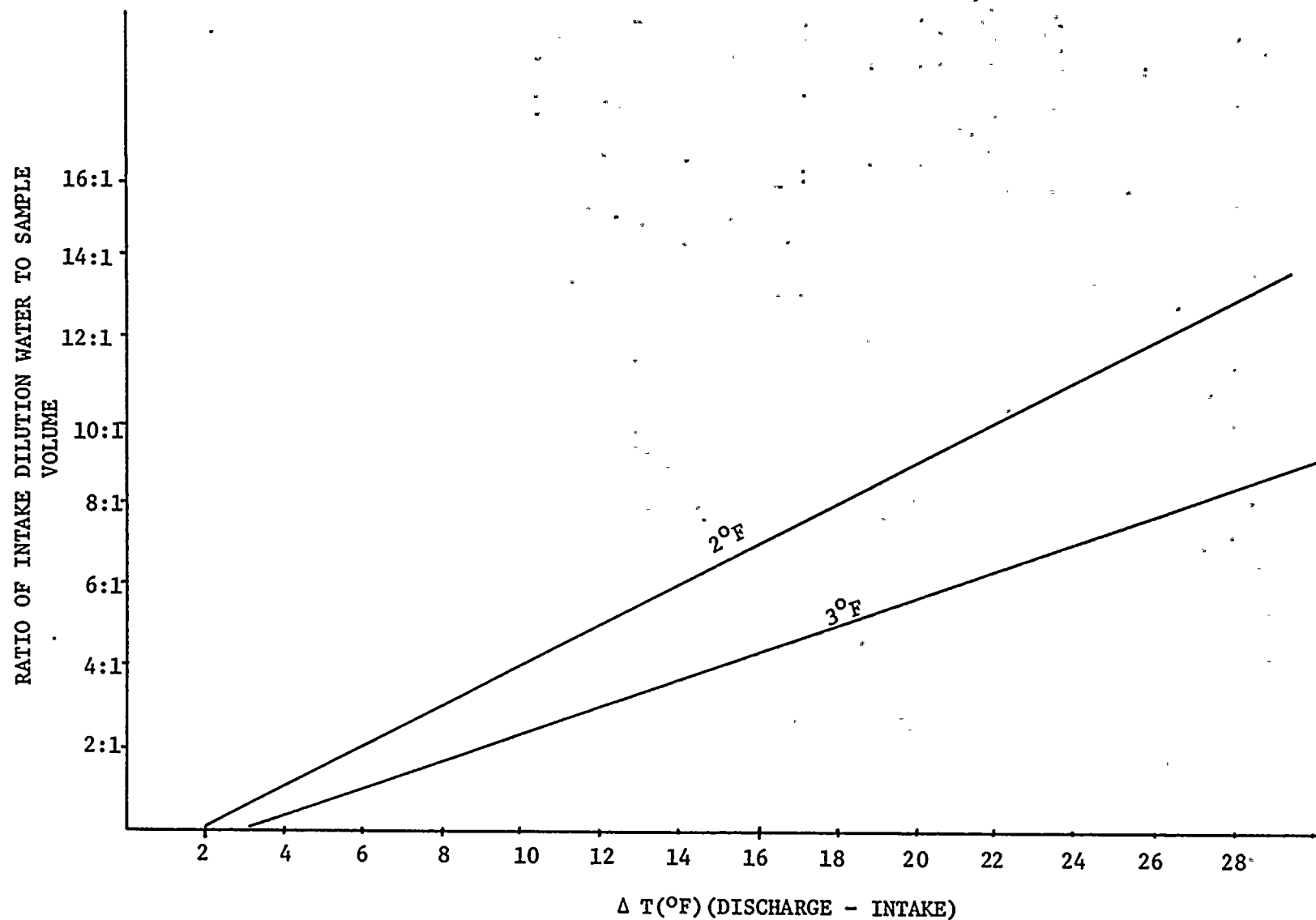
C-14 determination: day samples: 4,7,24,48, and 72 hr incubation periods
night samples: 7,24,48, and 72 hr incubation periods

Chlorophyll a determination: immediate analysis: April-December collections

7,24,48, and 72 hr incubation periods: 22 September-December collections

^eIntake forebay sample taken on lake side of entrainment rack, prior to tempering

^fSimulated studies for phytoplankton are conducted whenever lake sampling is cancelled due to inclement weather



DILUTION RATIOS FOR ENTRAINMENT SAMPLES

FIGURE II-1

- wooden mixing stick
- one cooler with ice, dark plastic bag
- two hand-held thermometers (0-30 C and 20-50 C)
- one viability pool (142 liters)

c. Method of Collection and Handling

(i) Intake sample

Two 15-gallon water samples were collected with the pump from approximately 1/2 meter below the surface in the intake forebay. One 2-liter aliquot was withdrawn from each sample for chlorophyll a determination, placed in a black plastic bag, and floated in an ice bath. One 1/2-liter plastic bottle was filled for Total Inorganic Carbon analysis from each 15-gallon water sample.

From each 15-gallon water sample, one light and one dark glass bottle (each 150 ml) was filled, each overflowing at least three times its volume, for each C-14 incubation period except the day four-hour C-14 incubation sample, which was dispensed into two light and one dark bottles. The bottles were returned to the laboratory within two hours of the collection, and 1 ml of $\text{NaH}^{14}\text{CO}_3$ (1 $\mu\text{Ci/ml}$) was injected into the bottom of each light and dark bottle with a repetitive syringe.

The samples (four-hour day samples and 7, 24, 48, and 72-hour day and night samples) were held in incubation chambers set at a constant 1000 footcandles and a temperature corresponding to that recorded in the intake forebay

prior to the tempering gate, or a minimum of 5 C. After incubation, 100 ml of the sample was filtered through a Millipore type EH 0.5 μ filter. The filter was washed with 100 ml of Millipore-filtered lake water at room temperature and placed in a scintillator cocktail (Hydromix®). Samples were sent to LMS's Nyack Laboratory for counting on an SL-30 Intertechnique scintillator counter.

(ii) Discharge sample

Two 15-gallon water samples were collected with the pump from 1/2 meter below the surface in the discharge aftbay. The phytoplankton enumeration sample was withdrawn, and the samples were then held for the appropriate time (see General Notes on Viability Sampling). Samples up to 5 gallons in volume were withdrawn as for the intake samples above and placed in an ice bath until their temperature was within 3 F of the temperature recorded in the intake ahead of the tempering gate. Then the TIC, chlorophyll a, and C-14 samples were dispensed into the appropriate bottles and returned to the laboratory where they were handled like the intake samples.

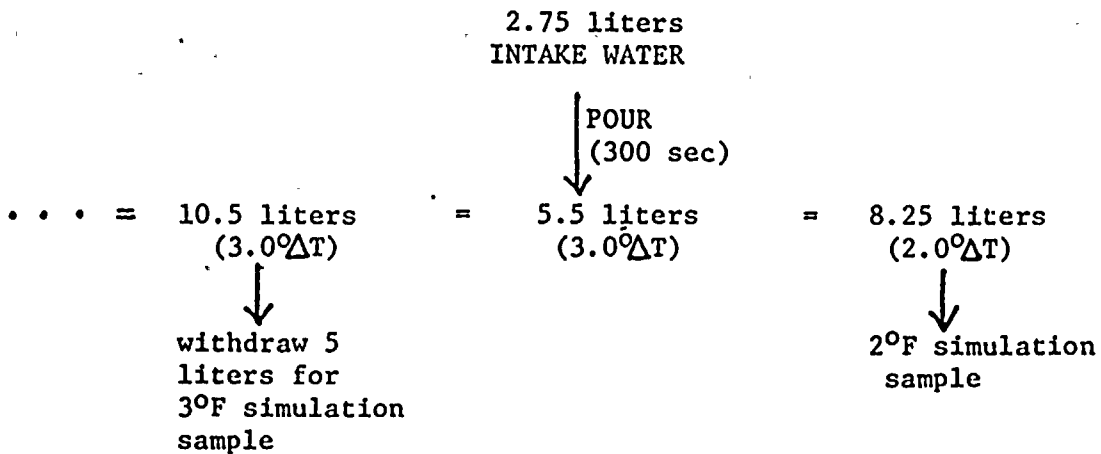
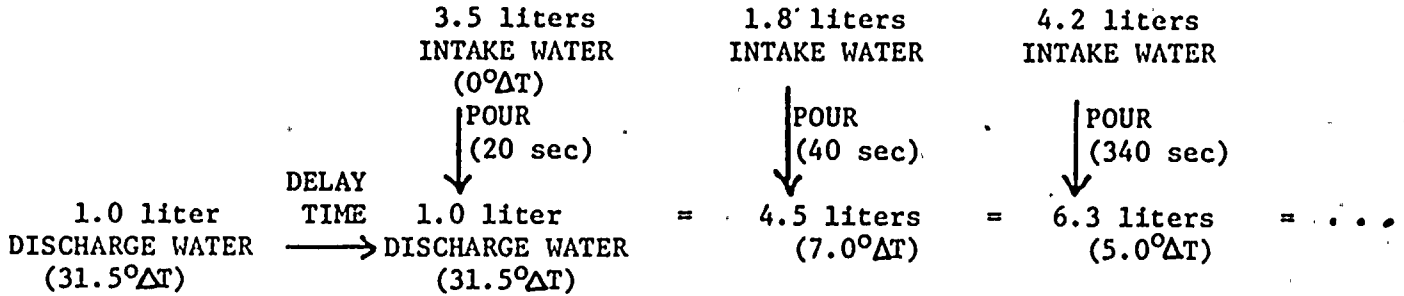
(iii) In-plant 3 and 2 F simulations

Two one-liter sample volumes of unfiltered discharge water, collected separately from the regular discharge sample, were maintained at discharge temperature for the appropriate time (see General Notes on Viability Sampling). Unfiltered intake water was added to each of the one-liter discharge samples, which were in 15-liter containers, according to the following schematic (Appendix II-2). The temperature of the water sample was recorded after each dilution.

APPENDIX II-2

3 F AND 2 F PROCEDURE FOR PHYTOPLANKTON SIMULATION STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT



NOTE: The dilution time given (POUR) is the time over which the dilution should take place. Long time periods are incremented; discrete volumes are poured every 30 seconds.

Water samples for TIC, chlorophyll a, and C-14 determination were withdrawn from the 3 and 2 F samples as described for the intake sample. All samples were incubated at the temperature recorded in the intake forebay or a minimum of 5 C.

(iv) Lake samples 3 and 2 F isotherm

Two 15-gallon water samples were pumped with a Kenco centrifugal pump from 1/2 meter below the water surface in the visible boil (3 F) and in the 2 F zone (1200-1500 ft along the trajectory of the plume from the boil - see section II-E). Water samples for chlorophyll a, TIC, and C-14 determination were withdrawn as for the in-plant intake sample.

When a Whitney thermistor was used, the water temperature (C) was recorded from 1/2 meter below the surface every 30 seconds during the sample interval at each location.

(v) General Notes

A surface temperature was recorded at every in-plant collection site and with every collection; both surface and bottom temperatures were recorded for lake collections.

2. Laboratory Program (Phytoplankton Viability)

a. Chlorophyll a

Each 2-liter whole water sample was filtered through a Whatman glass fiber filter GF/C. The concentration of chlorophyll and phaeophytin (the latter for immediate

analysis samples only) as determined according to the method outlined in Golterman (1971).

b. C-14 - Primary Productivity

Total Inorganic Carbon samples were titrated according to the method described in Golterman (1971).

Water samples were inoculated with one ml of $\text{NaH}^{14}\text{CO}_3$ in the laboratory where they were incubated at a constant 1000 foot-candles and ambient lake temperature (temperature recorded in the intake forebay prior to tempering) for 4, 7, 24, 48, and 72 hours (day samples only). The samples were filtered and washed with prefiltered lake water prior to scintillation counting.

c. ZOOPLANKTON

1. Field Program

a. Sampling Table (See Appendix II-3)

b. Gear

- one Dayton pump
- two submersible centrifugal pumps (Kenco[®] Model 139A, 1/2 hp)
- two 180-liter calibrated collection barrels, each lined with a #20 mesh plankton net (mesh aperture 76μ).
- eight one-liter incubation bottles (Nalgene bottles with 76μ mesh sides).
- two 15-liter plastic collection buckets
- one ice cooler
- two Nalgene viability pools (142 liters)
- one 250-ml graduated cylinder

APPENDIX II-3

ZOOPLANKTON^a VIABILITY SAMPLING PROGRAM

JAMES A. FITZPATRICK NUCLEAR POWER PLANT AND VICINITY - 1976

| SAMPLE TYPE | FREQUENCY ^b | DAY/NIGHT ^c | LOCATION OF SAMPLING | PROCEDURE OUTLINE |
|--|----------------------------------|------------------------|--|--|
| INTAKE | 2/MON(Apr-Dec) | Day and night | INTAKE FOREBAY ^e (14 April Collection) INTAKE FOREBAY ^e (28 April-December Collections) | Pump through net for 5-15 minutes (~200 cells/counting chamber); immediate analysis and after 24 hr incubation period Pump through net for 5-15 minutes (~200 cells/counting chamber); analysis after 8 hr incubation period |
| DISCHARGE | 2/MON(Apr-Dec) | Day and night | DISCHARGE AFTBAY (14 April Collection) DISCHARGE AFTBAY (28 April-June Collections) DISCHARGE AFTBAY (July-December Collections) | Pump through net for 5-15 minutes; hold for travel time to diffuser; immediate analysis and after 24 hr incubation period Pump through net for 5-15 minutes; hold for travel time to diffuser; analysis after 8 hr incubation period Pump through net for 5-15 minutes; hold for travel time to diffuser; bring sample to 0.5 liters with filtered discharge water; dilute with filtered intake water to 2°F, time series dilution scheme; refilter through net; analysis after 8 hr incubation period |
| SIMULATION 3°F | 1/MON(Apr-Dec) 2/MON(Apr-Dec) | Day Night | DISCHARGE AFTBAY (May & June Collections) INTAKE FOREBAY ^e (July-December Collections) | Pump through net for 5-15 minutes; hold for travel time to diffuser; instantaneous dilution with unfiltered (May-June collections)/filtered (23,28 June collections) intake water following dilution ratios (Figure 1) appropriate for recorded ΔT; refilter and analyze after 8 hr incubation period Pump through net for 1.5 times the collection time of the intake sample; add 12 liters of filtered intake water to intake sample; add resultant sample to 1 liter of filtered discharge water, time series dilution scheme; refilter and analyze after 8 hr incubation period |
| SIMULATION ^d 2°F | Same as 3°F simulation | Same as 3°F simulation | Same as 3°F simulation | Same as 3°F simulation |
| 3°F PLUME ISOTHERM (LAKE) ^b | 1/MON(Apr-Dec) | Day | VISIBLE BOIL (0.5 m below surface) | Pump; analyze after 8 hr incubation period |
| 2°F PLUME ISOTHERM (LAKE) ^b | 1/MON(Apr-Dec) | Day | 1200-1500 ft FROM BOIL ALONG TRAJECTORY OF PLUME | Pump; analyze after 8 hr incubation period |
| LAKE(FITZ INTAKE) ^b | 1/MON(Oct-Dec) | Day | VICINITY OF FITZ INTAKE STRUCTURE; 24 ft DEPTH CONTOUR, 1000 ft OFF- SHORE, 500 ft BEHIND VISIBLE BOIL | Pump; analyze after 8 hr incubation period |

^aZooplankton: >76μ but less than 571μ in size^bFrequency of lake collections contingent on weather conditions^cDay = 1030 hrs; Night = 2230 hrs^dSimulated studies for zooplankton are conducted whenever lake sampling is cancelled due to inclement weather^eIntake forebay sample taken on lake side of entrainment rack, prior to tempering

2/MON = Twice monthly

1/MON = Once monthly

- one 5-liter graduated plastic beaker
- one 1-liter graduated cylinder
- one plastic funnel
- one thermometer/one Whitney thermistor

c. Method of Collection

(i) Intake sample

Replicate zooplankton samples were pumped (with a Kenco[®] pump) from approximately 1/2 meter below the water surface in the intake forebay into a plankton net (#76 μ) suspended in a collection barrel containing ambient water (intake). The following procedure was used:

- The pump hose was lowered into the intake forebay. A volume of water sufficient to yield a minimum concentration of 200 zooplankton per counting chamber (Davies and Jensen 1974) was collected (approximately 500 liters).
- Net contents were washed into the cod-end receiving bucket and the concentrated sample was transferred to a one-liter Nalgene incubation container, which was placed in the circulating intake water incubation bath for 6-10 hours. The samples were then put in a cooler with ambient water (intake water) and transported to the laboratory where the survival of the zooplankton was recorded.

(ii) Discharge sample

The discharge samples were collected by the procedure outlined for the intake sample except that they were taken

from the discharge aftbay and diluted with filtered intake water before being placed in the incubation bottles. The collected discharge sample in the cod-end bucket (after being held for the appropriate time in the discharge water) was washed into a 10-liter container which was previously rinsed with intake water. Filtered discharge water was then added to bring the sample volume to 0.5 liters; and then the sample was diluted with filtered intake water as in the schematic in Appendix II-4. Temperatures were measured between each dilution. The dilution times were incremented every 30 seconds for long dilution times.

(iii) 3 F and 2 F Simulation Samples

Two concentrated intake samples were obtained by pumping intake water through the plankton net (aperture 76μ) for 2:0 times the sample time to collect the regular intake sample (criterion: minimum of 200 organisms/counting cell).

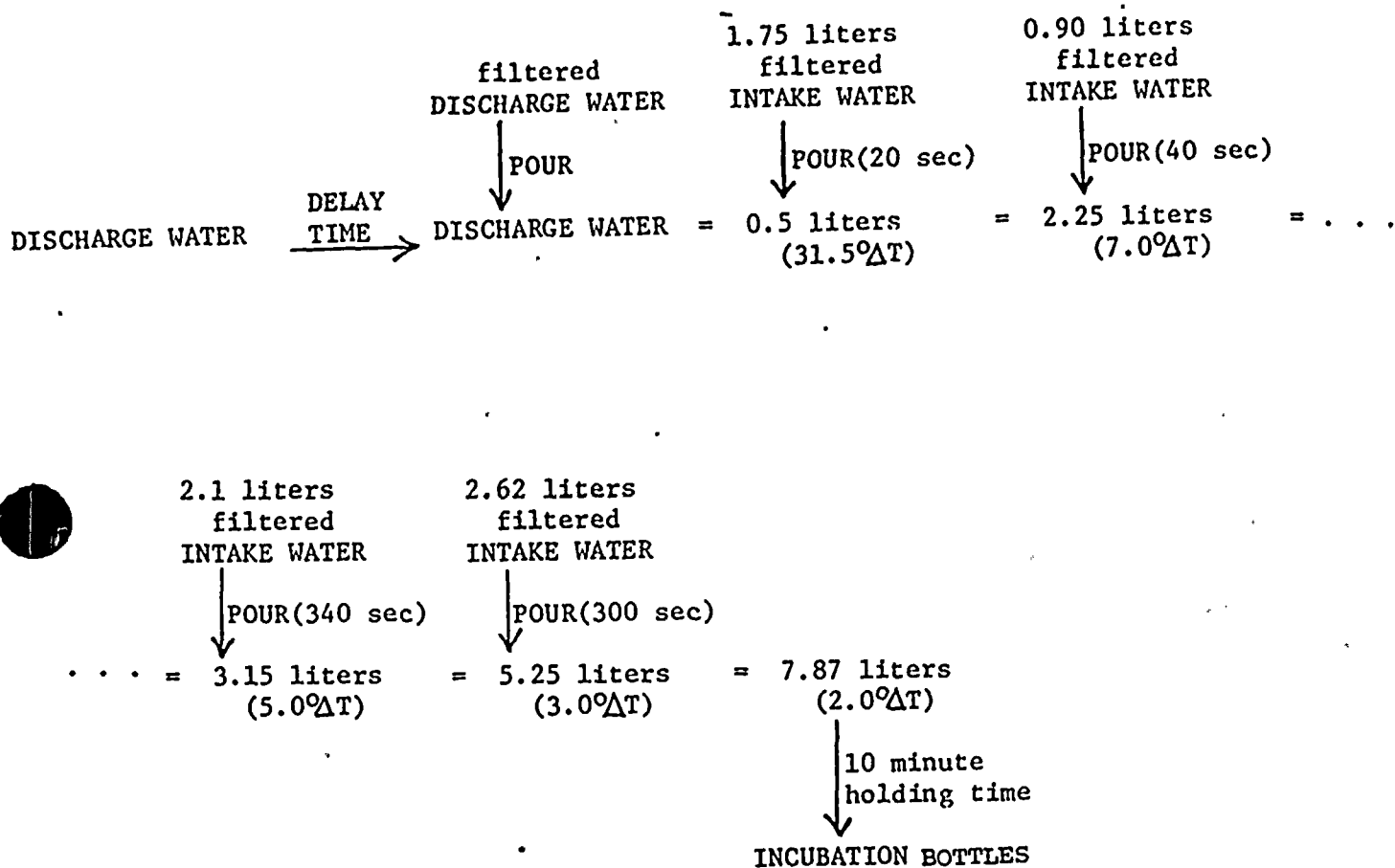
Approximately 12 liters of filtered intake water was added to each sample to increase the volume. The resulting water was added to one liter of filtered discharge water according to the dilution shown in the schematic (Appendix II-5). The water temperature was measured between dilutions, and long dilution times were incremented.

When the 3 F and 2 F samples were poured into the incubation bottles, care was taken to keep the organisms in the water. After a 6-10 hour incubation period in a viability pool containing running intake water, the samples were placed in a water cooler of ambient intake water and transported to the laboratory for analysis.

APPENDIX II-4

PROCEDURE FOR ZOOPLANKTON DISCHARGE SAMPLE

JAMES A. FITZPATRICK NUCLEAR POWER PLANT



APPENDIX II-5

PROCEDURE FOR ZOOPLANKTON 3 F and 2 F SIMULATION STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

~12 liters
filtered
INTAKE WATER

↓ POUR

INTAKE WATER

=

>12 liters
DILUTION WATER
(0°ΔT)

3.5 liters
DILUTION WATER

↓ POUR
(20 sec)

1 liter
filtered
DISCHARGE WATER
(31.5°ΔT)

1.8 liters
DILUTION WATER

↓ POUR
(40 sec)

= 4.5 liters
(7.0°ΔT)

4.2 liters
DILUTION WATER

↓ POUR
(340 sec)

= 6.3 liters
(5.0°ΔT)

=

10.5 liters
(3.0°ΔT)

→

5.25 liters
(3.0°ΔT)

=

7.87 liters
(2.0°ΔT)

↓ HOLD for
10 minutes

INCUBATION
BOTTLES

5.25 liters

↓ HOLD for
10 minutes

INCUBATION BOTTLES

(iv) 3 F and 2 F Lake Samples

Two samples were taken with a Kenco[®] centrifugal pump held approximately 1 meter below the water surface in the visible boil (3 F isotherm) and at a point in the plume 2 F above ambient or 1-2 F less than the observed boil temperature. The sample was handled as indicated for the in-plant intake samples; 500 liters or a volume yielding a minimum of 200 organisms per counting chamber, and 6-10 hour incubation period. The surface water temperature (°C) was recorded every 30 seconds during the sampling interval with either a Whitney thermistor or a hand-held thermometer.

(v) Lake - Fitz Intake

Two samples were taken with a Kenco[®] centrifugal pump held approximately 1 m below the water surface. Each sample was handled as indicated for the in-plant intake samples.

(vi) General notes

- For all samples, the pump was calibrated prior to each sampling period.
- A surface temperature was recorded at every in-plant collection site and with every collection. Both surface and bottom temperatures were recorded for lake collections.

2. Laboratory Program

The water sample was carefully washed into a 250-ml graduated beaker and uniformly mixed. A 1-ml aliquot was withdrawn using a disposable

wide-bore pipette and placed in an acid-cleaned Sedgewick-Rafter cell. The volume of the sample in the 250-ml beaker was recorded and 1 ml added to account for the 1-ml aliquot extracted.

First, one 1-ml sample from each 1-liter discharge sample was analyzed in a Sedgewick-Rafter cell. All non-motile (classification: dead) organisms in the entire chamber were counted in horizontal strips, as defined by a Whipple grid, at 100 magnifications; motility was defined as the ability of a zooplankter to show any movement or activity whatsoever. The Sedgewick-Rafter cell was then placed on a hot plate for 5 minutes at 65 C to heat-kill all live organisms. All organisms in the sample were then identified and enumerated, and the number of live organisms was considered to be the difference between the total number of organisms and the number dead.

All zooplankton (i.e., protozoans, rotifers, cladocerans, and copepods) were identified to the species level whenever possible; juvenile copepods were recorded primarily to order and copepod nauplii were recorded as a group.

For each aliquot:

NUMBER OF LIVE ORGANISMS = total number of organisms - number of non-motile organisms

% LIVE (MOTILE) = $\frac{\text{number of motile organisms}}{\text{total number of organisms}} \times 100$

NUMBER OF ORGANISMS/m³ = $\frac{\text{number of organisms}}{\text{ml}} \times$

$\frac{\text{volume of incubator bottle (ml)}}{\text{avg. pump rate (liters/min)} \times \text{pump duration (min)}} \times 1000 \text{ liters/m}^3$

D. ICHTHYOPLANKTON AND GAMMARUS

1. Field Program

a. Sampling Table (See Appendix table II-6)

b. Gear

- four 1/2-meter plankton nets of #0 mesh (571 μ aperture), each equipped with a TSK flowmeter (intake forebay samples)
- two 15-gallon Nalgene containers
- three collection buckets
- five graduated cylinders (one 1-liter; two 500-ml; two 250-ml)
- four graduated beakers (two 4000-ml; two 1000-ml)
- one Whitney thermistor
- one 25-HP ODP Mid-Whirl self-priming centrifugal pump Model 4W5501 (750 gpm pumping capacity under field conditions) (discharge samples)
- two hand-held thermometers (0-30 C and 20-50 C)

c. Methods of Collection and Handling

(i) Intake Sample

Two nets were lowered simultaneously into the center intake forebay to depths of 14 and 20 ft below the water surface for a 5-minute period (30 minute period, 28 April sample), and then immediately retrieved. Contents of the cod-end of the larval net apparatus were washed into a graduated cylinder and the volume of the sample was recorded.

APPENDIX II-6

ICHTHYOPLANKTON (FISH LARVAE ONLY) AND GAMMARUS VIABILITY SAMPLING PROGRAM

JAMES A. FITZPATRICK NUCLEAR POWER PLANT AND VICINITY - 1976

| SAMPLE TYPE | FREQUENCY ^a | DAY/NIGHT ^b | LOCATION OF SAMPLING | PROCEDURE OUTLINE |
|---|---|--|---|---|
| INTAKE | 2/MON(Apr-Sep) 2/MON(Apr-Sep) 1/MON(Oct-Dec) ^d | ICHTHYOPLANKTON: day and night <u>GAMMARUS</u> : night | INTAKE FOREBAY ^f (April Collection) INTAKE FOREBAY ^f (May-December Collections) | 30-minute net set; analysis after 8 hr incubation period. 5-minute net set; immediate analysis |
| DISCHARGE | 2/MON(Apr-Sep) 2/MON(Apr-Sep) 1/MON(Oct-Dec) ^d | ICHTHYOPLANKTON: day and night <u>GAMMARUS</u> : night | DISCHARGE AFTBAY (April Collection) DISCHARGE AFTBAY (May-June Collections) DISCHARGE AFTBAY (July-December Collections) | Pump through net for 30-minutes; hold for travel time to diffuser; analysis after 8 hr incubation period Pump through net for 30-minutes; hold for travel time to diffuser; immediate analysis Pump through net for 5-minutes; hold for travel time to diffuser; dilute with filtered intake water to 2°F; refilter and analyze immediately |
| SIMULATION ^e 3°F | 2/MON(Apr,May) 1/MON(Sep) 2/MON(Apr-Sep) 1/MON(Oct-Dec) ^d | ICHTHYOPLANKTON: night ICHTHYOPLANKTON: day and night <u>GAMMARUS</u> : night | DISCHARGE AFTBAY (May & June Collections) INTAKE FOREBAY ^f (July-December Collections) | Pump through net for 5-minutes; hold for travel time to diffuser; instantaneous dilution with filtered (571μ) (May collection)/unfiltered(June collection) intake water following dilution ratio (Figure 1) appropriate for recorded ΔT (intake - discharge temperature recorded at time of sampling); refilter and analyze immediately Add filtered discharge water; dilute with filtered intake water, time series dilution scheme; refilter and analyze immediately |
| SIMULATION ^e 2°F | Same as 3°F simulation | Same as 3°F simulation | Same as 3°F simulation | Same as 3°F simulation except only one-half of full ΔT |
| 3°F/2°F PLUME ISOTHERMS (LAKE) ^a | 2/MON(Apr,May) 2/MON(Jun-Aug) 1/MON(Sep) | ICHTHYOPLANKTON: day and night ICHTHYOPLANKTON: day and night ICHTHYOPLANKTON: day and night | COMBINED SAMPLE: TOW FROM BOIL OUT ALONG PLUME TRAJECTORY | Tow for 5-minutes at 1 fps (2.5 minutes in boil and 2.5 minutes in 2°F isotherm) |

2/MON = Twice monthly
1/MON = Once monthly

^aFrequency of lake collections contingent on weather conditions

^bDay = 1100 hrs; Night = 2300 hrs

^cIchthyoplankton viability by species and life stage from each simulated sample analyzed for Gammarus viability

^dThrough December if zero mortality is not recorded in two previous consecutive experiments

^eSimulated studies for ichthyoplankton are conducted whenever lake sampling is cancelled due to inclement weather

^fIntake forebay sample taken plant side of tempering gates; after tempering

The numbers of dead fish larvae (all samples) and Gammarus (night sample only) were recorded in the field immediately after collection; one analysis (28 April sample) was conducted after an 18-hour incubation period. Organisms showing no mobility when probed with a dissecting needle were classified as dead. (See Section IID-2a for details.)

(ii) Discharge Sample

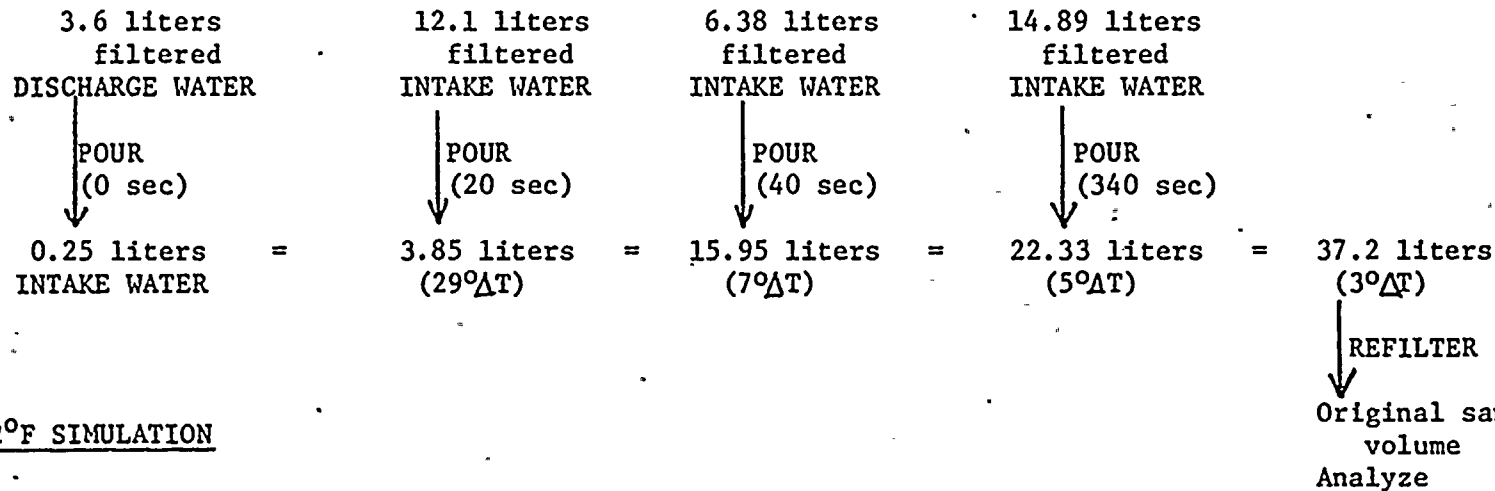
The discharge sample was collected by pumping water with a Mid-Whirl pump through a net for a 5-minute period (30-minute period for 28 April sample). The resulting sample was then treated exactly like the zooplankton discharge samples, except that the samples were analyzed immediately after the final dilution was made; one analysis (28 April sample) was concluded after an 18-hour incubation period. In-plant sample analysis followed the procedure outlined for the intake samples.

(iii) 3 F and 2 F Simulations

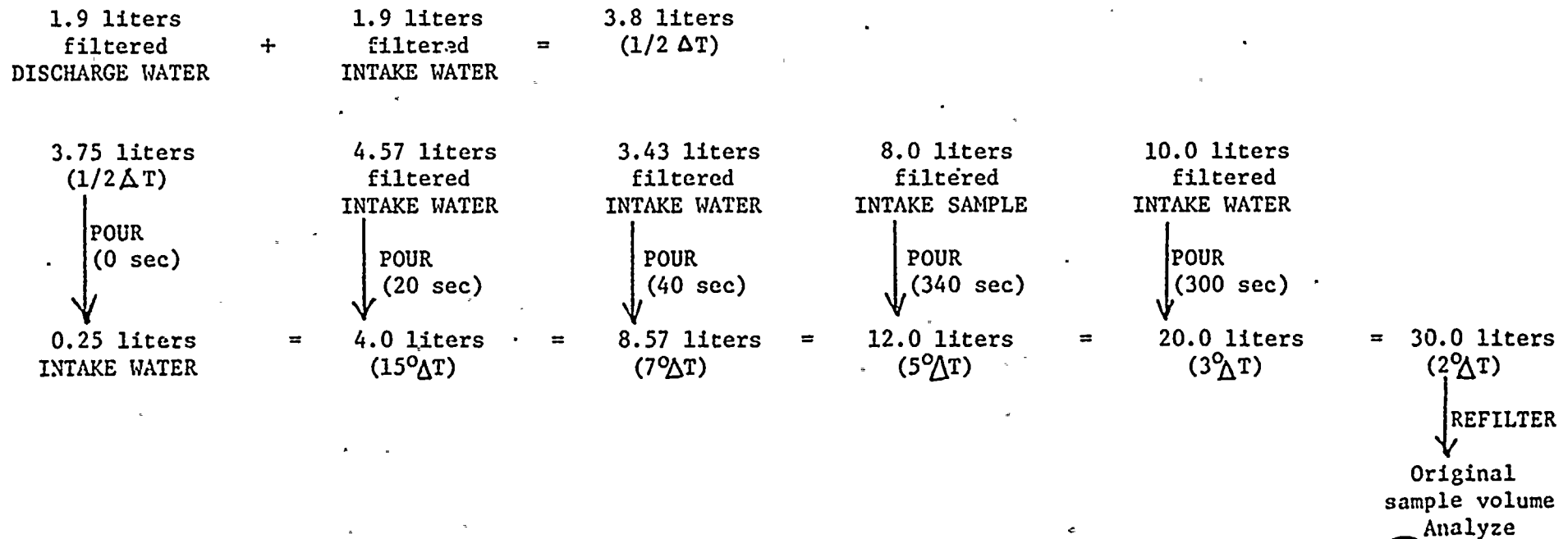
For the 3 F and 2 F simulation a 5-minute replicate sample was collected from the intake forebay, and the temperature was raised by dilution with filtered discharge water. The temperature was then progressively lowered by dilution with filtered intake water. The 3 F simulation was taken from approximately the full plant ΔT to a 3 F ΔT , while the 2 F ΔT simulation was taken from approximately one half the full plant ΔT to 2 F ΔT . The proper dilutions are shown in Appendix II-7.

APPENDIX II-7
PROCEDURE FOR GAMMARUS AND ICHTHYOPLANKTON 3 AND 2 F SIMULATION STUDIES

3°F SIMULATION



2°F SIMULATION



Due to the large volumes required, 15-gallon containers first rinsed with intake water were used for the dilutions. The final dilution volumes were filtered to approximately 0.25 liters by being passed carefully through the nets. All resulting samples were handled like the intake samples.

(iv) 3 F and 2 F Lake Samples

The 3 F and 2 F lake samples were combined in one sample; a tow was made from the visible boil area out through the plume to the 2 F isotherm. Replicate samples were collected simultaneously by towing two nets approximately one meter below the water surface. The tow duration and speed were similar to that of the intake sample (5 minutes, 1 fps). The first 2.5 minutes of the tow occurred in the boil, the second 2.5 minutes in the plume extended out from the boil.

The May and June samples were collected as follows: the tow began on the western side of the visible boil, turned north before the eastern end of the boil, and extended until the 2 F isotherm above ambient was reached or for a maximum of 5 minutes. Temperature measurements were made outside the plume (shoreward of the boil) to determine the local ambient temperature.

Temperature measurements were recorded before the tow to estimate the trajectory of the plume (see Section IIE). In addition, temperature measurements were recorded at surface, mid-depth, and bottom depths at the beginning and end of each tow beginning 20 July. Vertical temperature profiles were taken at the beginning and end of each tow during the

May and June samples. A surface temperature was also recorded every 20 seconds during the tow.

The resulting samples were handled like the intake samples.

(v) General Notes

- Surface temperatures were taken with all samples.

- The pump was calibrated before each sampling period.

2. Laboratory Program

a. Ichthyoplankton Samples

The sample was scanned under a dissecting microscope at 10 magnifications. All dead larvae were counted, picked from the sample, and preserved in 70% ethanol. The remaining sample was then preserved in 10% buffered formalin and returned to the laboratory where it was analyzed at 10 magnifications for the number of live fish larvae. The total count of ichthyoplankton was calculated from the number of live and dead organisms recorded. All larvae were identified to species whenever possible and the life stage (pro-larva, larva, or juvenile) recorded.

b. Gammarus Samples

The sample was scanned under a dissecting microscope at 10 magnifications; dead Gammarus and ichthyoplankton were counted and identified to species immediately, then picked from the sample and preserved in 70% ethanol. After all dead organisms were removed, the remaining organisms were preserved in

buffered 10% formalin and returned to the laboratory, where the total number of Gammarus fasciatus, and the number of live fish larvae were recorded. The difference in total count of Gammarus and the number of dead Gammarus yielded the number of live Gammarus in the sample. The total number of fish larvae was determined from the number of live and dead fish larvae counted. The life stage (pro-larva, larva, juvenile) of all fish larvae was determined.

E. DETERMINATION OF PLUME TRAJECTORY

The plume trajectory in the lake was determined by the following procedure:

- a. Observe the direction of the trajectory of the Oswego river plume where it enters the lake. This is done when leaving the harbor.
- b. Measure the surface temperature at a point approximately 400 ft south of the visible boil and in the visible boil.
- c. If the boil temperature is less than the temperature south of the boil, a "colder than ambient" plume will result. If the boil temperature is greater than the temperature south of the boil, a "warmer than ambient" temperature plume exists. If the two temperatures are the same, assume the plume trajectory to be the same as the Oswego river plume trajectory.
- d. If a temperature differential does exist, the thermistor is towed in the direction in which the river plume was observed to flow. The temperature is observed and the boat course adjusted to hold the temperature as close as possible to the boil temperature while still heading away from the boil. If the temperature

measured south of the boil is encountered, the course is reversed until the temperature again approaches the boil temperature. A new course is then set along the revised estimate of the plume trajectory.

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1976 IMPINGEMENT FIELD AND LABORATORY WORK PLAN

NINE MILE POINT NUCLEAR STATION UNIT 1
AND JAMES A. FITZPATRICK NUCLEAR POWER PLANT

A. GEAR

- one metal fish basket lined with 1/4-inch stretched mesh nylon netting
- two hand-held thermometers

B. DAILY COLLECTIONS (MONDAY AND FRIDAY) [Appendix table III-1]

1. Sampling Frequency

A 24-hour composite sample was collected every Monday and Friday from January through December.

Sampling frequency was increased during periods of increased impingement, i.e., whenever more than 20,000 fish were impinged/24-hour period. Twelve and 13 additional collections were made during 1976 at FitzPatrick [FITZ] and Nine Mile Point [NMP] plants, respectively. The superintendent of the power plant was notified within 12 hours whenever more than 20,000 fish were collected from the traveling screens within a 24-hour period. Only the plant reporting high impingement was continuously sampled until the number of fish impinged drop below 20,000 fish/24-hour period. An exception to this occurred on 6-7 April, when an extra daily collection was made at the FitzPatrick plant because more than 20,000 fish were impinged at Nine Mile Point. Fish collected on the additional sampling days were identified to species, enumerated at the plant site, and then discarded.

APPENDIX III-1

SUMMARY OF PARAMETERS MONITORED IN THE SCHEDULED IMPINGEMENT PROGRAM

NINE MILE POINT NUCLEAR STATION UNIT 1
AND JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| | ALEWIFE | RAINBOW SMELT | WHITE PERCH | YELLOW PERCH | SMALLMOUTH BASS | SELECTED SPECIES | ALL SPECIES |
|----------------------------------|---------|------------------|----------------|-----------------|--------------------|---------------------|----------------|
| TRASH RACK COLLECTION | | | | | | | |
| Total Length | | | | | | | X |
| Total Weight per Individual | | | | | | | X |
| Tags | | | | | | | X |
| Condition (intact/damaged) | | | | | | | X |
| PHOTOPERIOD OR HOURLY COLLECTION | | | | | | | |
| Total Length | | | | | | | A |
| Total Weight per Individual | | | | | | | A |
| Total Weight per Species | | | | | | | B |
| Partial Weight | C | C | C | C | C | | |
| Sex | | | | | | | D |
| Condition (intact/damaged) | | | | | | | A |
| Tags | | | | | | | X |
| Scales (FITZ only) | | | | | | E | |
| 24-HOUR COLLECTION | | | | | | | |
| Total Length | | | | | | | A |
| Total Weight per Individual | | | | | | | A |
| Total Weight per Species | | | | | | | B |
| Condition (intact/damaged) | | | | | | | A |
| Tags | | | | | | | X |

X = All fish collected

A = <60 fish/species/collection

B = All fish collected (includes damaged fish)

C = <60 fish/species/24-hour sampling period

D = <60 fish/species/week (Wednesday collection: composite of two photoperiod collections at FITZ; composite of 24-hourly collections at NMP)

E = <150 fish/sex/season for two numerically dominant species

2. In-Plant Program

a. Method of Collection

Fish and debris present on the trash racks and all fish impinged on the traveling screens immediately prior to the initiation of sampling were discarded. The fish collection basket was placed in the screen wash discharge basin (FITZ) or in the discharge canal at the end of the sluiceway (NMP) at approximately 1000 hours or following the first programmed wash after 1000 hours on each Monday and Friday.

The following parameters were recorded at the initiation and termination of each sampling period:

Number of traveling screens operating (maximum = 3)

Number of circulating water pumps operating (maximum = 3 [FITZ]
and 2 [NMP])

Number of service pumps operating

Screen wash pressure

Screen wash cycle and duration: programmed time (10-minute wash/hour [FITZ] or 3-minute wash/hour [NMP]), manual, or continuous

Air temperature (C)

Percent tempering (from plant generation data sheets)

Wind direction and velocity from 200-ft tower probe

Surface temperature* (C) (16 April-December 1976):

intake forebay [FITZ]: before tempering

after tempering (from mid-forebay)

intake forebay [NMP]: before tempering

after tempering (behind gates)

*Temperature was recorded with a hand-thermometer held in a 20-liter water sample taken at the surface of the bay.

discharge bay [FITZ]: after tempering, lakeside
discharge bay [NMP]: at reverse flow gate

Computer plant temperatures (F) (January-12 April,
4 June-December 1976): lake probe
intake (average of condenser
inlet probes)
discharge (average of condenser
outlet probes).

The following data were recorded hourly from the plant generation
data sheets in the LMS field impingement notebook:

Gross output (megawatts)
Number of circulating water pumps operating
Number of service water pumps operating.

At approximately 1000 hours on each Tuesday and Saturday, the
fish basket was removed. At approximately the same time the fish
basket was removed, the trash rack sample was retrieved.

b. Preliminary Analysis

(i) January-27 September and 29 October-December sampling
periods

- January-27 September

All fish collected during the preceding 24 hours were identi-
fied to species and enumerated in the field. The presence
of fish tags was recorded for all fish; the condition (e.g.,
intact or damaged) of a maximum of 60 fish/species was also

recorded. Damaged fish are defined as any fish for which a correct length or weight could not be determined.

If more than 60 fish/species were collected from the traveling screens during the 24-hour period, a maximum subsample of 60 fish/species was preserved in 10% buffered formalin and returned to the laboratory for secondary analysis. The remainder of the impingement sample was bagged and discarded. If 60 or fewer fish/species were collected, all fish were returned to the laboratory for secondary analysis.

The fish collected in the trash rack sample were identified, enumerated, bagged separately, preserved in formalin, and returned to the laboratory with the fish basket sample for secondary analysis.

-29 October-December

All fish from the traveling screens were collected and returned unpreserved to the laboratory in coolers where all fish of each species were weighed together. Total biomass per species included damaged fish.

Secondary analysis was conducted as described in section B-3.

(ii) 1 October-25 October Sampling Period

All fish from the traveling screens were enumerated and separated according to species, but not preserved. All fish of each species were weighed together, including damaged or partial fish if these could be identified to a species level (4-25 October collection period).

If more than 60 fish/species were collected from the traveling screens during the 24-hour period, secondary analysis was conducted in the plant on a subsample of up to 60 fish/species. If fewer than 60 fish/species were collected, all fish were analyzed in the plant.

All fish collected in the trash rack samples were identified, enumerated, and analyzed for total body weight and total length; these fish were not included in the total biomass sample, which included only fish from the traveling screens.

The presence of fish tags on all fish and the condition (e.g., intact or damaged) of up to 60 fish per species were recorded.

All fish were discarded following analysis.

(iii) January-December Sampling Period

All invertebrates collected in the fish basket and readily visible were returned to the laboratory for identification to the species level and for enumeration. Invertebrates approximately one inch or longer were included in this procedure.

3. Laboratory Program - Secondary Analysis

Secondary analysis was conducted in the laboratory during the January through 27 September sampling period on formalin preserved fish and during the 29 October-December sampling period on fresh (unpreserved) fish. The 29-30 October collection at NMP and FITZ was frozen and subsequently thawed before analysis.

Total length (to the nearest 0.1 cm) and total weight (to the nearest 0.1 g) were determined for a maximum of 60 fish/species per 24-hour collection (Appendix table III-1).

C. 24-HOUR HOURLY SAMPLING (WEDNESDAY)

1. Sampling Frequency

Hourly samples were collected over a 24-hour period each Wednesday from January through May at the FitzPatrick plant and from January through December at the Nine Mile Point plant.

2. In-Plant Program

a. Method of Collection

The following parameters were recorded hourly:

Number of traveling screens operating

Number of circulating water pumps operating

Number of service water pumps operating

Screen wash pressure

Screen wash cycle and duration: (programmed time, manual,
or continuous)

Air temperature (C)

Percent tempering (from plant generation data sheets)

Surface temperature* (C): (14 April-December 1976):

intake bay: before tempering

after tempering

discharge bay

*Temperature was recorded from a 20-liter water sample collected at the surface of the bay by LMS staff person.

Computer plant temperatures (F): (January - 7 April,
4 June-December 1976):

lake probe

intake probe

discharge probe

Gross output (megawatts)

Wind direction and velocity from 200-ft tower probe.

Samples were collected each hour over a 24-hour period. When the programmed wash cycle was not operating, a NMPC/PASNY staff person operated the traveling screens manually for a minimum of 5 minutes every two hours. Fish and debris were cleared from the trash racks and discarded before the fish basket was lowered into place following the first programmed wash at approximately 1000 hours. The fish basket was retrieved immediately after each hourly wash.

b. Preliminary Analysis

(i) January-22 September, 3 November-December
Sampling Period

All fish collected were identified and enumerated in the field; however, the number of alewife impinged on the traveling screens on 17-18 November at FITZ was estimated based on the total biomass for the species and the average weight of an individual. The presence of tags was recorded for all fish.

The trash rack sample retrieved at the end of the 24-hour period was bagged separately, preserved in formalin, and returned to the laboratory for further analysis.

A maximum of 60 fish/species/hour (NMP) or 60 fish/species/ photoperiod (FITZ) collected from the traveling screens were preserved and returned to the laboratory for further analysis. The remainder of the impingement sample was bagged and discarded.

(ii) 29 September-27 October Sampling Period

- Traveling Screen Sample

All fish from the traveling screens were enumerated and separated according to species; the presence of fish tags was recorded. Fish were rinsed with water to remove any debris or vegetative matter (e.g., Cladophora). All fish of each species were weighed together, including damaged or partial fish if these could be identified to a species level (6-27 October); fish were not preserved.

If fewer than 60 fish of any species were collected in a traveling screen sample (hourly [NMP] or photoperiod [FITZ] sample), total length (to nearest 0.1 cm), total weight (to nearest 0.1 g) and condition (e.g., intact or damaged) of all fish of that species were recorded. If more than 60 fish per species were collected in a traveling screen sample, a maximum of 60 fish were subsampled for analysis.

Sex was determined for up to 60 fish for each species collected in a 24-hr period. If fewer than 60 fish/species were collected during the first hourly sample (NMP) or the first photoperiod sample (FITZ), additional fish were obtained from the succeeding hourly or photoperiod samples.

Scales were removed from selected species from the Fitz-Patrick impingement collections for analysis in the laboratory.

Condition factor was calculated for those alewife, rainbow smelt, yellow perch, white perch, and smallmouth bass for which sex had been determined. Partial weight was obtained by removing the gonads and the stomach from the fish; the stomach was excised from the most anterior point of the esophagus to its posterior portion at the pyloric sphincter. Partial weights were obtained for a maximum of 60 fish/species/ 24-hour period. Fish were weighed to the nearest 0.1 g.

- Trash Rack Sample

All fish collected in the trash rack samples were identified, enumerated, and analyzed for total weight and total length (Appendix III-1); these fish were not included in the total biomass sample, which included only fish from the traveling screens.

(iii) January-December Sampling Period

All invertebrates collected in the fish basket were identified and enumerated to the group level (e.g., crayfish, water beetle) in the plant. All intact invertebrates were returned to the laboratory for enumeration and identification to the species level whenever possible.

3. Laboratory Program

a. January-22 September and 3 November-December Sampling Program: Secondary Analysis

Secondary analysis was conducted in the laboratory on formalin-preserved fish during the January-22 September sampling period and on freshly caught (unpreserved) fish during the 3 November-December sampling period.

(i) Traveling Screen Sample

The identification and enumeration of fish collected from the traveling screens were verified in the laboratory.

The total length, total weight, and condition (e.g., intact or damaged) were determined for a maximum of 60 fish/species/hour (NMP) or 60 fish/species/photoperiod (FITZ). The stomachs and gonads of 30 fish/species/sex were removed per 24-hour period at both plants for determination of condition factor for alewife, rainbow smelt, smallmouth bass, white perch, and yellow perch. Partial weight was recorded to the nearest 0.1 g.

Sex was determined for a maximum of 60 fish/species/24-hour period.

(ii) Trash Rack Sample

All fish removed from the trash racks were analyzed for total length and total weight.

b. January-December Sampling Program: Scales for Age Determination-James A. FitzPatrick Nuclear Power Plant

Scales were removed from each of the potentially abundant species in impingement collections from January through September (e.g., alewife, rainbow smelt, white perch, and gizzard shad). Scales were removed from up to 25/fish/sex/Wednesday collection of alewife and rainbow smelt from the first photoperiod (day) sample during the October-December sampling period. If the day sample did not yield the required number of fish, scales from the night samples were used. The stage of gonadal development was recorded for each fish for which scales were saved.

| <u>SEASONS</u> | <u>NUMERICALLY DOMINANT SPECIES</u> | |
|---------------------------------|--|--------------------------------------|
| | <u>HYPOTHESIZED</u> | <u>ACTUAL</u> |
| 1975*- FALL: October - December | alewife rainbow smelt gizzard shad | alewife rainbow smelt |
| 1976 - WINTER: January - March | alewife rainbow smelt gizzard shad | alewife rainbow smelt |
| 1976 - SPRING: April - June | alewife rainbow smelt gizzard shad | alewife rainbow smelt |
| 1976 - SUMMER: July - September | alewife rainbow smelt white perch | alewife threespine stickleback |
| 1976 - FALL: October - December | alewife rainbow smelt | alewife rainbow smelt |

Age determinations were made by counting the number of annuli for a maximum of 150 scales/sex of the two most abundant species per season. Scales read for age determination were randomly subsampled from those scales removed during the three months which comprised a season.

*Alewife and rainbow smelt age and growth determination, November-December 1975.

D. PHOTOPERIOD COLLECTIONS (WEDNESDAY) - JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

1. Sampling Frequency

Two samples, corresponding to day and night collections (Appendix III-2), were obtained each Wednesday from June through December.

2. In-plant Program

a. Method of Collection

The following parameters were recorded at the initiation and termination of each sampling period:

Number of traveling screens operating (maximum = 3)

Number of circulating water pumps operating (maximum = 3)

Number of service pumps operating

Screen wash pressure

Screen wash cycle and duration: programmed time (10 minute wash/hour), manual, or continuous

Air temperature (C)

Percent tempering (from plant generation data sheets)

Wind direction and velocity from 200-ft tower probe

Surface temperature (C)*: intake forebay: before tempering
after tempering

discharge bay: after tempering

Computer plant temperatures (F): lake probe

intake probe

discharge probe.

*Temperature was recorded from a 20-liter water sample taken at the surface of the bay by LMS

APPENDIX III-2

APPROXIMATE TIME INTERVAL FOR DAY IMPINGEMENT COLLECTIONS

JAMES A. FITZPATRICK NUCLEAR POWER PLANT-1976

| PERIOD | DAYLIGHT HOURS* |
|---------------|-----------------|
| 1-31 JAN | 700-1600 |
| 1-29 FEB | 600-1700 |
| 1-31 MAR | 500-1800 |
| 1-24 APR | 500-1800 |
| 25-30 APR | 600-1900 |
| 1-31 MAY | 500-1900 |
| 1-15 JUN | 500-2000 |
| 16-30 JUN | 500-2100 |
| 1- 7 JUL | 500-2100 |
| 8-28 JUL | 600-2100 |
| 29 JUL- 1 SEP | 600-2000 |
| 2-22 SEP | 600-1900 |
| 23 SEP-13 OCT | 700-1900 |
| 14-24 OCT | 700-1800 |
| 25 OCT-10 NOV | 700-1700 |
| 11 NOV- 1 DEC | 700-1700 |
| 2-16 DEC | 700-1600 |
| 17-31 DEC | 700-1700 |

*Corrected for Daylight Saving Time

The following data were recorded hourly from the plant generation data sheets in the LMS field impingement notebook:

Gross output (megawatts)

Number of circulating water pumps operating

Number of service water pumps operating

Number of traveling screens operating.

The method of collection was similar to that described for daily impingement collections (see Section B) except that two samples were collected in a 24-hour period. A trash rack sample was collected at the end of the 24-hour period.

3. Laboratory Program

(See Sections C-2 and C-3)

E. CONTINUOUS WASH ON SCHEDULED OR UNSCHEDULED IMPINGEMENT DAYS

1. Sampling Frequency

The frequency of sampling depended upon when the traveling screens were put on continuous wash due to impingement of large numbers of fish (>5,000 fish/hour) or large quantities of vegetative matter.

2. In-Plant Program

The following parameters were recorded at the initiation and termination of the sampling period:

- Number of screens operating
- Number of circulating water pumps operating
- Number of service water pumps operating
- Screen wash pressure
- Air temperature (C)
- Percent tempering (from plant generation data sheets)
- Wind direction and velocity from 200-ft tower probe
- Surface temperature(C):* intake forebay: before tempering
after tempering
discharge bay
- Computer plant temperatures (F): lake probe
intake probe
discharge probe.

The following data were recorded hourly from the plant generation data sheets in the LMS field impingement notebook for scheduled impingement days:

- Gross output (megawatts)
- Number of circulating water pumps operating
- Number of service water pumps operating
- Number of traveling screens operating.

All plant data were recorded hourly if the continuous wash field procedure was followed on a Wednesday.

*Temperature was recorded from a 20-liter water sample collected at the surface of the bay by LMS on all impingement days.

a. James A. FitzPatrick Nuclear Power Plant

All fish impinged on the traveling screens were collected in the fish basket net. A second net was used to subsample impinged fish for 1 minute every 15 minutes or 4 minutes/hour. The fish basket was emptied at regular intervals throughout the subsampling procedure to prevent overflow which otherwise would have resulted in recirculation of impinged fish; those fish were discarded.

All fish collected in the subsample (second net) were enumerated and identified.

b. Nine Mile Point Nuclear Station Unit 1

All fish impinged on the traveling screens were collected in the fish basket and subsequently subsampled for species identification and enumeration.

There was no trash rack sample at NMP or FITZ on unscheduled impingement days.

3. Laboratory Program

Only fish collected on the scheduled impingement sampling days were analyzed; the laboratory procedure followed corresponded to the type of collection (i.e., hourly, photoperiod, or 24-hour).

CHAPTER IV

APPENDIX IVA-1

TWICE MONTHLY WATER CHEMISTRY PROGRAM : SELECTED PARAMETERS*

NINE MILE POINT VICINITY - 1976

I. CHLOROPHYLL A ($\mu\text{g/l}$).

| DATE | 20 FT | | | 60 FT | | |
|--------|-------|-----------|------|-------|-----------|------|
| | NMPW | NMPP/FITZ | NMPE | NMPW | NMPP/FITZ | NMPE |
| 14 APR | 12.6 | 17.2 | 13.9 | 17.8 | 11.5 | 12.2 |
| 29 APR | 7.8 | 7.4 | 9.0 | 4.4 | 4.6 | 6.8 |
| 10 MAY | 11.5 | 5.2 | 7.9 | 3.5 | 7.1 | 6.6 |
| 24 MAY | 6.0 | 5.0 | 5.5 | 5.5 | 5.7 | 4.1 |
| 8 JUN | 13.0 | 9.3 | 8.2 | 5.6 | 10.0 | 9.6 |
| 21 JUN | 13.3 | 7.0 | 9.6 | 12.8 | 5.6 | 6.3 |
| 6 JUL | 8.9 | 9.8 | 11.0 | 13.3 | 11.9 | 14.2 |
| 19 JUL | 10.5 | 8.2 | 6.3 | 11.0 | 9.6 | 5.6 |
| 2 AUG | 2.1 | 6.1 | 6.3 | 4.2 | 3.3 | 2.8 |
| 23 AUG | 12.8 | 8.6 | 8.6 | 8.4 | 14.9 | 5.6 |
| 7 SEP | 6.3 | 4.2 | 6.3 | 1.4 | 4.2 | 3.7 |
| 20 SEP | 9.3 | 7.7 | 7.9 | 11.0 | 10.7 | 8.9 |
| 4 OCT | 2.1 | 4.2 | 8.4 | 8.4 | 6.1 | 4.0 |
| 19 OCT | 3.5 | 2.6 | 3.0 | 3.3 | 2.6 | 2.6 |
| 2 NOV | 4.2 | 1.4 | <0.1 | 2.1 | 3.0 | 2.3 |
| 15 NOV | 2.3 | 2.1 | 1.6 | 1.4 | 1.9 | 1.6 |
| 6 DEC | 3.3 | 4.7 | 5.1 | 4.2 | 4.4 | 5.1 |

*Surface samples

APPENDIX IVA-2

TWICE MONTHLY WATER CHEMISTRY PROGRAM : SELECTED PARAMETERS*

NINE MILE POINT VICINITY - 1976

II. DISSOLVED OXYGEN (mg/l)

| DATE | 20 FT | | | 60 FT | | |
|--------|-------|-----------|------|-------|-----------|------|
| | NMPW | NMPP/FITZ | NMPE | NMPW | NMPP/FITZ | NMPE |
| 14 APR | 13.4 | 13.9 | 13.4 | 13.3 | 13.6 | 13.6 |
| 29 APR | 11.8 | 11.8 | 11.4 | 12.2 | 11.5 | 11.4 |
| 10 MAY | 10.7 | 11.1 | 10.6 | 11.5 | 11.0 | 11.3 |
| 24 MAY | 10.5 | 10.8 | 10.8 | 10.9 | 10.6 | 11.5 |
| 8 JUN | 10.8 | 11.1 | 11.1 | 11.2 | 10.7 | 11.7 |
| 21 JUN | 9.4 | 10.2 | 11.0 | 9.9 | 10.1 | 11.0 |
| 6 JUL | 9.9 | 9.8 | 10.2 | 10.1 | 10.2 | 10.2 |
| 19 JUL | 8.7 | 8.5 | 8.5 | 8.5 | 8.6 | 8.7 |
| 2 AUG | 8.9 | 8.5 | 8.6 | 8.9 | 8.7 | 8.4 |
| 23 AUG | 10.6 | 10.4 | 10.1 | 10.3 | 10.7 | 10.3 |
| 7 SEP | 8.9 | 8.8 | 8.8 | 8.5 | 8.4 | 8.5 |
| 20 SEP | 8.8 | 8.8 | 9.2 | 8.9 | 9.0 | 8.7 |
| 4 OCT | 8.8 | 9.1 | 9.8 | 9.7 | 9.4 | 9.0 |
| 19 OCT | 10.0 | 9.6 | 10.0 | 9.9 | 9.9 | 9.7 |
| 2 NOV | 10.6 | 10.7 | 10.6 | 10.6 | 10.2 | 10.3 |
| 15 NOV | 12.4 | 10.8 | 11.0 | 10.8 | 10.9 | 10.9 |
| 6 DEC | 13.6 | 12.9 | 12.6 | 13.0 | 13.0 | 12.3 |

*Surface samples

APPENDIX IVA-3

TWICE MONTHLY WATER CHEMISTRY PROGRAM : SELECTED PARAMETERS*

NINE MILE POINT VICINITY - 1976

III. AMMONIA NITROGEN (mg/l-N)

| DATE | 20 FT | | | 60 FT | | |
|--------|-------|-----------|------|-------|-----------|------|
| | NMPW | NMPP/FITZ | NMPE | NMPW | NMPP/FITZ | NMPE |
| 14 APR | 0.14 | 0.04 | 0.17 | 0.17 | 0.07 | 0.06 |
| 29 APR | 0.30 | 0.40 | 0.51 | 0.31 | 0.31 | 0.50 |
| 10 MAY | 0.26 | 0.29 | 0.27 | 0.25 | 0.25 | 0.30 |
| 24 MAY | 0.26 | 0.30 | 0.39 | 0.37 | 0.23 | 0.20 |
| 8 JUN | 0.37 | 0.16 | 0.30 | 0.12 | 0.22 | 0.22 |
| 21 JUN | 0.09 | 0.07 | 0.28 | 0.13 | 0.17 | 0.16 |
| 6 JUL | 0.12 | 0.16 | 0.28 | 0.16 | 0.17 | 0.23 |
| 19 JUL | 0.25 | 0.28 | 0.44 | 0.29 | 0.28 | 0.30 |
| 2 AUG | 0.42 | 0.26 | 0.27 | 0.31 | 0.21 | 0.23 |
| 23 AUG | 0.15 | 0.14 | 0.16 | 0.14 | 0.18 | 0.18 |
| 7 SEP | 0.17 | 0.26 | 0.49 | 0.15 | 0.26 | 0.32 |
| 20 SEP | 0.18 | 0.29 | 0.37 | 0.19 | 0.24 | 0.26 |
| 4 OCT | 0.10 | 0.24 | 0.26 | 0.28 | 0.18 | 0.33 |
| 19 OCT | 0.14 | 0.17 | 0.14 | 0.12 | 0.16 | 0.13 |
| 2 NOV | 0.09 | 0.15 | 0.17 | 0.07 | 0.05 | 0.14 |
| 15 NOV | 0.29 | 0.34 | 0.23 | 0.29 | 0.29 | 0.22 |
| 6 DEC | 0.22 | 0.19 | 0.39 | 0.13 | 0.12 | 0.27 |

*Surface samples

APPENDIX IVA-4

TWICE MONTHLY WATER CHEMISTRY PROGRAM : SELECTED PARAMETERS*

NINE MILE POINT VICINITY - 1976

IV. NITRATE NITROGEN (mg/l-N)

| DATE | 20 FT | | | 60 FT | | |
|--------|-------|-----------|-------|-------|-----------|-------|
| | NMPW | NMPP/FITZ | NMPE | NMPW | NMPP/FITZ | NMPE |
| 14 APR | 0.248 | 0.207 | 0.255 | 0.199 | 0.155 | 0.241 |
| 29 APR | 0.385 | 0.385 | 0.373 | 0.300 | 0.315 | 0.376 |
| 10 MAY | 0.512 | 0.431 | 0.437 | 0.386 | 0.429 | 0.476 |
| 24 MAY | 0.397 | 0.325 | 0.291 | 0.359 | 0.371 | 0.282 |
| 8 JUN | 0.416 | 0.387 | 0.278 | 0.362 | 0.392 | 0.312 |
| 21 JUN | 0.213 | 0.145 | 0.173 | 0.200 | 0.114 | 0.124 |
| 6 JUL | 0.155 | 0.146 | 0.129 | 0.167 | 0.162 | 0.117 |
| 19 JUL | 0.409 | 0.399 | 0.177 | 0.149 | 0.155 | 0.183 |
| 2 AUG | 0.107 | 0.035 | 0.041 | 0.065 | 0.028 | 0.025 |
| 23 AUG | 0.028 | 0.020 | 0.028 | 0.023 | 0.017 | 0.020 |
| 7 SEP | 0.021 | 0.043 | 0.041 | 0.013 | 0.020 | 0.038 |
| 20 SEP | 0.018 | 0.022 | 0.035 | 0.018 | 0.033 | 0.037 |
| 4 OCT | 0.107 | 0.091 | 0.048 | 0.091 | 0.079 | 0.066 |
| 19 OCT | 0.150 | 0.144 | 0.121 | 0.151 | 0.150 | 0.139 |
| 2 NOV | 0.252 | 0.225 | 0.242 | 0.178 | 0.235 | 0.208 |
| 15 NOV | 0.283 | 0.263 | 0.284 | 0.267 | 0.280 | 0.256 |
| 6 DEC | 0.415 | 0.294 | 0.254 | 0.279 | 0.298 | 0.260 |

*Surface samples

APPENDIX IVA-5

TWICE MONTHLY WATER CHEMISTRY PROGRAM : SELECTED PARAMETERS*

NINE MILE POINT VICINITY - 1976

V. TOTAL SOLIDS (mg/l)

| DATE | 20 FT | | | 60 FT | | |
|--------|-------|-----------|------|-------|-----------|------|
| | NMPW | NMPP/FITZ | NMPE | NMPW | NMPP/FITZ | NMPE |
| 14 APR | 237 | 203 | 267 | 207 | 200 | 208 |
| 29 APR | 267 | 288 | 303 | 187 | 210 | 273 |
| 10 MAY | 463 | 254 | 278 | 208 | 281 | 247 |
| 24 MAY | 321 | 260 | 248 | 292 | 272 | 198 |
| 8 JUN | 295 | 252 | 232 | 243 | 281 | 242 |
| 21 JUN | 276 | 222 | 196 | 267 | 205 | 203 |
| 6 JUL | 266 | 261 | 244 | 259 | 261 | 238 |
| 19 JUL | 303 | 264 | 266 | 206 | 268 | 240 |
| 2 AUG | 212 | 196 | 212 | 210 | 196 | 193 |
| 23 AUG | 265 | 239 | 206 | 205 | 247 | 198 |
| 7 SEP | 207 | 210 | 211 | 195 | 194 | 214 |
| 20 SEP | 203 | 180 | 186 | 185 | 179 | 178 |
| 4 OCT | 200 | 204 | 200 | 198 | 198 | 205 |
| 19 OCT | 187 | 186 | 184 | 186 | 188 | 180 |
| 2 NOV | 195 | 182 | 177 | 193 | 188 | 184 |
| 15 NOV | 202 | 186 | 189 | 187 | 187 | 184 |
| 6 DEC | 347 | 240 | 227 | 192 | 202 | 209 |

*Surface samples

APPENDIX IVA-6

TWICE MONTHLY WATER CHEMISTRY PROGRAM : SELECTED PARAMETERS*

NINE MILE POINT VICINITY - 1976

VI. TEMPERATURE (°C)

| DATE | 20 FT | | | 60 FT | | |
|--------|-------|-----------|------|-------|-----------|------|
| | NMPW | NMPP/FITZ | NMPE | NMPW | NMPP/FITZ | NMPE |
| 14 APR | 6.2 | 5.0 | 5.8 | 6.5 | 5.8 | 4.3 |
| 29 APR | 7.6 | 7.8 | 8.6 | 6.0 | 6.7 | 7.5 |
| 10 MAY | 11.8 | 11.2 | 10.8 | 10.1 | 11.1 | 9.4 |
| 24 MAY | 11.0 | 12.6 | 10.2 | 10.5 | 11.7 | 8.7 |
| 8 JUN | 14.2 | 15.3 | 13.8 | 12.6 | 14.6 | 12.8 |
| 21 JUN | 17.5 | 17.8 | 16.2 | 17.3 | 20.0 | 16.3 |
| 6 JUL | 18.4 | 21.4 | 18.8 | 19.1 | 20.3 | 18.8 |
| 19 JUL | 20.1 | 20.4 | 19.5 | 19.3 | 20.9 | 19.3 |
| 2 AUG | 14.6 | 19.8 | 19.9 | 17.9 | 19.8 | 19.6 |
| 23 AUG | 23.1 | 26.1 | 23.2 | 22.5 | 26.0 | 22.1 |
| 7 SEP | 19.7 | 20.3 | 20.0 | 19.7 | 19.6 | 19.5 |
| 20 SEP | 19.3 | 22.5 | 19.5 | 19.5 | 20.4 | 19.2 |
| 4 OCT | 15.3 | 19.1 | 15.5 | 16.3 | 16.0 | 15.3 |
| 19 OCT | 12.6 | 17.0 | 12.6 | 12.8 | 12.9 | 12.7 |
| 2 NOV | 8.8 | 11.8 | 10.0 | 9.2 | 10.0 | 9.4 |
| 15 NOV | 4.2 | 7.5 | 7.6 | 7.7 | 7.6 | 7.9 |
| 6 DEC | 0.2 | 1.1 | 1.9 | 1.9 | 1.2 | -0.6 |

*Surface samples

APPENDIX IVA-7

TWICE MONTHLY WATER CHEMISTRY PROGRAM : SELECTED PARAMETERS*

NINE MILE POINT VICINITY - 1976

VII. TOTAL SUSPENDED SOLIDS (mg/l)

| DATE | 20 FT | | | 60 FT | | |
|--------|-------|-----------|------|-------|-----------|------|
| | NMPW | NMPP/FITZ | NMPE | NMPW | NMPP/FITZ | NMPE |
| 14 APR | 11 | 8 | 10 | 11 | 8 | 5 |
| 29 APR | 12 | 12 | 9 | 7 | 9 | 8 |
| 10 MAY | 8 | 5 | 8 | 8 | 6 | 7 |
| 24 MAY | 22 | 17 | 15 | 21 | 20 | 16 |
| 8 JUN | 7 | 4 | 4 | 4 | 6 | 3 |
| 21 JUN | 5 | 3 | 3 | 4 | 2 | 2 |
| 6 JUL | 4 | 3 | 3 | 4 | 4 | 4 |
| 19 JUL | 8 | 6 | 5 | 4 | 9 | 5 |
| 2 AUG | 3 | 5 | 4 | 2 | 2 | 1 |
| 23 AUG | 7 | 6 | 5 | 6 | 7 | 4 |
| 7 SEP | 2 | 3 | 4 | 2 | 2 | 3 |
| 20 SEP | 3 | 3 | 3 | 3 | 3 | 2 |
| 4 OCT | 2 | 2 | 3 | 2 | 2 | 2 |
| 19 OCT | 1 | 2 | 2 | 2 | 2 | 2 |
| 2 NOV | 3 | 2 | 2 | 3 | 2 | 2 |
| 15 NOV | 7 | 1 | 1 | 2 | 2 | 2 |
| 6 DEC | 5 | 5 | 5 | 4 | 4 | 4 |

*Surface samples

APPENDIX IVA-8

TWICE MONTHLY WATER CHEMISTRY PROGRAM : SELECTED PARAMETERS*

NINE MILE POINT VICINITY - 1976

VIII. SILICATE (mg/l)

| DATE | 20 FT | | | 60 FT | | |
|---------------------|-------|-----------|-------|-------|-----------|-------|
| | NMPW | NMPP/FITZ | NMPE | NMPW | NMPP/FITZ | NMPE |
| 14 APR ^a | 0.40 | 0.70 | 0.80 | 0.50 | 0.10 | 0.40 |
| 29 APR ^a | 0.60 | <0.02 | 0.40 | <0.02 | 0.20 | 0.10 |
| 10 MAY ^a | 0.40 | 0.20 | 0.03 | 0.20 | 0.20 | 0.20 |
| 24 MAY ^a | 0.50 | 0.30 | 0.10 | 0.10 | 0.50 | <0.02 |
| 8 JUN ^b | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 |
| 21 JUN ^b | <0.96 | 5.6 | 1.3 | <0.96 | 3.7 | <0.96 |
| 6 JUL ^b | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 |
| 19 JUL ^b | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 |
| 2 AUG ^b | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 |
| 23 AUG ^b | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 |
| 7 SEP ^b | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 |
| 20 SEP ^b | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 |
| 4 OCT ^b | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 |
| 19 OCT ^b | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 |
| 2 NOV ^b | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 |
| 15 NOV ^b | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 |
| 6 DEC ^b | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 |

*Surface samples

^aMolybdosilicate method

^bAtomic absorption spectrophotometric method

Revised

APPENDIX IVB-1

MONTHLY WATER CHEMISTRY PROGRAM : SELECTED PARAMETERS*

NINE MILE POINT VICINITY - 1976

I. CALCIUM (mg/l)

| DATE | 20 FT | | | 40 FT | | |
|--------|--------|-----------|--------|--------|-----------|--------|
| | NMPW | NMPP/FITZ | NMPE | NMPW | NMPP/FITZ | NMPE |
| 14 APR | NAn | NAn | 45.200 | NAn | 38.800 | NAn |
| 10 MAY | NAn | NAn | 48.000 | NAn | 49.600 | NAn |
| 8 JUN | 46.000 | 42.400 | 41.200 | 48.800 | 46.000 | 40.400 |
| 6 JUL | 42.342 | 41.675 | 39.675 | 42.342 | 42.008 | 40.341 |
| 2 AUG | 35.942 | 35.942 | 35.328 | 35.942 | 35.328 | 35.328 |
| 7 SEP | 43.380 | 43.600 | 44.340 | 41.380 | 43.120 | 42.240 |
| 4 OCT | 38.228 | 38.228 | 37.712 | 38.228 | 38.228 | 38.745 |
| 2 NOV | 41.328 | 40.295 | 39.262 | 42.361 | 40.811 | 39.262 |
| 6 DEC | 59.000 | 48.400 | 44.700 | 42.420 | 44.500 | 44.500 |

*Surface samples
NAn = Not analyzed

APPENDIX IVB-2

MONTHLY WATER CHEMISTRY PROGRAM : SELECTED PARAMETERS*

NINE MILE POINT VICINITY - 1976

II. DISSOLVED OXYGEN (mg/l)

| DATE | 20 FT | | | 40 FT | | |
|--------|-------|-----------|------|-------|-----------|------|
| | NMPW | NMPP/FITZ | NMPE | NMPW | NMPP/FITZ | NMPE |
| 14 APR | 13.4 | 13.9 | 13.4 | 13.6 | 13.3 | 13.7 |
| 10 MAY | 10.7 | 11.1 | 10.6 | 11.3 | 11.2 | 11.3 |
| 8 JUN | 10.8 | 11.1 | 11.1 | 10.7 | 10.9 | 11.1 |
| 6 JUL | 9.9 | 9.8 | 10.2 | 9.9 | 9.8 | 10.4 |
| 2 AUG | 8.9 | 8.5 | 8.6 | 8.9 | 8.8 | 8.4 |
| 7 SEP | 8.9 | 8.8 | 8.8 | 8.6 | 8.6 | 8.7 |
| 4 OCT | 8.8 | 9.1 | 9.8 | 9.3 | 9.5 | 9.6 |
| 2 NOV | 10.6 | 10.7 | 10.6 | 10.5 | 10.5 | 11.0 |
| 6 DEC | 13.6 | 12.9 | 12.6 | 13.0 | 12.9 | 12.9 |

*Surface samples

APPENDIX IVB-3

MONTHLY WATER CHEMISTRY PROGRAM : SELECTED PARAMETERS*

NINE MILE POINT VICINITY - 1976

III. SODIUM (mg/l))

| DATE | 20 FT | | | 40 FT | | |
|--------|--------|-----------|--------|--------|-----------|--------|
| | NMPW | NMPP/FITZ | NMPE | NMPW | NMPP/FITZ | NMPE |
| 14 APR | NAn | NAn | 23.921 | NAn | 13.764 | NAn |
| 10 MAY | NAn | NAn | 31.857 | NAn | 27.417 | NAn |
| 8 JUN | 32.079 | 22.755 | 20.313 | 38.850 | 28.305 | 21.757 |
| 6 JUL | 14.914 | 15.287 | 14.969 | 15.508 | 15.411 | 14.652 |
| 2 AUG | 11.713 | 11.403 | 11.885 | 11.610 | 11.489 | 11.644 |
| 7 SEP | 15.401 | 16.097 | 16.212 | 14.156 | 15.750 | 19.051 |
| 4 OCT | 12.500 | 13.000 | 13.000 | 13.000 | 13.000 | 13.340 |
| 2 NOV | 14.800 | 13.650 | 13.350 | 15.100 | 13.650 | 13.350 |
| 6 DEC | 42.000 | 27.200 | 26.600 | 21.700 | 24.000 | 25.600 |

*Surface samples

NAn = Not analyzed

APPENDIX IVB-4

MONTHLY WATER CHEMISTRY PROGRAM : SELECTED PARAMETERS*

NINE MILE POINT VICINITY - 1976

IV. SULFATE (mg/l)

| DATE | 20 FT | | | 40 FT | | |
|--------|-------|-----------|------|-------|-----------|------|
| | NMPW | NMPP/FITZ | NMPE | NMPW | NMPP/FITZ | NMPE |
| 14 APR | 27 | 28 | 32 | 28 | 28 | 30 |
| 10 MAY | 60 | 37 | 38 | 31 | 37 | 35 |
| 8 JUN | 36 | 32 | 33 | 46 | 35 | 31 |
| 6 JUL | 30 | 30 | 31 | 30 | 30 | 29 |
| 2 AUG | 29 | 23 | 24 | 24 | 27 | 27 |
| 7 SEP | 23 | 23 | 22 | 22 | 23 | 24 |
| 4 OCT | 29 | 26 | 28 | 27 | 28 | 28 |
| 2 NOV | 26 | 25 | 24 | 26 | 25 | 23 |
| 6 DEC | 37 | 30 | 28 | 27 | 27 | 27 |

*Surface samples

APPENDIX IVC-1 & IVC-2

WATER CHEMISTRY PROGRAM : SELECTED PARAMETERS

NMPP/FITZ TRANSECT, NINE MILE POINT VICINITY - 1976

I. CALCIUM (mg/l)

| DATE | 25 FT | | 45 FT | |
|--------|---------|--------|---------|--------|
| | SURFACE | BOTTOM | SURFACE | BOTTOM |
| 20 APR | 53.200 | 54.400 | 56.800 | 46.800 |
| 24 MAY | 54.720 | 44.340 | 56.658 | 44.340 |
| 14 JUN | 43.665 | 42.132 | 46.732 | 44.049 |
| 19 JUL | 46.633 | 41.556 | 48.664 | 36.141 |
| 9 AUG | 39.498 | 41.878 | 39.100 | 41.878 |
| 13 SEP | 42.200 | 42.800 | 40.600 | 42.400 |
| 11 OCT | 32.270 | 36.508 | 36.889 | 39.175 |
| 9 NOV | 41.460 | 41.079 | 40.698 | 41.841 |
| 8 DEC | 47.937 | 45.651 | 46.413 | 45.651 |

II. CHLORIDE (mg/l)

| DATE | 25 FT | | 45 FT | |
|--------|---------|--------|---------|--------|
| | SURFACE | BOTTOM | SURFACE | BOTTOM |
| 20 APR | 80 | 78 | 89 | 56 |
| 24 MAY | 59 | 30 | 61 | 29 |
| 14 JUN | 26 | 27 | 28 | 28 |
| 19 JUL | 51 | 35 | 54 | 30 |
| 9 AUG | 30 | 34 | 29 | 31 |
| 13 SEP | 29 | 29 | 29 | 31 |
| 11 OCT | 32 | 32 | 32 | 33 |
| 9 NOV | 27 | 26 | 25 | 26 |
| 8 DEC | 41 | 37 | 39 | 39 |

APPENDIX IVC-3 & IVC-4

WATER CHEMISTRY PROGRAM : SELECTED PARAMETERS

NMPP/FITZ TRANSECT, NINE MILE POINT VICINITY - 1976

III. DISSOLVED OXYGEN (mg/l)

| DATE | 25 FT | | 45 FT | |
|--------|---------|--------|---------|--------|
| | SURFACE | BOTTOM | SURFACE | BOTTOM |
| 20 APR | 11.3 | 11.5 | 11.7 | 12.3 |
| 24 MAY | 10.6 | 11.9 | 10.5 | 11.9 |
| 14 JUN | 10.9 | 11.4 | 12.2 | 11.6 |
| 19 JUL | 8.7 | 8.6 | 8.6 | 8.7 |
| 9 AUG | 9.6 | 9.0 | 9.4 | 10.2 |
| 13 SEP | 9.5 | 8.8 | 9.0 | 8.7 |
| 11 OCT | 9.6 | 9.4 | 9.4 | 9.3 |
| 9 NOV | 10.4 | 11.1 | 10.6 | 10.6 |
| 8 DEC | 13.3 | 12.5 | 12.9 | 12.3 |

IV. SODIUM (mg/l)

| DATE | 25 FT | | 45 FT | |
|--------|---------|--------|---------|--------|
| | SURFACE | BOTTOM | SURFACE | BOTTOM |
| 20 APR | 33.855 | 34.299 | 37.740 | 25.641 |
| 24 MAY | 27.257 | 14.331 | 24.672 | 14.556 |
| 14 JUN | 12.298 | 11.489 | 12.539 | 11.954 |
| 19 JUL | 10.633 | 9.943 | 11.655 | 9.915 |
| 9 AUG | 11.475 | 12.963 | 11.050 | 11.475 |
| 13 SEP | 13.721 | 14.359 | 13.199 | 13.924 |
| 11 OCT | 28.875 | 31.771 | 30.922 | 30.273 |
| 9 NOV | 27.254 | 26.680 | 26.904 | 26.904 |
| 8 DEC | 32.569 | 31.796 | 32.095 | 31.297 |

APPENDIX IVC-5 & IVC-6

WATER CHEMISTRY PROGRAM : SELECTED PARAMETERS

NMPP/FITZ TRANSECT, NINE MILE POINT VICINITY - 1976

V. AMMONIA NITROGEN (mg/l-N)

| DATE | 25 FT | | 45 FT | |
|--------|---------|--------|---------|--------|
| | SURFACE | BOTTOM | SURFACE | BOTTOM |
| 20 APR | 0.29 | 0.32 | 0.36 | 0.42 |
| 24 MAY | 0.41 | 0.36 | 0.31 | 0.25 |
| 14 JUN | 0.22 | 0.10 | 0.12 | 0.19 |
| 19 JUL | 0.29 | 0.27 | 0.29 | 0.29 |
| 9 AUG | 0.32 | 0.27 | 0.29 | 0.25 |
| 13 SEP | 0.27 | 0.28 | 0.18 | 0.21 |
| 11 OCT | 0.33 | 0.23 | 0.24 | 0.23 |
| 9 NOV | 0.37 | 0.18 | 0.14 | 0.13 |
| 8 DEC | 0.45 | 0.27 | 0.18 | 0.14 |

VI. NITRATE NITROGEN (mg/l-N)

| DATE | 25 FT | | 45 FT | |
|--------|---------|--------|---------|--------|
| | SURFACE | BOTTOM | SURFACE | BOTTOM |
| 20 APR | 0.428 | 0.470 | 0.506 | 0.360 |
| 24 MAY | 0.291 | 0.229 | 0.351 | 0.222 |
| 14 JUN | 0.170 | 0.173 | 0.178 | 0.176 |
| 19 JUL | 0.380 | 0.212 | 0.374 | 0.138 |
| 9 AUG | 0.063 | 0.181 | 0.101 | 0.312 |
| 13 SEP | 0.035 | 0.038 | 0.035 | 0.057 |
| 11 OCT | 0.142 | 0.154 | 0.153 | 0.184 |
| 9 NOV | 0.270 | 0.282 | 0.256 | 0.256 |
| 8 DEC | 0.321 | 0.342 | 0.350 | 0.350 |

APPENDIX IVC-7 & IVC-8

WATER CHEMISTRY PROGRAM : SELECTED PARAMETERS

NMPP/FITZ TRANSECT, NINE MILE POINT VICINITY - 1976

VII. SULFATE (mg/l)

| DATE | 25 FT | | 45 FT | |
|--------|---------|--------|---------|--------|
| | SURFACE | BOTTOM | SURFACE | BOTTOM |
| 20 APR | 38 | 41 | 40 | 34 |
| 24 MAY | 37 | 30 | 37 | 28 |
| 14 JUN | 28 | 28 | 28 | 28 |
| 19 JUL | 35 | 28 | 33 | 26 |
| 9 AUG | 23 | 24 | 23 | 23 |
| 13 SEP | 26 | 26 | 26 | 26 |
| 11 OCT | 30 | 32 | 31 | 33 |
| 9 NOV | 26 | 26 | 26 | 26 |
| 8 DEC | 31 | 29 | 30 | 29 |

VIII. TOTAL SUSPENDED SOLIDS (mg/l)

| DATE | 25 FT | | 45 FT | |
|--------|---------|--------|---------|--------|
| | SURFACE | BOTTOM | SURFACE | BOTTOM |
| 20 APR | 21 | 19 | 26 | 19 |
| 24 MAY | 19 | 17 | 18 | 21 |
| 14 JUN | 3 | 3 | 3 | 3 |
| 19 JUL | 10 | 24 | 11 | 69 |
| 9 AUG | 2 | 4 | 2 | 2 |
| 13 SEP | 3 | 4 | 3 | 5 |
| 11 OCT | 5 | 5 | 5 | 27 |
| 9 NOV | 2 | 2 | 2 | 7 |
| 8 DEC | 2 | 3 | 5 | 5 |

APPENDIX IVC-9 & IVC-10

WATER CHEMISTRY PROGRAM : SELECTED PARAMETERS

NMPP/FITZ TRANSECT, NINE MILE POINT VICINITY - 1976

IX. TOTAL DISSOLVED SOLIDS (mg/l)

| DATE | 25 FT | | 45 FT | |
|--------|---------|--------|---------|--------|
| | SURFACE | BOTTOM | SURFACE | BOTTOM |
| 20 APR | 328 | 326 | 366 | 260 |
| 24 MAY | 273 | 188 | 270 | 181 |
| 14 JUN | 199 | 202 | 203 | 205 |
| 19 JUL | 260 | 209 | 266 | 199 |
| 9 AUG | 196 | 220 | 198 | 206 |
| 13 SEP | 192 | 193 | 189 | 197 |
| 11 OCT | 221 | 219 | 218 | 218 |
| 9 NOV | 193 | 190 | 183 | 187 |
| 8 DEC | 241 | 224 | 227 | 229 |

X. TOTAL SOLIDS (mg/l)

| DATE | 25 FT | | 45 FT | |
|--------|---------|--------|---------|--------|
| | SURFACE | BOTTOM | SURFACE | BOTTOM |
| 20 APR | 349 | 345 | 392 | 278 |
| 24 MAY | 292 | 205 | 288 | 202 |
| 14 JUN | 202 | 205 | 206 | 208 |
| 19 JUL | 270 | 233 | 277 | 268 |
| 9 AUG | 198 | 224 | 200 | 208 |
| 13 SEP | 195 | 197 | 192 | 202 |
| 11 OCT | 226 | 224 | 223 | 245 |
| 9 NOV | 195 | 192 | 185 | 194 |
| 8 DEC | 243 | 227 | 232 | 234 |

APPENDIX IVC-11

WATER CHEMISTRY PROGRAM : SELECTED PARAMETERS

NMPP/FITZ TRANSECT, NINE MILE POINT VICINITY - 1976

XI. SILICATE (mg/l)

| DATE | 25 FT | | 45 FT | |
|-----------------------|---------|--------|---------|--------|
| | SURFACE | BOTTOM | SURFACE | BOTTOM |
| 20 APR ^a | <0.96 | 1.47 | 1.68 | 0.97 |
| 24 MAY ^b | 0.85 | 0.43 | 0.85 | <0.04 |
| 14 JUN ^{a,c} | <0.96 | <0.96 | <0.96 | <0.96 |
| 19 JUL ^c | <0.96 | <0.96 | <0.96 | <0.96 |
| 9 AUG ^c | 1.09 | 1.13 | <0.96 | 1.00 |
| 13 SEP ^c | <0.96 | <0.96 | <0.96 | <0.96 |
| 11 OCT ^c | <0.96 | <0.96 | <0.96 | <0.96 |
| 9 NOV ^c | <0.96 | <0.96 | <0.96 | <0.96 |
| 8 DEC ^c | <0.96 | <0.96 | <0.96 | <0.96 |

^a Analysis rerun Feb 1976; spectrophotometric method

^b Molybdosilicate method

^c Atomic absorption spectrophotometric method

APPENDIX IVC-12

WATER CHEMISTRY PROGRAM : SELECTED PARAMETERS

NMPP/FITZ TRANSECT, NINE MILE POINT VICINITY - 1976

XII. Organic Nitrogen (mg/l)

| DATE | 25 FT | | 45 FT | |
|--------|---------|--------|---------|--------|
| | SURFACE | BOTTOM | SURFACE | BOTTOM |
| 20 APR | 0.10 | NA | 0.25 | NA |
| 24 MAY | 0.44 | 0.52 | 1.19 | 0.93 |
| 14 JUN | 0.61 | 0.21 | 0.55 | 0.24 |
| 19 JUL | 0.34 | 0.33 | 0.91 | NAn |
| 9 AUG | 0.51 | 0.45 | 0.53 | 0.45 |
| 13 SEP | 0.12 | 1.03 | 0.93 | 1.05 |
| 11 OCT | 0.31 | 0.31 | 0.23 | 0.29 |
| 9 NOV | NA | 0.05 | 0.11 | 0.14 |
| 8 DEC | NA | 0.06 | 0.13 | 0.19 |

NA = Not available

NAn = Not analyzed

APPENDIX IVD-1

SPECIFIC CONDUCTANCE^a

NINE MILE POINT VICINITY - 1976

| DATE | NMPP/FITZ ^b | | NMPP/FITZ ^c |
|--------|------------------------|--------|------------------------|
| | 25 FT | | 20 FT |
| | SURFACE | BOTTOM | SURFACE |
| 14 APR | NOT REQUIRED | | 332 |
| 20 APR | 536 | 537 | NOT REQUIRED |
| 29 APR | NOT REQUIRED | | 438 |
| 10 MAY | NOT REQUIRED | | 450 |
| 24 MAY | 465 | 330 | 437 |
| 8 JUN | NOT REQUIRED | | 409 |
| 14 JUN | 325 | 319 | NOT REQUIRED |
| 21 JUN | NOT REQUIRED | | 302 |
| 6 JUL | NOT REQUIRED | | 292 |
| 19 JUL | 437 | 356 | 439 |
| 2 AUG | NOT REQUIRED | | 321 |
| 9 AUG | 314 | 296 | NOT REQUIRED |
| 23 AUG | NOT REQUIRED | | 387 |
| 7 SEP | NOT REQUIRED | | 343 |
| 13 SEP | 321 | 322 | NOT REQUIRED |
| 20 SEP | NOT REQUIRED | | 319 |
| 4 OCT | NOT REQUIRED | | 314 |
| 11 OCT | 342 | 339 | NOT REQUIRED |
| 19 OCT | NOT REQUIRED | | 322 |
| 2 NOV | NOT REQUIRED | | 325 |
| 9 NOV | 305 | 306 | NOT REQUIRED |
| 15 NOV | NOT REQUIRED | | 310 |
| 6 DEC | NOT REQUIRED | | 402 |
| 8 DEC | 403 | 389 | NOT REQUIRED |

^a $\mu\text{mho/cm}$ @ 25°C^b Water Chemistry Program^c Twice Monthly Water Chemistry Program

Data Update

APPENDIX IVD-2

DISSOLVED OXYGEN* AND PERCENT SATURATION AT SELECTED DEPTH CONTOURS

NINE MILE POINT VICINITY - 1976

I. 20 AND 25 FT DEPTH CONTOURS

| | 20 FT | | | | | | | | | 25 FT | | |
|--------|-----------|-----------|--------|-----------|-----------|--------|-----------|-----------|--------|-----------|-----------|--------|
| | NMPW | | | NMPP/FITZ | | | NMPE | | | NMPP/FITZ | | |
| DATE | TEMP (°C) | DO (mg/l) | % SAT. | TEMP (°C) | DO (mg/l) | % SAT. | TEMP (°C) | DO (mg/l) | % SAT. | TEMP (°C) | DO (mg/l) | % SAT. |
| 14 APR | 6.2 | 13.4 | 108 | 5.0 | 13.9 | 109 | 5.8 | 13.4 | 106 | - | - | - |
| 20 | - | - | - | - | - | - | - | - | - | 10.0 | 11.3 | 100 |
| 29 | 7.6 | 11.8 | 98 | 7.8 | 11.8 | 98 | 8.6 | 11.4 | 97 | - | - | - |
| 10 MAY | 11.8 | 10.7 | 98 | 11.2 | 11.1 | 101 | 10.8 | 10.6 | 95 | - | - | - |
| 24 | 11.0 | 10.5 | 95 | 12.6 | 10.8 | 101 | 10.2 | 10.8 | 96 | 12.5 | 10.6 | 99 |
| 8 JUN | 14.2 | 10.8 | 104 | 15.3 | 11.1 | 110 | 13.8 | 11.1 | 107 | - | - | - |
| 14 | - | - | - | - | - | - | - | - | - | 15.1 | 10.9 | 107 |
| 21 | 17.5 | 9.4 | 98 | 17.8 | 10.2 | 107 | 16.2 | 11.0 | 111 | - | - | - |
| 6 JUL | 18.4 | 9.9 | 104 | 21.4 | 9.8 | 110 | 18.8 | 10.2 | 109 | - | - | - |
| 19 | 20.1 | 8.7 | 95 | 20.4 | 8.5 | 93 | 19.5 | 8.5 | 91 | 20.3 | 8.7 | 96 |
| 2 AUG | 14.6 | 8.9 | 86 | 19.8 | 8.5 | 92 | 19.9 | 8.6 | 93 | - | - | - |
| 9 | - | - | - | - | - | - | - | - | - | 18.5 | 9.6 | 101 |
| 23 | 23.1 | 10.6 | 122 | 26.1 | 10.4 | 127 | 23.2 | 10.1 | 116 | - | - | - |
| 7 SEP | 19.7 | 8.9 | 96 | 20.3 | 8.8 | 97 | 20.0 | 8.8 | 96 | - | - | - |
| 13 | - | - | - | - | - | - | - | - | - | 19.8 | 9.5 | 103 |
| 20 | 19.3 | 8.8 | 95 | 22.5 | 8.8 | 100 | 19.5 | 9.2 | 99 | - | - | - |
| 4 OCT | 15.3 | 8.8 | 87 | 19.1 | 9.1 | 97 | 15.5 | 9.8 | 97 | - | - | - |
| 11 | - | - | - | - | - | - | - | - | - | 14.7 | 9.6 | 93 |
| 19 | 12.6 | 10.0 | 93 | 17.0 | 9.6 | 99 | 12.6 | 10.0 | 93 | - | - | - |
| 2 NOV | 8.8 | 10.6 | 91 | 11.8 | 10.7 | 98 | 10.0 | 10.6 | 94 | - | - | - |
| 9 | - | - | - | - | - | - | - | - | - | 10.7 | 10.4 | 93 |
| 15 | 4.2 | 12.4 | 95 | 7.5 | 10.8 | 90 | 7.6 | 11.0 | 92 | - | - | - |
| | 0.2 | 13.6 | 94 | 1.1 | 12.9 | 91 | 1.9 | 12.6 | 91 | - | - | - |
| | - | - | - | - | - | - | - | - | - | 1.7 | 13.3 | 96 |

II. 40 AND 45 FT DEPTH CONTOURS

| DATE | 40 FT | | | | | | | | | 45 FT | | |
|--------|-----------|-----------|--------|-----------|-----------|--------|-----------|-----------|--------|-----------|-----------|--------|
| | NMPW | | | NMPP/FITZ | | | NMPE | | | NMPP/FITZ | | |
| DATE | TEMP (°C) | DO (mg/l) | % SAT. | TEMP (°C) | DO (mg/l) | % SAT. | TEMP (°C) | DO (mg/l) | % SAT. | TEMP (°C) | DO (mg/l) | % SAT. |
| 14 APR | 5.8 | 13.6 | 108 | 5.2 | 13.3 | 105 | 4.8 | 13.7 | 109 | - | - | - |
| 20 | - | - | - | - | - | - | - | - | - | 11.0 | 11.7 | 105 |
| 10 MAY | 10.3 | 11.3 | 101 | 11.7 | 11.2 | 103 | 10.2 | 11.3 | 100 | - | - | - |
| 24 | - | - | - | - | - | - | - | - | - | 12.3 | 10.5 | 98 |
| 8 JUN | 14.4 | 10.7 | 104 | 14.9 | 10.9 | 107 | 13.2 | 11.1 | 105 | - | - | - |
| 14 | - | - | - | - | - | - | - | - | - | 15.2 | 12.2 | 120 |
| 6 JUL | 18.7 | 9.9 | 105 | 19.9 | 9.8 | 107 | 18.9 | 10.4 | 111 | - | - | - |
| 19 | - | - | - | - | - | - | - | - | - | 20.6 | 8.6 | 95 |
| 2 AUG | 16.2 | 8.9 | 90 | 19.5 | 8.8 | 95 | 19.7 | 8.4 | 90 | - | - | - |
| 9 | - | - | - | - | - | - | - | - | - | 18.8 | 9.4 | 100 |
| 7 SEP | 19.7 | 8.6 | 92 | 20.4 | 8.6 | 95 | 20.2 | 8.7 | 95 | - | - | - |
| 13 | - | - | - | - | - | - | - | - | - | 19.7 | 9.0 | 97 |
| 4 OCT | 15.8 | 9.3 | 93 | 16.8 | 9.5 | 97 | 15.3 | 9.6 | 95 | - | - | - |
| 11 | - | - | - | - | - | - | - | - | - | 13.7 | 9.4 | 90 |
| 2 NOV | 9.1 | 10.5 | 91 | 10.6 | 10.5 | 94 | 9.6 | 11.0 | 96 | - | - | - |
| 9 | - | - | - | - | - | - | - | - | - | 9.5 | 10.6 | 93 |
| 6 DEC | 1.6 | 13.0 | 93 | 1.4 | 12.9 | 92 | 2.1 | 12.9 | 93 | - | - | - |
| | - | - | - | - | - | - | - | - | - | 0.4 | 12.9 | 90 |

* - Trace sample
 - - Not applicable

APPENDIX IVD-3

SILICATE*

NMPP/FITZ TRANSECT, NINE MILE POINT VICINITY - 1976

| DATE | NMPP/FITZ ^a 20 FT SURFACE | NMPP/FITZ ^b 25 FT | | NMPP/FITZ ^b 45 FT | |
|----------------------|--|---------------------------------|--------|---------------------------------|--------|
| | | SURFACE | BOTTOM | SURFACE | BOTTOM |
| 14 APR ^c | 0.70 | NOT REQUIRED | | NOT REQUIRED | |
| 20 APR ^e | NR | <0.96 | 1.47 | 1.68 | 0.97 |
| 20 APR ^c | <0.02 | NOT REQUIRED | | NOT REQUIRED | |
| 10 MAY ^c | 0.20 | NOT REQUIRED | | NOT REQUIRED | |
| 24 MAY ^c | 0.30 | 0.85 | 0.43 | 0.85 | <0.04 |
| 8 JUND ^d | <0.96 | NOT REQUIRED | | NOT REQUIRED | |
| 14 JUNE ^e | NR | <0.96 | <0.96 | <0.96 | <0.96 |
| 21 JUND ^d | 5.6 | NOT REQUIRED | | NOT REQUIRED | |
| 6 JUL ^d | <0.96 | NOT REQUIRED | | NOT REQUIRED | |
| 19 JUL ^d | <0.96 | <0.96 | <0.96 | <0.96 | <0.96 |
| 2 AUG ^d | <0.96 | NOT REQUIRED | | NOT REQUIRED | |
| 9 AUG ^d | NR | 1.09 | 1.13 | <0.96 | 1.00 |
| 23 AUG ^d | <0.96 | NOT REQUIRED | | NOT REQUIRED | |
| 7 SEP ^d | <0.96 | NOT REQUIRED | | NOT REQUIRED | |
| 13 SEP ^d | NR | <0.96 | <0.96 | <0.96 | <0.96 |
| 20 SEP ^d | <0.96 | NOT REQUIRED | | NOT REQUIRED | |
| 4 OCT ^d | <0.96 | NOT REQUIRED | | NOT REQUIRED | |
| 11 OCT ^d | NR | <0.96 | <0.96 | <0.96 | <0.96 |
| 19 OCT ^d | <0.96 | NOT REQUIRED | | NOT REQUIRED | |
| 2 NOV ^d | <0.96 | NOT REQUIRED | | NOT REQUIRED | |
| 9 NOV ^d | NR | <0.96 | <0.96 | <0.96 | <0.96 |
| 15 NOV ^d | <0.96 | NOT REQUIRED | | NOT REQUIRED | |
| 6 DEC ^d | <0.96 | NOT REQUIRED | | NOT REQUIRED | |
| 8 DEC ^d | NR | <0.96 | <0.96 | <0.96 | <0.96 |

*mg/l

^aTwice Monthly Water Chemistry Program^bWater Chemistry Program^cMolybdosilicate method^dAtomic absorption spectrophotometric method^eAnalysis rerun Feb 1976; spectrophotometric method

APPENDIX IVD-4

TOTAL DISSOLVED SOLIDS*

NINE MILE POINT VICINITY - 1976

| DATE | 20 FT | | | 40 FT | | | 60 FT | | |
|--------|-------|-----------|------|-------|--------------|------|-------|-----------|------|
| | NMPW | NMPP/FITZ | NMPE | NMPW | NMPP/FITZ | NMPE | NMPW | NMPP/FITZ | NMPE |
| 14 APR | 226 | 195 | 257 | 196 | 194 | 209 | 196 | 192 | 203 |
| 29 APR | 255 | 276 | 294 | | NOT REQUIRED | | 180 | 201 | 265 |
| 10 MAY | 455 | 249 | 270 | 205 | 282 | 246 | 200 | 275 | 240 |
| 24 MAY | 299 | 243 | 233 | | NOT REQUIRED | | 271 | 252 | 182 |
| 8 JUN | 288 | 248 | 228 | 308 | 229 | 239 | 239 | 275 | 239 |
| 21 JUN | 271 | 219 | 193 | | NOT REQUIRED | | 263 | 203 | 201 |
| 6 JUL | 262 | 258 | 241 | 262 | 255 | 244 | 255 | 257 | 234 |
| 19 JUL | 295 | 258 | 261 | | NOT REQUIRED | | 202 | 259 | 235 |
| 2 AUG | 209 | 191 | 208 | 199 | 196 | 193 | 208 | 194 | 192 |
| 23 AUG | 258 | 233 | 201 | | NOT REQUIRED | | 199 | 240 | 194 |
| 7 SEP | 205 | 207 | 207 | 210 | 202 | 223 | 193 | 192 | 211 |
| 20 SEP | 200 | 177 | 183 | | NOT REQUIRED | | 182 | 176 | 176 |
| 4 OCT | 198 | 202 | 197 | 200 | 196 | 207 | 196 | 196 | 203 |
| 19 OCT | 186 | 184 | 182 | | NOT REQUIRED | | 184 | 186 | 178 |
| 2 NOV | 192 | 180 | 175 | 187 | 183 | 192 | 190 | 186 | 182 |
| 15 NOV | 195 | 185 | 188 | | NOT REQUIRED | | 185 | 182 | 182 |
| 6 DEC | 342 | 235 | 222 | 196 | 204 | 213 | 188 | 198 | 205 |

*TS-TSS; mg/l; monthly and twice monthly water chemistry programs; surface samples.



APPENDIX VA-1

DEPTH* OF WHOLE WATER PHYTOPLANKTON COLLECTIONS
AT NMPE - 40 FT. STATION

NINE MILE POINT VICINITY - 1976

| LIGHT LEVEL | DATE | | | | | | | | |
|----------------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14,19 DEC |
| 50% | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.5 |
| 25% | 0.8 | 0.6 | 1.0 | 1.0 | 0.6 | 0.5 | 2.0 | 0.7 | 1.5 |
| 1% | 3.0 | 3.5 | 6.0 | 12.0 | 7.0 | 4.3 | 9.0 | 6.5 | 7.0 |

*Depth in meters from surface

APPENDIX VA-2a

ABUNDANCE^a OF BACILLARIOPHYCEAE IN WHOLE WATER COLLECTIONS
NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL MEAN |
|-------------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|----------------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14,19 DEC | |
| 10 | NMPW | 2418 | 3847 | 2882 | 10175 | 319 | 517 | 114 | 656 | 1353 | 2475.7 |
| | NMPP | 3158 | 2952 | 2321 | 553 | 10 | 626 | 144 | 321 | 796 | 1209.0 |
| | FITZ | 2820 | 3278 | 826 | 5426 | 417 | 249 | 98 | 227 | 1043 | 1598.2 |
| | NMPE | 2225 | 2112 | 512 | 2187 | 39 | 316 | 141 | 275 | 1245 | 1005.8 |
| | CONTOUR MEAN | 2655.2 | 3047.2 | 1635.2 | 4585.2 | 196.2 | 427.0 | 124.2 | 369.8 | 1109.2 | |
| 20 | NMPW | 1333 | 4859 | 2422 | 3858 | 327 | 396 | 110 | 521 | 1104 | 1658.9 |
| | NMPP | 3113 | 2517 | 1867 | 755 | 99 | 338 | 133 | 203 | 991 | 1112.9 |
| | FITZ | 2952 | 3102 | 1323 | 1988 | 374 | 293 | 83 | 172 | 1026 | 1257.0 |
| | NMPE | 1284 | 1029 | 336 | 1932 | 141 | 372 | 52 | 150 | 1360 | 739.6 |
| | CONTOUR MEAN | 2170.5 | 2876.8 | 1487.0 | 2133.2 | 235.2 | 349.8 | 94.5 | 261.5 | 1120.2 | |
| 40 | NMPW | 692 | 3783 | 2971 | 4447 | 308 | 203 | 178 | 199 | 1073 | 1539.3 |
| | NMPP | 3414 | 2964 | 916 | 1961 | 91 | 213 | 144 | 123 | 785 | 1179.0 |
| | FITZ | 891 | 2698 | 684 | 637 | 98 | 332 | 147 | 56 | 1080 | 735.9 |
| | NMPE-S/50% | 2021 | 2216 | 614 | 832 | 91 | 317 | 63 | 70 | 1300 | 836.0 |
| | 25% | 1510 | 1477 | 176 | 1250 | 21 | 153 | 128 | 110 | 463 | 587.6 |
| | 1% | 1723 | 1965 | 806 | 1462 | 151 | 197 | 124 | 96 | 730 | 806.0 |
| | CONTOUR MEAN ^c | 1754.5 | 2915.2 | 1296.2 | 1969.2 | 147.0 | 266.2 | 133.0 | 112.0 | 1059.5 | |
| 60 | NMPW | 695 | 2536 | 307 | 4211 | 156 | 270 | 119 | 129 | 1147 | 1063.3 |
| | NMPP | 690 | 3984 | 853 | 1750 | 164 | 148 | 93 | 118 | 698 | 944.2 |
| | FITZ | 916 | 1978 | 703 | 1335 | 78 | 215 | 76 | 158 | 837 | 699.6 |
| | NMPE | 103 | 1735 | 500 | 624 | 144 | 170 | 59 | 72 | 1064 | 496.8 |
| | CONTOUR MEAN | 601.0 | 2558.2 | 590.8 | 1980.0 | 135.5 | 200.8 | 86.8 | 119.2 | 936.5 | |
| DAILY MEAN ^c | | 1795.3 | 2849.4 | 1252.3 | 2666.9 | 178.5 | 310.9 | 109.6 | 215.6 | 1056.4 | |

^a Cells/ml, mean of R-1 and R-2

^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels

^c Mean of surface samples

CHAPTER V

APPENDIX VA
PHYTOPLANKTON

APPENDIX VA-2b

ABUNDANCE^a OF CHLOROPHYCEAE IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL MEAN |
|-------------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|----------------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14,19 DEC | |
| 10 | NMPW | 1356 | 2061 | 2364 | 9913 | 5130 | 3289 | 577 | 321 | 245 | 2806.2 |
| | NMPP | 1457 | 2604 | 2286 | 586 | 894 | 3541 | 964 | 306 | 203 | 1426.8 |
| | FITZ | 1569 | 2585 | 1116 | 4476 | 4605 | 2426 | 588 | 270 | 203 | 1982.0 |
| | NMPE | 1228 | 1663 | 1132 | 2277 | 1990 | 3026 | 941 | 142 | 224 | 1402.6 |
| | CONTOUR MEAN | 1402.5 | 2228.2 | 1724.5 | 4313.0 | 3154.8 | 3070.5 | 767.5 | 259.8 | 218.8 | |
| 20 | NMPW | 853 | 2035 | 1773 | 4287 | 3715 | 2348 | 728 | 271 | 222 | 1803.6 |
| | NMPP | 1660 | 1854 | 1879 | 1338 | 1006 | 3749 | 458 | 170 | 259 | 1374.8 |
| | FITZ | 1097 | 1909 | 1499 | 960 | 3239 | 3082 | 614 | 177 | 293 | 1430.0 |
| | NMPE | 1061 | 999 | 820 | 1829 | 2964 | 2587 | 620 | 158 | 277 | 1257.2 |
| | CONTOUR MEAN | 1167.8 | 1699.2 | 1492.8 | 2103.5 | 2731.0 | 2941.5 | 605.0 | 194.0 | 262.8 | |
| 40 | NMPW | 396 | 1957 | 1808 | 5263 | 3083 | 2351 | 838 | 189 | 206 | 1787.9 |
| | NMPP | 1088 | 1481 | 1045 | 1984 | 3086 | 1858 | 676 | 205 | 310 | 1303.7 |
| | FITZ | 718 | 1796 | 781 | 822 | 2787 | 2275 | 1540 | 150 | 251 | 1235.6 |
| | NMPE-S/50% | 959 | 1520 | 921 | 909 | 2630 | 2058 | 536 | 184 | 274 | 1110.1 |
| | 25% | 868 | 1566 | 594 | 2885 | 2119 | 3136 | 767 | 207 | 213 | 1372.8 |
| | 1% | 845 | 1151 | 1005 | 1709 | 3641 | 1645 | 835 | 121 | 349 | 1255.7 |
| | CONTOUR MEAN ^c | 790.2 | 1688.5 | 1138.8 | 2244.5 | 2896.5 | 2135.5 | 897.5 | 182.0 | 260.2 | |
| 60 | NMPW | 412 | 1157 | 596 | 2815 | 3119 | 3704 | 809 | 184 | 264 | 1451.1 |
| | NMPP | 213 | 2162 | 1160 | 1717 | 2454 | 2629 | 679 | 184 | 245 | 1271.4 |
| | FITZ | 475 | 1000 | 1223 | 1781 | 3505 | 2341 | 820 | 160 | 363 | 1296.4 |
| | NMPE | 803 | 1207 | 764 | 912 | 2147 | 2038 | 972 | 123 | 227 | 1021.4 |
| | CONTOUR MEAN | 475.8 | 1381.5 | 935.8 | 1806.2 | 2806.2 | 2678.0 | 820.0 | 162.8 | 274.8 | |
| DAILY MEAN ^c | | 959.1 | 1749.4 | 1322.9 | 2616.8 | 2897.1 | 2706.4 | 772.5 | 199.6 | 254.1 | |

^a Cells/ml, mean of R-1 and R-2^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels^c Mean of surface samples

APPENDIX VA-2c
ABUNDANCE^a OF CHRYSOPHYCEAE IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL MEAN |
|-------------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|----------------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14,19 DEC | |
| 10 | NMPW | 644 | 225 | 1842 | 351 | 2160 | 490 | 192 | 78 | 198 | 686.7 |
| | NMPP | 1088 | 265 | 2455 | 223 | 164 | 654 | 246 | 197 | 317 | 623.2 |
| | FITZ | 1176 | 312 | 1472 | 111 | 1756 | 635 | 184 | 95 | 199 | 660.0 |
| | NMPE | 866 | 292 | 1392 | 402 | 583 | 729 | 422 | 161 | 199 | 560.7 |
| | CONTOUR MEAN | 943.5 | 273.5 | 1790.2 | 271.8 | 1165.8 | 627.0 | 261.0 | 132.8 | 228.2 | |
| 20 | NMPW | 561 | 234 | 2002 | 137 | 1991 | 666 | 280 | 138 | 229 | 693.1 |
| | NMPP | 1051 | 208 | 2924 | 172 | 302 | 650 | 233 | 111 | 354 | 667.2 |
| | FITZ | 689 | 212 | 2303 | 196 | 1434 | 1058 | 280 | 65 | 291 | 725.3 |
| | NMPE | 744 | 348 | 903 | 469 | 612 | 451 | 491 | 353 | 236 | 511.9 |
| | CONTOUR MEAN | 761.2 | 250.5 | 2033.0 | 243.5 | 1084.8 | 706.2 | 321.0 | 166.8 | 277.5 | |
| 40 | NMPW | 526 | 451 | 4516 | 292 | 1629 | 809 | 570 | 99 | 236 | 1014.2 |
| | NMPP | 603 | 206 | 1576 | 117 | 1073 | 838 | 195 | 162 | 331 | 566.8 |
| | FITZ | 698 | 182 | 1552 | 177 | 1666 | 797 | 306 | 88 | 321 | 643.0 |
| | NMPE-S/50% | 594 | 350 | 1076 | 97 | 1513 | 1077 | 224 | 109 | 301 | 593.4 |
| | 25% | 567 | 254 | 747 | 592 | 1166 | 888 | 434 | 124 | 126 | 544.2 |
| | 1% | 741 | 306 | 1754 | 266 | 416 | 511 | 355 | 126 | 308 | 531.4 |
| | CONTOUR MEAN ^c | 605.2 | 297.2 | 2180.0 | 170.8 | 1470.3 | 880.2 | 323.8 | 114.5 | 297.2 | |
| 60 | NMPW | 562 | 293 | 1156 | 271 | 685 | 1145 | 382 | 134 | 266 | 543.8 |
| | NMPP | 766 | 351 | 5076 | 143 | 637 | 894 | 366 | 120 | 355 | 967.6 |
| | FITZ | 773 | 236 | 1811 | 260 | 1361 | 612 | 379 | 94 | 460 | 665.1 |
| | NMPE | 657 | 395 | 1330 | 148 | 1847 | 880 | 573 | 93 | 312 | 692.8 |
| | CONTOUR MEAN | 689.5 | 318.8 | 2343.2 | 205.5 | 1132.5 | 882.8 | 425.0 | 110.2 | 348.2 | |
| DAILY MEAN ^c | | 749.9 | 285.0 | 2086.6 | 222.9 | 1213.4 | 774.1 | 332.7 | 131.1 | 287.8 | |

^a Cells/ml, mean of R-1 and R-2

^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels

^c Mean of surface samples

APPENDIX VA-2d

ABUNDANCE^a OF CRYPTOPHYCEAE IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL MEAN |
|-------------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|----------------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14,19 DEC | |
| 10 | NMPW | 566 | 383 | 505 | 1014 | 3039 | 1687 | 781 | 306 | 104 | 931.7 |
| | NMPP | 585 | 666 | 580 | 1284 | 235 | 1360 | 607 | 287 | 137 | 637.9 |
| | FITZ | 502 | 852 | 575 | 1027 | 2691 | 1720 | 527 | 354 | 77 | 925.0 |
| | NMPE | 299 | 1436 | 468 | 2379 | 4249 | 1255 | 1332 | 383 | 111 | 1323.6 |
| | CONTOUR MEAN | 488.0 | 834.2 | 532.0 | 1426.0 | 2553.5 | 1505.5 | 811.8 | 332.5 | 107.2 | |
| 20 | NMPW | 502 | 774 | 390 | 2368 | 1292 | 1718 | 799 | 317 | 91 | 916.8 |
| | NMPP | 617 | 579 | 838 | 937 | 312 | 1583 | 827 | 338 | 215 | 694.0 |
| | FITZ | 584 | 798 | 505 | 3084 | 1780 | 1610 | 609 | 283 | 149 | 1044.7 |
| | NMPE | 398 | 1897 | 229 | 2134 | 3969 | 1104 | 728 | 370 | 92 | 1213.4 |
| | CONTOUR MEAN | 525.2 | 1012.0 | 490.5 | 2130.8 | 1838.3 | 1503.8 | 740.8 | 327.0 | 136.8 | |
| 40 | NMPW | 585 | 620 | 702 | 2476 | 2058 | 2214 | 979 | 361 | 104 | 1122.1 |
| | NMPP | 489 | 661 | 240 | 4671 | 1652 | 1859 | 765 | 479 | 164 | 1220.0 |
| | FITZ | 438 | 683 | 345 | 1327 | 957 | 1780 | 929 | 334 | 198 | 776.8 |
| | NMPE-S/50% | 566 | 2576 | 348 | 1892 | 1793 | 1692 | 930 | 318 | 155 | 1141.1 |
| | 25% | 453 | 1832 | 252 | 2368 | 1572 | 1739 | 949 | 332 | 95 | 1065.8 |
| | 1% | 787 | 1711 | 542 | 473 | 1020 | 1648 | 978 | 358 | 100 | 846.3 |
| | CONTOUR MEAN ^c | 519.5 | 1135.0 | 408.8 | 2591.5 | 1615.0 | 1886.3 | 900.8 | 373.0 | 155.2 | |
| 60 | NMPW | 378 | 1035 | 171 | 2822 | 2090 | 2333 | 848 | 433 | 130 | 1137.8 |
| | NMPP | 566 | 871 | 835 | 4957 | 1084 | 1872 | 766 | 381 | 141 | 1274.8 |
| | FITZ | 472 | 909 | 577 | 2915 | 2275 | 1347 | 816 | 407 | 196 | 1101.6 |
| | NMPE | 610 | 1337 | 191 | 2799 | 1659 | 1719 | 1311 | 287 | 166 | 1119.9 |
| | CONTOUR MEAN | 506.5 | 1038.0 | 443.5 | 3373.2 | 1777.0 | 1817.8 | 935.2 | 377.0 | 158.2 | |
| DAILY MEAN ^c | | 509.8 | 1004.8 | 468.7 | 2380.4 | 1945.9 | 1678.3 | 847.1 | 352.4 | 139.4 | |

^a Cells/ml, mean of R-1 and R-2^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels^c Mean of surface samples

APPENDIX VA-2e

ABUNDANCE^a OF DINOPHYCEAE IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL MEAN |
|-------------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|------------|----------------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14, 19 DEC | |
| 10 | NMPW | 0 | 12 | 5 | 7 | 52 | 21 | 35 | 4 | 5 | 15.7 |
| | NMPP | 22 | 49 | 4 | 0 | 3 | 7 | 25 | 5 | 8 | 13.7 |
| | FITZ | 0 | 26 | 0 | 13 | 81 | 5 | 5 | 7 | 9 | 16.2 |
| | NMPE | 23 | 31 | 4 | 5 | 47 | 7 | 3 | 13 | 0 | 14.8 |
| | CONTOUR MEAN | 11.2 | 29.5 | 3.2 | 6.2 | 45.8 | 10.0 | 17.0 | 7.2 | 5.5 | |
| 20 | NMPW | 34 | 13 | 0 | 26 | 54 | 33 | 15 | 7 | 2 | 20.4 |
| | NMPP | 21 | 33 | 22 | 10 | 13 | 20 | 0 | 0 | 13 | 14.7 |
| | FITZ | 17 | 35 | 7 | 23 | 60 | 34 | 0 | 3 | 12 | 21.2 |
| | NMPE | 79 | 72 | 23 | 0 | 33 | 11 | 2 | 3 | 10 | 25.9 |
| | CONTOUR MEAN | 37.8 | 38.2 | 13.0 | 14.8 | 40.0 | 24.5 | 4.2 | 3.2 | 9.2 | |
| 40 | NMPW | 26 | 5 | 13 | 29 | 31 | 26 | 0 | 8 | 3 | 15.7 |
| | NMPP | 37 | 13 | 0 | 39 | 36 | 42 | 7 | 7 | 5 | 20.7 |
| | FITZ | 19 | 13 | 0 | 3 | 13 | 21 | 3 | 4 | 15 | 10.1 |
| | NMPE-S/50% | 55 | 92 | 7 | 15 | 38 | 6 | 9 | 6 | 18 | 27.3 |
| | 25% | 19 | 68 | 12 | 7 | 57 | 14 | 3 | 8 | 10 | 22.0 |
| | 1% | 33 | 46 | 7 | 16 | 17 | 14 | 3 | 9 | 4 | 16.6 |
| | CONTOUR MEAN ^c | 34.2 | 30.8 | 5.0 | 21.5 | 29.5 | 23.8 | 4.8 | 6.2 | 10.2 | |
| 60 | NMPW | 20 | 46 | 0 | 34 | 21 | 7 | 16 | 9 | 10 | 18.1 |
| | NMPP | 44 | 7 | 0 | 13 | 53 | 9 | 15 | 4 | 3 | 16.4 |
| | FITZ | 14 | 24 | 0 | 13 | 53 | 0 | 9 | 5 | 17 | 15.0 |
| | NMPE | 65 | 52 | 0 | 11 | 69 | 11 | 4 | 3 | 21 | 26.2 |
| | CONTOUR MEAN | 35.8 | 32.2 | 0.0 | 17.8 | 49.0 | 6.8 | 11.0 | 5.2 | 12.8 | |
| DAILY MEAN ^c | | 29.8 | 32.7 | 5.3 | 15.1 | 41.1 | 16.2 | 9.2 | 5.5 | 9.4 | |

^a Cells/ml, mean of R-1 and R-2

^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels

^c Mean of surface samples

ABUNDANCE^a OF EUGLENOPHYCEAE IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL MEAN |
|-------------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|----------------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14,19 DEC | |
| 10 | NMPW | 147 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18.2 |
| | NMPP | 318 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37.7 |
| | FITZ | 436 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 48.4 |
| | NMPE | 466 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 52.1 |
| | CONTOUR MEAN | 341.8 | 9.5 | 0.0 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 20 | NMPW | 42 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4.7 |
| | NMPP | 257 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 30.0 |
| | FITZ | 328 | 7 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 38.0 |
| | NMPE | 220 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24.4 |
| | CONTOUR MEAN | 211.8 | 1.8 | 3.2 | 0.0 | 0.0 | 1.8 | 0.0 | 0.0 | 0.2 | |
| 40 | NMPW | 5 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.9 |
| | NMPP | 182 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20.8 |
| | FITZ | 70 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7.8 |
| | NMPE-S/50% | 86 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9.6 |
| | 25% | 78 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8.7 |
| | 1% | 78 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9.4 |
| | CONTOUR MEAN ^c | 85.8 | 4.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 60 | NMPW | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 |
| | NMPP | 29 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5.2 |
| | FITZ | 92 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10.8 |
| | NMPE | 18 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3.1 |
| | CONTOUR MEAN | 36.0 | 8.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| DAILY MEAN ^c | | 168.8 | 5.9 | 0.8 | 0.2 | 0.0 | 0.4 | 0.0 | 0.0 | 0.1 | |

^a Cells/ml, mean of R-1 and R-2^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels^c Mean of surface samples

APPENDIX VA-2g

ABUNDANCE^a OF MYXOPHYCEAE IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL MEAN |
|-------------------------|---------------------------|--------|--------|---------|--------|---------|--------|--------|--------|-----------|----------------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14,19 DEC | |
| 10 | NMPW | 1441 | 5015 | 12666 | 21789 | 22413 | 7282 | 3738 | 1540 | 835 | 8524.3 |
| | NMPP | 1011 | 2209 | 13589 | 3282 | 4300 | 6058 | 3465 | 1220 | 691 | 3980.6 |
| | FITZ | 1749 | 5856 | 5613 | 5603 | 12302 | 6679 | 1371 | 1219 | 987 | 4597.7 |
| | NMPE | 1097 | 2936 | 13643 | 4057 | 7743 | 3993 | 1518 | 963 | 1869 | 4202.1 |
| | CONTOUR MEAN | 1324.5 | 4004.0 | 11377.8 | 8682.8 | 11689.5 | 6003.0 | 2523.0 | 1235.5 | 1095.5 | |
| 20 | NMPW | 941 | 3631 | 11708 | 11132 | 15200 | 6041 | 3355 | 1085 | 1730 | 6091.4 |
| | NMPP | 1732 | 2993 | 16024 | 3881 | 4260 | 10362 | 2320 | 984 | 1195 | 4861.2 |
| | FITZ | 1365 | 3425 | 14468 | 2808 | 9640 | 5752 | 1493 | 627 | 1043 | 4513.4 |
| | NMPE | 867 | 1197 | 12981 | 2555 | 9340 | 3313 | 608 | 1852 | 1647 | 3817.8 |
| | CONTOUR MEAN | 1226.2 | 2811.5 | 13795.2 | 5094.0 | 9610.0 | 6367.0 | 1944.0 | 1137.0 | 1403.8 | |
| 40 | NMPW | 515 | 3037 | 17378 | 7345 | 15134 | 3946 | 2348 | 770 | 1130 | 5733.7 |
| | NMPP | 1328 | 3532 | 7227 | 5739 | 12169 | 2718 | 866 | 858 | 651 | 3898.7 |
| | FITZ | 1317 | 3793 | 6578 | 1377 | 14415 | 7646 | 1401 | 461 | 533 | 4169.0 |
| | NMPE-S/50% | 1454 | 2523 | 10318 | 2457 | 14352 | 3567 | 567 | 581 | 1221 | 4115.6 |
| | 25% | 948 | 604 | 14587 | 554 | 17983 | 6005 | 1506 | 877 | 802 | 4874.0 |
| | 1% | 1477 | 1952 | 6877 | 1109 | 11818 | 3741 | 1960 | 676 | 783 | 3377.0 |
| | CONTOUR MEAN ^c | 1153.5 | 3221.2 | 10375.2 | 4229.5 | 14017.5 | 4469.2 | 1295.5 | 667.5 | 883.8 | |
| 60 | NMPW | 521 | 2694 | 3803 | 3989 | 12591 | 8032 | 3354 | 946 | 1227 | 4128.6 |
| | NMPP | 1050 | 2322 | 8379 | 3760 | 8695 | 2178 | 713 | 442 | 927 | 3162.9 |
| | FITZ | 352 | 3340 | 10902 | 1728 | 11559 | 4268 | 945 | 1142 | 518 | 3861.6 |
| | NMPE | 394 | 1338 | 11885 | 2215 | 14889 | 3856 | 2599 | 424 | 722 | 4258.0 |
| | CONTOUR MEAN | 579.2 | 2423.5 | 8742.2 | 2923.0 | 11933.5 | 4583.5 | 1902.8 | 738.5 | 848.5 | |
| DAILY MEAN ^c | | 1070.9 | 3115.1 | 11072.6 | 5232.3 | 11812.6 | 5355.7 | 1916.3 | 944.6 | 1057.9 | |

^a Cells/ml, mean of R-1 and R-2

^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels

^c Mean of surface samples

APPENDIX-VA-2h

ABUNDANCE^a OF TOTAL PHYTOPLANKTON IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL |
|-------------------------|---------------------------|--------|---------|---------|---------|---------|---------|--------|--------|-----------|---------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14,19 DEC | MEAN |
| 10 | NMPW | 6570 | 11558 | 20263 | 43248 | 33112 | 13284 | 5436 | 2905 | 2738 | 15457.1 |
| | NMPP | 7637 | 8765 | 21234 | 5926 | 5605 | 12244 | 5450 | 2335 | 2151 | 7927.4 |
| | FITZ | 8251 | 12909 | 9601 | 16655 | 21851 | 11713 | 2772 | 2170 | 2516 | 9826.4 |
| | NMPE | 6203 | 8469 | 17150 | 11309 | 14650 | 9324 | 4355 | 1936 | 3648 | 8560.4 |
| | CONTOUR MEAN | 7165.2 | 10425.2 | 17062.0 | 19284.5 | 18804.5 | 11641.2 | 4503.2 | 2336.5 | 2763.2 | |
| 20 | NMPW | 4264 | 11546 | 18293 | 21806 | 22576 | 11200 | 5285 | 2338 | 3378 | 11187.3 |
| | NMPP | 8449 | 8183 | 23565 | 7092 | 5991 | 16702 | 3970 | 1805 | 3025 | 8753.6 |
| | FITZ | 7029 | 9487 | 20104 | 9057 | 16527 | 11834 | 3078 | 1326 | 2813 | 9028.3 |
| | NMPE | 4652 | 5540 | 15292 | 8917 | 17057 | 7838 | 2500 | 2884 | 3620 | 7588.8 |
| | CONTOUR MEAN | 6098.5 | 8689.0 | 19313.5 | 11718.0 | 15537.8 | 11893.5 | 3708.2 | 2088.2 | 3209.0 | |
| 40 | NMPW | 2744 | 9864 | 27387 | 19851 | 22243 | 9547 | 4913 | 1626 | 2750 | 11213.8 |
| | NMPP | 7139 | 8861 | 11003 | 14511 | 18107 | 7526 | 2562 | 1833 | 2245 | 8198.6 |
| | FITZ | 4150 | 9164 | 9938 | 4342 | 19934 | 12849 | 4325 | 1093 | 2396 | 7576.8 |
| | NMPE-S/50% | 5733 | 9277 | 13282 | 6201 | 20417 | 8716 | 2327 | 1268 | 3267 | 7832.0 |
| | 25% | 4443 | 5801 | 16367 | 7654 | 22917 | 11933 | 3785 | 1657 | 1708 | 8473.8 |
| | 1% | 5683 | 7136 | 10989 | 5033 | 17062 | 7755 | 4255 | 1384 | 2274 | 6841.2 |
| | CONTOUR MEAN ^c | 4941.5 | 9291.5 | 15402.5 | 11226.2 | 20175.2 | 9659.5 | 3531.8 | 1455.0 | 2664.5 | |
| 60 | NMPW | 2591 | 7759 | 6032 | 14141 | 18661 | 15490 | 5527 | 1833 | 3042 | 8341.8 |
| | NMPP | 3356 | 9714 | 16302 | 12339 | 13086 | 7728 | 2360 | 1247 | 2367 | 7611.0 |
| | FITZ | 3094 | 7492 | 15215 | 8031 | 18830 | 8782 | 3044 | 1964 | 2390 | 7649.1 |
| | NMPE | 2647 | 6073 | 14669 | 6708 | 20754 | 8673 | 5517 | 1000 | 2511 | 7616.8 |
| | CONTOUR MEAN | 2922.0 | 7759.5 | 13054.5 | 10304.8 | 17832.8 | 10168.2 | 4112.0 | 1511.0 | 2577.5 | |
| DAILY MEAN ^c | | 5281.8 | 9041.3 | 16208.1 | 13133.4 | 18087.6 | 10840.6 | 3963.8 | 1847.6 | 2803.6 | |

^a Cells/ml, mean of R-1 and R-2^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels^c Mean of surface samples

APPENDIX VA-3a

BIOVOLUME^a OF BACILLARIOPHYCEAE IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL MEAN |
|-------------------------|---------------------------|---------|---------|---------|---------|--------|---------|--------|--------|-----------|----------------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14,19 DEC | |
| 10 | NMPW | 1407.55 | 2042.81 | 1310.58 | 2677.60 | 83.75 | 448.74 | 83.11 | 402.10 | 1177.31 | 1070.39 |
| | NMPP | 1535.49 | 1754.58 | 768.41 | 218.24 | 44.84 | 672.01 | 61.41 | 272.22 | 961.65 | 698.76 |
| | FITZ | 1584.08 | 1693.57 | 261.99 | 1126.29 | 157.83 | 126.98 | 321.67 | 201.17 | 1350.80 | 758.26 |
| | NMPE | 1422.36 | 1060.64 | 183.17 | 1879.55 | 25.02 | 140.60 | 40.36 | 388.22 | 1062.62 | 689.17 |
| | CONTOUR MEAN | 1487.37 | 1637.90 | 631.04 | 1475.42 | 77.96 | 347.08 | 126.64 | 315.93 | 1138.10 | |
| 20 | NMPW | 898.47 | 2148.56 | 879.59 | 1614.83 | 125.92 | 1370.77 | 221.12 | 188.50 | 991.56 | 937.70 |
| | NMPP | 1577.74 | 1580.92 | 685.62 | 485.35 | 60.87 | 246.63 | 220.47 | 115.76 | 768.65 | 642.44 |
| | FITZ | 1882.38 | 1665.79 | 379.83 | 518.59 | 146.47 | 199.67 | 130.29 | 214.17 | 1433.18 | 730.04 |
| | NMPE | 1072.23 | 720.48 | 202.57 | 783.32 | 28.62 | 285.18 | 111.23 | 186.78 | 854.92 | 471.70 |
| | CONTOUR MEAN | 1357.70 | 1528.94 | 536.90 | 850.52 | 90.47 | 525.56 | 170.78 | 186.30 | 1012.08 | |
| 40 | NMPW | 600.52 | 1956.68 | 886.43 | 2846.16 | 145.77 | 104.32 | 208.80 | 137.74 | 1348.94 | 915.05 |
| | NMPP | 1989.49 | 1385.11 | 304.16 | 642.56 | 8.51 | 131.59 | 164.35 | 124.65 | 740.87 | 610.14 |
| | FITZ | 649.75 | 1569.95 | 274.68 | 265.00 | 59.00 | 1030.06 | 73.61 | 104.13 | 1259.73 | 587.32 |
| | NMPE-S/50% | 1421.32 | 1305.46 | 185.29 | 585.78 | 28.13 | 262.29 | 33.10 | 113.09 | 1450.53 | 598.33 |
| | 25% | 889.63 | 766.62 | 96.11 | 354.56 | 42.95 | 140.11 | 146.07 | 136.38 | 791.84 | 373.81 |
| | 1% | 1333.89 | 1032.93 | 296.12 | 1000.72 | 47.40 | 181.71 | 184.97 | 145.76 | 988.81 | 579.15 |
| | CONTOUR MEAN ^c | 1165.27 | 1554.30 | 412.64 | 1084.88 | 60.35 | 382.06 | 119.96 | 119.90 | 1200.02 | |
| 60 | NMPW | 547.61 | 1576.80 | 127.01 | 3483.00 | 19.82 | 694.93 | 110.76 | 133.17 | 1249.05 | 882.46 |
| | NMPP | 549.38 | 2098.77 | 213.92 | 893.85 | 64.68 | 95.61 | 170.60 | 254.27 | 1066.35 | 600.81 |
| | FITZ | 728.11 | 944.36 | 172.53 | 574.59 | 17.85 | 967.11 | 48.99 | 194.13 | 1052.72 | 522.27 |
| | NMPE | 68.98 | 1093.77 | 188.19 | 204.53 | 60.13 | 319.31 | 213.55 | 94.45 | 1083.47 | 369.60 |
| | CONTOUR MEAN | 473.52 | 1428.42 | 175.41 | 1288.99 | 40.62 | 519.24 | 135.95 | 169.00 | 1112.90 | |
| DAILY MEAN ^c | | 1120.97 | 1537.39 | 439.00 | 1174.95 | 67.33 | 443.49 | 138.33 | 197.78 | 1115.77 | |

^a mg/m³, mean of R-1 and R-2^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels^c Mean of surface samples

APPENDIX VA-3b

BIOVOLUME^a OF CHLOROPHYCEAE IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL MEAN |
|-------------------------|---------------------------|--------|--------|--------|---------|---------|--------|--------|--------|-----------|----------------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14,19 DEC | |
| 10 | NMPW | 103.62 | 176.42 | 201.02 | 1095.27 | 735.08 | 803.86 | 150.39 | 99.81 | 37.55 | 378.11 |
| | NMPP | 135.45 | 197.71 | 172.49 | 63.05 | 123.45 | 609.71 | 282.37 | 74.98 | 20.87 | 186.68 |
| | FITZ | 115.83 | 229.63 | 97.16 | 395.03 | 652.82 | 475.65 | 188.05 | 92.68 | 14.17 | 251.22 |
| | NMPE | 123.31 | 224.16 | 35.83 | 394.71 | 268.49 | 489.88 | 241.61 | 76.71 | 62.95 | 213.01 |
| | CONTOUR MEAN | 119.55 | 206.98 | 126.62 | 487.02 | 444.96 | 594.78 | 215.60 | 85.91 | 33.88 | |
| 20 | NMPW | 74.53 | 191.62 | 137.39 | 524.88 | 668.22 | 537.92 | 265.90 | 40.23 | 27.71 | 274.27 |
| | NMPP | 210.42 | 125.39 | 96.95 | 137.84 | 333.82 | 774.84 | 242.59 | 56.67 | 22.33 | 222.32 |
| | FITZ | 82.09 | 120.85 | 114.01 | 78.28 | 486.89 | 593.54 | 172.80 | 77.20 | 42.43 | 196.45 |
| | NMPE | 61.80 | 99.47 | 77.89 | 197.07 | 343.59 | 450.72 | 168.91 | 90.27 | 32.26 | 169.11 |
| | CONTOUR MEAN | 107.21 | 134.33 | 106.56 | 234.52 | 458.13 | 589.26 | 212.55 | 66.09 | 31.18 | |
| 40 | NMPW | 24.48 | 156.48 | 120.73 | 549.52 | 576.79 | 663.02 | 212.98 | 151.46 | 46.04 | 277.94 |
| | NMPP | 88.52 | 118.08 | 74.48 | 243.04 | 711.55 | 515.14 | 244.23 | 81.43 | 43.44 | 235.55 |
| | FITZ | 62.18 | 173.24 | 72.65 | 77.36 | 367.78 | 426.82 | 338.73 | 101.39 | 28.95 | 183.23 |
| | NMPE-S/50% | 54.87 | 143.60 | 66.94 | 92.11 | 390.55 | 387.71 | 149.12 | 62.85 | 25.35 | 152.57 |
| | 25% | 80.12 | 133.27 | 21.18 | 440.56 | 307.36 | 506.25 | 214.24 | 111.93 | 15.20 | 203.35 |
| | 1% | 54.01 | 105.81 | 87.43 | 245.01 | 3467.97 | 337.88 | 328.23 | 109.75 | 40.95 | 530.78 |
| | CONTOUR MEAN ^c | 57.51 | 147.85 | 83.70 | 240.51 | 511.67 | 498.17 | 236.26 | 99.28 | 35.94 | |
| 60 | NMPW | 15.66 | 102.98 | 34.47 | 358.59 | 482.09 | 647.84 | 222.82 | 68.67 | 19.92 | 217.00 |
| | NMPP | 12.13 | 187.89 | 57.41 | 280.44 | 422.23 | 465.94 | 219.14 | 60.63 | 24.63 | 192.27 |
| | FITZ | 64.56 | 88.78 | 97.65 | 174.69 | 402.95 | 501.89 | 262.00 | 111.21 | 85.41 | 198.79 |
| | NMPE | 40.09 | 124.98 | 41.76 | 61.51 | 369.38 | 436.24 | 413.66 | 40.17 | 20.43 | 171.94 |
| | CONTOUR MEAN | 33.11 | 125.98 | 57.82 | 218.81 | 419.16 | 512.98 | 279.40 | 70.17 | 37.60 | |
| DAILY MEAN ^c | | 79.35 | 153.78 | 93.68 | 295.21 | 458.48 | 548.80 | 235.95 | 80.36 | 34.65 | |

^a mg/m³, mean of R-1 and R-2

^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels

^c Mean of surface samples

Revised

APPENDIX VA-3c

BIOVOLUME^a OF CHRYSOPHYCEAE IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL MEAN |
|-------------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|------------|----------------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14, 19 DEC | |
| 10 | NMPW | 64.36 | 33.94 | 110.50 | 36.66 | 99.88 | 24.03 | 20.32 | 9.56 | 26.54 | 47.31 |
| | NMPP | 87.60 | 24.62 | 160.95 | 8.93 | 8.89 | 75.67 | 40.40 | 25.04 | 20.56 | 50.30 |
| | FITZ | 118.68 | 17.80 | 91.01 | 8.02 | 110.67 | 70.52 | 19.63 | 13.03 | 12.20 | 51.28 |
| | NMPE | 128.65 | 13.70 | 88.38 | 19.28 | 32.87 | 67.93 | 32.90 | 12.06 | 13.61 | 45.49 |
| | CONTOUR MEAN | 99.82 | 22.52 | 112.71 | 18.22 | 63.08 | 59.54 | 28.31 | 14.92 | 18.23 | |
| 20 | NMPW | 42.74 | 42.15 | 124.89 | 30.20 | 116.08 | 130.25 | 15.07 | 11.36 | 28.42 | 60.13 |
| | NMPP | 82.03 | 25.72 | 193.36 | 9.76 | 17.81 | 59.49 | 12.91 | 7.69 | 27.93 | 48.52 |
| | FITZ | 80.23 | 41.35 | 117.42 | 14.94 | 64.00 | 153.44 | 47.32 | 14.30 | 22.60 | 61.73 |
| | NMPE | 62.35 | 79.98 | 63.79 | 18.66 | 38.18 | 33.97 | 32.02 | 16.33 | 16.06 | 40.15 |
| | CONTOUR MEAN | 66.84 | 47.30 | 124.86 | 18.39 | 59.02 | 94.29 | 26.83 | 12.42 | 23.75 | |
| 40 | NMPW | 30.11 | 43.84 | 222.10 | 40.38 | 75.52 | 77.63 | 62.13 | 10.75 | 15.69 | 64.24 |
| | NMPP | 66.93 | 106.55 | 93.12 | 18.96 | 76.21 | 57.04 | 10.77 | 9.80 | 21.03 | 51.16 |
| | FITZ | 60.00 | 31.78 | 103.57 | 9.93 | 91.68 | 89.39 | 25.72 | 5.66 | 22.81 | 48.95 |
| | NMPE-S/50% | 99.27 | 85.83 | 77.59 | 7.44 | 67.93 | 82.25 | 11.08 | 7.93 | 18.80 | 50.90 |
| | 25% | 46.61 | 24.71 | 51.67 | 30.36 | 53.80 | 83.39 | 27.80 | 7.15 | 11.85 | 37.48 |
| | 1% | 64.05 | 23.21 | 121.53 | 17.68 | 39.98 | 65.91 | 48.96 | 11.17 | 21.16 | 45.96 |
| | CONTOUR MEAN ^c | 64.08 | 67.00 | 124.10 | 19.18 | 77.84 | 76.58 | 27.42 | 8.54 | 19.58 | |
| 60 | NMPW | 31.92 | 50.90 | 65.80 | 40.52 | 27.84 | 116.30 | 46.99 | 11.14 | 19.02 | 45.60 |
| | NMPP | 40.61 | 44.56 | 250.05 | 12.89 | 34.78 | 139.46 | 32.12 | 12.93 | 20.92 | 65.37 |
| | FITZ | 41.88 | 33.89 | 105.07 | 16.11 | 66.01 | 58.69 | 25.92 | 7.10 | 34.45 | 43.24 |
| | NMPE | 43.41 | 54.09 | 86.17 | 7.41 | 85.55 | 136.66 | 70.92 | 6.98 | 26.86 | 57.56 |
| | CONTOUR MEAN | 39.46 | 45.86 | 126.77 | 19.23 | 53.54 | 112.78 | 43.99 | 9.54 | 25.31 | |
| DAILY MEAN ^c | | 67.55 | 45.67 | 122.11 | 18.76 | 63.37 | 85.80 | 31.64 | 11.36 | 21.72 | |

^a mg/m³, mean of R-1 and R-2^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels^c Mean of surface samples

APPENDIX VA-3d

BIOVOLUME^a OF CRYPTOPHYCEAE IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL MEAN |
|-------------------------|---------------------------|--------|--------|--------|---------|--------|---------|--------|--------|-----------|----------------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14,19 DEC | |
| 10 | NMPW | 147.40 | 111.15 | 187.70 | 919.80 | 411.02 | 559.48 | 308.05 | 201.21 | 57.72 | 322.61 |
| | NMPP | 178.02 | 182.73 | 199.98 | 1393.00 | 22.42 | 490.89 | 268.93 | 240.12 | 57.47 | 337.06 |
| | FITZ | 170.25 | 146.33 | 158.72 | 832.20 | 369.01 | 572.48 | 169.68 | 217.91 | 31.00 | 296.40 |
| | NMPE | 84.62 | 259.60 | 359.09 | 2684.65 | 558.13 | 408.38 | 519.63 | 216.06 | 53.56 | 571.52 |
| | CONTOUR MEAN | 145.07 | 174.95 | 226.37 | 1457.41 | 340.14 | 507.81 | 316.57 | 218.82 | 49.94 | |
| 20 | NMPW | 120.16 | 414.97 | 146.37 | 2641.07 | 227.05 | 634.36 | 262.04 | 266.53 | 30.82 | 527.04 |
| | NMPP | 181.90 | 195.62 | 342.99 | 996.09 | 35.69 | 625.48 | 342.69 | 298.70 | 88.53 | 345.30 |
| | FITZ | 187.83 | 184.24 | 146.14 | 2858.15 | 199.22 | 658.93 | 199.68 | 189.18 | 52.59 | 519.55 |
| | NMPE | 141.08 | 515.33 | 134.12 | 2086.17 | 485.15 | 387.55 | 233.53 | 244.72 | 30.00 | 473.07 |
| | CONTOUR MEAN | 157.74 | 327.54 | 192.40 | 2145.37 | 236.78 | 576.58 | 259.48 | 249.78 | 50.48 | |
| 40 | NMPW | 152.97 | 371.42 | 145.96 | 2723.56 | 259.06 | 895.25 | 292.27 | 219.04 | 45.36 | 567.21 |
| | NMPP | 163.88 | 165.68 | 38.37 | 4684.88 | 235.27 | 758.93 | 236.57 | 334.45 | 92.27 | 745.59 |
| | FITZ | 120.74 | 261.38 | 138.34 | 1105.75 | 114.48 | 567.43 | 399.41 | 240.08 | 111.64 | 339.92 |
| | NMPE-S/50% | 187.77 | 813.44 | 97.46 | 2330.12 | 235.95 | 454.44 | 372.36 | 255.02 | 94.18 | 537.86 |
| | 25% | 150.94 | 452.41 | 79.13 | 2623.81 | 232.74 | 676.26 | 392.84 | 253.46 | 48.93 | 545.61 |
| | 1% | 241.30 | 506.31 | 175.08 | 447.44 | 142.38 | 590.26 | 477.19 | 176.49 | 38.42 | 310.54 |
| | CONTOUR MEAN ^c | 156.34 | 402.98 | 105.03 | 2711.08 | 211.19 | 669.01 | 325.15 | 262.15 | 85.86 | |
| 60 | NMPW | 85.99 | 381.27 | 27.05 | 2903.38 | 251.87 | 1099.18 | 261.99 | 387.59 | 52.58 | 605.66 |
| | NMPP | 153.83 | 439.88 | 141.11 | 4695.01 | 131.77 | 831.12 | 302.87 | 251.18 | 91.46 | 782.03 |
| | FITZ | 118.68 | 298.61 | 268.09 | 3325.28 | 264.75 | 499.48 | 329.36 | 273.99 | 81.66 | 606.66 |
| | NMPE | 175.22 | 377.67 | 121.46 | 2940.43 | 200.98 | 759.37 | 387.69 | 181.32 | 82.87 | 580.78 |
| | CONTOUR MEAN | 133.43 | 374.36 | 139.43 | 3466.02 | 212.34 | 797.29 | 320.48 | 273.52 | 77.14 | |
| DAILY MEAN ^c | | 148.15 | 319.96 | 165.81 | 2444.97 | 250.11 | 637.67 | 305.42 | 251.07 | 65.86 | |

^a mg/m³, mean of R-1 and R-2^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels^c Mean of surface samples

APPENDIX VA-3e

BIOVOLUME^a OF DINOPHYCEAE IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL MEAN |
|-------------------------|---------------------------|--------|--------|--------|--------|---------|--------|--------|--------|-----------|----------------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14,19 DEC | |
| 10 | NMPW | 0.00 | 73.63 | 47.43 | 24.18 | 1070.98 | 364.19 | 38.08 | 52.67 | 11.76 | 186.99 |
| | NMPP | 72.47 | 411.87 | 28.25 | 0.00 | 69.07 | 33.86 | 32.58 | 21.02 | 9.29 | 75.38 |
| | FITZ | 0.00 | 180.98 | 0.00 | 41.45 | 2069.65 | 27.08 | 7.61 | 103.57 | 33.85 | 273.80 |
| | NMPE | 195.74 | 251.43 | 52.38 | 58.58 | 1243.35 | 28.11 | 7.95 | 151.19 | 0.00 | 220.97 |
| | CONTOUR MEAN | 67.05 | 229.48 | 32.02 | 31.05 | 1113.26 | 113.31 | 21.55 | 82.11 | 13.72 | |
| 20 | NMPW | 392.57 | 13.94 | 0.00 | 103.96 | 662.29 | 482.15 | 44.73 | 73.75 | 35.59 | 201.00 |
| | NMPP | 114.87 | 222.54 | 245.89 | 37.31 | 60.17 | 177.55 | 0.00 | 0.00 | 63.36 | 102.41 |
| | FITZ | 91.89 | 264.17 | 13.30 | 230.05 | 1349.26 | 437.37 | 0.00 | 37.16 | 40.67 | 273.76 |
| | NMPE | 603.06 | 511.90 | 137.78 | 0.00 | 652.23 | 34.38 | 40.58 | 53.13 | 14.22 | 227.48 |
| | CONTOUR MEAN | 300.60 | 253.14 | 99.24 | 92.83 | 680.99 | 282.86 | 21.33 | 41.01 | 38.46 | |
| 40 | NMPW | 182.77 | 45.84 | 26.60 | 217.20 | 788.38 | 108.36 | 0.00 | 59.31 | 2.54 | 159.00 |
| | NMPP | 198.92 | 30.65 | 0.00 | 544.40 | 658.75 | 172.00 | 85.41 | 97.18 | 5.81 | 199.24 |
| | FITZ | 109.81 | 114.60 | 0.00 | 50.29 | 345.38 | 99.14 | 29.69 | 84.83 | 33.98 | 96.41 |
| | NMPE-S/50% | 320.13 | 698.28 | 2.31 | 236.69 | 899.74 | 30.47 | 66.62 | 136.21 | 71.70 | 273.57 |
| | 25% | 183.00 | 559.72 | 106.73 | 20.72 | 1411.89 | 47.92 | 24.03 | 78.99 | 30.24 | 273.69 |
| | 1% | 266.15 | 352.88 | 13.30 | 49.73 | 448.99 | 22.34 | 29.69 | 117.05 | 38.21 | 148.70 |
| | CONTOUR MEAN ^c | 202.91 | 222.34 | 7.23 | 262.14 | 673.06 | 102.49 | 45.43 | 94.38 | 28.51 | |
| 60 | NMPW | 142.66 | 289.36 | 0.00 | 294.17 | 288.59 | 30.98 | 27.53 | 109.90 | 15.61 | 133.20 |
| | NMPP | 249.08 | 38.59 | 0.00 | 251.48 | 401.61 | 171.94 | 16.60 | 56.85 | 2.90 | 132.12 |
| | FITZ | 36.02 | 165.66 | 0.00 | 209.47 | 1218.36 | 0.00 | 24.87 | 59.69 | 19.22 | 192.59 |
| | NMPE | 481.15 | 345.63 | 0.00 | 201.18 | 712.37 | 7.82 | 6.29 | 37.16 | 78.97 | 207.84 |
| | CONTOUR MEAN | 227.23 | 209.81 | 0.00 | 239.08 | 655.23 | 52.68 | 18.82 | 65.90 | 29.18 | |
| DAILY MEAN ^c | | 199.45 | 228.69 | 34.62 | 156.28 | 780.64 | 137.84 | 26.78 | 70.85 | 27.47 | |

^a mg/m³, mean of R-1 and R-2^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels^c Mean of surface samples

APPENDIX VA-3f.

BIOVOLUME^a OF EUGLENOPHYCEAE IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL MEAN |
|-------------------------|---------------------------|---------|--------|--------|--------|--------|--------|--------|--------|-----------|----------------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14,19 DEC | |
| 10 | NMPW | 521.65 | 54.24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 63.99 |
| | NMPP | 1100.95 | 67.60 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 129.84 |
| | FITZ | 1539.37 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 171.04 |
| | NMPE | 1661.93 | 0.00 | 0.00 | 10.15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 185.79 |
| | CONTOUR MEAN | 1205.98 | 30.46 | 0.00 | 2.54 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 20 | NMPW | 145.44 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.36 | 16.64 |
| | NMPP | 918.73 | 0.00 | 43.55 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 106.92 |
| | FITZ | 1176.82 | 22.28 | 0.00 | 0.00 | 0.00 | 366.56 | 0.00 | 0.00 | 0.00 | 173.96 |
| | NMPE | 771.62 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 85.74 |
| | CONTOUR MEAN | 753.15 | 5.57 | 10.89 | 0.00 | 0.00 | 91.64 | 0.00 | 0.00 | 1.09 | |
| 40 | NMPW | 18.82 | 40.10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.55 |
| | NMPP | 638.24 | 2.63 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 71.21 |
| | FITZ | 254.08 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.23 |
| | NMPE-S/50% | 261.36 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.04 |
| | 25% | 265.92 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.55 |
| | 1% | 277.19 | 6.34 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 31.50 |
| | CONTOUR MEAN ^c | 293.13 | 10.68 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 60 | NMPW | 18.82 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.09 |
| | NMPP | 103.51 | 62.38 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 18.43 |
| | FITZ | 327.11 | 17.82 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 38.33 |
| | NMPE | 65.87 | 35.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 11.28 |
| | CONTOUR MEAN | 128.83 | 28.96 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| DAILY MEAN ^c | | 595.27 | 18.92 | 2.72 | 0.63 | 0.00 | 22.91 | 0.00 | 0.00 | 0.27 | |

^a mg/m³, mean of R-1 and R-2^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels^c Mean of surface samples

APPENDIX VA-3g

BIOVOLUME^a OF MYXOPHYCEAE IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL MEAN |
|-------------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|------------|----------------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14, 19 DEC | |
| 10 | NMPW | 18.41 | 43.64 | 46.89 | 280.10 | 108.79 | 268.96 | 25.53 | 47.60 | 7.42 | 94.15 |
| | NMPP | 14.46 | 16.16 | 42.88 | 7.24 | 31.39 | 85.58 | 17.15 | 30.54 | 25.74 | 30.13 |
| | FITZ | 21.00 | 28.47 | 20.29 | 39.05 | 622.89 | 122.19 | 34.85 | 23.77 | 12.52 | 102.78 |
| | NMPE | 14.95 | 15.98 | 35.92 | 27.58 | 668.33 | 80.36 | 11.77 | 15.91 | 29.47 | 100.03 |
| | CONTOUR MEAN | 17.20 | 26.06 | 36.50 | 88.49 | 357.85 | 139.27 | 22.32 | 29.46 | 18.79 | |
| 20 | NMPW | 11.99 | 34.33 | 55.29 | 70.96 | 71.73 | 112.67 | 27.00 | 29.76 | 9.32 | 47.01 |
| | NMPP | 24.07 | 19.50 | 43.36 | 9.23 | 130.07 | 335.76 | 44.94 | 7.49 | 12.96 | 69.71 |
| | FITZ | 18.42 | 24.68 | 46.36 | 7.80 | 155.39 | 242.59 | 21.16 | 8.39 | 11.82 | 59.62 |
| | NMPE | 12.39 | 14.77 | 45.59 | 7.68 | 139.58 | 23.79 | 2.98 | 22.66 | 17.25 | 31.85 |
| | CONTOUR MEAN | 16.72 | 23.32 | 47.65 | 23.92 | 124.19 | 178.70 | 24.02 | 17.08 | 12.84 | |
| 40 | NMPW | 7.37 | 30.34 | 41.04 | 52.32 | 214.01 | 58.05 | 16.79 | 18.65 | 14.40 | 50.33 |
| | NMPP | 18.39 | 27.20 | 18.95 | 43.48 | 126.50 | 93.57 | 12.95 | 5.78 | 4.09 | 38.99 |
| | FITZ | 18.83 | 29.07 | 18.94 | 29.89 | 115.86 | 181.56 | 4.85 | 7.35 | 6.43 | 45.86 |
| | NMPE-S/50% | 15.49 | 35.20 | 56.20 | 35.70 | 274.65 | 29.51 | 8.74 | 5.76 | 11.22 | 52.50 |
| | 25% | 13.55 | 6.81 | 23.04 | 10.35 | 378.80 | 30.46 | 25.63 | 7.51 | 8.54 | 56.08 |
| | 1% | 18.74 | 11.81 | 26.40 | 3.06 | 100.78 | 29.67 | 20.09 | 11.32 | 7.66 | 25.50 |
| | CONTOUR MEAN ^c | 15.02 | 30.45 | 33.78 | 40.35 | 182.78 | 90.67 | 10.83 | 9.38 | 9.04 | |
| 60 | NMPW | 5.99 | 34.15 | 92.98 | 38.32 | 118.79 | 67.25 | 12.56 | 10.66 | 18.08 | 44.31 |
| | NMPP | 9.75 | 19.73 | 18.70 | 55.62 | 396.70 | 17.58 | 7.44 | 7.46 | 16.53 | 61.06 |
| | FITZ | 5.03 | 25.38 | 56.12 | 23.72 | 60.87 | 100.61 | 11.51 | 12.86 | 15.77 | 34.65 |
| | NMPE | 4.62 | 15.91 | 26.71 | 25.29 | 367.93 | 37.60 | 21.27 | 5.90 | 17.03 | 58.03 |
| | CONTOUR MEAN | 6.35 | 23.79 | 48.63 | 35.74 | 236.07 | 55.76 | 13.20 | 9.22 | 16.85 | |
| DAILY MEAN ^c | | 13.82 | 25.91 | 41.64 | 47.12 | 225.22 | 116.10 | 17.59 | 16.28 | 14.38 | |

^a mg/m³, mean of R-1 and R-2

^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels

^c Mean surface samples

APPENDIX VA-3h

BIOVOLUME^a OF TOTAL PHYTOPLANKTON IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL MEAN |
|-------------------------|---------------------------|---------|---------|---------|---------|---------|---------|---------|--------|------------|----------------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14, 19 DEC | |
| 10 | NMPW | 2263.00 | 2535.83 | 1904.12 | 5033.62 | 2509.50 | 2469.26 | 625.49 | 812.95 | 1318.31 | 2163.56 |
| | NMPP | 3124.43 | 2655.27 | 1372.97 | 1690.46 | 300.06 | 1967.71 | 702.84 | 663.93 | 1095.59 | 1508.14 |
| | FITZ | 3549.21 | 2296.78 | 629.18 | 2442.03 | 3982.86 | 1394.91 | 741.48 | 652.12 | 1454.55 | 1904.79 |
| | NMPE | 3631.56 | 1825.51 | 754.78 | 5074.52 | 2796.19 | 1215.26 | 854.22 | 859.61 | 1222.21 | 2025.98 |
| | CONTOUR MEAN | 3142.05 | 2328.35 | 1165.26 | 3560.16 | 2397.15 | 1761.78 | 731.01 | 747.15 | 1272.66 | |
| 20 | NMPW | 1685.89 | 2845.58 | 1343.54 | 4985.89 | 1871.29 | 3268.11 | 835.87 | 610.13 | 1127.78 | 2063.79 |
| | NMPP | 3109.76 | 2169.69 | 1651.70 | 1675.59 | 638.43 | 2219.75 | 863.61 | 526.30 | 983.77 | 1537.62 |
| | FITZ | 3519.66 | 2323.37 | 817.06 | 3707.81 | 2401.23 | 2652.09 | 571.25 | 540.39 | 1603.29 | 2015.13 |
| | NMPE | 2724.52 | 1941.94 | 661.73 | 3092.91 | 1687.34 | 1215.60 | 589.24 | 613.89 | 964.72 | 1499.10 |
| | CONTOUR MEAN | 2759.96 | 2320.14 | 1118.51 | 3365.55 | 1649.57 | 2338.89 | 714.99 | 572.68 | 1169.89 | |
| 40 | NMPW | 1020.03 | 2644.71 | 1442.87 | 6429.13 | 2059.52 | 1906.64 | 792.97 | 596.94 | 1472.96 | 2040.64 |
| | NMPP | 3164.36 | 1835.90 | 529.08 | 6177.32 | 1816.79 | 1728.28 | 754.29 | 653.29 | 907.52 | 1951.87 |
| | FITZ | 1275.39 | 2180.01 | 608.18 | 1538.22 | 1094.18 | 2394.39 | 872.00 | 543.42 | 1463.54 | 1329.93 |
| | NMPE-S/50% | 2360.22 | 3081.80 | 485.79 | 3287.83 | 1896.96 | 1246.67 | 641.02 | 580.86 | 1671.79 | 1694.77 |
| | 25% | 1629.78 | 1943.55 | 377.85 | 3480.36 | 2427.54 | 1484.40 | 830.61 | 595.42 | 906.61 | 1519.57 |
| | 1% | 2255.33 | 2039.29 | 719.86 | 1763.64 | 4247.51 | 1227.77 | 1089.13 | 571.53 | 1135.20 | 1672.14 |
| | CONTOUR MEAN ^c | 1955.00 | 2435.60 | 766.48 | 4358.12 | 1716.86 | 1819.00 | 765.07 | 593.63 | 1378.95 | |
| 60 | NMPW | 848.65 | 2435.47 | 347.31 | 7117.99 | 1189.00 | 2656.48 | 682.65 | 721.13 | 1374.26 | 1930.33 |
| | NMPP | 1118.28 | 2891.81 | 681.18 | 6189.29 | 1451.76 | 1721.65 | 748.68 | 643.33 | 1222.79 | 1852.09 |
| | FITZ | 1321.39 | 1574.52 | 699.47 | 4323.85 | 2030.80 | 2127.79 | 702.64 | 658.99 | 1289.24 | 1636.52 |
| | NMPE | 879.34 | 2046.96 | 464.28 | 3440.34 | 1796.35 | 1697.00 | 1113.38 | 365.98 | 1309.63 | 1457.03 |
| | CONTOUR MEAN | 1041.92 | 2237.19 | 548.06 | 5267.87 | 1616.98 | 2050.73 | 811.84 | 597.36 | 1298.98 | |
| DAILY MEAN ^c | | 2224.73 | 2330.32 | 899.58 | 4137.92 | 1845.14 | 1992.60 | 755.73 | 627.70 | 1280.12 | |

^a mg/m³, mean of R-1 and R-2

^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels

^c Mean of surface samples

Revised

APPENDIX VA-4a

ABUNDANCE OF SELECTED SPECIES OF BACILLARIOPHYCEAE

ABUNDANCE^a OF ASTERIONELLA FORMOSA IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL |
|-------------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14,19 DEC | MEAN |
| 10 | NMPW | 170 | 1005 | 76 | 0 | 0 | 0 | 17 | 32 | 135 | 159.4 |
| | NMPP | 195 | 849 | 12 | 0 | 0 | 0 | 12 | 6 | 37 | 123.4 |
| | FITZ | 371 | 1142 | 56 | 0 | 0 | 0 | 0 | 3 | 48 | 180.0 |
| | NMPE | 228 | 396 | 33 | 0 | 0 | 10 | 0 | 5 | 137 | 96.6 |
| | CONTOUR MEAN | 256.0 | 848.0 | 44.2 | 0 | 0 | 2.5 | 7.2 | 11.5 | 89.2 | |
| 20 | NMPW | 241 | 1536 | 56 | 0 | 0 | 37 | 2 | 16 | 112 | 222.2 |
| | NMPP | 507 | 996 | 19 | 0 | 0 | 0 | 23 | 8 | 33 | 176.2 |
| | FITZ | 460 | 1417 | 0 | 0 | 0 | 0 | 18 | 14 | 70 | 219.9 |
| | NMPE | 233 | 378 | 34 | 0 | 0 | 0 | 0 | 12 | 66 | 80.3 |
| | CONTOUR MEAN | 360.2 | 1081.8 | 27.2 | 0 | 0 | 9.2 | 10.8 | 12.5 | 70.2 | |
| 40 | NMPW | 216 | 941 | 36 | 0 | 0 | 0 | 0 | 15 | 146 | 150.4 |
| | NMPP | 526 | 924 | 29 | 0 | 0 | 0 | 8 | 4 | 41 | 170.2 |
| | FITZ | 107 | 1087 | 49 | 0 | 0 | 5 | 26 | 6 | 67 | 149.7 |
| | NMPE-S/50% | 372 | 849 | 8 | 0 | 0 | 0 | 11 | 8 | 94 | 149.1 |
| | 25% | 346 | 219 | 44 | 4 | 0 | 0 | 34 | 4 | 46 | 77.4 |
| | 1% | 254 | 348 | 13 | 0 | 0 | 0 | 4 | 11 | 71 | 77.9 |
| | CONTOUR MEAN ^c | 305.2 | 950.2 | 30.5 | 0 | 0 | 1.2 | 11.2 | 8.2 | 87.0 | |
| 60 | NMPW | 257 | 1015 | 26 | 11 | 0 | 0 | 9 | 6 | 115 | 159.9 |
| | NMPP | 165 | 945 | 8 | 0 | 0 | 0 | 21 | 9 | 58 | 134.0 |
| | FITZ | 175 | 587 | 44 | 0 | 0 | 0 | 0 | 4 | 59 | 96.6 |
| | NMPE | 0 | 487 | 8 | 0 | 0 | 0 | 0 | 3 | 44 | 60.2 |
| | CONTOUR MEAN | 149.2 | 758.5 | 21.5 | 2.8 | 0 | 0 | 7.5 | 5.5 | 69.0 | |
| DAILY MEAN ^c | | 267.7 | 909.6 | 30.9 | 0.7 | 0 | 3.2 | 9.2 | 9.4 | 78.8 | |

^a Cells/ml, mean of R-1 and R-2

^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels

^c Mean of surface samples

ABUNDANCE^a OF CYCLOTELLA ATOMUS IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL |
|-------------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14,19 DEC | MEAN |
| 10 | NMPW | 85 | 492 | 94 | 7235 | 273 | 31 | 46 | 423 | 528 | 1023.0 |
| | NMPP | 117 | 265 | 182 | 403 | 0 | 65 | 58 | 154 | 388 | 181.3 |
| | FITZ | 63 | 260 | 30 | 4255 | 104 | 77 | 39 | 141 | 396 | 596.1 |
| | NMPE | 167 | 203 | 20 | 895 | 0 | 54 | 78 | 154 | 409 | 220.0 |
| | CONTOUR MEAN | 108.0 | 305.0 | 81.5 | 3197.0 | 94.2 | 56.8 | 55.2 | 218.0 | 430.2 | |
| 20 | NMPW | 39 | 944 | 59 | 2395 | 253 | 44 | 63 | 393 | 402 | 510.2 |
| | NMPP | 143 | 208 | 294 | 328 | 42 | 47 | 9 | 99 | 435 | 178.3 |
| | FITZ | 87 | 217 | 93 | 1379 | 70 | 59 | 32 | 65 | 406 | 267.6 |
| | NMPE | 71 | 13 | 0 | 1072 | 120 | 72 | 21 | 52 | 568 | 221.0 |
| | CONTOUR MEAN | 85.0 | 345.5 | 111.5 | 1293.5 | 121.2 | 55.5 | 31.2 | 152.2 | 452.8 | |
| 40 | NMPW | 0 | 514 | 150 | 1270 | 136 | 65 | 78 | 109 | 401 | 302.6 |
| | NMPP | 99 | 398 | 37 | 1119 | 78 | 89 | 38 | 50 | 396 | 256.0 |
| | FITZ | 52 | 189 | 26 | 297 | 78 | 52 | 63 | 14 | 432 | 133.7 |
| | NMPE-S/50% | 91 | 181 | 13 | 431 | 65 | 117 | 29 | 31 | 505 | 162.6 |
| | 25% | 58 | 26 | 22 | 729 | 11 | 29 | 42 | 68 | 59 | 116.0 |
| | 1% | 52 | 254 | 43 | 510 | 128 | 25 | 73 | 47 | 344 | 164.0 |
| | CONTOUR MEAN ^c | 60.5 | 320.5 | 56.5 | 779.2 | 89.2 | 80.8 | 52 | 51.0 | 433.5 | |
| 60 | NMPW | 0 | 280 | 0 | 1291 | 133 | 65 | 40 | 74 | 443 | 258.4 |
| | NMPP | 7 | 612 | 31 | 1152 | 146 | 39 | 34 | 37 | 289 | 260.8 |
| | FITZ | 44 | 168 | 24 | 812 | 26 | 98 | 42 | 54 | 326 | 177.1 |
| | NMPE | 11 | 94 | 0 | 406 | 104 | 34 | 33 | 34 | 211 | 103.0 |
| | CONTOUR MEAN | 15.5 | 288.5 | 13.8 | 915.2 | 102.2 | 59.0 | 37.2 | 49.8 | 317.2 | |
| DAILY MEAN ^c | | 67.2 | 314.9 | 65.8 | 1546.2 | 101.8 | 63.0 | 43.9 | 108.9 | 408.4 | |

^a Cells/ml, mean of R-1 and R-2

^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels

^c Mean of surface samples

ABUNDANCE^a OF MELOSIRA ITALICA VAR. SUBARCTICA IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATES | | | | | | | | | ANNUAL MEAN |
|-------------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|----------------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14,19 DEC | |
| 10 | NMPW | 384 | 918 | 1957 | 742 | 0 | 0 | 0 | 0 | 0 | 444.6 |
| | NMPP | 750 | 771 | 1239 | 0 | 0 | 0 | 0 | 0 | 0 | 306.7 |
| | FITZ | 574 | 957 | 576 | 273 | 0 | 21 | 3 | 0 | 0 | 267.1 |
| | NMPE | 276 | 437 | 254 | 0 | 0 | 97 | 42 | 7 | 0 | 123.7 |
| | CONTOUR MEAN | 496.0 | 770.8 | 1006.5 | 253.8 | 0 | 29.5 | 11.2 | 1.8 | 0 | |
| 20 | NMPW | 106 | 1327 | 1197 | 143 | 0 | 26 | 0 | 0 | 0 | 311.0 |
| | NMPP | 368 | 449 | 695 | 42 | 0 | 0 | 9 | 0 | 0 | 173.7 |
| | FITZ | 438 | 736 | 681 | 26 | 0 | 26 | 5 | 2 | 0 | 212.7 |
| | NMPE | 11 | 189 | 94 | 263 | 0 | 37 | 0 | 0 | 0 | 66.0 |
| | CONTOUR MEAN | 230.8 | 675.2 | 666.8 | 118.5 | 0 | 22.2 | 3.5 | 0.5 | 0 | |
| 40 | NMPW | 0 | 1243 | 1640 | 250 | 0 | 0 | 20 | 2 | 0 | 350.6 |
| | NMPP | 609 | 897 | 536 | 0 | 0 | 11 | 9 | 0 | 0 | 229.1 |
| | FITZ | 11 | 683 | 306 | 42 | 0 | 11 | 0 | 2 | 0 | 117.2 |
| | NMPE-S/50% | 43 | 462 | 152 | 42 | 0 | 0 | 0 | 0 | 0 | 77.6 |
| | 25% | 198 | 490 | 50 | 208 | 0 | 0 | 0 | 0 | 0 | 105.1 |
| | 1% | 0 | 684 | 510 | 0 | 0 | 0 | 0 | 0 | 0 | 132.7 |
| | CONTOUR MEAN ^c | 165.8 | 821.2 | 658.5 | 83.5 | 0 | 5.5 | 7.2 | 1.0 | 0 | |
| 60 | NMPW | 0 | 351 | 109 | 0 | 0 | 0 | 0 | 0 | 0 | 51.1 |
| | NMPP | 0 | 1295 | 582 | 33 | 0 | 0 | 0 | 0 | 0 | 212.2 |
| | FITZ | 0 | 642 | 508 | 11 | 0 | 0 | 4 | 0 | 0 | 129.4 |
| | NMPE | 0 | 500 | 227 | 42 | 0 | 0 | 0 | 0 | 0 | 85.4 |
| | CONTOUR MEAN | 0 | 697.0 | 356.5 | 21.5 | 0 | 0 | 1 | 0 | 0 | |
| DAILY MEAN ^c | | 223.1 | 741.1 | 672.1 | 119.3 | 0 | 14.3 | 5.8 | 0.8 | 0 | |

^a Cells/ml, mean of R-1 and R-2

^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels

^c Mean of surface samples

APPENDIX VA-4b

ABUNDANCE OF SELECTED SPECIES OF CHLOROPHYCEAE

ABUNDANCE^a OF ANKISTRODESMUS FALCATUS IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL MEAN |
|-------------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|----------------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14,19 DEC | |
| 10 | NMPW | 130 | 276 | 297 | 221 | 325 | 62 | 30 | 51 | 39 | 159.0 |
| | NMPP | 151 | 651 | 591 | 46 | 52 | 91 | 32 | 38 | 60 | 190.2 |
| | FITZ | 128 | 521 | 223 | 91 | 159 | 100 | 24 | 37 | 51 | 148.2 |
| | NMPE | 277 | 484 | 469 | 96 | 292 | 91 | 78 | 34 | 42 | 207.0 |
| | CONTOUR MEAN | 171.5 | 483.0 | 395.0 | 113.5 | 207.0 | 86.0 | 41 | 40.0 | 48.0 | |
| 20 | NMPW | 163 | 306 | 306 | 117 | 201 | 29 | 63 | 42 | 44 | 141.2 |
| | NMPP | 212 | 384 | 489 | 42 | 52 | 91 | 30 | 24 | 63 | 154.1 |
| | FITZ | 165 | 512 | 298 | 52 | 195 | 85 | 22 | 28 | 51 | 156.4 |
| | NMPE | 180 | 423 | 271 | 68 | 292 | 63 | 33 | 38 | 58 | 158.4 |
| | CONTOUR MEAN | 180.0 | 406.2 | 341.0 | 69.8 | 185.0 | 67.0 | 37 | 33.0 | 54.0 | |
| 40 | NMPW | 213 | 320 | 351 | 136 | 193 | 60 | 47 | 21 | 29 | 152.2 |
| | NMPP | 183 | 263 | 224 | 78 | 39 | 42 | 19 | 35 | 37 | 102.2 |
| | FITZ | 238 | 280 | 325 | 73 | 169 | 63 | 36 | 14 | 47 | 138.3 |
| | NMPE-S/50% | 253 | 567 | 269 | 83 | 258 | 50 | 23 | 18 | 71 | 176.9 |
| | 25% | 172 | 432 | 272 | 39 | 188 | 70 | 38 | 32 | 49 | 143.6 |
| | 1% | 182 | 442 | 323 | 32 | 125 | 67 | 21 | 9 | 65 | 140.7 |
| | CONTOUR MEAN ^c | 221.8 | 357.5 | 292.2 | 92.5 | 164.8 | 53.8 | 31.2 | 22.0 | 46.0 | |
| 60 | NMPW | 236 | 215 | 203 | 52 | 94 | 78 | 21 | 39 | 55 | 110.3 |
| | NMPP | 111 | 351 | 486 | 52 | 97 | 78 | 25 | 19 | 44 | 140.3 |
| | FITZ | 147 | 232 | 379 | 73 | 193 | 72 | 13 | 25 | 34 | 129.8 |
| | NMPE | 210 | 354 | 302 | 73 | 130 | 38 | 39 | 14 | 55 | 135.0 |
| | CONTOUR MEAN | 176.0 | 288.0 | 342.5 | 62.5 | 128.5 | 66.5 | 24.5 | 24.2 | 47.0 | |
| DAILY MEAN ^c | | 187.3 | 383.7 | 342.7 | 84.6 | 171.3 | 68.3 | 33.4 | 29.8 | 48.8 | |

^a Cells/ml, mean of R-1 and R-2

^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels

^c Mean of surface samples

APPENDIX VA-4c

ABUNDANCE OF SELECTED SPECIES OF CHRYSOPHYCEAE

ABUNDANCE^a OF CHRYSOCHROMULINA PARVA IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL MEAN |
|-------------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|------------|----------------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14, 19 DEC | |
| 10 | NMPW | 208 | 11 | 1333 | 78 | 1484 | 385 | 138 | 31 | 50 | 413.1 |
| | NMPP | 659 | 32 | 1463 | 116 | 78 | 495 | 177 | 121 | 123 | 362.7 |
| | FITZ | 519 | 33 | 1131 | 52 | 1231 | 445 | 141 | 46 | 69 | 404.1 |
| | NMPE | 106 | 37 | 950 | 273 | 448 | 344 | 333 | 81 | 52 | 291.6 |
| | CONTOUR MEAN | 373.0 | 28.2 | 1219.2 | 129.8 | 810.2 | 417.2 | 197.2 | 69.8 | 73.5 | |
| 20 | NMPW | 293 | 7 | 1276 | 65 | 1135 | 468 | 172 | 110 | 59 | 398.3 |
| | NMPP | 513 | 7 | 1895 | 89 | 68 | 492 | 146 | 65 | 175 | 383.3 |
| | FITZ | 310 | 37 | 1877 | 143 | 958 | 612 | 166 | 38 | 131 | 474.7 |
| | NMPE | 162 | 189 | 573 | 396 | 422 | 318 | 175 | 98 | 88 | 269.0 |
| | CONTOUR MEAN | 319.5 | 60.0 | 1405.2 | 173.2 | 645.8 | 472.5 | 164.8 | 77.8 | 113.2 | |
| 40 | NMPW | 276 | 24 | 3969 | 73 | 1187 | 664 | 323 | 68 | 138 | 746.9 |
| | NMPP | 234 | 16 | 1338 | 91 | 547 | 573 | 165 | 121 | 188 | 363.7 |
| | FITZ | 298 | 13 | 963 | 125 | 1041 | 510 | 203 | 71 | 160 | 376.0 |
| | NMPE-S/50% | 227 | 63 | 635 | 50 | 1317 | 601 | 149 | 83 | 102 | 358.6 |
| | 25% | 214 | 89 | 524 | 377 | 989 | 656 | 271 | 87 | 10 | 357.4 |
| | 1% | 319 | 7 | 1375 | 99 | 260 | 351 | 219 | 94 | 67 | 310.1 |
| | CONTOUR MEAN ^c | 258.8 | 29.0 | 1726.2 | 84.8 | 1023.0 | 587.0 | 210 | 85.8 | 147.0 | |
| 60 | NMPW | 299 | 7 | 781 | 73 | 424 | 846 | 251 | 90 | 117 | 320.9 |
| | NMPP | 353 | 26 | 4250 | 78 | 370 | 596 | 181 | 92 | 152 | 677.6 |
| | FITZ | 388 | 47 | 1464 | 187 | 708 | 456 | 275 | 57 | 206 | 420.9 |
| | NMPE | 268 | 83 | 788 | 73 | 1262 | 540 | 312 | 78 | 146 | 394.4 |
| | CONTOUR MEAN | 327.0 | 40.8 | 1820.8 | 102.8 | 691.0 | 609.5 | 254.8 | 79.2 | 155.2 | |
| DAILY MEAN ^c | | 319.6 | 39.5 | 1542.9 | 122.6 | 792.5 | 521.6 | 206.7 | 78.2 | 122.2 | |

^a Cells/ml, mean of R-1 and R-2

^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels

^c Mean of surface samples

APPENDIX VA-4d

ABUNDANCE OF SELECTED SPECIES OF CRYPTOPHYCEAE

ABUNDANCE^a OF KATABLEPHARIS OVALIS IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL |
|-------------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14,19 DEC | MEAN |
| 10 | NMPW | 189 | 246 | 271 | 169 | 508 | 344 | 63 | 21 | 14 | 202.8 |
| | NMPP | 110 | 323 | 286 | 38 | 146 | 612 | 99 | 25 | 23 | 184.7 |
| | FITZ | 96 | 495 | 306 | 78 | 294 | 494 | 81 | 18 | 9 | 207.9 |
| | NMPE | 185 | 490 | 163 | 0 | 312 | 338 | 162 | 29 | 12 | 187.9 |
| | CONTOUR MEAN | 145.0 | 388.5 | 256.5 | 71.2 | 315.0 | 447.0 | 101.2 | 23.2 | 14.5 | |
| 20 | NMPW | 112 | 469 | 169 | 78 | 440 | 344 | 103 | 13 | 6 | 192.7 |
| | NMPP | 181 | 332 | 411 | 141 | 214 | 654 | 75 | 21 | 13 | 226.9 |
| | FITZ | 109 | 520 | 332 | 26 | 305 | 482 | 104 | 6 | 18 | 211.3 |
| | NMPE | 147 | 456 | 110 | 117 | 458 | 401 | 58 | 23 | 8 | 197.6 |
| | CONTOUR MEAN | 137.2 | 444.2 | 255.5 | 90.5 | 354.2 | 470.2 | 85.0 | 15.8 | 11.2 | |
| 40 | NMPW | 193 | 282 | 345 | 62 | 370 | 549 | 162 | 6 | 3 | 219.1 |
| | NMPP | 141 | 346 | 151 | 13 | 325 | 521 | 96 | 18 | 13 | 180.4 |
| | FITZ | 113 | 397 | 143 | 94 | 481 | 573 | 115 | 19 | 16 | 216.8 |
| | NMPE-S/50% | 136 | 596 | 172 | 21 | 453 | 677 | 94 | 21 | 13 | 242.6 |
| | 25% | 99 | 573 | 112 | 39 | 333 | 578 | 88 | 13 | 13 | 205.3 |
| | 1% | 221 | 358 | 221 | 135 | 583 | 565 | 99 | 15 | 9 | 245.1 |
| | CONTOUR MEAN ^c | 145.8 | 405.2 | 202.8 | 47.5 | 407.2 | 580.0 | 116.8 | 16.0 | 11.2 | |
| 60 | NMPW | 91 | 267 | 120 | 21 | 292 | 742 | 104 | 25 | 5 | 185.2 |
| | NMPP | 117 | 364 | 366 | 39 | 169 | 471 | 102 | 15 | 4 | 183.0 |
| | FITZ | 116 | 349 | 283 | 21 | 515 | 371 | 75 | 27 | 11 | 196.4 |
| | NMPE | 77 | 547 | 61 | 73 | 260 | 517 | 208 | 13 | 21 | 197.4 |
| | CONTOUR MEAN | 100.2 | 381.8 | 207.5 | 38.5 | 309.0 | 525.2 | 122.2 | 20.0 | 10.2 | |
| DAILY MEAN ^c | | 132.1 | 404.9 | 230.6 | 61.9 | 346.4 | 505.6 | 106.3 | 18.8 | 11.8 | |

^a Cells/ml, mean of R-1 and R-2

^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels

^c Mean of surface samples

ABUNDANCE^a OF RHODOMONAS MINUTA VAR. NANNOPLANCTICA IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL |
|-------------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14,19 DEC | MEAN |
| 10 | NMPW | 338 | 95 | 130 | 273 | 2460 | 1010 | 579 | 166 | 64 | 568.3 |
| | NMPP | 388 | 297 | 159 | 302 | 89 | 338 | 395 | 119 | 54 | 237.9 |
| | FITZ | 358 | 345 | 193 | 351 | 2329 | 771 | 375 | 199 | 48 | 352.1 |
| | NMPE | 94 | 921 | 228 | 651 | 3810 | 656 | 927 | 208 | 65 | 840.0 |
| | CONTOUR MEAN | 294.5 | 414.5 | 177.5 | 394.2 | 2172.0 | 693.8 | 569.0 | 173.0 | 57.8 | |
| 20 | NMPW | 368 | 163 | 163 | 625 | 781 | 885 | 556 | 159 | 63 | 418.1 |
| | NMPP | 362 | 208 | 286 | 183 | 89 | 445 | 583 | 169 | 149 | 274.9 |
| | FITZ | 402 | 250 | 133 | 1210 | 1465 | 638 | 393 | 166 | 91 | 527.6 |
| | NMPE | 164 | 1340 | 78 | 612 | 3477 | 442 | 579 | 215 | 55 | 773.6 |
| | CONTOUR MEAN | 324.0 | 490.2 | 165.0 | 657.5 | 1453.0 | 602.5 | 527.8 | 177.2 | 89.5 | |
| 40 | NMPW | 365 | 212 | 241 | 770 | 1637 | 953 | 630 | 240 | 70 | 568.7 |
| | NMPP | 271 | 260 | 68 | 1796 | 1249 | 859 | 565 | 288 | 102 | 606.4 |
| | FITZ | 268 | 215 | 137 | 573 | 455 | 771 | 661 | 198 | 118 | 377.3 |
| | NMPE-S/50% | 338 | 1834 | 145 | 407 | 1291 | 664 | 643 | 180 | 86 | 620.9 |
| | 25% | 250 | 1156 | 95 | 664 | 1208 | 700 | 662 | 172 | 38 | 549.4 |
| | 1% | 456 | 1256 | 224 | 63 | 398 | 690 | 599 | 215 | 50 | 439.0 |
| | CONTOUR MEAN ^c | 310.5 | 630.2 | 147.8 | 886.5 | 1158.0 | 811.8 | 624.8 | 226.5 | 94.0 | |
| 60 | NMPW | 251 | 671 | 42 | 844 | 1773 | 690 | 566 | 204 | 91 | 570.2 |
| | NMPP | 406 | 371 | 389 | 2017 | 890 | 817 | 485 | 224 | 81 | 631.1 |
| | FITZ | 323 | 498 | 163 | 843 | 1723 | 671 | 598 | 246 | 143 | 578.7 |
| | NMPE | 422 | 698 | 26 | 822 | 1366 | 698 | 885 | 168 | 104 | 576.6 |
| | CONTOUR MEAN | 350.5 | 559.5 | 155.0 | 1131.5 | 1438.0 | 719.0 | 633.5 | 210.5 | 104.8 | |
| DAILY MEAN ^c | | 319.9 | 523.6 | 161.3 | 767.4 | 1555.2 | 706.8 | 588.8 | 196.8 | 86.5 | |

^a Cells/ml, mean of R-1 and R-2

^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels

^c Mean surface samples

APPENDIX VA-4e

ABUNDANCE OF SELECTED SPECIES OF MYXOPHYCEAE

ABUNDANCE^a OF COELOSPHAERIUM KUETZINGIANUM IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL |
|-------------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14,19 DEC | MEAN |
| 10 | NMPW | 0 | 0 | 0 | 0 | 1464 | 0 | 0 | 213 | 0 | 186.3 |
| | NMPP | 0 | 0 | 0 | 0 | 0 | 488 | 75 | 0 | 0 | 62.6 |
| | FITZ | 0 | 0 | 0 | 0 | 1139 | 1822 | 242 | 0 | 0 | 355.9 |
| | NMPE | 0 | 0 | 0 | 0 | 1083 | 203 | 0 | 0 | 833 | 235.4 |
| | CONTOUR MEAN | 0 | 0 | 0 | 0 | 921.5 | 628.2 | 79.2 | 53.2 | 208.2 | |
| 20 | NMPW | 0 | 0 | 0 | 0 | 565 | 1523 | 1029 | 0 | 267 | 376.0 |
| | NMPP | 0 | 0 | 0 | 0 | 479 | 3156 | 0 | 0 | 0 | 403.9 |
| | FITZ | 0 | 0 | 0 | 0 | 1249 | 0 | 375 | 0 | 250 | 208.2 |
| | NMPE | 0 | 0 | 0 | 0 | 1920 | 0 | 0 | 0 | 219 | 237.7 |
| | CONTOUR MEAN | 0 | 0 | 0 | 0 | 1053.2 | 1169.8 | 351.0 | 0 | 184.0 | |
| 40 | NMPW | 0 | 0 | 0 | 0 | 992 | 0 | 0 | 52 | 0 | 116.0 |
| | NMPP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | FITZ | 0 | 0 | 0 | 0 | 326 | 0 | 0 | 40 | 0 | 40.7 |
| | NMPE-S/50% | 0 | 0 | 0 | 0 | 163 | 0 | 0 | 0 | 0 | 18.1 |
| | 25% | 0 | 0 | 0 | 0 | 0 | 1269 | 167 | 0 | 0 | 159.6 |
| | 1% | 0 | 0 | 0 | 0 | 326 | 838 | 430 | 37 | 0 | 181.2 |
| | CONTOUR MEAN ^c | 0 | 0 | 0 | 0 | 370.2 | 0 | 0 | 23.0 | 0 | |
| 60 | NMPW | 0 | 0 | 0 | 0 | 1164 | 651 | 0 | 0 | 0 | 201.7 |
| | NMPP | 0 | 0 | 0 | 0 | 488 | 0 | 0 | 49 | 0 | 59.7 |
| | FITZ | 0 | 0 | 0 | 0 | 0 | 1171 | 208 | 0 | 0 | 153.2 |
| | NMPE | 0 | 0 | 0 | 0 | 1627 | 801 | 326 | 84 | 0 | 315.3 |
| | CONTOUR MEAN | 0 | 0 | 0 | 0 | 819.8 | 655.8 | 133.5 | 33.2 | 0 | |
| DAILY MEAN ^c | | 0 | 0 | 0 | 0 | 791.2 | 613.4 | 140.9 | 27.4 | 98.0 | |

^a Cells/ml, mean of R-1 and R-2

^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels

^c Mean surface samples

ABUNDANCE^a OF COELOSPHAERIUM NAEGELIANUM IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL MEAN |
|-------------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|----------------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14,19 DEC | |
| 10 | NMPW | 0 | 0 | 0 | 0 | 0 | 979 | 573 | 0 | 0 | 172.4 |
| | NMPP | 0 | 0 | 0 | 0 | 266 | 65 | 236 | 0 | 0 | 63.0 |
| | FITZ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 130 | 0 | 14.4 |
| | NMPE | 0 | 0 | 0 | 0 | 843 | 651 | 188 | 0 | 0 | 186.9 |
| | CONTOUR MEAN | 0 | 0 | 0 | 0 | 277.2 | 423.8 | 249.2 | 32.5 | 0 | |
| 20 | NMPW | 0 | 0 | 651 | 0 | 0 | 0 | 0 | 0 | 0 | 72.3 |
| | NMPP | 0 | 0 | 0 | 0 | 0 | 163 | 96 | 98 | 214 | 63.4 |
| | FITZ | 0 | 0 | 0 | 0 | 0 | 0 | 156 | 24 | 0 | 20.0 |
| | NMPE | 0 | 0 | 0 | 0 | 469 | 0 | 0 | 0 | 0 | 52.1 |
| | CONTOUR MEAN | 0 | 0 | 162.8 | 0 | 117.2 | 40.8 | 63.0 | 30.5 | 53.5 | |
| 40 | NMPW | 0 | 0 | 0 | 0 | 0 | 195 | 0 | 0 | 177 | 41.3 |
| | NMPP | 0 | 0 | 0 | 0 | 0 | 469 | 53 | 111 | 0 | 70.3 |
| | FITZ | 0 | 0 | 0 | 0 | 0 | 1822 | 0 | 0 | 0 | 202.4 |
| | NMPE-S/50% | 0 | 0 | 0 | 0 | 2033 | 287 | 0 | 131 | 0 | 272.3 |
| | 25% | 0 | 0 | 0 | 0 | 1374 | 0 | 562 | 221 | 78 | 248.3 |
| | 1% | 0 | 0 | 0 | 0 | 1041 | 0 | 0 | 65 | 0 | 122.9 |
| | CONTOUR MEAN ^c | 0 | 0 | 0 | 0 | 508.2 | 693.2 | 13.2 | 60.5 | 44.2 | |
| 60 | NMPW | 0 | 0 | 0 | 0 | 125 | 1464 | 0 | 117 | 292 | 222.0 |
| | NMPP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | FITZ | 0 | 0 | 0 | 0 | 1464 | 274 | 0 | 0 | 0 | 193.1 |
| | NMPE | 0 | 0 | 0 | 0 | 234 | 651 | 0 | 0 | 0 | 98.3 |
| | CONTOUR MEAN | 0 | 0 | 0 | 0 | 455.8 | 597.2 | 0 | 29.2 | 73.0 | |
| DAILY MEAN ^c | | 0 | 0 | 40.7 | 0 | 339.6 | 438.8 | 81.4 | 38.2 | 42.7 | |

^a Cells/ml, mean of R-1 and R-2

^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels

^c Mean of surface samples

ABUNDANCE^a OF CHROOCOCCUS DISPERSUS VAR. MINOR IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL |
|-------------------------|---------------------------|--------|--------|---------|--------|---------|--------|--------|--------|------------|--------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14, 19 DEC | MEAN |
| 10 | NMPW | 156 | 1687 | 9661 | 11243 | 15094 | 1999 | 733 | 446 | 108 | 4569.7 |
| | NMPP | 0 | 1124 | 10743 | 3144 | 3581 | 3019 | 575 | 667 | 50 | 2544.8 |
| | FITZ | 568 | 3852 | 4216 | 3436 | 9182 | 2280 | 792 | 604 | 362 | 2810.2 |
| | NMPE | 52 | 1791 | 11191 | 2436 | 4331 | 1530 | 1083 | 666 | 100 | 2575.6 |
| | CONTOUR MEAN | 194.0 | 2113.5 | 8952.8 | 5064.8 | 8047.0 | 2207.0 | 795.8 | 595.8 | 155.0 | |
| 20 | NMPW | 104 | 1210 | 8797 | 7079 | 13241 | 2353 | 108 | 653 | 217 | 3751.3 |
| | NMPP | 42 | 1562 | 13075 | 3665 | 3332 | 2884 | 1033 | 646 | 333 | 2952.4 |
| | FITZ | 78 | 1593 | 11493 | 2395 | 6475 | 2967 | 654 | 421 | 304 | 2931.1 |
| | NMPE | 0 | 52 | 9827 | 2165 | 5143 | 2749 | 566 | 350 | 200 | 2339.1 |
| | CONTOUR MEAN | 56.0 | 1104.2 | 10798.0 | 3826.0 | 7047.8 | 2738.2 | 590.2 | 517.5 | 263.5 | |
| 40 | NMPW | 0 | 719 | 13949 | 3914 | 11451 | 2728 | 1624 | 358 | 209 | 3883.6 |
| | NMPP | 42 | 1499 | 6204 | 4581 | 8328 | 1166 | 107 | 633 | 333 | 2543.7 |
| | FITZ | 0 | 2394 | 5257 | 375 | 11139 | 2832 | 1083 | 304 | 159 | 2615.9 |
| | NMPE-S/50% | 0 | 1229 | 6933 | 1666 | 11055 | 2811 | 500 | 350 | 479 | 2780.3 |
| | 25% | 0 | 21 | 13283 | 273 | 15407 | 2519 | 633 | 517 | 292 | 3660.6 |
| | 1% | 59 | 1093 | 4934 | 1041 | 9057 | 2478 | 750 | 435 | 417 | 2251.6 |
| | CONTOUR MEAN ^c | 10.5 | 1460.2 | 8085.8 | 2634.0 | 10493.2 | 2384.2 | 828.5 | 411.2 | 295.0 | |
| 60 | NMPW | 104 | 397 | 3082 | 2040 | 8848 | 5309 | 808 | 617 | 292 | 2388.6 |
| | NMPP | 375 | 833 | 7235 | 2498 | 5351 | 1895 | 400 | 250 | 329 | 2129.6 |
| | FITZ | 0 | 1832 | 9411 | 1249 | 8640 | 1093 | 533 | 760 | 167 | 2631.7 |
| | NMPE | 72 | 115 | 10348 | 1832 | 9993 | 1780 | 1874 | 256 | 271 | 2949.0 |
| | CONTOUR MEAN | 137.8 | 794.2 | 7519.0 | 1904.8 | 8208.0 | 2519.2 | 903.8 | 470.8 | 264.8 | |
| DAILY MEAN ^c | | 99.6 | 1368.1 | 8838.9 | 3357.4 | 8449.0 | 2462.2 | 779.6 | 498.8 | 244.6 | |

^a Cells/ml, mean of R-1 and R-2

^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels

^c Mean of surface samples

ABUNDANCE^a OF OSCILLATORIA LIMNETICA IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL |
|-------------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14,19 DEC | MEAN |
| 10 | NMPW | 1285 | 3264 | 2415 | 5960 | 429 | 0 | 0 | 512 | 259 | 1569.3 |
| | NMPP | 1011 | 1031 | 2434 | 50 | 86 | 0 | 29 | 304 | 207 | 572.4 |
| | FITZ | 1112 | 2004 | 1283 | 1035 | 0 | 271 | 145 | 164 | 293 | 700.8 |
| | NMPE | 1045 | 1145 | 2453 | 656 | 0 | 0 | 0 | 0 | 358 | 628.6 |
| | CONTOUR MEAN | 1113.2 | 1861.0 | 2146.0 | 1925.2 | 128.8 | 67.8 | 43.5 | 245.0 | 279.2 | |
| 20 | NMPW | 837 | 2291 | 2170 | 1093 | 86 | 0 | 0 | 219 | 245 | 771.2 |
| | NMPP | 1675 | 1432 | 2321 | 146 | 0 | 0 | 511 | 109 | 448 | 738.0 |
| | FITZ | 1287 | 1833 | 2755 | 121 | 0 | 0 | 59 | 77 | 249 | 709.0 |
| | NMPE | 867 | 1145 | 2642 | 390 | 0 | 68 | 23 | 110 | 241 | 609.6 |
| | CONTOUR MEAN | 1166.5 | 1675.2 | 2472.0 | 437.5 | 21.5 | 17.0 | 148.2 | 128.8 | 295.8 | |
| 40 | NMPW | 515 | 2319 | 1321 | 927 | 0 | 68 | 0 | 261 | 308 | 635.4 |
| | NMPP | 1286 | 2033 | 378 | 368 | 0 | 271 | 464 | 61 | 187 | 560.9 |
| | FITZ | 1317 | 1074 | 1321 | 242 | 0 | 136 | 57 | 50 | 287 | 498.2 |
| | NMPE-S/50% | 704 | 1002 | 2491 | 316 | 108 | 68 | 0 | 44 | 164 | 544.1 |
| | 25% | 948 | 458 | 1283 | 124 | 0 | 169 | 0 | 98 | 274 | 372.7 |
| | 1% | 1126 | 859 | 1943 | 0 | 0 | 0 | 0 | 52 | 227 | 467.4 |
| | CONTOUR MEAN ^c | 955.5 | 1607.0 | 1377.8 | 463.2 | 27.0 | 135.8 | 130.2 | 104.0 | 236.5 | |
| 60 | NMPW | 417 | 2147 | 302 | 778 | 0 | 0 | 0 | 55 | 118 | 424.1 |
| | NMPP | 675 | 1489 | 962 | 481 | 0 | 0 | 23 | 77 | 329 | 448.4 |
| | FITZ | 352 | 1346 | 1151 | 193 | 172 | 0 | 0 | 55 | 164 | 381.4 |
| | NMPE | 322 | 1203 | 1038 | 0 | 0 | 68 | 0 | 33 | 306 | 330.0 |
| | CONTOUR MEAN | 441.5 | 1546.2 | 863.2 | 363.0 | 43.0 | 17.0 | 5.8 | 55.0 | 229.2 | |
| DAILY MEAN ^c | | 919.2 | 1672.4 | 1714.8 | 797.2 | 55.1 | 59.4 | 81.9 | 133.2 | 260.2 | |

^a Cells/ml, mean of R-1 and R-2

^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels

^c Mean of surface samples

APPENDIX VA -5a

BIOVOLUME OF SELECTED SPECIES OF BACILLARIOPHYCEAE

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BIOVOLUME^a OF ASTERIONELLA FORMOSA IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL |
|-------------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14,19 DEC | MEAN |
| 10 | NMPW | 77.91 | 618.04 | 62.68 | 0.00 | 0.00 | 0.00 | 12.31 | 19.74 | 65.18 | 95.10 |
| | NMPP | 89.90 | 521.98 | 9.73 | 0.00 | 0.00 | 0.00 | 8.46 | 3.88 | 18.12 | 72.45 |
| | FITZ | 170.81 | 702.51 | 46.47 | 0.00 | 0.00 | 0.00 | 0.00 | 1.62 | 23.15 | 104.95 |
| | NMPE | 132.45 | 243.38 | 27.02 | 0.00 | 0.00 | 8.60 | 0.00 | 3.24 | 66.44 | 53.46 |
| | CONTOUR MEAN | 117.77 | 521.48 | 36.48 | 0.00 | 0.00 | 2.15 | 5.19 | 7.12 | 43.22 | |
| 20 | NMPW | 110.57 | 944.68 | 45.93 | 0.00 | 0.00 | 32.11 | 0.96 | 9.71 | 53.85 | 133.09 |
| | NMPP | 233.14 | 612.44 | 15.67 | 0.00 | 0.00 | 0.00 | 16.92 | 4.85 | 15.73 | 99.86 |
| | FITZ | 211.86 | 871.83 | 0.00 | 0.00 | 0.00 | 0.00 | 13.46 | 8.58 | 33.59 | 126.59 |
| | NMPE | 107.28 | 232.17 | 28.10 | 0.00 | 0.00 | 0.00 | 0.00 | 7.12 | 32.08 | 45.19 |
| | CONTOUR MEAN | 165.71 | 665.28 | 22.42 | 0.00 | 0.00 | 8.03 | 7.84 | 7.56 | 33.81 | |
| 40 | NMPW | 99.49 | 578.82 | 29.72 | 0.00 | 0.00 | 0.00 | 0.00 | 9.14 | 70.46 | 87.51 |
| | NMPP | 242.13 | 568.41 | 23.78 | 0.00 | 0.00 | 0.00 | 5.38 | 2.26 | 19.50 | 95.72 |
| | FITZ | 48.84 | 668.48 | 40.53 | 0.00 | 0.00 | 4.59 | 19.23 | 3.56 | 32.21 | 90.83 |
| | NMPE-S/50% | 171.41 | 521.98 | 6.48 | 0.00 | 0.00 | 0.00 | 7.69 | 4.77 | 45.30 | 84.18 |
| | 25% | 159.42 | 134.50 | 36.20 | 1.32 | 0.00 | 0.00 | 24.62 | 2.02 | 22.27 | 42.26 |
| | 1% | 116.87 | 214.15 | 10.81 | 0.00 | 0.00 | 0.00 | 2.88 | 6.80 | 34.22 | 42.86 |
| | CONTOUR MEAN ^c | 140.47 | 584.42 | 25.13 | 0.00 | 0.00 | 1.15 | 8.08 | 4.93 | 41.87 | |
| 60 | NMPW | 118.07 | 624.45 | 21.61 | 4.22 | 0.00 | 0.00 | 6.15 | 3.56 | 55.36 | 92.60 |
| | NMPP | 75.81 | 581.22 | 6.48 | 0.00 | 0.00 | 0.00 | 15.39 | 5.83 | 27.93 | 79.18 |
| | FITZ | 80.31 | 361.06 | 36.75 | 0.00 | 0.00 | 0.00 | 0.00 | 2.02 | 28.31 | 56.49 |
| | NMPE | 0.00 | 299.41 | 6.48 | 0.00 | 0.00 | 0.00 | 0.00 | 1.62 | 21.39 | 36.54 |
| | CONTOUR MEAN | 68.55 | 466.54 | 17.83 | 1.06 | 0.00 | 0.00 | 5.38 | 3.26 | 33.25 | |
| DAILY MEAN ^c | | 123.12 | 599.43 | 25.46 | 0.26 | 0.00 | 2.83 | 6.62 | 5.72 | 38.04 | |

^a mg/m³, mean of R-1 and R-2

^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels

^c Mean of surface samples

BIOVOLUME^a OF CYCLOTELLA ATOMUS IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL |
|-------------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14,19 DEC | MEAN |
| 10 | NMPW | 7.26 | 37.60 | 6.44 | 629.95 | 24.68 | 2.37 | 3.04 | 37.74 | 44.20 | 88.14 |
| | NMPP | 10.05 | 20.29 | 12.52 | 35.12 | 0.00 | 4.94 | 3.81 | 13.74 | 32.43 | 14.77 |
| | FITZ | 5.36 | 19.89 | 2.06 | 370.49 | 9.40 | 5.83 | 2.59 | 12.53 | 33.13 | 51.25 |
| | NMPE | 14.29 | 15.52 | 1.34 | 77.95 | 0.00 | 4.05 | 5.19 | 13.70 | 34.18 | 18.47 |
| | CONTOUR MEAN | 9.24 | 23.33 | 5.59 | 278.38 | 8.52 | 4.30 | 3.66 | 19.42 | 35.98 | |
| 20 | NMPW | 3.35 | 72.13 | 4.02 | 208.47 | 22.80 | 3.36 | 4.15 | 35.05 | 33.65 | 43.00 |
| | NMPP | 12.28 | 15.92 | 20.21 | 28.55 | 3.76 | 3.56 | 0.55 | 8.82 | 36.40 | 14.45 |
| | FITZ | 7.48 | 16.61 | 6.35 | 120.10 | 6.34 | 4.45 | 2.14 | 5.80 | 34.00 | 22.59 |
| | NMPE | 6.03 | 0.99 | 0.00 | 93.36 | 10.81 | 5.44 | 1.38 | 4.64 | 47.56 | 18.91 |
| | CONTOUR MEAN | 7.29 | 26.41 | 7.65 | 112.62 | 10.93 | 4.20 | 2.06 | 13.57 | 37.90 | |
| 40 | NMPW | 0.00 | 39.29 | 10.28 | 110.58 | 12.22 | 4.94 | 5.19 | 9.70 | 33.57 | 25.08 |
| | NMPP | 8.48 | 30.44 | 2.50 | 97.44 | 7.05 | 6.72 | 2.49 | 4.43 | 33.13 | 21.41 |
| | FITZ | 4.47 | 14.42 | 1.79 | 25.83 | 7.05 | 3.96 | 4.15 | 1.28 | 36.14 | 11.01 |
| | NMPE-S/50% | 7.81 | 13.83 | 0.89 | 37.50 | 5.88 | 8.90 | 1.90 | 2.74 | 42.29 | 13.53 |
| | 25% | 4.91 | 1.99 | 1.52 | 63.45 | 0.94 | 2.17 | 2.77 | 6.06 | 4.90 | 9.86 |
| | 1% | 4.47 | 19.40 | 2.95 | 44.41 | 11.52 | 1.88 | 4.84 | 4.15 | 28.77 | 13.60 |
| | CONTOUR MEAN ^c | 5.19 | 24.50 | 3.87 | 67.84 | 8.05 | 6.13 | 3.43 | 4.53 | 36.28 | |
| 60 | NMPW | 0.00 | 21.39 | 0.00 | 112.39 | 11.99 | 4.94 | 2.63 | 6.59 | 37.05 | 21.89 |
| | NMPP | 0.56 | 46.76 | 2.14 | 100.27 | 13.16 | 2.97 | 2.21 | 3.25 | 24.19 | 21.72 |
| | FITZ | 3.79 | 12.83 | 1.61 | 70.70 | 2.35 | 7.42 | 2.77 | 4.76 | 27.24 | 14.83 |
| | NMPE | 0.89 | 7.16 | 0.00 | 35.35 | 9.40 | 2.57 | 2.16 | 2.99 | 17.65 | 8.68 |
| | CONTOUR MEAN | 1.31 | 22.04 | 0.94 | 79.68 | 9.23 | 4.48 | 2.44 | 4.39 | 26.53 | |
| DAILY MEAN ^c | | 5.76 | 24.07 | 4.51 | 134.63 | 9.18 | 4.78 | 2.90 | 10.48 | 34.17 | |

^a mg/m³, mean of R-1 and R-2

^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels

^c Mean of surface samples

BIOVOLUME^a OF MELOSIRA ITALICA VAR. SUBARCTICA IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL |
|-------------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14,19 DEC | MEAN |
| 10 | NMPW | 28.97 | 76.89 | 199.20 | 80.55 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 42.84 |
| | NMPP | 56.57 | 64.57 | 126.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.47 |
| | FITZ | 43.31 | 80.16 | 58.67 | 29.67 | 0.00 | 1.64 | 0.28 | 0.35 | 0.00 | 23.79 |
| | NMPE | 20.82 | 36.65 | 25.83 | 0.00 | 0.00 | 7.61 | 4.53 | 0.71 | 0.00 | 10.68 |
| | CONTOUR MEAN | 37.42 | 64.57 | 102.45 | 27.56 | 0.00 | 2.31 | 1.20 | 0.26 | 0.00 | |
| 20 | NMPW | 7.95 | 111.25 | 121.85 | 15.54 | 0.00 | 2.05 | 0.00 | 0.35 | 0.00 | 28.78 |
| | NMPP | 27.79 | 37.63 | 70.73 | 4.52 | 0.00 | 0.00 | 0.91 | 0.00 | 0.00 | 15.73 |
| | FITZ | 33.00 | 61.62 | 69.27 | 2.83 | 0.00 | 2.05 | 0.57 | 0.00 | 0.00 | 18.82 |
| | NMPE | 0.79 | 15.81 | 9.54 | 28.54 | 0.00 | 2.88 | 0.00 | 1.70 | 0.00 | 6.58 |
| | CONTOUR MEAN | 17.38 | 56.58 | 67.85 | 12.86 | 0.00 | 1.74 | 0.37 | 0.51 | 0.00 | |
| 40 | NMPW | 0.00 | 104.16 | 166.88 | 27.13 | 0.00 | 0.00 | 2.12 | 0.28 | 0.00 | 33.40 |
| | NMPP | 45.96 | 75.15 | 54.57 | 0.00 | 0.00 | 0.82 | 0.91 | 0.00 | 0.00 | 19.71 |
| | FITZ | 0.79 | 57.26 | 31.12 | 4.52 | 0.00 | 0.82 | 0.00 | 0.28 | 0.00 | 10.53 |
| | NMPE-S/50% | 3.24 | 38.72 | 15.50 | 4.52 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.89 |
| | 25% | 14.93 | 41.01 | 5.03 | 22.61 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.29 |
| | 1% | 0.00 | 57.26 | 51.92 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 12.13 |
| | CONTOUR MEAN ^c | 12.50 | 68.82 | 67.02 | 9.04 | 0.00 | 0.41 | 0.76 | 0.14 | 0.00 | |
| 60 | NMPW | 0.00 | 24.04 | 11.13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.91 |
| | NMPP | 0.00 | 108.52 | 59.20 | 3.53 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 19.03 |
| | FITZ | 0.00 | 53.77 | 51.65 | 1.13 | 0.00 | 0.00 | 0.45 | 0.00 | 0.00 | 11.89 |
| | NMPE | 0.00 | 41.88 | 23.04 | 4.52 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.72 |
| | CONTOUR MEAN | 0.00 | 57.05 | 36.26 | 2.30 | 0.00 | 0.00 | 0.11 | 0.00 | 0.00 | |
| DAILY MEAN ^c | | 16.82 | 61.76 | 68.48 | 12.94 | 0.00 | 1.12 | 0.61 | 0.23 | 0.00 | |

^a mg/m³, mean of R-1 and R-2

^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels

^c Mean of surface samples

APPENDIX VA-5b
BIOVOLUME OF SELECTED SPECIES OF CHLOROPHYCEAE

BIOVOLUME^a OF ANKISTRODESMUS FALCATUS IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL |
|-------------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14,19 DEC | MEAN |
| 10 | NMPW | 1.60 | 3.57 | 1.55 | 1.37 | 2.23 | 0.34 | 0.23 | 0.80 | 0.55 | 1.36 |
| | NMPP | 1.86 | 8.41 | 3.09 | 0.28 | 0.36 | 0.50 | 0.25 | 0.59 | 0.86 | 1.80 |
| | FITZ | 1.57 | 6.73 | 1.16 | 0.56 | 1.09 | 0.55 | 0.18 | 0.57 | 0.72 | 1.46 |
| | NMPE | 3.42 | 6.26 | 2.45 | 0.59 | 2.00 | 0.50 | 0.62 | 0.53 | 0.59 | 1.88 |
| | CONTOUR MEAN | 2.11 | 6.24 | 2.06 | 0.70 | 1.42 | 0.47 | 0.32 | 0.62 | 0.68 | |
| 20 | NMPW | 2.00 | 3.96 | 1.60 | 0.72 | 1.37 | 0.16 | 0.49 | 0.65 | 0.62 | 1.28 |
| | NMPP | 2.61 | 4.96 | 2.56 | 0.26 | 0.36 | 0.50 | 0.23 | 0.37 | 0.89 | 1.42 |
| | FITZ | 2.04 | 6.61 | 1.56 | 0.32 | 1.34 | 0.46 | 0.17 | 0.43 | 0.72 | 1.52 |
| | NMPE | 2.21 | 5.47 | 1.41 | 0.42 | 2.00 | 0.34 | 0.26 | 0.59 | 0.83 | 1.50 |
| | CONTOUR MEAN | 2.22 | 5.25 | 1.78 | 0.43 | 1.27 | 0.37 | 0.29 | 0.51 | 0.76 | |
| 40 | NMPW | 2.63 | 4.14 | 1.84 | 0.84 | 1.32 | 0.33 | 0.37 | 0.32 | 0.40 | 1.35 |
| | NMPP | 2.24 | 3.40 | 1.17 | 0.48 | 0.27 | 0.23 | 0.15 | 0.54 | 0.52 | 1.00 |
| | FITZ | 2.94 | 3.62 | 1.70 | 0.45 | 1.16 | 0.34 | 0.29 | 0.21 | 0.66 | 1.26 |
| | NMPE-S/50% | 3.11 | 7.34 | 1.41 | 0.51 | 1.77 | 0.27 | 0.18 | 0.28 | 1.00 | 1.76 |
| | 25% | 2.12 | 5.59 | 1.42 | 0.24 | 1.28 | 0.38 | 0.29 | 0.49 | 0.69 | 1.39 |
| | 1% | 2.25 | 5.72 | 1.69 | 0.19 | 0.86 | 0.36 | 0.16 | 0.15 | 0.92 | 1.37 |
| | CONTOUR MEAN ^c | 2.73 | 4.63 | 1.53 | 0.57 | 1.13 | 0.29 | 0.25 | 0.34 | 0.64 | |
| 60 | NMPW | 2.90 | 2.78 | 1.06 | 0.32 | 0.64 | 0.43 | 0.16 | 0.61 | 0.78 | 1.08 |
| | NMPP | 1.36 | 4.54 | 2.54 | 0.32 | 0.66 | 0.43 | 0.20 | 0.29 | 0.63 | 1.22 |
| | FITZ | 1.81 | 2.99 | 1.98 | 0.45 | 1.32 | 0.38 | 0.10 | 0.39 | 0.48 | 1.10 |
| | NMPE | 2.58 | 4.58 | 1.58 | 0.45 | 0.89 | 0.20 | 0.31 | 0.21 | 0.78 | 1.29 |
| | CONTOUR MEAN | 2.16 | 3.72 | 1.79 | 0.39 | 0.88 | 0.36 | 0.19 | 0.38 | 0.67 | |
| DAILY MEAN ^c | | 2.31 | 4.96 | 1.79 | 0.52 | 1.17 | 0.37 | 0.26 | 0.46 | 0.69 | |

^a mg/m³, mean of R-1 and R-2

^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels

^c Mean of surface samples

APPENDIX VA-5c

BIOVOLUME OF SELECTED SPECIES OF CHRYSOPHYCEAE

BIOVOLUME^a OF CHRYSOCHROMULINA PARVA IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL |
|-------------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|------------|--------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14, 19 DEC | MEAN |
| 10 | NMPW | 9.92 | 0.56 | 52.89 | 3.10 | 55.05 | 16.21 | 6.12 | 1.53 | 3.47 | 16.54 |
| | NMPP | 31.37 | 1.67 | 58.05 | 4.60 | 2.90 | 20.82 | 7.88 | 6.02 | 8.52 | 15.76 |
| | FITZ | 24.73 | 1.74 | 44.88 | 2.06 | 45.68 | 18.73 | 6.26 | 2.27 | 4.76 | 16.79 |
| | NMPE | 5.02 | 1.95 | 37.70 | 10.85 | 16.61 | 14.46 | 14.83 | 4.02 | 3.61 | 12.12 |
| | CONTOUR MEAN | 17.76 | 1.48 | 48.38 | 5.15 | 30.06 | 17.56 | 8.77 | 3.46 | 5.09 | |
| 20 | NMPW | 13.95 | 0.35 | 50.62 | 2.58 | 42.11 | 19.72 | 7.65 | 5.45 | 4.04 | 16.27 |
| | NMPP | 24.42 | 0.35 | 75.20 | 3.51 | 2.51 | 20.71 | 6.49 | 3.24 | 12.10 | 16.50 |
| | FITZ | 14.75 | 1.95 | 74.48 | 5.68 | 35.54 | 25.75 | 7.37 | 1.87 | 9.06 | 19.60 |
| | NMPE | 7.69 | 10.13 | 22.73 | 15.70 | 15.64 | 13.37 | 7.79 | 4.88 | 6.10 | 11.56 |
| | CONTOUR MEAN | 15.20 | 3.20 | 55.76 | 6.87 | 23.95 | 19.89 | 7.32 | 3.86 | 7.82 | |
| 40 | NMPW | 13.14 | 1.26 | 157.53 | 2.89 | 44.04 | 27.94 | 14.37 | 3.40 | 9.57 | 30.46 |
| | NMPP | 11.16 | 0.84 | 53.10 | 3.61 | 20.28 | 24.10 | 7.32 | 6.02 | 13.00 | 15.49 |
| | FITZ | 14.20 | 0.70 | 38.22 | 4.96 | 38.63 | 21.47 | 9.04 | 3.55 | 11.05 | 15.76 |
| | NMPE-S/50% | 10.79 | 3.35 | 25.20 | 1.96 | 48.87 | 25.31 | 6.60 | 4.11 | 7.04 | 14.80 |
| | 25% | 10.17 | 4.75 | 20.76 | 14.98 | 36.70 | 27.61 | 12.05 | 4.30 | 0.70 | 14.67 |
| | 1% | 15.19 | 0.35 | 54.54 | 3.92 | 9.66 | 14.79 | 9.73 | 4.67 | 4.62 | 13.05 |
| | CONTOUR MEAN ^c | 12.32 | 1.54 | 68.51 | 3.36 | 37.96 | 24.70 | 9.33 | 4.27 | 10.16 | |
| 60 | NMPW | 14.26 | 0.35 | 30.99 | 2.89 | 15.74 | 35.61 | 11.17 | 4.46 | 8.12 | 13.73 |
| | NMPP | 16.80 | 1.40 | 168.69 | 3.10 | 13.71 | 25.09 | 8.07 | 4.56 | 10.51 | 27.99 |
| | FITZ | 18.47 | 2.51 | 58.11 | 7.44 | 26.27 | 19.17 | 12.24 | 2.85 | 14.26 | 17.92 |
| | NMPE | 12.77 | 4.47 | 31.25 | 2.89 | 46.84 | 22.73 | 13.91 | 3.88 | 10.11 | 16.54 |
| | CONTOUR MEAN | 15.58 | 2.18 | 72.26 | 4.08 | 25.64 | 25.65 | 11.35 | 3.94 | 10.75 | |
| DAILY MEAN ^c | | 15.22 | 2.10 | 61.23 | 4.86 | 29.40 | 21.95 | 9.19 | 4.09 | 8.46 | |

^a mg/m³, mean of R-1 and R-2

^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels

^c Mean of surface samples

APPENDIX VA-5d

BIOVOLUME OF SELECTED SPECIES OF CRYPTOPHYCEAE

BIOVOLUME^a OF KATABLEPHARIS OVALIS IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL |
|-------------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14,19 DEC | MEAN |
| 10 | NMPW | 15.26 | 25.66 | 18.38 | 13.89 | 42.17 | 24.03 | 5.89 | 1.54 | 1.41 | 16.47 |
| | NMPP | 8.84 | 16.29 | 19.44 | 3.10 | 12.11 | 42.78 | 9.32 | 1.90 | 2.31 | 12.90 |
| | FITZ | 7.79 | 51.59 | 20.77 | 6.41 | 24.44 | 34.58 | 7.61 | 1.38 | 0.89 | 17.27 |
| | NMPE | 14.94 | 51.05 | 11.05 | 0.00 | 25.95 | 23.66 | 15.21 | 2.17 | 1.26 | 16.14 |
| | CONTOUR MEAN | 11.71 | 36.15 | 17.41 | 5.85 | 26.17 | 31.26 | 9.51 | 1.74 | 1.46 | |
| 20 | NMPW | 9.05 | 48.88 | 11.49 | 6.41 | 36.55 | 24.03 | 9.69 | 0.99 | 0.63 | 16.41 |
| | NMPP | 14.63 | 34.62 | 27.93 | 11.54 | 17.73 | 45.69 | 7.07 | 1.58 | 1.31 | 18.01 |
| | FITZ | 8.84 | 54.31 | 22.53 | 2.14 | 25.30 | 33.67 | 9.77 | 0.43 | 1.78 | 17.64 |
| | NMPE | 11.89 | 47.52 | 7.42 | 9.62 | 38.06 | 28.03 | 5.50 | 1.74 | 0.79 | 16.73 |
| | CONTOUR MEAN | 11.10 | 46.33 | 17.34 | 7.43 | 29.41 | 32.86 | 8.01 | 1.18 | 1.13 | |
| 40 | NMPW | 15.58 | 29.46 | 23.42 | 5.13 | 30.71 | 38.41 | 15.21 | 0.45 | 0.26 | 17.63 |
| | NMPP | 11.37 | 36.11 | 10.25 | 1.07 | 27.03 | 36.40 | 9.03 | 1.32 | 1.31 | 14.88 |
| | FITZ | 9.16 | 41.41 | 9.72 | 7.69 | 40.01 | 40.04 | 10.80 | 1.40 | 1.57 | 17.98 |
| | NMPE-S/50% | 10.94 | 62.18 | 11.67 | 1.71 | 37.63 | 47.33 | 8.83 | 1.60 | 1.31 | 20.36 |
| | 25% | 8.00 | 59.74 | 7.60 | 3.20 | 27.68 | 40.41 | 8.24 | 0.99 | 1.31 | 17.46 |
| | 1% | 17.89 | 37.34 | 15.02 | 11.11 | 48.44 | 39.50 | 9.32 | 1.11 | 0.84 | 20.06 |
| | CONTOUR MEAN ^c | 11.76 | 42.29 | 13.77 | 3.90 | 33.85 | 40.55 | 10.97 | 1.19 | 1.11 | |
| 60 | NMPW | 7.37 | 27.83 | 8.13 | 1.71 | 24.22 | 51.88 | 9.82 | 1.86 | 0.52 | 14.82 |
| | NMPP | 9.47 | 38.02 | 24.83 | 3.20 | 14.06 | 32.95 | 9.62 | 1.11 | 0.42 | 14.85 |
| | FITZ | 9.37 | 36.39 | 19.18 | 1.71 | 42.82 | 25.94 | 7.07 | 2.08 | 1.05 | 16.18 |
| | NMPE | 6.21 | 57.02 | 4.15 | 5.98 | 21.62 | 36.13 | 19.63 | 0.93 | 2.10 | 17.09 |
| | CONTOUR MEAN | 8.11 | 39.82 | 14.07 | 3.15 | 25.68 | 36.73 | 11.54 | 1.50 | 1.02 | |
| DAILY MEAN ^c | | 10.67 | 41.15 | 15.65 | 5.08 | 28.78 | 35.35 | 10.00 | 1.40 | 1.18 | |

^a mg/m³, mean of R-1 and R-2

^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels

^c Mean of surface samples

BIOVOLUME^a OF RHODOMONAS MINUTA VAR. NANNOPLANTICA IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL |
|-------------------------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14,19 DEC | MEAN |
| 10 | NMPW | 63.94 | 16.32 | 13.19 | 40.25 | 286.51 | 127.89 | 89.84 | 40.64 | 13.80 | 76.93 |
| | NMPP | 73.28 | 50.97 | 16.09 | 44.47 | 10.31 | 42.85 | 61.24 | 29.14 | 11.77 | 37.79 |
| | FITZ | 66.93 | 59.25 | 19.51 | 51.75 | 271.35 | 97.56 | 58.17 | 48.89 | 10.41 | 75.98 |
| | NMPE | 17.70 | 158.29 | 23.07 | 95.84 | 443.87 | 83.06 | 143.81 | 51.12 | 14.03 | 114.53 |
| | CONTOUR MEAN | 55.46 | 71.21 | 17.97 | 58.08 | 253.01 | 87.84 | 88.27 | 42.44 | 12.50 | |
| 20 | NMPW | 69.59 | 27.94 | 16.48 | 92.00 | 90.96 | 112.07 | 86.24 | 38.98 | 13.58 | 60.87 |
| | NMPP | 68.36 | 35.77 | 29.01 | 26.83 | 10.31 | 56.36 | 90.49 | 41.54 | 32.24 | 43.43 |
| | FITZ | 75.99 | 42.93 | 13.45 | 178.25 | 170.69 | 80.75 | 60.91 | 40.83 | 19.68 | 75.94 |
| | NMPE | 30.98 | 230.28 | 7.91 | 90.09 | 405.06 | 56.03 | 89.84 | 52.66 | 11.88 | 108.30 |
| | CONTOUR MEAN | 61.23 | 84.23 | 16.71 | 96.79 | 169.26 | 76.30 | 81.87 | 43.50 | 19.34 | |
| 40 | NMPW | 68.85 | 36.44 | 24.39 | 113.47 | 190.70 | 120.64 | 97.76 | 58.79 | 15.27 | 80.70 |
| | NMPP | 51.15 | 44.71 | 6.85 | 264.51 | 145.53 | 108.77 | 87.58 | 70.74 | 22.06 | 89.10 |
| | FITZ | 50.66 | 36.89 | 13.84 | 84.34 | 53.06 | 97.57 | 102.60 | 48.50 | 25.57 | 57.00 |
| | NMPE-S/50% | 63.94 | 315.01 | 14.64 | 59.99 | 150.38 | 84.05 | 99.78 | 44.22 | 18.67 | 94.52 |
| | 25% | 47.21 | 198.53 | 9.63 | 97.75 | 140.68 | 88.67 | 102.77 | 42.24 | 8.15 | 81.74 |
| | 1% | 86.07 | 215.75 | 22.68 | 9.20 | 46.39 | 87.35 | 92.91 | 52.72 | 10.86 | 69.33 |
| | CONTOUR MEAN | 58.65 | 108.26 | 14.93 | 130.58 | 134.92 | 102.76 | 96.93 | 55.56 | 20.39 | |
| 60 | NMPW | 47.46 | 115.14 | 4.22 | 124.20 | 206.47 | 87.35 | 87.74 | 50.10 | 19.80 | 82.50 |
| | NMPP | 76.72 | 63.72 | 39.43 | 297.09 | 103.69 | 103.50 | 75.30 | 55.08 | 17.54 | 92.45 |
| | FITZ | 60.98 | 85.63 | 16.48 | 124.20 | 200.71 | 84.87 | 92.75 | 60.39 | 31.11 | 84.12 |
| | NMPE | 79.68 | 119.84 | 2.64 | 121.14 | 159.17 | 88.34 | 137.34 | 41.09 | 22.63 | 85.76 |
| | CONTOUR MEAN | 66.21 | 96.08 | 15.69 | 166.66 | 167.51 | 91.02 | 98.28 | 51.66 | 22.77 | |
| DAILY MEAN ^c | | 60.39 | 89.95 | 16.33 | 113.03 | 181.17 | 89.48 | 91.34 | 48.29 | 18.75 | |

^a mg/m³, mean of R-1 and R-2

^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels

^c Mean surface samples

APPENDIX VA -5e

BIOLVOLUME OF SELECTED SPECIES OF MYXOPHYCEAE

BIOVOLUME^a OF COELOSPHAERIUM KUETZINGIANUM IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL |
|-------------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14,19 DEC | MEAN |
| 10 | NMPW | 0.00 | 0.00 | 0.00 | 0.00 | 16.58 | 0.00 | 0.00 | 2.36 | 0.00 | 2.10 |
| | NMPP | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.86 | 1.31 | 0.31 | 0.00 | 0.47 |
| | FITZ | 0.00 | 0.00 | 0.00 | 0.00 | 12.90 | 10.68 | 4.22 | 0.00 | 0.00 | 3.09 |
| | NMPE | 0.00 | 0.00 | 0.00 | 0.00 | 12.26 | 1.19 | 0.00 | 0.00 | 6.15 | 2.18 |
| | CONTOUR MEAN | 0.00 | 0.00 | 0.00 | 0.00 | 10.44 | 3.68 | 1.38 | 0.67 | 1.54 | |
| 20 | NMPW | 0.00 | 0.00 | 0.00 | 0.00 | 6.39 | 8.93 | 17.94 | 0.00 | 1.97 | 3.91 |
| | NMPP | 0.00 | 0.00 | 0.00 | 0.00 | 5.42 | 18.50 | 0.00 | 0.00 | 0.00 | 2.66 |
| | FITZ | 0.00 | 0.00 | 0.00 | 0.00 | 14.15 | 0.00 | 6.53 | 0.00 | 1.85 | 2.50 |
| | NMPE | 0.00 | 0.00 | 0.00 | 0.00 | 21.74 | 0.00 | 0.00 | 0.00 | 1.61 | 2.59 |
| | CONTOUR MEAN | 0.00 | 0.00 | 0.00 | 0.00 | 11.93 | 6.86 | 6.12 | 0.00 | 1.36 | |
| 40 | NMPW | 0.00 | 0.00 | 0.00 | 0.00 | 11.23 | 0.00 | 0.00 | 0.58 | 0.00 | 1.31 |
| | NMPP | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | FITZ | 0.00 | 0.00 | 0.00 | 0.00 | 3.68 | 0.00 | 0.00 | 0.44 | 0.00 | 0.46 |
| | NMPE-S/50% | 0.00 | 0.00 | 0.00 | 0.00 | 1.84 | 0.00 | 0.00 | 0.00 | 0.00 | 0.20 |
| | 25% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.44 | 2.90 | 0.00 | 0.00 | 1.15 |
| | 1% | 0.00 | 0.00 | 0.00 | 0.00 | 3.68 | 4.91 | 7.49 | 0.40 | 0.00 | 1.83 |
| | CONTOUR MEAN ^c | 0.00 | 0.00 | 0.00 | 0.00 | 4.19 | 0.00 | 0.00 | 0.26 | 0.00 | |
| 60 | NMPW | 0.00 | 0.00 | 0.00 | 0.00 | 13.18 | 3.81 | 0.00 | 0.00 | 0.00 | 1.89 |
| | NMPP | 0.00 | 0.00 | 0.00 | 0.00 | 5.53 | 0.00 | 0.00 | 0.54 | 0.00 | 0.67 |
| | FITZ | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.87 | 3.63 | 0.00 | 0.00 | 1.17 |
| | NMPE | 0.00 | 0.00 | 0.00 | 0.00 | 18.42 | 4.69 | 5.67 | 0.93 | 0.00 | 3.30 |
| | CONTOUR MEAN | 0.00 | 0.00 | 0.00 | 0.00 | 9.28 | 3.84 | 2.33 | 0.37 | 0.00 | |
| DAILY MEAN ^c | | 0.00 | 0.00 | 0.00 | 0.00 | 8.96 | 3.60 | 2.46 | 0.32 | 0.73 | |

^a mg/m³, mean of R-1 and R-2

^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels

^c Mean of surface samples

BIOVOLUME^a OF COELOSPHAERIUM NAEGELIANUM IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL |
|----------------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|------------|--------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14, 19 DEC | MEAN |
| 10 | NMPW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 22.03 | 10.34 | 0 | 0 | 3.60 |
| | NMPP | 0.00 | 0.00 | 0.00 | 0.00 | 4.38 | 1.46 | 4.26 | 0 | 0 | 1.12 |
| | FITZ | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.80 | 0 | 0.20 |
| | NMPE | 0.00 | 0.00 | 0.00 | 0.00 | 13.91 | 14.65 | 3.38 | 0 | 0 | 3.55 |
| | CONTOUR MEAN | 0.00 | 0.00 | 0.00 | 0.00 | 4.57 | 9.54 | 4.50 | 0.45 | 0 | |
| 20 | NMPW | 0.00 | 0.00 | 22.12 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 0 | 2.46 |
| | NMPP | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.66 | 1.73 | 1.35 | 3.50 | 1.14 |
| | FITZ | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.82 | 0.33 | 0 | 0.35 |
| | NMPE | 0.00 | 0.00 | 0.00 | 0.00 | 7.73 | 0.00 | 0.00 | 0 | 0 | 0.86 |
| | CONTOUR MEAN | 0.00 | 0.00 | 5.53 | 0.00 | 1.93 | 0.92 | 1.14 | 0.42 | 0.88 | |
| 40 | NMPW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.39 | 0.00 | 0 | 2.90 | 0.81 |
| | NMPP | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 10.55 | 0.96 | 1.53 | 0 | 1.45 |
| | FITZ | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 41.02 | 0.00 | 0 | 0 | 4.56 |
| | NMPE-S/50% | 0.00 | 0.00 | 0.00 | 0.00 | 33.52 | 6.45 | 0.00 | 1.80 | 0 | 4.64 |
| | 25% | 0.00 | 0.00 | 0.00 | 0.00 | 22.66 | 0.00 | 10.15 | 3.05 | 1.28 | 4.13 |
| | 1% | 0.00 | 0.00 | 0.00 | 0.00 | 17.17 | 0.00 | 0.00 | 0.90 | 0 | 2.01 |
| | CONTOUR MEAN ^c | 0.00 | 0.00 | 0.00 | 0.00 | 8.38 | 15.60 | 0.24 | 0.83 | 0.72 | |
| 60 | NMPW | 0.00 | 0.00 | 0.00 | 0.00 | 2.06 | 32.96 | 0.00 | 1.62 | 4.79 | 4.60 |
| | NMPP | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| | FITZ | 0.00 | 0.00 | 0.00 | 0.00 | 24.14 | 6.15 | 0.00 | 0 | 0 | 3.36 |
| | NMPE | 0.00 | 0.00 | 0.00 | 0.00 | 3.86 | 14.65 | 0.00 | 0 | 0 | 2.06 |
| | CONTOUR MEAN | 0.00 | 0.00 | 0.00 | 0.00 | 7.52 | 13.44 | 0.00 | 0.40 | 1.20 | |
| ^c DAILY MEAN | | 0.00 | 0.00 | 1.38 | 0.00 | 5.61 | 9.88 | 1.47 | 0.52 | 0.70 | |

^a mg/m³, mean of R-1 and R-2

^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels

^c Mean of surface samples

BIOVOLUME^a OF CHROOCOCCUS DISPERSUS VAR. MINOR IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL |
|-------------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14,19 DEC | MEAN |
| 10 | NMPW | 0.04 | 1.17 | 5.06 | 5.88 | 17.36 | 2.87 | 1.57 | 0.95 | 0.12 | 3.89 |
| | NMPP | 0.00 | 0.78 | 5.62 | 1.64 | 4.12 | 4.34 | 1.23 | 1.43 | 0.06 | 2.14 |
| | FITZ | 0.15 | 2.68 | 2.21 | 1.80 | 10.56 | 3.27 | 1.69 | 1.29 | 0.42 | 2.68 |
| | NMPE | 0.01 | 1.25 | 5.86 | 1.27 | 4.98 | 2.20 | 2.32 | 1.43 | 0.11 | 2.16 |
| | CONTOUR MEAN | 0.05 | 1.47 | 4.69 | 2.65 | 9.26 | 3.17 | 1.70 | 1.28 | 0.18 | |
| 20 | NMPW | 0.03 | 0.84 | 4.60 | 3.71 | 15.23 | 3.38 | 0.23 | 1.20 | 0.25 | 3.27 |
| | NMPP | 0.01 | 1.09 | 6.84 | 1.92 | 3.83 | 4.14 | 2.21 | 1.38 | 0.38 | 2.42 |
| | FITZ | 0.02 | 1.11 | 6.02 | 1.25 | 7.45 | 4.26 | 1.40 | 0.90 | 0.35 | 2.53 |
| | NMPE | 0.00 | 0.04 | 5.14 | 1.13 | 5.91 | 3.95 | 1.21 | 0.75 | 0.23 | 2.04 |
| | CONTOUR MEAN | 0.02 | 0.77 | 5.65 | 2.00 | 8.11 | 3.93 | 1.26 | 1.06 | 0.30 | |
| 40 | NMPW | 0.00 | 0.50 | 7.30 | 2.05 | 13.17 | 3.92 | 3.48 | 0.77 | 0.24 | 3.49 |
| | NMPP | 0.01 | 1.04 | 3.25 | 2.40 | 9.58 | 1.67 | 0.23 | 1.36 | 0.38 | 2.18 |
| | FITZ | 0.00 | 1.67 | 2.75 | 0.19 | 12.81 | 4.07 | 2.32 | 0.65 | 0.18 | 2.73 |
| | NMPE-S/50% | 0.00 | 0.86 | 3.63 | 0.87 | 12.72 | 4.04 | 1.07 | 0.75 | 0.55 | 2.72 |
| | 25% | 0.00 | 0.01 | 6.95 | 0.14 | 17.72 | 3.62 | 1.36 | 1.11 | 0.33 | 3.47 |
| | 1% | 0.02 | 0.76 | 2.58 | 0.54 | 10.42 | 3.56 | 1.61 | 0.93 | 0.48 | 2.32 |
| | CONTOUR MEAN ^c | .0025 | 1.02 | 4.23 | 1.38 | 12.07 | 3.43 | 1.78 | 0.88 | 0.34 | |
| 60 | NMPW | 0.03 | 0.27 | 1.61 | 1.07 | 10.18 | 7.63 | 1.73 | 1.32 | 0.33 | 2.69 |
| | NMPP | 0.10 | 0.58 | 3.79 | 1.31 | 6.15 | 2.72 | 0.86 | 0.53 | 0.38 | 1.82 |
| | FITZ | 0.00 | 1.28 | 4.93 | 0.65 | 9.94 | 1.57 | 1.14 | 1.63 | 0.19 | 2.33 |
| | NMPE | 0.02 | 0.08 | 5.42 | 0.96 | 11.49 | 2.56 | 4.02 | 0.55 | 0.31 | 2.77 |
| | CONTOUR MEAN | 0.04 | 0.55 | 3.94 | 1.00 | 9.44 | 3.62 | 1.94 | 1.01 | 0.30 | |
| DAILY MEAN ^c | | 0.03 | 0.95 | 4.63 | 1.76 | 9.72 | 3.54 | 1.67 | 1.06 | 0.28 | |

^a mg/m³, mean of R-1 and R-2

^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels

^c Mean of surface samples

BIOVOLUME^a OF OSCILLATORIA LIMNETICA IN WHOLE WATER COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL |
|-------------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14,19 DEC | MEAN |
| 10 | NMPW | 18.37 | 41.99 | 29.60 | 100.09 | 5.53 | 0.00 | 0.00 | 8.72 | 4.88 | 23.24 |
| | NMPP | 14.46 | 13.26 | 29.83 | 0.83 | 1.11 | 0.00 | 0.33 | 5.18 | 3.90 | 7.66 |
| | FITZ | 15.89 | 25.78 | 15.73 | 17.37 | 0.00 | 2.82 | 1.65 | 2.79 | 5.51 | 9.72 |
| | NMPE | 14.94 | 14.73 | 30.06 | 11.01 | 0.00 | 0.00 | 0.00 | 0 | 6.75 | 8.61 |
| | CONTOUR MEAN | 15.92 | 23.94 | 26.31 | 32.33 | 1.66 | 0.71 | 0.50 | 4.17 | 5.26 | |
| 20 | NMPW | 11.96 | 29.47 | 26.59 | 18.36 | 1.11 | 0.00 | 0.00 | 3.73 | 4.61 | 10.65 |
| | NMPP | 23.95 | 18.42 | 28.44 | 2.45 | 0.00 | 0.00 | 5.84 | 1.86 | 8.43 | 9.93 |
| | FITZ | 18.40 | 23.57 | 33.76 | 2.02 | 0.00 | 0.00 | 0.67 | 1.30 | 4.70 | 9.38 |
| | NMPE | 12.39 | 14.73 | 32.37 | 6.54 | 0.00 | 0.70 | 0.26 | 1.86 | 4.52 | 8.15 |
| | CONTOUR MEAN | 16.68 | 21.55 | 30.29 | 7.34 | 0.28 | 0.18 | 1.69 | 2.18 | 5.56 | |
| 40 | NMPW | 7.37 | 29.84 | 16.19 | 15.56 | 0.00 | 0.70 | 0.00 | 4.44 | 5.78 | 8.88 |
| | NMPP | 18.38 | 26.15 | 4.62 | 6.17 | 0.00 | 2.82 | 5.32 | 1.02 | 3.53 | 7.56 |
| | FITZ | 18.83 | 13.81 | 16.19 | 4.06 | 0.00 | 1.41 | 0.66 | 0.84 | 5.41 | 6.80 |
| | NMPE-S/50% | 10.07 | 12.89 | 30.52 | 5.30 | 1.38 | 0.70 | 0.00 | 0.75 | 3.09 | 7.19 |
| | 25% | 13.55 | 5.89 | 15.73 | 2.08 | 0.00 | 1.76 | 0.00 | 1.68 | 5.15 | 5.09 |
| | 1% | 16.09 | 11.05 | 23.82 | 0.00 | 0.00 | 0.00 | 0.00 | 0.88 | 4.27 | 6.23 |
| | CONTOUR MEAN ^c | 13.66 | 20.67 | 16.88 | 7.77 | 0.35 | 1.41 | 1.50 | 1.76 | 4.45 | |
| 60 | NMPW | 5.96 | 27.63 | 3.70 | 13.07 | 0.00 | 0.00 | 0.00 | 0.93 | 2.20 | 5.94 |
| | NMPP | 9.65 | 19.15 | 11.79 | 8.08 | 0.00 | 0.00 | 0.26 | 1.30 | 6.20 | 6.27 |
| | FITZ | 5.03 | 17.31 | 14.11 | 3.23 | 2.21 | 0.00 | 0.00 | 0.93 | 3.09 | 5.10 |
| | NMPE | 4.60 | 15.47 | 12.72 | 0.00 | 0.00 | 0.70 | 0.00 | 0.56 | 5.76 | 4.42 |
| | CONTOUR MEAN | 6.31 | 19.89 | 10.58 | 6.10 | 0.55 | 0.18 | 0.07 | 0.93 | 4.31 | |
| DAILY MEAN ^c | | 13.14 | 21.51 | 21.01 | 13.39 | 0.71 | 0.62 | 0.94 | 2.26 | 4.90 | |

^a mg/m³, mean of R-1 and R-2

^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels

^c Mean of surface samples

APPENDIX VA-6

CONCENTRATION OF CHLOROPHYLL A^a IN WHOLE WATER DAY COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | | | | | | | | | | ANNUAL MEAN | | | | | | | | | |
|--------------------------|---------------------------|--------|------|------|--------|------|------|--------|------|------|--------|------|------|--------|-----|------|--------|-----|------|----------------|--------|-----|------|--------|-----|------|--------|-----|------|
| | | 30 APR | | | 27 MAY | | | 17 JUN | | | 28 JUL | | | 26 AUG | | | 23 SEP | | | | 19 OCT | | | 16 NOV | | | 14 DEC | | |
| | | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN |
| 10 | NMPW | 6.3 | 6.9 | 6.6 | 11.4 | 9.8 | 10.6 | 13.3 | 14.0 | 13.6 | 19.1 | 16.1 | 17.6 | 3.3 | 5.8 | 4.6 | 7.0 | 7.7 | 7.4 | 2.6 | 2.1 | 2.4 | 2.6 | 2.3 | 2.4 | 4.0 | 5.4 | 4.7 | 7.8 |
| | NMPP | 12.0 | 9.6 | 10.8 | 9.6 | 9.3 | 9.4 | 8.2 | 8.6 | 8.4 | 5.1 | 5.4 | 5.2 | 2.6 | 1.6 | 2.1 | 5.6 | 5.8 | 5.7 | 3.0 | 3.3 | 3.2 | 2.8 | 2.6 | 2.7 | 4.2 | 4.7 | 4.4 | 5.8 |
| | FITZ | 10.7 | 12.0 | 11.4 | 10.3 | 10.5 | 10.4 | 9.3 | 8.2 | 8.8 | 11.0 | 11.0 | 11.0 | 7.9 | 6.3 | 7.1 | 9.3 | 1.6 | 9.2 | 1.6 | 1.8 | 1.7 | 1.9 | 1.6 | 1.8 | 4.9 | 4.2 | 4.6 | 6.9 |
| | NMPE | 12.6 | 11.7 | 12.2 | 8.4 | 9.6 | 9.0 | 6.8 | 5.1 | 6.0 | 11.4 | 11.0 | 11.2 | 5.4 | 4.0 | 4.7 | 6.6 | 7.0 | 6.8 | 3.3 | 3.5 | 3.4 | 2.8 | 2.8 | 2.8 | 3.7 | 4.9 | 4.3 | 6.7 |
| | CONTOUR MEAN | 10.4 | 10.0 | 10.2 | 9.9 | 9.8 | 9.9 | 9.4 | 9.0 | 9.2 | 11.6 | 10.9 | 11.3 | 4.8 | 4.4 | 4.6 | 7.1 | 7.4 | 7.3 | 2.6 | 2.7 | 2.6 | 2.5 | 2.3 | 2.4 | 4.2 | 4.8 | 4.5 | |
| 20 | NMPW | 4.0 | 4.0 | 4.0 | 13.1 | 12.6 | 12.8 | 10.3 | 12.6 | 11.5 | 10.0 | 11.7 | 10.8 | 6.8 | 7.2 | 7.0 | 5.8 | 7.2 | 6.5 | 2.1 | 2.3 | 2.2 | 2.8 | 3.0 | 2.9 | 4.0 | 6.3 | 5.2 | 7.0 |
| | NMPP | 11.7 | 11.2 | 11.4 | 9.8 | 9.5 | 9.6 | 10.5 | 7.0 | 8.8 | 4.4 | 4.2 | 4.3 | 1.9 | 2.6 | 2.2 | 5.6 | 5.8 | 5.7 | 3.3 | 3.0 | 3.2 | 2.3 | 2.3 | 2.3 | 4.2 | 4.2 | 4.2 | 5.8 |
| | FITZ | 13.4 | 12.6 | 13.0 | 9.1 | 8.4 | 8.8 | 9.3 | 10.5 | 9.9 | 11.9 | 11.0 | 11.4 | 5.4 | 4.4 | 4.9 | 4.7 | 2.3 | 6.0 | 2.3 | 2.3 | 2.3 | 1.4 | 2.3 | 1.8 | 3.5 | 4.4 | 4.0 | 6.6 |
| | NMPE | 9.6 | 9.6 | 9.6 | 12.6 | 11.0 | 11.8 | 6.8 | 6.5 | 6.6 | 13.8 | 11.2 | 12.5 | 5.1 | 7.9 | 6.5 | 7.0 | 7.0 | 7.0 | 3.3 | 2.8 | 3.0 | 2.6 | 2.6 | 2.6 | 4.4 | 4.2 | 4.3 | 7.1 |
| | CONTOUR MEAN | 9.7 | 9.4 | 9.5 | 11.2 | 10.4 | 10.8 | 9.2 | 9.2 | 9.2 | 10.0 | 9.5 | 9.8 | 4.8 | 5.5 | 5.2 | 5.8 | 6.8 | 6.3 | 2.8 | 2.6 | 2.7 | 2.3 | 2.6 | 2.4 | 4.0 | 4.8 | 4.4 | |
| 40 | NMPW | 3.0 | 2.7 | 2.8 | 12.8 | 12.9 | 12.8 | 10.0 | 10.7 | 10.4 | 13.8 | 12.8 | 13.3 | 5.1 | 5.8 | 5.4 | 8.2 | 7.9 | 8.0 | 2.8 | 1.9 | 2.4 | 2.3 | 2.6 | 2.4 | 4.9 | 4.4 | 4.6 | 6.9 |
| | NMPP | 7.6 | 7.1 | 7.4 | 9.1 | 10.2 | 9.6 | 11.4 | 9.8 | 10.6 | 12.8 | 14.0 | 13.4 | 5.8 | 5.8 | 5.8 | 6.5 | 6.5 | 6.5 | 2.6 | 1.9 | 2.2 | 2.8 | 2.6 | 2.7 | 3.5 | 4.2 | 3.8 | 6.9 |
| | FITZ | 4.6 | 4.9 | 4.8 | 8.9 | 8.4 | 8.6 | 9.1 | 9.6 | 9.4 | 7.0 | 6.1 | 6.6 | 4.4 | 3.0 | 3.7 | 7.2 | 7.0 | 7.1 | 2.8 | 3.0 | 2.9 | 2.3 | 2.3 | 2.3 | 4.0 | 4.0 | 4.0 | 5.5 |
| | NMPE-S/50% | 5.5 | 7.4 | 6.4 | 12.4 | 12.1 | 12.2 | 7.7 | 8.6 | 8.2 | 16.6 | 13.1 | 14.8 | 2.3 | 2.8 | 2.6 | 6.1 | 7.0 | 6.6 | 3.7 | 2.6 | 3.2 | 3.0 | 3.0 | 3.0 | 5.1 | 4.9 | 5.0 | 6.9 |
| | 25% | 6.3 | 6.0 | 6.2 | 12.1 | 11.0 | 11.6 | 8.9 | 8.4 | 8.6 | 11.4 | 10.5 | 11.0 | 3.3 | 4.0 | 3.6 | 5.8 | 6.5 | 6.2 | 3.0 | 2.8 | 2.9 | 2.8 | 2.6 | 2.7 | 3.7 | 4.4 | 4.0 | 6.3 |
| | 1% | 6.0 | 4.9 | 5.4 | 12.1 | 10.3 | 11.2 | 7.0 | 8.2 | 7.6 | 3.7 | 4.0 | 3.8 | 4.4 | 3.7 | 4.0 | 7.9 | 6.3 | 7.1 | 1.6 | 1.9 | 1.8 | 2.1 | 1.3 | 1.7 | 3.1 | 3.0 | 3.0 | 5.1 |
| | CONTOUR MEAN ^c | 5.2 | 5.5 | 5.4 | 10.8 | 10.9 | 10.8 | 9.6 | 9.7 | 9.6 | 12.6 | 11.5 | 12.0 | 4.4 | 4.4 | 4.4 | 7.0 | 7.1 | 7.0 | 3.0 | 2.4 | 2.7 | 2.6 | 2.6 | 2.6 | 4.4 | 4.4 | 4.4 | |
| 60 | NMPW | 2.5 | 2.7 | 2.6 | 10.5 | 10.5 | 10.5 | 6.1 | 6.1 | 6.1 | 12.6 | 13.8 | 13.2 | 4.7 | 4.7 | 4.7 | 7.0 | 7.0 | 7.0 | 3.0 | 2.8 | 2.9 | 3.0 | 2.1 | 2.6 | 4.0 | 6.2 | 5.1 | 6.1 |
| | NMPP | 3.6 | 3.6 | 3.6 | 10.0 | 10.5 | 10.2 | 8.2 | 8.9 | 8.6 | 11.7 | 11.7 | 11.7 | 5.1 | 4.2 | 4.6 | 7.2 | 7.2 | 7.2 | 2.6 | 2.6 | 2.6 | 2.8 | 2.3 | 2.6 | 3.7 | 4.0 | 3.8 | 6.1 |
| | FITZ | 3.8 | 4.0 | 3.9 | 7.7 | 8.9 | 8.3 | 9.6 | 8.9 | 9.2 | 14.0 | 11.7 | 12.8 | 7.2 | 4.4 | 5.8 | 7.5 | 7.9 | 7.7 | 3.3 | 2.8 | 3.0 | 2.6 | 3.0 | 2.8 | 3.0 | 3.0 | 3.0 | 6.3 |
| | NMPE | 3.8 | 3.6 | 3.7 | 8.6 | 8.9 | 8.8 | 9.3 | 7.9 | 8.6 | 13.8 | 11.2 | 12.5 | 4.0 | 4.4 | 4.2 | 5.6 | 7.5 | 6.6 | 2.6 | 2.3 | 2.4 | 2.1 | 2.1 | 2.1 | 4.0 | 4.0 | 4.0 | 5.9 |
| | CONTOUR MEAN | 3.4 | 3.5 | 3.4 | 9.2 | 9.7 | 9.4 | 8.3 | 8.0 | 8.1 | 13.0 | 12.1 | 12.6 | 5.2 | 4.4 | 4.8 | 6.8 | 7.4 | 7.1 | 2.9 | 2.6 | 2.8 | 2.6 | 2.4 | 2.5 | 3.7 | 4.3 | 4.0 | |
| DAILY MEAN ^c | | 7.2 | 7.1 | 7.1 | 10.3 | 10.2 | 10.2 | 9.1 | 8.9 | 9.0 | 11.8 | 11.0 | 11.4 | 4.8 | 4.7 | 4.7 | 6.7 | 7.2 | 6.9 | 2.8 | 2.6 | 2.7 | 2.5 | 2.4 | 2.4 | 4.1 | 4.6 | 4.3 | |

^aµg/l

^bSurface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels

^cMean of surface samples

APPENDIX VA-7

PHAEOPIGMENT CONCENTRATION^a IN WHOLE WATER DAY COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | | | | | | | ANNUAL MEAN | | | | | | | | | | | | |
|--------------------------|---------------------------|--------|-----|------|--------|-----|------|--------|-----|------|--------|-----|------|--------|-----|------|----------------|--------|-----|------|--------|------|------|--------|------|------|--------|------|------|
| | | 30 APR | | | 27 MAY | | | 17 JUN | | | 28 JUL | | | 26 AUG | | | | 23 SEP | | | 19 OCT | | | 16 NOV | | | 14 DEC | | |
| | | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN |
| 10 | NMPW | 2.9 | 2.0 | 2.4 | 2.7 | 4.1 | 3.4 | 3.4 | 3.5 | 3.4 | 1.0 | 3.4 | 2.2 | 3.0 | 1.4 | 2.2 | 2.4 | 2.9 | 2.6 | 0.8 | 1.1 | 1.0 | 0.5 | 0.7 | 0.6 | 1.3 | 1.7 | 1.5 | 2.2 |
| | NMPP | 2.3 | 3.9 | 3.1 | 1.7 | 2.0 | 1.8 | 3.2 | 3.1 | 3.2 | 1.8 | 2.8 | 2.3 | 0 | 1.2 | 0.6 | 1.9 | 2.5 | 2.2 | 0.7 | <.1 | - | 0.6 | 1.1 | 0.8 | 1.3 | 0.8 | 1.0 | <1.7 |
| | FITZ | 2.7 | 3.2 | 3.0 | 1.5 | 1.6 | 1.6 | 1.3 | 1.4 | 1.4 | 2.0 | 2.4 | 2.2 | 0 | 2.0 | 1.0 | 1.6 | 0.8 | 1.2 | 1.5 | 1.3 | 1.4 | 1.2 | 2.0 | 1.6 | 0.9 | 0.5 | 0.7 | 1.6 |
| | NMPE | 2.1 | 3.0 | 2.6 | 5.3 | 3.6 | 4.4 | 1.1 | 1.2 | 1.2 | 3.0 | 3.9 | 3.4 | 1.4 | 1.0 | 1.2 | 7.0 | 5.0 | 6.0 | 1.2 | 0.8 | 1.0 | 0.1 | 0.1 | 0.1 | 2.0 | 0.4 | 1.2 | 2.3 |
| | CONTOUR MEAN | 2.5 | 3.0 | 2.8 | 2.8 | 2.8 | 2.8 | 2.2 | 2.3 | 2.3 | 2.0 | 3.1 | 2.5 | 1.1 | 1.4 | 1.2 | 3.2 | 2.8 | 3.0 | 1.0 | - | <0.9 | 0.6 | 1.0 | 0.8 | 1.4 | 0.8 | 1.1 | |
| 20 | NMPW | 0.9 | 0.6 | 0.8 | 2.7 | 2.3 | 2.5 | 7.6 | 3.0 | 5.3 | 2.8 | 2.7 | 2.8 | 0.8 | 0.6 | 0.7 | 4.5 | 3.2 | 3.8 | 1.4 | 1.3 | 1.4 | <0.1 | <0.1 | - | 1.2 | 1.6 | 1.4 | <2.1 |
| | NMPP | 2.9 | 2.3 | 2.6 | 2.0 | 2.1 | 2.0 | 2.5 | 2.8 | 2.6 | 2.0 | 1.3 | 1.6 | 1.3 | 0.5 | 0.9 | 2.2 | 2.8 | 2.5 | 0.4 | 0.5 | 0.4 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 1.5 |
| | FITZ | 3.0 | 2.3 | 2.6 | 2.0 | 2.5 | 2.2 | 1.5 | 1.0 | 1.2 | 2.1 | 2.3 | 2.2 | 1.2 | 1.8 | 1.5 | 2.5 | 4.7 | 3.6 | 1.0 | 1.2 | 1.1 | 1.7 | 1.3 | 1.5 | 1.6 | 1.0 | 1.3 | 1.9 |
| | NMPE | 2.3 | 2.1 | 2.2 | 2.4 | 2.9 | 2.6 | 0.8 | 0.9 | 0.8 | 3.8 | 4.0 | 3.9 | 0.7 | 1.1 | 0.9 | 2.9 | 2.3 | 2.6 | 1.1 | 1.6 | 1.4 | 0.5 | 0.5 | 0.5 | 1.3 | 1.9 | 1.6 | 1.8 |
| | CONTOUR MEAN | 2.3 | 1.8 | 2.0 | 2.3 | 2.4 | 2.4 | 3.1 | 1.9 | 2.5 | 2.7 | 2.6 | 2.6 | 1.0 | 1.0 | 1.0 | 3.0 | 3.2 | 3.1 | 1.0 | 1.2 | 1.1 | - | - | <0.7 | 1.2 | 1.2 | 1.2 | |
| 40 | NMPW | 1.1 | 0.7 | 0.9 | 3.0 | 3.4 | 3.2 | 3.9 | 2.8 | 3.4 | 2.2 | 2.5 | 2.4 | 1.5 | 1.3 | 1.4 | 2.3 | 2.8 | 2.6 | 2.7 | 2.2 | 2.4 | 0.6 | 0.3 | 0.4 | 0.8 | 1.5 | 1.2 | 2.0 |
| | NMPP | 2.9 | 2.3 | 2.6 | 4.0 | 2.5 | 3.2 | 2.7 | 4.0 | 3.4 | 2.3 | 3.8 | 3.0 | 1.3 | 0.6 | 1.0 | 2.0 | 3.5 | 2.8 | 1.0 | 0.7 | 0.8 | 0.1 | <0.1 | - | 0.5 | 0.2 | 0.4 | <1.9 |
| | FITZ | 2.9 | 1.4 | 2.2 | 1.3 | 2.1 | 1.7 | 1.4 | 1.7 | 1.6 | 2.5 | 2.4 | 2.4 | 0.3 | 1.1 | 0.7 | 2.8 | 4.0 | 3.4 | 1.2 | 0.8 | 1.0 | 0.6 | 0.4 | 0.5 | 1.0 | 0.6 | 0.8 | 1.6 |
| | NMPE-S/50% | 1.2 | 0.9 | 1.0 | 1.4 | 1.3 | 1.4 | 0.6 | 1.2 | 0.9 | 4.0 | 5.2 | 4.6 | 0.9 | 0.7 | 0.8 | 1.8 | 2.2 | 2.0 | 0.9 | 0.6 | 0.8 | <0.1 | <0.1 | - | 0.7 | 0.9 | 0.8 | <1.4 |
| | 25% | 2.1 | 1.6 | 1.8 | 1.2 | 2.0 | 1.6 | 0.4 | 1.0 | 0.7 | 2.4 | 4.4 | 3.4 | 1.7 | 1.3 | 1.5 | 2.8 | 2.7 | 2.8 | 1.0 | 0.9 | 1.0 | 0.3 | 0.8 | 0.6 | 0.2 | <0.1 | - | <1.5 |
| | 1% | 1.4 | 2.1 | 1.8 | 1.2 | 1.1 | 1.2 | 1.7 | 3.0 | 2.4 | 4.0 | 2.7 | 3.4 | 0.4 | 0.6 | 0.5 | 0 | 3.1 | 1.6 | 1.4 | 1.3 | 1.4 | 0.8 | 1.9 | 1.4 | 1.5 | 1.3 | 1.4 | 1.6 |
| | CONTOUR MEAN ^c | 2.0 | 1.3 | 1.7 | 2.4 | 2.3 | 2.4 | 2.2 | 2.4 | 2.3 | 2.8 | 3.5 | 3.1 | 1.0 | 0.9 | 1.0 | 2.2 | 3.1 | 2.7 | 1.4 | 1.1 | 1.3 | - | - | <0.3 | 0.8 | 0.8 | 0.8 | |
| 60 | NMPW | 1.1 | 1.1 | 1.1 | 2.5 | 2.4 | 2.4 | 1.8 | 2.0 | 1.9 | 2.6 | 3.8 | 3.2 | 1.3 | 1.1 | 1.2 | 1.7 | 2.6 | 2.2 | 0.8 | 0.9 | 0.8 | <0.1 | 1.2 | - | <0.1 | 0.1 | - | <1.5 |
| | NMPP | 1.1 | 0 | 0.6 | 3.3 | 2.4 | 2.8 | 2.7 | 2.1 | 2.4 | 2.8 | 4.2 | 3.5 | 0.7 | 1.7 | 1.2 | 1.6 | 2.2 | 1.9 | 1.4 | 1.3 | 1.4 | <0.1 | 0.7 | - | 0.3 | 0.6 | 0.4 | <1.6 |
| | FITZ | 1.4 | 1.1 | 1.2 | 2.7 | 1.2 | 2.0 | 0.8 | 0.9 | 0.8 | 1.6 | 2.4 | 2.0 | 0.6 | 0.6 | 0.6 | 2.2 | 2.5 | 2.4 | 1.1 | 1.6 | 1.4 | 0.5 | 0.7 | 0.6 | 1.7 | 1.6 | 1.6 | 1.4 |
| | NMPE | 1.1 | 2.0 | 1.6 | 2.3 | 1.0 | 1.6 | 2.4 | 1.9 | 2.2 | 2.7 | 0.1 | 1.4 | 0.9 | 1.3 | 1.1 | 1.8 | 2.8 | 2.3 | 1.0 | 1.6 | 1.3 | 0.8 | 1.4 | 1.1 | 0.3 | 0.3 | 0.3 | 1.4 |
| | CONTOUR MEAN | 1.2 | 1.0 | 1.1 | 2.7 | 1.8 | 2.2 | 1.9 | 1.7 | 1.8 | 2.4 | 2.6 | 2.5 | 0.9 | 1.2 | 1.0 | 1.8 | 2.5 | 2.2 | 1.1 | 1.4 | 1.2 | - | - | <0.7 | - | 0.6 | <0.6 | |
| DAILY MEAN ^c | | 2.0 | 1.8 | 1.9 | 2.6 | 2.3 | 2.4 | 2.4 | 2.1 | 2.2 | 2.4 | 3.0 | 2.7 | 1.0 | 1.1 | 1.1 | 2.6 | 2.9 | 2.8 | 1.1 | <1.1 | <1.1 | <0.5 | <0.7 | <0.6 | <1.0 | 0.9 | <0.9 | |

^a µg/l^b Surface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels^c Mean of surface samples

- = Not applicable

APPENDIX VA-8

PRIMARY PRODUCTION^a AFTER FOUR-HOUR INCUBATION PERIOD

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT ^b | DATE | | | | | | | | | ANNUAL MEAN |
|-------------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------------|
| | | 30 APR | 27 MAY | 17 JUN | 28 JUL | 26 AUG | 23 SEP | 19 OCT | 16 NOV | 14 DEC | |
| 10 | NMPW | 36.50 | 35.32 | 28.36 | 53.66 | 20.76 | 9.16 | 1.76 | 4.83 | 9.34 | 22.19 |
| | NMPP | 42.46 | 17.50 | 11.29 | 5.90 | 7.03 | 12.08 | 6.46 | 5.98 | 7.98 | 12.96 |
| | FITZ | 33.64 | 10.42 | 9.26 | 18.74 | 12.12 | 22.68 | 6.77 | 4.20 | 8.80 | 14.07 |
| | NMPE | 9.58 | 20.93 | 6.96 | 15.98 | 17.25 | 12.76 | 6.50 | 2.65 | 10.36 | 11.44 |
| | CONTOUR MEAN | 30.54 | 21.04 | 13.97 | 23.57 | 14.29 | 14.17 | 5.37 | 4.42 | 9.12 | |
| 20 | NMPW | 30.14 | 32.80 | 36.14 | 28.42 | 19.73 | 11.78 | 6.08 | 5.86 | 10.60 | 20.17 |
| | NMPP | 44.40 | 14.02 | 14.32 | 5.46 | 9.50 | 13.30 | 3.82 | 2.12 | 8.20 | 12.79 |
| | FITZ | 21.89 | 8.00 | 13.48 | 7.34 | 6.78 | 15.90 | 7.39 | 4.28 | 8.16 | 10.36 |
| | NMPE | 13.14 | 22.16 | 8.17 | 12.22 | 15.66 | 10.26 | 2.93 | 0.84 | 11.62 | 10.78 |
| | CONTOUR MEAN | 27.39 | 19.24 | 18.03 | 13.36 | 12.92 | 12.81 | 5.06 | 3.28 | 9.64 | |
| 40 | NMPW | 17.62 | 28.46 | 30.10 | 36.18 | 12.32 | 11.75 | 6.85 | 3.05 | 10.14 | 17.39 |
| | NMPP | 15.93 | 16.46 | 25.87 | 13.12 | 15.21 | 19.36 | 6.28 | 4.74 | 8.96 | 13.99 |
| | FITZ | 24.71 | 8.04 | 11.47 | 7.86 | 13.52 | 25.20 | 7.82 | 5.17 | 10.30 | 12.68 |
| | NMPE-S/50% | 11.74 | 25.30 | 7.24 | 10.10 | 8.12 | 7.00 | 5.30 | 2.06 | 13.34 | 10.02 |
| | 25% | 13.12 | 28.62 | 9.32 | 18.02 | 6.31 | 10.31 | 9.19 | 1.96 | 11.44 | 12.03 |
| | 1% | 10.82 | 24.32 | 14.02 | 8.08 | 13.50 | 9.36 | 5.68 | 3.40 | 10.43 | 11.07 |
| | CONTOUR MEAN ^c | 17.50 | 19.56 | 18.67 | 16.82 | 12.29 | 15.83 | 6.56 | 3.76 | 10.68 | |
| 60 | NMPW | 11.24 | 16.26 | 11.04 | 27.92 | 11.06 | 14.02 | 5.94 | 5.29 | 11.68 | 12.72 |
| | NMPP | 11.18 | 11.32 | 15.78 | 8.07 | 10.48 | 12.74 | 6.16 | 4.10 | 9.46 | 9.92 |
| | FITZ | 10.38 | 7.16 | 15.32 | 9.52 | 16.69 | 25.19 | 5.55 | 3.92 | 10.54 | 11.59 |
| | NMPE | 7.45 | 17.26 | 12.21 | 8.64 | 11.27 | 12.28 | 4.70 | 1.92 | 9.32 | 9.45 |
| | CONTOUR MEAN | 10.06 | 13.00 | 13.59 | 13.54 | 12.38 | 16.06 | 5.59 | 3.81 | 10.25 | |
| DAILY MEAN ^c | | 21.38 | 18.21 | 16.06 | 16.82 | 12.97 | 14.72 | 5.64 | 3.81 | 9.92 | |

^aC-14, 2 light and 1 dark bottle, mg C/m³/hr (day collections)

^bSurface collection except at the NMPE-40 ft station where samples were collected at three light transmittance levels

^cMean of surface samples

APPENDIX VB

ZOOPLANKTON

APPENDIX VB-1a

ABUNDANCE^a OF CALANOIDA IN ZOOPLANKTON^b COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT | DATE | | | | | | | | ANNUAL MEAN |
|-----------------------|--------------|--------|---------------------|--------|---------------------|---------------------|--------|--------|--------|----------------|
| | | 28 MAY | 17 JUN ^c | 28 JUL | 26 AUG ^d | 23 SEP ^e | 19 OCT | 16 NOV | 19 DEC | |
| 10 | NMPW | 0 | 0 | 0 | 0 | 2184 | 1396 | 5930 | 38 | 1193.5 |
| | NMPP | 0 | 0 | 0 | 1865 | 0 | 621 | 3807 | 21 | 789.2 |
| | FITZ | 0 | 0 | 0 | 0 | 2464 | 958 | 6467 | 133 | 1252.8 |
| | NMPE | 0 | 2241 | 4438 | 10973 | 656 | 715 | 1935 | 52 | 2626.2 |
| | CONTOUR MEAN | 0 | 560.2 | 1109.5 | 3209.5 | 1326.0 | 922.5 | 4534.8 | 61.0 | |
| 20 | NMPW | 0 | 2047 | 0 | 0 | 1423 | 2035 | 2190 | 27 | 965.2 |
| | NMPP | 1786 | 2434 | 0 | 1150 | 4181 | 5056 | 6809 | 280 | 2712.0 |
| | FITZ | 1741 | 0 | 1626 | 0 | 0 | 1343 | 6309 | 20 | 1379.9 |
| | NMPE | 0 | 1464 | 3037 | 6942 | 0 | 1416 | 4223 | 83 | 2145.6 |
| | CONTOUR MEAN | 881.8 | 1486.2 | 1165.8 | 2023.0 | 1401.0 | 2462.5 | 4882.8 | 102.5 | |
| 40 | NMPW | 0 | 0 | 0 | 0 | 642 | 2848 | 4485 | 136 | 1013.9 |
| | NMPP | 0 | 0 | 0 | 0 | 674 | 7624 | 4224 | 335 | 1607.1 |
| | FITZ | 0 | 0 | 0 | 0 | 1788 | 618 | 4971 | 34 | 926.4 |
| | NMPE | 0 | 3467 | 0 | 922 | 0 | 248 | 3439 | 68 | 1018.0 |
| | CONTOUR MEAN | 0 | 866.8 | 0 | 230.5 | 776.0 | 2834.5 | 4279.8 | 143.2 | |
| 60 | NMPW | 0 | 3467 | 0 | 719 | 1550 | 1991 | 0 | 0 | 965.9 |
| | NMPP | 0 | 1566 | 0 | 1159 | 1450 | 2438 | 1487 | 77 | 1022.1 |
| | FITZ | 842 | 266 | 0 | 1044 | 1170 | 999 | 1032 | 66 | 677.4 |
| | NMPE | 1018 | 1782 | 0 | 3259 | 1368 | 0 | 2723 | 72 | 1277.8 |
| | CONTOUR MEAN | 465.0 | 1770.2 | 0 | 1545.2 | 1384.5 | 1357.0 | 1310.5 | 53.8 | |
| DAILY MEAN | | 336.7 | 1170.9 | 568.8 | 1752.1 | 1221.9 | 1894.1 | 3751.9 | 90.1 | |

^aOrganisms/m³, mean of R-1 and R-2; juvenile stage

^bZooplankton collection with 12.7 cm Clarke-Bumpus, 76 µm mesh net

^cNMPW, NMPP and FITZ (all depth contours) sampled 18 Jun

^dNMPW (all depth contours), NMPP-10' and NMPP-20' sampled 27 Aug

^eNMPW, NMPP (all depth contours) and FITZ-60' R-2, sampled 6 Sep

APPENDIX VB-1b

ABUNDANCE^a OF CYCLOPOIDA IN ZOOPLANKTON^b COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT | DATE | | | | | | | | ANNUAL |
|-----------------------|--------------|---------|---------------------|----------|---------------------|---------------------|---------|----------|--------|----------|
| | | 28 MAY | 17 JUN ^c | 28 JUL | 26 AUG ^d | 23 SEP ^e | 19 OCT | 16 NOV | 19 DEC | MEAN |
| 10 | NMPW | 4200 | 5363 | 213997 | 10889 | 100017 | 54949 | 270517 | 2467 | 82799.9 |
| | NMPP | 10655 | 10608 | 111327 | 2409 | 97923 | 58278 | 193009 | 4125 | 61041.8 |
| | FITZ | 14406 | 12265 | 40646 | 14485 | 130036 | 10265 | 449724 | 3316 | 84392.9 |
| | NMPE | 3043 | 22420 | 41222 | 48477 | 69940 | 48648 | 272648 | 3727 | 63765.6 |
| | CONTOUR MEAN | 8076.0 | 12664.0 | 101798.0 | 19065.0 | 99479.0 | 43035.0 | 296474.5 | 3408.8 | |
| 20 | NMPW | 10300 | 17009 | 91316 | 15768 | 70437 | 59746 | 189601 | 1683 | 56982.5 |
| | NMPP | 14877 | 19843 | 59485 | 21285 | 93169 | 122394 | 255770 | 11591 | 74801.8 |
| | FITZ | 17471 | 34575 | 69675 | 49553 | 119379 | 50178 | 458349 | 2116 | 100162.0 |
| | NMPE | 10373 | 10495 | 158669 | 27646 | 73422 | 74915 | 213024 | 5078 | 71702.8 |
| | CONTOUR MEAN | 13255.2 | 20480.5 | 94786.2 | 28563.0 | 89101.8 | 76808.2 | 279186.0 | 5117.0 | |
| 40 | NMPW | 4628 | 24330 | 175104 | 16709 | 45903 | 59132 | 137661 | 3680 | 58393.4 |
| | NMPP | 9623 | 24195 | 196310 | 38672 | 97026 | 112420 | 204610 | 9331 | 86523.4 |
| | FITZ | 6862 | 24226 | 153207 | 20330 | 154980 | 74203 | 298893 | 3746 | 92055.9 |
| | NMPE | 16604 | 6752 | 106370 | 23308 | 170142 | 41811 | 160885 | 5389 | 66407.6 |
| | CONTOUR MEAN | 9429.2 | 19875.8 | 157747.8 | 24754.8 | 117012.8 | 71891.5 | 200512.2 | 5536.5 | |
| 60 | NMPW | 15370 | 33970 | 138680 | 15037 | 57714 | 50019 | 147467 | 2580 | 57604.6 |
| | NMPP | 23804 | 24350 | 135090 | 38089 | 78462 | 50472 | 198912 | 5030 | 69276.1 |
| | FITZ | 28442 | 10881 | 179917 | 41619 | 102423 | 85192 | 303004 | 2220 | 94212.2 |
| | NMPE | 8625 | 13921 | 156949 | 21124 | 125908 | 69883 | 147017 | 6931 | 68794.8 |
| | CONTOUR MEAN | 19060.2 | 20780.5 | 152659.0 | 28967.2 | 91126.8 | 63891.5 | 199100.0 | 4190.2 | |
| DAILY MEAN | | 12455.2 | 18450.2 | 126747.8 | 25337.5 | 99180.1 | 63906.6 | 243818.2 | 4563.1 | |

^a Organisms/m³, mean of R-1 and R-2; juvenile stage^b Zooplankton collection with 12.7 cm Clarke-Bumpus, 76 μ m mesh net^c NMPW, NMPP and FITZ (all depth contours) sampled 18 Jun.^d NMPW (all depth contours), NMPP-10' and NMPP-20' sampled 27 Aug^e NMPW and NMPP (all depth contours) and FITZ-60' R-2, sampled 26 Sep

APPENDIX VB-1c

ABUNDANCE^a OF COPEPODA NAUPLII IN ZOOPLANKTON^b COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT | DATE | | | | | | | | ANNUAL MEAN |
|-----------------------|--------------|---------|---------------------|----------|---------------------|---------------------|---------|---------|--------|----------------|
| | | 28 MAY | 17 JUN ^c | 28 JUL | 26 AUG ^d | 23 SEP ^e | 19 OCT | 16 NOV | 19 DEC | |
| 10 | NMPW | 13955 | 7566 | 38056 | 11653 | 45211 | 30796 | 19653 | 1860 | 21093.8 |
| | NMPP | 8272 | 4924 | 128803 | 13366 | 29663 | 31325 | 35691 | 3070 | 31889.2 |
| | FITZ | 27207 | 14785 | 121787 | 47669 | 48407 | 13512 | 21725 | 3183 | 37284.4 |
| | NMPE | 19132 | 11349 | 116367 | 128702 | 25026 | 26955 | 21338 | 1316 | 43773.1 |
| | CONTOUR MEAN | 17141.5 | 9656.0 | 101253.2 | 50347.5 | 37076.8 | 25647.0 | 24601.8 | 2357.2 | |
| 20 | NMPW | 52788 | 6123 | 95949 | 22953 | 30471 | 30567 | 25493 | 2656 | 33375.0 |
| | NMPP | 18448 | 8261 | 122329 | 42344 | 23292 | 32536 | 30802 | 4594 | 35325.8 |
| | FITZ | 27948 | 20152 | 126303 | 54458 | 54802 | 30329 | 51933 | 2056 | 45997.6 |
| | NMPE | 13122 | 16601 | 157484 | 72706 | 32723 | 27413 | 35299 | 2927 | 44784.4 |
| | CONTOUR MEAN | 28076.5 | 12784.2 | 125516.2 | 48115.3 | 35322.0 | 30211.2 | 35881.8 | 3058.2 | |
| 40 | NMPW | 6447 | 9895 | 204042 | 33733 | 29803 | 30084 | 38325 | 4094 | 44556.2 |
| | NMPP | 13121 | 19938 | 211413 | 32954 | 45171 | 75419 | 25986 | 3200 | 53400.2 |
| | FITZ | 10099 | 14489 | 122081 | 37679 | 67201 | 38961 | 42277 | 3245 | 42004.0 |
| | NMPE | 23939 | 3893 | 91709 | 57020 | 60956 | 15898 | 37566 | 3174 | 36769.4 |
| | CONTOUR MEAN | 13408.2 | 12053.2 | 157311.2 | 40346.5 | 50782.8 | 40090.5 | 36038.5 | 3428.2 | |
| 60 | NMPW | 15233 | 2771 | 151833 | 49098 | 21085 | 20704 | 32412 | 4012 | 37143.5 |
| | NMPP | 22322 | 4542 | 135085 | 41004 | 22810 | 23417 | 40189 | 3554 | 36615.4 |
| | FITZ | 28381 | 6904 | 120489 | 52918 | 24999 | 31868 | 71505 | 2307 | 42421.4 |
| | NMPE | 17345 | 10358 | 164522 | 60712 | 66706 | 48875 | 35600 | 3433 | 50943.9 |
| | CONTOUR MEAN | 20820.2 | 6143.8 | 142982.2 | 50933.0 | 33900 | 31216.0 | 44926.5 | 3326.5 | |
| DAILY MEAN | | 19861.6 | 10159.4 | 131765.8 | 47435.6 | 39270.4 | 31791.2 | 35362.1 | 3042.6 | |

^aOrganisms/m³, mean of R-1 and R-2^bZooplankton collection with 12.7 cm Clarke-Bumpus, 76 µm mesh net^cNMPW, NMPP and FITZ (all depth contours) sampled 18 Jun^dNMPW (all depth contours), NMPP-10' and NMPP-20' sampled 27 Aug^eNMPW and NMPP (all depth contours) and FITZ-60' R-2, sampled 26 Sep

APPENDIX VB-1d

ABUNDANCE^a OF COPEPODA^b IN ZOOPLANKTON^c COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT | DATE | | | | | | | | ANNUAL MEAN |
|-----------------------|--------------|---------|---------------------|----------|---------------------|---------------------|----------|----------|--------|----------------|
| | | 28 MAY | 17 JUN ^d | 28 JUL | 26 AUG ^e | 23 SEP ^f | 19 OCT | 16 NOV | 19 DEC | |
| 10 | NMPW | 18155 | 12929 | 254209 | 22542 | 150778 | 97336 | 307909 | 4625 | 108560.4 |
| | NMPP | 18927 | 15532 | 242288 | 17640 | 127586 | 101180 | 239310 | 7693 | 96269.5 |
| | FITZ | 41613 | 27050 | 165025 | 62154 | 182478 | 26158 | 507941 | 6839 | 127407.2 |
| | NMPE | 22175 | 36010 | 163852 | 188152 | 98246 | 82467 | 309581 | 5270 | 113219.1 |
| | CONTOUR MEAN | 25217.5 | 22880.2 | 206343.5 | 72622.0 | 139772.0 | 76785.2 | 341185.2 | 6106.8 | |
| 20 | NMPW | 63088 | 25179 | 187265 | 38721 | 111237 | 100915 | 230571 | 4570 | 95193.2 |
| | NMPP | 35111 | 30538 | 181814 | 66966 | 122434 | 176133 | 306779 | 17387 | 117145.2 |
| | FITZ | 47160 | 54727 | 197604 | 116236 | 174181 | 90125 | 540033 | 4219 | 153035.6 |
| | NMPE | 23495 | 28560 | 319190 | 110745 | 109694 | 112238 | 262844 | 8244 | 121876.2 |
| | CONTOUR MEAN | 42213.5 | 34751.0 | 221468.2 | 83167.0 | 129386.5 | 119852.8 | 335056.8 | 8605.0 | |
| 40 | NMPW | 11102 | 34225 | 379146 | 51146 | 79418 | 99208 | 186535 | 7990 | 106096.2 |
| | NMPP | 22744 | 44133 | 407723 | 85518 | 142871 | 218336 | 247492 | 14147 | 147870.5 |
| | FITZ | 16961 | 38715 | 275288 | 64456 | 225757 | 131717 | 351112 | 7234 | 138905.0 |
| | NMPE | 40543 | 14112 | 198079 | 84059 | 233130 | 61529 | 206763 | 8976 | 105898.9 |
| | CONTOUR MEAN | 22837.5 | 32796.2 | 315059.0 | 71294.8 | 170294.0 | 127697.5 | 247975.5 | 9586.8 | |
| 60 | NMPW | 30603 | 40208 | 293724 | 67654 | 82790 | 75853 | 191432 | 6592 | 98607.0 |
| | NMPP | 46126 | 30458 | 270175 | 86598 | 103345 | 87654 | 249450 | 8854 | 110332.5 |
| | FITZ | 57665 | 18051 | 300406 | 100386 | 128592 | 124608 | 394614 | 4593 | 141114.4 |
| | NMPE | 26988 | 26061 | 321471 | 86181 | 195280 | 141271 | 192285 | 10867 | 125050.5 |
| | CONTOUR MEAN | 40345.5 | 28694.5 | 296444.0 | 85200.2 | 127501.8 | 107346.5 | 256945.2 | 7726.5 | |
| DAILY MEAN | | 32653.5 | 29780.5 | 259828.7 | 78071.0 | 141738.6 | 107920.5 | 295290.7 | 8006.3 | |

^aOrganisms/m³, mean of R-1 and R-2^bNauplii, juvenile, and adults^cZooplankton collection with 12.7 cm Clarke-Bumpus, 76 μ m mesh net^dNMPW, NMPP and FITZ (all depth contours) sampled 18 Jun^eNMPW (all depth contours), NMPP-10' and NMPP-20' sampled 27 Aug^fNMPW and NMPP (all depth contours) and FITZ-60' R-2, sampled 26 Sep

APPENDIX VB-1e

ABUNDANCE^a OF CLADOCERA IN ZOOPLANKTON^b COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT | DATE | | | | | | | | ANNUAL MEAN |
|-----------------------|--------------|--------|---------------------|----------|---------------------|---------------------|---------|---------|--------|----------------|
| | | 28 MAY | 17 JUN ^c | 28 JUL | 26 AUG ^d | 23 SEP ^e | 19 OCT | 16 NOV | 19 DEC | |
| 10 | NMPW | 0 | 1903 | 256359 | 203681 | 184528 | 39300 | 60247 | 448 | 94208.2 |
| | NMPP | 1542 | 10513 | 762984 | 346912 | 31864 | 58603 | 88811 | 262 | 162686.4 |
| | FITZ | 1223 | 18232 | 768986 | 312616 | 67469 | 11838 | 68345 | 448 | 156144.6 |
| | NMPE | 1741 | 3783 | 460400 | 385462 | 31421 | 47113 | 95435 | 296 | 128206.4 |
| | CONTOUR MEAN | 1126.5 | 10407.8 | 562182.2 | 312167.8 | 78820.5 | 39213.5 | 78209.5 | 363.5 | |
| 20 | NMPW | 1292 | 16339 | 512437 | 145075 | 190235 | 35601 | 48327 | 422 | 118716.0 |
| | NMPP | 595 | 3909 | 743291 | 253508 | 17022 | 80161 | 105964 | 574 | 150628.0 |
| | FITZ | 1171 | 21559 | 469947 | 156372 | 80413 | 36836 | 64457 | 283 | 103879.8 |
| | NMPE | 1882 | 16349 | 1136033 | 200705 | 63197 | 63811 | 55467 | 394 | 192229.8 |
| | CONTOUR MEAN | 1235.0 | 14539.0 | 715427.0 | 188915.0 | 87716.8 | 54102.2 | 68553.8 | 418.2 | |
| 40 | NMPW | 0 | 11961 | 464583 | 73044 | 70099 | 31159 | 38222 | 499 | 86195.9 |
| | NMPP | 1203 | 9969 | 729207 | 78154 | 31226 | 98888 | 66982 | 737 | 127045.8 |
| | FITZ | 0 | 10770 | 404705 | 48346 | 91695 | 76054 | 105161 | 99 | 92103.8 |
| | NMPE | 870 | 5254 | 438338 | 84892 | 65075 | 45796 | 53884 | 298 | 86800.9 |
| | CONTOUR MEAN | 518.2 | 9488.5 | 509208.2 | 71109.0 | 64523.8 | 62974.2 | 66062.2 | 408.2 | |
| 60 | NMPW | 947 | 11785 | 405694 | 67132 | 33515 | 19144 | 40197 | 550 | 72370.5 |
| | NMPP | 1482 | 6185 | 496232 | 55290 | 21667 | 41564 | 73717 | 350 | 87060.9 |
| | FITZ | 0 | 8079 | 283382 | 102244 | 56619 | 68449 | 151000 | 274 | 83755.9 |
| | NMPE | 749 | 9422 | 386556 | 65319 | 59868 | 36453 | 53090 | 735 | 76524.0 |
| | CONTOUR MEAN | 794.5 | 8867.8 | 392966.0 | 72496.2 | 42917.2 | 41402.5 | 79501.0 | 477.2 | |
| DAILY MEAN | | 918.6 | 10825.8 | 544945.9 | 161172.0 | 68494.6 | 49423.1 | 73081.6 | 416.8 | |

^aOrganisms/m³, mean of R-1 and R-2^bZooplankton collection with 12.7 cm Clarke-Bumpus, 76 μ m mesh net^cNMPW, NMPP and FITZ (all depth contours) sampled 18 Jun.^dNMPW (all depth contours), NMPP-10' and NMPP-20' sampled 27 Aug^eNMPW and NMPP (all depth contours) and FITZ-60' R-2, sampled 26 Sep

ABUNDANCE^a OF PROTOZOA IN ZOOPLANKTON^b COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT | DATE | | | | | | | | ANNUAL |
|-----------------------|--------------|----------|---------------------|---------|---------------------|---------------------|---------|--------|--------|----------|
| | | 28 MAY | 17 JUN ^c | 28 JUL | 26 AUG ^d | 23 SEP ^e | 19 OCT | 16 NOV | 19 DEC | MEAN |
| 10 | NMPW | 133994 | 2870 | 7285 | 8882 | 2184 | 17006 | 0 | 78 | 21537.4 |
| | NMPP | 65871 | 19984 | 29987 | 15232 | 494 | 44813 | 1153 | 21 | 22194.4 |
| | FITZ | 105082 | 10608 | 2592 | 17909 | 20415 | 7638 | 0 | 54 | 20537.2 |
| | NMPE | 119553 | 37274 | 204196 | 60619 | 21642 | 30064 | 821 | 884 | 59381.6 |
| | CONTOUR MEAN | 106125.0 | 17684.0 | 61015.0 | 25660.5 | 11183.8 | 24880.2 | 493.5 | 259.2 | -- |
| 20 | NMPW | 60254 | 0 | 13989 | 29232 | 7336 | 25751 | 0 | 81 | 17080.4 |
| | NMPP | 51772 | 41523 | 18582 | 30033 | 8885 | 12722 | 0 | 0 | 20439.6 |
| | FITZ | 109607 | 0 | 10065 | 31710 | 2737 | 13156 | 2706 | 254 | 21279.4 |
| | NMPE | 125492 | 1464 | 147705 | 116390 | 24933 | 22076 | 0 | 280 | 54792.5 |
| | CONTOUR MEAN | 86781.2 | 10746.8 | 47585.2 | 51841.2 | 10972.8 | 18426.2 | 676.5 | 153.8 | -- |
| 40 | NMPW | 57001 | 0 | 4243 | 25659 | 2428 | 14761 | 0 | 476 | 13071.0 |
| | NMPP | 29407 | 1419 | 15692 | 12528 | 9667 | 13510 | 2424 | 555 | 10650.2 |
| | FITZ | 56676 | 29367 | 10352 | 41913 | 2803 | 11118 | 0 | 69 | 19037.2 |
| | NMPE | 48943 | 9947 | 77294 | 71244 | 61974 | 26869 | 2855 | 796 | 37490.4 |
| | CONTOUR MEAN | 48006.8 | 10183.2 | 26895.5 | 37836.0 | 19218.0 | 16564.5 | 1319.8 | 474.0 | -- |
| 60 | NMPW | 42323 | 1385 | 6525 | 74411 | 3402 | 35612 | 722 | 248 | 20578.5 |
| | NMPP | 49491 | 7830 | 23653 | 15573 | 54610 | 9357 | 715 | 0 | 20153.6 |
| | FITZ | 50796 | 23875 | 14998 | 75409 | 11659 | 27580 | 2064 | 1955 | 260452.0 |
| | NMPE | 67633 | 43818 | 28163 | 41236 | 16939 | 25787 | 715 | 341 | 28079.0 |
| | CONTOUR MEAN | 52560.8 | 19227.0 | 18334.8 | 51657.2 | 21652.5 | 24584.0 | 1054.0 | 636.0 | -- |
| DAILY MEAN | | 73368.4 | 14460.2 | 38457.6 | 41748.7 | 15756.8 | 21113.7 | 886.0 | 380.8 | -- |

^aOrganisms/m³, mean of R-1 and R-2

^bZooplankton collection with 12.7 cm Clarke-Bumpus, 76 μ m mesh net

^cNMPW, NMPP and FITZ (all depth contours) sampled 18 Jun

^dNMPW (all depth contours), NMPP-10' and NMPP-20' sampled 27 Aug

^eNMPW and NMPP (all depth contours) and FITZ-60' R-2, sampled 26 Sep

APPENDIX VB-1g

ABUNDANCE^a OF ROTIFERA IN ZOOPLANKTON^b COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT | DATE | | | | | | | | ANNUAL |
|-----------------------|--------------|----------|---------------------|----------|---------------------|---------------------|---------|---------|--------|----------|
| | | 28 MAY | 17 JUN ^c | 28 JUL | 26 AUG ^d | 23 SEP ^e | 19 OCT | 16 NOV | 19 DEC | MEAN |
| 10 | NMPW | 1088577 | 574284 | 295908 | 180837 | 503413 | 75467 | 34682 | 3814 | 344622.8 |
| | NMPP | 276430 | 1006980 | 820110 | 256300 | 124695 | 57362 | 55071 | 9305 | 325781.6 |
| | FITZ | 730254 | 624582 | 663240 | 519624 | 300386 | 47634 | 32100 | 8429 | 365781.1 |
| | NMPE | 647269 | 1347867 | 825359 | 1277938 | 91040 | 58273 | 38516 | 6112 | 536546.8 |
| | CONTOUR MEAN | 685632.5 | 888428.2 | 651154.2 | 558674.8 | 254884.5 | 59684.0 | 40092.2 | 6915.0 | - |
| 20 | NMPW | 756072 | 1034179 | 307632 | 306732 | 339354 | 73348 | 49819 | 8181 | 359414.6 |
| | NMPP | 362434 | 1006981 | 587610 | 615318 | 140059 | 74696 | 42283 | 9360 | 354842.6 |
| | FITZ | 616619 | 787119 | 456911 | 478708 | 295581 | 56338 | 58698 | 5311 | 378160.6 |
| | NMPE | 308200 | 1856136 | 1222112 | 859009 | 188973 | 53008 | 42087 | 11429 | 567619.2 |
| | CONTOUR MEAN | 510831.2 | 1171103.7 | 643566.2 | 632441.8 | 240991.8 | 64347.5 | 48221.8 | 8570.2 | - |
| 40 | NMPW | 366139 | 798589 | 376232 | 158604 | 146416 | 49233 | 45901 | 10864 | 243997.2 |
| | NMPP | 444923 | 1117436 | 717607 | 163941 | 134887 | 98591 | 44676 | 8414 | 341309.4 |
| | FITZ | 304971 | 699361 | 408004 | 197560 | 302770 | 50734 | 40101 | 8617 | 251514.8 |
| | NMPE | 457456 | 621529 | 490353 | 325363 | 307938 | 31929 | 54483 | 8369 | 287177.5 |
| | CONTOUR MEAN | 393372.2 | 809228.8 | 498049.0 | 211367.0 | 223002.8 | 57621.8 | 46290.2 | 9066.0 | - |
| 60 | NMPW | 431134 | 1015466 | 482649 | 192059 | 94733 | 42969 | 48220 | 9575 | 289600.6 |
| | NMPP | 489516 | 703013 | 664616 | 130590 | 78149 | 35859 | 49881 | 5610 | 269654.2 |
| | FITZ | 396501 | 463787 | 430099 | 225591 | 144947 | 58879 | 86693 | 7332 | 226728.6 |
| | NMPE | 451532 | 1040646 | 526537 | 167231 | 248311 | 52939 | 53809 | 7482 | 318560.9 |
| | CONTOUR MEAN | 442170.8 | 805728.0 | 525975.2 | 178867.8 | 141535.0 | 47661.5 | 59650.8 | 7499.8 | - |
| DAILY MEAN | | 508001.7 | 918622.2 | 579686.2 | 395337.9 | 215103.3 | 57328.7 | 48563.8 | 8012.8 | - |

^aOrganisms/m³, mean of R-1 and R-2^bZooplankton collection with 12.7 cm Clarke-Bumpus, 76 μ m mesh net^cNMPW, NMPP and FITZ (all depth contours) sampled 18 Jun^dNMPW (all depth contours), NMPP-10' and NMPP-20' sampled 27 Aug^eNMPW and NMPP (all depth contours) and FITZ-60' R-2, sampled 26 Sep

ABUNDANCE^a OF TOTAL ZOOPLANKTON^b

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT | DATE | | | | | | | | ANNUAL MEAN |
|-----------------------|--------------|----------|---------------------|-----------|---------------------|---------------------|----------|----------|----------|----------------|
| | | 28 MAY | 17 JUN ^c | 28 JUL | 26 AUG ^d | 23 SEP ^e | 19 OCT | 16 NOV | 19 DEC | |
| 10 | NMPW | 1240726 | 599186 | 813761 | 415942 | 840903 | 229109 | 402838 | 8965 | 568928.8 |
| | NMPP | 362770 | 1053009 | 1855369 | 636084 | 284639 | 261958 | 384345 | 17281 | 606931.9 |
| | FITZ | 878172 | 680472 | 1599843 | 912303 | 570748 | 93268 | 608386 | 15770 | 669870.2 |
| | NMPE | 790738 | 1424934 | 1653807 | 1912171 | 242349 | 217917 | 444353 | 12562 | 837353.9 |
| | CONTOUR MEAN | 818101.5 | 939400.2 | 1480695.0 | 969125.0 | 484659.8 | 200563.0 | 459980.5 | 136644.5 | |
| 20 | NMPW | 880706 | 1075697 | 1021323 | 519760 | 648162 | 235615 | 328717 | 13254 | 590404.2 |
| | NMPP | 449912 | 1082951 | 1531297 | 965825 | 288400 | 343712 | 455026 | 27321 | 643055.5 |
| | FITZ | 774557 | 863405 | 1134527 | 1053026 | 552912 | 196455 | 665894 | 10067 | 656355.4 |
| | NMPE | 459069 | 1902509 | 2825040 | 1286849 | 386797 | 251133 | 360398 | 20347 | 936517.8 |
| | CONTOUR MEAN | 641061.0 | 1231140.5 | 1628046.8 | 956365.0 | 469067.8 | 256728.8 | 452508.8 | 17747.2 | |
| 40 | NMPW | 434242 | 844775 | 1224204 | 308453 | 298361 | 194361 | 270658 | 19829 | 449360.4 |
| | NMPP | 498277 | 1172957 | 1870229 | 340141 | 318651 | 429325 | 361574 | 23853 | 626875.9 |
| | FITZ | 378608 | 778213 | 1098349 | 352275 | 623025 | 269623 | 496374 | 16019 | 501560.8 |
| | NMPE | 547812 | 650842 | 1204065 | 565558 | 668117 | 166123 | 317985 | 18439 | 517367.6 |
| | CONTOUR MEAN | 464734.8 | 861696.8 | 1349211.8 | 391606.8 | 477038.5 | 264858.0 | 361647.8 | 19535.0 | |
| 60 | NMPW | 505007 | 1068844 | 1188592 | 401256 | 214440 | 173578 | 280571 | 16965 | 481156.6 |
| | NMPP | 586615 | 747486 | 1454676 | 288051 | 257771 | 174434 | 373763 | 14814 | 487201.2 |
| | FITZ | 504962 | 513792 | 1028885 | 503630 | 341817 | 279516 | 634371 | 14154 | 477640.9 |
| | NMPE | 546902 | 1119947 | 1262727 | 359967 | 520398 | 256450 | 299899 | 19425 | 548214.4 |
| | CONTOUR MEAN | 535871.5 | 862517.2 | 1233720.0 | 388226.0 | 333606.5 | 220994.5 | 397151.0 | 16339.5 | |
| DAILY MEAN | | 614942.2 | 973688.7 | 1422918.3 | 676330.7 | 441093.2 | 235786.1 | 417822.0 | 16816.6 | |

^aOrganisms/m³, mean of R-1 and R-2^bZooplankton collection with 12.7 cm Clarke-Bumpus, 76 μ m mesh net^cNMPW, NMPP and FITZ (all depth contours) sampled 18 Jun^dNMPW (all depth contours), NMPP-10' and NMPP-20' sampled 27 Aug^eNMPW and NMPP (all depth contours) and FITZ-60' R-2, sampled 26 Sep

APPENDIX VB-2a

ABUNDANCE OF SELECTED SPECIES OF CLADOCERA

ABUNDANCE^a OF BOSMINA LONGIROSTRIS (CLADOCERA) IN ZOOPLANKTON^b COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT | DATE | | | | | | | | ANNUAL MEAN |
|-----------------------|--------------|--------|---------------------|----------|---------------------|---------------------|---------|---------|--------|----------------|
| | | 28 MAY | 17 JUN ^c | 28 JUL | 26 AUG ^d | 23 SEP ^e | 19 OCT | 16 NOV | 19 DEC | |
| 10 | NMPW | 0 | 9103 | 254872 | 186716 | 151597 | 15398 | 31411 | 347 | 81180.5 |
| | NMPP | 1542 | 10513 | 762984 | 324065 | 5442 | 28694 | 49016 | 145 | 147800.1 |
| | FITZ | 1223 | 17370 | 761209 | 270213 | 22079 | 8074 | 35149 | 394 | 139462.9 |
| | NMPE | 1741 | 3783 | 460400 | 346160 | 8908 | 27238 | 56510 | 296 | 113129.5 |
| | CONTOUR MEAN | 1126.5 | 10192.2 | 559866.2 | 281788.5 | 47006.5 | 19851.0 | 43021.5 | 295.5 | |
| 20 | NMPW | 1292 | 14980 | 512437 | 133233 | 165455 | 12581 | 28792 | 154 | 180615.5 |
| | NMPP | 595 | 3909 | 743291 | 214049 | 4480 | 31721 | 67509 | 574 | 133266.0 |
| | FITZ | 1171 | 21559 | 469947 | 128718 | 24632 | 16616 | 17668 | 256 | 85070.9 |
| | NMPE | 966 | 16349 | 1132403 | 156942 | 19736 | 22595 | 31267 | 140 | 172549.8 |
| | CONTOUR MEAN | 1006.0 | 14199.2 | 714519.5 | 158235.5 | 53575.8 | 20878.2 | 36309.0 | 281.0 | |
| 40 | NMPW | 0 | 11961 | 464583 | 64896 | 55894 | 10071 | 21462 | 472 | 78667.4 |
| | NMPP | 1203 | 9969 | 729207 | 67258 | 14689 | 35288 | 45244 | 508 | 112920.8 |
| | FITZ | 0 | 9582 | 397607 | 37471 | 33286 | 40804 | 86488 | 99 | 75667.1 |
| | NMPE | 870 | 5254 | 438338 | 72688 | 26843 | 18749 | 26371 | 210 | 73665.4 |
| | CONTOUR MEAN | 518.2 | 9191.5 | 507433.8 | 60578.2 | 32678.0 | 26228.0 | 44891.2 | 322.2 | |
| 60 | NMPW | 947 | 11785 | 404037 | 60740 | 14138 | 8032 | 20540 | 362 | 65072.6 |
| | NMPP | 741 | 6185 | 494227 | 47222 | 9015 | 14840 | 54882 | 246 | 78419.8 |
| | FITZ | 0 | 6889 | 282141 | 91789 | 16678 | 28666 | 107959 | 155 | 66784.6 |
| | NMPE | 749 | 8063 | 386556 | 53483 | 17572 | 14470 | 34032 | 636 | 64445.1 |
| | CONTOUR MEAN | 609.2 | 8230.5 | 391740.2 | 63308.5 | 14350.8 | 16502.0 | 54353.2 | 349.8 | |
| DAILY MEAN | | 815.0 | 10453.4 | 543389.9 | 140977.7 | 36902.8 | 20864.8 | 44643.8 | 312.1 | |

^aOrganisms/m³, mean of R-1 and R-2

^bZooplankton collection with 12.7 cm Clarke-Bumpus, 76µ m mesh net

^cNMPW, NMPP and FITZ (all depth contours) sampled 18 Jun

^dNMPW (all depth contours), NMPP-10' and NMPP-20' sampled 27 Aug

^eNMPW and NMPP (all depth contours) and FITZ-60' R-2, sampled 26 Sep

ABUNDANCE^a OF DAPHNIA RETROCURVA (CLADOCERA) IN ZOOPLANKTON^b COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT | DATE | | | | | | | | ANNUAL |
|-----------------------|--------------|--------|---------------------|--------|---------------------|---------------------|---------|---------|--------|---------|
| | | 28 MAY | 17 JUN ^c | 28 JUL | 26 AUG ^d | 23 SEP ^e | 19 OCT | 16 NOV | 19 DEC | MEAN |
| 10 | NMPW | 0 | 0 | 1487 | 13163 | 24198 | 21109 | 25549 | 38 | 10693.0 |
| | NMPP | 0 | 0 | 0 | 5595 | 24541 | 26531 | 35987 | 0 | 11581.8 |
| | FITZ | 0 | 0 | 0 | 14222 | 33503 | 1191 | 31243 | 0 | 10019.9 |
| | NMPE | 0 | 0 | 0 | 0 | 15628 | 17587 | 37459 | 0 | 8834.2 |
| | CONTOUR MEAN | 0.0 | 0.0 | 371.8 | 8245.0 | 24467.5 | 16604.5 | 32559.5 | 9.5 | |
| 20 | NMPW | 0 | 0 | 0 | 1796 | 8759 | 19433 | 18017 | 0 | 6000.6 |
| | NMPP | 0 | 0 | 0 | 21285 | 10302 | 38408 | 36229 | 0 | 13278.0 |
| | FITZ | 0 | 0 | 0 | 20790 | 43204 | 11987 | 46789 | 27 | 15349.6 |
| | NMPE | 0 | 0 | 3630 | 5765 | 29248 | 32122 | 21921 | 0 | 11585.8 |
| | CONTOUR MEAN | 0.0 | 0.0 | 907.5 | 12409.0 | 22878.2 | 25487.5 | 30739.0 | 6.8 | |
| 40 | NMPW | 0 | 0 | 0 | 2619 | 10493 | 14357 | 16062 | 0 | 5441.4 |
| | NMPP | 0 | 0 | 0 | 8715 | 16537 | 26746 | 19314 | 58 | 8921.2 |
| | FITZ | 0 | 0 | 7098 | 7923 | 43481 | 30302 | 15247 | 0 | 13006.4 |
| | NMPE | 0 | 0 | 0 | 4697 | 21763 | 21495 | 24645 | 88 | 9086.0 |
| | CONTOUR MEAN | 0.0 | 0.0 | 1774.5 | 5988.5 | 23068.5 | 23225.0 | 18817.0 | 36.5 | |
| 60 | NMPW | 0 | 0 | 1657 | 1041 | 12430 | 8336 | 18213 | 63 | 5217.5 |
| | NMPP | 0 | 0 | 2005 | 6909 | 8506 | 12618 | 17292 | 0 | 5916.2 |
| | FITZ | 0 | 0 | 1241 | 4391 | 24693 | 35260 | 37247 | 0 | 12854.0 |
| | NMPE | 0 | 0 | 0 | 6817 | 28968 | 15698 | 18343 | 0 | 8728.2 |
| | CONTOUR MEAN | 0.0 | 0.0 | 1225.8 | 4789.5 | 18649.2 | 17978.0 | 22773.8 | 15.8 | |
| DAILY MEAN | | 0.0 | 0.0 | 1069.9 | 7858.0 | 22265.9 | 20823.8 | 26222.3 | 17.1 | |

^a Organisms/m³, mean of R-1 and R-2

^b Zooplankton collection with 12.7 cm Clarke-Bumpus, 76µ m mesh net

^c NMPW, NMPP and FITZ (all depth contours) sampled 18 Jun

^d NMPW (all depth contours), NMPP-10' and NMPP-20' sampled 27 Aug

^e NMPW and NMPP (all depth contours) and FITZ-60' R-2, sampled 26 Sep

APPENDIX VB-2b

ABUNDANCE OF SELECTED SPECIES OF ROTIFERA

ABUNDANCE^a OF ASPLANCHNA PRIODONTA (ROTIFERA) IN ZOOPLANKTON^b COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT | DATE | | | | | | | | ANNUAL MEAN |
|-----------------------|--------------|---------|---------------------|---------|---------------------|---------------------|--------|---------|--------|----------------|
| | | 28 MAY | 17 JUN ^c | 28 JUL | 26 AUG ^d | 23 SEP ^e | 19 OCT | 16 NOV | 19 DEC | |
| 10 | NMPW | 12600 | 61196 | 4460 | 0 | 7232 | 4188 | 2626 | 282 | 11573.0 |
| | NMPP | 5305 | 100766 | 56531 | 0 | 1881 | 1068 | 9919 | 294.5 | 21970.5 |
| | FITZ | 10928 | 16508 | 58987 | 0 | 2803 | 726 | 2807 | 256 | 11626.9 |
| | NMPE | 2605 | 351140 | 27909 | 0 | 2569 | 1931 | 4573 | 195 | 48865.2 |
| | CONTOUR MEAN | 7859.5 | 132402.5 | 36971.8 | 0 | 3621.2 | 1978.2 | 4981.2 | 256.8 | |
| 20 | NMPW | 7087 | 130020 | 21970 | 0 | 2846 | 5193 | 12206 | 400 | 22465.2 |
| | NMPP | 0 | 103114 | 40361 | 0 | 822 | 816 | 11661 | 355 | 19641.1 |
| | FITZ | 180041 | 117283 | 14786 | 0 | 5995 | 1365 | 20106 | 262 | 42479.8 |
| | NMPE | 0 | 539939 | 75113 | 0 | 5927 | 5636 | 9062 | 436 | 79514.1 |
| | CONTOUR MEAN | 46782.0 | 222589.0 | 38057.5 | 0 | 3897.5 | 3252.5 | 13258.8 | 363.2 | |
| 40 | NMPW | 0 | 107134 | 58895 | 0 | 893 | 2868 | 20432 | 499 | 23840.1 |
| | NMPP | 13342 | 112415 | 42989 | 0 | 674 | 2956 | 13278 | 332 | 23248.3 |
| | FITZ | 2549 | 113924 | 14126 | 738 | 7392 | 1855 | 13367 | 261 | 19276.5 |
| | NMPE | 772 | 77671 | 38824 | 0 | 3040 | 4502 | 8884 | 473 | 16770.8 |
| | CONTOUR MEAN | 4165.8 | 102786.0 | 38708.5 | 184.5 | 2999.8 | 3045.3 | 13990.3 | 391.3 | |
| 60 | NMPW | 7631 | 113672 | 27551 | 0 | 0 | 1932 | 15724 | 261 | 20846.4 |
| | NMPP | 17956 | 60914 | 33672 | 0 | 0 | 4436 | 14206 | 449 | 16454.1 |
| | FITZ | 12507 | 67981 | 14716 | 0 | 1170 | 1263 | 21640 | 90 | 14920.9 |
| | NMPE | 4553 | 181724 | 38557 | 0 | 2595 | 2290 | 16610 | 332 | 30832.6 |
| | CONTOUR MEAN | 10661.8 | 106072.8 | 28624 | 0 | 941.2 | 2480.2 | 17045.0 | 283 | |
| DAILY MEAN | | 17367.3 | 140962.6 | 35590.5 | 46.1 | 2864.9 | 2689.1 | 12318.8 | 323.6 | |

^a Organisms/m³, mean of R-1 and R-2

^b Zooplankton collection with 12.7 cm Clarke-Bumpus, 76 μ m mesh net

^c NMPW, NMPP and FITZ (all depth contours) sampled 18 Jun

^d NMPW (all depth contours), NMPP-10' and NMPP-20' sampled 27 Aug

^e NMPW and NMPP (all depth contours) and FITZ-60' R-2, sampled 26 Sep

ABUNDANCE^a OF KELLICOTTIA LONGISPINA (ROTIFERA) IN ZOOPLANKTON^b COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT | DATE | | | | | | | | ANNUAL MEAN |
|-----------------------|--------------|---------|---------------------|--------|---------------------|---------------------|--------|--------|--------|----------------|
| | | 28 MAY | 17 JUN ^c | 28 JUL | 26 AUG ^d | 23 SEP ^e | 19 OCT | 16 NOV | 19 DEC | |
| 10 | NMPW | 25698 | 56908 | 2156 | 0 | 0 | 1058 | 0 | 364 | 10773.0 |
| | NMPP | 16637 | 107116 | 0 | 0 | 0 | 621 | 520 | 1044 | 15742.3 |
| | FITZ | 14406 | 49752 | 5185 | 0 | 0 | 247 | 1708 | 1082 | 9047.5 |
| | NMPE | 11733 | 392315 | 4438 | 0 | 0 | 0 | 1466 | 451 | 51300.4 |
| | CONTOUR MEAN | 17118.5 | 151522.8 | 2944.8 | 0 | 0 | 481.5 | 923.5 | 735.2 | |
| 20 | NMPW | 11244 | 156627 | 2446 | 0 | 0 | 375 | 1344 | 649 | 21585.6 |
| | NMPP | 10115 | 159313 | 1535 | 0 | 0 | 0 | 0 | 1087 | 21506.2 |
| | FITZ | 18642 | 75929 | 0 | 0 | 0 | 0 | 1353 | 529 | 12056.6 |
| | NMPE | 10324 | 304521 | 16964 | 0 | 0 | 0 | 0 | 1109 | 41614.8 |
| | CONTOUR MEAN | 12581.2 | 174097.5 | 5236.2 | 0 | 0 | 93.8 | 674.2 | 843.5 | |
| 40 | NMPW | 10164 | 121267 | 2597 | 0 | 0 | 946 | 1213 | 835 | 17127.8 |
| | NMPP | 18259 | 146597 | 7258 | 0 | 0 | 0 | 600 | 645 | 21669.9 |
| | FITZ | 20885 | 101500 | 5990 | 0 | 0 | 0 | 931 | 1114 | 16302.5 |
| | NMPE | 15539 | 132241 | 2021 | 0 | 0 | 0 | 863 | 426 | 18886.3 |
| | CONTOUR MEAN | 16211.8 | 125401.2 | 4466.5 | 0 | 0 | 236.5 | 901.8 | 755.0 | |
| 60 | NMPW | 20242 | 198240 | 9736 | 0 | 445 | 0 | 1204 | 802 | 28833.6 |
| | NMPP | 22899 | 114702 | 8819 | 0 | 0 | 0 | 1487 | 493 | 18550.0 |
| | FITZ | 22744 | 89025 | 2199 | 630 | 0 | 632 | 1931 | 820 | 14747.6 |
| | NMPE | 18748 | 202953 | 5148 | 0 | 0 | 0 | 2077 | 1272 | 28774.8 |
| | CONTOUR MEAN | 21158.2 | 151230.0 | 6475.5 | 157.5 | 111.2 | 158.0 | 1674.8 | 846.8 | |
| DAILY MEAN | | 16767.4 | 150562.9 | 4780.8 | 39.4 | 27.8 | 242.4 | 1043.6 | 795.1 | |

^a Organisms/m³, mean of R-1 and R-2

^b Zooplankton collection with 12.7 cm Clarke-Bumpus, 76 μ m mesh net

^c NMPW, NMPP and FITZ (all depth contours) sampled 18 Jun

^d NMPW (all depth contours), NMPP-10' and NMPP-20' sampled 27 Aug

^e NMPW and NMPP (all depth contours) and FITZ-60' R-2, sampled 26 Sep

ABUNDANCE^a OF KERATELLA COCHLEARIS (ROTIFERA) IN ZOOPLANKTON^b COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT | DATE | | | | | | | | ANNUAL |
|-----------------------|--------------|---------|---------------------|--------|---------------------|---------------------|--------|--------|--------|---------|
| | | 28 MAY | 17 JUN ^c | 28 JUL | 26 AUG ^d | 23 SEP ^e | 19 OCT | 16 NOV | 19 DEC | MEAN |
| 10 | NMPW | 125368 | 38412 | 0 | 1777 | 8233 | 3130 | 661 | 437 | 22252.2 |
| | NMPP | 40308 | 16574 | 7335 | 1477 | 3961 | 4447 | 0 | 874 | 9372.0 |
| | FITZ | 109245 | 43591 | 5185 | 9481 | 5266 | 2860 | 1099 | 1211 | 22242.2 |
| | NMPE | 109975 | 0 | 0 | 21945 | 656 | 3109 | 3107 | 980 | 17471.5 |
| | CONTOUR MEAN | 96224.0 | 24644.2 | 3130.0 | 8670.0 | 4529.0 | 3386.5 | 1216.8 | 875.5 | |
| 20 | NMPW | 73103 | 53744 | 0 | 1685 | 2920 | 13545 | 1431 | 342 | 18346.2 |
| | NMPP | 45229 | 50091 | 2655 | 20834 | 822 | 4241 | 624 | 706 | 15650.2 |
| | FITZ | 81026 | 37846 | 0 | 44527 | 2737 | 1835 | 2344 | 687 | 21375.2 |
| | NMPE | 62435 | 11707 | 3037 | 11529 | 3951 | 4247 | 1519 | 1135 | 12445.0 |
| | CONTOUR MEAN | 65448.2 | 38347.0 | 1423.0 | 19643.8 | 2607.5 | 5967.0 | 1479.5 | 717.5 | |
| 40 | NMPW | 76654 | 59588 | 0 | 2425 | 6671 | 4769 | 0 | 1000 | 18888.4 |
| | NMPP | 48220 | 66818 | 2321 | 5177 | 2728 | 4669 | 0 | 714 | 16330.9 |
| | FITZ | 55997 | 27829 | 0 | 25356 | 1401 | 4954 | 2793 | 525 | 14856.9 |
| | NMPE | 59254 | 5323 | 0 | 13170 | 12459 | 2770 | 1434 | 730 | 11892.5 |
| | CONTOUR MEAN | 60013.2 | 39889.5 | 580.2 | 11532.0 | 5814.8 | 4290.5 | 1056.8 | 742.2 | |
| 60 | NMPW | 56554 | 112982 | 0 | 3196 | 1479 | 3923 | 803 | 778 | 22464.4 |
| | NMPP | 68276 | 62871 | 0 | 21989 | 1450 | 1488 | 2916 | 264 | 19906.8 |
| | FITZ | 63047 | 29603 | 3439 | 16964 | 1170 | 1131 | 1931 | 797 | 14760.2 |
| | NMPE | 83959 | 23765 | 0 | 16255 | 7856 | 2821 | 2145 | 717 | 17189.8 |
| | CONTOUR MEAN | 67959.0 | 57305.2 | 859.8 | 14601.0 | 2988.8 | 2340.8 | 1948.8 | 639.0 | |
| DAILY MEAN | | 72415.6 | 40046.5 | 1498.2 | 13611.7 | 3985.0 | 3996.2 | 1425.4 | 743.6 | |

^aOrganisms/m³, mean of R-1 and R-2

^bZooplankton collection with 12.7 cm Clarke-Bumpus, 76µ m mesh net

^cNMPW, NMPP and FITZ (all depth contours) sampled 18 Jun

^dNMPW (all depth contours), NMPP-10' and NMPP-20' sampled 27 Aug

^eNMPW and NMPP (all depth contours) and FITZ-60' R-2, sampled 26 Sep

ABUNDANCE^a OF KERATELLA CRASSA (ROTIFERA) IN ZOOPLANKTON^b COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT | DATE | | | | | | | | ANNUAL MEAN |
|-----------------------|--------------|--------|---------------------|----------|---------------------|---------------------|--------|--------|--------|----------------|
| | | 28 MAY | 17 JUN ^c | 28 JUL | 26 AUG ^d | 23 SEP ^e | 19 OCT | 16 NOV | 19 DEC | |
| 10 | NMPW | 2349 | 2203 | 42888 | 45493 | 18830 | 6938 | 2609 | 335 | 15205.6 |
| | NMPP | 748 | 0 | 170453 | 94575 | 23154 | 3752 | 520 | 928 | 36766.2 |
| | FITZ | 0 | 1691 | 155244 | 187253 | 18045 | 5298 | 854 | 822 | 46150.9 |
| | NMPE | 0 | 14433 | 204036 | 114852 | 10821 | 6863 | 6038 | 705 | 44718.5 |
| | CONTOUR MEAN | 774.2 | 4581.8 | 143155.2 | 110543.2 | 17712.5 | 5712.8 | 2505.2 | 697.5 | |
| 20 | NMPW | 1607 | 3405 | 63722 | 77123 | 15947 | 4337 | 5052 | 416 | 21451.1 |
| | NMPP | 0 | 3393 | 156170 | 135893 | 21203 | 5056 | 5831 | 1019 | 41070.6 |
| | FITZ | 1171 | 1288 | 81479 | 216191 | 48742 | 7446 | 5050 | 506 | 45234.1 |
| | NMPE | 916 | 4390 | 169708 | 104980 | 11451 | 5880 | 0 | 337 | 37207.8 |
| | CONTOUR MEAN | 923.5 | 3119.0 | 117769.8 | 133546.8 | 24335.8 | 5679.8 | 3983.2 | 569.5 | |
| 40 | NMPW | 0 | 17290 | 50850 | 33053 | 9961 | 2858 | 2094 | 861 | 14620.9 |
| | NMPP | 547 | 9960 | 104252 | 40291 | 26739 | 8394 | 2418 | 1195 | 24224.5 |
| | FITZ | 882 | 6057 | 52280 | 67060 | 37490 | 4332 | 7167 | 508 | 21972.0 |
| | NMPE | 772 | 2532 | 120130 | 58907 | 33954 | 1356 | 4873 | 778 | 27912.8 |
| | CONTOUR MEAN | 550.2 | 8959.8 | 81878.0 | 49827.8 | 27036.0 | 4235.0 | 4138.0 | 835.5 | |
| 60 | NMPW | 0 | 0 | 67945 | 69063 | 14425 | 2413 | 5457 | 596 | 19987.4 |
| | NMPP | 3048 | 0 | 127065 | 44470 | 9435 | 565 | 6002 | 400 | 23873.1 |
| | FITZ | 842 | 266 | 47869 | 71356 | 10615 | 2893 | 12883 | 606 | 18416.2 |
| | NMPE | 1767 | 6281 | 48852 | 35131 | 54153 | 2821 | 7659 | 484 | 19643.5 |
| | CONTOUR MEAN | 1414.2 | 1636.8 | 72932.8 | 55005.0 | 22157.0 | 2173.0 | 8000.2 | 521.5 | |
| DAILY MEAN | | 915.6 | 4574.3 | 103933.9 | 87230.7 | 22810.3 | 4450.1 | 4656.7 | 656.0 | |

^a Organisms/m³, mean of R-1 and R-2

^b Zooplankton collection with 12.7 cm Clarke-Bumpus, 76 μ m mesh net

^c NMPW, NMPP and FITZ (all depth contours) sampled 18 Jun

^d NMPW (all depth contours), NMPP-10' and NMPP-20' sampled 27 Aug

^e NMPW and NMPP (all depth contours) and FITZ-60' R-2, sampled 26 Sep

ABUNDANCE^a OF KERATELLA EARLINAE (ROTIFERA) IN ZOOPLANKTON^b COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT | DATE | | | | | | | | ANNUAL MEAN |
|-----------------------|--------------|---------|---------------------|----------|---------------------|---------------------|---------|---------|--------|----------------|
| | | 28 MAY | 17 JUN ^c | 28 JUL | 26 AUG ^d | 23 SEP ^e | 19 OCT | 16 NOV | 19 DEC | |
| 10 | NMPW | 36310 | 289753 | 100866 | 3926 | 19150 | 7699 | 9810 | 497 | 58501.4 |
| | NMPP | 16848 | 454281 | 105939 | 7227 | 12377 | 5789 | 14821 | 1127 | 77301.1 |
| | FITZ | 20443 | 320425 | 27490 | 28707 | 35873 | 7693 | 14278 | 827 | 56967.0 |
| | NMPE | 9128 | 71304 | 70212 | 79685 | 7541 | 8687 | 12720 | 628 | 32488.1 |
| | CONTOUR MEAN | 20682.2 | 283940.8 | 76126.8 | 29886.2 | 18735.2 | 7467.0 | 12907.2 | 769.8 | |
| 20 | NMPW | 16756 | 432264 | 51108 | 7185 | 18719 | 7227 | 14221 | 1037 | 68564.6 |
| | NMPP | 11310 | 398322 | 63422 | 28884 | 13514 | 18264 | 12016 | 883 | 68326.9 |
| | FITZ | 10476 | 268768 | 107261 | 39029 | 24110 | 10557 | 17133 | 682 | 59752.0 |
| | NMPE | 12255 | 311461 | 144742 | 106157 | 22133 | 4438 | 16557 | 1813 | 77444.5 |
| | CONTOUR MEAN | 12699.2 | 352703.8 | 91633.2 | 45313.8 | 19610.0 | 10121.5 | 14981.8 | 1103.8 | |
| 40 | NMPW | 11160 | 328357 | 69723 | 2013 | 9600 | 11450 | 7276 | 1431 | 55126.2 |
| | NMPP | 23947 | 454043 | 113536 | 6267 | 13067 | 7301 | 11490 | 1402 | 78881.6 |
| | FITZ | 19809 | 314509 | 105290 | 16807 | 31499 | 6806 | 9941 | 866 | 63190.9 |
| | NMPE | 16800 | 140940 | 52366 | 33801 | 66677 | 2157 | 17794 | 872 | 41425.9 |
| | CONTOUR MEAN | 17929.0 | 309462.2 | 85228.8 | 14722.0 | 30210.8 | 6928.5 | 11625.2 | 1142.8 | |
| 60 | NMPW | 13422 | 350029 | 90525 | 10875 | 17008 | 7846 | 10189 | 841 | 62591.9 |
| | NMPP | 20179 | 258218 | 94210 | 15046 | 6523 | 5413 | 14206 | 1332 | 51890.9 |
| | FITZ | 23000 | 169067 | 139603 | 11714 | 35865 | 8180 | 26269 | 755 | 51806.6 |
| | NMPE | 18421 | 282915 | 117206 | 23820 | 28757 | 6649 | 9598 | 744 | 61013.8 |
| | CONTOUR MEAN | 18755.5 | 265057.2 | 110386.0 | 15363.8 | 22038.2 | 7022.0 | 15065.5 | 918.0 | |
| DAILY MEAN | | 17516.5 | 302791.0 | 90843.7 | 26321.4 | 22650.8 | 7884.8 | 13644.9 | 983.6 | |

^aOrganisms/m³, mean of R-1 and R-2

^bZooplankton collection with 12.7 cm Clarke-Bumpus, 76 μ m mesh net

^cNMPW, NMPP and FITZ (all depth contours) sampled 18 Jun

^dNMPW (all depth contours), NMPP-10' and NMPP-20' sampled 27 Aug

^eNMPW and NMPP (all depth contours) and FITZ-60' R-2, sampled 26 Sep

ABUNDANCE^a OF KERATELLA QUADRATA (ROTIFERA) IN ZOOPLANKTON^b COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT | DATE | | | | | | | | ANNUAL MEAN |
|-----------------------|--------------|---------|---------------------|---------|---------------------|---------------------|--------|--------|--------|----------------|
| | | 28 MAY | 17 JUN ^c | 28 JUL | 26 AUG ^d | 23 SEP ^e | 19 OCT | 16 NOV | 19 DEC | |
| 10 | NMPW | 131059 | 19743 | 3642 | 0 | 0 | 0 | 0 | 245 | 19336.1 |
| | NMPP | 41803 | 44797 | 11651 | 0 | 0 | 0 | 1153 | 299 | 12462.9 |
| | FITZ | 47190 | 10607 | 7973 | 0 | 0 | 0 | 0 | 285 | 8256.9 |
| | NMPE | 66537 | 82248 | 8875 | 0 | 0 | 0 | 645 | 51 | 19794.5 |
| | CONTOUR MEAN | 71647.2 | 39348.8 | 8035.2 | 0.0 | 0.0 | 0.0 | 449.5 | 220.0 | |
| 20 | NMPW | 75339 | 43581 | 2661 | 0 | 0 | 0 | 759 | 269 | 15326.1 |
| | NMPP | 49389 | 54208 | 1535 | 0 | 0 | 0 | 0 | 287 | 13177.4 |
| | FITZ | 85077 | 37490 | 2516 | 0 | 0 | 470 | 0 | 66 | 15702.4 |
| | NMPE | 42163 | 110428 | 13334 | 0 | 0 | 0 | 0 | 280 | 20775.6 |
| | CONTOUR MEAN | 62992.0 | 61426.8 | 5011.5 | 0.0 | 0.0 | 117.5 | 189.8 | 225.5 | |
| 40 | NMPW | 29584 | 21692 | 6586 | 0 | 0 | 0 | 0 | 333 | 7274.4 |
| | NMPP | 49529 | 52646 | 7552 | 0 | 0 | 0 | 0 | 426 | 13769.1 |
| | FITZ | 27359 | 24265 | 9833 | 710 | 0 | 0 | 0 | 380 | 7818.4 |
| | NMPE | 55201 | 30817 | 3741 | 2809 | 0 | 0 | 0 | 250 | 11602.2 |
| | CONTOUR MEAN | 40418.2 | 32355.0 | 6928.0 | 879.8 | 0.0 | 0.0 | 0.0 | 347.2 | |
| 60 | NMPW | 40292 | 55443 | 17815 | 1041 | 0 | 0 | 1444 | 226 | 14532.6 |
| | NMPP | 55023 | 32101 | 14428 | 0 | 0 | 0 | 0 | 104 | 12707.0 |
| | FITZ | 44647 | 22404 | 10036 | 0 | 0 | 0 | 0 | 173 | 9657.5 |
| | NMPE | 58106 | 71991 | 25540 | 0 | 0 | 0 | 0 | 233 | 19483.8 |
| | CONTOUR MEAN | 49517.0 | 45484.8 | 16954.8 | 260.2 | 0.0 | 0.0 | 361/0 | 184.0 | |
| DAILY MEAN | | 56143.6 | 44653.8 | 9232.4 | 285.0 | 0.0 | 29.4 | 250.1 | 244.2 | |

^a Organisms/m³, mean of R-1 and R-2

^b Zooplankton collection with 12.7 cm Clarke-Bumpus, 76 μ m mesh net

^c NMPW, NMPP and FITZ (all depth contours) sampled 18 Jun

^d NMPW (all depth contours), NMPP-10' and NMPP-20' sampled 27 Aug

^e NMPW and NMPP (all depth contours) and FITZ-60' R-2, sampled 26 Sep

ABUNDANCE^a OF PLOESOMA TRUNCATUM (ROTIFERA) IN ZOOPLANKTON^b COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT | DATE | | | | | | | | ANNUAL MEAN |
|-----------------------|--------------|--------|---------------------|----------|---------------------|---------------------|--------|--------|--------|----------------|
| | | 28 MAY | 17 JUN ^c | 28 JUL | 26 AUG ^d | 23 SEP ^e | 19 OCT | 16 NOV | 19 DEC | |
| 10 | NMPW | 0 | 0 | 71356 | 7106 | 191759 | 0 | 0 | 0 | 33777.6 |
| | NMPP | 0 | 0 | 249636 | 14067 | 1387 | 0 | 0 | 0 | 33126.2 |
| | FITZ | 0 | 862 | 153240 | 1844 | 24449 | 0 | 0 | 0 | 22549.4 |
| | NMPE | 0 | 2241 | 271883 | 35255 | 8197 | 608 | 0 | 0 | 39773.0 |
| | CONTOUR MEAN | 0.0 | 775.8 | 186528.8 | 14568.0 | 56448.0 | 152.0 | 0.0 | 0.0 | |
| 20 | NMPW | 1292 | 0 | 69516 | 10157 | 110647 | 643 | 0 | 0 | 24031.9 |
| | NMPP | 0 | 959 | 165922 | 11500 | 4405 | 0 | 0 | 0 | 22848.2 |
| | FITZ | 0 | 2576 | 87402 | 5361 | 15900 | 448 | 0 | 0 | 13960.9 |
| | NMPE | 0 | 1464 | 386311 | 17294 | 5524 | 0 | 0 | 0 | 51324.1 |
| | CONTOUR MEAN | 323.0 | 1249.8 | 177287.8 | 11078.0 | 34119.0 | 272.8 | 0.0 | 0.0 | |
| 40 | NMPW | 0 | 0 | 66939 | 5748 | 24306 | 483 | 0 | 0 | 12184.5 |
| | NMPP | 0 | 0 | 144626 | 3813 | 3436 | 0 | 0 | 0 | 18984.4 |
| | FITZ | 0 | 1188 | 89537 | 2214 | 21305 | 0 | 0 | 0 | 14280.5 |
| | NMPE | 0 | 1103 | 142054 | 6541 | 12405 | 0 | 0 | 0 | 20262.9 |
| | CONTOUR MEAN | 0.0 | 572.8 | 110789.0 | 4579.0 | 15363.0 | 120.8 | 0.0 | 0.0 | |
| 60 | NMPW | 0 | 0 | 83064 | 1041 | 2814 | 0 | 0 | 0 | 10864.9 |
| | NMPP | 0 | 0 | 87380 | 0 | 1869 | 0 | 0 | 0 | 11156.1 |
| | FITZ | 0 | 266 | 54355 | 3762 | 6585 | 7990 | 0 | 0 | 9119.8 |
| | NMPE | 0 | 0 | 66818 | 1423 | 5261 | 0 | 0 | 0 | 9187.8 |
| | CONTOUR MEAN | 0.0 | 66.5 | 72904.2 | 1556.5 | 4132.2 | 1997.5 | 0.0 | 0.0 | |
| DAILY MEAN | | 80.8 | 666.2 | 136877.4 | 7945.4 | 27515.6 | 635.8 | 0.0 | 0.0 | |

^aOrganisms/m³, mean of R-1 and R-2

^bZooplankton collection with 12.7 cm Clarke-Bumpus, 76µ m mesh net

^cNMPW, NMPP and FITZ (all depth contours) sampled 18 Jun

^dNMPW (all depth contours), NMPP-10' and NMPP-20' sampled 27 Aug

^eNMPW and NMPP (all depth contours) and FITZ-60' R-2, sampled 26 Sep

ABUNDANCE^a OF POLYARTHRA MAJOR (ROTIFERA) IN ZOOPLANKTON^b COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT | DATE | | | | | | | | ANNUAL MEAN |
|-----------------------|--------------|--------|---------------------|---------|---------------------|---------------------|---------|--------|--------|----------------|
| | | 28 MAY | 17 JUN ^c | 28 JUL | 26 AUG ^d | 23 SEP ^e | 19 OCT | 16 NOV | 19 DEC | |
| 10 | NMPW | 0 | 0 | 2973 | 15348 | 72273 | 13832 | 2609 | 87 | 13390.2 |
| | NMPP | 0 | 0 | 12948 | 15932 | 32063 | 9266 | 9571 | 912 | 10086.5 |
| | FITZ | 0 | 0 | 29494 | 25810 | 76428 | 9567 | 1099 | 25 | 17802.9 |
| | NMPE | 0 | 0 | 25837 | 38674 | 14316 | 12478 | 1466 | 0 | 11596.4 |
| | CONTOUR MEAN | 0.0 | 0.0 | 17813.0 | 23941.0 | 48770.0 | 11285.8 | 3686.2 | 256 | |
| 20 | NMPW | 0 | 0 | 5107 | 22842 | 39303 | 13277 | 0 | 521 | 10131.2 |
| | NMPP | 1190 | 6714 | 3070 | 33370 | 49421 | 16228 | 1247 | 513 | 13969.1 |
| | FITZ | 0 | 0 | 17303 | 82705 | 86993 | 15273 | 2344 | 118 | 25592.0 |
| | NMPE | 0 | 0 | 6667 | 57606 | 43077 | 10264 | 3321 | 1130 | 15258.1 |
| | CONTOUR MEAN | 297.5 | 1678.5 | 8036.8 | 49130.8 | 54698.5 | 13760.5 | 1728.0 | 570.5 | |
| 40 | NMPW | 908 | 0 | 11779 | 17801 | 16632 | 6731 | 0 | 393 | 6780.5 |
| | NMPP | 0 | 8550 | 55183 | 3813 | 27048 | 19594 | 3012 | 429 | 14703.6 |
| | FITZ | 0 | 0 | 8725 | 6475 | 68504 | 14845 | 931 | 976 | 12557.0 |
| | NMPE | 0 | 1103 | 12942 | 21598 | 68495 | 4254 | 6586 | 0 | 14372.2 |
| | CONTOUR MEAN | 227.0 | 2413.2 | 22157.2 | 12421.8 | 45169.8 | 11356.0 | 2632.2 | 449.5 | |
| 60 | NMPW | 0 | 0 | 35630 | 8794 | 28620 | 6699 | 4331 | 1137 | 10651.4 |
| | NMPP | 2800 | 1566 | 18438 | 2892 | 20522 | 5538 | 1430 | 494 | 6710.0 |
| | FITZ | 0 | 1190 | 14716 | 18407 | 35262 | 16962 | 1032 | 767 | 11042.0 |
| | NMPE | 0 | 3141 | 15245 | 4308 | 52363 | 5642 | 1939 | 0 | 10329.8 |
| | CONTOUR MEAN | 700.0 | 1474.2 | 21007.2 | 8600.2 | 34191.8 | 8710.2 | 2183.0 | 599.5 | |
| DAILY MEAN | | 306.1 | 1391.5 | 17253.6 | 23523.4 | 45707.5 | 11278.1 | 2557.4 | 468.9 | |

^aOrganisms/m³, mean of R-1 and R-2

^bZooplankton collection with 12.7 cm Clarke-Bumpus, 76µ m mesh net

^cNMPW, NMPP and FITZ (all depth contours) sampled 18 Jun

^dNMPW (all depth contours), NMPP-10' and NMPP-20' sampled 27 Aug

^eNMPW and NMPP (all depth contours) and FITZ-60' R-2, sampled 26 Sep

ABUNDANCE^a OF POLYARTHRA VULGARIS (ROTIFERA) IN ZOOPLANKTON^b COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT | DATE | | | | | | | | ANNUAL |
|-----------------------|--------------|--------|---------------------|---------|---------------------|---------------------|--------|--------|--------|---------|
| | | 28 MAY | 17 JUN ^c | 28 JUL | 26 AUG ^d | 23 SEP ^e | 19 OCT | 16 NOV | 19 DEC | MEAN |
| 10 | NMPW | 2349 | 5073 | 19549 | 4690 | 3366 | 5626 | 9166 | 257 | 6259.5 |
| | NMPP | 0 | 9377 | 72060 | 9092 | 6136 | 5341 | 8418 | 344 | 13846.0 |
| | FITZ | 2637 | 5072 | 124379 | 72689 | 27128 | 7405 | 3052 | 1207 | 30446.1 |
| | NMPE | 1741 | 0 | 92647 | 222603 | 8798 | 3504 | 2286 | 1247 | 41603.2 |
| | CONTOUR MEAN | 1681.8 | 4880.5 | 77158.8 | 77268.5 | 11357.0 | 5469.0 | 5730.5 | 763.8 | |
| 20 | NMPW | 3874 | 8187 | 57330 | 17850 | 5913 | 6371 | 6220 | 875 | 13327.5 |
| | NMPP | 595 | 8261 | 46790 | 74473 | 4031 | 7666 | 2983 | 698 | 18187.1 |
| | FITZ | 5254 | 5390 | 63483 | 59561 | 33950 | 6059 | 2344 | 780 | 22102.6 |
| | NMPE | 0 | 1464 | 191561 | 78591 | 20981 | 3430 | 4223 | 694 | 37618.0 |
| | CONTOUR MEAN | 2430.8 | 5825.5 | 89791.0 | 57618.8 | 16218.8 | 5881.5 | 3942.5 | 761.8 | |
| 40 | NMPW | 938 | 4540 | 47370 | 5942 | 7533 | 7627 | 6064 | 1095 | 10138.6 |
| | NMPP | 2186 | 7140 | 85357 | 26687 | 7475 | 4346 | 4230 | 547 | 17246.0 |
| | FITZ | 5883 | 2454 | 44144 | 13061 | 44738 | 3709 | 2178 | 639 | 14600.8 |
| | NMPE | 870 | 13178 | 29323 | 37620 | 35344 | 2899 | 4873 | 2049 | 15769.5 |
| | CONTOUR MEAN | 2469.2 | 6828.0 | 51548.5 | 20827.5 | 23772.5 | 4645.2 | 4336.2 | 1082.5 | |
| 60 | NMPW | 3898 | 13178 | 86481 | 4558 | 9975 | 7601 | 1926 | 880 | 16062.1 |
| | NMPP | 4530 | 6185 | 105028 | 17950 | 6841 | 7851 | 5231 | 154 | 19221.2 |
| | FITZ | 0 | 266 | 48041 | 27235 | 12648 | 5758 | 14815 | 719 | 13685.2 |
| | NMPE | 6320 | 4500 | 99437 | 21686 | 31704 | 7346 | 5817 | 573 | 22172.9 |
| | CONTOUR MEAN | 3687.0 | 6032.2 | 84746.8 | 17857.2 | 15292.0 | 7139.0 | 6947.2 | 581.5 | |
| DAILY MEAN | | 2567.2 | 5891.6 | 75811.3 | 43393.0 | 16660.1 | 5783.7 | 5239.1 | 797.4 | |

^aOrganisms/m³, mean of R-1 and R-2

^bZooplankton collection with 12.7 cm Clarke-Bumpus, 76μ m mesh net

^cNMPW, NMPP and FITZ (all depth contours) sampled 18 Jun

^dNMPW (all depth contours), NMPP-10' and NMPP-20' sampled 27 Aug

^eNMPW and NMPP (all depth contours) and FITZ-60' R-2, sampled 26 Sep

ABUNDANCE^a OF SYNCHAETA LACROWITZIANA (ROTIFERA) IN ZOOPLANKTON^b COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT | DATE | | | | | | | | ANNUAL MEAN |
|-----------------------|--------------|----------|---------------------|--------|---------------------|---------------------|--------|--------|--------|----------------|
| | | 28 MAY | 17 JUN ^c | 28 JUL | 26 AUG ^d | 23 SEP ^e | 19 OCT | 16 NOV | 19 DEC | |
| 10 | NMPW | 405232 | 6696 | 0 | 0 | 0 | 0 | 0 | 432 | 51545.0 |
| | NMPP | 71992 | 4830 | 0 | 0 | 0 | 0 | 0 | 1612 | 9804.2 |
| | FITZ | 373322 | 431 | 0 | 0 | 0 | 0 | 0 | 1078 | 46854.0 |
| | NMPE | 303405 | 53383 | 0 | 0 | 0 | 0 | 0 | 1022 | 44726.2 |
| | CONTOUR MEAN | 288487.8 | 16335.0 | 0 | 0 | 0 | 0 | 0 | 1036.0 | |
| 20 | NMPW | 307120 | 4076 | 0 | 0 | 0 | 0 | 0 | 1193 | 39048.6 |
| | NMPP | 103552 | 4796 | 0 | 0 | 0 | 0 | 0 | 2041 | 13798.6 |
| | FITZ | 215667 | 0 | 0 | 0 | 0 | 0 | 0 | 414 | 27010.0 |
| | NMPE | 94618 | 53940 | 0 | 0 | 0 | 0 | 1519 | 2456 | 19066.6 |
| | CONTOUR MEAN | 180239.2 | 15703.0 | 0 | 0 | 0 | 0 | 379.8 | 1526.0 | |
| 40 | NMPW | 132042 | 1033 | 0 | 0 | 0 | 483 | 0 | 2246 | 16976.0 |
| | NMPP | 147730 | 5685 | 0 | 0 | 0 | 0 | 0 | 1292 | 19338.0 |
| | FITZ | 99231 | 0 | 0 | 0 | 0 | 0 | 0 | 1168 | 12550.0 |
| | NMPE | 170231 | 7786 | 0 | 0 | 0 | 0 | 0 | 1358 | 22422.0 |
| | CONTOUR MEAN | 137308.5 | 3626.0 | 0 | 0 | 0 | 120.8 | 0 | 1516.0 | |
| 60 | NMPW | 159917 | 2082 | 0 | 0 | 0 | 0 | 0 | 1179. | 20397.2 |
| | NMPP | 147687 | 1566 | 0 | 0 | 0 | 0 | 0 | 483 | 18717.0 |
| | FITZ | 115209 | 3571 | 0 | 0 | 0 | 0 | 0 | 1230 | 15001.2 |
| | NMPE | 129119 | 12139 | 0 | 0 | 0 | 0 | 0 | 1191 | 17806.1 |
| | CONTOUR MEAN | 137983.0 | 4839.5 | 0 | 0 | 0 | 0 | 0 | 1020.8 | |
| DAILY MEAN | | 186004.6 | 10125.9 | 0 | 0 | 0 | 30.2 | 95.0 | 1274.7 | |

^aOrganisms/m³, mean of R-1 and R-2

^bZooplankton collection with 12.7 cm Clarke-Bumpus, 76 μ m mesh net

^cNMPW, NMPP and FITZ (all depth contours) sampled 18 Jun

^dNMPW (all depth contours), NMPP-10' and NMPP-20' sampled 27 Aug

^eNMPW and NMPP (all depth contours) and FITZ-60' R-2, sampled 26 Sep

ABUNDANCE^a OF SYNCHAETA PECTINATA (ROTIFERA) IN ZOOPLANKTON^b COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT | DATE. | | | | | | | | ANNUAL |
|-----------------------|--------------|---------|---------------------|--------|---------------------|---------------------|--------|--------|--------|---------|
| | | 28 MAY | 17 JUN ^c | 28 JUL | 26 AUG ^d | 23 SEP ^e | 19 OCT | 16 NOV | 19 DEC | MEAN |
| 10 | NMPW | 43219 | 0 | 0 | 0 | 0 | 8587 | 3914 | 404 | 7015.5 |
| | NMPP | 35144 | 4924 | 0 | 0 | 0 | 10682 | 4497 | 936 | 7022.9 |
| | FITZ | 23921 | 0 | 0 | 0 | 0 | 0 | 0 | 867 | 3098.5 |
| | NMPE | 36927 | 21577 | 0 | 0 | 0 | 5221 | 821 | 448 | 8124.2 |
| | CONTOUR MEAN | 34802.8 | 6625.2 | 0 | 0 | 0 | 6122.5 | 2308.0 | 663.8 | - |
| 20 | NMPW | 55717 | 0 | 0 | 0 | 0 | 8941 | 2774 | 861 | 8536.6 |
| | NMPP | 46420 | 4425 | 0 | 0 | 0 | 0 | 3337 | 1340 | 6940.2 |
| | FITZ | 64662 | 0 | 0 | 0 | 0 | 0 | 7033 | 694 | 9048.6 |
| | NMPE | 41492 | 29187 | 0 | 3451 | 0 | 3839 | 1661 | 565 | 10024.4 |
| | CONTOUR MEAN | 52072.8 | 8403.0 | 0 | 862.8 | 0 | 3195.0 | 3701.2 | 865.0 | - |
| 40 | NMPW | 18600 | 2066 | 0 | 0 | 0 | 0 | 0 | 1186 | 2731.5 |
| | NMPP | 46145 | 0 | 0 | 0 | 0 | 0 | 2418 | 800 | 6170.4 |
| | FITZ | 35597 | 2454 | 0 | 0 | 2803 | 0 | 0 | 892 | 5218.2 |
| | NMPE | 59461 | 6615 | 0 | 0 | 0 | 1108 | 2005 | 580 | 8721.1 |
| | CONTOUR MEAN | 39950.8 | 2783.8 | 0 | 0 | 700.8 | 277.0 | 1105.8 | 864.8 | - |
| 60 | NMPW | 35365 | 0 | 0 | 0 | 0 | 2413 | 722 | 1280 | 4972.5 |
| | NMPP | 60294 | 0 | 0 | 0 | 0 | 0 | 1430 | 766 | 7811.2 |
| | FITZ | 51907 | 3711 | 0 | 0 | 0 | 0 | 2064 | 940 | 7327.8 |
| | NMPE | 53015 | 8576 | 0 | 0 | 0 | 8718 | 0 | 924 | 8904.1 |
| | CONTOUR MEAN | 50145.2 | 3071.8 | 0 | 0 | 0 | 2782.8 | 1054.0 | 977.5 | - |
| DAILY MEAN | | 44242.9 | 5221.0 | 0 | 215.7 | 175.2 | 3094.2 | 2042.2 | 842.7 | - |

^aOrganisms/m³, mean of R-1 and R-2

^bZooplankton collection with 12.7 cm Clarke-Bumpus, 76 μ m mesh net

^cNMPW, NMPP and FITZ (all depth contours) sampled 18 Jun

^dNMPW (all depth contours), NMPP-10' and NMPP-20' sampled 27 Aug

^eNMPW and NMPP (all depth contours) and FITZ-60' R-2, sampled 26 Sep

ABUNDANCE^a OF SYNCHAETA STYLATA (ROTIFERA) IN ZOOPLANKTON^b COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT | DATE | | | | | | | | ANNUAL MEAN |
|-----------------------|--------------|--------|---------------------|---------|---------------------|---------------------|---------|--------|--------|----------------|
| | | 28 MAY | 17 JUN ^c | 28 JUL | 26 AUG ^d | 23 SEP ^e | 19 OCT | 16 NOV | 19 DEC | |
| 10 | NMPW | 1852 | 67775 | 8771 | 10516 | 146772 | 7445 | 0 | 49 | 30397.5 |
| | NMPP | 0 | 217055 | 6474 | 28521 | 16325 | 9266 | 1673 | 0 | 34914.2 |
| | FITZ | 1414 | 159929 | 26706 | 9745 | 75751 | 6376 | 2198 | 0 | 35264.9 |
| | NMPE | 0 | 292671 | 44623 | 37505 | 21967 | 3824 | 0 | 0 | 50073.8 |
| | CONTOUR MEAN | 816.5 | 184357.5 | 21643.5 | 21571.8 | 65203.8 | 6727.8 | 967.8 | 12.2 | . |
| 20 | NMPW | 3874 | 138913 | 3776 | 13638 | 125614 | 4605 | 0 | 0 | 36302.5 |
| | NMPP | 1191 | 166841 | 4190 | 11387 | 20904 | 14677 | 2848 | 0 | 27754.8 |
| | FITZ | 1741 | 203296 | 13316 | 3858 | 41118 | 5950 | 0 | 0 | 33659.9 |
| | NMPE | 0 | 408942 | 49705 | 11529 | 45107 | 9066 | 760 | 0 | 65638.6 |
| | CONTOUR MEAN | 1701.5 | 229498.0 | 17746.8 | 10103.0 | 58185.8 | 8574.5 | 902.0 | 0 | . |
| 40 | NMPW | 2754 | 89219 | 3293 | 5238 | 56756 | 7184 | 5366 | 0 | 21226.2 |
| | NMPP | 2296 | 188083 | 7258 | 2997 | 29033 | 38889 | 0 | 0 | 33569.5 |
| | FITZ | 2549 | 95483 | 5990 | 0 | 61741 | 9282 | 931 | 30 | 22000.8 |
| | NMPE | 870 | 154186 | 30224 | 7507 | 32938 | 6599 | 0 | 0 | 29040.5 |
| | CONTOUR MEAN | 2117.2 | 131742.8 | 11691.2 | 3935.5 | 45117.0 | 15488.5 | 1574.2 | 7.5 | . |
| 60 | NMPW | 3815 | 108145 | 11290 | 2081 | 962 | 3501 | 803 | 0 | 16324.6 |
| | NMPP | 4038 | 97712 | 16833 | 574 | 16580 | 6130 | 715 | 0 | 17822.8 |
| | FITZ | 1037 | 62770 | 1241 | 3977 | 26078 | 11675 | 2064 | 0 | 13605.2 |
| | NMPE | 749 | 212614 | 17967 | 5394 | 29250 | 2821 | 1362 | 0 | 33769.6 |
| | CONTOUR MEAN | 2409.8 | 120310.2 | 11832.8 | 3006.5 | 18217.5 | 6031.8 | 1236.0 | 0 | . |
| DAILY MEAN | | 1761.2 | 166477.1 | 15728.6 | 9654.2 | 46681.0 | 9205.6 | 1170.0 | 4.9 | . |

^a Organisms/m³, mean of R-1 and R-2

^b Zooplankton collection with 12.7 cm Clarke-Bumpus, 76 μ m mesh net

^c NMPW, NMPP and FITZ (all depth contours) sampled 18 Jun

^d NMPW (all depth contours), NMPP-10' and NMPP-20' sampled 27 Aug

^e NMPW and NMPP (all depth contours) and FITZ-60' R-2, sampled 26 Sep

APPENDIX VC
MACROZOOPLANKTON AND ICHTHYOPLANKTON

APPENDIX VC-1a

ABUNDANCE OF SELECTED TAXA OF MACROZOOPLANKTON IN DAY
COLLECTIONS

ABUNDANCE^a OF CHAOBORUS IN DAY MACROZOOPLANKTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT | 80 FT | 100 FT | GRAND |
|-------------------------|--------------|---------------------|--------|----------|----------|--------|--------|------|---------------------|--------|----------|----------|--------|--------|------|-------|-------|--------|-------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | NMPP | NMPP | NMPP | MEAN |
| 16 JUN | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 6 | 0.4 |
| | B | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2 | 0.1 |
| GRAND MEAN ^b | S | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | |
| | M | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.7 | |
| | B | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.2 | |

None collected 14 Apr, 13 May, and 15 Jul - 10 Dec

^a Number of organisms/1000 m³

^b April-December sampling period

S = Surface sample

M = Mid-depth sample

B = Bottom sample

ABUNDANCE^a OF DIPTERA IN DAY MACROZOOPLANKTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | | 60 FT | 80 FT | 100 FT | GRAND MEAN |
|-------------------------|--------------|---------------------|--------|----------|----------|--------|--------|------|--------|---------------------|----------|----------|--------|--------|------|------|------|-------|-------|--------|------------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | NMPP | NMPP | NMPP | | | |
| 14 APR | S | 0 | 0 | 0 | 5 | 0 | 0 | 0.8 | 5 | 0 | 0 | 0 | 0 | 5 | 1.7 | 0 | 0 | 0 | 1.0 | | |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 6 | 6 | 0 | 2.0 | 0 | 0 | 0 | 0.8 | | |
| | B | 0 | 0 | 5 | 11 | 0 | 0 | 2.7 | 0 | 0 | 0 | 6 | 0 | 5 | 1.8 | 0 | 0 | 0 | 1.8 | | |
| | MEAN | 0 | 0 | 1.7 | 5.3 | 0 | 0 | 1.2 | 1.7 | 0 | 0 | 4 | 2 | 3.3 | 1.8 | 0 | 0 | 0 | 1.2 | | |
| 13 MAY | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | | |
| | M | 0 | 0 | 5 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.3 | | |
| | B | 0 | 5 | 0 | 0 | 0 | 0 | 0.8 | 0 | 5 | 0 | 0 | 0 | 5 | 1.7 | 5 | 0 | 0 | 1.3 | | |
| | MEAN | 0 | 1.7 | 1.7 | 0 | 0 | 0 | 0.6 | 0 | 1.7 | 0 | 0 | 0 | 1.7 | 0.6 | 1.7 | 0 | 0 | 0.6 | | |
| 16 JUN | S | 15 | 6 | 0 | 0 | 0 | 0 | 3.5 | 0 | 0 | 0 | 6 | 0 | 0 | 1.0 | 0 | 0 | 0 | 1.8 | | |
| | M | 15 | 0 | 0 | 7 | 5 | 0 | 4.5 | 20 | 0 | 0 | 0 | 5 | 0 | 4.2 | 0 | 0 | 12 | 4.3 | | |
| | B | 0 | 0 | 16 | 0 | 0 | 0 | 2.7 | 5 | 0 | 0 | 0 | 0 | 50 | 9.2 | 0 | 0 | 0 | 4.7 | | |
| | MEAN | 10 | 2 | 5.3 | 2.3 | 1.7 | 0 | 3.6 | 8.3 | 0 | 0 | 2 | 1.7 | 16.7 | 4.8 | 0 | 0 | 4 | 3.6 | | |
| 15 JUL | S | 16 | 34 | 0 | 0 | 6 | 16 | 12.0 | 16 | 8 | 0 | 5 | 0 | 6 | 5.8 | 5 | 0 | 0 | 7.5 | | |
| | M | 5 | 18 | 9 | 0 | 0 | 0 | 5.3 | 7 | 0 | 0 | 7 | 0 | 5 | 3.2 | 0 | 0 | 0 | 3.4 | | |
| | B | 5 | 30 | 0 | 0 | 14 | 0 | 8.2 | 5 | 16 | 5 | 4 | 9 | 10 | 8.2 | 4 | 0 | 0 | 6.8 | | |
| | MEAN | 8.7 | 27.3 | 3 | 0 | 6.7 | 5.3 | 8.5 | 9.3 | 8.0 | 1.7 | 5.3 | 3 | 7.0 | 5.7 | 3 | 0 | 0 | 5.9 | | |
| 18 AUG | S | 27 | 10 | 7 | 43 | 21 | 15 | 20.5 | 0 | 4 | 5 | 37 | 10 | 19 | 12.5 | 12 | 0 | 0 | 14.0 | | |
| | M | 14 | 11 | 5 | 21 | 10 | 14 | 12.5 | 10 | 0 | 5 | 4 | 5 | 0 | 4.0 | 7 | 4 | 0 | 7.3 | | |
| | B | 21 | 16 | 5 | 15 | 35 | 15 | 17.8 | 4 | 0 | 0 | 5 | 0 | 7 | 2.7 | 0 | 10 | 14 | 9.8 | | |
| | MEAN | 20.7 | 12.3 | 5.7 | 26.3 | 22.0 | 14.7 | 16.9 | 4.7 | 1.3 | 3.3 | 15.3 | 5.0 | 8.7 | 6.4 | 6.3 | 4.7 | 4.7 | 10.4 | | |
| 8 SEP | S | 44 | 5 | 6 | 0 | 24 | 0 | 13.2 | 21 | 94 | 10 | 23 | 5 | 5 | 26.3 | 5 | 0 | 0 | 16.1 | | |
| | M | 55 | 0 | 5 | 0 | 13 | 0 | 12.2 | 5 | 27 | 6 | 10 | 5 | 0 | 8.8 | 10 | 14 | 5 | 10.3 | | |
| | B | 61 | 16 | 0 | 33 | 27 | 0 | 22.8 | 16 | 83 | 10 | 8 | 0 | 0 | 19.5 | 0 | 5 | 0 | 17.3 | | |
| | MEAN | 53.3 | 7 | 3.7 | 11 | 21.3 | 0 | 16.1 | 14 | 68 | 8.7 | 13.7 | 3.3 | 1.7 | 18.2 | 5 | 6.3 | 1.7 | 14.6 | | |
| 6 OCT | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | | |
| | M | 5 | 0 | 0 | 5 | 0 | 0 | 1.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 1.3 | | |
| | B | 0 | 0 | 0 | 16 | 0 | 0 | 2.7 | 0 | 0 | 24 | 32 | 0 | 0 | 9.3 | 0 | 10 | 5 | 5.8 | | |
| | MEAN | 1.7 | 0 | 0 | 7.0 | 0 | 0 | 1.5 | 0 | 0 | 8 | 10.7 | 0 | 0 | 3.1 | 0 | 3.3 | 1.7 | 2.4 | | |
| GRAND MEAN ^b | S | 11.3 | 6.1 | 1.4 | 5.3 | 5.7 | 3.4 | | 4.7 | 11.8 | 1.7 | 7.9 | 1.7 | 3.9 | | 2.4 | 0.0 | 0.0 | | | |
| | M | 10.4 | 3.2 | 2.7 | 3.6 | 3.1 | 1.6 | | 4.7 | 3.0 | 1.2 | 3.0 | 2.3 | 0.6 | | 1.9 | 2.0 | 1.9 | | | |
| | B | 9.7 | 7.4 | 2.9 | 8.3 | 8.4 | 1.7 | | 3.3 | 11.6 | 4.3 | 6.1 | 1.0 | 8.6 | | 1.0 | 2.8 | 2.1 | | | |
| | MEAN | 10.5 | 5.6 | 2.3 | 5.7 | 5.7 | 2.2 | | 4.2 | 8.8 | 2.4 | 5.7 | 1.7 | 4.4 | | 1.8 | 1.6 | 1.3 | | | |

None collected 3 Nov-10 Dec

^a Number of organisms/1000 m³

^b April-December sampling period

S = Surface sample

M = Mid-depth sample

B = Bottom sample

ABUNDANCE^a OF HYDROIDA*IN DAY MACROZOOPLANKTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT | 80 FT | 100 FT | GRAND |
|-------------------------|--------------|---------------------|--------|----------|----------|--------|--------|-------|---------------------|--------|----------|----------|--------|--------|-------|-------|-------|--------|-------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | NMPP | NMPP | NMPP | MEAN |
| 14 APR | S | 0 | 0 | 0 | 0 | 25 | 0 | 4.2 | 0 | 0 | 0 | 0 | 22 | 0 | 3.7 | 0 | 5 | 0 | 3.5 |
| | M | 0 | 0 | 0 | 0 | 11 | 0 | 1.8 | 0 | 0 | 0 | 0 | 6 | 0 | 1.0 | 0 | 5 | 0 | 1.5 |
| | B | 0 | 0 | 0 | 22 | 0 | 0 | 3.7 | 5 | 0 | 0 | 34 | 23 | 0 | 10.3 | 0 | 5 | 0 | 5.9 |
| | MEAN | 0 | 0 | 0 | 7.3 | 12.0 | 0 | 3.2 | 1.7 | 0 | 0 | 11.3 | 17.0 | 0 | 5.0 | 0 | 5.0 | 0 | 3.6 |
| 13 MAY | S | 0 | 44 | 29 | 4 | 145 | 0 | 37.0 | 0 | 4 | 0 | 4 | 63 | 93 | 27.3 | 27 | 0 | 0 | 27.5 |
| | M | 0 | 168 | 163 | 57 | 342 | 1007 | 289.5 | 4 | 0 | 30 | 176 | 0 | 79 | 48.2 | 60 | 40 | 52 | 145.2 |
| | B | 5 | 146 | 0 | 62 | 32 | 21 | 44.3 | 5 | 5 | 25 | 65 | 16 | 239 | 59.2 | 5 | 5 | 5 | 42.4 |
| | MEAN | 1.7 | 119.3 | 64.0 | 41.0 | 173.0 | 342.7 | 123.6 | 3.0 | 3.0 | 18.3 | 81.7 | 26.3 | 137.0 | 44.9 | 30.7 | 15.0 | 19.0 | 71.7 |
| 16 JUN | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 5 | 6 | 0 | 0 | 1.8 | 0 | 0 | 0 | 0.7 |
| | M | 5 | 0 | 5 | 0 | 25 | 0 | 5.8 | 0 | 0 | 0 | 5 | 0 | 0 | 0.8 | 0 | 0 | 0 | 2.7 |
| | B | 0 | 19 | 89 | 5 | 72 | 0 | 30.8 | 0 | 0 | 0 | 0 | 4 | 0 | 0.7 | 0 | 0 | 0 | 12.6 |
| | MEAN | 1.7 | 6.3 | 31.3 | 1.7 | 32.3 | 0 | 12.2 | 0 | 0 | 1.7 | 3.7 | 1.3 | 0 | 1.1 | 0 | 0 | 0 | 5.3 |
| 15 JUL | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 5 | 0 | 0 | 0.8 | 0 | 0 | 0 | 0.3 |
| | M | 0 | 0 | 17 | 0 | 0 | 0 | 2.8 | 7 | 0 | 54 | 0 | 0 | 0 | 10.2 | 0 | 0 | 0 | 5.2 |
| | B | 0 | 0 | 14 | 0 | 0 | 5 | 3.2 | 5 | 5 | 9 | 105 | 22 | 0 | 24.3 | 21 | 0 | 0 | 12.4 |
| | MEAN | 0 | 0 | 10.3 | 0 | 0 | 1.7 | 2.0 | 4.0 | 1.7 | 21.0 | 36.7 | 7.3 | 0 | 11.8 | 2.0 | 0 | 0 | 6.0 |
| 18 AUG | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 0 | 0 | 5 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.3 |
| | B | 0 | 5 | 0 | 0 | 0 | 0 | 0.8 | 0 | 0 | 8 | 9 | 0 | 0 | 2.8 | 0 | 0 | 0 | 1.5 |
| | MEAN | 0 | 1.7 | 0 | 0 | 0 | 1.7 | 0.6 | 0 | 0 | 2.7 | 3 | 0 | 0 | 0.9 | 0 | 0 | 0 | 0.6 |
| 8 SEP | S | 0 | 5 | 0 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 0 | 0 | 5 | 0.8 | 0 | 0 | 0 | 0.7 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 6 | 0 | 0 | 0 | 0 | 0 | 1.0 | 0 | 0 | 0 | 8 | 0 | 0 | 1.3 | 0 | 0 | 0 | 0.9 |
| | MEAN | 2.0 | 1.7 | 0 | 0 | 0 | 0 | 0.6 | 0 | 0 | 0 | 2.7 | 0 | 1.7 | 0.7 | 0 | 0 | 0 | 0.5 |
| 6 OCT | S | 6 | 301 | 0 | 15 | 14 | 0 | 56.0 | 31 | 13 | 0 | 0 | 5 | 0 | 8.2 | 0 | 9 | 0 | 26.3 |
| | M | 25 | 180 | 0 | 10 | 44 | 0 | 43.2 | 10 | 66 | 0 | 0 | 0 | 0 | 12.7 | 15 | 5 | 0 | 23.7 |
| | B | 11 | 12 | 21 | 60 | 0 | 0 | 17.3 | 66 | 129 | 510 | 1070 | 0 | 0 | 295.8 | 0 | 10 | 24 | 127.5 |
| | MEAN | 14.0 | 164.3 | 7.0 | 17.3 | 19.3 | 0 | 38.8 | 35.7 | 69.3 | 170.0 | 356.7 | 1.7 | 0 | 105.6 | 5.0 | 8.0 | 8.0 | 59.2 |
| 3 NOV | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 0 | 10 | 0 | 1.7 | 0 | 0 | 0 | 0 | 13 | 0 | 2.2 | 0 | 0 | 0 | 1.5 |
| | B | 0 | 114 | 0 | 5 | 100 | 0 | 36.5 | 0 | 18 | 5 | 5 | 8 | 0 | 6.0 | 0 | 0 | 0 | 17.0 |
| | MEAN | 0 | 38.0 | 0 | 1.7 | 36.7 | 0 | 12.7 | 0 | 6.0 | 1.7 | 1.7 | 7.0 | 0 | 2.7 | 0 | 0 | 0 | 6.2 |
| 10 DEC | S | 15 | 16 | 44 | 16 | 39 | 34 | 27.3 | 5 | 5 | 9 | 19 | 0 | 18 | 9.3 | 28 | 0 | 19 | 17.8 |
| | M | 0 | 5 | 0 | 39 | 34 | 0 | 13.0 | 14 | 5 | 42 | 0 | 4 | 6 | 11.8 | 6 | 11 | 0 | 11.1 |
| | B | 0 | 0 | 21 | 90 | 0 | 54 | 27.5 | 0 | 15 | 43 | 96 | 8 | 14 | 29.3 | 45 | 29 | 5 | 28.0 |
| | MEAN | 5.0 | 7.0 | 21.7 | 48.3 | 24.3 | 29.3 | 22.6 | 6.3 | 8.3 | 31.3 | 38.3 | 4.0 | 12.7 | 16.8 | 26.3 | 13.3 | 8.0 | 19.0 |
| GRAND MEAN ^b | S | 2.3 | 40.7 | 8.1 | 3.9 | 24.8 | 3.8 | | 4.0 | 2.4 | 1.6 | 3.8 | 10.0 | 12.9 | | 6.1 | 1.6 | 2.1 | |
| | M | 3.3 | 39.2 | 20.6 | 11.8 | 51.8 | 112.4 | | 3.9 | 7.9 | 14.0 | 20.1 | 2.6 | 9.4 | | 9.0 | 6.7 | 5.8 | |
| | B | 2.4 | 32.9 | 16.1 | 27.1 | 22.7 | 8.9 | | 9.0 | 19.1 | 66.7 | 154.7 | 9.0 | 28.1 | | 7.9 | 5.4 | 3.8 | |
| | MEAN | 2.7 | 37.6 | 14.9 | 14.3 | 33.1 | 41.7 | | 5.6 | 9.8 | 27.4 | 59.5 | 7.2 | 16.8 | | 7.7 | 4.6 | 3.9 | |

^a Number of organisms/1000 m³

^b April-December sampling period

S = Surface sample

M = Depth sample

B = Bottom sample

*Hydroida includes Hydra americana, Cordylophora lacustris, and unidentified hydroids.

ABUNDANCE^a OF LEPTODORA KINDTII IN DAY MACROZOOPLANKTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT | 80 FT | 100 FT | GRAND |
|-------------------------|--------------|---------------------|---------|----------|----------|----------|----------|----------|---------------------|---------|----------|----------|----------|----------|----------|---------|----------|----------|----------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | NMPP | NMPP | NMPP | MEAN |
| 13 MAY | S | 0 | 4 | 0 | 0 | 0 | 0 | 0.7 | 0 | 0 | 4 | 0 | 0 | 4 | 1.3 | 4 | 4 | 8 | 1.9 |
| | M | 0 | 5 | 0 | 0 | 0 | 11 | 2.7 | 46 | 0 | 4 | 0 | 0 | 0 | 8.3 | 9 | 15 | 0 | 6.0 |
| | B | 0 | 5 | 0 | 0 | 5 | 0 | 1.7 | 0 | 0 | 5 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 1.0 |
| | MEAN | 0 | 4.7 | 0 | 0 | 1.7 | 3.7 | 1.7 | 15.3 | 0 | 4.3 | 0 | 0 | 1.3 | 3.5 | 4.3 | 6.3 | 2.7 | 3.0 |
| 16 JUN | S | 5399 | 270 | 713 | 548 | 307 | 8700 | 2656.2 | 526 | 600 | 809 | 1128 | 412 | 1718 | 865.5 | 418 | 616 | 45 | 1480.6 |
| | M | 414 | 526 | 1011 | 1125 | 1806 | 7037 | 1986.5 | 1001 | 0 | 160 | 1002 | 2417 | 2102 | 1113.7 | 402 | 347 | 120 | 1298.0 |
| | B | 1095 | 956 | 1019 | 1271 | 1038 | 3407 | 1464.3 | 355 | 346 | 589 | 568 | 1238 | 587 | 613.8 | 47 | 30 | 70 | 841.1 |
| | MEAN | 2302.7 | 584.0 | 914.3 | 981.3 | 1050.3 | 6381.3 | 2035.7 | 627.3 | 315.3 | 519.3 | 899.3 | 1355.7 | 1469.0 | 864.3 | 289.0 | 331.0 | 78.3 | 1206.6 |
| 15 JUL | S | 24052 | 51488 | 21902 | 8360 | 39198 | 20754 | 27625.7 | 6090 | 20879 | 44453 | 67163 | 14536 | 20183 | 28884.0 | 813 | 1466 | 3395 | 22982.1 |
| | M | 46998 | 54853 | 14426 | 12706 | 17263 | 25894 | 28690.0 | 23912 | 30578 | 64340 | 23700 | 25323 | 14555 | 30401.3 | 34164 | 51295 | 306 | 29354.2 |
| | B | 17010 | 38669 | 13044 | 28016 | 13719 | 20523 | 21830.2 | 51116 | 11358 | 28431 | 73201 | 39860 | 11720 | 35947.7 | 52416 | 11289 | 13771 | 28276.2 |
| | MEAN | 29353.3 | 48336.7 | 16457.3 | 16360.7 | 23393.3 | 22390.3 | 26048.6 | 27039.3 | 20938.3 | 45741.3 | 54688.0 | 26573.0 | 15486.0 | 31744.3 | 29131.0 | 21350.0 | 5824.0 | 26870.8 |
| 18 AUG | S | 139739 | 48076 | 236336 | 53160 | 37506 | 174032 | 114808.2 | 496 | 35220 | 7681 | 1142 | 31329 | 10053 | 14320.2 | 23736 | 389 | 9357 | 53883.5 |
| | M | 65833 | 188948 | 67664 | 43149 | 95785 | 317370 | 129791.5 | 61008 | 109301 | 66127 | 24496 | 61825 | 60905 | 63943.7 | 48119 | 22134 | 30701 | 84224.3 |
| | B | 61618 | 47673 | 55026 | 33184 | 125954 | 293169 | 102770.7 | 229951 | 14935 | 37408 | 959 | 123704 | 72182 | 79856.5 | 14800 | 31647 | 34588 | 78453.2 |
| | MEAN | 89063.3 | 94899.0 | 119675.3 | 43164.3 | 86415.0 | 261523.7 | 115790.1 | 97151.7 | 53152.0 | 37072.0 | 8865.7 | 72286.0 | 47713.3 | 52706.8 | 28885.0 | 18056.7 | 24882.0 | 72187.0 |
| 8 SEP | S | 633339 | 29530 | 549840 | 159155 | 198118 | 572117 | 357016.5 | 493598 | 514479 | 330655 | 59632 | 354889 | 333337 | 347765.0 | 265700 | 325405 | 456447 | 351749.4 |
| | M | 933059 | 57193 | 793410 | 296122 | 151348 | 938272 | 528234.0 | 208935 | 197469 | 214697 | 26951 | 473311 | 485611 | 267829.0 | 393620 | 222680 | 346285 | 382597.5 |
| | B | 331472 | 260365 | 611628 | 664828 | 663549 | 364614 | 482742.7 | 117759 | 323022 | 294780 | 114940 | 863914 | 366062 | 346746.2 | 2321536 | 310810 | 364687 | 398264.4 |
| | MEAN | 632623.3 | 115696 | 651626 | 373368.3 | 337671.7 | 625001 | 455997.7 | 273430.7 | 344990 | 280044 | 67174.3 | 564038 | 395003.3 | 320780.1 | 1326952 | 286298.3 | 389139.7 | 377537.1 |
| 6 OCT | S | 6116 | 15713 | 22598 | 29694 | 26990 | 7457 | 18094.7 | 32359 | 22586 | 81295 | 27522 | 9480 | 33217 | 34409.8 | 37037 | 11047 | 653 | 24250.9 |
| | M | 67323 | 3114 | 34797 | 43868 | 37127 | 34172 | 36733.5 | 103879 | 82291 | 56532 | 40435 | 83351 | 67390 | 72313.0 | 73879 | 49916 | 47063 | 55009.1 |
| | B | 13654 | 34378 | 48356 | 99079 | 42289 | 36012 | 45628.0 | 69476 | 41047 | 49427 | 2673 | 55975 | 86697 | 50882.5 | 65254 | 13463 | 50134 | 47194.3 |
| | MEAN | 29031.0 | 17735.0 | 35250.3 | 57547.0 | 35468.7 | 25880.3 | 33485.4 | 68571.3 | 48641.3 | 62418.0 | 23543.3 | 49602.0 | 62434.7 | 52535.1 | 58723.3 | 24808.7 | 32616.7 | 42151.4 |
| 3 NOV | S | 1467 | 1530 | 139 | 1899 | 27 | 588 | 941.7 | 149 | 225 | 225 | 248 | 467 | 525 | 306.5 | 145 | 388 | 338 | 557.3 |
| | M | 6547 | 3608 | 4897 | 6317 | 8386 | 4083 | 5639.7 | 7500 | 2284 | 3859 | 4164 | 19211 | 6115 | 7188.8 | 1974 | 3361 | 1670 | 5598.4 |
| | B | 2655 | 7303 | 20817 | 20046 | 1774 | 34429 | 14504.0 | 5124 | 3102 | 4625 | 10575 | 5118 | 2115 | 5109.8 | 2925 | 2928 | 1840 | 8358.4 |
| | MEAN | 3556.3 | 4147.0 | 8617.7 | 9420.7 | 3395.7 | 13033.3 | 7028.5 | 4257.7 | 1870.3 | 2903.0 | 4995.7 | 8265.3 | 2918.3 | 4201.7 | 1681.3 | 2225.7 | 1282.7 | 4838.0 |
| 10 DEC | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 5 | 0 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 0.3 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.1 |
| GRAND MEAN ^b | S | 90012.4 | 16290.1 | 92392.0 | 28090.7 | 33571.8 | 87072.0 | | 59246.4 | 65999.3 | 51680.2 | 17426.1 | 45679.2 | 44337.4 | | 36428.1 | 37701.7 | 52249.2 | |
| | M | 124463.8 | 34249.7 | 101800.6 | 44809.7 | 34635.0 | 147426.6 | | 45142.3 | 46880.3 | 45079.9 | 13416.4 | 73937.6 | 70742.0 | | 61351.9 | 38860.9 | 47349.4 | |
| | B | 47500.4 | 43261.0 | 83321.1 | 94047.1 | 94258.7 | 83572.7 | | 52642.3 | 43756.7 | 46140.6 | 22546.2 | 121089.9 | 59929.2 | | 50775.3 | 41129.7 | 51676.7 | |
| | MEAN | 87325.5 | 31266.9 | 92504.6 | 55649.2 | 54155.2 | 106023.8 | | 52343.7 | 52212.1 | 47633.6 | 17796.2 | 80235.6 | 58336.2 | | 49518.4 | 39230.8 | 50425.1 | |

None collected 14 Apr

^a Number of organisms/1000 m³

^b April-December sampling period

S = Surface sample

M = Mid-depth sample

B = Bottom sample

ABUNDANCE^a OF GAMMARUS FASCIATUS IN DAY MACROZOOPLANKTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT | 80 FT | 100 FT | GRAND |
|-------------------------|--------------|---------------------|--------|----------|----------|--------|--------|-------|---------------------|--------|----------|----------|--------|--------|------|-------|-------|--------|-------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | NMPP | NMPP | NMPP | MEAN |
| 14 APR | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 1.0 | 0 | 0 | 0 | .4 |
| | B | 0 | 0 | 0 | 27 | 0 | 0 | 4.5 | 0 | 0 | 0 | 0 | 0 | 10 | 1.7 | 0 | 0 | 0 | 2.5 |
| | MEAN | 0 | 0 | 0 | 9 | 0 | 0 | 1.5 | 0 | 0 | 0 | 2 | 0 | 3.3 | 0.9 | 0 | 0 | 0 | 1.0 |
| 13 MAY | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | .7 | 0 | 0 | 0 | .3 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | B | 0 | 0 | 0 | 5 | 0 | 52 | 9.5 | 0 | 0 | 0 | 0 | 0 | 25 | 4.2 | 0 | 0 | 0 | 5.5 |
| | MEAN | 0 | 0 | 0 | 1.7 | 0 | 17.3 | 3.2 | 0 | 0 | 0 | 1.3 | 0 | 8.3 | 1.6 | 0 | 0 | 0 | 1.9 |
| 16 JUN | S | 8 | 0 | 0 | 0 | 0 | 0 | 1.3 | 0 | 20 | 0 | 0 | 0 | 8 | 4.7 | 0 | 20 | 0 | 3.7 |
| | M | 0 | 9 | 0 | 0 | 10 | 49 | 11.3 | 10 | 0 | 0 | 0 | 5 | 0 | 2.5 | 0 | 0 | 44 | 8.5 |
| | B | 0 | 0 | 77 | 0 | 5 | 34 | 19.3 | 0 | 31 | 14 | 0 | 0 | 0 | 7.5 | 26 | 0 | 9 | 13.1 |
| | MEAN | 2.7 | 3 | 25.7 | 0 | 5 | 27.7 | 10.7 | 3.3 | 17.0 | 4.7 | 0 | 1.7 | 2.7 | 4.9 | 8.7 | 6.7 | 17.7 | 8.4 |
| 15 JUL | S | 0 | 0 | 0 | 0 | 6 | 0 | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 5 | 1.1 |
| | M | 5 | 0 | 0 | 0 | 5 | 0 | 1.7 | 0 | 0 | 20 | 4 | 0 | 0 | 4.0 | 0 | 0 | 0 | 2.3 |
| | B | 0 | 0 | 0 | 10 | 0 | 0 | 1.7 | 0 | 0 | 9 | 0 | 9 | 0 | 3.0 | 0 | 30 | 49 | 7.1 |
| | MEAN | 1.7 | 0 | 0 | 3.3 | 3.7 | 0 | 1.4 | 0 | 0 | 9.7 | 1.3 | 3 | 0 | 2.3 | 1.7 | 10 | 18 | 3.5 |
| 18 AUG | S | 140 | 35 | 230 | 6 | 0 | 53 | 77.3 | 0 | 8 | 19 | 9 | 0 | 0 | 6.0 | 156 | 0 | 128 | 52.3 |
| | M | 24 | 28 | 9 | 0 | 0 | 9 | 11.7 | 14 | 14 | 0 | 0 | 0 | 4 | 5.3 | 7 | 0 | 6 | 7.7 |
| | B | 17 | 11 | 5 | 0 | 10 | 0 | 7.2 | 102 | 0 | 4 | 0 | 0 | 0 | 17.7 | 0 | 7 | 55 | 14.1 |
| | MEAN | 60.3 | 24.7 | 81.3 | 2.0 | 3.3 | 20.7 | 32.1 | 38.7 | 7.3 | 7.7 | 3.0 | 0 | 1.3 | 9.7 | 54.3 | 2.3 | 63.0 | 24.7 |
| 8 SEP | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 6 | 0 | 10 | 2.7 | 0 | 0 | 8 | 1.6 |
| | M | 0 | 0 | 0 | 5 | 0 | 0 | 0.8 | 0 | 4 | 0 | 5 | 0 | 5 | 2.3 | 0 | 5 | 0 | 1.6 |
| | B | 37 | 0 | 0 | 270 | 11 | 0 | 53.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 6 | 21.6 |
| | MEAN | 12.3 | 0 | 0 | 91.7 | 3.7 | 0 | 18.0 | 0 | 1.3 | 0 | 3.7 | 0 | 5.0 | 1.7 | 0 | 1.7 | 4.7 | 8.3 |
| 6 OCT | S | 0 | 0 | 0 | 0 | 0 | 7 | 1.2 | 0 | 0 | 0 | 0 | 5 | 5 | 1.7 | 0 | 0 | 0 | 1.1 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 0 | 0 | 0 | 0 | 6 | 0 | 1.0 | 0 | 10 | 18 | 26 | 0 | 0 | 9.0 | 0 | 0 | 0 | 4.0 |
| | MEAN | 0 | 0 | 0 | 0 | 2.0 | 2.3 | 0.7 | 0 | 3.3 | 6.0 | 8.7 | 1.7 | 1.7 | 3.6 | 0 | 0 | 0 | 1.7 |
| 3 NOV | S | 4 | 0 | 0 | 5 | 0 | 0 | 1.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 4 | 0.9 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 4 | 0 | 0.7 | 0 | 0 | 9 | 0.9 |
| | B | 0 | 33 | 0 | 27 | 687 | 0 | 124.5 | 0 | 0 | 0 | 0 | 13 | 53 | 11.0 | 0 | 0 | 0 | 54.2 |
| | MEAN | 1.3 | 11.0 | 0 | 10.7 | 229.0 | 0 | 42.0 | 0 | 0 | 0 | 0 | 5.7 | 17.7 | 3.9 | 0 | 0 | 4.3 | 18.7 |
| 10 DEC | S | 0 | 0 | 0 | 0 | 0 | 5 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.3 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| GRAND MEAN ^b | S | 16.9 | 3.9 | 25.6 | 1.2 | 0.7 | 7.2 | | 0.0 | 3.1 | 2.1 | 2.1 | 0.6 | 2.6 | | 17.9 | 2.2 | 16.1 | |
| | M | 3.2 | 4.1 | 1.0 | 0.6 | 1.7 | 6.4 | | 2.7 | 2.0 | 2.2 | 1.7 | 1.0 | 1.0 | | 0.8 | 0.6 | 6.6 | |
| | B | 6.0 | 4.9 | 9.1 | 37.7 | 79.9 | 9.6 | | 11.3 | 4.6 | 5.0 | 2.9 | 2.4 | 9.8 | | 2.9 | 4.1 | 13.2 | |
| | MEAN | 8.7 | 4.3 | 11.9 | 13.2 | 27.4 | 7.7 | | 4.7 | 3.2 | 3.1 | 2.2 | 1.3 | 4.5 | | 7.2 | 2.3 | 12.0 | |

^a Number of organisms/1000 m³

^b Ap = December sampling period

S = Surface sample

M = Mid-depth sample

B = Bottom sample

APPENDIX VC-1b

ABUNDANCE OF SELECTED SPECIES OF MACROZOOPLANKTON
IN NIGHT COLLECTIONS

ABUNDANCE^a OF GAMMARUS FASCIATUS IN NIGHT MACROZOOPLANKTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT | 80 FT | 100 FT | GRAND |
|-------------------------|-----------------|---------------------|--------|----------|----------|--------|--------|--------|---------------------|--------|----------|----------|--------|--------|--------|--------|--------|--------|--------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | NMPP | NMPP | NMPP | MEAN |
| 16 JUN | S | 498 | 623 | 625 | 490 | 394 | 311 | 490.2 | 819 | 661 | 415 | 490 | 515 | 480 | 563.3 | 352 | 143 | 9 | 455.0 |
| | M | 791 | 840 | 561 | 86 | 420 | 989 | 614.5 | 789 | 468 | 532 | 1088 | 1318 | 539 | 789.0 | 441 | 128 | 62 | 603.5 |
| | B | 1706 | 547 | 515 | 531 | 992 | 192 | 747.2 | 893 | 441 | 252 | 1234 | 761 | 433 | 669.0 | 260 | 129 | 58 | 596.3 |
| | MEAN | 998.3 | 670.0 | 567.0 | 369.0 | 602.0 | 497.3 | 617.3 | 833.7 | 523.3 | 399.7 | 937.3 | 864.7 | 484.0 | 673.8 | 351.0 | 133.3 | 43.0 | 551.6 |
| 15 JUL | S | 34 | 126 | 342 | 512 | 922 | 864 | 466.7 | 41 | 35 | 161 | 141 | 174 | 413 | 160.8 | 367 | 785 | 201 | 341.2 |
| | M | 32 | 116 | 615 | 579 | 0 | 40 | 230.3 | 205 | 192 | 346 | 317 | 100 | 3310 | 745.0 | 751 | 1425 | 996 | 601.6 |
| | B | 315 | 613 | 890 | 1314 | 6717 | 1266 | 1852.5 | 200 | 422 | 400 | 500 | 1866 | 1452 | 806.7 | 815 | 1046 | 482 | 1219.9 |
| | MEAN | 127.0 | 285.0 | 615.7 | 801.7 | 2546.3 | 723.3 | 849.8 | 148.7 | 216.3 | 302.3 | 319.3 | 713.3 | 1725.0 | 570.8 | 644.3 | 1085.3 | 559.7 | 720.9 |
| 18 AUG | S | 684 | 1121 | 621 | 1119 | 1996 | 983 | 1087.3 | 189 | 701 | 657 | 1620 | 622 | 772 | 760.2 | 291 | 318 | 163 | 790.5 |
| | M | 70 | 1981 | 2076 | 2779 | 3308 | 2768 | 2163.7 | 1337 | 1438 | 2457 | 1200 | 3088 | 1604 | 1854.0 | 5532 | 558 | 893 | 2072.6 |
| | B | 2556 | 2690 | 3131 | 2626 | 9221 | 3586 | 3968.3 | 1463 | 2536 | 6147 | 4035 | 2702 | 1569 | 3075.3 | 2268 | 899 | 522 | 3063.4 |
| | MEAN | 1103.3 | 1930.7 | 1942.7 | 2174.7 | 4841.7 | 2445.7 | 2406.4 | 996.3 | 1558.3 | 3087.0 | 2285.0 | 2137.3 | 1315.0 | 1896.5 | 2697.0 | 591.7 | 526.0 | 1975.5 |
| 8 SEP | S | 0 | 0 | 0 | 6 | 0 | 0 | 1.0 | 5 | 0 | 0 | 5 | 0 | 0 | 1.7 | 5 | 9 | 0 | 2.0 |
| | M | 0 | 5 | 0 | 16 | 0 | 11 | 5.3 | 0 | 5 | 0 | 0 | 0 | 15 | 3.3 | 252 | 606 | 611 | 101.4 |
| | B | 26 | 26 | 21 | 53 | 30 | 120 | 46.0 | 69 | 136 | 245 | 221 | 309 | 637 | 269.5 | 384 | 367 | 647 | 219.4 |
| | MEAN | 8.7 | 10.3 | 7.0 | 25.0 | 10.0 | 43.7 | 17.4 | 24.7 | 47.0 | 81.7 | 75.3 | 103.0 | 217.3 | 91.5 | 213.7 | 327.3 | 419.3 | 107.6 |
| GRAND MEAN ^b | S | 304.0 | 467.5 | 397.0 | 531.8 | 828.0 | 539.5 | | 263.5 | 349.2 | 308.2 | 564.0 | 327.8 | 416.2 | | 253.8 | 313.8 | 93.2 | |
| | M | 223.2 | 735.5 | 813.0 | 865.0 | 932.0 | 952.0 | | 582.8 | 525.8 | 833.8 | 651.2 | 1126.5 | 1367.0 | | 1744.0 | 679.2 | 640.5 | |
| | B | 1150.8 | 969.0 | 1139.2 | 1131.0 | 4240.0 | 1291.0 | | 656.2 | 883.8 | 1761.0 | 1497.5 | 1409.5 | 1022.8 | | 931.8 | 610.2 | 427.2 | |
| | MEAN | 559.3 | 724.0 | 783.1 | 842.6 | 2000.0 | 927.5 | | 500.8 | 586.2 | 967.7 | 904.2 | 954.6 | 935.3 | | 976.5 | 534.4 | 387.0 | |

^aNumber of organisms/1000 m³

^bJune-September sampling period

S = Surface sample

M = Mid-depth sample

B = Bottom sample

APPENDIX VC-2a

ABUNDANCE OF SELECTED SPECIES OF LARVAE IN DAY COLLECTIONS

ABUNDANCE^a OF ALEWIFE LARVAE IN DAY ICHTHYOPLANKTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT | 80 FT | 100 FT | GRAND MEAN |
|-----------|--------------|---------------------|--------|----------|----------|--------|--------|--------|---------------------|--------|----------|----------|--------|--------|--------|-------|--------|--------|------------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | NMPP | NMPP | NMPP | |
| 16,17 JUN | S | 15 | 0 | 0 | 0 | 0 | 0 | 2.5 | 5 | 5 | 0 | 0 | 0 | 4 | 2.3 | 0 | 0 | 0 | 1.9 |
| | M | 0 | 9 | 0 | 0 | 0 | 6 | 2.5 | 11 | 0 | 0 | 0 | 0 | 0 | 1.8 | 0 | 4 | 0 | 2.0 |
| | B | 0 | 0 | 0 | 0 | 5 | 0 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 5 | 0.7 |
| | MEAN | 5.0 | 3.0 | 0.0 | 0.0 | 1.7 | 2.0 | 1.9 | 5.3 | 1.7 | 0.0 | 0.0 | 0.0 | 1.3 | 1.4 | 0.0 | 1.3 | 1.7 | 1.5 |
| 23 JUN | S | 0 | 0 | 8 | 6 | 14 | 0 | 4.7 | 0 | 5 | 0 | 0 | 0 | 111 | 19.3 | 9 | 0 | 0 | 10.2 |
| | M | 0 | 5 | 12 | 0 | 5 | 9 | 5.2 | 0 | 0 | 0 | 0 | 5 | 7 | 2.0 | 0 | 4 | 0 | 3.1 |
| | B | 0 | 0 | 40 | 0 | 21 | 5 | 11.0 | 0 | 0 | 0 | 0 | 36 | 0 | 6.0 | 0 | 5 | 9 | 7.7 |
| | MEAN | 0.0 | 1.7 | 20.0 | 2.0 | 13.3 | 4.7 | 6.9 | 0.0 | 1.7 | 0.0 | 0.0 | 13.7 | 39.3 | 9.1 | 3.0 | 3.0 | 3.0 | 7.0 |
| 30 JUN | S | 5 | 0 | 5 | 0 | 0 | 29 | 6.5 | 6 | 0 | 0 | 5 | 0 | 26 | 6.2 | 0 | 14 | 18 | 7.2 |
| | M | 5 | 6 | 17 | 0 | 13 | 5 | 7.7 | 15 | 0 | 0 | 0 | 23 | 16 | 9.0 | 5 | 11 | 10 | 8.4 |
| | B | 0 | 6 | 0 | 10 | 16 | 15 | 7.8 | 5 | 24 | 8 | 0 | 13 | 22 | 12.0 | 14 | 46 | 18 | 13.1 |
| | MEAN | 3.3 | 4.0 | 7.3 | 3.3 | 9.7 | 16.3 | 7.3 | 8.7 | 8.0 | 2.7 | 1.7 | 12.0 | 21.3 | 9.1 | 6.3 | 23.7 | 15.3 | 9.6 |
| 7 JUL | S | 18 | 15 | 12 | 5 | 0 | 9 | 9.8 | 49 | 4 | 0 | 24 | 5 | 23 | 17.5 | 5 | 0 | 0 | 11.3 |
| | M | 5 | 0 | 5 | 5 | 0 | 48 | 10.5 | 5 | 41 | 0 | 6 | 11 | 12 | 12.5 | 11 | 0 | 0 | 9.9 |
| | B | 0 | 16 | 5 | 11 | 10 | 24 | 11.0 | 0 | 0 | 11 | 6 | 0 | 35 | 8.7 | 0 | 0 | 0 | 7.9 |
| | MEAN | 7.7 | 10.3 | 7.3 | 7.0 | 3.3 | 27.0 | 10.4 | 18.0 | 15.0 | 3.7 | 12.0 | 5.3 | 23.3 | 12.9 | 5.3 | 0.0 | 0.0 | 9.7 |
| 15 JUL | S | 161 | 162 | 0 | 10 | 231 | 48 | 102.0 | 308 | 180 | 22 | 19 | 6 | 6 | 90.2 | 0 | 0 | 0 | 76.9 |
| | M | 20 | 26 | 9 | 22 | 126 | 80 | 47.2 | 22 | 10 | 0 | 4 | 9 | 5 | 8.3 | 5 | 0 | 0 | 22.5 |
| | B | 62 | 35 | 5 | 35 | 95 | 52 | 47.3 | 59 | 26 | 91 | 12 | 31 | 5 | 37.3 | 0 | 9 | 4 | 34.7 |
| | MEAN | 81.0 | 74.3 | 4.7 | 22.3 | 150.7 | 60.0 | 65.5 | 129.7 | 72.0 | 37.7 | 11.7 | 15.3 | 5.3 | 45.3 | 1.7 | 3.0 | 1.3 | 44.7 |
| 21 JUL | S | 4 | 19 | 5 | 34 | 32 | 365 | 76.5 | 5 | 0 | 5 | 5 | 13 | 317 | 57.5 | 31 | 75 | 50 | 64.0 |
| | M | 0 | 5 | 5 | 15 | 89 | 65 | 29.8 | 14 | 0 | 5 | 0 | 20 | 87 | 21.0 | 9 | 5 | 12 | 22.1 |
| | B | 0 | 0 | 5 | 0 | 0 | 95 | 16.7 | 4 | 4 | 4 | 0 | 25 | 159 | 32.7 | 33 | 13 | 0 | 22.8 |
| | MEAN | 1.3 | 8.0 | 5.0 | 16.3 | 40.3 | 175.0 | 41.0 | 7.7 | 1.3 | 4.7 | 1.7 | 19.3 | 187.7 | 37.1 | 24.3 | 31.0 | 20.7 | 36.3 |
| 28 JUL | S | 113 | 141 | 84 | 14 | 80 | 61 | 82.2 | 55 | 32 | 86 | 43 | 26 | 5 | 41.2 | 125 | 156 | 299 | 88.0 |
| | M | 19 | 4 | 277 | 91 | 35 | 317 | 123.8 | 0 | 125 | 35 | 8 | 16 | 305 | 81.5 | 195 | 115 | 53 | 106.3 |
| | B | 506 | 350 | 203 | 82 | 25 | 127 | 215.5 | 79 | 125 | 88 | 101 | 48 | 249 | 115.0 | 74 | 144 | 104 | 153.7 |
| | MEAN | 212.7 | 165.0 | 188.0 | 62.3 | 46.7 | 168.3 | 140.5 | 44.7 | 94.0 | 69.7 | 50.7 | 30.0 | 186.3 | 79.2 | 131.3 | 138.3 | 152.0 | 116.0 |
| 4 AUG | S | 1629 | 1111 | 1320 | 2932 | 808 | 476 | 1379.3 | 1178 | 1750 | 1667 | 2293 | 676 | 138 | 1283.7 | 1497 | 2790 | 177 | 1362.8 |
| | M | 3301 | 1195 | 3247 | 1552 | 240 | 247 | 1630.3 | 534 | 845 | 2594 | 431 | 69 | 6 | 746.5 | 393 | 307 | 19 | 998.7 |
| | B | 1535 | 1527 | 2212 | 246 | 215 | 104 | 973.2 | 643 | 373 | 1812 | 131 | 59 | 11 | 504.8 | 122 | 102 | 30 | 608.1 |
| | MEAN | 2155.0 | 1277.7 | 2259.7 | 1576.7 | 421.0 | 275.7 | 1327.6 | 785.0 | 989.3 | 2024.3 | 951.7 | 268.0 | 51.7 | 845.0 | 670.7 | 1066.3 | 75.3 | 989.9 |
| 11 AUG | S | 61 | 237 | 38 | 108 | 68 | 147 | 109.8 | 131 | 254 | 280 | 274 | 81 | 70 | 181.7 | 123 | 190 | 83 | 143.0 |
| | M | 91 | 20 | 261 | 11 | 0 | 29 | 68.7 | 32 | 129 | 136 | 36 | 12 | 17 | 60.3 | 10 | 47 | 0 | 55.4 |
| | B | 87 | 49 | 485 | 17 | 153 | 37 | 138.0 | 56 | 75 | 20 | 16 | 39 | 6 | 35.3 | 23 | 29 | 0 | 72.8 |
| | MEAN | 79.7 | 102.0 | 261.3 | 45.3 | 73.7 | 71.0 | 105.5 | 73.0 | 152.7 | 145.3 | 108.7 | 44.0 | 31.0 | 92.4 | 52.0 | 88.7 | 27.7 | 90.4 |
| 18 AUG | S | 1793 | 1482 | 1732 | 1202 | 438 | 437 | 1180.7 | 36 | 743 | 529 | 1069 | 440 | 526 | 557.2 | 1347 | 702 | 1426 | 926.8 |
| | M | 222 | 290 | 490 | 1159 | 356 | 208 | 454.2 | 210 | 106 | 452 | 1086 | 26 | 76 | 326.0 | 441 | 342 | 335 | 386.6 |
| | B | 124 | 233 | 505 | 1252 | 354 | 160 | 438.0 | 218 | 44 | 293 | 92 | 88 | 54 | 131.5 | 241 | 396 | 242 | 286.4 |
| | MEAN | 713.0 | 668.3 | 909.0 | 1204.3 | 382.7 | 268.3 | 690.9 | 154.7 | 297.7 | 424.7 | 749.0 | 184.7 | 218.7 | 338.2 | 676.3 | 480.0 | 667.7 | 533.3 |
| 25 AUG | S | 20 | 24 | 7 | 0 | 6 | 41 | 16.3 | 15 | 5 | 6 | 13 | 29 | 10 | 13.0 | 21 | 17 | 0 | 14.3 |
| | M | 12 | 24 | 11 | 0 | 18 | 6 | 11.8 | 18 | 6 | 22 | 0 | 12 | 19 | 12.8 | 0 | 0 | 6 | 10.3 |
| | B | 12 | 17 | 16 | 25 | 29 | 0 | 16.5 | 31 | 27 | 6 | 0 | 0 | 6 | 11.7 | 5 | 10 | 15 | 13.3 |
| | MEAN | 14.7 | 21.7 | 11.3 | 8.3 | 17.7 | 15.7 | 14.9 | 21.3 | 12.7 | 11.3 | 4.3 | 13.7 | 11.7 | 12.5 | 8.7 | 9.0 | 7.0 | 12.6 |

ABUNDANCE^a OF ALEWIFE LARVAE IN DAY ICHTHYOPLANKTON COLLECTIONS (continued)

NINE MILE POINT VICINITY - 1976

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT | 80 FT | 100 FT | GRAND MEAN |
|-------------------------|--------------|---------------------|--------|----------|----------|--------|--------|------|---------------------|--------|----------|----------|--------|--------|------|-------|-------|--------|------------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | NMPP | NMPP | NMPP | |
| 1 SEP | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 5 | 5 | 0 | 0 | 0 | 1.7 | 0 | 0 | 0 | 0.7 |
| | B | 0 | 0 | 6 | 0 | 0 | 0 | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 4 | 0.7 |
| | MEAN | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 1.7 | 1.7 | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 | 0.0 | 1.3 | 0.4 |
| 8 SEP | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 21 | 0 | 0 | 0 | 0 | 3.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 1.4 |
| | B | 0 | 0 | 9 | 0 | 0 | 0 | 1.5 | 0 | 0 | 0 | 8 | 0 | 0 | 1.3 | 0 | 0 | 0 | 1.1 |
| | MEAN | 0.0 | 7.0 | 3.0 | 0.0 | 0.0 | 0.0 | 1.7 | 0.0 | 0.0 | 0.0 | 2.7 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.8 |
| 15 SEP | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 5 | 0.3 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 6 | 0.4 |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.7 | 0.2 |
| 25, 26 SEP | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 5 | 0 | 0 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 0.3 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 0 | 6 | 0 | 0 | 0 | 0 | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 6 | 0.8 |
| | MEAN | 0.0 | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 2.0 | 0.4 |
| 29, 30 SEP | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| | B | 0 | 0 | 0 | 0 | 6 | 0 | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 13, 15 OCT | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0.3 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| | B | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | 0.0 | 0.0 | 0.1 |
| GRAND MEAN ^b | S | 109.1 | 91.2 | 91.7 | 123.2 | 48.0 | 46.1 | | 51.2 | 85.1 | 74.1 | 107.0 | 36.4 | 35.3 | | 90.3 | 112.7 | 58.8 | |
| | M | 105.0 | 45.9 | 123.8 | 81.6 | 25.2 | 29.1 | | 24.6 | 36.2 | 92.8 | 44.9 | 5.8 | 15.7 | | 30.5 | 23.9 | 12.4 | |
| | B | 66.5 | 64.0 | 99.5 | 47.9 | 26.5 | 17.7 | | 31.3 | 19.9 | 66.6 | 10.5 | 9.7 | 15.6 | | 14.6 | 21.5 | 12.7 | |
| | MEAN | 93.5 | 67.0 | 105.0 | 84.2 | 33.2 | 31.0 | | 35.7 | 47.1 | 77.8 | 54.1 | 17.3 | 22.2 | | 45.1 | 52.7 | 28.0 | |

None collected 7 Apr - 9 Jun, 6 Oct, and 20 Oct - 19 Dec

^a Number of organisms/1000 m³

^b April - December sampling period

S = Surface sample

M = Mid-depth sample

B = Bottom sample

ABUNDANCE^a OF JOHNNY DARTER LARVAE IN DAY ICHTHYOPLANKTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT | 80 FT | 100 FT | GRAND |
|-------------------------|--------------|---------------------|--------|----------|----------|--------|--------|------|---------------------|--------|----------|----------|--------|--------|------|-------|-------|--------|-------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | NMPP | NMPP | NMPP | MEAN |
| 7 JUL | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 0 | 6 | 0 | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.4 |
| | B | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 6 | 0 | 0 | 0 | 1.0 | 0 | 0 | 0 | 0.4 |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 | 0.0 | 0.3 | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.3 |
| 15 JUL | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 5 | 0 | 0 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.3 |
| | B | 0 | 0 | 0 | 5 | 10 | 0 | 2.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 4 | 1.3 |
| | MEAN | 1.7 | 0.0 | 0.0 | 1.7 | 3.3 | 0.0 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | 0.5 |
| GRAND MEAN ^b | S | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | |
| | M | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | |
| | B | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.0 | | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.1 | |
| | MEAN | <0.1 | 0.0 | 0.0 | <0.1 | 0.2 | 0.0 | | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | <0.1 | |

None collected 7 Apr-30 Jun and 21 Jul-19 Dec

^aNumber of organisms/1000 m³

^bApril-December sampling period

S = Surface

M = Mid-depth

B = Bottom

ABUNDANCE^a OF MOTTLED SCULPIN LARVAE IN DAY ICHTHYOPLANKTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT | 80 FT | 100 FT | GRAND |
|-------------------------|--------------|---------------------|--------|----------|----------|--------|--------|------|---------------------|--------|----------|----------|--------|--------|------|-------|-------|--------|-------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | NMPP | NMPP | NMPP | MEAN |
| 28 JUL | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 0 | 0 | 0 | 7 | 0 | 0 | 1.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.5 |
| | MEAN | 0.0 | 0.0 | 0.0 | 2.3 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 4 AUG | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 6 | 0 | 0.4 |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 | 0.0 | 0.1 |
| GRAND MEAN ^b | S | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | |
| | M | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | |
| | B | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.2 | 0.0 | |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.1 | 0.0 | |

None collected 7 Apr-21 Jul and 11 Aug-19 Dec

^a Number of organisms/1000 m³

^b April-December sampling period.

S = Surface

M = Mid-depth

B = Bottom

ABUNDANCE^a OF RAINBOW SMELT LARVAE IN DAY ICHTHYOPLANKTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT | 80 FT | 100 FT | GRAND MEAN |
|-------------------------|--------------|---------------------|--------|----------|----------|--------|--------|------|---------------------|--------|----------|----------|--------|--------|------|-------|-------|--------|------------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | NMPP | NMPP | NMPP | |
| 13 MAY | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 0 | 4 | 0 | 0.7 | 0 | 0 | 0 | 6 | 0 | 0 | 1.0 | 0 | 0 | 0 | 0.7 |
| | B | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 5 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 0.3 |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | 0.0 | 0.2 | 0.0 | 0.0 | 1.7 | 2.0 | 0.0 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.3 |
| 22 MAY | S | 7 | 10 | 0 | 22 | 5 | 5 | 8.2 | 5 | 11 | 5 | 0 | 16 | 5 | 7.0 | 0 | 5 | 0 | 6.4 |
| | M | 5 | 0 | 0 | 0 | 0 | 0 | 0.8 | 0 | 12 | 0 | 10 | 6 | 0 | 4.7 | 0 | 0 | 0 | 2.2 |
| | B | 0 | 11 | 0 | 0 | 5 | 0 | 2.7 | 0 | 10 | 5 | 0 | 11 | 5 | 5.2 | 4 | 0 | 0.0 | 3.4 |
| | MEAN | 4.0 | 7.0 | 0.0 | 7.3 | 3.3 | 1.7 | 3.9 | 1.7 | 11.0 | 3.3 | 3.3 | 11.0 | 3.3 | 5.6 | 1.3 | 1.7 | 0.0 | 4.0 |
| 26 MAY | S | 0 | 0 | 0 | 4 | 0 | 0 | 0.7 | 9 | 5 | 0 | 0 | 0 | 0 | 2.3 | 0 | 0 | 0 | 1.2 |
| | M | 0 | 0 | 5 | 0 | 0 | 0 | 0.8 | 0 | 0 | 5 | 38 | 0 | 0 | 7.2 | 0 | 0 | 5 | 3.5 |
| | B | 0 | 0 | 0 | 5 | 5 | 0 | 1.7 | 5 | 0 | 0 | 0 | 10 | 0 | 2.5 | 0 | 0 | 0 | 1.7 |
| | MEAN | 0.0 | 0.0 | 1.7 | 3.0 | 1.7 | 0.0 | 1.1 | 4.7 | 1.7 | 1.7 | 12.7 | 3.3 | 0.0 | 4.0 | 0.0 | 0.0 | 1.7 | 2.1 |
| 2 JUN | S | 0 | 0 | 0 | 11 | 4 | 5 | 3.3 | 0 | 0 | 6 | 6 | 37 | 0 | 8.2 | 0 | 53 | 0 | 8.1 |
| | M | 5 | 0 | 0 | 7 | 13 | 17 | 7.0 | 6 | 0 | 0 | 7 | 6 | 7 | 4.3 | 0 | 10 | 16 | 6.3 |
| | B | 0 | 0 | 0 | 5 | 0 | 11 | 2.7 | 0 | 0 | 5 | 0 | 0 | 0 | 0.8 | 0 | 0 | 4 | 1.7 |
| | MEAN | 1.7 | 0.0 | 0.0 | 7.7 | 5.7 | 11.0 | 4.3 | 2.0 | 0.0 | 3.7 | 4.3 | 14.3 | 2.3 | 4.4 | 0.0 | 21.0 | 6.7 | 5.4 |
| 9 JUN | S | 41 | 7 | 0 | 9 | 26 | 28 | 18.5 | 14 | 6 | 12 | 11 | 12 | 18 | 12.2 | 28 | 23 | 0 | 15.7 |
| | M | 89 | 19 | 15 | 10 | 78 | 87 | 49.7 | 10 | 47 | 12 | 0 | 21 | 24 | 19.0 | 0 | 15 | 5 | 28.8 |
| | B | 52 | 0 | 0 | 5 | 68 | 25 | 25.0 | 10 | 14 | 20 | 0 | 4 | 27 | 12.5 | 0 | 18 | 12 | 17.0 |
| | MEAN | 60.7 | 8.7 | 5.0 | 8.0 | 57.3 | 46.7 | 31.1 | 11.3 | 22.3 | 14.7 | 3.7 | 12.3 | 23.0 | 14.6 | 9.3 | 18.7 | 5.7 | 20.5 |
| 16,17 JUN | S | 0 | 0 | 0 | 0 | 0 | 10 | 1.7 | 0 | 5 | 0 | 0 | 0 | 0 | 0.8 | 4 | 0 | 0 | 1.3 |
| | M | 5 | 0 | 0 | 0 | 5 | 11 | 3.5 | 37 | 0 | 0 | 0 | 0 | 0 | 6.2 | 0 | 13 | 6 | 5.1 |
| | B | 6 | 0 | 0 | 0 | 0 | 0 | 1.0 | 0 | 0 | 0 | 0 | 4 | 9 | 2.2 | 0 | 0 | 0 | 1.3 |
| | MEAN | 3.7 | 0.0 | 0.0 | 0.0 | 1.7 | 7.0 | 2.1 | 12.3 | 1.7 | 0.0 | 0.0 | 1.3 | 3.0 | 3.1 | 1.3 | 4.3 | 2.0 | 2.6 |
| 23 JUN | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 37 | 6.2 | 0 | 0 | 4 | 2.7 |
| | M | 0 | 0 | 0 | 0 | 0 | 13 | 2.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 4 | 4 | 1.4 |
| | B | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 5 | 0 | 0 | 0 | 0 | 0 | 0.8 | 9 | 0 | 4 | 1.2 |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.3 | 0.7 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 12.3 | 2.3 | 3.0 | 1.3 | 4.0 | 1.7 |
| 30 JUN | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 4 | 0 | 0 | 0 | 0.7 | 0 | 0 | 0 | 0.3 |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 |
| 7 JUL | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 5 | 0 | 0.3 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 0.0 | 0.1 |
| 25 AUG | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 0 | 0 | 0 | 6 | 0 | 0 | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.4 |
| | MEAN | 0.0 | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| GRAND MEAN ^b | S | 1.4 | 0.5 | 0.0 | 1.3 | 1.0 | 1.4 | | 0.8 | 0.8 | 0.7 | 0.5 | 1.9 | 1.7 | | 0.9 | 2.5 | 0.1 | |
| | M | 3.0 | 0.5 | 0.6 | 0.5 | 2.9 | 3.7 | | 1.5 | 1.7 | 0.5 | 1.7 | 0.9 | 0.9 | | 0.0 | 1.2 | 1.0 | |
| | B | 1.7 | 0.3 | 0.0 | 0.6 | 2.2 | 1.0 | | 0.6 | 0.7 | 1.1 | 0.0 | 0.8 | 1.2 | | 0.4 | 0.5 | 0.6 | |
| | MEAN | 2.0 | 0.4 | 0.2 | 0.8 | 2.0 | 2.0 | | 1.0 | 1.1 | 0.8 | 0.7 | 1.2 | 1.3 | | 0.4 | 1.4 | 0.6 | |

None collected 7-29 Apr, 15 Jul - 18 Aug, and 1 Sep - 19 Dec

^a Number of organisms/1000 m³

^b Apr - December sampling period

S = Surface sample

M = Mid depth sample

B = Bottom sample

ABUNDANCE^a OF WHITE PERCH IN DAY ICHTHYOPLANKTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT | 80 FT | 100 FT | GRAND MEAN |
|-----------|--------------|---------------------|--------|----------|----------|--------|--------|------|---------------------|--------|----------|----------|--------|--------|------|-------|-------|--------|------------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | NMPP | NMPP | NMPP | |
| 26 MAY | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 4 | 0 | 0 | 0 | 0 | 0 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.3 |
| | MEAN | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 2 JUN | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 6 | 0 | 0 | 1.0 | 0 | 0 | 0 | 0.4 |
| | M | 5 | 0 | 0 | 7 | 13 | 0 | 4.2 | 6 | 0 | 0 | 7 | 0 | 0 | 2.2 | 0 | 0 | 0 | 2.5 |
| | B | 5 | 6 | 0 | 5 | 15 | 42 | 12.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 4.9 |
| | MEAN | 3.3 | 2.0 | 0.0 | 4.0 | 9.3 | 14.0 | 5.4 | 2.0 | 0.0 | 0.0 | 4.3 | 0.0 | 0.0 | 1.1 | 0.0 | 0.0 | 0.0 | 2.6 |
| 9 JUN | S | 0 | 7 | 0 | 4 | 4 | 0 | 2.5 | 0 | 0 | 4 | 0 | 0 | 0 | 0.7 | 4 | 0 | 0 | 1.5 |
| | M | 5 | 5 | 10 | 0 | 0 | 0 | 3.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 1.3 |
| | B | 0 | 0 | 0 | 0 | 0 | 5 | 0.8 | 0 | 0 | 0 | 0 | 4 | 0 | 0.7 | 0 | 0 | 0 | 0.6 |
| | MEAN | 1.7 | 4.0 | 3.3 | 1.3 | 1.3 | 1.7 | 2.2 | 0.0 | 0.0 | 1.3 | 0.0 | 1.3 | 0.0 | 0.4 | 1.3 | 0.0 | 0.0 | 1.2 |
| 16,17 JUN | S | 15 | 0 | 4 | 0 | 0 | 0 | 3.2 | 5 | 0 | 0 | 0 | 0 | 0 | 0.8 | 4 | 4 | 0 | 2.1 |
| | M | 10 | 4 | 0 | 0 | 0 | 0 | 2.3 | 16 | 0 | 0 | 0 | 0 | 0 | 2.7 | 5 | 4 | 0 | 2.6 |
| | B | 0 | 5 | 0 | 10 | 9 | 0 | 4.0 | 5 | 0 | 0 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 1.9 |
| | MEAN | 8.3 | 3.0 | 1.3 | 3.3 | 3.0 | 0.0 | 3.2 | 8.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4 | 3.0 | 2.7 | 0.0 | 2.2 |
| 23 JUN | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 4 | 0 | 0.3 |
| | B | 5 | 0 | 3 | 0 | 0 | 0 | 1.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 4 | 0.8 |
| | MEAN | 1.7 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | 1.3 | 0.4 |
| 30 JUN | S | 0 | 0 | 0 | 5 | 0 | 0 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.3 |
| | M | 5 | 0 | 0 | 0 | 7 | 0 | 2.0 | 0 | 0 | 0 | 6 | 0 | 0 | 1.0 | 0 | 0 | 0 | 1.2 |
| | B | 12 | 0 | 0 | 0 | 0 | 0 | 2.0 | 5 | 0 | 0 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 1.1 |
| | MEAN | 5.7 | 0.0 | 0.0 | 1.7 | 2.3 | 0.0 | 1.6 | 1.7 | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.9 |
| 7 JUL | S | 5 | 0 | 0 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.3 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 0 | 0 | 0 | 0 | 5 | 0 | 0.8 | 0 | 0 | 0 | 0 | 5 | 0 | 0.8 | 0 | 0 | 0 | 0.7 |
| | MEAN | 1.7 | 0.0 | 0.0 | 0.0 | 1.7 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.3 |
| 15 JUL | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 6 | 0 | 0 | 0 | 1.0 | 0 | 0 | 0 | 0.4 |
| | M | 0 | 0 | 4 | 0 | 0 | 0 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.3 |
| | B | 0 | 15 | 0 | 0 | 0 | 0 | 2.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 1.0 |
| | MEAN | 0.0 | 5.0 | 1.3 | 0.0 | 0.0 | 0.0 | 1.1 | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.6 |
| 21 JUL | S | 0 | 0 | 0 | 0 | 0 | 4 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.3 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 5 | 0 | 0.3 |
| | B | 4 | 0 | 0 | 5 | 0 | 5 | 2.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.9 |
| | MEAN | 1.3 | 0.0 | 0.0 | 1.7 | 0.0 | 3.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 0.0 | 0.5 |
| 28 JUL | S | 9 | 0 | 0 | 5 | 3 | 5 | 3.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 4 | 0 | 1.7 |
| | M | 0 | 0 | 4 | 9 | 5 | 5 | 3.8 | 0 | 19 | 0 | 0 | 0 | 0 | 3.2 | 5 | 0 | 0 | 3.1 |
| | B | 10 | 5 | 0 | 7 | 0 | 0 | 3.7 | 0 | 0 | 0 | 14 | 0 | 0 | 2.3 | 0 | 0 | 0 | 2.4 |
| | MEAN | 6.3 | 1.7 | 1.3 | 7.0 | 2.7 | 3.3 | 3.7 | 0.0 | 6.3 | 0.0 | 4.7 | 0.0 | 0.0 | 1.8 | 1.7 | 1.3 | 0.0 | 2.4 |
| 4 AUG | S | 9 | 0 | 0 | 0 | 18 | 7 | 5.7 | 4 | 0 | 10 | 0 | 5 | 5 | 4.0 | 10 | 0 | 0 | 4.5 |
| | M | 21 | 5 | 0 | 0 | 21 | 6 | 8.8 | 15 | 8 | 38 | 0 | 5 | 17 | 13.8 | 0 | 0 | 0 | 9.1 |
| | B | 4 | 15 | 0 | 0 | 16 | 18 | 8.8 | 13 | 4 | 16 | 0 | 0 | 11 | 7.3 | 5 | 0 | 4 | 7.1 |
| | MEAN | 11.3 | 6.7 | 0.0 | 0.0 | 18.3 | 10.3 | 7.8 | 10.7 | 4.0 | 21.3 | 0.0 | 3.3 | 11.0 | 8.4 | 5.0 | 0.0 | 1.3 | 6.9 |

ABUNDANCE^a OF WHITE PERCH LARVAE IN DAY ICHTHYOPLANKTON COLLECTIONS (continued)

NINE MILE POINT VICINITY - 1976

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT | 80 FT | 100 FT | GRAND MEAN |
|-------------------------|--------------|---------------------|--------|----------|----------|--------|--------|------|---------------------|--------|----------|----------|--------|--------|------|-------|-------|--------|------------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | NMPP | NMPP | NMPP | |
| 11 AUG | S | 0 | 0 | 0 | 6 | 0 | 0 | 1.0 | 5 | 0 | 0 | 0 | 5 | 0 | 1.7 | 0 | 5 | 10 | 2.1 |
| | M | 5 | 0 | 5 | 0 | 0 | 0 | 1.7 | 0 | 0 | 0 | 6 | 0 | 12 | 3.0 | 0 | 0 | 0 | 1.9 |
| | B | 0 | 0 | 5 | 0 | 14 | 0 | 3.2 | 6 | 0 | 0 | 0 | 0 | 0 | 1.0 | 5 | 5 | 0 | 2.3 |
| | MEAN | 1.7 | 0.0 | 3.3 | 2.0 | 4.7 | 0.0 | 1.9 | 3.7 | 0.0 | 0.0 | 2.0 | 1.7 | 4.0 | 1.9 | 1.7 | 3.3 | 3.3 | 2.1 |
| 18 AUG | S | 0 | 0 | 0 | 0 | 0 | 5 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.3 |
| | M | 0 | 6 | 0 | 12 | 0 | 0 | 3.0 | 3 | 0 | 5 | 0 | 5 | 4 | 2.8 | 0 | 0 | 0 | 2.3 |
| | B | 0 | 5 | 5 | 4 | 0 | 10 | 4.0 | 4 | 0 | 4 | 0 | 6 | 0 | 2.3 | 0 | 0 | 5 | 2.9 |
| | MEAN | 0.0 | 3.7 | 1.7 | 5.3 | 0.0 | 5.0 | 2.6 | 2.3 | 0.0 | 3.0 | 0.0 | 3.7 | 1.3 | 1.7 | 0.0 | 0.0 | 1.7 | 1.8 |
| 25 AUG | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 11 | 0 | 0.7 |
| | B | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 6 | 0 | 0 | 0 | 1.0 | 0 | 0 | 0 | 0.4 |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 3.7 | 0.0 | 0.4 |
| GRAND MEAN ^b | S | 1.1 | 0.2 | 0.1 | 0.6 | 0.7 | 0.6 | | 0.4 | 0.0 | 0.6 | 0.2 | 0.3 | 0.1 | | 0.5 | 0.4 | 0.3 | |
| | M | 1.5 | 0.6 | 0.7 | 0.8 | 1.3 | 0.3 | | 1.1 | 0.8 | 1.2 | 0.5 | 0.3 | 0.9 | | 0.3 | 0.7 | 0.0 | |
| | B | 1.3 | 1.5 | 0.4 | 0.9 | 1.7 | 2.3 | | 0.9 | 0.1 | 0.7 | 0.4 | 0.4 | 0.3 | | 0.3 | 0.1 | 0.4 | |
| | MEAN | 1.3 | 0.8 | 0.4 | 0.8 | 1.2 | 1.1 | | 0.8 | 0.3 | 0.8 | 0.4 | 0.3 | 0.4 | | 0.4 | 0.4 | 0.2 | |

None collected 7 Apr-22 May and 1 Sep-19 Dec

^a Number of organisms/1000 m³

^b April-December sampling period

S = Surface sample

M = Mid-depth

B = Bottom sample

ABUNDANCE^a OF YELLOW PERCH LARVAE IN DAY ICHTHYOPLANKTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT | 80 FT | 100 FT | GRAND MEAN |
|-------------------------|--------------|---------------------|--------|----------|----------|--------|--------|------|---------------------|--------|----------|----------|--------|--------|------|-------|-------|--------|------------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | NMPP | NMPP | NMPP | |
| 29 APR | S | 0 | 0 | 6 | 18 | 128 | 0 | 25.3 | 15 | 19 | 0 | 9 | 0 | 5 | 8.0 | 4 | 0 | 0 | 13.6 |
| | M | 16 | 0 | 0 | 19 | 54 | 0 | 14.8 | 0 | 0 | 21 | 7 | 7 | 0 | 5.8 | 6 | 0 | 0 | 8.7 |
| | B | 15 | 0 | 0 | 41 | 43 | 15 | 19.0 | 22 | 8 | 9 | 13 | 19 | 0 | 11.8 | 14 | 0 | 0 | 13.3 |
| | MEAN | 10.3 | 0.0 | 2.0 | 26.0 | 75.0 | 5.0 | 19.7 | 12.3 | 9.0 | 10.0 | 9.7 | 8.7 | 1.7 | 8.6 | 8.0 | 0.0 | 0.0 | 11.8 |
| 22 MAY | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | B | 5 | 0 | 0 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 5 | 0 | 0 | 0.8 | 0 | 0 | 0 | 0.7 |
| | MEAN | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 1.7 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.2 |
| GRAND MEAN ^b | S | 0.0 | 0.0 | 0.2 | 0.5 | 3.7 | 0.0 | | 0.4 | 0.5 | 0.0 | 0.3 | 0.0 | 0.1 | | 0.1 | 0.0 | 0.0 | |
| | M | 0.5 | 0.0 | 0.0 | 0.5 | 1.5 | 0.0 | | 0.0 | 0.0 | 0.6 | 0.2 | 0.2 | 0.0 | | 0.2 | 0.0 | 0.0 | |
| | B | 0.6 | 0.0 | 0.0 | 1.2 | 1.2 | 0.4 | | 0.6 | 0.2 | 0.3 | 0.5 | 0.5 | 0.0 | | 0.4 | 0.0 | 0.0 | |
| | MEAN | 0.4 | 0.0 | 0.1 | 0.7 | 2.1 | 0.1 | | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | <0.1 | | 0.2 | 0.0 | 0.0 | |

None collected 7-21 Apr, 13 May, and 26 May-19 Dec

^a Number of organisms/1000 m³

^b April-December sampling period

S = Surface sample

M = Mid-depth sample

B = Bottom sample

APPENDIX VC-2b

ABUNDANCE OF SELECTED SPECIES OF LARVAE IN NIGHT COLLECTIONS

ABUNDANCE^a OF ALEWIFE LARVAE IN NIGHT ICHTHYOPLANKTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT | 80 FT | 100 FT | GRAND MEAN |
|---------|--------------|---------------------|--------|----------|----------|--------|--------|--------|---------------------|--------|----------|----------|--------|--------|--------|--------|--------|--------|------------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | NMPP | NMPP | NMPP | |
| 16 JUN | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 4 | 0 | 5 | 0 | 0 | 0 | 1.5 | 0 | 0 | 5 | 0 | 0 | 5 | 1.7 | 0 | 0 | 0 | 1.3 |
| | B | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 3 | 0 | 0.2 |
| | MEAN | 1.3 | 0.0 | 1.7 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 1.7 | 0.0 | 0.0 | 1.7 | 0.6 | 0.0 | 1.0 | 0.0 | 0.5 |
| 23 JUN | S | 10 | 17 | 0 | 10 | 11 | 0 | 8.0 | 7 | 0 | 0 | 0 | 5 | 5 | 2.8 | 5 | 5 | 5 | 5.3 |
| | M | 0 | 12 | 5 | 0 | 0 | 0 | 2.8 | 0 | 5 | 5 | 0 | 4 | 9 | 3.8 | 0 | 0 | 0 | 2.7 |
| | B | 15 | 5 | 0 | 0 | 0 | 26 | 7.7 | 21 | 5 | 0 | 0 | 0 | 14 | 6.7 | 0 | 0 | 0 | 5.7 |
| | MEAN | 8.3 | 11.3 | 1.7 | 3.3 | 3.7 | 8.7 | 6.2 | 9.3 | 3.3 | 1.7 | 0.0 | 3.0 | 9.3 | 4.4 | 1.7 | 1.7 | 1.7 | 4.6 |
| 1 JUL | S | 37 | 6 | 0 | 6 | 20 | 16 | 14.2 | 46 | 0 | 0 | 6 | 15 | 40 | 17.8 | 18 | 5 | 14 | 15.3 |
| | M | 37 | 5 | 0 | 31 | 33 | 21 | 21.2 | 15 | 6 | 0 | 0 | 0 | 11 | 5.3 | 5 | 19 | 10 | 12.9 |
| | B | 12 | 10 | 5 | 6 | 55 | 0 | 14.7 | 11 | 0 | 0 | 0 | 12 | 13 | 6.0 | 6 | 7 | 0 | 9.1 |
| | MEAN | 28.7 | 7.0 | 1.7 | 14.3 | 36.0 | 12.3 | 16.7 | 24.0 | 2.0 | 0.0 | 2.0 | 9.0 | 21.3 | 9.7 | 9.7 | 10.3 | 8.0 | 12.4 |
| 7 JUL | S | 118 | 96 | 102 | 0 | 15 | 63 | 65.7 | 407 | 449 | 285 | 108 | 61 | 65 | 229.2 | 99 | 27 | 61 | 130.4 |
| | M | 17 | 0 | 40 | 41 | 34 | 97 | 38.2 | 110 | 55 | 17 | 34 | 41 | 37 | 49.0 | 10 | 25 | 8 | 37.7 |
| | B | 44 | 32 | 10 | 37 | 0 | 78 | 33.5 | 68 | 52 | 65 | 50 | 30 | 20 | 47.5 | 16 | 14 | 5 | 34.7 |
| | MEAN | 59.7 | 42.7 | 50.7 | 26.0 | 16.3 | 79.3 | 45.8 | 195.0 | 185.3 | 122.3 | 64.0 | 44.0 | 40.7 | 108.6 | 41.7 | 22.0 | 24.7 | 67.6 |
| 15 JUL | S | 78 | 46 | 5 | 120 | 93 | 20 | 60.3 | 63 | 109 | 87 | 82 | 71 | 85 | 82.8 | 164 | 82 | 67 | 78.1 |
| | M | 37 | 95 | 81 | 83 | 90 | 0 | 64.3 | 135 | 147 | 14 | 48 | 18 | 30 | 65.3 | 62 | 26 | 10 | 58.4 |
| | B | 107 | 38 | 36 | 27 | 58 | 25 | 48.5 | 60 | 62 | 10 | 24 | 28 | 40 | 37.3 | 44 | 14 | 0 | 38.2 |
| | MEAN | 74.0 | 59.7 | 40.7 | 76.7 | 80.3 | 15.0 | 57.7 | 86.0 | 106.0 | 37.0 | 51.3 | 39.0 | 51.7 | 61.8 | 90.0 | 40.7 | 25.7 | 58.2 |
| 21 JUL | S | 5 | 44 | 10 | 58 | 98 | 1134 | 224.8 | 15 | 24 | 50 | 0 | 428 | 1071 | 264.7 | 308 | 201 | 99 | 236.3 |
| | M | 9 | 19 | 4 | 22 | 81 | 1147 | 213.7 | 5 | 22 | 19 | 17 | 19 | 263 | 57.5 | 40 | 30 | 22 | 114.6 |
| | B | 5 | 9 | 13 | 12 | 9 | 168 | 36.0 | 5 | 0 | 4 | 4 | 32 | 439 | 80.7 | 17 | 37 | 17 | 51.4 |
| | MEAN | 6.3 | 24.0 | 9.0 | 30.7 | 62.7 | 816.3 | 158.2 | 8.3 | 15.3 | 24.3 | 7.0 | 159.7 | 591.0 | 134.3 | 121.7 | 89.3 | 46.0 | 134.1 |
| 28 JUL | S | 5 | 69 | 48 | 360 | 335 | 1605 | 403.7 | 23 | 83 | 135 | 232 | 227 | 1030 | 288.3 | 32 | 21 | 0 | 280.3 |
| | M | 19 | 52 | 73 | 332 | 98 | 962 | 256.0 | 18 | 22 | 224 | 30 | 156 | 1089 | 256.5 | 31 | 117 | 72 | 219.7 |
| | B | 9 | 106 | 119 | 162 | 169 | 688 | 208.8 | 65 | 115 | 49 | 79 | 173 | 436 | 152.8 | 99 | 44 | 21 | 155.6 |
| | MEAN | 11.0 | 75.7 | 80.0 | 284.7 | 200.7 | 1085.0 | 289.5 | 35.3 | 73.3 | 136.0 | 113.7 | 185.3 | 851.7 | 232.6 | 54.0 | 60.7 | 31.0 | 218.5 |
| 4 AUG | S | 2005 | 1203 | 4317 | 2772 | 3064 | 3658 | 2836.5 | 1673 | 3617 | 2379 | 5502 | 3444 | 895 | 2918.3 | 2480 | 2656 | 68 | 2648.9 |
| | M | 1801 | 1698 | 2971 | 2655 | 5001 | 38 | 2360.7 | 2112 | 3172 | 1117 | 574 | 667 | 4500 | 2023.7 | 451 | 299 | 199 | 1817.0 |
| | B | 1241 | 613 | 2515 | 655 | 872 | 2987 | 1480.5 | 205 | 1708 | 858 | 369 | 183 | 2264 | 931.2 | 187 | 218 | 60 | 995.7 |
| | MEAN | 1682.3 | 1171.3 | 3267.7 | 2027.3 | 2979.0 | 2227.7 | 2225.9 | 1330.0 | 2832.3 | 1451.3 | 2148.3 | 1431.3 | 2553.0 | 1957.7 | 1039.3 | 1057.7 | 109.0 | 1820.5 |
| 11 AUG | S | 441 | 405 | 205 | 340 | 239 | 427 | 342.8 | 552 | 138 | 496 | 427 | 67 | 104 | 297.3 | 209 | 810 | 261 | 341.4 |
| | M | 330 | 200 | 358 | 318 | 358 | 552 | 352.7 | 374 | 611 | 316 | 456 | 1673 | 691 | 686.8 | 506 | 23 | 96 | 457.5 |
| | B | 219 | 927 | 286 | 893 | 175 | 794 | 549.0 | 6 | 634 | 107 | 590 | 1595 | 606 | 589.7 | 858 | 100 | 387 | 545.1 |
| | MEAN | 330.0 | 510.7 | 283.0 | 517.0 | 257.3 | 591.0 | 414.8 | 310.7 | 461.0 | 306.3 | 491.0 | 1111.7 | 467.0 | 524.6 | 524.3 | 311.0 | 248.0 | 448.0 |
| 18 AUG | S | 1745 | 1415 | 1832 | 1138 | 1497 | 2096 | 1620.5 | 2346 | 1044 | 1177 | 2483 | 1288 | 648 | 1497.7 | 904 | 385 | 599 | 1373.1 |
| | M | 22 | 1635 | 351 | 1426 | 1630 | 1119 | 1030.5 | 661 | 969 | 338 | 303 | 1280 | 797 | 724.7 | 202 | 238 | 234 | 747.0 |
| | B | 997 | 341 | 466 | 622 | 882 | 714 | 670.3 | 166 | 136 | 406 | 517 | 1371 | 696 | 548.7 | 67 | 83 | 144 | 507.2 |
| | MEAN | 921.3 | 1130.3 | 883.0 | 1062.0 | 1336.3 | 1309.7 | 1107.1 | 1057.7 | 716.3 | 640.3 | 1101.0 | 1313.0 | 713.7 | 923.7 | 391.0 | 235.3 | 325.6 | 875.8 |
| 25 AUG | S | 411 | 398 | 88 | 338 | 2323 | 195 | 625.5 | 283 | 223 | 214 | 415 | 1250 | 187 | 428.7 | 112 | 246 | 35 | 447.9 |
| | M | 768 | 220 | 641 | 275 | 1985 | 814 | 783.8 | 62 | 0 | 117 | 105 | 81 | 80 | 74.2 | 55 | 31 | 0 | 348.9 |
| | B | 711 | 106 | 292 | 109 | 253 | 84 | 259.2 | 35 | 16 | 60 | 59 | 82 | 0 | 42.0 | 116 | 20 | 9 | 130.1 |
| | MEAN | 630.0 | 241.3 | 340.3 | 240.7 | 1520.3 | 364.3 | 556.2 | 126.7 | 79.7 | 130.3 | 193.0 | 417.0 | 89.0 | 181.6 | 94.3 | 99.0 | 14.7 | 309.0 |
| 2,3 SEP | S | 59 | 50 | 10 | 5 | 21 | 111 | 42.7 | 26 | 47 | 9 | 0 | 110 | 114 | 51.0 | 48 | 61 | 25 | 46.4 |
| | M | 111 | 17 | 11 | 27 | 38 | 113 | 52.8 | 72 | 27 | 13 | 20 | 119 | 170 | 70.2 | 146 | 510 | 119 | 100.9 |
| | B | 185 | 123 | 47 | 16 | 114 | 207 | 115.3 | 212 | 121 | 34 | 60 | 312 | 317 | 176.0 | 77 | 572 | 72 | 164.6 |
| | MEAN | 118.3 | 63.3 | 22.7 | 16.0 | 57.7 | 143.7 | 70.3 | 103.3 | 65.0 | 18.7 | 26.7 | 180.3 | 200.3 | 99.1 | 90.3 | 381.0 | 72.0 | 104.0 |

ABUNDANCE^a OF ALEWIFE LARVAE IN NIGHT ICHTHYOPLANKTON COLLECTIONS (Continued)

NINE MILE POINT VICINITY - 1976

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT | 80 FT | 100 FT | GRAND |
|-------------------------|--------------|---------------------|--------|----------|----------|--------|--------|------|---------------------|--------|----------|----------|--------|--------|------|-------|-------|--------|-------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | NMPP | NMPP | NMPP | MEAN |
| 8 SEP | S | 0 | 0 | 0 | 6 | 6 | 16 | 4.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 1.9 |
| | M | 40 | 9 | 5 | 0 | 0 | 12 | 11.0 | 0 | 5 | 5 | 0 | 0 | 5 | 2.5 | 5 | 0 | 5 | 6.1 |
| | B | 13 | 4 | 0 | 12 | 9 | 22 | 10.0 | 5 | 4 | 4 | 8 | 32 | 5 | 9.7 | 4 | 0 | 8 | 8.7 |
| | MEAN | 17.7 | 4.3 | 1.7 | 6.0 | 5.0 | 16.7 | 8.6 | 1.7 | 3.0 | 3.0 | 2.7 | 10.7 | 3.3 | 4.1 | 3.0 | 0 | 4.3 | 5.5 |
| 15 SEP | S | 112 | 38 | 43 | 0 | 0 | 0 | 32.2 | 82 | 41 | 10 | 76 | 0 | 5 | 35.7 | 37 | 4 | 0 | 29.9 |
| | M | 191 | 16 | 28 | 52 | 28 | 49 | 60.7 | 125 | 104 | 19 | 57 | 48 | 42 | 65.8 | 50 | 5 | 5 | 54.6 |
| | B | 81 | 53 | 65 | 102 | 116 | 53 | 78.3 | 126 | 22 | 31 | 86 | 4 | 23 | 48.7 | 4 | 17 | 12 | 53.0 |
| | MEAN | 128.0 | 35.7 | 45.3 | 51.3 | 48.0 | 34.0 | 57.1 | 111.0 | 55.7 | 20.0 | 73.0 | 17.3 | 23.3 | 50.1 | 30.3 | 8.7 | 5.7 | 45.8 |
| GRAND MEAN ^b | S | 314.1 | 236.7 | 416.2 | 322.1 | 482.6 | 583.8 | | 345.2 | 360.9 | 302.6 | 583.2 | 435.4 | 265.6 | | 276.0 | 281.4 | 77.1 | |
| | M | 211.6 | 248.6 | 285.8 | 328.9 | 586.0 | 307.8 | | 230.6 | 321.6 | 138.1 | 102.8 | 256.6 | 483.1 | | 97.7 | 82.7 | 48.8 | |
| | B | 227.4 | 147.9 | 240.9 | 165.8 | 169.5 | 365.4 | | 61.6 | 179.7 | 101.8 | 115.4 | 240.8 | 304.6 | | 93.4 | 70.6 | 45.9 | |
| | MEAN | 251.0 | 211.1 | 314.3 | 272.2 | 412.7 | 419.0 | | 212.4 | 287.4 | 180.8 | 267.1 | 310.9 | 351.1 | | 155.7 | 144.9 | 57.3 | |

None collected 2-10 Jun; night ichthyoplankton collections not required in sampling program after 15 Sep

^a Number of organisms/1000 m³

^b June-September sampling period

S = Surface sample

M = Mid-depth sample

B = Bottom sample

ABUNDANCE^a OF JOHNNY DARTER LARVAE IN NIGHT ICHTHYOPLANKTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT | 80 FT | 100 FT | GRAND |
|-----------|--------------|---------------------|--------|----------|----------|--------|--------|-------|---------------------|--------|----------|----------|--------|--------|-------|-------|-------|--------|-------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | NMPP | NMPP | NMPP | MEAN |
| 9, 10 JUN | S | 0 | 0 | 0 | 0 | 5 | 0 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.3 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 16 JUN | S | 5 | 0 | 10 | 0 | 0 | 0 | 2.5 | 0 | 5 | 0 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 1.3 |
| | M | 4 | 0 | 0 | 0 | 0 | 0 | 0.7 | 0 | 0 | 14 | 0 | 0 | 0 | 2.3 | 0 | 0 | 0 | 1.2 |
| | B | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 10 | 0 | 0 | 1.7 | 0 | 0 | 0 | 0.7 |
| | MEAN | 3.0 | 0.0 | 3.3 | 0.0 | 0.0 | 0.0 | 1.1 | 0.0 | 1.7 | 4.7 | 3.3 | 0.0 | 0.0 | 1.6 | 0.0 | 0.0 | 0.0 | 1.1 |
| 23 JUN | S | 35 | 63 | 20 | 30 | 83 | 0 | 38.5 | 20 | 38 | 5 | 5 | 5 | 0 | 12.2 | 15 | 0 | 0 | 21.3 |
| | M | 42 | 29 | 5 | 5 | 82 | 0 | 27.2 | 0 | 21 | 15 | 5 | 4 | 0 | 7.5 | 0 | 0 | 0 | 13.9 |
| | B | 44 | 49 | 10 | 25 | 176 | 0 | 50.7 | 5 | 9 | 0 | 4 | 0 | 0 | 3.0 | 0 | 0 | 0 | 21.5 |
| | MEAN | 40.3 | 47.0 | 11.6 | 20.0 | 113.7 | 0.0 | 38.8 | 8.3 | 22.7 | 6.7 | 4.7 | 3.0 | 0.0 | 7.6 | 5.0 | 0.0 | 0.0 | 18.9 |
| 1 JUL | S | 0 | 93 | 62 | 68 | 183 | 16 | 70.3 | 0 | 6 | 0 | 22 | 5 | 0 | 5.5 | 27 | 0 | 0 | 32.1 |
| | M | 0 | 95 | 0 | 67 | 181 | 0 | 57.2 | 0 | 18 | 17 | 23 | 6 | 0 | 10.7 | 5 | 0 | 0 | 27.5 |
| | B | 24 | 84 | 69 | 88 | 320 | 0 | 97.5 | 11 | 12 | 11 | 18 | 6 | 7 | 10.8 | 0 | 0 | 0 | 43.3 |
| | MEAN | 8.0 | 90.7 | 43.7 | 74.3 | 228.0 | 5.3 | 75.0 | 3.7 | 12.0 | 9.3 | 21.0 | 5.7 | 2.3 | 9.0 | 10.7 | 0.0 | 0.0 | 34.3 |
| 7 JUL | S | 102 | 122 | 157 | 0 | 5 | 43 | 71.5 | 86 | 77 | 117 | 56 | 5 | 0 | 56.8 | 45 | 0 | 0 | 54.3 |
| | M | 103 | 4 | 35 | 138 | 28 | 68 | 62.7 | 39 | 60 | 39 | 85 | 6 | 6 | 39.2 | 26 | 0 | 0 | 42.5 |
| | B | 72 | 122 | 150 | 185 | 10 | 27 | 94.3 | 24 | 63 | 59 | 139 | 0 | 0 | 47.5 | 42 | 0 | 0 | 59.5 |
| | MEAN | 92.3 | 82.7 | 114.0 | 107.7 | 14.3 | 46.0 | 76.2 | 49.7 | 66.7 | 71.7 | 93.3 | 3.7 | 2.0 | 47.8 | 37.7 | 0.0 | 0.0 | 52.1 |
| 15 JUL | S | 5 | 46 | 5 | 78 | 20 | 5 | 26.5 | 14 | 20 | 44 | 59 | 9 | 0 | 24.3 | 77 | 0 | 0 | 25.5 |
| | M | 11 | 74 | 10 | 64 | 70 | 0 | 38.2 | 15 | 40 | 42 | 48 | 5 | 1120 | 211.7 | 31 | 5 | 0 | 102.3 |
| | B | 37 | 26 | 10 | 70 | 115 | 0 | 43.0 | 20 | 57 | 84 | 48 | 0 | 0 | 34.8 | 24 | 0 | 5 | 33.1 |
| | MEAN | 17.7 | 48.7 | 8.3 | 70.7 | 68.3 | 1.7 | 35.9 | 16.3 | 39.0 | 56.7 | 51.7 | 4.7 | 373.3 | 90.3 | 44.0 | 1.7 | 1.7 | 53.6 |
| 21 JUL | S | 15 | 5 | 5 | 5 | 0 | 5 | 5.8 | 5 | 5 | 25 | 0 | 0 | 0 | 5.8 | 27 | 5 | 0 | 6.8 |
| | M | 5 | 0 | 9 | 0 | 5 | 10 | 4.8 | 27 | 4 | 5 | 4 | 0 | 0 | 6.7 | 13 | 4 | 0 | 5.7 |
| | B | 9 | 27 | 27 | 44 | 5 | 642 | 125.7 | 24 | 0 | 13 | 8 | 14 | 19 | 13.0 | 9 | 0 | 0 | 56.1 |
| | MEAN | 9.7 | 10.7 | 13.7 | 16.3 | 3.3 | 219.0 | 45.4 | 18.7 | 3.0 | 14.3 | 4.0 | 4.7 | 6.3 | 8.5 | 16.3 | 3.0 | 0.0 | 22.9 |
| 28 JUL | S | 5 | 0 | 4 | 0 | 0 | 3 | 2.0 | 0 | 4 | 4 | 0 | 4 | 0 | 2.0 | 11 | 0 | 0 | 2.3 |
| | M | 0 | 4 | 0 | 0 | 3 | 0 | 1.2 | 4 | 5 | 0 | 0 | 0 | 0 | 1.5 | 4 | 0 | 0 | 1.3 |
| | B | 9 | 9 | 13 | 16 | 6 | 54 | 17.8 | 15 | 12 | 4 | 0 | 0 | 5 | 6.0 | 4 | 9 | 0 | 10.4 |
| | MEAN | 4.7 | 4.3 | 5.7 | 5.3 | 3.0 | 19.0 | 7.0 | 6.3 | 7.0 | 2.7 | 0.0 | 1.3 | 1.7 | 3.2 | 6.3 | 3.0 | 0.0 | 4.6 |

ABUNDANCE^a OF JOHNNY DARTER LARVAE IN NIGHT ICHTHYOPLANKTON COLLECTIONS (Continued)

NINE MILE POINT VICINITY - 1976

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT | 80 FT | 100 FT | GRAND |
|----------------------------|--------------|---------------------|--------|----------|----------|--------|--------|------|---------------------|--------|----------|----------|--------|--------|------|-------|-------|--------|-------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | | | | |
| 4 AUG | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 1.0 | 4 | 0 | 0 | 0.7 |
| | M | 5 | 6 | 0 | 0 | 0 | 0 | 1.8 | 0 | 0 | 0 | 5 | 0 | 0 | 0.8 | 4 | 0 | 0 | 1.3 |
| | B | 7 | 0 | 0 | 0 | 6 | 0 | 2.2 | 0 | 5 | 0 | 0 | 0 | 6 | 1.8 | 11 | 0 | 0 | 2.3 |
| | MEAN | 4.0 | 2.0 | 0.0 | 0.0 | 2.0 | 0.0 | 1.3 | 2.0 | 1.7 | 0.0 | 1.7 | 0.0 | 2.0 | 1.2 | 6.3 | 0.0 | 0.0 | 1.4 |
| 11 AUG | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 5 | 0 | 0 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 0.3 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 0 | 5 | 0 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.3 |
| | MEAN | 0.0 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.2 |
| 25 AUG | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 0 | 0 | 0 | 16 | 0 | 0 | 2.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 1.1 |
| | MEAN | 0.0 | 0.0 | 0.0 | 5.3 | 0.0 | 0.0 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 |
| 2, 3 SEP | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 4 | 0 | 0.7 | 0 | 0 | 0 | 0.3 |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 |
| GRAND MEAN ^b | S | 10.4 | 20.6 | 16.4 | 11.3 | 18.5 | 4.5 | | 8.5 | 9.7 | 12.2 | 8.9 | 1.8 | 0.0 | | 12.9 | 0.3 | 0.0 | |
| | M | 10.6 | 13.2 | 3.7 | 17.1 | 23.0 | 4.9 | | 5.3 | 9.2 | 8.2 | 10.6 | 1.3 | 70.4 | | 5.2 | 0.6 | 0.0 | |
| | B | 12.6 | 20.1 | 17.4 | 27.8 | 39.9 | 45.2 | | 6.2 | 9.9 | 10.7 | 14.2 | 1.2 | 2.3 | | 5.6 | 0.6 | 0.3 | |
| | MEAN | 11.2 | 18.0 | 12.5 | 18.7 | 27.1 | 18.2 | | 6.7 | 9.6 | 10.4 | 11.2 | 1.4 | 24.2 | | 7.9 | 0.5 | 0.1 | |

None collected 2 Jun and 8-15 Sep

^a Number of organisms/1000 m³

^b June-September sampling period

S = Surface

M = Mid-depth

B = Bottom

ABUNDANCE^a OF MOTTLED SCULPIN LARVAE IN NIGHT ICHTHYOPLANKTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT | 80 FT | 100 FT | GRAND |
|-----------|--------------|---------------------|--------|----------|----------|--------|--------|------|---------------------|--------|----------|----------|--------|--------|------|-------|-------|--------|-------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | NMPP | NMPP | NMPP | MEAN |
| 9, 10 JUN | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 4 | 0 | 0 | 0 | 0 | 0 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.3 |
| | B | 5 | 0 | 0 | 0 | 5 | 0 | 1.7 | 0 | 0 | 5 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 1.0 |
| | MEAN | 3.0 | 0.0 | 0.0 | 0.0 | 1.7 | 0.0 | 0.8 | 0.0 | 0.0 | 1.7 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.4 |
| 16 JUN | S | 5 | 0 | 0 | 5 | 10 | 0 | 3.3 | 0 | 0 | 5 | 0 | 33 | 0 | 6.3 | 29 | 5 | 0 | 6.1 |
| | M | 0 | 4 | 5 | 3 | 0 | 0 | 2.0 | 0 | 4 | 0 | 11 | 38 | 0 | 8.8 | 58 | 5 | 0 | 8.5 |
| | B | 8 | 0 | 0 | 5 | 25 | 8 | 7.7 | 0 | 4 | 8 | 59 | 23 | 9 | 17.2 | 41 | 3 | 0 | 12.9 |
| | MEAN | 4.3 | 1.3 | 1.7 | 4.3 | 11.7 | 2.7 | 4.3 | 0.0 | 2.7 | 4.3 | 23.3 | 31.3 | 3.0 | 10.7 | 42.7 | 4.3 | 0.0 | 9.2 |
| 23 JUN | S | 10 | 0 | 0 | 0 | 0 | 0 | 1.7 | 0 | 5 | 0 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 1.0 |
| | M | 16 | 0 | 0 | 10 | 0 | 9 | 5.8 | 5 | 10 | 10 | 5 | 0 | 0 | 5.0 | 51 | 9 | 0 | 8.3 |
| | B | 29 | 60 | 21 | 66 | 24 | 0 | 33.3 | 31 | 51 | 32 | 71 | 0 | 0 | 30.8 | 97 | 14 | 0 | 33.1 |
| | MEAN | 18.3 | 20.0 | 7.0 | 25.3 | 8.0 | 3.0 | 13.6 | 12.0 | 22.0 | 14.0 | 25.3 | 0.0 | 0.0 | 12.2 | 49.3 | 7.6 | 0.0 | 14.1 |
| 1 JUL | S | 0 | 0 | 0 | 6 | 0 | 0 | 1.0 | 0 | 0 | 6 | 0 | 0 | 0 | 1.0 | 0 | 0 | 0 | 0.8 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 6 | 0 | 1.0 | 5 | 5 | 0 | 1.1 |
| | B | 0 | 5 | 5 | 17 | 0 | 0 | 4.5 | 0 | 0 | 17 | 0 | 0 | 0 | 2.8 | 6 | 0 | 5 | 3.7 |
| | MEAN | 0.0 | 1.7 | 1.7 | 7.7 | 0.0 | 0.0 | 1.8 | 0.0 | 0.0 | 7.7 | 0.0 | 2.0 | 0.0 | 1.6 | 3.7 | 1.7 | 1.7 | 1.8 |
| 7 JUL | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 6 | 0 | 0 | 0 | 0 | 1.0 | 0 | 0 | 0 | 0.4 |
| | B | 0 | 5 | 5 | 0 | 0 | 0 | 1.7 | 5 | 0 | 11 | 0 | 0 | 0 | 2.7 | 0 | 0 | 5 | 2.1 |
| | MEAN | 0.0 | 1.7 | 1.7 | 0.0 | 0.0 | 0.0 | 0.6 | 1.7 | 2.0 | 3.7 | 0.0 | 0.0 | 0.0 | 1.2 | 0.0 | 0.0 | 1.7 | 0.7 |
| 15 JUL | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 5 | 0 | 0 | 0.3 |
| | M | 0 | 0 | 5 | 0 | 0 | 0 | 0.8 | 0 | 0 | 5 | 5 | 0 | 0 | 1.7 | 0 | 0 | 0 | 1.0 |
| | B | 0 | 0 | 5 | 22 | 0 | 0 | 4.5 | 5 | 0 | 0 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 2.1 |
| | MEAN | 0.0 | 0.0 | 3.3 | 7.3 | 0.0 | 0.0 | 1.8 | 1.7 | 0.0 | 1.7 | 1.7 | 0.0 | 0.0 | 0.8 | 1.7 | 0.0 | 0.0 | 1.2 |
| 21 JUL | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 4 | 0 | 0 | 0.7 | 0 | 0 | 0 | 0.3 |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | 0.0 | 0.0 | 0.2 | 0 | 0 | 0 | 0.1 |
| 28 JUL | S | 0 | 5 | 0 | 4 | 0 | 8 | 2.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 1.1 |
| | M | 0 | 4 | 0 | 0 | 0 | 0 | 0.7 | 0 | 0 | 0 | 0 | 0 | 5 | 0.8 | 0 | 0 | 0 | 0.6 |
| | B | 0 | 0 | 4 | 0 | 0 | 0 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.3 |
| | MEAN | 0.0 | 3.0 | 1.3 | 1.3 | 0.0 | 2.7 | 1.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 0.3 | 0.0 | 0.0 | 0.0 | 0.7 |

ABUNDANCE^a OF MOTTLED SCULPIN LARVAE IN NIGHT ICHTHYOPLANKTON COLLECTIONS (Continued)

NINE MILE POINT VICINITY - 1976

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT | 80 FT | 100 FT | GRAND |
|-------------------------|--------------|---------------------|--------|----------|----------|--------|--------|------|---------------------|--------|----------|----------|--------|--------|------|-------|-------|--------|-------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | NMPP | NMPP | NMPP | MEAN |
| 4 AUG | S | 5 | 0 | 0 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.3 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 5 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 0.3 |
| | MEAN | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 1.7 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.2 |
| 18 AUG | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 5 | 0 | 0 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.3 |
| | MEAN | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| GRAND MEAN ^b | S | 1.2 | 0.3 | 0.0 | 0.9 | 0.6 | 0.5 | | 0.0 | 0.3 | 0.7 | 0.0 | 2.1 | 0.0 | | 2.1 | 0.3 | 0.0 | |
| | M | 1.2 | 0.5 | 0.6 | 0.8 | 0.0 | 0.6 | | 0.3 | 1.2 | 0.9 | 1.3 | 2.8 | 0.3 | | 7.1 | 1.2 | 0.0 | |
| | B | 2.9 | 4.4 | 2.5 | 6.9 | 3.4 | 0.5 | | 2.6 | 3.4 | 4.9 | 8.4 | 1.4 | 0.6 | | 9.0 | 1.1 | 0.6 | |
| | MEAN | 1.8 | 1.7 | 1.0 | 2.9 | 1.3 | 0.5 | | 1.0 | 1.7 | 2.2 | 3.2 | 2.1 | 0.3 | | 6.1 | 0.9 | 0.2 | |

None collected 2 Jun, 11 Aug, and 25 Aug-15 Sep

^a Number of organisms/1000 m³

^b June-September sampling period

S = Surface

M = Mid-depth

B = Bottom

ABUNDANCE^a OF RAINBOW SMELT LARVAE IN NIGHT ICHTHYOPLANKTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT | 80 FT | 100 FT | GRAND MEAN |
|----------|--------------|---------------------|--------|----------|----------|--------|--------|------|---------------------|--------|----------|----------|--------|--------|------|-------|-------|--------|------------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | NMPP | NMPP | NMPP | |
| 2 JUN | S | 5 | 0 | 34 | 5 | 0 | 31 | 12.5 | 6 | 28 | 13 | 20 | 0 | 10 | 12.8 | 33 | 35 | 5 | 15.0 |
| | M | 0 | 5 | 6 | 10 | 7 | 16 | 7.3 | 11 | 5 | 34 | 47 | 24 | 10 | 21.8 | 35 | 51 | 22 | 18.9 |
| | B | 0 | 0 | 11 | 41 | 6 | 48 | 17.7 | 0 | 0 | 25 | 22 | 76 | 39 | 27.0 | 6 | 23 | 34 | 22.1 |
| | MEAN | 1.7 | 1.7 | 17.0 | 18.7 | 4.3 | 31.7 | 12.5 | 5.7 | 11.0 | 24.0 | 29.7 | 33.3 | 19.7 | 20.6 | 24.7 | 36.3 | 20.3 | 18.7 |
| 9,10 JUN | S | 4 | 0 | 19 | 10 | 33 | 3 | 11.5 | 14 | 9 | 10 | 14 | 0 | 31 | 13.0 | 0 | 0 | 4 | 10.1 |
| | M | 38 | 14 | 0 | 16 | 70 | 5 | 23.8 | 0 | 0 | 10 | 0 | 9 | 0 | 3.2 | 6 | 0 | 9 | 11.8 |
| | B | 10 | 10 | 5 | 11 | 56 | 28 | 20.0 | 5 | 0 | 5 | 0 | 14 | 3 | 4.5 | 30 | 5 | 0 | 12.1 |
| | MEAN | 17.3 | 8.0 | 8.0 | 12.3 | 53.0 | 12.0 | 18.4 | 6.3 | 3.0 | 8.3 | 4.7 | 7.7 | 11.3 | 6.9 | 12.0 | 1.7 | 4.3 | 11.3 |
| 16 JUN | S | 11 | 5 | 5 | 10 | 0 | 0 | 5.2 | 15 | 15 | 5 | 0 | 0 | 0 | 5.8 | 15 | 9 | 9 | 6.6 |
| | M | 9 | 0 | 0 | 0 | 5 | 13 | 4.5 | 5 | 0 | 5 | 0 | 0 | 0 | 1.7 | 0 | 14 | 22 | 4.9 |
| | B | 8 | 19 | 4 | 0 | 0 | 4 | 5.8 | 0 | 4 | 8 | 10 | 0 | 9 | 5.2 | 5 | 0 | 0 | 4.7 |
| | MEAN | 9.3 | 8.0 | 3.0 | 3.3 | 1.7 | 5.7 | 5.2 | 6.7 | 6.3 | 6.0 | 3.3 | 0.0 | 3.0 | 4.2 | 6.7 | 7.7 | 10.3 | 5.4 |
| 23 JUN | S | 0 | 0 | 7 | 0 | 6 | 10 | 3.8 | 0 | 0 | 0 | 0 | 5 | 5 | 1.7 | 5 | 5 | 5 | 3.2 |
| | M | 0 | 6 | 0 | 0 | 5 | 9 | 3.3 | 0 | 5 | 10 | 5 | 9 | 18 | 7.8 | 14 | 18 | 4 | 6.9 |
| | B | 5 | 0 | 0 | 0 | 14 | 10 | 4.8 | 16 | 0 | 0 | 8 | 9 | 0 | 5.5 | 5 | 9 | 10 | 5.7 |
| | MEAN | 1.7 | 2.0 | 2.3 | 0.0 | 8.3 | 9.7 | 4.0 | 5.3 | 1.7 | 3.3 | 4.3 | 7.7 | 7.7 | 5.0 | 8.0 | 10.7 | 6.3 | 5.3 |
| 1 JUL | S | 0 | 0 | 0 | 11 | 0 | 0 | 1.8 | 0 | 0 | 0 | 0 | 5 | 6 | 1.8 | 0 | 0 | 0 | 1.5 |
| | M | 0 | 5 | 0 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 5 | 0 | 5 | 1.7 | 0 | 0 | 5 | 1.3 |
| | B | 0 | 0 | 5 | 0 | 0 | 0 | 0.8 | 6 | 0 | 0 | 0 | 0 | 0 | 1.0 | 0 | 0 | 0 | 0.7 |
| | MEAN | 0.0 | 1.7 | 1.7 | 3.7 | 0.0 | 0.0 | 1.1 | 2.0 | 0.0 | 0.0 | 1.7 | 1.7 | 3.7 | 1.5 | 0.0 | 0.0 | 1.7 | 1.2 |
| 7 JUL | S | 5 | 5 | 9 | 0 | 0 | 10 | 4.8 | 5 | 10 | 19 | 0 | 5 | 5 | 7.3 | 12 | 0 | 0 | 5.7 |
| | M | 6 | 0 | 5 | 0 | 6 | 0 | 2.8 | 6 | 6 | 17 | 6 | 0 | 6 | 6.8 | 5 | 10 | 4 | 5.1 |
| | B | 6 | 0 | 10 | 11 | 0 | 0 | 4.5 | 0 | 69 | 22 | 5 | 0 | 5 | 16.8 | 11 | 5 | 9 | 10.2 |
| | MEAN | 5.7 | 1.7 | 8.0 | 3.7 | 2.0 | 3.3 | 4.1 | 3.7 | 28.3 | 19.3 | 3.7 | 1.7 | 5.3 | 10.3 | 9.3 | 5.0 | 4.3 | 7.0 |
| 15 JUL | S | 0 | 0 | 0 | 0 | 5 | 5 | 1.7 | 0 | 0 | 4 | 0 | 9 | 0 | 2.2 | 5 | 5 | 9 | 2.8 |
| | M | 0 | 0 | 10 | 10 | 40 | 0 | 10.0 | 10 | 5 | 5 | 16 | 0 | 10 | 7.7 | 5 | 0 | 31 | 9.5 |
| | B | 5 | 0 | 5 | 0 | 52 | 0 | 10.3 | 5 | 0 | 0 | 12 | 6 | 5 | 4.7 | 0 | 0 | 5 | 6.3 |
| | MEAN | 1.7 | 0.0 | 5.0 | 3.3 | 32.3 | 1.7 | 7.3 | 5.0 | 1.7 | 3.0 | 9.3 | 5.0 | 5.0 | 4.8 | 3.3 | 1.7 | 15.0 | 6.2 |
| 21 JUL | S | 15 | 20 | 10 | 0 | 10 | 0 | 9.2 | 0 | 5 | 5 | 0 | 0 | 0 | 1.7 | 0 | 0 | 0 | 4.3 |
| | M | 9 | 0 | 4 | 0 | 10 | 0 | 3.8 | 9 | 0 | 5 | 0 | 0 | 5 | 3.2 | 4 | 0 | 4 | 3.3 |
| | B | 0 | 9 | 4 | 12 | 5 | 63 | 15.5 | 10 | 0 | 4 | 0 | 0 | 10 | 4.0 | 0 | 4 | 8 | 8.6 |
| | MEAN | 8.0 | 9.7 | 6.0 | 4.0 | 8.3 | 21.0 | 9.5 | 6.3 | 1.7 | 4.7 | 0.0 | 0.0 | 5.0 | 2.9 | 1.3 | 1.3 | 4.0 | 5.4 |
| 28 JUL | S | 0 | 0 | 0 | 0 | 0 | 8 | 1.3 | 4 | 0 | 0 | 0 | 0 | 0 | 0.7 | 0 | 0 | 0 | 0.8 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 4 | 0 | 0 | 4 | 0 | 0 | 1.3 | 0 | 0 | 0 | 0.5 |
| | B | 0 | 0 | 13 | 0 | 3 | 45 | 10.2 | 0 | 0 | 0 | 0 | 0 | 5 | 0.8 | 0 | 0 | 0 | 4.4 |
| | MEAN | 0.0 | 0.0 | 4.3 | 0.0 | 1.0 | 17.0 | 3.8 | 2.7 | 0.0 | 0.0 | 1.3 | 0.0 | 1.7 | 0.9 | 0.0 | 0.0 | 0.0 | 1.9 |
| 4 AUG | S | 0 | 6 | 0 | 0 | 0 | 0 | 1.0 | 0 | 0 | 0 | 6 | 0 | 0 | 1.0 | 0 | 0 | 0 | 0.8 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 5 | 0 | 0.3 |
| | B | 0 | 0 | 5 | 9 | 12 | 0 | 4.3 | 0 | 0 | 0 | 0 | 0 | 6 | 1.0 | 0 | 22 | 0 | 3.6 |
| | MEAN | 0.0 | 2.0 | 1.7 | 3.0 | 4.0 | 0.0 | 1.8 | 0.0 | 0.0 | 0.0 | 2.0 | 0.0 | 2.0 | 0.7 | 0.0 | 9.0 | 0.0 | 1.6 |

ABUNDANCE^a OF RAINBOW SMELT LARVAE IN NIGHT ICHTHYOPLANKTON COLLECTIONS (continued)

NINE MILE POINT VICINITY - 1976

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT | 80 FT | 100 FT | GRAND |
|-------------------------|--------------|---------------------|--------|----------|----------|--------|--------|------|---------------------|--------|----------|----------|--------|--------|------|-------|-------|--------|-------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | NMPP | NMPP | NMPP | MEAN |
| 11 AUG | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 0 | 0 | 5 | 5 | 0 | 0 | 1.7 | 6 | 0 | 4 | 0 | 0 | 0 | 1.7 | 0 | 0 | 10 | 2.0 |
| | MEAN | 0.0 | 0.0 | 1.7 | 1.7 | 0.0 | 0.0 | 0.6 | 2.0 | 0.0 | 1.3 | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 | 0.0 | 3.3 | 0.7 |
| 18 AUG | S | 5 | 0 | 0 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.3 |
| | M | 0 | 5 | 6 | 19 | 5 | 43 | 13.0 | 15 | 0 | 0 | 0 | 0 | 0 | 2.5 | 0 | 0 | 0 | 6.2 |
| | B | 0 | 74 | 0 | 0 | 33 | 17 | 20.7 | 0 | 5 | 0 | 19 | 5 | 0 | 4.8 | 0 | 4 | 0 | 10.5 |
| | MEAN | 1.7 | 26.3 | 2.0 | 6.3 | 12.7 | 20.0 | 11.5 | 5.0 | 1.7 | 0.0 | 6.3 | 1.7 | 0.0 | 2.4 | 0.0 | 1.3 | 0.0 | 5.7 |
| 25 AUG | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 5 | 0 | 0 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 0.3 |
| | M | 0 | 0 | 0 | 0 | 0 | 87 | 14.5 | 0 | 0 | 5 | 0 | 6 | 0 | 1.8 | 0 | 0 | 0 | 6.5 |
| | B | 27 | 25 | 21 | 0 | 0 | 151 | 37.3 | 0 | 0 | 16 | 5 | 6 | 0 | 4.5 | 0 | 0 | 0 | 16.7 |
| | MEAN | 9.0 | 8.3 | 7.0 | 0.0 | 0.0 | 79.3 | 17.3 | 1.7 | 0.0 | 7.0 | 1.7 | 4.0 | 0.0 | 2.4 | 0.0 | 0.0 | 0.0 | 7.8 |
| 2,3 SEP | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 5 | 0 | 0 | 0.3 |
| | B | 0 | 0 | 0 | 0 | 5 | 0 | 0.8 | 0 | 0 | 4 | 0 | 4 | 0 | 1.3 | 0 | 0 | 0 | 0.9 |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 0.0 | 0.3 | 0.0 | 0.0 | 1.3 | 0.0 | 1.3 | 0.0 | 0.4 | 1.7 | 0.0 | 0.0 | 0.4 |
| 15 SEP | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 5 | 0 | 0 | 0.3 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 5 | 0 | 0.3 |
| | B | 0 | 0 | 0 | 0 | 0 | 4 | 0.7 | 0 | 0 | 0 | 0 | 0 | 8 | 1.3 | 0 | 4 | 0 | 1.1 |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.7 | 0.4 | 1.7 | 3.0 | 0.0 | 0.6 |
| GRAND MEAN ^b | S | 2.8 | 2.2 | 5.2 | 2.2 | 3.4 | 4.2 | | 3.1 | 4.2 | 3.5 | 2.5 | 1.5 | 3.6 | | 4.7 | 3.4 | 2.0 | |
| | M | 3.9 | 2.2 | 1.9 | 3.4 | 9.2 | 10.8 | | 3.8 | 1.3 | 5.6 | 5.2 | 3.0 | 3.4 | | 4.6 | 6.4 | 6.3 | |
| | B | 3.8 | 8.6 | 5.5 | 5.6 | 11.6 | 23.1 | | 3.0 | 4.9 | 5.5 | 5.1 | 7.5 | 5.6 | | 3.6 | 4.8 | 4.8 | |
| | MEAN | 3.5 | 4.3 | 4.2 | 3.7 | 8.1 | 12.7 | | 3.3 | 3.5 | 4.9 | 4.2 | 4.1 | 4.2 | | 4.3 | 4.8 | 4.3 | |

None collected 8 Sep; night ichthyoplankton collections not required in sampling program after 15 Sep

^a Number of organisms/1000 m³

^b June-September sampling period

S = Surface sample

M = Mid-depth sample

B = Bottom sample

ABUNDANCE^a OF THREESPINE STICKLEBACK LARVAE IN NIGHT ICHTHYOPLANKTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT | 80 FT | 100 FT | GRAND |
|-------------------------|--------------|---------------------|--------|----------|----------|--------|--------|------|---------------------|--------|----------|----------|--------|--------|------|-------|-------|--------|-------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | NMPP | NMPP | NMPP | MEAN |
| 28 JUL | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 4 | 0 | 0 | 0 | 0 | 0 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.3 |
| | MEAN | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| GRAND MEAN ^b | S | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | |
| | B | 0.3 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | |
| | MEAN | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | |

None collected 2 Jun-21 Jul and 4 Aug-15 Sep; night ichthyoplankton collections not required in sampling after 15 Sep

^a Number of organisms/1000 m³

^b June-September sampling period

S = Surface sample

M = Mid-depth sample

B = Bottom sample

ABUNDANCE^a OF WHITE PERCH LARVAE IN NIGHT ICHTHYOPLANKTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT | 80 FT | 100 FT | GRAND MEAN |
|----------|--------------|---------------------|--------|----------|----------|--------|--------|------|---------------------|--------|----------|----------|--------|--------|------|-------|-------|--------|------------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | NMPP | NMPP | NMPP | |
| 2 JUN | S | 0 | 0 | 0 | 0 | 0 | 5 | 0.8 | 0 | 0 | 0 | 0 | 0 | 5 | 0.8 | 0 | 0 | 0 | 0.7 |
| | M | 0 | 0 | 0 | 0 | 0 | 11 | 1.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.7 |
| | B | 0 | 11 | 6 | 0 | 0 | 11 | 4.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 1.9 |
| | MEAN | 0.0 | 3.7 | 2.0 | 0.0 | 0.0 | 9.0 | 2.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 0.3 | 0.0 | 0.0 | 0.0 | 1.1 |
| 9,10 JUN | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 9 | 0 | 0 | 0 | 0 | 1.5 | 0 | 0 | 0 | 0.6 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 6 | 1.0 | 6 | 0 | 0 | 0.8 |
| | B | 5 | 0 | 0 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.3 |
| | MEAN | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 3.0 | 0.0 | 0.0 | 0.0 | 2.0 | 0.8 | 2.0 | 0.0 | 0.0 | 0.6 |
| 16 JUN | S | 21 | 10 | 5 | 0 | 0 | 10 | 7.7 | 0 | 15 | 9 | 0 | 0 | 5 | 4.8 | 0 | 5 | 0 | 5.3 |
| | M | 13 | 0 | 5 | 3 | 5 | 4 | 5.0 | 10 | 12 | 5 | 11 | 0 | 0 | 6.3 | 0 | 0 | 0 | 4.5 |
| | B | 40 | 5 | 0 | 0 | 4 | 0 | 8.2 | 0 | 4 | 0 | 0 | 0 | 4 | 1.3 | 0 | 0 | 0 | 3.8 |
| | MEAN | 24.7 | 5.0 | 3.3 | 1.0 | 3.0 | 4.7 | 7.0 | 3.3 | 10.3 | 4.7 | 3.7 | 0.0 | 3.0 | 4.2 | 0.0 | 1.1 | 0.0 | 4.6 |
| 23 JUN | S | 0 | 6 | 0 | 0 | 0 | 0 | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 5 | 5 | 5 | 1.4 |
| | M | 0 | 6 | 0 | 0 | 0 | 0 | 1.0 | 0 | 10 | 0 | 5 | 0 | 0 | 2.5 | 0 | 0 | 0 | 1.4 |
| | B | 0 | 5 | 0 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 0 | 0 | 5 | 0.8 | 5 | 5 | 5 | 1.7 |
| | MEAN | 0.0 | 5.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 0.0 | 3.3 | 0.0 | 1.7 | 0.0 | 1.7 | 1.1 | 3.3 | 3.3 | 3.3 | 1.5 |
| 1 JUL | S | 13 | 0 | 0 | 0 | 13 | 0 | 4.3 | 5 | 6 | 0 | 6 | 10 | 0 | 4.5 | 0 | 0 | 0 | 3.5 |
| | M | 0 | 0 | 0 | 5 | 0 | 0 | 0.8 | 0 | 0 | 0 | 5 | 6 | 0 | 1.8 | 5 | 0 | 0 | 1.4 |
| | B | 0 | 0 | 0 | 0 | 6 | 0 | 1.0 | 0 | 6 | 0 | 6 | 0 | 0 | 2.0 | 0 | 0 | 0 | 1.2 |
| | MEAN | 4.3 | 0.0 | 0.0 | 1.7 | 6.3 | 0.0 | 2.1 | 1.7 | 4.0 | 0.0 | 5.7 | 5.3 | 0.0 | 2.8 | 1.7 | 0.0 | 0.0 | 2.0 |
| 7 JUL | S | 0 | 5 | 9 | 0 | 0 | 5 | 3.2 | 0 | 0 | 5 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 1.6 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 5 | 0 | 0.3 |
| | B | 0 | 0 | 0 | 5 | 0 | 0 | 0.8 | 5 | 0 | 0 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 0.7 |
| | MEAN | 0.0 | 1.7 | 3.0 | 1.7 | 0.0 | 1.7 | 1.3 | 1.7 | 0.0 | 1.7 | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 | 1.7 | 0.0 | 0.9 |
| 15 JUL | S | 0 | 0 | 5 | 5 | 0 | 0 | 1.7 | 5 | 0 | 4 | 5 | 0 | 0 | 2.3 | 0 | 0 | 0 | 1.6 |
| | M | 0 | 0 | 0 | 5 | 10 | 0 | 2.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 1.0 |
| | B | 0 | 6 | 0 | 0 | 11 | 0 | 2.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 1.1 |
| | MEAN | 0.0 | 2.0 | 1.7 | 3.3 | 7.0 | 0.0 | 2.3 | 1.7 | 0.0 | 1.3 | 1.7 | 0.0 | 0.0 | 0.8 | 0.0 | 0.0 | 0.0 | 1.2 |
| 21 JUL | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 5 | 0 | 0 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 0.3 |
| | M | 0 | 0 | 0 | 0 | 5 | 10 | 2.5 | 0 | 4 | 5 | 8 | 0 | 5 | 3.7 | 0 | 0 | 0 | 2.5 |
| | B | 0 | 0 | 0 | 4 | 0 | 0 | 0.7 | 0 | 0 | 0 | 0 | 0 | 5 | 0.8 | 0 | 0 | 0 | 0.6 |
| | MEAN | 0.0 | 0.0 | 0.0 | 1.3 | 1.7 | 3.3 | 1.1 | 1.7 | 1.3 | 1.7 | 2.7 | 0.0 | 3.3 | 1.8 | 0.0 | 0.0 | 0.0 | 1.1 |
| 28 JUL | S | 10 | 5 | 0 | 0 | 0 | 3 | 3.0 | 0 | 4 | 4 | 0 | 4 | 0 | 2.0 | 0 | 0 | 0 | 2.0 |
| | M | 0 | 4 | 5 | 4 | 1 | 0 | 2.3 | 0 | 5 | 5 | 0 | 0 | 5 | 2.5 | 0 | 0 | 0 | 1.9 |
| | B | 0 | 0 | 0 | 8 | 0 | 4 | 2.0 | 0 | 0 | 0 | 3 | 4 | 0 | 1.2 | 0 | 0 | 0 | 1.3 |
| | MEAN | 3.3 | 3.0 | 1.7 | 4.0 | 0.3 | 2.3 | 2.4 | 0.0 | 3.0 | 3.0 | 1.0 | 2.7 | 1.7 | 1.9 | 0.0 | 0.0 | 0.0 | 1.7 |
| 4 AUG | S | 5 | 11 | 5 | 0 | 0 | 15 | 6.0 | 12 | 5 | 5 | 0 | 0 | 0 | 3.7 | 12 | 23 | 0 | 6.2 |
| | M | 0 | 19 | 0 | 0 | 0 | 0 | 3.2 | 12 | 7 | 5 | 0 | 0 | 0 | 4.0 | 8 | 0 | 5 | 3.7 |
| | B | 15 | 6 | 9 | 0 | 0 | 0 | 5.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 2.0 |
| | MEAN | 6.7 | 12.0 | 4.7 | 0.0 | 0.0 | 5.0 | 4.7 | 8.0 | 4.0 | 3.3 | 0.0 | 0.0 | 0.0 | 2.6 | 6.7 | 7.3 | 1.7 | 4.0 |
| 11 AUG | S | 5 | 0 | 0 | 0 | 13 | 4 | 3.7 | 11 | 5 | 0 | 0 | 0 | 4 | 3.3 | 5 | 15 | 5 | 4.5 |
| | M | 0 | 0 | 5 | 0 | 14 | 0 | 3.2 | 0 | 0 | 4 | 4 | 0 | 0 | 1.3 | 0 | 0 | 0 | 1.8 |
| | B | 0 | 0 | 0 | 0 | 11 | 0 | 1.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 5 | 0 | 0 | 1.1 |
| | MEAN | 1.7 | 0.0 | 1.7 | 0.0 | 12.7 | 1.3 | 2.9 | 3.7 | 1.7 | 1.3 | 1.3 | 0.0 | 1.3 | 1.5 | 3.3 | 5.0 | 1.7 | 2.4 |

ABUNDANCE^a OF WHITE PERCH LARVAE IN NIGHT ICHTHYOPLANKTON COLLECTIONS (continued)

NINE MILE POINT VICINITY - 1976

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT | 80 FT | 100 FT | GRAND |
|-------------------------|--------------|---------------------|--------|----------|----------|--------|--------|------|---------------------|--------|----------|----------|--------|--------|------|-------|-------|--------|-------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | NMPP | NMPP | NMPP | MEAN |
| 18 AUG | S | 5 | 0 | 0 | 5 | 6 | 0 | 2.7 | 0 | 5 | 0 | 0 | 0 | 0 | 0.8 | 5 | 0 | 5 | 2.1 |
| | M | 0 | 5 | 0 | 5 | 10 | 0 | 3.3 | 0 | 19 | 0 | 0 | 0 | 0 | 3.2 | 0 | 0 | 5 | 2.9 |
| | B | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 10 | 0 | 1.7 | 0 | 0 | 0 | 0.7 |
| | MEAN | 1.7 | 1.7 | 0.0 | 3.3 | 5.3 | 0.0 | 2.0 | 0.0 | 8.0 | 0.0 | 0.0 | 3.3 | 0.0 | 1.9 | 1.7 | 0.0 | 3.3 | 1.9 |
| 25 AUG | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 6 | 0 | 0 | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.4 |
| | B | 0 | 5 | 5 | 0 | 0 | 0 | 1.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.7 |
| | MEAN | 0.0 | 1.7 | 1.7 | 2.0 | 0.0 | 0.0 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 |
| 2 SEP | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 4 | 0.7 | 0 | 0 | 0 | 0.3 |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 |
| GRAND MEAN ^b | S | 3.7 | 2.3 | 1.5 | 0.6 | 2.0 | 2.6 | | 2.4 | 3.1 | 1.7 | 0.7 | 0.9 | 0.9 | | 1.7 | 3.0 | 0.9 | |
| | M | 0.8 | 2.1 | 0.9 | 1.8 | 2.8 | 1.6 | | 1.4 | 3.6 | 1.5 | 2.1 | 0.4 | 1.0 | | 1.2 | 0.3 | 0.6 | |
| | B | 3.8 | 2.4 | 1.2 | 1.1 | 2.0 | 0.9 | | 0.3 | 0.6 | 0.0 | 0.6 | 0.9 | 1.1 | | 1.6 | 0.3 | 0.3 | |
| | MEAN | 2.8 | 2.3 | 1.2 | 1.2 | 2.3 | 1.7 | | 1.4 | 2.4 | 1.1 | 1.1 | 0.7 | 1.0 | | 1.5 | 1.2 | 0.6 | |

None collected 8-15 Sep; night ichthyoplankton collections not required in sampling program after 15 Sep

^a Number of organisms/1000 m³

^b June-September sampling period

S = Surface sample

M = Mid-depth sample

B = Bottom sample

ABUNDANCE^a OF YELLOW PERCH LARVAE IN NIGHT ICHTHYOPLANKTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT | 80 FT | 100 FT | GRAND |
|------------|--------------|---------------------|--------|----------|----------|--------|--------|------|---------------------|--------|----------|----------|--------|--------|------|-------|-------|--------|-------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | NMPP | NMPP | NMPP | MEAN |
| 21 JUL | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 0 | 0 | 0 | 0 | 0 | 3 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.2 |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| GRAND MEAN | S | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | |
| | B | 0 | 0 | 0 | 0 | 0 | 0.2 | | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | |

None collected 2 Jun-15 Jul and 28 Jul-15 Sep; night ichthyoplankton collections not required in the sampling program after 15 Sep

^a Number of organisms/1000 m³

^b June-September sampling period

S = Surface sample

M = Mid-depth sample

B = Bottom sample

APPENDIX VC-2c

ABUNDANCE OF SELECTED SPECIES OF FISH EGGS IN DAY/NIGHT COLLECTIONS

ABUNDANCE^a OF ALEWIFE EGGS IN DAY ICHTHYOPLANKTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT | 80 FT | 100 FT | GRAND MEAN |
|-----------|--------------|---------------------|--------|----------|----------|--------|--------|-------|---------------------|--------|----------|----------|--------|--------|-------|-------|-------|--------|------------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | NMPP | NMPP | NMPP | |
| 9 JUN | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 0 | 0 | 0 | 0 | 11 | 0 | 1.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.7 |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 3.7 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 16,17 JUN | S | 0 | 0 | 4 | 0 | 0 | 0 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.3 |
| | M | 0 | 9 | 361 | 0 | 59 | 0 | 71.5 | 0 | 0 | 10 | 0 | 0 | 0 | 1.7 | 0 | 0 | 0 | 29.3 |
| | B | 0 | 0 | 0 | 10 | 9 | 0 | 3.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 1.3 |
| | MEAN | 0.0 | 3.0 | 121.7 | 3.3 | 22.7 | 0.0 | 25.1 | 0.0 | 0.0 | 3.3 | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | 10.3 |
| 23 JUN | S | 0 | 0 | 0 | 0 | 0 | 29 | 4.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 1.9 |
| | M | 0 | 0 | 0 | 0 | 0 | 13 | 2.2 | 0 | 0 | 0 | 0 | 9 | 13 | 3.7 | 5 | 0 | 0 | 2.7 |
| | B | 15 | 25 | 98 | 0 | 5 | 5 | 24.7 | 0 | 5 | 0 | 0 | 5 | 364 | 62.3 | 0 | 0 | 0 | 34.8 |
| | MEAN | 5.0 | 8.3 | 32.7 | 0.0 | 1.7 | 15.7 | 10.6 | 0.0 | 1.7 | 0.0 | 0.0 | 4.7 | 125.7 | 22.0 | 1.7 | 0.0 | 0.0 | 13.1 |
| 30 JUN | S | 5 | 0 | 0 | 0 | 0 | 13 | 3.0 | 0 | 0 | 0 | 0 | 9 | 21 | 5.0 | 12 | 27 | 18 | 7.0 |
| | M | 36 | 35 | 46 | 1003 | 151 | 5 | 212.7 | 0 | 33 | 0 | 322 | 2114 | 5 | 412.3 | 5 | 6 | 5 | 251.1 |
| | B | 35 | 0 | 0 | 19 | 64 | 188 | 51.0 | 27 | 0 | 0 | 0 | 18 | 0 | 7.5 | 18 | 42 | 14 | 28.3 |
| | MEAN | 25.3 | 11.7 | 15.3 | 340.7 | 71.7 | 68.7 | 88.9 | 9.0 | 11.0 | 0.0 | 107.3 | 713.7 | 8.7 | 141.6 | 11.7 | 25.0 | 12.3 | 95.5 |
| 7 JUL | S | 0 | 0 | 12 | 28 | 73 | 431 | 90.7 | 0 | 0 | 0 | 0 | 1431 | 517 | 324.7 | 5 | 9 | 180 | 179.1 |
| | M | 0 | 6 | 0 | 0 | 23 | 9 | 6.3 | 16 | 0 | 0 | 0 | 91 | 25 | 22.0 | 0 | 10 | 0 | 12.0 |
| | B | 0 | 0 | 10 | 5 | 46 | 345 | 67.7 | 71 | 0 | 6 | 6 | 33 | 381 | 82.8 | 113 | 0 | 28 | 69.6 |
| | MEAN | 0.0 | 2.0 | 7.3 | 11.0 | 47.3 | 261.7 | 54.9 | 29.0 | 0.0 | 2.0 | 2.0 | 518.3 | 307.7 | 143.2 | 39.3 | 6.3 | 69.3 | 86.9 |
| 15 JUL | S | 0 | 0 | 0 | 0 | 39 | 0 | 6.5 | 0 | 0 | 0 | 0 | 6 | 0 | 1.0 | 0 | 0 | 0 | 3.0 |
| | M | 0 | 0 | 0 | 0 | 29 | 0 | 4.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 1.9 |
| | B | 0 | 0 | 5 | 0 | 66 | 5 | 12.7 | 5 | 37 | 0 | 0 | 0 | 0 | 7.0 | 13 | 4 | 33 | 11.2 |
| | MEAN | 0.0 | 0.0 | 1.7 | 0.0 | 44.7 | 1.7 | 8.0 | 1.7 | 12.3 | 0.0 | 0.0 | 2.0 | 0.0 | 2.7 | 4.3 | 1.3 | 11.0 | 5.4 |
| 21 JUL | S | 8 | 0 | 0 | 17 | 74 | 9 | 18.0 | 0 | 0 | 0 | 24 | 0 | 0 | 4.0 | 0 | 0 | 0 | 8.8 |
| | M | 12 | 0 | 0 | 60 | 63 | 0 | 22.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 9.0 |
| | B | 53 | 8 | 5 | 18 | 255 | 18 | 59.5 | 21 | 0 | 16 | 4 | 0 | 0 | 6.8 | 0 | 0 | 0 | 26.5 |
| | MEAN | 24.3 | 2.7 | 1.7 | 31.7 | 130.7 | 9.0 | 33.3 | 7.0 | 0.0 | 5.3 | 9.3 | 0.0 | 0.0 | 3.6 | 0.0 | 0.0 | 0.0 | 14.8 |
| 28 JUL | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 9 | 0 | 0 | 0.6 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 5 | 0 | 0.3 |
| | B | 10 | 637 | 154 | 156 | 176 | 517 | 275.0 | 5 | 5 | 15 | 0 | 16 | 143 | 30.7 | 0 | 0 | 0 | 122.3 |
| | MEAN | 3.3 | 212.3 | 51.3 | 52.0 | 58.7 | 172.3 | 91.7 | 1.7 | 1.7 | 5.0 | 0.0 | 5.3 | 47.7 | 10.2 | 3.0 | 1.7 | 0.0 | 41.1 |
| 4 AUG | S | 0 | 0 | 0 | 6 | 0 | 0 | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.4 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 8 | 0 | 263 | 0 | 0 | 45.2 | 0 | 0 | 0 | 18.1 |
| | B | 154 | 25 | 0 | 95 | 84 | 134 | 82.0 | 22 | 0 | 0 | 385 | 4217 | 6 | 771.7 | 0 | 0 | 0 | 341.5 |
| | MEAN | 51.3 | 8.3 | 0.0 | 33.7 | 28.0 | 44.7 | 27.7 | 7.3 | 2.7 | 0.0 | 216.0 | 1405.7 | 2.0 | 272.3 | 0.0 | 0.0 | 0.0 | 120.0 |

ABUNDANCE^a OF ALEWIFE EGGS IN DAY ICHTHYOPLANKTON COLLECTIONS (continued)

NINE MILE POINT VICINITY - 1976

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT | 80 FT | 100 FT | GRAND |
|----------------------------|--------------|---------------------|--------|----------|----------|--------|--------|------|---------------------|--------|----------|----------|--------|--------|------|-------|-------|--------|-------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | NMPP | NMPP | NMPP | MEAN |
| 11 AUG | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 0 | 0 | 6 | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 5 | 0 | 0.7 |
| | B | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 18 | 0 | 0 | 1.2 |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.0 | 1.7 | 0.0 | 0.6 |
| 18 AUG | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 4 | 0 | 0 | 0.7 | 0 | 19 | 0 | 0 | 0 | 0 | 3.2 | 0 | 0 | 0 | 1.5 |
| | B | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | MEAN | 0.0 | 0.0 | 0.0 | 1.3 | 0.0 | 0.0 | 0.2 | 0.0 | 6.3 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 0.0 | 0.0 | 0.0 | 0.5 |
| GRAND MEAN ^b | S | 0.4 | 0.0 | 0.5 | 1.5 | 5.3 | 27.3 | | 0.0 | 0.0 | 0.0 | 0.7 | 41.3 | 15.4 | | 0.7 | 1.0 | 5.7 | |
| | M | 1.4 | 1.4 | 11.6 | 30.5 | 9.3 | 0.9 | | 0.5 | 1.7 | 0.3 | 16.7 | 63.3 | 1.2 | | 0.3 | 0.6 | 0.1 | |
| | B | 7.6 | 19.9 | 7.8 | 8.7 | 20.5 | 34.6 | | 4.3 | 1.3 | 1.1 | 11.3 | 122.5 | 25.5 | | 4.6 | 1.3 | 2.1 | |
| | MEAN | 3.1 | 7.1 | 6.6 | 13.5 | 11.7 | 21.0 | | 1.6 | 1.0 | 0.4 | 9.6 | 75.7 | 14.0 | | 1.9 | 1.0 | 2.6 | |

None collected 7 Apr-2 Jun and 25 Aug-19 Dec

^aNumber of organisms/1000 m³

^bApril-December sampling period

S = Surface sample

M = Mid-depth sample

B = Bottom sample

ABUNDANCE^a OF ALEWIFE EGGS IN NIGHT ICHTHYOPLANKTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT NMPP | 80 FT NMPP | 100 FT NMPP | GRAND MEAN |
|------------|--------------|---------------------|---------|----------|----------|---------|--------|---------|---------------------|--------|----------|----------|---------|--------|---------|------------|------------|-------------|------------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | | | | |
| 9,10 JUN | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 5 | 0 | 0 | 0.8 | 0 | 0 | 0 | 0.3 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 0 | 0 | 10 | 16 | 0 | 0 | 4.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 1.7 |
| | MEAN | 0.0 | 0.0 | 3.3 | 5.3 | 0.0 | 0.0 | 1.4 | 0.0 | 0.0 | 0.0 | 1.7 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.7 |
| 16 JUN | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 5 | 0 | 0.8 | 5 | 9 | 0 | 1.3 |
| | M | 0 | 0 | 0 | 0 | 0 | 13 | 2.2 | 0 | 0 | 5 | 0 | 0 | 5 | 1.7 | 0 | 5 | 0 | 1.9 |
| | B | 0 | 0 | 0 | 0 | 0 | 4 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 9 | 0 | 0 | 0.9 |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.7 | 0.9 | 0.0 | 0.0 | 1.7 | 0.0 | 1.7 | 1.7 | 0.8 | 4.7 | 4.7 | 0.0 | 1.3 |
| 23 JUN | S | 1415 | 1914 | 353 | 1989 | 2119 | 2600 | 1731.7 | 27 | 389 | 249 | 1079 | 514 | 1667 | 654.2 | 76 | 155 | 214 | 984.0 |
| | M | 854 | 1484 | 760 | 2498 | 2166 | 1248 | 1501.7 | 0 | 211 | 222 | 1011 | 71 | 735 | 375.0 | 32 | 77 | 0 | 757.9 |
| | B | 3790 | 2720 | 109 | 5219 | 4424 | 4465 | 3454.5 | 68 | 466 | 291 | 265 | 318 | 496 | 317.3 | 639 | 96 | 94 | 1564.0 |
| | MEAN | 2019.7 | 2039.3 | 407.3 | 3235.3 | 2903.0 | 2771.0 | 2229.3 | 31.7 | 355.3 | 254.0 | 785.0 | 301.0 | 966.0 | 448.8 | 249.0 | 109.3 | 102.7 | 1102.0 |
| 1 JUL | S | 362 | 64 | 51 | 3276 | 549 | 341 | 773.8 | 10 | 0 | 29 | 394 | 283 | 262 | 163.0 | 62 | 20 | 0 | 380.2 |
| | M | 1448 | 345 | 0 | 2627 | 1397 | 481 | 1049.7 | 60 | 53 | 338 | 1359 | 99 | 218 | 354.5 | 103 | 29 | 0 | 570.5 |
| | B | 1769 | 194 | 101 | 6487 | 2134 | 124 | 1801.5 | 50 | 40 | 86 | 205 | 283 | 199 | 143.8 | 102 | 0 | 0 | 784.9 |
| | MEAN | 1193.0 | 201.0 | 50.7 | 4130.0 | 1360.0 | 315.3 | 1208.3 | 40.0 | 31.0 | 151.0 | 652.7 | 221.7 | 226.3 | 220.4 | 89.0 | 16.3 | 0.0 | 578.5 |
| 7 JUL | S | 9842 | 19693 | 35134 | 0 | 4659 | 164 | 11582.0 | 7563 | 9916 | 6791 | 1276 | 3883 | 1488 | 5152.8 | 49 | 9 | 12 | 6698.6 |
| | M | 1841 | 8458 | 38735 | 67497 | 10856 | 772 | 21359.8 | 5027 | 7338 | 29681 | 16841 | 1919 | 1323 | 10354.8 | 633 | 111 | 61 | 12739.5 |
| | B | 14375 | 109329 | 52618 | 64616 | 33104 | 507 | 45758.2 | 4410 | 4680 | 11690 | 6433 | 9187 | 1410 | 6301.7 | 514 | 74 | 28 | 20865.0 |
| | MEAN | 8686.0 | 45826.7 | 42162.3 | 44037.7 | 16206.3 | 481.0 | 26233.3 | 5666.7 | 7311.3 | 16054.0 | 8183.3 | 4996.3 | 1407.0 | 7269.8 | 398.7 | 64.7 | 33.7 | 13434.4 |
| 15 JUL | S | 1203 | 24252 | 13080 | 73073 | 3951 | 1509 | 19511.3 | 1856 | 5034 | 27929 | 26436 | 36292 | 1252 | 16466.5 | 950 | 1730 | 94 | 14576.1 |
| | M | 1097 | 16070 | 25373 | 98758 | 16058 | 270 | 26271.0 | 1937 | 4184 | 12243 | 23724 | 9638 | 4777 | 9417.2 | 1821 | 1626 | 376 | 14530.1 |
| | B | 1762 | 6306 | 10476 | 117127 | 9201 | 1479 | 24391.8 | 1833 | 3987 | 14785 | 45078 | 59362 | 1497 | 21090.3 | 1484 | 1161 | 89 | 18375.1 |
| | MEAN | 1354.0 | 15542.7 | 16309.7 | 96319.3 | 9736.7 | 1086.0 | 23391.4 | 1875.3 | 4401.7 | 18319.0 | 31746.0 | 35097.3 | 2508.7 | 15658.0 | 1418.3 | 1505.7 | 186.3 | 15827.1 |
| 21 JUL | S | 9567 | 26928 | 3238 | 597 | 1039 | 952 | 7053.5 | 4342 | 3641 | 2477 | 47 | 1179 | 2828 | 2419.0 | 1044 | 67 | 118 | 3870.9 |
| | M | 11128 | 31110 | 7147 | 564 | 2165 | 1132 | 25541.0 | 4299 | 4978 | 7885 | 6095 | 7068 | 8029 | 6392.3 | 994 | 836 | 349 | 12918.6 |
| | B | 58227 | 15146 | 4675 | 2475 | 2861 | 13485 | 16144.8 | 15250 | 3347 | 4928 | 2116 | 3432 | 5787 | 5810.0 | 892 | 196 | 46 | 8857.5 |
| | MEAN | 59640.7 | 24394.7 | 5020.0 | 1212.0 | 2021.7 | 5189.7 | 16246.4 | 7963.7 | 3988.7 | 5096.7 | 2752.7 | 3893.0 | 5548.0 | 4873.8 | 976.7 | 366.3 | 171.0 | 8549.0 |
| 28 JUL | S | 5073 | 1561 | 3483 | 3250 | 694 | 30 | 2348.5 | 1460 | 4883 | 9645 | 14206 | 3714 | 457 | 5727.5 | 0 | 0 | 0 | 3230.4 |
| | M | 1362 | 1403 | 2574 | 3890 | 448 | 16 | 1615.5 | 1129 | 2122 | 6940 | 0 | 2378 | 436 | 2167.5 | 0 | 81 | 0 | 1518.6 |
| | B | 2997 | 1117 | 1969 | 4964 | 595 | 8 | 1941.7 | 12420 | 8925 | 8867 | 3603 | 1914 | 1189 | 6153.5 | 395 | 0 | 0 | 3264.4 |
| | MEAN | 3144.0 | 1360.3 | 2675.3 | 4034.7 | 579.0 | 18.0 | 1968.6 | 5003.0 | 5310.0 | 8484.0 | 5936.3 | 2669.7 | 694.0 | 4682.8 | 131.7 | 27.0 | 0.0 | 2671.1 |
| 4 AUG | S | 706 | 624 | 63 | 1247 | 106 | 157 | 483.8 | 461 | 453 | 173 | 378 | 405 | 106 | 329.3 | 0 | 14 | 0 | 326.2 |
| | M | 839 | 1932 | 577 | 1420 | 6 | 0 | 795.7 | 650 | 1194 | 387 | 536 | 342 | 571 | 613.3 | 0 | 0 | 0 | 563.6 |
| | B | 1161 | 744 | 174 | 2274 | 94 | 1495 | 990.3 | 568 | 524 | 1004 | 793 | 441 | 1992 | 887.0 | 66 | 0 | 0 | 755.3 |
| | MEAN | 902.0 | 1100.0 | 271.3 | 1647.0 | 68.7 | 550.7 | 756.6 | 559.7 | 723.7 | 521.3 | 569.0 | 396.0 | 889.7 | 609.9 | 22.0 | 4.7 | 0.0 | 548.4 |
| 11 AUG | S | 0 | 0 | 20 | 19 | 0 | 13 | 8.7 | 0 | 0 | 18 | 0 | 36 | 4 | 9.7 | 0 | 0 | 0 | 7.3 |
| | M | 0 | 0 | 28 | 5 | 0 | 5 | 6.3 | 0 | 61 | 12 | 0 | 0 | 26 | 16.5 | 0 | 0 | 0 | 9.1 |
| | B | 0 | 497 | 281 | 183 | 170 | 9 | 190.0 | 0 | 48 | 31 | 0 | 0 | 27 | 17.7 | 0 | 0 | 0 | 83.1 |
| | MEAN | 0.0 | 165.7 | 109.7 | 69.0 | 56.7 | 9.0 | 68.3 | 0.0 | 36.3 | 20.3 | 0.0 | 12.0 | 19.0 | 14.6 | 0.0 | 0.0 | 0.0 | 33.2 |
| GRAND MEAN | S | 1760.5 | 4689.8 | 3463.9 | 5216.7 | 819.8 | 360.4 | | 982.4 | 1519.8 | 2956.9 | 2738.8 | 2894.4 | 504.0 | | 136.6 | 125.2 | 27.4 | |
| | M | 7410.6 | 3800.1 | 4699.6 | 11078.7 | 2068.5 | 246.1 | | 1257.9 | 2204.6 | 3607.1 | 3097.4 | 1475.2 | 1007.5 | | 223.9 | 172.8 | 49.1 | |
| | B | 5255.1 | 8503.3 | 4400.8 | 12709.1 | 3286.4 | 1348.5 | | 2162.4 | 1376.1 | 2605.1 | 3655.8 | 4683.8 | 787.3 | | 256.3 | 95.4 | 16.1 | |
| | MEAN | 4808.7 | 5664.4 | 4188.1 | 9668.1 | 2058.2 | 651.6 | | 1467.6 | 1700.1 | 3056.4 | 3164.2 | 3017.8 | 766.3 | | 205.6 | 131.2 | 30.9 | |

None collected 2 Jun and 18 Aug - 15 Sep; night ichthyoplankton collections not required after 15 Sep

^a Number of organisms/1000 m³
^b June-September sampling period

S = Surface sample
M = Mid-depth sample
B = Bottom sample

ABUNDANCE^a OF RAINBOW SMELT FISH IN ICHTHYOPLANKTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

I. DAY

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT | 80 FT | 100 FT | GRAND |
|-------------------------|--------------|---------------------|--------|----------|----------|--------|--------|------|---------------------|--------|----------|----------|--------|--------|------|-------|-------|--------|-------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | NMPP | NMPP | NMPP | MEAN |
| 21 APR | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 27 | 22 | 0 | 0 | 8.2 | 0 | 0 | 0 | 3.3 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.0 | 7.3 | 0.0 | 0.0 | 2.7 | 0.0 | 0.0 | 0.0 | 1.1 |
| 29 APR | S | 31 | 521 | 0 | 0 | 0 | 0 | 92.0 | 85 | 77 | 0 | 0 | 3 | 0 | 27.5 | 0 | 0 | 0 | 47.8 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | MEAN | 10.3 | 173.7 | 0.0 | 0.0 | 0.0 | 0.0 | 30.7 | 28.3 | 25.7 | 0.0 | 0.0 | 1.0 | 0.0 | 9.2 | 0.0 | 0.0 | 0.0 | 15.9 |
| 13 MAY | S | 0 | 0 | 0 | 0 | 8 | 4 | 2.0 | 0 | 0 | 0 | 0 | 13 | 4 | 2.8 | 0 | 0 | 0 | 1.9 |
| | M | 0 | 0 | 0 | 0 | 0 | 16 | 2.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 1.1 |
| | B | 0 | 0 | 0 | 0 | 0 | 5 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.3 |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 2.7 | 8.3 | 1.8 | 0.0 | 0.0 | 0.0 | 0.0 | 4.3 | 1.3 | 0.9 | 0.0 | 0.0 | 0.0 | 1.1 |
| 22 MAY | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 5 | 0 | 0.3 |
| | M | 0 | 0 | 0 | 0 | 0 | 6 | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.4 |
| | B | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 54 | 0 | 9.0 | 0 | 0 | 0 | 3.6 |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 18.0 | 0.0 | 3.0 | 0.0 | 1.7 | 0.0 | 1.4 |
| 26 MAY | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 5 | 0 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 0.3 |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.1 |
| GRAND MEAN ^b | S | 0.9 | 14.9 | 0.0 | 0.0 | 0.2 | 0.1 | | 2.4 | 2.2 | 0.8 | 0.6 | 0.5 | 0.1 | | 0.0 | 0.1 | 0.0 | |
| | M | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | |
| | B | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | | 0.0 | 0.1 | 0.0 | 0.0 | 1.5 | 0.0 | | 0.0 | 0.0 | 0.0 | |
| | MEAN | 0.3 | 5.0 | 0.0 | 0.0 | 0.1 | 0.3 | | 0.8 | 0.8 | 0.3 | 0.2 | 0.7 | <0.1 | | 0.0 | <0.1 | 0.0 | |

None collected 7-14 Apr and 2 Jun-19 Dec

II. NIGHT

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT | 80 FT | 100 FT | GRAND |
|-------------------------|--------------|---------------------|--------|----------|----------|--------|--------|------|---------------------|--------|----------|----------|--------|--------|------|-------|-------|--------|-------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | NMPP | NMPP | NMPP | MEAN |
| 2 JUN | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 0 | 0 | 6 | 0 | 0 | 0 | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.4 |
| | MEAN | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| GRAND MEAN ^c | S | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | |
| | M | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | |
| | B | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | |
| | MEAN | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | |

None collected 9 Jun-15 Sep; night ichthyoplankton collections not required after 15 Sep

^a Number of organisms/1000 m³
^b April-December sampling period
^c June-September sampling period

S = Surface sample
M = Mid-depth sample
B = Bottom sample

^a
ABUNDANCE OF WHITE PERCH EGGS IN ICHTHYOPLANKTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

I. DAY

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT | 80 FT | 100 FT | GRAND |
|-------------------------|--------------|---------------------|--------|----------|----------|--------|--------|------|---------------------|--------|----------|----------|--------|--------|------|-------|-------|--------|-------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | NMPP | NMPP | NMPP | MEAN |
| 13 MAY | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 0 | 4 | 0 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.3 |
| | B | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 2 JUN | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 5 | 0 | 0 | 0.8 | 18 | 0 | 0 | 1.5 |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 0.0 | 0.0 | 0.3 | 6.0 | 0.0 | 0.0 | 0.5 |
| 16 JUN | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 0 | 0 | 0 | 0 | 5 | 0 | 0.8 | 0 | 0 | 0 | 5 | 0 | 0 | 0.8 | 0 | 0 | 0 | 0.7 |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 1.7 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.2 |
| GRAND MEAN ^b | S | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | |
| | M | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | |
| | B | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | | 0.5 | 0.0 | 0.0 | |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | | 0.2 | 0.0 | 0.0 | |

None collected 7-29 Apr, 22-26 May, 9 Jun, and 23 Jun-19 Dec

II. NIGHT

| DATE | SAMPLE DEPTH | 20 FT DEPTH CONTOUR | | | | | | | 40 FT DEPTH CONTOUR | | | | | | | 60 FT | 80 FT | 100 FT | GRAND |
|-------------------------|--------------|---------------------|--------|----------|----------|--------|--------|------|---------------------|--------|----------|----------|--------|--------|------|-------|-------|--------|-------|
| | | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | 3-NMPW | 1-NMPW | 1/2-NMPW | 1/2-NMPE | 1-NMPE | 3-NMPE | MEAN | NMPP | NMPP | NMPP | MEAN |
| 16 JUN | S | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 5 | 0 | 0.8 | 0 | 0 | 0 | 0.3 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | B | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.1 |
| GRAND MEAN ^c | S | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | | 0.0 | 0.0 | 0.0 | |
| | M | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | |
| | B | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | | 0.0 | 0.0 | 0.0 | |

None collected 2-10 Jun and 23 Jun-15 Sep; night ichthyoplankton collections not required after 15 Sep

^aNumber of organisms/1000 m³

^bApril-December sampling period

^cJune-September sampling period

S = Surface sample

M = Mid-depth sample

B = Bottom sample

CHAPTER VI

Lawler, Matusky & Skelly Engineers

APPENDIX VIB-1

ORGANIC CARBON^a IN BOTTOM SEDIMENTS : BENTHOS SAMPLING PROGRAM

NINE MILE POINT VICINITY - 1976

| DATE | STATIONS | | | | | | | | |
|-----------|-------------------|-------------------|------|-------------------|-------------------|------|-------------------|-------------------|------|
| | NMPE - 40 FT | | | FITZ - 40 FT | | | NMPW - 40 FT | | |
| | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN |
| 19 APR | NR | NAn | - | NR | NAn | - | NR | NS | - |
| 15,16 JUN | 0.14 ^b | 0.07 ^b | 0.10 | 0.05 ^b | 0.08 ^b | 0.06 | 1.46 ^c | 1.57 ^c | 1.52 |
| 3, 7 SEP | 0.06 ^d | 0.09 ^d | 0.08 | 0.08 ^e | 0.09 ^e | 0.08 | 0.78 ^e | 0.96 ^e | 0.87 |
| 12,13 OCT | 0.14 ^f | 0.12 ^f | 0.13 | 0.04 ^g | 0.04 ^g | 0.04 | 0.15 ^g | 0.14 ^g | 0.14 |
| DEC | NS | NS | - | NS | NS | - | NS | NS | - |

^a Percent organic carbon, chromic acid oxidation values

^b 15 June

^c 16 June

^d 3 September; represents August collection

^e 7 September; represents August collection

^f 12 October

^g 13 October

NAn = Not analyzed

NR = Not required in sampling program

NS = No December benthic collection

APPENDIX VIB-2

GRAIN SIZE ANALYSIS* AT 40 FT BENTHIC STATIONS

NINE MILE POINT VICINITY - 1976

| DATE | NMPW | | NMPP | | FITZ | | NMPE | |
|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------|-----------------|-----------------|
| | % Sand | % Silt | % Sand | % Silt | % Sand | % Silt | % Sand | % Silt |
| 15, 16, 17 JUN | NA ^a | NA ^a | NA ^b | NA ^b | 92 ^c | 8 ^c | 94 ^c | 6 ^c |
| 12, 13 OCT | 90 ^d | 10 ^d | NA ^d | NA ^d | 94 ^d | 6 ^d | 90 ^e | 10 ^e |

*Analysis required with June and October benthos collections only

^a 16 June

^b 17 June

^c 15 June

^d 13 October

^e 12 October

NA = Not analyzed, sample size insufficient for analysis

APPENDIX VIB-3

QUALITATIVE DESCRIPTION OF SUBSTRATA OF BENTHIC SAMPLES

NINE MILE POINT VICINITY - APRIL COLLECTION, 1976

| DEPTH CONTOUR (ft) | NMPW (14 May) | | NMPP (14 May) | | FITZ (19 Apr) | | NMPE (19 Apr) | |
|--------------------------|---------------|-----|---------------|-----|---------------|-----|---------------|-----|
| | R-1 | R-2 | R-1 | R-2 | R-1 | R-2 | R-1 | R-2 |
| 10 | C | C | C | A | B | B | C | C |
| 20 | C | C | C | A | C | C | E | E |
| 30 | C | C | C | C | D | D | D | D |
| 40 | C | B | C | C | D | D | D | D |
| 60 | D | D | C | C | D | D | D | D |

- A Flatrock (bedrock) with crevices (with layer of silt)
- B Flatrock (bedrock), no crevices (with layer of silt)
- C Cobble over boulder (with layer of silt)
- D Sand and silt
- E <5 cm sand and silt over flatrock (bedrock)

APPENDIX VIB-3

QUALITATIVE DESCRIPTION OF SUBSTRATA OF BENTHIC SAMPLES

NINE MILE POINT VICINITY - JUNE COLLECTION, 1976

| DEPTH CONTOUR (ft) | NMPW (16 Jun) | | NMPP (16-17 Jun) | | FITZ (15 Jun) | | NMPE (15 Jun) | |
|--------------------------|---------------|-----|------------------|-----|---------------|-----|---------------|-----|
| | R-1 | R-2 | R-1 | R-2 | R-1 | R-2 | R-1 | R-2 |
| 10 | C | C | B | B | B | B | A | A |
| 20 | C | C | B | B | B | B | A | A |
| 30 | A | A | B | B | B | B | D | D |
| 40 | C | C | B | B | D | D | D | D |
| 60 | D | D | A | A | D | D | D | D |

- A Flatrock (bedrock) with crevices (with layer of silt)
- B Flatrock (bedrock), no crevices (with layer of silt)
- C Cobble over boulder (with layer of silt)
- D Sand and silt
- E <5 cm sand and silt over flatrock (bedrock)

APPENDIX VIB-3

QUALITATIVE DESCRIPTION OF SUBSTRATA OF BENTHIC SAMPLES

NINE MILE POINT VICINITY - AUGUST COLLECTION, 1976

| DEPTH CONTOUR (ft) | NMPW (4 Sep) | | NMPP (4, 7 Sep) | | FITZ (7 Sep) | | NMPE (3 Sep) | |
|--------------------------|--------------|-----|-----------------|-----|--------------|-----|--------------|-----|
| | R-1 | R-2 | R-1 | R-2 | R-1 | R-2 | R-1 | R-2 |
| 10 | A | A | B | B | A | A | E | E |
| 20 | A | A | A | A | B | B | A | B |
| 30 | A | A | A | A | D | D | D | D |
| 40 | A | C | A | A | D | D | D | D |
| 60 | D | D | B | B | D | D | D | D |

- A Flatrock (bedrock) with crevices (with layer of silt)
- B Flatrock (bedrock), no crevices (with layer of silt)
- C Cobble over boulder (with layer of silt)
- D Sand and silt
- E <5 cm sand and silt over flatrock (bedrock)

APPENDIX VIB-3

QUALITATIVE DESCRIPTION OF SUBSTRATA OF BENTHIC SAMPLES

NINE MILE POINT VICINITY - OCTOBER COLLECTION, 1976

| DEPTH CONTOUR (ft) | NMPW (13 Oct) | | NMPP (13 Oct) | | FITZ (12-13 Oct) | | NMPE (12 Oct) | |
|--------------------------|---------------|-----|---------------|-----|------------------|-----|---------------|-----|
| | R-1 | R-2 | R-1 | R-2 | R-1 | R-2 | R-1 | R-2 |
| 10 | A | A | C | A | B | B | G | G |
| 20 | B | B | A | A | F | F | H | H |
| 30 | B | B | C | C | D | D | D | D |
| 40 | C | C | A | A | D | D | D | D |
| 60 | B | B | C | C | D | D | D | D |

- A Flatrock (bedrock) with crevices (with layer of silt)
- B Flatrock (bedrock), no crevices (with layer of silt)
- C Cobble over boulder (with layer of silt)
- D Sand and silt
- E <5 cm sand and silt over flatrock (bedrock)
- F Gravel and <5 cm sand and silt over flatrock (bedrock)
- G Sand
- H Flatrock; no crevices

APPENDIX VIB-3

QUALITATIVE DESCRIPTION OF SUBSTRATA OF BENTHIC SAMPLES

NINE MILE POINT VICINITY - DECEMBER COLLECTION, 1976

| DEPTH CONTOUR (FT) | NMPE (14 DEC) | |
|--------------------------|---------------|-----|
| | R-1 | R-2 |
| 10 | No Sample | |
| 20 | D | NS |
| 30 | D | D |
| 40 | No Sample | |
| 60 | No Sample | |

NMPW, NMPP, and FITZ: No Sample

D = Sand and silt

NS = No sample

APPENDIX VIB-4

DIVER OBSERVATION OF SEDIMENT ACCUMULATION^a NEAR BUOY PERIPHYTON ANCHORS

NINE MILE POINT VICINITY - 1976

| DATE | 40 FT STATION | | |
|--------|-----------------|-----------------|-----------------|
| | NMPW | NMPP/ FITZ | NMPE |
| 11 MAY | <0.1 | NS ^b | 0.2-1.2 |
| 2 JUN | 0.2 | <0.1 | 0.3-1.8 |
| 1 JUL | 0.5 | 0.5 | 2.0 |
| AUG | NS ^c | NS ^c | NS ^c |
| 7 SEP | <0.1 | NS ^b | 0-0.8 |
| 8 OCT | <0.1 | NS ^b | 0.1-4.5 |
| 2 NOV | <0.1 | NS ^b | <0.1-6.0 |
| 10 DEC | NS ^b | 0 ^d | 16.0 |

^aRecorded in cm

^bStructure missing

^cNo collection; diver's regulation

^dStructure replaced 6 Dec

NS = No sample

APPENDIX VIB-5a

ABUNDANCE AND BIOMASS OF SELECTED TAXA OF ANNELIDA

ABUNDANCE^a AND BIOMASS^b OF OLIGOCHAETA (ANNELIDA) IN BENTHIC COLLECTIONS

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | | APR | | | | JUN | | | | AUG | | | |
|---|--------------|-----------|---------|---------|---------|-----------|---------|---------|---------|-----------|---------|---------|---------|
| | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT |
| 10 | NMPW | 115 | 3.4 | 0.011 | 0.09 | 265 | 5.3 | 0.325 | 3.39 | 76 | 0.5 | 0.030 | 0.05 |
| | NMPP | 568 | 23.9 | 0.412 | 28.05 | 753 | 12.8 | 0.073 | 3.73 | 8 | 0.2 | 0.001 | 0.04 |
| | FITZ | 15 | 0.5 | 0.002 | 0.02 | 89 | 8.4 | 0.009 | 0.74 | 61 | 0.3 | 0.006 | 0.03 |
| | NMPE | 99 | 2.4 | 0.061 | 0.39 | 143 | 3.1 | 0.095 | 0.90 | 3 | 0.1 | <0.001 | <0.01 |
| | CONTOUR MEAN | 199 | | 0.122 | | 312 | | 0.126 | | 37 | | <0.001 | |
| 20 | NMPW | 10 | 0.2 | 0.001 | 0.05 | 15 | 0.3 | 0.002 | 0.02 | 0 | | - | |
| | NMPP | 51 | 1.0 | 0.120 | 0.35 | 25 | 0.6 | 0.008 | 0.81 | 0 | | - | |
| | FITZ | 13 | 0.7 | 0.041 | 0.44 | 10 | 0.5 | 0.001 | 0.20 | 0 | | - | |
| | NMPE | 61 | 1.1 | 0.144 | 1.40 | 8 | 0.2 | 0.004 | 0.13 | 3 | 0.1 | <0.001 | <0.01 |
| | CONTOUR MEAN | 34 | | 0.076 | | 14 | | 0.004 | | 1 | | - | |
| 30 | NMPW | 10 | 0.3 | 0.024 | 1.85 | 0 | | - | | 15 | 0.7 | 0.036 | 1.20 |
| | NMPP | 0 | | - | | 10 | 0.2 | 0.024 | 0.22 | 71 | 1.6 | 0.168 | 3.43 |
| | FITZ | 20 | 11.6 | 0.048 | 5.50 | 0 | | - | | 33 | 2.0 | 0.107 | 6.31 |
| | NMPE | 137 | 7.3 | 0.295 | 5.50 | 471 | 8.7 | 0.897 | 11.81 | 1512 | 18.1 | 4.041 | 22.46 |
| | CONTOUR MEAN | 42 | | 0.122 | | 120 | | 0.460 | | 408 | | 1.088 | |
| 40 | NMPW | 13 | 0.5 | 0.001 | 0.04 | 3 | 0.9 | 0.006 | 4.20 | 8 | 0.3 | 0.018 | 1.53 |
| | NMPP | 5 | 1.0 | 0.006 | 0.70 | 3 | 0.1 | <0.001 | <0.01 | 178 | 5.2 | 0.409 | 8.89 |
| | FITZ | 529 | 35.2 | 1.261 | 39.85 | 1130 | 23.9 | 2.644 | 49.82 | 305 | 7.5 | 0.755 | 15.11 |
| | NMPE | 425 | 16.7 | 1.273 | 21.45 | 1059 | 12.1 | 3.211 | 21.57 | 2016 | 14.9 | 5.835 | 27.21 |
| | CONTOUR MEAN | 243 | | 0.635 | | 549 | | <1.466 | | 627 | | 1.754 | |
| 60 | NMPW | 11279 | 50.0 | 33.969 | 88.56 | 4764 | 24.2 | 13.103 | 73.39 | 4469 | 53.6 | 12.567 | 80.48 |
| | NMPP | 153 | 6.9 | 0.296 | 16.12 | 137 | 8.1 | 0.117 | 6.14 | 216 | 3.6 | 0.436 | 8.75 |
| | FITZ | 1507 | 48.7 | 4.532 | 46.19 | 2626 | 23.4 | 8.518 | 49.01 | 652 | 6.6 | 1.802 | 16.59 |
| | NMPE | 2525 | 34.4 | 6.509 | 38.79 | 1038 | 9.2 | 3.071 | 15.87 | 1015 | 6.1 | 2.551 | 6.91 |
| | CONTOUR MEAN | 3866 | | 11.326 | | 2141 | | 6.202 | | 1588 | | 4.339 | |

^a Number organisms/m²; exact date of benthic collection indicated on computer print-outs

^b Grams/m²; wet weight

ABUNDANCE^a AND BIOMASS^b OF OLIGOCHAETA (ANNELIDA) IN BENTHIC COLLECTIONS (Continued)

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | OCT | | | | DEC | | | | GRAND MEAN | | | |
|---|-----------|---------|---------|---------|----------------|------------------|--------------------|---------|------------|------|---------|-------|
| | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | | | | |
| NMPW | 15 | 2.6 | 0.013 | 1.76 | NS | - | NS | - | 118 | 1.9 | 0.095 | 0.45 |
| NMPP | 20 | 0.1 | 0.014 | 0.08 | NS | - | NS | - | 337 | 4.3 | 0.125 | 2.12 |
| 10 FITZ | 13 | 0.2 | 0.007 | 0.09 | NS | - | NS | - | 45 | 0.6 | 0.006 | 0.06 |
| NMPE | 5 | 1.2 | 0.006 | 1.85 | NS | - | NS | - | 63 | 1.7 | 0.041 | 0.54 |
| CONTOUR MEAN | 13 | | 0.01 | | - | | - | | | | | |
| NMPW | 3 | 0.2 | 0.006 | 0.19 | NS | - | NS | - | 7 | 0.2 | 0.002 | 0.05 |
| NMPP | 10 | 2.1 | 0.047 | 10.40 | NS | - | NS | - | 22 | 0.5 | 0.044 | 0.45 |
| 20 FITZ | 0 | | - | | NS | - | NS | - | 6 | 0.2 | 0.011 | 0.25 |
| NMPE | 1003 | 5.9 | 2.768 | 8.71 | 5 ^c | 2.0 ^c | 0.122 ^c | NA | 269 | 3.3 | 0.729 | 5.15 |
| CONTOUR MEAN | 254 | | 0.940 | | - | | - | | | | | |
| NMPW | 3 | 0.3 | 0.006 | 0.40 | NS | - | NS | - | 7 | 0.3 | 0.017 | 0.97 |
| NMPP | 38 | 2.1 | 0.090 | 0.17 | NS | - | NS | - | 30 | 1.0 | 0.071 | 0.40 |
| 30 FITZ | 13 | 2.3 | 0.024 | 2.56 | NS | - | NS | - | 17 | 2.2 | 0.045 | 3.83 |
| NMPE | 1522 | 20.9 | 3.453 | 18.36 | 56 | 9.7 | 0.144 | 7.62 | 740 | NA | 0.766 | NA |
| CONTOUR MEAN | 394 | | 0.893 | | - | | - | | | | | |
| NMPW | 0 | | - | | NS | - | NS | - | 6 | 0.4 | 0.006 | 0.61 |
| NMPP | 1232 | 32.8 | 2.780 | 44.85 | NS | - | NS | - | 355 | 14.2 | 0.799 | 25.29 |
| 40 FITZ | 239 | 14.2 | 0.599 | 19.80 | NS | - | NS | - | 551 | 18.4 | 1.315 | 31.87 |
| NMPE | 400 | 5.6 | 1.006 | 5.69 | NS | - | NS | - | 975 | 12.2 | 2.831 | 18.89 |
| CONTOUR MEAN | 468 | | 1.462 | | - | | - | | | | | |
| NMPW | 120 | 11.6 | 0.282 | 14.77 | NS | - | NS | - | 5158 | 40.0 | 14.980 | 81.26 |
| NMPP | 247 | 13.5 | 0.577 | 25.63 | NS | - | NS | - | 188 | 6.4 | 0.357 | 12.99 |
| 60 FITZ | 965 | 19.0 | 2.363 | 24.26 | NS | - | NS | - | 1438 | 19.7 | 4.304 | 36.01 |
| NMPE | 2280 | 17.5 | 5.703 | 25.61 | NS | - | NS | - | 1715 | 14.2 | 4.459 | 18.71 |
| CONTOUR MEAN | 903 | | 2.231 | | - | | - | | | | | |

^aNo. organisms/m²; exact date of benthic collection indicated on computer print-outs

^bGrams/m²; wet weight
Original sample only

NA = Not available

NS = No sample

- = Not applicable

ABUNDANCE^a AND BIOMASS^b OF POLYCHAETA (ANNELIDA) IN BENTHIC COLLECTIONS

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | | APR | | | | JUN | | | | AUG | | | |
|---|--------------|-----------|---------|---------|---------|-----------|---------|---------|---------|-----------|---------|---------|---------|
| | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT |
| 10 | NMPW | 728 | 21.6 | 0.120 | 0.96 | 819 | 16.4 | 0.080 | 0.83 | 1489 | 9.4 | 0.145 | 0.24 |
| | NMPP | 565 | 23.7 | 0.009 | 0.61 | 5 | 0.1 | 0.001 | 0.05 | 8 | 0.2 | 0.001 | 0.04 |
| | FITZ | 61 | 2.1 | 0.006 | 0.07 | 3 | 0.3 | <0.001 | <0.01 | 3222 | 14.9 | 0.313 | 1.46 |
| | NMPE | 84 | 2.0 | 0.008 | 0.05 | 1944 | 42.6 | 0.188 | 1.77 | 117 | 2.0 | 0.011 | 0.27 |
| | CONTOUR MEAN | 360 | | 0.036 | | 693 | | <0.068 | | 1209 | | 0.118 | |
| 20 | NMPW | 4011 | 75.5 | 0.390 | 19.17 | 4342 | 76.9 | 0.421 | 4.74 | 878 | 36.8 | 0.085 | 6.97 |
| | NMPP | 1975 | 39.1 | 0.193 | 0.56 | 837 | 20.0 | 0.123 | 12.53 | 1792 | 24.2 | 0.174 | 5.07 |
| | FITZ | 168 | 8.6 | 0.016 | 0.17 | 257 | 12.9 | 0.025 | 5.02 | 1586 | 22.3 | 0.153 | 4.18 |
| | NMPE | 766 | 13.6 | 0.074 | 0.72 | 832 | 23.0 | 0.081 | 2.71 | 624 | 10.0 | 0.060 | 0.52 |
| | CONTOUR MEAN | 1730 | | 0.168 | | 1567 | | 0.162 | | 1220 | | 0.118 | |
| 30 | NMPW | 1166 | 32.0 | 0.114 | 8.80 | 853 | 45.7 | 0.083 | 6.86 | 244 | 11.3 | 0.024 | 0.80 |
| | NMPP | 0 | - | - | - | 2942 | 58.5 | 0.285 | 2.56 | 1468 | 32.1 | 0.143 | 2.92 |
| | FITZ | 0 | - | - | - | 0 | - | - | - | 3 | 0.2 | <0.001 | <0.01 |
| | NMPE | 5 | 0.3 | 0.001 | 0.02 | 5 | 0.1 | 0.001 | 0.01 | 76 | 0.9 | 0.008 | 0.04 |
| | CONTOUR MEAN | 293 | | 0.058 | | 950 | | 0.123 | | 448 | | <0.044 | |
| 40 | NMPW | 3 | 0.1 | <0.001 | <0.01 | 3 | 0.9 | <0.001 | <0.01 | 8 | 0.3 | 0.001 | 0.09 |
| | NMPP | 5 | 1.0 | 0.001 | 0.12 | 570 | 24.8 | 0.055 | 5.67 | 0 | - | - | - |
| | FITZ | 0 | - | - | - | 10 | 0.2 | 0.001 | 0.02 | 0 | - | - | - |
| | NMPE | 10 | 0.4 | 0.001 | 0.02 | 20 | 0.2 | - | - | 255 | 1.9 | 0.024 | 0.11 |
| | CONTOUR MEAN | 4 | | <0.001 | | 151 | | 0.019 | | 66 | | 0.012 | |
| 60 | NMPW | 0 | - | - | - | 51 | 0.3 | 0.005 | 0.03 | 20 | 0.2 | 0.002 | 0.01 |
| | NMPP | 0 | - | - | - | 3 | 0.2 | <0.001 | <0.01 | 5 | 0.1 | 0.001 | 0.02 |
| | FITZ | 0 | - | - | - | 0 | - | - | 0 | 20 | 0.2 | 0.002 | 0.02 |
| | NMPE | 97 | 1.3 | 0.010 | 0.06 | 61 | 0.5 | 0.006 | 0.03 | 285 | 1.7 | 0.027 | 0.07 |
| | CONTOUR MEAN | 24 | | - | | 29 | | <0.004 | | 82 | | 0.008 | |

^a Number organisms/m²; exact date of benthic collection indicated on computer print-outs

^b Grams/m²; wet weight

ABUNDANCE^a AND BIOMASS^b OF POLYCHAETA (ANNELIDA) IN BENTHIC COLLECTIONS (Continued)

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | | OCT | | | | DEC | | | | GRAND MEAN | | | |
|---|--------------|-----------|---------|---------|---------|----------------|---------|---------|---------|------------|------|---------|-------|
| | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | | | | |
| 10 | NMPW | 10 | 1.7 | 0.001 | 0.14 | NS | - | NS | - | 762 | 12.3 | 0.087 | 0.42 |
| | NMPP | 881 | 4.9 | 0.086 | 0.49 | NS | - | NS | - | 365 | 4.7 | 0.024 | 0.41 |
| | FITZ | 33 | 0.5 | 0.003 | 0.04 | NS | - | NS | - | 830 | 10.2 | 0.081 | 0.83 |
| | NMPE | 0 | | - | | NS | - | NS | - | 536 | 14.3 | 0.052 | 0.68 |
| | CONTOUR MEAN | 231 | | 0.03 | | - | | - | | | | | |
| 20 | NMPW | 384 | 25.2 | 0.037 | 1.19 | NS | - | NS | - | 2404 | 64.7 | 0.233 | 6.11 |
| | NMPP | 163 | 34.5 | 0.016 | 3.54 | NS | - | NS | - | 1192 | 27.9 | 0.127 | 1.29 |
| | FITZ | 0 | | - | | NS | - | NS | - | 503 | 14.4 | 0.049 | 1.10 |
| | NMPE | 31 | 0.2 | 0.003 | 0.01 | 0 ^c | - | - | - | 563 | 6.9 | 0.055 | 0.39 |
| | CONTOUR MEAN | 144 | | 0.019 | | - | | - | | | | | |
| 30 | NMPW | 53 | 4.9 | 0.005 | 0.33 | NS | - | NS | - | 579 | 26.5 | 0.057 | 3.24 |
| | NMPP | 0 | | - | | NS | - | NS | - | 1103 | 35.0 | 0.107 | 0.60 |
| | FITZ | 0 | | - | | NS | - | NS | - | 1 | 0.1 | <0.001 | <0.01 |
| | NMPE | 46 | 0.6 | 0.005 | 0.03 | 0 | - | NS | - | 26 | NA | 0.003 | NA |
| | CONTOUR MEAN | 25 | | 0.005 | | - | | - | | | | | |
| 40 | NMPW | 3 | 1.2 | <0.001 | <0.01 | NS | - | NS | - | 4 | 0.3 | <0.001 | <0.01 |
| | NMPP | 15 | 0.4 | 0.002 | 0.03 | NS | - | NS | - | 148 | 5.9 | 0.015 | 0.47 |
| | FITZ | 0 | | - | | NS | - | NS | - | 3 | 0.1 | <0.001 | <0.01 |
| | NMPE | 94 | 1.3 | 0.009 | 0.05 | NS | - | NS | - | 95 | 1.2 | 0.009 | 0.06 |
| | CONTOUR MEAN | 28 | | 0.004 | | - | | - | | | | | |
| 60 | NMPW | 0 | | - | | NS | - | NS | - | 18 | 0.1 | 0.002 | 0.01 |
| | NMPP | 0 | | - | | NS | - | NS | - | 2 | 0.1 | <0.001 | <0.01 |
| | FITZ | 0 | | - | | NS | - | NS | - | 5 | 0.1 | 0.001 | 0.01 |
| | NMPE | 122 | 0.9 | 0.011 | 0.05 | NS | - | NS | - | 141 | 1.2 | 0.014 | 0.06 |
| | CONTOUR MEAN | 30 | | - | | - | | - | | | | | |

^aNo. organisms/m²; exact date of benthic collection indicated on computer print-outs
^bgrams/m²; wet weight
 Original sample only

NA = Not available
 NS = No sample
 - = Not applicable

APPENDIX VIB-5b

ABUNDANCE AND BIOMASS OF SELECTED TAXA OF ARTHROPODA

ABUNDANCE^a AND BIOMASS^b OF ACARI (ARTHROPODA: ARACHNIDA) IN BENTHIC COLLECTIONS

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | | APR | | | | JUN | | | | AUG | | | |
|---|--------------|-----------|---------|---------|---------|-----------|---------|---------|---------|-----------|---------|---------|---------|
| | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT |
| 10 | NMPW | 79 | 2.3 | 0.024 | 0.19 | 69 | 1.4 | 0.021 | 0.22 | 38 | 0.2 | 0.011 | 0.02 |
| | NMPP | 38 | 1.6 | 0.011 | 0.75 | 349 | 5.9 | 0.105 | 5.37 | 23 | 0.5 | 0.007 | 0.26 |
| | FITZ | 41 | 1.4 | 0.012 | 0.14 | 25 | 2.4 | 0.008 | 0.66 | 122 | 0.6 | 0.037 | 0.17 |
| | NMPE | 23 | 0.6 | 0.007 | 0.04 | 43 | 0.9 | 0.013 | 0.12 | 115 | 2.0 | 0.034 | 0.84 |
| | CONTOUR MEAN | 45 | | 0.014 | | 122 | | 0.037 | | 74 | | 0.022 | |
| 20 | NMPW | 56 | 1.1 | 0.017 | 0.84 | 84 | 1.5 | 0.025 | 0.28 | 153 | 6.4 | 0.046 | 3.77 |
| | NMPP | 92 | 1.8 | 0.027 | 0.08 | 125 | 3.0 | 0.037 | 3.77 | 120 | 1.6 | 0.036 | 1.05 |
| | FITZ | 43 | 2.2 | 0.013 | 0.14 | 61 | 3.1 | 0.018 | 3.61 | 109 | 1.5 | 0.033 | 0.90 |
| | NMPE | 56 | 1.0 | 0.017 | 0.16 | 150 | 4.1 | 0.045 | 1.51 | 122 | 2.0 | 0.037 | 0.32 |
| | CONTOUR MEAN | 62 | | 0.019 | | 105 | | 0.031 | | 126 | | 0.038 | |
| 30 | NMPW | 524 | 14.4 | 0.157 | 12.11 | 275 | 14.7 | 0.082 | 6.78 | 277 | 12.9 | 0.083 | 2.76 |
| | NMPP | 112 | 9.5 | 0.034 | 2.29 | 351 | 7.0 | 0.105 | 0.94 | 247 | 5.4 | 0.074 | 1.51 |
| | FITZ | 3 | 1.7 | 0.001 | 0.11 | 8 | 1.1 | 0.002 | 0.17 | 10 | 0.6 | 0.003 | 0.18 |
| | NMPE | 8 | 0.4 | 0.002 | 0.04 | 8 | 0.2 | 0.002 | 0.03 | 25 | 0.3 | 0.008 | 0.04 |
| | CONTOUR MEAN | 162 | | 0.049 | | 160 | | 0.048 | | 140 | | 0.042 | |
| 40 | NMPW | 321 | 13.2 | 0.096 | 3.86 | 173 | 52.3 | 0.052 | 36.36 | 1000 | 31.6 | 0.300 | 25.53 |
| | NMPP | 137 | 27.9 | 0.041 | 4.75 | 313 | 13.6 | 0.094 | 9.69 | 255 | 7.4 | 0.076 | 1.65 |
| | FITZ | 0 | - | - | - | 249 | 5.3 | 0.075 | 1.41 | 36 | 0.9 | 0.011 | 0.22 |
| | NMPE | 41 | 1.6 | 0.012 | 0.20 | 20 | 0.2 | 0.006 | 0.04 | 196 | 1.5 | 0.059 | 0.28 |
| | CONTOUR MEAN | 125 | | 0.050 | | 189 | | 0.057 | | 372 | | 0.112 | |
| 60 | NMPW | 51 | 0.2 | 0.015 | 0.04 | 31 | 0.2 | 0.009 | 0.05 | 13 | 0.2 | 0.004 | 0.03 |
| | NMPP | 420 | 18.9 | 0.126 | 6.86 | 349 | 20.7 | 0.105 | 5.51 | 84 | 1.4 | 0.025 | 0.50 |
| | FITZ | 0 | - | - | - | 38 | 0.3 | 0.011 | 0.06 | 31 | 0.3 | 0.009 | 0.08 |
| | NMPE | 31 | 0.4 | 0.009 | 0.05 | 64 | 0.6 | 0.019 | 0.10 | 69 | 0.4 | 0.021 | 0.06 |
| | CONTOUR MEAN | 126 | | 0.050 | | 120 | | 0.036 | | 49 | | 0.015 | |

^aNo. organisms/m²; exact date of benthic collection indicated on computer print-outs

^bGrams/m²; wet weight
original sample only

NA = Not available

NS = No sample

- = Not applicable

ABUNDANCE^a AND BIOMASS^b OF ACARI (ARACHNIDA: ARACHNIDA) IN BENTHIC COLLECTIONS (CONTINUED)

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | OCT | | | | DEC | | | | GRAND MEAN | | | |
|---|-----------|---------|---------|---------|-----------------|------------------|--------------------|---------|------------|---------|---------|---------|
| | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT |
| NMPW | 0 | - | - | - | NS | - | NS | - | 47 | 0.8 | 0.014 | 0.07 |
| NMPP | 38 | 0.2 | 0.011 | 0.06 | NS | - | NS | - | 112 | 1.4 | 0.034 | 0.58 |
| 10 FITZ | 56 | 0.8 | 0.017 | 0.22 | NS | - | NS | - | 61 | 0.8 | 0.019 | 0.19 |
| NMPE | 8 | 2.0 | 0.002 | 0.62 | NS | - | NS | - | 47 | 1.3 | 0.014 | 0.18 |
| CONTOUR MEAN | 26 | | 0.010 | | - | | - | | | | | |
| NMPW | 148 | 9.7 | 0.044 | 1.41 | NS | - | NS | - | 110 | 3.0 | 0.033 | 0.87 |
| NMPP | 64 | 13.5 | 0.019 | 4.20 | NS | - | NS | - | 100 | 2.3 | 0.030 | 0.31 |
| 20 FITZ | 25 | 0.9 | 0.008 | 0.19 | NS | - | NS | - | 60 | 1.7 | 0.018 | 0.40 |
| NMPE | 188 | 1.1 | 0.057 | 0.18 | 15 ^c | 6.0 ^c | 0.005 ^c | - | 129 | 1.6 | 0.039 | 0.28 |
| CONTOUR MEAN | 106 | | 0.032 | | - | | - | | | | | |
| NMPW | 420 | 39.0 | 0.126 | 8.32 | NS | - | NS | - | 374 | 17.1 | 0.112 | 6.36 |
| NMPP | 458 | 25.4 | 0.137 | 0.26 | NS | - | NS | - | 292 | 9.3 | 0.088 | 0.50 |
| 30 FITZ | 0 | - | - | - | NS | - | NS | - | 5 | 0.6 | 0.002 | 0.17 |
| NMPE | 20 | 0.3 | 0.006 | 0.03 | 5 | 0.9 | 0.002 | 0.11 | 13 | NA | 0.004 | NA |
| CONTOUR MEAN | 224 | | 0.090 | | - | | - | | | | | |
| NMPW | 214 | 84.6 | 0.064 | 47.76 | NS | - | NS | - | 427 | 27.6 | 0.128 | 12.99 |
| NMPP | 361 | 9.6 | 0.108 | 1.74 | NS | - | NS | - | 267 | 10.7 | 0.080 | 2.53 |
| 40 FITZ | 3 | 0.2 | 0.001 | 0.03 | NS | - | NS | - | 72 | 2.4 | 0.022 | 0.53 |
| NMPE | 51 | 0.7 | 0.015 | 0.08 | NS | - | NS | - | 77 | 1.0 | 0.023 | 0.15 |
| CONTOUR MEAN | 157 | | 0.047 | | - | | - | | | | | |
| NMPW | 410 | 39.7 | 0.123 | 6.44 | NS | - | NS | - | 126 | 1.0 | 0.038 | 0.21 |
| NMPP | 598 | 32.6 | 0.179 | 7.95 | NS | - | NS | - | 363 | 12.3 | 0.109 | 3.97 |
| 60 FITZ | 10 | 0.2 | 0.003 | 0.03 | NS | - | NS | - | 20 | 0.3 | 0.006 | 0.05 |
| NMPE | 25 | 0.2 | 0.008 | 0.04 | NS | - | NS | - | 47 | 0.4 | 0.014 | 0.06 |
| CONTOUR MEAN | 261 | | 0.078 | | - | | - | | | | | |

^aNo. organisms/m²; exact date of benthic collection indicated on computer print-outs

^bGrams/m²; wet weight

^cOriginal sample only

NA = Not available

NS = No sample

- = Not applicable

ABUNDANCE^a AND BIOMASS^b OF AMPHIPODA (ARTHROPODA: CRUSTACEA) IN BENTHIC COLLECTIONS

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | APR | | | | JUN | | | | AUG | | | |
|---|-----------|---------|---------|---------|-----------|---------|---------|---------|-----------|---------|---------|---------|
| | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT |
| 10 NMPW | 1079 | 32.0 | 3.765 | 29.97 | 1377 | 27.6 | 0.974 | 10.16 | 11707 | 73.6 | 8.737 | 14.35 |
| NMPP | 372 | 15.6 | 0.378 | 25.73 | 4092 | 69.5 | 1.013 | 51.82 | 4316 | 84.2 | 2.255 | 83.09 |
| FITZ | 201 | 6.9 | 0.413 | 4.76 | 163 | 15.3 | 0.104 | 8.55 | 16654 | 76.9 | 14.668 | 68.36 |
| NMPE | 870 | 20.8 | 4.912 | 31.39 | 1486 | 32.6 | 0.443 | 4.17 | 4591 | 78.8 | 3.439 | 85.19 |
| CONTOUR MEAN | 630 | | 2.367 | | 1780 | | 0.633 | | 9317 | | 7.275 | |
| 20 NMPW | 153 | 2.9 | 0.440 | 21.63 | 705 | 12.5 | 0.335 | 3.77 | 524 | 22.0 | 0.328 | 26.91 |
| NMPP | 967 | 19.2 | 5.183 | 15.09 | 2362 | 56.5 | 0.721 | 73.42 | 4581 | 61.9 | 2.946 | 85.79 |
| FITZ | 1415 | 72.7 | 8.006 | 85.52 | 1290 | 64.8 | 0.277 | 55.62 | 5090 | 71.7 | 2.034 | 55.62 |
| NMPE | 3400 | 60.5 | 7.092 | 68.81 | 794 | 21.9 | 0.142 | 4.75 | 1853 | 29.6 | 1.340 | 11.60 |
| CONTOUR MEAN | 1484 | | 5.180 | | 1288 | | 0.369 | | 3012 | | 1.662 | |
| 30 NMPW | 15 | 0.4 | 0.065 | 5.02 | 107 | 5.7 | 0.005 | 0.41 | 585 | 27.2 | 0.363 | 12.06 |
| NMPP | 252 | 21.4 | 1.030 | 69.41 | 741 | 14.7 | 0.052 | 0.47 | 1547 | 33.9 | 0.753 | 15.37 |
| FITZ | 117 | 67.6 | 0.803 | 92.09 | 570 | 75.6 | 0.343 | 28.78 | 1369 | 83.2 | 1.285 | 75.77 |
| NMPE | 277 | 14.7 | 0.182 | 3.39 | 392 | 7.2 | 0.145 | 1.91 | 1201 | 14.4 | 2.432 | 13.52 |
| CONTOUR MEAN | 165 | | 0.520 | | 452 | | 0.136 | | 1176 | | 1.208 | |
| 40 NMPW | 59 | 2.4 | 0.222 | 8.92 | 25 | 7.6 | 0.007 | 4.90 | 176 | 5.6 | 0.309 | 26.30 |
| NMPP | 18 | 3.7 | 0.055 | 6.37 | 349 | 15.2 | 0.016 | 1.65 | 130 | 3.8 | 0.054 | 1.17 |
| FITZ | 481 | 32.0 | 0.471 | 14.89 | 1960 | 41.4 | 1.136 | 21.41 | 1924 | 47.4 | 2.291 | 45.84 |
| NMPE | 186 | 7.3 | 0.427 | 7.20 | 1573 | 18.0 | 0.908 | 6.10 | 1746 | 12.9 | 2.889 | 13.47 |
| CONTOUR MEAN | 186 | | 0.294 | | 977 | | 0.517 | | 994 | | 1.386 | |
| 60 NMPW | 929 | 4.1 | 0.285 | 0.74 | 2901 | 14.8 | 0.724 | 4.06 | 715 | 8.6 | 1.104 | 7.07 |
| NMPP | 36 | 1.6 | 0.211 | 11.49 | 145 | 8.6 | 0.106 | 5.56 | 69 | 1.2 | 0.074 | 1.49 |
| FITZ | 369 | 11.9 | 1.004 | 10.23 | 2922 | 26.1 | 1.253 | 7.21 | 1537 | 15.7 | 2.163 | 19.92 |
| NMPE | 557 | 7.6 | 2.198 | 13.10 | 3970 | 35.2 | 1.796 | 9.28 | 2866 | 17.1 | 4.231 | 11.46 |
| CONTOUR MEAN | 473 | | 0.924 | | 2484 | | 0.970 | | 1297 | | 1.893 | |

^aNo. organisms/m²; exact date of benthic collection indicated on computer print-outs

^bGrams/m²; wet weight

^cOriginal sample only

NA = Not available

NS = No sample

- = Not available

ABUNDANCE^a AND BIOMASS^b OF AMPHIPODA (ARTHROPODA CRUSTACEA) IN BENTHIC COLLECTIONS (Continued)

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | OCT | | | | DEC | | | | GRAND MEAN | | | |
|---|-----------|---------|---------|---------|-----------------|-------------------|--------------------|---------|------------|------|---------|-------|
| | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | | | | |
| 10 NMPW | 509 | 88.7 | 0.296 | 40.16 | NS | | NS | | 3668 | 59.0 | 3.443 | 16.44 |
| NMPP | 14252 | 79.8 | 11.562 | 66.11 | NS | | NS | | 5758 | 73.7 | 3.802 | 64.35 |
| FITZ | 6719 | 94.8 | 6.674 | 84.81 | NS | | NS | | 5934 | 72.6 | 5.465 | 55.74 |
| NMPE | 384 | 94.1 | 0.303 | 93.52 | NS | | NS | | 1833 | 48.9 | 2.274 | 29.70 |
| CONTOUR MEAN | 5466 | | 4.709 | | - | | - | | | | | |
| 20 NMPW | 331 | 21.7 | 0.104 | 3.34 | NS | | NS | | 428 | 11.5 | 0.302 | 7.92 |
| NMPP | 109 | 23.0 | 0.029 | 6.42 | NS | | NS | | 2005 | 46.9 | 2.220 | 22.63 |
| FITZ | 1715 | 58.1 | 1.370 | 32.14 | NS | | NS | | 2378 | 67.9 | 2.922 | 65.71 |
| NMPE | 14221 | 82.9 | 10.932 | 34.40 | 41 ^c | 16.4 ^c | 0.267 ^c | NA | 5067 | 62.1 | 4.877 | 34.44 |
| CONTOUR MEAN | 4094 | | 3.109 | | - | | - | | | | | |
| 30 NMPW | 400 | 37.1 | 0.224 | 14.80 | NS | | NS | | 277 | 12.7 | 0.164 | 9.32 |
| NMPP | 687 | 38.1 | 1.382 | 2.59 | NS | | NS | | 807 | 25.6 | 0.804 | 4.54 |
| FITZ | 453 | 78.4 | 0.750 | 80.04 | NS | | NS | | 627 | 79.4 | 0.795 | 67.60 |
| NMPE | 410 | 5.6 | 0.712 | 3.79 | 51 | 8.9 | 0.277 | 14.66 | 466 | NA | 0.750 | NA |
| CONTOUR MEAN | 488 | | .767 | | - | | - | | | | | |
| 40 NMPW | 8 | 3.2 | 0.007 | 5.22 | NS | | NS | | 67 | 4.3 | 0.136 | 13.81 |
| NMPP | 1105 | 29.5 | 1.100 | 17.75 | NS | | NS | | 401 | 16.1 | 0.306 | 9.69 |
| FITZ | 662 | 39.3 | 0.992 | 32.79 | NS | | NS | | 1257 | 42.0 | 1.223 | 29.64 |
| NMPE | 1629 | 22.6 | 2.369 | 13.40 | NS | | NS | | 1284 | 16.0 | 1.648 | 11.00 |
| CONTOUR MEAN | 851 | | 1.117 | | - | | - | | | | | |
| 60 NMPW | 43 | 4.2 | 0.011 | 0.58 | NS | | NS | | 1147 | 8.9 | 0.531 | 2.88 |
| NMPP | 160 | 8.7 | 0.171 | 7.60 | NS | | NS | | 103 | 3.5 | 0.141 | 5.13 |
| FITZ | 2138 | 42.2 | 3.769 | 38.70 | NS | | NS | | 1742 | 23.9 | 2.047 | 17.13 |
| NMPE | 4174 | 32.1 | 8.129 | 36.51 | NS | | NS | | 2892 | 23.9 | 4.089 | 17.16 |
| CONTOUR MEAN | 1629 | | 3.020 | | - | | - | | | | | |

^aNo. organisms/m²; exact date of benthic collection indicated on computer print-outs

^bGrams/m²; wet weight

^cOriginal sample only

NA = Not available

NS = No sample

- = Not applicable

ABUNDANCE^a AND BIOMASS^b OF DECAPODA (ARTHROPODA: CRUSTACEA) IN BENTHIC COLLECTIONS^d

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | APR | | | | JUN | | | | AUG | | | |
|---|-----------|---------|---------|---------|-----------|---------|---------|---------|-----------|---------|---------|---------|
| | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT |
| 20 NMPW | 0 | - | - | - | 5 | 0.1 | 6.301 | 70.95 | 0 | - | - | - |
| NMPP | 3 | 0.1 | 23.614 | 68.74 | 0 | - | - | - | 0 | - | - | - |
| FITZ | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| NMPE | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| CONTOUR MEAN | 1 | - | - | - | 1 | - | - | - | 0 | - | - | - |
| 30 NMPW | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| NMPP | 0 | - | - | - | 3 | 0.1 | 9.738 | 87.59 | 3 | 0.1 | 2.771 | 56.57 |
| FITZ | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| NMPE | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| CONTOUR MEAN | 0 | - | - | - | 1 | - | - | - | 1 | - | - | - |
| 40 NMPW | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| NMPP | 0 | - | - | - | 0 | - | - | - | 5 | 0.2 | 0.352 | 7.65 |
| FITZ | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| NMPE | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| CONTOUR MEAN | 0 | - | - | - | 0 | - | - | - | 1 | - | - | - |

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | OCT | | | | DEC | | | | GRAND MEAN | | | |
|---|-----------|---------|---------|---------|----------------|---------|---------|---------|------------|---------|---------|---------|
| | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT |
| 20 NMPW | 0 | - | - | - | NS | - | NS | - | 1 | <0.1 | 1.575 | 41.31 |
| NMPP | 0 | - | - | - | NS | - | NS | - | 1 | <0.1 | 5.904 | 60.20 |
| FITZ | 0 | - | - | - | NS | - | NS | - | 0 | - | - | - |
| NMPE | 3 | <0.1 | 1.509 | 4.75 | 0 ^c | - | - | - | 1 | <0.1 | 0.377 | 2.66 |
| CONTOUR MEAN | 1 | - | - | - | - | - | - | - | - | - | - | - |
| 30 NMPW | 0 | - | - | - | NS | - | NS | - | 0 | - | - | - |
| NMPP | 3 | 0.2 | 0.232 | 0.44 | NS | - | NS | - | 2 | 0.1 | 3.185 | 17.99 |
| FITZ | 0 | - | - | - | NS | - | NS | - | 0 | - | - | - |
| NMPE | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| CONTOUR MEAN | 1 | - | - | - | - | - | - | - | - | - | - | - |
| 40 NMPW | 0 | - | - | - | NS | - | NS | - | 0 | - | - | - |
| NMPP | 0 | - | - | - | NS | - | NS | - | 1 | <0.1 | 0.088 | 2.79 |
| FITZ | 0 | - | - | - | NS | - | NS | - | 0 | - | - | - |
| NMPE | 0 | - | - | - | NS | - | NS | - | 0 | - | - | - |
| CONTOUR MEAN | 0 | - | - | - | - | - | - | - | 0 | - | - | - |

^aNo. organisms/m²; exact date of benthic collection indicated on computer print-outs

^bGrams/m²; wet weight

^cOriginal sample only

^dNo organisms of this taxon collected at the 10 and 60 stations during 1976

NS = No sample

- = Not applicable

ABUNDANCE^a AND BIOMASS^b OF DIPTERA (ARTHROPODA: INSECTA) IN BENTHIC COLLECTIONS

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | | APR | | | | JUN | | | | AUG | | | |
|---|--------------|-----------|---------|---------|---------|-----------|---------|---------|---------|-----------|---------|---------|---------|
| | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT |
| 10 | NMPW | 199 | 5.9 | 0.061 | 0.49 | 99 | 2.0 | 0.117 | 1.22 | 165 | 1.0 | 0.036 | 0.06 |
| | NMPP | 186 | 7.8 | 0.039 | 2.65 | 155 | 2.6 | 0.105 | 5.37 | 178 | 3.5 | 0.125 | 4.61 |
| | FITZ | 2441 | 84.1 | 1.338 | 15.43 | 20 | 1.9 | 0.009 | 0.74 | 667 | 3.1 | 0.173 | 0.81 |
| | NMPE | 2586 | 61.9 | 2.057 | 13.14 | 183 | 4.0 | 0.179 | 1.69 | 858 | 14.7 | 0.271 | 6.71 |
| | CONTOUR MEAN | 1353 | | 0.874 | | 114 | | 0.102 | | 467 | | 0.151 | |
| 20 | NMPW | 20 | 0.4 | 0.022 | 1.08 | 25 | 0.4 | 0.062 | 0.70 | 15 | 0.6 | 0.006 | 0.49 |
| | NMPP | 46 | 0.9 | 0.038 | 0.11 | 242 | 5.8 | 0.027 | 2.75 | 76 | 1.0 | 0.066 | 1.92 |
| | FITZ | 244 | 12.5 | 0.074 | 0.79 | 43 | 2.2 | 0.024 | 4.82 | 48 | 0.7 | 0.045 | 1.23 |
| | NMPE | 606 | 10.8 | 0.208 | 2.02 | 48 | 1.3 | 0.314 | 10.50 | 178 | 2.8 | 0.078 | 0.68 |
| | CONTOUR MEAN | 229 | | 0.086 | | 90 | | 0.107 | | 79 | | 0.049 | |
| 30 | NMPW | 15 | 0.4 | 0.004 | 0.31 | 18 | 1.0 | 0.009 | 0.74 | 87 | 4.0 | 0.049 | 1.63 |
| | NMPP | 8 | 0.7 | 0.002 | 0.13 | 53 | 1.1 | 0.025 | 0.22 | 178 | 3.9 | 0.109 | 2.23 |
| | FITZ | 5 | 2.9 | 0.006 | 0.69 | 64 | 8.5 | 0.090 | 7.55 | 38 | 2.3 | 0.052 | 3.07 |
| | NMPE | 178 | 9.5 | 0.194 | 3.61 | 501 | 9.2 | 0.259 | 3.41 | 252 | 3.0 | 0.184 | 1.02 |
| | CONTOUR MEAN | 52 | | 0.052 | | 159 | | 0.096 | | 139 | | 0.098 | |
| 40 | NMPW | 13 | 0.5 | 0.013 | 0.52 | 8 | 2.4 | 0.001 | 0.70 | 23 | 0.7 | 0.020 | 1.70 |
| | NMPP | 23 | 4.7 | 0.006 | 0.70 | 71 | 3.1 | 0.077 | 7.94 | 463 | 13.5 | 0.330 | 7.18 |
| | FITZ | 109 | 7.3 | 0.234 | 7.40 | 87 | 1.8 | 0.112 | 2.11 | 31 | 1.8 | 0.050 | 1.00 |
| | NMPE | 137 | 5.4 | 0.172 | 2.90 | 171 | 2.0 | 0.127 | 0.85 | 1133 | 8.4 | 0.738 | 3.44 |
| | CONTOUR MEAN | 70 | | 0.106 | | 84 | | 0.080 | | 412 | | 0.284 | |
| 60 | NMPW | 255 | 1.1 | 0.906 | 2.36 | 379 | 1.9 | 0.874 | 4.90 | 481 | 5.8 | 0.657 | 4.21 |
| | NMPP | 28 | 1.3 | 0.005 | 0.27 | 79 | 4.7 | 0.049 | 2.57 | 2059 | 34.3 | 3.261 | 65.47 |
| | FITZ | 69 | 2.2 | 0.157 | 1.60 | 102 | 0.9 | 0.243 | 1.40 | 354 | 3.6 | 0.453 | 4.17 |
| | NMPE | 176 | 2.4 | 0.220 | 1.31 | 46 | 0.4 | 0.105 | 0.54 | 262 | 1.6 | 0.270 | 0.73 |
| | CONTOUR MEAN | 132 | | 0.322 | | 152 | | 0.318 | | 789 | | 1.160 | |

^a Number organisms/m²; exact date of benthic collection indicated on computer print-outs

^b Grams/m²; wet weight

ABUNDANCE^a AND BIOMASS^b OF DIPTERA (ARTHROPODA: INSECTA IN BENTHIC COLLECTIONS (Continued)

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | OCT | | | | DEC | | | | GRAND MEAN | | | |
|---|-----------|---------|---------|---------|-----------------|-------------------|--------------------|---------|------------|------|---------|-------|
| | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | | | | |
| NMPW | 0 | - | - | - | NS | 1 | NS | 1 | 116 | 1.9 | 0.054 | 0.26 |
| NMPP | 13 | 0.1 | 0.015 | 0.09 | NS | 1 | NS | 1 | 133 | 1.7 | 0.071 | 1.20 |
| 10 FITZ | 8 | 0.1 | 0.009 | 0.11 | NS | 1 | NS | 1 | 784 | 9.6 | 0.382 | 3.90 |
| NMPE | 8 | 2.0 | 0.012 | 3.70 | NS | 1 | NS | 1 | 909 | 24.3 | 0.630 | 8.23 |
| CONTOUR MEAN | 7 | | 0.012 | | - | | - | | | | | |
| NMPW | 0 | - | - | - | NS | 1 | NS | 1 | 15 | 0.4 | 0.023 | 0.60 |
| NMPP | 0 | - | - | - | NS | 1 | NS | 1 | 91 | 2.1 | 0.033 | 0.34 |
| 20 FITZ | 3 | 0.1 | 0.001 | 0.02 | NS | 1 | NS | 1 | 85 | 2.4 | 0.036 | 0.81 |
| NMPE | 87 | 0.5 | 0.060 | 0.19 | 25 ^c | 10.0 ^c | 0.007 ^c | NA | 230 | 2.8 | 0.165 | 1.17 |
| CONTOUR MEAN | 22 | | 0.030 | | - | | - | | | | | |
| NMPW | 0 | - | - | - | NS | 1 | NS | 1 | 30 | 1.4 | 0.016 | 0.91 |
| NMPP | 31 | 1.7 | 0.049 | 0.09 | NS | 1 | NS | 1 | 68 | 2.2 | 0.046 | 0.26 |
| 30 FITZ | 3 | 0.5 | 0.002 | 0.21 | NS | 1 | NS | 1 | 28 | 3.5 | 0.038 | 3.23 |
| NMPE | 318 | 4.4 | 0.173 | 0.92 | 48 | 8.4 | 0.032 | 1.69 | 259 | NA | 0.130 | NA |
| CONTOUR MEAN | 88 | | 0.075 | | - | | - | | | | | |
| NMPW | 0 | - | - | - | NS | 1 | NS | 1 | 11 | 0.7 | 0.009 | 0.91 |
| NMPP | 173 | 4.6 | 0.364 | 5.87 | NS | 1 | NS | 1 | 183 | 7.3 | 0.194 | 6.14 |
| 40 FITZ | 31 | 1.8 | 0.036 | 1.19 | NS | 1 | NS | 1 | 65 | 2.2 | 0.108 | 2.62 |
| NMPE | 155 | 2.2 | 0.143 | 0.81 | NS | 1 | NS | 1 | 399 | 5.0 | 0.295 | 1.97 |
| CONTOUR MEAN | 90 | | 0.181 | | - | | - | | | | | |
| NMPW | 0 | - | - | - | NS | 1 | NS | 1 | 279 | 2.2 | 0.609 | 3.30 |
| NMPP | 36 | 2.0 | 0.083 | 3.69 | NS | 1 | NS | 1 | 551 | 18.7 | 0.850 | 30.93 |
| 60 FITZ | 252 | 5.0 | 0.557 | 5.72 | NS | 1 | NS | 1 | 194 | 2.7 | 0.353 | 2.95 |
| NMPE | 316 | 2.4 | 0.430 | 1.93 | NS | 1 | NS | 1 | 200 | 1.7 | 0.256 | 1.07 |
| CONTOUR MEAN | 151 | | 0.357 | | - | | - | | | | | |

^aNo. organisms/m²; exact date of benthic collection indicated on computer print-outs
²ams/m²; wet weight
 Original sample only

NA = Not available
 NS = No sample
 - = Not applicable

ABUNDANCE^a AND BIOMASS^b OF EPHEMEROPTERA (ARTHROPODA: INSECTA) IN BENTHIC COLLECTIONS

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | APR | | | | JUN | | | | AUG | | | |
|---|-----------|---------|---------|---------|-----------|---------|---------|---------|-----------|---------|---------|---------|
| | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT |
| NMPW | 5 | 0.1 | 0.001 | 0.05 | 0 | - | - | - | 0 | - | - | - |
| NMPP | 5 | 0.1 | 0.003 | 0.01 | 0 | - | - | - | 0 | - | - | - |
| 20 FITZ | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| NMPE | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| CONTOUR MEAN | 2 | - | 0.002 | - | 0 | - | - | - | 0 | - | - | - |
| NMPW | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| 30 NMPP | 18 | 1.5 | 0.062 | 4.18 | 0 | - | - | - | 0 | - | - | - |
| FITZ | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| NMPE | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| CONTOUR MEAN | 4 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| NMPW | 15 | 0.6 | 0.013 | 0.52 | 3 | 0.9 | 0.002 | 1.40 | 0 | - | - | - |
| 40 NMPP | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| FITZ | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| NMPE | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| CONTOUR MEAN | 4 | - | - | - | 1 | - | - | - | 0 | - | - | - |
| NMPW | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| 60 NMPP | 5 | 0.2 | 0.015 | 0.82 | 0 | - | - | - | 0 | - | - | - |
| FITZ | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| NMPE | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| CONTOUR MEAN | 1 | - | - | - | 0 | - | - | - | 0 | - | - | - |

^aNo. organisms/m²; exact date of benthic collection indicated on computer print-outs

^bGrams/m²; wet weight

^cOriginal sample only

NA = Not available

NS = No sample

- = Not applicable

ABUNDANCE^a AND BIOMASS^b OF EPHEMEROPTERA (ARTHROPODA: INSECTA) IN BENTHIC COLLECTIONS (Continued)

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | OCT | | | | DEC | | | | GRAND MEAN | | | |
|---|-----------|---------|---------|---------|----------------|---------|---------|---------|------------|---------|---------|---------|
| | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT |
| NMPW | 0 | - | - | - | NS | - | NS | - | 1 | <0.1 | <0.001 | <0.01 |
| NMPP | 0 | - | - | - | NS | - | NS | - | 1 | <0.1 | 0.001 | 0.01 |
| 20 FITZ | 0 | - | - | - | NS | - | NS | - | 0 | - | - | - |
| NMPE | 10 | 0.1 | 0.011 | 0.03 | 0 ^c | - | - | - | 3 | <0.1 | 0.003 | 0.02 |
| CONTOUR MEAN | 2 | - | - | - | - | - | - | - | - | - | - | - |
| NMPW | 0 | - | - | - | NS | - | NS | - | 0 | - | - | - |
| NMPP | 0 | - | - | - | NS | - | NS | - | 5 | 0.2 | 0.016 | 0.09 |
| 30 FITZ | 0 | - | - | - | NS | - | NS | - | 0 | - | - | - |
| NMPE | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| CONTOUR MEAN | 0 | - | - | - | - | - | - | - | - | - | - | - |
| NMPW | 0 | - | - | - | NS | - | NS | - | 5 | 0.3 | 0.004 | 0.41 |
| NMPP | 0 | - | - | - | NS | - | NS | - | 0 | - | - | - |
| 40 FITZ | 0 | - | - | - | NS | - | NS | - | 0 | - | - | - |
| NMPE | 0 | - | - | - | NS | - | NS | - | 0 | - | - | - |
| CONTOUR MEAN | 0 | - | - | - | - | - | - | - | - | - | - | - |
| NMPW | 0 | - | - | - | NS | - | NS | - | 0 | - | - | - |
| NMPP | 0 | - | - | - | NS | - | NS | - | 1 | <0.1 | 0.004 | 0.15 |
| 60 FITZ | 0 | - | - | - | NS | - | NS | - | 0 | - | - | - |
| NMPE | 0 | - | - | - | NS | - | NS | - | 0 | - | - | - |
| CONTOUR MEAN | 0 | - | - | - | - | - | - | - | - | - | - | - |

^aNo. organisms/m²; exact date of benthic collection

indicated on computer print-outs

^bGrams/m²; wet weight

^cOriginal sample only

NS = No sample

- = Not applicable

ABUNDANCE^a AND BIOMASS^b OF ISOPODA (ARTHROPODA: CRUSTACEA) IN BENTHIC COLLECTIONS

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | APR | | | | JUN | | | | AUG | | | |
|---|-----------|---------|---------|---------|-----------|---------|---------|---------|-----------|---------|---------|---------|
| | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT |
| NMPW | 0 | - | - | - | 10 | 0.2 | 0.012 | 0.13 | 0 | - | - | - |
| NMPP | 0 | - | - | - | 3 | 0.1 | 0.445 | 22.76 | 0 | - | - | - |
| 10 FITZ | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| NMPE | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| CONTOUR MEAN | 0 | | - | | 3 | | 0.229 | | 0 | | - | |
| NMPW | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| NMPP | 5 | 0.1 | 0.012 | 0.03 | 0 | - | - | - | 0 | - | - | - |
| 20 FITZ | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| NMPE | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| CONTOUR MEAN | 1 | | - | | 0 | | - | | 0 | | - | |
| NMPW | 0 | - | - | - | 0 | - | - | - | 5 | 0.2 | 0.012 | 0.40 |
| NMPP | 18 | 1.5 | 0.044 | 2.96 | 0 | - | - | - | 13 | 0.3 | 0.025 | 0.51 |
| 30 FITZ | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| NMPE | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| CONTOUR MEAN | 4 | | - | | 0 | | - | | 4 | | 0.019 | |
| NMPW | 25 | 1.0 | 0.080 | 3.22 | 3 | 0.9 | 0.008 | 5.59 | 46 | 1.5 | 0.030 | 2.55 |
| NMPP | 3 | 0.6 | 0.006 | 0.70 | 0 | - | - | - | 20 | 0.6 | 0.023 | 0.50 |
| 40 FITZ | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| NMPE | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| CONTOUR MEAN | 7 | | 0.043 | | 1 | | - | | 16 | | 0.027 | |
| NMPW | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| NMPP | 10 | 0.5 | 0.016 | 0.87 | 0 | - | - | - | 3 | 0.1 | 0.005 | 0.10 |
| 60 FITZ | 0 | - | - | - | 0 | - | - | - | 3 | <0.1 | 0.001 | 0.01 |
| NMPE | 0 | - | - | - | 0 | - | - | - | 3 | <0.1 | 0.009 | 0.02 |
| CONTOUR MEAN | 2 | | - | | 0 | | - | | 2 | | 0.005 | |

^aNumber organisms/m²; exact date of benthic collection indicated on computer print-outs

^bGrams/m²; wet weight

ABUNDANCE^a AND BIOMASS^b OF ISOPODA (ARTHROPODA: CRUSTACEA) IN BENTHIC COLLECTIONS (Continued)

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | OCT | | | | DEC | | | | GRAND. MEAN | | | |
|---|-----------|---------|---------|---------|----------------|---------|---------|---------|-------------|------|---------|-------|
| | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | | | | |
| NMPW | 0 | - | - | - | NS | | NS | | 3 | 0.1 | 0.003 | 0.01 |
| NMPP | 0 | - | - | - | NS | | NS | | 1 | <0.1 | 0.111 | 1.88 |
| 10 FITZ | 0 | - | - | - | NS | | NS | | 0 | - | - | - |
| NMPE | 0 | - | - | - | NS | | NS | | 0 | - | - | - |
| CONTOUR MEAN | 0 | | - | | - | | - | | | | | |
| NMPW | 0 | - | - | - | NS | | NS | | 0 | - | - | - |
| NMPP | 3 | 0.6 | 0.001 | 0.22 | NS | | NS | | 2 | 0.1 | 0.003 | 0.03 |
| 20 FITZ | 0 | - | - | - | NS | | NS | | 0 | - | - | - |
| NMPE | 0 | - | - | - | 0 ^c | - | - | - | 0 | - | - | - |
| CONTOUR MEAN | 1 | | - | | - | | - | | | | | |
| NMPW | 0 | - | - | - | NS | | NS | | 1 | 0.1 | 0.003 | 0.17 |
| NMPP | 5 | 0.3 | 0.012 | 0.02 | NS | | NS | | 9 | 0.3 | 0.020 | 0.11 |
| 30 FITZ | 0 | - | - | - | NS | | NS | | 0 | - | - | - |
| NMPE | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| CONTOUR MEAN | 1 | | - | | - | | - | | | | | |
| NMPW | 0 | - | - | - | NS | | NS | | 19 | 1.2 | 0.030 | 3.05 |
| NMPP | 28 | 0.8 | 0.022 | 0.35 | NS | | NS | | 13 | 0.5 | 0.013 | 0.41 |
| 40 FITZ | 0 | - | - | - | NS | | NS | | 0 | - | - | - |
| NMPE | 0 | - | - | - | NS | | NS | | 0 | - | - | - |
| CONTOUR MEAN | 7 | | - | | - | | - | | | | | |
| NMPW | 3 | 0.3 | 0.003 | 0.16 | NS | | NS | | 1 | <0.1 | 0.001 | 0.01 |
| NMPP | 43 | 2.3 | 0.073 | 3.24 | NS | | NS | | 14 | 0.5 | 0.024 | 0.87 |
| 60 FITZ | 0 | - | - | - | NS | | NS | | 1 | <0.1 | <0.001 | <0.01 |
| NMPE | 0 | - | - | - | NS | | NS | | 1 | <0.1 | 0.002 | 0.01 |
| CONTOUR MEAN | 12 | | 0.038 | | - | | - | | | | | |

^aNo. organisms/m² exact date of benthic collection
indicated on computer print-outs
^bms/m²; wet weight
original sample only

NS = No sample
- = Not applicable

ABUNDANCE^a AND BIOMASS^b OF MYSIDACEA (ARTHROPODA: CRUSTACEA) IN BENTHIC COLLECTIONS^c

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | APR | | | | JUN | | | | AUG | | | |
|---|-----------|---------|---------|---------|-----------|---------|---------|---------|-----------|---------|---------|---------|
| | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT |
| NMPW | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| NMPP | 3 | 0.1 | 0.006 | 0.33 | 0 | - | - | - | 0 | - | - | - |
| 60 FITZ | 5 | 0.2 | 0.035 | 0.36 | 0 | - | - | - | 0 | - | - | - |
| NMPE | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| CONTOUR MEAN | 2 | - | 0.020 | - | 0 | - | - | - | 0 | - | 0.015 | - |

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | OCT | | | | DEC | | | | GRAND MEAN | | | |
|---|-----------|---------|---------|---------|-----------|---------|---------|---------|------------|---------|---------|---------|
| | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT |
| NMPW | 0 | - | - | - | NS | - | NS | - | 0 | - | - | - |
| NMPP | 0 | - | - | - | NS | - | NS | - | 1 | <0.1 | 0.002 | 0.07 |
| 60 FITZ | 0 | - | - | - | NS | - | NS | - | 1 | <0.1 | 0.009 | 0.08 |
| NMPE | 0 | - | - | - | NS | - | NS | - | 0 | - | - | - |
| CONTOUR MEAN | 0 | - | - | - | - | - | - | - | - | - | - | - |

^aNo. organisms/m²; exact date of benthic collection

indicated on computer print-outs

^bGrams/m²; wet weight

^cNo organisms of this taxon collected at the 10, 20, 30, and 40 ft stations during 1976

NS = No sample

- = Not applicable

ABUNDANCE^a AND BIOMASS^b OF OSTRACODA (ARTHROPODA: CRUSTACEA) IN BENTHIC COLLECTIONS

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | APR | | | | JUN | | | | AUG | | | |
|---|-----------|---------|---------|---------|-----------|---------|---------|---------|-----------|---------|---------|---------|
| | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT |
| NMPW | 562 | 16.7 | 0.112 | 0.89 | 529 | 10.6 | 0.106 | 1.11 | 0 | - | - | - |
| NMPP | 377 | 15.8 | 0.075 | 5.11 | 326 | 5.5 | 0.065 | 3.32 | 127 | 2.5 | 0.025 | 0.92 |
| 10 FITZ | 10 | 0.3 | 0.002 | 0.02 | 649 | 60.9 | 0.130 | 10.69 | 0 | - | - | - |
| NMPE | 53 | 1.3 | 0.011 | 0.07 | 338 | 7.4 | 0.068 | 0.64 | 3 | 0.1 | 0.001 | 0.02 |
| CONTOUR MEAN | 250 | | 0.050 | | 460 | | 0.092 | | 32 | | 0.013 | |
| NMPW | 817 | 15.4 | 0.163 | 8.01 | 165 | 2.9 | 0.033 | 0.37 | 43 | 1.8 | 0.009 | 0.74 |
| NMPP | 1550 | 30.7 | 0.310 | 0.90 | 293 | 7.0 | 0.059 | 6.01 | 389 | 5.3 | 0.078 | 2.27 |
| 20 FITZ | 5 | 0.3 | 0.001 | 0.01 | 229 | 11.5 | 0.046 | 9.24 | 145 | 2.0 | 0.029 | 0.79 |
| NMPE | 20 | 0.4 | 0.004 | 0.04 | 720 | 19.9 | 0.144 | 4.82 | 260 | 4.2 | 0.052 | 0.45 |
| CONTOUR MEAN | 598 | | 0.120 | | 352 | | 0.070 | | 209 | | 0.042 | |
| NMPW | 1624 | 44.5 | 0.325 | 25.08 | 112 | 6.0 | 0.022 | 1.82 | 336 | 15.6 | 0.067 | 2.23 |
| NMPP | 641 | 54.4 | 0.128 | 8.63 | 392 | 7.8 | 0.078 | 0.70 | 616 | 13.5 | 0.123 | 2.51 |
| 30 FITZ | 0 | - | - | - | 13 | 1.7 | 0.003 | 0.25 | 87 | 5.3 | 0.017 | 1.00 |
| NMPE | 64 | 3.4 | 0.013 | 0.24 | 2151 | 39.5 | 0.430 | 5.66 | 646 | 7.7 | 0.129 | 0.72 |
| CONTOUR MEAN | 582 | | 0.155 | | 667 | | 0.133 | | 421 | | 0.084 | |
| NMPW | 1792 | 73.8 | 0.358 | 14.39 | 51 | 15.4 | 0.010 | 6.99 | 1677 | 53.0 | 0.335 | 28.51 |
| NMPP | 214 | 43.6 | 0.043 | 4.98 | 756 | 32.9 | 0.151 | 15.57 | 1680 | 48.9 | 0.336 | 7.31 |
| 40 FITZ | 10 | 0.7 | 0.002 | 0.06 | 534 | 11.3 | 0.107 | 2.02 | 461 | 11.4 | 0.092 | 1.84 |
| NMPE | 125 | 4.9 | 0.025 | 0.42 | 2514 | 28.7 | 0.503 | 3.38 | 2311 | 17.1 | 0.462 | 2.15 |
| CONTOUR MEAN | 535 | | 0.107 | | 964 | | 0.193 | | 1532 | | 0.306 | |
| NMPW | 9294 | 41.2 | 1.859 | 4.85 | 10903 | 55.5 | 2.181 | 12.22 | 512 | 6.1 | 0.102 | 0.65 |
| NMPP | 1392 | 62.5 | 0.278 | 15.14 | 781 | 46.4 | 0.156 | 8.18 | 3375 | 56.1 | 0.675 | 13.55 |
| 60 FITZ | 46 | 1.5 | 0.009 | 0.09 | 3802 | 33.9 | 0.760 | 4.37 | 3298 | 33.6 | 0.660 | 6.08 |
| NMPE | 506 | 6.9 | 0.101 | 0.60 | 2797 | 24.8 | 0.559 | 2.89 | 1527 | 9.1 | 0.305 | 0.83 |
| CONTOUR MEAN | 2810 | | 0.562 | | 4571 | | 0.914 | | 2178 | | 0.436 | |

^aNumber organisms/m² ; exact date of benthic collection indicated on computer print-outs

^bGrams/m²; wet weight

ABUNDANCE^a AND BIOMASS^b OF OSTRACODA (ARTHROPODA: CRUSTACEA) IN BENTHIC COLLECTIONS (Continued)

NINE MILE JOINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | OCT | | | | DEC | | | | GRAND MEAN | | | |
|---|-----------|---------|---------|---------|----------------|------------------|--------------------|---------|------------|------|---------|-------|
| | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | | | | |
| NMPW | 0 | - | - | - | NS | - | NS | - | 273 | 4.4 | 0.055 | 0.26 |
| NMPP | 3 | <0.1 | 0.001 | 0.01 | NS | - | NS | - | 208 | 2.7 | 0.042 | 0.71 |
| 10 FITZ | 5 | <0.1 | 0.001 | 0.01 | NS | - | NS | - | 166 | 2.0 | 0.033 | 0.34 |
| NMPE | 3 | 0.7 | 0.001 | 0.31 | NS | - | NS | - | 99 | 2.6 | 0.020 | 0.26 |
| CONTOUR MEAN | 3 | | 0.001 | | - | | - | | | | | |
| NMPW | 8 | 0.5 | 0.002 | 0.06 | NS | - | NS | - | 258 | 6.9 | 0.052 | 1.36 |
| NMPP | 3 | 0.6 | 0.001 | 0.22 | NS | - | NS | - | 559 | 13.1 | 0.112 | 1.14 |
| 20 FITZ | 5 | 0.2 | 0.001 | 0.02 | NS | - | NS | - | 96 | 2.7 | 0.019 | 0.43 |
| NMPE | 15 | 0.1 | 0.003 | 0.01 | 5 ^c | 2.0 ^c | 0.001 ^c | NA | 254 | 3.1 | 0.051 | 0.36 |
| CONTOUR MEAN | 8 | | 0.002 | | - | | - | | | | | |
| NMPW | 0 | - | - | - | NS | - | NS | - | 518 | 23.7 | 0.104 | 5.91 |
| NMPP | 8 | 0.4 | 0.002 | <0.01 | NS | - | NS | - | 414 | 13.2 | 0.083 | 0.47 |
| 30 FITZ | 3 | 0.5 | 0.001 | 0.11 | NS | - | NS | - | 26 | 3.3 | 0.005 | 0.43 |
| NMPE | 199 | 2.7 | 0.040 | 0.21 | 0 | - | - | - | 612 | NA | 0.122 | NA |
| CONTOUR MEAN | 52 | | 0.014 | | - | | - | | | | | |
| NMPW | 0 | - | - | - | NS | - | NS | - | 880 | 57.0 | 0.176 | 17.87 |
| NMPP | 59 | 1.6 | 0.012 | 0.19 | NS | - | NS | - | 677 | 27.1 | 0.136 | 4.31 |
| 40 FITZ | 5 | 0.3 | 0.001 | 0.03 | NS | - | NS | - | 253 | 8.4 | 0.051 | 1.24 |
| NMPE | 168 | 2.3 | 0.034 | 0.19 | NS | - | NS | - | 1280 | 16.0 | 0.256 | 1.71 |
| CONTOUR MEAN | 58 | | 0.016 | | - | | - | | | | | |
| NMPW | 107 | 10.4 | 0.021 | 1.10 | NS | - | NS | - | 5204 | 40.3 | 1.041 | 5.65 |
| NMPP | 255 | 13.9 | 0.051 | 2.27 | NS | - | NS | - | 1451 | 49.3 | 0.290 | 10.55 |
| 60 FITZ | 140 | 2.8 | 0.028 | 0.29 | NS | - | NS | - | 1822 | 25.0 | 0.364 | 3.05 |
| NMPE | 422 | 3.3 | 0.084 | 0.38 | NS | - | NS | - | 1313 | 10.9 | 0.262 | 1.10 |
| CONTOUR MEAN | 231 | | 0.046 | | - | | - | | | | | |

^aNo. organisms/m²; exact date of benthic collection indicated on computer print-outs

^bGrams/m²; wet weight

^cOriginal sample only

NA = Not available

NS = No sample

- = Not applicable

ABUNDANCE^a AND BIOMASS^b OF TRICHOPTERA (ARTHROPODA: INSECTA) IN BENTHIC COLLECTIONS

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | | APR | | | | JUN | | | | AUG | | | |
|---|--------------|-----------|---------|---------|---------|-----------|---------|---------|---------|-----------|---------|---------|---------|
| | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT |
| 10 | NMPW | 59 | 1.8 | 0.027 | 0.21 | 79 | 1.6 | 0.242 | 2.52 | 3 | <0.1 | 0.017 | 0.03 |
| | NMPP | 5 | 0.2 | 0.002 | 0.14 | 23 | 0.4 | 0.028 | 1.43 | 0 | - | - | - |
| | FITZ | 0 | - | - | - | 0 | - | - | - | 5 | <0.1 | 0.020 | 0.09 |
| | NMPE | 0 | - | - | - | 38 | 0.8 | 0.192 | 1.81 | 87 | 1.5 | 0.034 | 0.84 |
| | CONTOUR MEAN | 16 | | 0.014 | | 35 | | 0.154 | | 24 | | 0.024 | |
| 20 | NMPW | 23 | 0.4 | 0.017 | 0.84 | 56 | 1.0 | 0.067 | 0.75 | 0 | - | - | - |
| | NMPP | 15 | 0.3 | 0.014 | 0.04 | 3 | 0.1 | <0.001 | <0.01 | 0 | - | - | - |
| | FITZ | 0 | - | - | - | 5 | 0.3 | 0.054 | 10.84 | 0 | - | - | - |
| | NMPE | 5 | 0.1 | 0.006 | 0.06 | 61 | 1.7 | 0.164 | 5.48 | 33 | 0.5 | 0.005 | 0.04 |
| | CONTOUR MEAN | 11 | | 0.012 | | 31 | | <0.072 | | 8 | | - | |
| 30 | NMPW | 0 | - | - | - | 5 | 0.3 | 0.002 | 0.17 | 0 | - | - | - |
| | NMPP | 0 | - | - | - | 31 | 0.6 | 0.078 | 0.70 | 5 | 0.1 | 0.014 | 0.29 |
| | FITZ | 0 | - | - | - | 46 | 6.1 | 0.138 | 11.58 | 0 | - | - | - |
| | NMPE | 3 | 0.2 | 0.002 | 0.04 | 0 | - | - | - | 3 | <0.1 | 0.025 | 0.14 |
| | CONTOUR MEAN | 1 | | - | | 20 | | 0.073 | | 2 | | 0.020 | |
| 40 | NMPW | 0 | - | - | - | 0 | - | - | - | 5 | 0.2 | 0.005 | 0.43 |
| | NMPP | 0 | - | - | - | 5 | 0.2 | 0.004 | 0.41 | 3 | 0.1 | 0.064 | 1.39 |
| | FITZ | 0 | - | - | - | 5 | 0.1 | 0.011 | 0.21 | 0 | - | - | - |
| | NMPE | 0 | - | - | - | 0 | - | - | - | 8 | 0.1 | 0.086 | 0.40 |
| | CONTOUR MEAN | 0 | | - | | 2 | | 0.008 | | 4 | | 0.052 | |
| 60 | NMPW | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| | NMPP | 0 | - | - | - | 3 | 0.2 | 0.028 | 1.47 | 0 | - | - | - |
| | FITZ | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| | NMPE | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| | CONTOUR MEAN | 0 | | - | | 1 | | - | | 0 | | - | |

^a Number organisms/m²; exact date of benthic collection indicated on computer print-outs

^b Grams/m²; wet weight

ABUNDANCE^a AND BIOMASS^b OF TRICHOPTERA (ARTHROPODA: INSECTA) IN BENTHIC COLLECTIONS (CONTINUED)

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | OCT | | | | DEC | | | | GRAND MEAN | | | |
|---|--------------|---------|---------|---------|-----------|----------------|---------|---------|------------|---------|---------|---------|
| | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT |
| 10 | NMPW | 0 | - | - | NS | - | NS | - | 35 | 0.6 | 0.072 | 0.34 |
| | NMPP | 0 | - | - | NS | - | NS | - | 7 | 0.1 | 0.008 | 0.14 |
| | FITZ | 0 | - | - | NS | - | NS | - | 1 | <0.1 | 0.005 | 0.05 |
| | NMPE | 0 | - | - | NS | - | NS | - | 31 | 0.8 | 0.057 | 0.74 |
| | CONTOUR MEAN | 0 | - | - | - | - | - | - | - | - | - | - |
| 20 | NMPW | 0 | - | - | NS | - | NS | - | 20 | 0.5 | 0.021 | 0.55 |
| | NMPP | 0 | - | - | NS | - | NS | - | 5 | 0.1 | 0.004 | 0.04 |
| | FITZ | 0 | - | - | NS | - | NS | - | 1 | <0.1 | 0.014 | 0.31 |
| | NMPE | 13 | 0.1 | 0.006 | 0.02 | 0 ^c | - | - | 28 | 0.3 | 0.045 | 0.32 |
| | CONTOUR MEAN | 3 | - | - | - | - | - | - | - | - | - | - |
| 30 | NMPW | 0 | - | - | NS | - | NS | - | 1 | 0.1 | 0.001 | 0.06 |
| | NMPP | 0 | - | - | NS | - | NS | - | 9 | 0.3 | 0.023 | 0.13 |
| | FITZ | 0 | - | - | NS | - | NS | - | 12 | 1.5 | 0.035 | 2.98 |
| | NMPE | 3 | <0.1 | 0.012 | 0.06 | 3 | 0.5 | 0.016 | 2 | NA | 0.011 | NA |
| | CONTOUR MEAN | 1 | - | - | - | - | - | - | - | - | - | - |
| 40 | NMPW | 0 | - | - | NS | - | NS | - | 1 | 0.1 | 0.001 | 0.10 |
| | NMPP | 5 | 0.1 | 0.012 | 0.19 | NS | - | NS | 3 | 0.1 | 0.020 | 0.63 |
| | FITZ | 0 | - | - | NS | - | NS | - | 1 | <0.1 | 0.003 | 0.07 |
| | NMPE | 13 | 0.2 | 0.017 | 0.10 | NS | - | NS | 5 | 0.1 | 0.026 | 0.17 |
| | CONTOUR MEAN | 4 | - | 0.013 | - | - | - | - | - | - | - | - |
| 60 | NMPW | 3 | 0.3 | 0.003 | 0.16 | NS | - | NS | 1 | <0.1 | 0.001 | 0.01 |
| | NMPP | 8 | 0.4 | 0.012 | 0.53 | NS | - | NS | 3 | 0.1 | 0.010 | 0.36 |
| | FITZ | 0 | - | - | - | NS | - | NS | 0 | - | - | - |
| | NMPE | 0 | - | - | - | NS | - | NS | 0 | - | - | - |
| | CONTOUR MEAN | 3 | - | 0.008 | - | - | - | - | - | - | - | - |

^aNo. organisms/m²; exact date of benthic collection indicated on computer print-outs

^bGrams/m²; wet weight

^cOriginal sample only

NA = Not available

NS = No sample

- = Not applicable

APPENDIX VIB-5c

ABUNDANCE AND BIOMASS OF SELECTED TAXA OF ASCHELMINTHES

ABUNDANCE^a AND BIOMASS^b OF NEMATODA (ASCHELMINTHES) IN BENTHIC COLLECTIONS

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | APR | | | | JUN | | | | AUG | | | |
|---|-----------|---------|---------|---------|-----------|---------|---------|---------|-----------|---------|---------|---------|
| | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT |
| 10 NMPW | 74 | 2.2 | 0.002 | 0.02 | 33 | 0.7 | 0.001 | 0.01 | 5 | <0.1 | <0.001 | <0.01 |
| NMPP | 18 | 0.8 | 0.002 | 0.14 | 15 | 0.3 | 0.002 | 0.10 | 3 | 0.1 | <0.001 | <0.01 |
| FITZ | 31 | 1.1 | 0.001 | 0.01 | 0 | - | - | - | 3 | <0.1 | <0.001 | <0.01 |
| NMPE | 305 | 7.3 | 0.004 | 0.03 | 87 | 1.9 | 0.007 | 0.07 | 5 | 0.1 | 0.001 | 0.02 |
| CONTOUR MEAN | 107 | | 0.002 | | 34 | | 0.003 | | 4 | | <0.001 | |
| 20 NMPW | 20 | 0.4 | 0.002 | 0.10 | 61 | 1.1 | 0.006 | 0.07 | 5 | 0.2 | 0.001 | 0.08 |
| NMPP | 10 | 0.2 | 0.001 | <0.01 | 3 | 0.1 | <0.001 | <0.01 | 0 | - | - | - |
| FITZ | 3 | 0.2 | <0.001 | <0.01 | 3 | 0.2 | <0.001 | <0.01 | 0 | - | - | - |
| NMPE | 33 | 0.6 | 0.003 | 0.03 | 104 | 2.9 | 0.010 | 0.33 | 48 | 0.8 | 0.005 | 0.04 |
| CONTOUR MEAN | 16 | | <0.002 | | 43 | | <0.004 | | 13 | | 0.003 | |
| 30 NMPW | 0 | - | - | - | 5 | 0.3 | <0.001 | <0.01 | 3 | 0.1 | <0.001 | <0.01 |
| NMPP | 15 | 1.3 | 0.002 | 0.13 | 0 | - | - | - | 10 | 0.2 | 0.001 | 0.02 |
| FITZ | 3 | 1.7 | <0.001 | <0.01 | 0 | - | - | - | 3 | 0.2 | <0.001 | <0.01 |
| NMPE | 102 | 5.4 | 0.010 | 0.19 | 171 | 3.1 | 0.017 | 0.22 | 349 | 4.2 | 0.035 | 0.19 |
| CONTOUR MEAN | 30 | | <0.004 | | 44 | | <0.009 | | 91 | | <0.010 | |
| 40 NMPW | 3 | 0.1 | <0.001 | <0.01 | 3 | 0.9 | <0.001 | <0.01 | 15 | 0.5 | 0.001 | 0.09 |
| NMPP | 41 | 8.4 | 0.001 | 0.12 | 3 | 0.1 | <0.001 | <0.01 | 15 | 0.4 | 0.002 | 0.04 |
| FITZ | 196 | 13.0 | 0.020 | 0.63 | 214 | 4.5 | 0.021 | 0.40 | 81 | 2.0 | 0.008 | 0.16 |
| NMPE | 61 | 2.4 | 0.006 | 0.10 | 440 | 5.0 | 0.044 | 0.30 | 443 | 3.3 | 0.044 | 0.21 |
| CONTOUR MEAN | 75 | | <0.007 | | 165 | | <0.017 | | 138 | | 0.014 | |
| 60 NMPW | 33 | 0.2 | 0.003 | 0.01 | 41 | 0.2 | 0.004 | 0.02 | 8 | 0.1 | 0.001 | 0.01 |
| NMPP | 10 | 0.5 | 0.001 | 0.05 | 15 | 0.9 | 0.001 | 0.05 | 99 | 1.7 | 0.010 | 0.20 |
| FITZ | 125 | 4.0 | 0.012 | 0.12 | 756 | 6.8 | 0.076 | 0.44 | 237 | 2.4 | 0.024 | 0.22 |
| NMPE | 519 | 7.1 | 0.052 | 0.31 | 349 | 3.1 | 0.035 | 0.18 | 122 | 0.7 | 0.012 | 0.03 |
| CONTOUR MEAN | 172 | | 0.017 | | 290 | | 0.029 | | 116 | | 0.012 | |

^aNo. organisms/m²; exact date of benthic collection indicated on computer print-outs

^bGrams/m²; wet weight

^cOriginal sample only

NS = No sample

NA = Not available

- = Not applicable

ABUNDANCE^a AND BIOMASS^b OF NEMATODA (ASCHELMINTHES) IN BENTHIC COLLECTIONS (Continued)

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | OCT | | | | DEC | | | | GRAND MEAN | | | |
|---|-----------|---------|---------|---------|----------------|---------|---------|---------|------------|-----|---------|-------|
| | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | | | | |
| 10 NMPW | 0 | - | - | - | NS | | NS | | 28 | 0.5 | 0.001 | <0.01 |
| NMPP | 0 | - | - | - | NS | | NS | | 9 | 0.1 | 0.001 | 0.02 |
| FITZ | 0 | - | - | - | NS | | NS | | 9 | 0.1 | <0.001 | <0.01 |
| NMPE | 0 | - | - | - | NS | | NS | | 99 | 2.6 | 0.003 | 0.04 |
| CONTOUR MEAN | 0 | | - | - | - | | - | | | | | |
| 20 NMPW | 0 | - | - | - | NS | | NS | | 22 | 0.6 | 0.002 | 0.05 |
| NMPP | 3 | 0.6 | <0.001 | <0.01 | NS | | NS | | 4 | 0.1 | <0.001 | <0.01 |
| FITZ | 0 | - | - | - | NS | | NS | | 2 | 0.1 | <0.001 | <0.01 |
| NMPE | 23 | 0.1 | 0.002 | 0.01 | 0 ^c | - | - | - | 52 | 0.6 | 0.005 | 0.04 |
| CONTOUR MEAN | 6 | | <0.002 | | - | | - | | | | | |
| 30 NMPW | 0 | - | - | - | NS | | NS | | 2 | 0.1 | <0.001 | <0.01 |
| NMPP | 53 | 2.9 | 0.005 | 0.01 | NS | | NS | | 20 | 0.6 | 0.002 | 0.01 |
| FITZ | 0 | - | - | - | NS | | NS | | 2 | 0.3 | <0.001 | <0.01 |
| NMPE | 173 | 2.4 | 0.017 | 0.09 | 15 | 2.6 | 0.002 | 0.11 | 162 | NA | 0.016 | NA |
| CONTOUR MEAN | 56 | | 0.011 | | - | | - | | | | | |
| 40 NMPW | 0 | - | - | - | NS | | NS | | 5 | 0.3 | <0.001 | <0.01 |
| NMPP | 25 | 0.7 | 0.001 | 0.02 | NS | | NS | | 21 | 0.8 | 0.001 | 0.03 |
| FITZ | 66 | 3.9 | 0.007 | 0.23 | NS | | NS | | 139 | 4.6 | 0.014 | 0.34 |
| NMPE | 74 | 1.0 | 0.007 | 0.04 | NS | | NS | | 255 | 3.2 | 0.025 | 0.17 |
| CONTOUR MEAN | 41 | | 0.005 | | - | | - | | | | | |
| 60 NMPW | 0 | - | - | - | NS | | NS | | 21 | 0.2 | 0.002 | 0.01 |
| NMPP | 31 | 1.7 | 0.002 | 0.09 | NS | | NS | | 39 | 1.3 | 0.004 | 0.15 |
| FITZ | 104 | 2.1 | 0.010 | 0.10 | NS | | NS | | 306 | 4.2 | 0.031 | 0.26 |
| NMPE | 99 | 0.8 | 0.010 | 0.04 | NS | | NS | | 272 | 2.3 | 0.027 | 0.11 |
| CONTOUR MEAN | 58 | | 0.007 | | - | | - | | | | | |

^aNo. organisms/m²; exact date of benthic collection indicated on computer print-outs

^bGrams/m²; wet weight

^cOriginal sample only

NA = Not available

NS = No sample

- = Not applicable

APPENDIX VIB-5d

ABUNDANCE AND BIOMASS OF BRYOZOA

ABUNDANCE^a AND BIOMASS^b OF BRYOZOA IN BENTHIC COLLECTIONS

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | APR | | | | JUN | | | | AUG | | | |
|---|-----------|---------|---------|---------|-----------|---------|---------|---------|-----------|---------|---------|---------|
| | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT |
| NMPW | 66 | 2.0 | 0.002 | 0.02 | 509 | 10.2 | 0.015 | 0.16 | 15 | 0.1 | 0.001 | <0.01 |
| NMPP | 89 | 3.7 | 0.003 | 0.20 | 46 | 0.8 | 0.001 | 0.05 | 0 | - | - | - |
| 10 FITZ | 23 | 0.8 | 0.001 | 0.01 | 15 | 1.4 | 0.001 | 0.08 | 3 | <0.1 | <0.001 | <0.01 |
| NMPE | 0 | - | - | - | 33 | 0.7 | 0.001 | 0.01 | 0 | - | - | - |
| CONTOUR MEAN | 44 | | 0.002 | | 151 | | 0.005 | | 4 | | <0.001 | |
| NMPW | 33 | 0.6 | 0.001 | 0.05 | 38 | 0.7 | 0.001 | 0.01 | 387 | 16.2 | 0.014 | 1.15 |
| NMPP | 104 | 2.1 | 0.003 | 0.01 | 143 | 3.4 | 0.003 | 0.31 | 224 | 3.0 | 0.006 | 0.17 |
| 20 FITZ | 0 | - | - | - | 76 | 3.8 | 0.002 | 0.40 | 0 | - | - | - |
| NMPE | 0 | - | - | - | 356 | 9.8 | 0.011 | 0.37 | 10 | 0.2 | <0.001 | <0.01 |
| CONTOUR MEAN | 34 | | 0.002 | | 153 | | 0.004 | | 155 | | <0.007 | |
| NMPW | 135 | 3.7 | 0.004 | 0.31 | 417 | 22.4 | 0.012 | 0.99 | 41 | 1.9 | 0.001 | 0.03 |
| NMPP | 3 | 0.3 | <0.001 | <0.01 | 450 | 9.0 | 0.014 | 0.13 | 46 | 1.0 | 0.001 | 0.02 |
| 30 FITZ | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| NMPE | 0 | - | - | - | 0 | - | - | - | 5 | - | <0.001 | <0.01 |
| CONTOUR MEAN | 34 | | <0.002 | | 217 | | 0.013 | | 23 | | <0.001 | |
| NMPW | 3 | 0.1 | <0.001 | <0.01 | 51 | 15.4 | 0.002 | 1.40 | 41 | 1.3 | 0.001 | 0.09 |
| NMPP | 20 | 4.1 | 0.001 | 0.12 | 33 | 1.4 | 0.001 | 0.10 | 0 | - | - | - |
| 40 FITZ | 0 | - | - | - | 397 | 8.4 | 0.012 | 0.23 | 0 | - | - | - |
| NMPE | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| CONTOUR MEAN | 6 | | <0.001 | | 120 | | 0.005 | | 10 | | - | |
| NMPW | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| NMPP | 0 | - | - | - | 15 | 0.9 | 0.001 | 0.05 | 25 | 0.4 | 0.001 | 0.02 |
| 60 FITZ | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| NMPE | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| CONTOUR MEAN | 0 | | - | | 4 | | - | | 6 | | - | |

^a Number organisms/m²; exact date of benthic collection
indicated on computer print-outs

^b Grams/m²; wet weight

ABUNDANCE^a AND BIOMASS^b OF POLYPODOZOA IN BENTHIC COLLECTIONS (Continued)

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | OCT | | | | DEC | | | | GRAND MEAN | | | |
|---|-----------|---------|---------|---------|----------------|---------|---------|---------|------------|-----|---------|-------|
| | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | | | | |
| NMPW | 0 | - | - | - | NS | - | NS | - | 148 | 2.4 | 0.005 | 0.02 |
| NMPP | 5 | <0.1 | <0.001 | <0.01 | NS | - | NS | - | 35 | 0.5 | 0.001 | 0.02 |
| 10 FITZ | 3 | <0.1 | 0.001 | 0.01 | NS | - | NS | - | 11 | 0.1 | 0.001 | 0.01 |
| NMPE | 0 | - | - | - | NS | - | NS | - | 8 | 0.2 | <0.001 | <0.01 |
| CONTOUR MEAN | 2 | | <0.001 | | - | | - | | | | | |
| NMPW | 94 | 6.2 | 0.003 | 0.10 | NS | - | NS | - | 138 | 3.7 | 0.005 | 0.13 |
| NMPP | 0 | - | - | - | NS | - | NS | - | 118 | 2.8 | 0.003 | 0.03 |
| 20 FITZ | 41 | 1.4 | 0.001 | 0.02 | NS | - | NS | - | 29 | 0.8 | 0.001 | 0.02 |
| NMPE | 0 | - | - | - | 0 ^c | - | - | - | 92 | 1.1 | 0.003 | 0.02 |
| CONTOUR MEAN | 34 | | 0.002 | | - | | - | | | | | |
| NMPW | 150 | 13.9 | 0.005 | 0.33 | NS | - | NS | - | 186 | 8.5 | 0.006 | 0.34 |
| NMPP | 102 | 5.7 | 0.003 | 0.01 | NS | - | NS | - | 150 | 4.8 | 0.005 | 0.03 |
| 30 FITZ | 0 | - | - | - | NS | - | NS | - | 0 | - | - | - |
| NMPE | 0 | - | - | - | 0 | - | - | - | 1 | NA | <0.001 | NA |
| CONTOUR MEAN | 63 | | 0.004 | | - | | - | | | | | |
| NMPW | 0 | - | - | - | NS | - | NS | - | 24 | 1.6 | 0.001 | 0.10 |
| NMPP | 140 | 3.7 | 0.004 | 0.06 | NS | - | NS | - | 48 | 1.9 | 0.002 | 0.06 |
| 40 FITZ | 0 | - | - | - | NS | - | NS | - | 99 | 3.3 | 0.003 | 0.07 |
| NMPE | 0 | - | - | - | NS | - | NS | - | 0 | - | - | - |
| CONTOUR MEAN | 35 | | - | | - | | - | | | | | |
| NMPW | 0 | - | - | - | NS | - | NS | - | 0 | - | - | - |
| NMPP | 71 | 3.9 | 0.002 | 0.09 | NS | - | NS | - | 28 | 1.0 | 0.001 | 0.04 |
| 60 FITZ | 0 | - | - | - | NS | - | NS | - | 0 | - | - | - |
| NMPE | 0 | - | - | - | NS | - | NS | - | 0 | - | - | - |
| CONTOUR MEAN | 18 | | - | | - | | - | | | | | |

^aNo. organisms/m²; exact date of benthic collection indicated on computer print-outs

^bGrams/m²; wet weight

^cOriginal sample only

NA = Not available

NS = No sample

- = Not applicable

APPENDIX VIB-5e

ABUNDANCE AND BIOMASS OF SELECTED TAXA OF COELENTERATA

ABUNDANCE^a AND BIOMASS^b OF HYDROZOA (COELENTERATA) IN BENTHIC COLLECTIONS

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | APR | | | | JUN | | | | AUG | | | |
|---|-----------|---------|---------|---------|-----------|---------|---------|---------|-----------|---------|---------|---------|
| | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT |
| NMPW | 199 | 5.9 | 0.006 | 0.05 | 102 | 2.0 | 0.003 | 0.03 | 8 | 0.1 | <0.001 | <0.01 |
| NMPP | 97 | 4.1 | 0.003 | 0.20 | 112 | 1.9 | 0.003 | 0.15 | 341 | 6.7 | 0.079 | 2.91 |
| 10 FITZ | 0 | - | - | - | 10 | 0.9 | <0.001 | <0.01 | 450 | 2.1 | 0.006 | 0.03 |
| NMPE | 3 | 0.1 | <0.001 | <0.01 | 0 | - | - | - | 13 | 0.2 | 0.001 | 0.02 |
| CONTOUR MEAN | 75 | | <0.003 | | 56 | | <0.002 | | 203 | | <0.022 | |
| NMPW | 76 | 1.4 | 0.002 | 0.10 | 3 | 0.1 | <0.001 | <0.01 | 10 | 0.4 | <0.001 | <0.01 |
| NMPP | 28 | 0.6 | 0.001 | <0.01 | 148 | 3.5 | 0.004 | 0.41 | 69 | 0.9 | 0.002 | 0.06 |
| 20 FITZ | 0 | - | - | - | 0 | - | - | - | 36 | 0.5 | 0.001 | 0.03 |
| NMPE | 0 | - | - | - | 13 | 0.4 | <0.001 | <0.01 | 0 | - | - | - |
| CONTOUR MEAN | 26 | | 0.002 | | 41 | | <0.002 | | 29 | | <0.001 | |
| NMPW | 46 | 1.3 | 0.002 | 0.15 | 13 | 0.7 | <0.001 | <0.01 | 160 | 7.4 | 0.005 | 0.17 |
| NMPP | 15 | 1.3 | 0.001 | 0.07 | 10 | 0.2 | <0.001 | <0.01 | 0 | - | - | - |
| 30 FITZ | 0 | - | - | - | 25 | 3.3 | 0.001 | 0.08 | 0 | - | - | - |
| NMPE | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| CONTOUR MEAN | 15 | | 0.002 | | 12 | | <0.001 | | 40 | | - | |
| NMPW | 18 | 0.7 | 0.001 | 0.04 | 3 | 0.9 | <0.001 | <0.01 | 112 | 3.5 | 0.004 | 0.34 |
| NMPP | 5 | 1.0 | <0.001 | <0.01 | 0 | - | - | - | 0 | - | - | - |
| 40 FITZ | 15 | 1.0 | 0.001 | 0.03 | 8 | 0.2 | <0.001 | <0.01 | 0 | - | - | - |
| NMPE | 0 | - | - | - | 0 | - | - | - | 3 | <0.1 | <0.001 | <0.01 |
| CONTOUR MEAN | 10 | | <0.001 | | 3 | | <0.001 | | 29 | | <0.003 | |
| NMPW | 5 | <0.1 | <0.001 | <0.01 | 0 | - | - | - | 0 | - | - | - |
| NMPP | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| 60 FITZ | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| NMPE | 0 | - | - | - | 0 | - | - | - | 143 | 0.9 | 0.004 | 0.01 |
| CONTOUR MEAN | 1 | | - | | 0 | | - | | 36 | | - | |

^a Number organisms/m² ; exact date of benthic collection indicated on computer print-outs

^b Grams/m²; wet weight

ABUNDANCE^a AND BIOMASS^b OF HYDROZOA (COELENTERATA) IN BENTHIC COLLECTIONS (Continued)

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | OCT | | | | DEC | | | | GRAND MEAN | | | |
|---|-----------|---------|---------|---------|----------------|---------|---------|---------|------------|------|---------|-------|
| | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | | | | |
| NMPW | 0 | - | - | - | NS | - | NS | - | 77 | 1.2 | 0.002 | 0.01 |
| NMPP | 2196 | 12.3 | 0.066 | 0.38 | NS | - | NS | - | 687 | 8.8 | 0.038 | 0.64 |
| 10 FITZ | 10 | 0.1 | 0.001 | 0.01 | NS | - | NS | - | 118 | 1.4 | 0.002 | 0.02 |
| NMPE | 0 | - | - | - | NS | - | NS | - | 4 | 0.1 | <0.001 | <0.01 |
| CONTOUR MEAN | 552 | | 0.034 | | | | | | | | | |
| NMPW | 15 | 1.0 | 0.001 | 0.03 | NS | - | NS | - | 26 | 0.7 | 0.001 | 0.03 |
| NMPP | 18 | 3.8 | 0.001 | 0.22 | NS | - | NS | - | 66 | 1.5 | 0.002 | 0.02 |
| 20 FITZ | 865 | 29.3 | 0.026 | 0.61 | NS | - | NS | - | 225 | 6.4 | 0.007 | 0.16 |
| NMPE | 0 | - | - | - | 0 ^c | - | - | - | 3 | <0.1 | <0.001 | <0.01 |
| CONTOUR MEAN | 224 | | 0.009 | | - | | - | | | | | |
| NMPW | 0 | - | - | - | NS | - | NS | - | 55 | 2.5 | 0.002 | 0.11 |
| NMPP | 18 | 1.0 | 0.001 | <0.01 | NS | - | NS | - | 11 | 0.4 | 0.001 | 0.01 |
| 30 FITZ | 20 | 3.5 | 0.001 | 0.11 | NS | - | NS | - | 11 | 1.4 | 0.001 | 0.09 |
| NMPE | 38 | 0.5 | 0.001 | 0.01 | 53 | 9.2 | 0.002 | 0.11 | 18 | NA | 0.001 | NA |
| CONTOUR MEAN | 19 | | 0.001 | | - | | - | | | | | |
| NMPW | 0 | - | - | - | NS | - | NS | - | 33 | 2.1 | 0.001 | 0.10 |
| NMPP | 0 | - | - | - | NS | - | NS | - | 1 | <0.1 | <0.001 | <0.01 |
| 40 FITZ | 171 | 10.2 | 0.005 | 0.17 | NS | - | NS | - | 49 | 1.6 | 0.002 | 0.05 |
| NMPE | 270 | 3.8 | 0.008 | 0.05 | NS | - | NS | - | 68 | 0.9 | 0.002 | 0.01 |
| CONTOUR MEAN | 110 | | 0.007 | | - | | - | | | | | |
| NMPW | 8 | 0.8 | <0.001 | <0.01 | NS | - | NS | - | 3 | <0.1 | <0.001 | <0.01 |
| NMPP | 3 | 0.2 | 0.001 | 0.04 | NS | - | NS | - | 1 | <0.1 | <0.001 | <0.01 |
| 60 FITZ | 211 | 4.2 | 0.006 | 0.06 | NS | - | NS | - | 53 | 0.7 | 0.002 | 0.02 |
| NMPE | 0 | - | - | - | NS | - | NS | - | 36 | 0.3 | 0.001 | <0.01 |
| CONTOUR MEAN | 56 | | <0.003 | | - | | - | | | | | |

^aNo. organisms/m²; exact date of benthic collection indicated on computer print-outs
^bms/m²; wet weight
^coriginal sample only

NA = Not available
 NS = No sample
 - = Not applicable

APPENDIX VIB-5f

ABUNDANCE AND BIOMASS OF SELECTED TAXA OF MOLLUSCA

ABUNDANCE^a AND BIOMASS^b OF BIVALVIA (MOLLUSCA) IN BENTHIC COLLECTIONS

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | APR | | | | JUN | | | | AUG | | | |
|---|-----------|---------|---------|---------|-----------|---------|---------|---------|-----------|---------|---------|---------|
| | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT |
| NMPW | 8 | 0.2 | 0.360 | 2.87 | 79 | 1.6 | 0.244 | 2.55 | 48 | 0.3 | 0.021 | 0.03 |
| NMPP | 8 | 0.3 | 0.019 | 1.29 | 5 | 0.1 | 0.036 | 1.84 | 20 | 0.4 | 0.030 | 1.11 |
| 10 FITZ | 0 | - | - | - | 10 | 0.9 | 0.006 | 0.49 | 43 | 0.2 | 0.028 | 0.13 |
| NMPE | 13 | 0.3 | 0.030 | 0.19 | 33 | 0.7 | 3.246 | 30.59 | 5 | 0.1 | 0.004 | 0.10 |
| CONTOUR MEAN | 7 | | 0.136 | | 32 | | 0.883 | | 29 | | 0.021 | |
| NMPW | 0 | - | - | - | 0 | - | - | - | 10 | 0.4 | 0.018 | 1.48 |
| NMPP | 8 | 0.2 | 0.069 | 0.20 | 0 | - | - | - | 5 | 0.1 | 0.002 | 0.06 |
| 20 FITZ | 13 | 0.7 | 0.019 | 0.20 | 0 | - | - | - | 10 | 0.1 | 0.038 | 1.04 |
| NMPE | 148 | 2.6 | 0.210 | 2.04 | 38 | 1.1 | 0.088 | 2.94 | 392 | 6.3 | 0.247 | 2.14 |
| CONTOUR MEAN | 42 | | 0.099 | | 9 | | - | | 104 | | 0.075 | |
| NMPW | 3 | 0.1 | <0.001 | <0.01 | 3 | 0.2 | <0.001 | <0.01 | 71 | 3.3 | 0.073 | 2.43 |
| NMPP | 3 | 0.3 | 0.008 | 0.54 | 0 | - | - | - | 150 | 3.3 | 0.079 | 1.61 |
| 30 FITZ | 25 | 14.5 | 0.014 | 1.61 | 0 | - | - | - | 46 | 2.8 | 0.025 | 1.47 |
| NMPE | 606 | 32.2 | 1.005 | 18.73 | 1099 | 20.2 | 1.989 | 26.20 | 2830 | 33.9 | 3.656 | 20.32 |
| CONTOUR MEAN | 159 | | <0.257 | | 275 | | <0.995 | | 774 | | 0.958 | |
| NMPW | 3 | 0.1 | 0.006 | 0.24 | 0 | - | - | - | 8 | 0.3 | 0.009 | 0.77 |
| NMPP | 0 | - | - | - | 3 | 0.1 | 0.004 | 0.41 | 135 | 3.9 | 0.111 | 2.41 |
| 40 FITZ | 97 | 6.5 | 0.112 | 3.54 | 69 | 1.5 | 0.127 | 2.39 | 774 | 19.1 | 0.624 | 12.48 |
| NMPE | 865 | 34.0 | 1.313 | 22.13 | 1308 | 15.0 | 2.606 | 17.51 | 3197 | 23.7 | 3.804 | 17.74 |
| CONTOUR MEAN | 241 | | 0.477 | | 345 | | 0.912 | | 1028 | | 1.137 | |
| NMPW | 715 | 3.2 | 1.167 | 3.04 | 517 | 2.6 | 0.807 | 4.52 | 2087 | 25.0 | 1.154 | 7.39 |
| NMPP | 15 | 0.7 | 0.011 | 0.60 | 0 | - | - | - | 31 | 0.5 | 0.018 | 0.36 |
| 60 FITZ | 366 | 11.8 | 0.575 | 5.86 | 534 | 4.8 | 1.539 | 8.85 | 1644 | 16.8 | 1.568 | 14.44 |
| NMPE | 1827 | 24.9 | 1.564 | 9.32 | 1575 | 14.0 | 3.102 | 16.03 | 4067 | 24.3 | 2.966 | 8.03 |
| CONTOUR MEAN | 731 | | 0.829 | | 656 | | 1.816 | | 1957 | | 1.426 | |

^aNumber organisms/m²; exact date of benthic collection
located on computer print-outs

^bGrams/m²; wet weight

ABUNDANCE^a AND BIOMASS^b OF BIVALVA (MOLLUSCA) IN BENTHIC COLLECTIONS (CONTINUED)

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | | OCT | | | | DEC | | | | GRAND MEAN | | | |
|---|--------------|-----------|---------|---------|---------|------------------|-------------------|--------------------|---------|------------|------|---------|-------|
| | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | | | | |
| 10 | NMPW | 10 | 1.7 | 0.026 | 3.53 | NS | - | NS | - | 36 | 0.6 | 0.163 | 0.78 |
| | NMPP | 15 | 0.1 | 0.134 | 0.77 | NS | - | NS | - | 12 | 0.2 | 0.055 | 0.93 |
| | FITZ | 71 | 1.0 | 0.045 | 0.57 | NS | - | NS | - | 31 | 0.4 | 0.020 | 0.20 |
| | NMPE | 0 | - | - | - | NS | - | NS | - | 13 | 0.4 | 0.820 | 10.71 |
| | CONTOUR MEAN | 24 | | 0.068 | | - | | - | | | | | |
| 20 | NMPW | 15 | 1.0 | 0.130 | 4.17 | NS | - | NS | - | 6 | 0.2 | 0.037 | 0.97 |
| | NMPP | 18 | 3.8 | 0.052 | 11.50 | NS | - | NS | - | 8 | 0.2 | 0.031 | 0.32 |
| | FITZ | 8 | 0.3 | 0.017 | 0.40 | NS | - | NS | - | 8 | 0.2 | 0.019 | 0.43 |
| | NMPE | 316 | 1.8 | 9.086 | 28.59 | 127 ^c | 50.9 ^c | 0.050 ^c | NA | 224 | 2.7 | 2.408 | 17.01 |
| | CONTOUR MEAN | 89 | | 2.321 | | - | | - | | | | | |
| 30 | NMPW | 0 | - | - | - | NS | - | NS | - | 19 | 0.9 | 0.018 | 1.02 |
| | NMPP | 28 | 1.6 | 50.566 | 94.83 | NS | - | NS | - | 45 | 1.4 | 12.663 | 71.51 |
| | FITZ | 33 | 5.7 | 0.066 | 7.04 | NS | - | NS | - | 26 | 3.3 | 0.026 | 2.21 |
| | NMPE | 3085 | 42.4 | 6.237 | 33.16 | 229 | 39.8 | 0.642 | 33.99 | 1570 | NA | 2.706 | NA |
| | CONTOUR MEAN | 786 | | 18.956 | | - | | - | | | | | |
| 40 | NMPW | 0 | - | - | - | NS | - | NS | - | 3 | 0.2 | 0.004 | 0.41 |
| | NMPP | 94 | 2.5 | 0.286 | 4.61 | NS | - | NS | - | 58 | 2.3 | 0.100 | 3.17 |
| | FITZ | 336 | 20.0 | 0.410 | 13.55 | NS | - | NS | - | 319 | 10.7 | 0.318 | 7.71 |
| | NMPE | 2418 | 33.6 | 4.431 | 25.06 | NS | - | NS | - | 1947 | 24.3 | 3.039 | 20.28 |
| | CONTOUR MEAN | 712 | | 1.709 | | - | | - | | | | | |
| 60 | NMPW | 15 | 1.5 | 0.017 | 0.89 | NS | - | NS | - | 834 | 6.5 | 0.786 | 4.26 |
| | NMPP | 23 | 1.3 | 0.135 | 6.00 | NS | - | NS | - | 17 | 0.6 | 0.041 | 1.49 |
| | FITZ | 883 | 17.4 | 1.508 | 15.48 | NS | - | NS | - | 857 | 11.7 | 1.298 | 10.86 |
| | NMPE | 3451 | 26.6 | 2.925 | 13.14 | NS | - | NS | - | 2730 | 22.6 | 2.639 | 11.07 |
| | CONTOUR MEAN | 1093 | | 1.146 | | - | | - | | | | | |

^aNo. organisms/m²; exact date of benthic collection indicated on computer print-outs

^bGrams/m²; wet weight

^cOriginal sample only

NA = Not available

NS = No sample

- = Not applicable

ABUNDANCE^a AND BIOMASS^b OF GASTROPODA (MOLLUSCA) IN BENTHIC COLLECTIONS

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | | APR | | | | JUN | | | | AUG | | | |
|---|--------------|-----------|---------|---------|---------|-----------|---------|---------|---------|-----------|---------|---------|---------|
| | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT |
| 10 | NMPW | 122 | 3.6 | 7.972 | 63.46 | 942 | 18.9 | 7.320 | 76.36 | 2291 | 14.4 | 51.832 | 85.14 |
| | NMPP | 15 | 0.6 | 0.498 | 33.90 | 5 | 0.1 | 0.076 | 3.89 | 92 | 1.8 | 0.186 | 6.85 |
| | FITZ | 53 | 1.8 | 6.889 | 79.47 | 71 | 6.7 | 0.923 | 75.90 | 282 | 1.3 | 6.093 | 28.40 |
| | NMPE | 102 | 2.4 | 8.486 | 54.22 | 183 | 4.0 | 6.117 | 57.64 | 23 | 0.4 | 0.229 | 5.67 |
| | CONTOUR MEAN | 73 | | 5.961 | | 300 | | 3.609 | | 672 | | 14.585 | |
| 20 | NMPW | 56 | 1.1 | 0.953 | 46.85 | 130 | 2.3 | 1.617 | 18.21 | 333 | 14.0 | 0.666 | 54.63 |
| | NMPP | 92 | 1.8 | 4.674 | 13.61 | 0 | | - | | 61 | 0.8 | 0.073 | 2.13 |
| | FITZ | 25 | 1.3 | 1.160 | 12.39 | 8 | 0.4 | 0.046 | 9.24 | 51 | 0.7 | 1.228 | 33.58 |
| | NMPE | 501 | 8.9 | 2.497 | 24.23 | 489 | 13.5 | 1.970 | 65.89 | 2708 | 43.3 | 9.693 | 83.89 |
| | CONTOUR MEAN | 168 | | 2.321 | | 157 | | 1.211 | | 788 | | 2.915 | |
| 30 | NMPW | 89 | 2.4 | 0.588 | 45.37 | 53 | 2.8 | 0.991 | 81.90 | 316 | 14.7 | 2.288 | 76.01 |
| | NMPP | 10 | 0.9 | 0.138 | 9.30 | 41 | 0.8 | 0.718 | 6.46 | 206 | 4.5 | 0.615 | 12.56 |
| | FITZ | 0 | - | - | - | 28 | 3.7 | 0.615 | 51.59 | 53 | 3.2 | 0.158 | 9.32 |
| | NMPE | 501 | 26.6 | 3.661 | 68.21 | 636 | 11.7 | 3.814 | 50.23 | 1448 | 17.4 | 7.476 | 41.55 |
| | CONTOUR MEAN | 150 | | 1.462 | | 189 | | 1.534 | | 506 | | 2.634 | |
| 40 | NMPW | 41 | 1.7 | 1.446 | 58.12 | 5 | 1.5 | 0.055 | 38.46 | 20 | 0.6 | 0.124 | 10.55 |
| | NMPP | 15 | 3.1 | 0.695 | 80.53 | 183 | 8.0 | 0.517 | 53.30 | 547 | 15.9 | 2.806 | 61.01 |
| | FITZ | 66 | 4.4 | 1.063 | 33.60 | 64 | 1.4 | 1.002 | 18.88 | 438 | 10.8 | 1.157 | 23.15 |
| | NMPE | 695 | 27.3 | 2.705 | 45.58 | 1644 | 18.8 | 7.480 | 50.25 | 2204 | 16.3 | 7.505 | 34.99 |
| | CONTOUR MEAN | 204 | | 1.477 | | 474 | | 2.263 | | 802 | | 2.898 | |
| 60 | NMPW | 13 | 0.1 | 0.153 | 0.40 | 15 | 0.1 | 0.136 | 0.76 | 36 | 0.4 | 0.025 | 0.16 |
| | NMPP | 46 | 2.1 | 0.690 | 37.58 | 127 | 7.5 | 1.277 | 66.96 | 33 | 0.6 | 0.457 | 9.17 |
| | FITZ | 603 | 19.5 | 3.295 | 33.58 | 417 | 3.7 | 4.947 | 28.46 | 2036 | 20.7 | 4.151 | 38.23 |
| | NMPE | 1094 | 14.9 | 6.096 | 36.33 | 1364 | 12.1 | 10.661 | 55.08 | 6363 | 38.0 | 26.510 | 71.81 |
| | CONTOUR MEAN | 439 | | 2.558 | | 481 | | 4.255 | | 2117 | | 7.786 | |

^aNumber organisms/m²; exact date of benthic collection indicated on computer print-outs

^bGrams/m²; wet weight

ABUNDANCE^a AND BIOMASS^b OF GASTROPODA (MOLLUSCA) IN BENTHIC COLLECTIONS (Continued)

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | OCT | | | | DEC | | | | GRAND MEAN | | | |
|---|-----------|---------|---------|---------|-----------------|-------------------|--------------------|---------|------------|------|---------|-------|
| | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | | | | |
| 10 NMPW | 25 | 4.4 | 0.223 | 30.26 | NS | - | NS | - | 845 | 13.6 | 16.837 | 80.39 |
| 10 NMPP | 326 | 1.8 | 5.539 | 31.67 | NS | - | NS | - | 110 | 1.4 | 1.575 | 26.66 |
| 10 FITZ | 107 | 1.5 | 1.089 | 13.84 | NS | - | NS | - | 128 | 1.6 | 3.749 | 38.24 |
| 10 NMPE | 0 | - | - | - | NS | - | NS | - | 77 | 2.1 | 3.708 | 48.43 |
| CONTOUR MEAN | 114 | | 2.284 | | - | | - | | | | | |
| 20 NMPW | 392 | 25.7 | 2.632 | 84.44 | NS | - | NS | - | 228 | 6.1 | 1.467 | 38.47 |
| 20 NMPP | 28 | 5.9 | 0.249 | 55.09 | NS | - | NS | - | 45 | 1.1 | 1.249 | 12.73 |
| 20 FITZ | 288 | 9.8 | 2.819 | 66.13 | NS | - | NS | - | 93 | 2.7 | 1.313 | 29.53 |
| 20 NMPE | 1150 | 6.7 | 7.266 | 22.87 | 31 ^c | 12.4 ^c | 0.113 ^c | NA | 1212 | 14.8 | 5.357 | 37.83 |
| CONTOUR MEAN | 464 | | 3.241 | | - | | - | | | | | |
| 30 NMPW | 36 | 3.3 | 1.105 | 72.99 | NS | - | NS | - | 124 | 5.7 | 1.243 | 70.63 |
| 30 NMPP | 137 | 7.6 | 0.448 | 0.84 | NS | - | NS | - | 99 | 3.1 | 0.480 | 2.71 |
| 30 FITZ | 53 | 9.2 | 0.093 | 9.93 | NS | - | NS | - | 34 | 4.3 | 0.217 | 18.45 |
| 30 NMPE | 1384 | 19.0 | 8.114 | 43.14 | 115 | 20.0 | 0.772 | 40.87 | 817 | NA | 4.767 | NA |
| CONTOUR MEAN | 402 | | 2.440 | | - | | - | | | | | |
| 40 NMPW | 28 | 11.1 | 0.063 | 47.01 | NS | - | NS | - | 24 | 1.6 | 0.422 | 42.84 |
| 40 NMPP | 389 | 10.4 | 1.283 | 20.70 | NS | - | NS | - | 284 | 11.4 | 1.325 | 41.94 |
| 40 FITZ | 168 | 10.0 | 0.972 | 32.13 | NS | - | NS | - | 184 | 6.1 | 1.049 | 25.42 |
| 40 NMPE | 1899 | 26.4 | 9.603 | 54.32 | NS | - | NS | - | 1611 | 20.1 | 6.823 | 45.53 |
| CONTOUR MEAN | 621 | | 2.980 | | - | | - | | | | | |
| 60 NMPW | 76 | 7.4 | 1.163 | 60.92 | NS | - | NS | - | 35 | 0.3 | 0.369 | 2.00 |
| 60 NMPP | 107 | 5.8 | 0.510 | 22.66 | NS | - | NS | - | 78 | 2.7 | 0.734 | 26.71 |
| 60 FITZ | 346 | 6.8 | 1.441 | 14.80 | NS | - | NS | - | 851 | 11.7 | 3.459 | 28.94 |
| 60 NMPE | 2041 | 15.7 | 4.941 | 22.19 | NS | - | NS | - | 2716 | 22.5 | 12.052 | 50.57 |
| CONTOUR MEAN | 642 | | 2.014 | | - | | - | | | | | |

^aNo. organisms/m²; exact date of benthic collection indicated on computer print-outs
^bGrams/m²; wet weight
^cOriginal sample only

NA = Not available
 NS = No sample
 - = Not applicable

APPENDIX VIB-5g

ABUNDANCE AND BIOMASS OF SELECTED TAXA OF PLATYHELMINTHES

ABUNDANCE^a AND BIOMASS^b OF TURBELLARIA (PLATYHELMINTHES) IN BENTHIC COLLECTIONS

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | | APR | | | | JUN | | | | AUG | | | |
|---|--------------|-----------|---------|---------|---------|-----------|---------|---------|---------|-----------|---------|---------|---------|
| | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT |
| 10 | NMPW | 76 | 2.3 | 0.097 | 0.77 | 76 | 1.5 | 0.124 | 1.29 | 66 | 0.4 | 0.046 | 0.08 |
| | NMPP | 41 | 1.7 | 0.017 | 1.16 | 3 | 0.1 | 0.002 | 0.10 | 3 | 0.1 | 0.005 | 0.18 |
| | FITZ | 23 | 0.8 | 0.004 | 0.05 | 10 | 0.9 | 0.026 | 2.14 | 140 | 0.7 | 0.111 | 0.52 |
| | NMPE | 20 | 0.5 | 0.067 | 0.43 | 53 | 1.2 | 0.064 | 0.60 | 10 | 0.2 | 0.012 | 0.30 |
| | CONTOUR MEAN | 40 | | 0.046 | | 35 | | 0.054 | | 55 | | 0.044 | |
| 20 | NMPW | 23 | 0.4 | 0.023 | 1.13 | 15 | 0.3 | 0.011 | 0.12 | 25 | 1.1 | 0.046 | 3.77 |
| | NMPP | 89 | 1.8 | 0.087 | 0.25 | 0 | - | - | - | 51 | 0.7 | 0.040 | 1.16 |
| | FITZ | 15 | 0.8 | 0.031 | 0.33 | 8 | 0.4 | 0.005 | 1.00 | 28 | 0.4 | 0.096 | 2.63 |
| | NMPE | 25 | 0.4 | 0.052 | 0.50 | 8 | 0.2 | 0.017 | 0.57 | 28 | 0.5 | 0.037 | 0.32 |
| | CONTOUR MEAN | 38 | | 0.048 | | 8 | | 0.011 | | 33 | | 0.055 | |
| 30 | NMPW | 20 | 0.6 | 0.013 | 1.00 | 5 | 0.3 | 0.004 | 0.33 | 15 | 0.7 | 0.009 | 0.30 |
| | NMPP | 84 | 7.1 | 0.035 | 2.36 | 0 | - | - | - | 8 | 0.2 | 0.022 | 0.45 |
| | FITZ | 0 | - | - | - | 0 | - | - | - | 3 | 0.2 | 0.049 | 2.89 |
| | NMPE | 3 | 0.2 | 0.002 | 0.04 | 13 | 0.2 | 0.039 | 0.51 | 0 | - | - | - |
| | CONTOUR MEAN | 27 | | 0.017 | | 4 | | 0.022 | | 6 | | 0.027 | |
| 40 | NMPW | 117 | 4.8 | 0.251 | 10.09 | 0 | - | - | - | 23 | 0.7 | 0.018 | 1.53 |
| | NMPP | 5 | 1.0 | 0.008 | 0.93 | 8 | 0.4 | 0.051 | 5.26 | 5 | 0.2 | 0.036 | 0.78 |
| | FITZ | 0 | - | - | - | 3 | 0.1 | 0.059 | 1.11 | 5 | 0.1 | 0.008 | 0.16 |
| | NMPE | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| | CONTOUR MEAN | 30 | | 0.130 | | 3 | | 0.055 | | 8 | | 0.021 | |
| 60 | NMPW | 0 | - | - | - | 56 | 0.3 | 0.010 | 0.06 | 0 | - | - | - |
| | NMPP | 102 | 4.6 | 0.179 | 9.75 | 31 | 1.8 | 0.067 | 3.51 | 13 | 0.2 | 0.018 | 0.36 |
| | FITZ | 3 | 0.1 | 0.193 | 1.97 | 5 | <0.1 | 0.034 | 0.20 | 3 | <0.1 | 0.026 | 0.24 |
| | NMPE | 15 | 0.2 | 0.019 | 0.11 | 0 | - | - | - | 5 | <0.1 | 0.011 | 0.03 |
| | CONTOUR MEAN | 30 | | 0.130 | | 23 | | 0.037 | | 5 | | 0.018 | |

^a Number/m²; exact date of benthic collection indicated on computer print-outs

^b Grams/m²; wet weight

ABUNDANCE^a AND BIOMASS^b OF TURBELLARIA (PLATYHELMINTHES) IN BENTHIC COLLECTIONS (Continued)

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | | OCT | | | | DEC | | | | GRAND MEAN. | | | |
|---|--------------|-----------|---------|---------|---------|----------------|---------|---------|---------|-------------|-----|---------|------|
| | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | | | | |
| 10 | NMPW | 5 | 0.9 | 0.178 | 24.15 | NS | - | NS | - | 56 | 0.9 | 0.111 | 0.53 |
| | NMPP | 64 | 0.4 | 0.045 | 0.26 | NS | - | NS | - | 28 | 0.4 | 0.017 | 0.29 |
| | FITZ | 8 | 0.1 | 0.005 | 0.06 | NS | - | NS | - | 45 | 0.6 | 0.037 | 0.38 |
| | NMPE | 0 | - | - | - | NS | - | NS | - | 21 | 0.6 | 0.036 | 0.47 |
| | CONTOUR MEAN | 19 | | 0.076 | | - | | - | | | | | |
| 20 | NMPW | 92 | 6.0 | 0.145 | 4.65 | NS | - | NS | - | 39 | 1.1 | 0.056 | 1.47 |
| | NMPP | 23 | 4.9 | 0.028 | 6.19 | NS | - | NS | - | 41 | 1.0 | 0.039 | 0.40 |
| | FITZ | 3 | 0.1 | 0.020 | 0.47 | NS | - | NS | - | 14 | 0.4 | 0.038 | 0.85 |
| | NMPE | 84 | 0.5 | 0.072 | 0.23 | 0 ^c | - | - | - | 36 | 0.4 | 0.045 | 0.32 |
| | CONTOUR MEAN | 50 | | 0.066 | | - | | - | | | | | |
| 30 | NMPW | 15 | 1.4 | 0.043 | 2.84 | NS | - | NS | - | 14 | 0.6 | 0.017 | 0.97 |
| | NMPP | 234 | 13.0 | 0.392 | 0.74 | NS | - | NS | - | 82 | 2.6 | 0.112 | 0.63 |
| | FITZ | 0 | | - | - | NS | - | NS | - | 1 | 0.1 | 0.012 | 1.02 |
| | NMPE | 71 | 1.0 | 0.039 | 0.21 | 0 | - | - | - | 17 | NA | 0.016 | NA |
| | CONTOUR MEAN | 80 | | 0.158 | | - | | - | | | | | |
| 40 | NMPW | 0 | - | - | - | NS | - | NS | - | 35 | 2.3 | 0.067 | 6.80 |
| | NMPP | 125 | 3.3 | 0.224 | 3.61 | NS | - | NS | - | 36 | 1.4 | 0.080 | 2.53 |
| | FITZ | 3 | 0.2 | 0.002 | 0.07 | NS | - | NS | - | 3 | 0.1 | 0.017 | 0.41 |
| | NMPE | 33 | 0.5 | 0.037 | 0.21 | NS | - | NS | - | 8 | 0.1 | 0.009 | 0.06 |
| | CONTOUR MEAN | 40 | | 0.088 | | - | | - | | | | | |
| 60 | NMPW | 247 | 23.9 | 0.286 | 14.98 | NS | - | NS | - | 76 | 0.6 | 0.074 | 0.40 |
| | NMPP | 255 | 13.9 | 0.455 | 20.21 | NS | - | NS | - | 100 | 3.4 | 0.180 | 6.55 |
| | FITZ | 18 | 0.4 | 0.054 | 0.55 | NS | - | NS | - | 7 | 0.1 | 0.077 | 0.64 |
| | NMPE | 64 | 0.5 | 0.027 | 0.12 | NS | - | NS | - | 21 | 0.2 | 0.014 | 0.06 |
| | CONTOUR MEAN | 146 | | 0.206 | | - | | - | | | | | |

^aNo. organisms/m²; exact date of benthic collection indicated on computer print-outs
^bgrams/m²; wet weight
^coriginal sample only

NA = Not available
 NS = No sample
 - = Not applicable

APPENDIX VIB-5h

ABUNDANCE AND BIOMASS OF RHYNCHOCOELA

ABUNDANCE^a AND BIOMASS^b OF RHYNCHOCOELA IN BENTHIC COLLECTIONS

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | APR | | | | JUN | | | | AUG | | | |
|---|-----------|---------|---------|---------|-----------|---------|---------|---------|-----------|---------|---------|---------|
| | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT |
| NMPW | 10 | 0.3 | 0.003 | 0.02 | 8 | 0.2 | 0.002 | 0.02 | 0 | - | - | - |
| NMPP | 3 | 0.1 | 0.001 | 0.07 | 0 | - | - | - | 3 | 0.1 | <0.001 | <0.01 |
| 10 FITZ | 3 | 0.1 | 0.001 | 0.01 | 0 | - | - | - | 3 | <0.1 | 0.001 | <0.01 |
| NMPE | 23 | 0.6 | 0.007 | 0.04 | 0 | - | - | - | 0 | - | - | - |
| CONTOUR MEAN | 10 | - | 0.003 | - | 2 | - | - | - | 2 | - | <0.001 | - |
| NMPW | 8 | 0.2 | 0.002 | 0.10 | 0 | - | - | - | 0 | - | - | - |
| NMPP | 10 | 0.2 | 0.003 | 0.01 | 0 | - | - | - | 36 | 0.5 | 0.011 | 0.32 |
| 20 FITZ | 3 | 0.2 | 0.001 | 0.01 | 0 | - | - | - | 0 | - | - | - |
| NMPE | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| CONTOUR MEAN | 5 | - | 0.002 | - | 0 | - | - | - | 9 | - | - | - |
| NMPW | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| NMPP | 0 | - | - | - | 3 | 0.1 | 0.001 | 0.01 | 0 | - | - | - |
| 30 FITZ | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| NMPE | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| CONTOUR MEAN | 0 | - | - | - | 1 | - | - | - | 0 | - | - | - |
| NMPW | 3 | 0.1 | 0.001 | 0.04 | 0 | - | - | - | 0 | - | - | - |
| NMPP | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| 40 FITZ | 0 | - | - | - | 0 | - | - | - | 5 | 0.1 | 0.002 | 0.04 |
| NMPE | 0 | - | - | - | 0 | - | - | - | 3 | <0.1 | 0.001 | <0.01 |
| CONTOUR MEAN | 1 | - | - | - | 0 | - | - | - | 2 | - | 0.002 | - |
| NMPW | 0 | - | - | - | 3 | <0.1 | 0.001 | 0.01 | 0 | - | - | - |
| NMPP | 8 | 0.4 | 0.002 | 0.11 | 0 | - | - | - | 0 | - | - | - |
| 60 FITZ | 0 | - | - | - | 0 | - | - | - | 0 | - | - | - |
| NMPE | 3 | <0.1 | 0.001 | 0.01 | 3 | <0.1 | 0.001 | 0.01 | 0 | - | - | - |
| CONTOUR MEAN | 3 | - | 0.002 | - | 2 | - | 0.001 | - | 0 | - | - | - |

^a Number organisms/m² ; exact date of benthic collection indicated on computer print-outs

^b Grams/m² ; wet weight

ABUNDANCE^a AND BIOMASS^b OF RHYNCOCOELA IN BENTHIC COLLECTIONS (Continued)

NINE MILE CREEK VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | OCT | | | | DEC | | | | GRAND MEAN | | | |
|---|--------------|---------|---------|---------|-----------|----------------|---------|---------|------------|------|---------|-------|
| | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | | ABUNDANCE | | BIOMASS | |
| | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | MEAN | PERCENT | | | | |
| 10 | NMPW | 0 | - | - | NS | | NS | | 5 | 0.1 | 0.001 | <0.01 |
| | NMPP | 48 | 0.3 | 0.015 | 0.09 | NS | NS | | 14 | 0.2 | 0.004 | 0.07 |
| | FITZ | 56 | 0.8 | 0.017 | 0.22 | NS | NS | | 16 | 0.2 | 0.005 | 0.05 |
| | NMPE | 0 | - | - | - | NS | NS | | 6 | 0.2 | 0.002 | 0.03 |
| | CONTOUR MEAN | 26 | | 0.016 | - | - | - | - | | | | |
| 20 | NMPW | 43 | 2.8 | 0.013 | 0.42 | NS | NS | | 13 | 0.4 | 0.004 | 0.10 |
| | NMPP | 31 | 6.6 | 0.009 | 1.99 | NS | NS | | 19 | 0.4 | 0.006 | 0.06 |
| | FITZ | 0 | - | - | - | NS | NS | | 1 | <0.1 | <0.001 | <0.01 |
| | NMPE | 8 | 0.1 | 0.002 | 0.01 | 0 ^c | - | - | 2 | <0.1 | 0.001 | 0.01 |
| | CONTOUR MEAN | 20 | | 0.008 | - | - | - | - | | | | |
| 30 | NMPW | 0 | - | - | - | NS | NS | | 0 | | - | |
| | NMPP | 3 | 0.2 | 0.001 | <0.01 | NS | NS | | 2 | 0.1 | 0.001 | 0.01 |
| | FITZ | 0 | - | - | - | NS | NS | | 0 | | - | |
| | NMPE | 0 | - | - | - | 0 | - | - | 0 | - | - | |
| | CONTOUR MEAN | 1 | | - | - | - | - | - | | | | |
| 40 | NMPW | 0 | - | - | - | NS | NS | | 1 | 0.1 | <0.001 | <0.01 |
| | NMPP | 0 | - | - | - | NS | NS | | 0 | | - | |
| | FITZ | 0 | - | - | - | NS | NS | | 1 | <0.1 | 0.001 | 0.02 |
| | NMPE | 0 | - | - | - | NS | NS | | 1 | <0.1 | <0.001 | <0.01 |
| | CONTOUR MEAN | 0 | | - | - | - | - | - | | | | |
| 60 | NMPW | 0 | - | - | - | NS | NS | | 1 | <0.1 | <0.001 | <0.01 |
| | NMPP | 0 | - | - | - | NS | NS | | 2 | 0.1 | 0.001 | 0.04 |
| | FITZ | 0 | - | - | - | NS | NS | | 0 | | - | |
| | NMPE | 0 | - | - | - | NS | NS | | 2 | <0.1 | 0.001 | <0.01 |
| | CONTOUR MEAN | 0 | | - | - | - | - | - | | | | |

^a No. organisms/m²; exact date of benthic collection indicated on computer print-outs

^b Grams/m²; wet weight

^c Original sample only

NS = No sample

- = Not applicable

APPENDIX VIB-6a

ABUNDANCE OF SELECTED SPECIES OF ANNELIDA: OLIGOCHAETA

ABUNDANCE* OF NAIS BRETSCHERI (ANNELIDA : OLIGOCHAETA) IN BENTHIC COLLECTIONS

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | APR | | | JUN | | | AUG | | | OCT | | | DEC | | | ANNUAL MEAN |
|---|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|----------------|
| | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | |
| 10 NMPW | 0 | 0 | 0 | 20 | 41 | 31 | 0 | 0 | 0 | 20 | 0 | 10 | NS | NS | - | 10 |
| NMPP | 540 | 229 | 384 | 947 | 534 | 741 | 5 | 5 | 5 | 0 | 20 | 10 | NS | NS | - | 285 |
| FITZ | 10 | 0 | 5 | 20 | 97 | 59 | 0 | 0 | 0 | 10 | 10 | 10 | NS | NS | - | 19 |
| NMPE | 0 | 5 | 3 | 0 | 0 | 0 | 5 | 0 | 3 | 0 | 0 | 0 | NS | NS | - | 2 |
| CONTOUR MEAN | 138 | 58 | 98 | 247 | 168 | 207 | 2 | 1 | 2 | 8 | 8 | 8 | - | - | - | |
| 20 NMPW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 0 |
| NMPP | 0 | 0 | 0 | 20 | 25 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 6 |
| FITZ | 0 | 0 | 0 | 0 | 15 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 2 |
| NMPE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 3 | 0 | NS | - | 1 |
| CONTOUR MEAN | 0 | 0 | 0 | 5 | 10 | 8 | 0 | 0 | 0 | 0 | 1 | 1 | - | - | - | |
| 40 NMPW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 0 |
| NMPP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 0 |
| FITZ | 0 | 0 | 0 | 0 | 20 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 3 |
| NMPE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 0 |
| CONTOUR MEAN | 0 | 0 | 0 | 0 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | - | - | - | |
| 60 NMPW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 0 |
| NMPP | 0 | 0 | 0 | 0 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 1 |
| FITZ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 0 |
| NMPE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 0 |
| CONTOUR MEAN | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | - | - | - | |

*No organisms/m²; exact date of benthic collection indicated on computer print-outs; none collected at the 30 ft. stations Apr - Dec
 NS = No sample

- = Not applicable

APPENDIX VIB-6b

ABUNDANCE OF SELECTED SPECIES OF ANNELIDA: POLYCHAETA

ABUNDANCE* OF MANUYUNKIA SPECIOSA (ANNELIDA) IN BENTHIC COLLECTIONS

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | APR | | | JUN | | | AUG | | | OCT | | | DEC | | | ANNUAL MEAN |
|---|------|------|------|------|------|------|------|------|------|------|-----|------|-----|-----|------|----------------|
| | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | |
| 10 NMPW | 1344 | 112 | 728 | 489 | 1150 | 819 | 2240 | 738 | 1489 | 20 | 0 | 10 | NS | NS | - | 762 |
| NMPP | 1049 | 81 | 565 | 10 | 0 | 5 | 15 | 0 | 8 | 1741 | 20 | 881 | NS | NS | - | 365 |
| FITZ | 112 | 10 | 61 | 0 | 5 | 3 | 784 | 5660 | 3222 | 10 | 56 | 33 | NS | NS | - | 830 |
| NMPE | 5 | 163 | 84 | 1446 | 2443 | 1944 | 229 | 5 | 117 | 0 | 0 | 0 | NS | NS | - | 536 |
| CONTOUR MEAN | 628 | 92 | 360 | 486 | 900 | 693 | 817 | 1601 | 1209 | 443 | 19 | 231 | - | - | - | |
| 20 NMPW | 3706 | 4316 | 4011 | 4897 | 3787 | 4342 | 1303 | 453 | 878 | 484 | 285 | 384 | NS | NS | - | 2404 |
| NMPP | 1649 | 2301 | 1975 | 1588 | 87 | 837 | 2647 | 937 | 1792 | 168 | 158 | 163 | NS | NS | - | 1192 |
| FITZ | 122 | 214 | 168 | 102 | 412 | 257 | 2484 | 687 | 1586 | 0 | 0 | 0 | NS | NS | - | 503 |
| NMPE | 840 | 692 | 766 | 937 | 728 | 832 | 453 | 794 | 624 | 0 | 61 | 31 | 0 | NS | - | 501 |
| CONTOUR MEAN | 1579 | 1881 | 1730 | 1881 | 1254 | 1567 | 1722 | 718 | 1220 | 163 | 126 | 144 | - | - | - | |
| 30 NMPW | 1507 | 825 | 1166 | 677 | 1028 | 853 | 316 | 173 | 244 | 15 | 92 | 53 | NS | NS | - | 579 |
| NMPP | 0 | 0 | 0 | 2545 | 3339 | 2942 | 188 | 2749 | 1468 | 0 | 0 | 0 | NS | NS | - | 1103 |
| FITZ | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 3 | 0 | 0 | 0 | NS | NS | - | 1 |
| NMPE | 10 | 0 | 5 | 10 | 0 | 5 | 71 | 81 | 76 | 81 | 10 | 46 | 0 | 0 | - | 26 |
| CONTOUR MEAN | 379 | 206 | 293 | 808 | 1092 | 950 | 145 | 751 | 448 | 24 | 26 | 25 | - | - | - | |
| 40 NMPW | 0 | 5 | 3 | 0 | 5 | 3 | 5 | 10 | 8 | 0 | 5 | 3 | NS | NS | - | 4 |
| NMPP | 10 | 0 | 5 | 616 | 524 | 570 | 0 | 0 | 0 | 31 | 0 | 15 | NS | NS | - | 148 |
| FITZ | 0 | 0 | 0 | 0 | 20 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 3 |
| NMPE | 15 | 5 | 10 | 0 | 41 | 20 | 81 | 428 | 255 | 97 | 92 | 94 | NS | NS | - | 95 |
| CONTOUR MEAN | 6 | 2 | 4 | 154 | 148 | 151 | 22 | 110 | 66 | 32 | 24 | 28 | - | - | - | |
| 0 NMPW | 0 | 0 | 0 | 81 | 5 | 43 | 41 | 0 | 20 | 0 | 0 | 0 | NS | NS | - | 16 |
| NMPP | 0 | 0 | 0 | 0 | 5 | 3 | 5 | 5 | 5 | 0 | 0 | 0 | NS | NS | - | 2 |
| FITZ | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 0 | 20 | 0 | 0 | 0 | NS | NS | - | 5 |
| NMPE | 143 | 51 | 97 | 31 | 92 | 61 | 468 | 102 | 285 | 143 | 102 | 122 | NS | NS | - | 141 |
| CONTOUR MEAN | 36 | 13 | 24 | 28 | 26 | 27 | 139 | 27 | 83 | 36 | 26 | 31 | - | - | - | |

*No. organisms/m²; exact date of benthic collection indicated on computer print-outs

NS = No sample

- = Not applicable

APPENDIX VIB-6c

ABUNDANCE OF SELECTED SPECIES OF ARTHROPODA: AMPHIPODA

ABUNDANCE* OF GAMMARUS FASCIATUS (ARTHROPODA: AMPHIPODA) IN BENTHIC COLLECTIONS

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | APR | | | JUN | | | AUG | | | OCT | | | DEC | | | ANNUAL MEAN |
|---|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-----|-----|------|----------------|
| | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | |
| 10 NC NMPW | 1720 | 428 | 1074 | 840 | 1893 | 1367 | 11442 | 11727 | 11585 | 468 | 499 | 484 | NS | NS | - | 3628 |
| NMPP | 407 | 127 | 267 | 2362 | 5823 | 4092 | 5619 | 3013 | 4316 | 10424 | 18080 | 14252 | NS | NS | - | 5732 |
| FITZ | 270 | 132 | 201 | 5 | 300 | 153 | 11972 | 21337 | 16654 | 3746 | 9691 | 6719 | NS | NS | - | 5932 |
| NMPE | 728 | 1013 | 870 | 1354 | 1608 | 1481 | 5701 | 3400 | 4550 | 672 | 97 | 384 | NS | NS | - | 1821 |
| CONTOUR MEAN | 781 | 425 | 603 | 1140 | 2406 | 1773 | 8683 | 9869 | 9276 | 3828 | 7092 | 5460 | - | - | - | |
| 20 NMPW | 143 | 163 | 153 | 596 | 814 | 705 | 310 | 723 | 517 | 392 | 265 | 328 | NS | NS | - | 426 |
| NMPP | 478 | 1456 | 967 | 2179 | 2545 | 2362 | 1415 | 7737 | 4576 | 117 | 97 | 107 | NS | NS | - | 2003 |
| FITZ | 1323 | 1496 | 1410 | 468 | 2097 | 1283 | 6719 | 3380 | 5049 | 204 | 3217 | 1710 | NS | NS | - | 2363 |
| NMPE | 3644 | 3135 | 3390 | 1069 | 519 | 794 | 1425 | 2280 | 1853 | 3156 | 25165 | 14160 | 0 | NS | - | 4488 |
| CONTOUR MEAN | 1397 | 1562 | 1480 | 1078 | 1494 | 1286 | 2467 | 3530 | 2999 | 967 | 7186 | 4077 | - | - | - | |
| 30 NMPW | 20 | 10 | 15 | 127 | 87 | 107 | 1089 | 66 | 578 | 36 | 764 | 400 | NS | NS | - | 275 |
| NMPP | 402 | 92 | 247 | 998 | 484 | 741 | 550 | 2525 | 1537 | 519 | 855 | 687 | NS | NS | - | 803 |
| FITZ | 56 | 132 | 94 | 845 | 295 | 570 | 957 | 682 | 819 | 122 | 209 | 165 | NS | NS | - | 412 |
| NMPE | 10 | 0 | 5 | 97 | 46 | 71 | 336 | 570 | 453 | 188 | 255 | 221 | 0 | 0 | - | 150 |
| CONTOUR MEAN | 122 | 58 | 90 | 517 | 228 | 372 | 733 | 961 | 847 | 216 | 521 | 368 | - | - | - | |
| 40 NMPW | 92 | 10 | 51 | 36 | 15 | 25 | 158 | 183 | 171 | 0 | 15 | 8 | NS | NS | - | 64 |
| NMPP | 25 | 5 | 15 | 290 | 0 | 145 | 153 | 81 | 117 | 1140 | 1028 | 1084 | NS | NS | - | 340 |
| FITZ | 20 | 565 | 293 | 713 | 1049 | 881 | 1222 | 692 | 957 | 316 | 285 | 300 | NS | NS | - | 608 |
| NMPE | 0 | 20 | 10 | 1079 | 1568 | 1323 | 611 | 1161 | 886 | 1150 | 1435 | 1293 | NS | NS | - | 878 |
| CONTOUR MEAN | 34 | 150 | 92 | 530 | 658 | 594 | 536 | 529 | 533 | 652 | 691 | 671 | - | - | - | |
| 60 NMPW | 51 | 20 | 36 | 448 | 81 | 265 | 178 | 158 | 168 | 20 | 61 | 41 | NS | NS | - | 128 |
| NMPP | 25 | 46 | 36 | 173 | 81 | 127 | 15 | 66 | 41 | 122 | 173 | 148 | NS | NS | - | 88 |
| FITZ | 0 | 20 | 10 | 183 | 3278 | 1731 | 265 | 122 | 193 | 1374 | 1415 | 1395 | NS | NS | - | 832 |
| NMPE | 163 | 137 | 150 | 41 | 81 | 61 | 1507 | 316 | 911 | 1262 | 1792 | 1527 | NS | NS | - | 662 |
| CONTOUR MEAN | 60 | 56 | 58 | 211 | 880 | 546 | 491 | 166 | 328 | 695 | 860 | 777 | - | - | - | |

*No. organisms/m²; exact date of benthic collection indicated on computer print-outs

NS = No sample

- = Not applicable

ABUNDANCE* OF PONTOPOREIA AFFINIS (ARTHROPODA: AMPHIPODA) IN BENTHIC COLLECTIONS

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | APR | | | JUN | | | AUG | | | OCT | | | DEC | | | ANNUAL MEAN |
|---|-----|------|------|------|------|------|------|------|------|------|------|------|-----|-----|------|----------------|
| | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | |
| 10 NMPW | 0 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 1 |
| NMPP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 0 |
| FITZ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 0 |
| NMPE | 0 | 0 | 0 | 10 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 1 |
| CONTOUR MEAN | 0 | 1 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | - | - | - | |
| 20 NMPW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 0 |
| NMPP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 0 |
| FITZ | 10 | 0 | 5 | 0 | 10 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 3 |
| NMPE | 0 | 0 | - | 0 | 0 | - | 0 | 0 | - | 0 | 0 | - | 8 | NS | - | 1 |
| CONTOUR MEAN | 2 | 0 | 1 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | - | - | - | |
| 30 NMPW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 0 |
| NMPP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 0 |
| FITZ | 15 | 31 | 23 | 0 | 0 | 0 | 509 | 570 | 540 | 178 | 377 | 277 | NS | NS | - | 210 |
| NMPE | 484 | 46 | 265 | 224 | 417 | 321 | 702 | 794 | 748 | 234 | 127 | 181 | 5 | 87 | 46 | 312 |
| CONTOUR MEAN | 125 | 19 | 72 | 56 | 104 | 80 | 303 | 341 | 322 | 103 | 126 | 114 | - | - | - | |
| 40 NMPW | 15 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 2 |
| NMPP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 5 | NS | NS | - | 1 |
| FITZ | 377 | 0 | 188 | 1507 | 652 | 1079 | 896 | 1038 | 967 | 321 | 397 | 359 | NS | NS | - | 648 |
| NMPE | 71 | 178 | 125 | 458 | 41 | 249 | 1079 | 641 | 860 | 214 | 458 | 336 | NS | NS | - | 393 |
| CONTOUR MEAN | 116 | 44 | 80 | 491 | 173 | 332 | 494 | 420 | 457 | 134 | 216 | 175 | - | - | - | |
| 60 NMPW | 601 | 1099 | 850 | 3868 | 1405 | 2637 | 621 | 463 | 542 | 0 | 0 | 0 | NS | NS | - | 1007 |
| NMPP | 0 | 0 | 0 | 10 | 0 | 5 | 31 | 25 | 28 | 5 | 5 | 5 | NS | NS | - | 10 |
| FITZ | 255 | 372 | 313 | 2301 | 81 | 1191 | 1191 | 1496 | 1344 | 784 | 702 | 743 | NS | NS | - | 898 |
| NMPE | 407 | 346 | 377 | 3380 | 4438 | 3909 | 3054 | 845 | 1949 | 2973 | 2321 | 2647 | NS | NS | - | 2221 |
| CONTOUR MEAN | 316 | 454 | 385 | 2390 | 1481 | 1935 | 1224 | 707 | 966 | 940 | 757 | 849 | - | - | - | |

*No. organisms/m²; exact date of benthic collection indicated on computer print-outs

NS = No sample

- = Not applicable

APPENDIX VIB-6d

ABUNDANCE OF SELECTED SPECIES OF COELENTERATA: HYDROZOA

ABUNDANCE* OF CORDYLOPHORA LACUSTRIS (COELENTERATA: HYDROZOA) IN BENTHIC COLLECTIONS

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | APR | | | JUN | | | AUG | | | OCT | | | DEC | | | ANNUAL MEAN |
|---|-----|-----|------|-----|-----|------|-----|-----|------|------|------|------|-----|-----|------|----------------|
| | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | |
| 10 NMPW | 10 | 10 | 10 | 41 | 61 | 51 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 15 |
| NMPP | 0 | 102 | 51 | 178 | 15 | 97 | 0 | 514 | 257 | 3319 | 1074 | 2196 | NS | NS | - | 650 |
| FITZ | 0 | 0 | 0 | 20 | 0 | 10 | 779 | 122 | 450 | 10 | 10 | 10 | NS | NS | - | 118 |
| NMPE | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 3 | 0 | 0 | 0 | NS | NS | - | 1 |
| CONTOUR MEAN | 2 | 28 | 15 | 60 | 19 | 39 | 196 | 159 | 178 | 832 | 271 | 552 | - | - | - | |
| 20 NMPW | 0 | 36 | 18 | 5 | 0 | 3 | 20 | 0 | 10 | 15 | 15 | 15 | NS | NS | - | 12 |
| NMPP | 0 | 0 | 0 | 20 | 0 | 10 | 71 | 36 | 53 | 5 | 25 | 15 | NS | NS | - | 20 |
| FITZ | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 31 | 36 | 0 | 1675 | 837 | NS | NS | - | 218 |
| NMPE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NS | - | 0 |
| CONTOUR MEAN | 0 | 9 | 4 | 6 | 0 | 3 | 33 | 17 | 25 | 5 | 429 | 217 | - | - | - | |
| 30 NMPW | 0 | 0 | 0 | 5 | 10 | 8 | 321 | 0 | 160 | 0 | 0 | 0 | NS | NS | - | 42 |
| NMPP | 0 | 0 | 0 | 0 | 10 | 5 | 0 | 0 | 0 | 25 | 10 | 18 | NS | NS | - | 6 |
| FITZ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 0 | 20 | NS | NS | - | 5 |
| NMPE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 46 | 33 | 0 | 0 | - | 7 |
| CONTOUR MEAN | 0 | 0 | 0 | 1 | 4 | 6 | 80 | 0 | 40 | 22 | 14 | 16 | - | - | - | |
| 40 NMPW | 0 | 0 | 0 | 5 | 0 | 3 | 25 | 199 | 112 | 0 | 0 | 0 | NS | NS | - | 29 |
| NMPP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 0 |
| FITZ | 0 | 0 | 0 | 0 | 5 | 3 | 0 | 0 | 0 | 143 | 199 | 171 | NS | NS | - | 44 |
| NMPE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 3 | 92 | 382 | 237 | NS | NS | - | 60 |
| CONTOUR MEAN | 0 | 0 | 0 | 1 | 1 | 1 | 6 | 51 | 29 | 59 | 145 | 102 | - | - | - | |
| 60 NMPW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 8 | NS | NS | - | 2 |
| NMPP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 3 | NS | NS | - | 1 |
| FITZ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 295 | 107 | 201 | NS | NS | - | 50 |
| NMPE | 0 | 0 | 0 | 0 | 0 | 0 | 102 | 36 | 69 | 0 | 0 | 0 | NS | NS | - | 17 |
| CONTOUR MEAN | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 9 | 17 | 78 | 28 | 53 | - | - | - | |

*No. organisms/m²; exact date of benthic collection indicated on computer print-outs

NS = No sample

- = Not applicable

ABUNDANCE* OF HYDRA AMERICANA (COELENTERATA: HYDROZOA) IN BENTHIC COLLECTIONS

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | APR | | | JUN | | | AUG | | | OCT | | | DEC | | | ANNUAL MEAN |
|---|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|----------------|
| | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | |
| 10 NMPW | 280 | 97 | 188 | 20 | 81 | 51 | 15 | 0 | 8 | 0 | 0 | 0 | NS | NS | - | 62 |
| NMPP | 31 | 61 | 46 | 5 | 25 | 15 | 168 | 0 | 84 | 0 | 0 | 0 | NS | NS | - | 36 |
| FITZ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 0 |
| NMPE | 0 | 5 | 3 | 0 | 0 | 0 | 20 | 0 | 10 | 0 | 0 | 0 | NS | NS | - | 3 |
| CONTOUR MEAN | 78 | 41 | 59 | 1 | 26 | 16 | 51 | 0 | 25 | 0 | 0 | 0 | - | - | - | |
| 20 NMPW | 46 | 71 | 59 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 15 |
| NMPP | 31 | 25 | 28 | 168 | 107 | 137 | 31 | 0 | 15 | 5 | 0 | 3 | NS | NS | - | 46 |
| FITZ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 56 | 28 | NS | NS | - | 7 |
| NMPE | 0 | 0 | 0 | 20 | 5 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NS | - | 3 |
| CONTOUR MEAN | 19 | 24 | 22 | 47 | 28 | 38 | 8 | 0 | 4 | 1 | 14 | 8 | - | - | - | |
| 30 NMPW | 15 | 76 | 46 | 0 | 10 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 13 |
| NMPP | 25 | 5 | 15 | 0 | 10 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 5 |
| FITZ | 0 | 0 | 0 | 0 | 51 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 6 |
| NMPE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 5 | 107 | 0 | 53 | 12 |
| CONTOUR MEAN | 10 | 20 | 15 | 0 | 18 | 9 | 0 | 0 | 0 | 2 | 0 | 1 | - | - | - | |
| 40 NMPW | 25 | 10 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 5 |
| NMPP | 10 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 1 |
| FITZ | 0 | 31 | 15 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 5 |
| NMPE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 46 | 33 | NS | NS | - | 8 |
| CONTOUR MEAN | 9 | 10 | 10 | 1 | 1 | 1 | 0 | 0 | 0 | 5 | 12 | 8 | - | - | - | |
| 60 NMPW | 10 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 1 |
| NMPP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 0 |
| FITZ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 10 | NS | NS | - | 3 |
| NMPE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 148 | 74 | 0 | 0 | 0 | NS | NS | - | 19 |
| CONTOUR MEAN | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 37 | 18 | 5 | 0 | 2 | - | - | - | |

*No organisms/m²; exact date of benthic collection indicated on computer print-outs

NS = No sample

- = Not applicable

APPENDIX VIB-6e

ABUNDANCE OF SELECTED SPECIES OF MOLLUSCA: GASTROPODA

ABUNDANCE* OF AMNICOLA LIMNOSA (MOLLUSCA: GASTROPODA) IN BENTHIC COLLECTIONS

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | APR | | | JUN | | | AUG | | | OCT | | | DEC | | | ANNUAL MEAN |
|---|-----|-----|------|-----|-----|------|------|-----|------|-----|-----|------|-----|-----|------|----------------|
| | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | |
| 10 NMPW | 5 | 0 | 3 | 0 | 0 | 0 | 41 | 0 | 20 | 0 | 0 | 0 | NS | NS | - | 6 |
| NMPP | 10 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 15 | 13 | NS | NS | - | 5 |
| FITZ | 5 | 0 | 3 | 0 | 0 | 0 | 31 | 10 | 20 | 25 | 25 | 25 | NS | NS | - | 12 |
| NMPE | 5 | 0 | 3 | 0 | 15 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 3 |
| CONTOUR MEAN | 6 | 0 | 3 | 0 | 4 | 2 | 18 | 2 | 10 | 9 | 10 | 9 | - | - | - | |
| 20 NMPW | 5 | 0 | 3 | 0 | 0 | 0 | 351 | 122 | 237 | 56 | 0 | 28 | NS | NS | - | 67 |
| NMPP | 20 | 5 | 13 | 0 | 0 | 0 | 0 | 15 | 8 | 10 | 15 | 13 | NS | NS | - | 9 |
| FITZ | 15 | 0 | 8 | 5 | 0 | 3 | 0 | 0 | 0 | 0 | 20 | 10 | NS | NS | - | 5 |
| NMPE | 0 | 0 | 0 | 321 | 0 | 160 | 631 | 0 | 316 | 81 | 407 | 244 | 0 | NS | - | 160 |
| CONTOUR MEAN | 10 | 1 | 6 | 82 | 0 | 41 | 246 | 34 | 140 | 37 | 110 | 74 | - | - | - | |
| 30 NMPW | 20 | 25 | 23 | 5 | 0 | 3 | 15 | 494 | 255 | 5 | 15 | 10 | NS | NS | - | 73 |
| NMPP | 5 | 0 | 3 | 15 | 0 | 8 | 36 | 117 | 76 | 5 | 76 | 41 | NS | NS | - | 32 |
| FITZ | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 5 | 0 | 3 | NS | NS | - | 2 |
| NMPE | 41 | 20 | 31 | 71 | 66 | 69 | 204 | 41 | 122 | 204 | 92 | 148 | 5 | 31 | 18 | 78 |
| CONTOUR MEAN | 16 | 11 | 14 | 23 | 16 | 20 | 65 | 164 | 115 | 55 | 46 | 50 | - | - | - | |
| 40 NMPW | 31 | 0 | 15 | 0 | 0 | 0 | 5 | 0 | 3 | 15 | 0 | 8 | NS | NS | - | 7 |
| NMPP | 15 | 0 | 8 | 51 | 0 | 25 | 0 | 422 | 211 | 173 | 25 | 99 | NS | NS | - | 86 |
| FITZ | 20 | 31 | 25 | 0 | 10 | 5 | 0 | 5 | 3 | 5 | 31 | 18 | NS | NS | - | 13 |
| NMPE | 36 | 255 | 145 | 31 | 244 | 137 | 652 | 41 | 346 | 153 | 244 | 199 | NS | NS | - | 207 |
| CONTOUR MEAN | 26 | 72 | 48 | 20 | 64 | 42 | 164 | 117 | 141 | 86 | 75 | 81 | - | - | - | |
| 60 NMPW | 5 | 0 | 3 | 0 | 0 | 0 | 5 | 0 | 3 | 0 | 31 | 15 | NS | NS | - | 5 |
| NMPP | 5 | 20 | 13 | 25 | 56 | 41 | 0 | 10 | 5 | 46 | 0 | 23 | NS | NS | - | 21 |
| FITZ | 66 | 31 | 48 | 20 | 15 | 18 | 0 | 326 | 163 | 10 | 10 | 10 | NS | NS | - | 60 |
| NMPE | 346 | 173 | 260 | 51 | 41 | 46 | 1384 | 41 | 713 | 0 | 20 | 10 | NS | NS | - | 257 |
| CONTOUR MEAN | 106 | 56 | 81 | 24 | 28 | 26 | 347 | 94 | 221 | 14 | 15 | 15 | - | - | - | |

*No. organisms/m²; exact date of benthic collection indicated on computer print-out

NS = No sample

- = Not applicable

ABUNDANCE* OF VALVATA PERDEPRESSA (MOLLUSCA: GASTROPODA) IN BENTHIC COLLECTIONS

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | APR | | | JUN | | | AUG | | | OCT | | | DEC | | | ANNUAL MEAN |
|---|------|-----|------|-----|------|------|------|------|------|------|-----|------|-----|-----|------|----------------|
| | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | |
| 10 NMPW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 0 |
| NMPP | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 10 | 10 | 5 | 0 | 3 | NS | NS | - | 3 |
| FITZ | 0 | 0 | 0 | 0 | 5 | 3 | 25 | 0 | 13 | 15 | 0 | 8 | NS | NS | - | 6 |
| NMPE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 0 |
| CONTOUR MEAN | 0 | 0 | 0 | 0 | 1 | 1 | 9 | 2 | 6 | 5 | 0 | 2 | - | - | - | |
| 20 NMPW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 0 |
| NMPP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 3 | 0 | 0 | 0 | NS | NS | - | 1 |
| FITZ | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 5 | 0 | 0 | 0 | NS | NS | - | 1 |
| NMPE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 10 | 0 | 0 | 0 | 5 | NS | - | 3 |
| CONTOUR MEAN | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 4 | 0 | 0 | 0 | - | - | - | |
| 30 NMPW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 0 |
| NMPP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 3 | NS | NS | - | 1 |
| FITZ | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 46 | 36 | 41 | 25 | 33 | NS | NS | - | 17 |
| NMPE | 433 | 224 | 328 | 545 | 127 | 336 | 234 | 977 | 606 | 448 | 397 | 422 | 15 | 76 | 46 | 348 |
| CONTOUR MEAN | 108 | 56 | 82 | 136 | 32 | 84 | 65 | 256 | 160 | 122 | 107 | 114 | - | - | - | |
| 40 NMPW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NS | NS | - | 0 |
| NMPP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 5 | 0 | 0 | 0 | NS | NS | - | 1 |
| FITZ | 0 | 25 | 13 | 46 | 41 | 43 | 249 | 229 | 239 | 102 | 132 | 117 | NS | NS | - | 103 |
| NMPE | 270 | 494 | 382 | 723 | 875 | 799 | 723 | 1120 | 921 | 682 | 753 | 718 | NS | NS | - | 705 |
| CONTOUR MEAN | 68 | 130 | 99 | 192 | 229 | 211 | 243 | 340 | 291 | 196 | 221 | 209 | - | - | - | |
| 60 NMPW | 15 | 5 | 10 | 20 | 0 | 10 | 5 | 25 | 15 | 0 | 0 | 0 | NS | NS | - | 9 |
| NMPP | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 15 | 0 | 8 | NS | NS | - | 3 |
| FITZ | 540 | 402 | 471 | 550 | 97 | 323 | 845 | 2117 | 1481 | 239 | 219 | 229 | NS | NS | - | 626 |
| NMPE | 1089 | 275 | 682 | 743 | 1008 | 875 | 6963 | 1995 | 4479 | 1568 | 845 | 1206 | NS | NS | - | 1811 |
| CONTOUR MEAN | 411 | 170 | 291 | 328 | 276 | 302 | 1954 | 1036 | 1495 | 456 | 266 | 361 | - | - | - | |

*No. organisms/m²; exact date of benthic collection indicated on computer print-outs

NS = No sample

- = Not applicable

APPENDIX VIB-6f

ABUNDANCE OF TOTAL MACROINVERTEBRATES

ABUNDANCE* OF TOTAL MACROINVERTEBRATES IN BENTHIC COLLECTIONS

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | APR | | | JUN | | | AUG | | | OCT | | | DEC | | | ANNUAL MEAN |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|------|----------------|
| | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | |
| 10 NC NMPW | 5200 | 1547 | 3376 | 3955 | 6037 | 4996 | 16613 | 15211 | 15911 | 569 | 580 | 574 | NS | NS | - | 6217 |
| NMPP | 2964 | 1797 | 2382 | 4275 | 7508 | 5892 | 6280 | 3964 | 5125 | 16205 | 19513 | 17861 | NS | NS | - | 7817 |
| FITZ | 2236 | 3567 | 2902 | 146 | 1985 | 1065 | 14732 | 28579 | 21655 | 3909 | 10265 | 7089 | NS | NS | - | 8179 |
| NMPE | 3227 | 5137 | 4181 | 3527 | 5604 | 4564 | 7873 | 3781 | 5830 | 707 | 107 | 408 | NS | NS | - | 3746 |
| CONTOUR MEAN | 3407 | 3012 | 3209 | 2976 | 5283 | 4130 | 11374 | 12884 | 12129 | 5348 | 7616 | 6482 | - | - | - | |
| 20 NMPW | 5481 | 5141 | 5311 | 6007 | 5282 | 5644 | 3242 | 1528 | 2383 | 1888 | 1160 | 1525 | NS | NS | - | 3716 |
| NMPP | 3802 | 6296 | 5050 | 4520 | 3839 | 4181 | 5600 | 9209 | 7404 | 525 | 417 | 473 | NS | NS | - | 4279 |
| FITZ | 1821 | 2070 | 1947 | 1007 | 2972 | 1990 | 10002 | 4203 | 7103 | 269 | 5635 | 2953 | NS | NS | - | 3501 |
| NMPE | 6096 | 5147 | 5621 | 4424 | 2820 | 3261 | 5039 | 7476 | 6259 | 5945 | 28356 | 17152 | 477 | NS | - | 7309 |
| CONTOUR MEAN | 5153 | 4664 | 4482 | 3990 | 3728 | 3859 | 5971 | 5604 | 5787 | 2157 | 8892 | 5524 | - | - | - | |
| 30 NMPW | 3247 | 4047 | 3647 | 2030 | 1699 | 1866 | 2565 | 1746 | 2155 | 300 | 1853 | 1077 | NS | NS | - | 2187 |
| NMPP | 1871 | 483 | 1179 | 4607 | 5445 | 5027 | 1043 | 8093 | 4568 | 1043 | 2565 | 1805 | NS | NS | - | 3148 |
| FITZ | 153 | 193 | 173 | 1078 | 427 | 754 | 1787 | 1501 | 1645 | 438 | 718 | 578 | NS | NS | - | 790 |
| NMPE | 2803 | 963 | 1884 | 7356 | 3537 | 5447 | 5766 | 10929 | 8347 | 8373 | 6164 | 7269 | 193 | 958 | 576 | 4704 |
| CONTOUR MEAN | 2018 | 1422 | 1720 | 3768 | 2777 | 3273 | 2790 | 5567 | 4179 | 2538 | 2825 | 2682 | - | - | - | |
| 40 NMPW | 3559 | 1491 | 2429 | 330 | 326 | 331 | 3760 | 2561 | 3162 | 61 | 443 | 253 | NS | NS | - | 1545 |
| NMPP | 620 | 361 | 491 | 2681 | 1909 | 2297 | 2091 | 4780 | 3436 | 3615 | 3889 | 3751 | NS | NS | - | 2496 |
| FITZ | 1389 | 1618 | 1503 | 4610 | 4844 | 4730 | 4215 | 3904 | 4060 | 1715 | 1649 | 1684 | NS | NS | - | 2996 |
| NMPE | 2426 | 2662 | 2545 | 8057 | 9441 | 8749 | 12756 | 14267 | 13515 | 6423 | 7982 | 7204 | NS | NS | - | 8005 |
| CONTOUR MEAN | 2453 | 1533 | 1741 | 3920 | 4130 | 4025 | 5706 | 6378 | 6042 | 2954 | 3491 | 3222 | - | - | - | |
| 60 NMPW | 23959 | 21188 | 22574 | 30503 | 8814 | 19661 | 13229 | 3451 | 8341 | 844 | 1216 | 1032 | NS | NS | - | 12904 |
| NMPP | 1668 | 2785 | 2228 | 1374 | 1995 | 1685 | 6892 | 5132 | 6012 | 2006 | 1664 | 1837 | NS | NS | - | 2942 |
| FITZ | 2536 | 3650 | 3093 | 11387 | 11019 | 11202 | 9489 | 10140 | 9815 | 5263 | 4871 | 5067 | NS | NS | - | 7297 |
| NMPE | 9810 | 4892 | 7350 | 8250 | 14284 | 11267 | 25120 | 8332 | 16727 | 15571 | 10426 | 12997 | NS | NS | - | 12087 |
| CONTOUR MEAN | 9483 | 8129 | 8811 | 12878 | 9028 | 8763 | 13682 | 6764 | 10223 | 3893 | 4544 | 5233 | - | - | - | |

*No organisms/m²; exact date of benthic collection indicated on computer print-outs

NS = No sample

- = Not applicable

APPENDIX VIB-

ABUNDANCE OF LARVAE AND FISH EGGS IN ETHIC COLLECTIONS

NINE MILE POINT VICINITY - 1976

| SPECIES | DATE | 10 FT | | | | 20 FT | | | | 30 FT | | | | 40 FT | | | | 60 FT | | | |
|-----------------|-------------------|-------|--------|------|-------------|-------|-------|------|------|-------|------|------|------|-------|------------|------|------|-------|------|------|------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| ALEWIFE | eggs 15 JUN R-1 | | | | 5.1 768.6 | | | | | | | | | | | | 5.1 | | | | |
| | eggs 16 JUN R-1 | | | | 193.4 86.5 | | | | | | | | | | | | | | | | |
| | eggs 16 JUN R-2 | | 208.7 | | | 5.1 | 5.1 | | | | | | | | | | | | | | |
| | eggs 17 JUN R-1 | | 132.4 | | | 5.1 | | | | 5.1 | | | | | | | | | | | |
| | eggs 17 JUN R-2 | | | | | | 15.3 | | | 5.1 | 5.1 | | | | | | | | | | |
| | larvae 4 SEP R-1 | | | | | | | | | | | | | | | | | 5.1 | | | |
| CATOSTOMUS | eggs 7 SEP R-1 | | | | | | | | | 5.1 | | | | | | | | | | | |
| | eggs 7 SEP R-2 | | | | | | | | | | | | | | | | | | | | |
| GIZZARD SHAD | eggs 14 MAY R-1 | | | | | | 549.7 | | | | | | | | | | | | | | |
| | eggs 14 MAY R-2 | | | | | | | | | | | | | | | | | | | | |
| JOHNNY DARTER | eggs 15 JUN R-1 | | | | | | | 5.1 | | | 15.3 | | | | | | | | | | |
| | eggs 15 JUN R-2 | | | | | | | | | | 5.1 | | | | 5.1 | | | | | | |
| JOHNNY DARTER | larvae 15 JUN R-1 | | | | | | | | | | 5.1 | | | | | | | | | | |
| | larvae 15 JUN R-2 | | | | | | | | | | | | | | | | | | | | |
| JOHNNY DARTER | larvae 4 SEP R-1 | | | | | | | | | | | | | | | | | 5.1 | | | |
| | larvae 4 SEP R-2 | | | | | | | | | | | | | | | | | | | | |
| MOTTLED SCULPIN | larvae 15 JUN R-1 | | | | | | | | | | | | | | | | | | | 5.1 | |
| | larvae 15 JUN R-2 | | | | 5.1 5.1 | | | | | | | | | | | | | | | 5.1 | |
| MOTTLED SCULPIN | larvae 16 JUN R-1 | | 5.1 | | | 5.1 | | | | | | | | | | | | | 5.1 | | |
| | larvae 16 JUN R-2 | 5.1 | 10.2 | | | 5.1 | | | | | | | | | | | | | | | |
| RAINBOW SMELT | eggs 19 APR R-1 | | | | | | | | | | | | | | 5.1 | | | | | | |
| | eggs 19 APR R-2 | | | | | | | | | | | | | | | | | | | | |
| RAINBOW SMELT | eggs 14 MAY R-1 | | | | | | | | | | | | | | | | | | 5.1 | | |
| | eggs 14 MAY R-2 | | | | | | | | | | | | | | | | | | 5.1 | | |
| RAINBOW SMELT | eggs 15 JUN R-1 | | | | | | | | | | | | | | | | | | | 5.1 | |
| | eggs 15 JUN R-2 | | | | | | | | | | | | | | | | | | | | |
| UNIDENTIFIED | eggs 19 APR R-1 | | | | | | | | | | | | | | | | | | 5.1 | | |
| | eggs 19 APR R-2 | | | | | | | | | | | | | | | | | | | 5.1 | |
| UNIDENTIFIED | eggs 14 MAY R-1 | | 10.2 | | | | | | | | | | | | | | | | | | |
| | eggs 14 MAY R-2 | | | | | | | | | | | | | | | | | | | | |
| UNIDENTIFIED | eggs 15 JUN R-1 | | | | 198.5 | | | 10.2 | 20.4 | | | 25.4 | | | 61.1 | | | | | 76.4 | 5.1 |
| | eggs 15 JUN R-2 | | | | 422.5 656.6 | | | 15.3 | 25.4 | | | 5.1 | | | 122.2 15.3 | | | | | | |
| UNIDENTIFIED | eggs 16 JUN R-1 | | 1221.6 | | | 20.4 | 10.2 | | | | | | | 20.4 | | | | | | | |
| | eggs 16 JUN R-2 | 5.1 | 1379.4 | | | | | | | 10.2 | | | | 15.3 | | | | | 5.1 | | |
| UNIDENTIFIED | larvae 16 JUN R-1 | | | | | | | | | | | | | | | | | | | | |
| | larvae 16 JUN R-2 | | | | | 5.1 | | | | | | | | | | | | | | | |
| UNIDENTIFIED | eggs 17 JUN R-1 | | | | | | 10.2 | | | 10.2 | | | | 142.5 | | | | | | | |
| | eggs 17 JUN R-2 | | | | | | | | | | | | | 20.4 | | | | | | | |
| WHITE PERCH | eggs 19 APR R-1 | | | | | | | | | | | | | | | | | | | | |
| | eggs 19 APR R-2 | | | | | | | | | | | | | | | | | | | | 5.1 |

*Number of organisms/m²

APPENDIX VIB-8

BIOMASS* OF CLADOPHORA COLLECTED WITH BENTHOS SAMPLES

NINE MILE POINT VICINITY - 1976

| STATION [TRANSECT/DEPTH CONTOUR (FT)] | APR ^a | | | JUN ^b | | | AUG ^c | | | OCT ^d | | | 14 DEC | | |
|---|------------------|-------|-------|------------------|-------|-------|------------------|-------|-------|------------------|-------|-------|--------|------|------|
| | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN |
| NMPW 10C | NR | NR | - | NS | NS | - | NR | NR | - | NR | NR | - | NR | NR | - |
| 10 NC | 71.82 | 5.04 | 38.43 | 46.88 | 43.88 | 45.38 | 36.04 | 16.70 | 26.37 | 0.00 | 0.00 | 0.00 | NS | NS | - |
| 20 | 4.02 | 24.48 | 14.25 | 101.95 | 55.18 | 78.56 | 2.49 | 6.21 | 4.35 | 15.58 | 7.23 | 11.41 | NS | NS | - |
| 30 | 0.00 | 2.85 | 1.42 | 5.80 | 0.00 | 2.90 | 2.90 | 0.00 | 1.45 | 0.15 | 3.21 | 1.68 | NS | NS | - |
| 40 | 0.81 | 0.10 | 0.46 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | NS | NS | - |
| 60 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.01 | NS | NS | - |
| NMPP 10C | NR | NR | - | NS | NS | - | NR | NR | - | NR | NR | - | NR | NR | - |
| 10 NC | 59.96 | 5.90 | 32.93 | 6.26 | 15.27 | 10.76 | 6.72 | 2.60 | 4.66 | 51.97 | 23.72 | 37.84 | NS | NS | - |
| 20 | 6.31 | 9.31 | 7.81 | 0.61 | 0.41 | 0.51 | 0.00 | 0.00 | 0.00 | 7.74 | 9.98 | 8.86 | NS | NS | - |
| 30 | 0.00 | 0.00 | 0.00 | 10.38 | 7.53 | 8.96 | 1.48 | 0.92 | 1.20 | 0.00 | 0.00 | 0.00 | NS | NS | - |
| 40 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | NS | NS | - |
| 60 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | NS | NS | - |
| FITZ 10 NC | 15.27 | 7.43 | 11.35 | 0.46 | 7.53 | 4.00 | 21.28 | 38.73 | 30.00 | 0.00 | 11.35 | 5.68 | NS | NS | - |
| 20 | 2.19 | 3.51 | 2.85 | 0.36 | 1.32 | 0.84 | 0.00 | 1.27 | 0.64 | 0.00 | 0.00 | 0.00 | NS | NS | - |
| 30 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | NS | NS | - |
| 40 | 0.00 | 0.00 | 0.00 | 0.00 | 3.51 | 1.76 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | NS | NS | - |
| 60 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | NS | NS | - |
| NMPE 10 NC | 23.52 | 36.44 | 29.98 | 31.15 | 97.83 | 64.49 | 16.24 | 2.39 | 9.32 | 0.00 | 0.00 | 0.00 | NS | NS | - |
| 20 | 14.61 | 0.97 | 7.79 | 18.48 | 14.00 | 16.24 | 17.92 | 52.32 | 35.12 | 0.00 | 0.00 | 0.00 | 0.12 | NS | - |
| 30 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.52 | 0.00 | 0.26 |
| 40 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | NS | NS | - |
| 60 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | NS | NS | - |

*g/m²; wet weight

NS = No sample

C = Cladophora sampleNC = Non-Cladophora sample

NR = Not required in work scope

- = Not applicable

^a19 April: FITZ and NMPE Stations;^b14 May: NMPW and NMPP Stations^c15 June: FITZ and NMPE Stations;

16 June: NMPW Stations; NMPP 10 ft and NMPP 20 ft R-1;

17 June: NMPP 20 ft R-2, NMPP 30 ft, NMPP 40 ft, and NMPP 60 ft

^c3 September: NMPE Stations

4 September: NMPW Stations; NMPP 10 ft, NMPP 20 ft

7 September: FITZ Stations; NMPP 30 ft, NMPP 40 ft; NMPP 60 ft

^d12 October: NMPE Stations; FITZ 10 ft, FITZ 20 ft

13 October: NMPW and NMPP Stations; FITZ 30 ft, FITZ 40 ft, FITZ 60 ft

PERCENT LIGHT TRANSMITTANCE VALUES AT BUOY PERIPHYTON STATIONS

NINE MILE POINT VICINITY - 1976

| SAMPLE DEPTH (FT) | STATION | DATES | | | | | | | |
|-------------------------|------------|-----------|----------|----------|----------|----------|----------|----------|-----------|
| | | 11 MAY | 2 JUN | 1 JUL | 2 AUG | 8 SEP | 5 OCT | 2 NOV | 10 DEC |
| 2 | NMPW | 18.0 | 35.0 | 40.0 | 30.0 | 18.0 | NA | NS | NA |
| | NMPP/FITZ | NS | 35.0 | 60.0 | 35.0 | 8.7 | NS | 60.0 | NA |
| | NMPE | 21.0 | 30.0 | 30.0 | 30.0 | 19.0 | 38.0 | 41.0 | NA |
| | DEPTH MEAN | 19.5 | 33.3 | 43.3 | 31.7 | 15.2 | 38.0 | 50.5 | - |
| 7 | NMPW | 2.4 | 6.0 | 6.4 | 8.5 | 4.8 | NA | 6.0 | NA |
| | NMPP/FITZ | NS | 17.0 | 10.0 | 5.4 | 6.8 | NS | 10.0 | NA |
| | NMPE | 3.5 | 2.2 | 4.8 | 12.0 | 4.3 | 8.3 | 2.2 | NA |
| | DEPTH MEAN | 3.0 | 8.4 | 7.1 | 8.6 | 5.3 | 8.3 | 6.1 | - |
| 12 | NMPW | 0.48 | 3.5 | 2.4 | 2.6 | 2.2 | NA | 2.0 | NA |
| | NMPP/FITZ | NS | 3.5 | 8.0 | 1.8 | 3.4 | NS | 5.2 | NA |
| | NMPE | 1.2 | 0.75 | 2.8 | 5.4 | 1.9 | 2.4 | 1.2 | NA |
| | DEPTH MEAN | 0.84 | 2.58 | 4.4 | 3.3 | 2.5 | 2.4 | 2.8 | - |
| 17 | NMPW | 0.13 | 1.6 | 0.75 | 0.96 | 1.2 | NA | 0.65 | NA |
| | NMPP/FITZ | NS | 1.85 | 4.0 | 0.56 | 1.9 | NS | 3.9 | NA |
| | NMPE | .32 | 0.25 | 1.2 | 2.4 | 0.82 | 1.3 | 0.7 | NA |
| | DEPTH MEAN | 0.22 | 1.23 | 1.98 | 1.31 | 1.31 | 1.3 | 1.75 | - |

NS = no sample
 NA = Not available
 - = Not applicable

APPENDIX VIC-1b

CHLOROPHYLL _a CONCENTRATIONS^a: BUOY PERIPHYTON SUBSTRATES

NINE MILE POINT VICINITY - 1976

| SAMPLE DEPTH (FT) | TRANSECT | DATES | | | | | | | | ANNUAL MEAN |
|-------------------------|------------|--------|-------|-------|-------|-----------------|-------------------|-------------------|--------|----------------|
| | | 11 MAY | 2 JUN | 1 JUL | 4 AUG | 8 SEP | 15 OCT | 2 NOV | 10 DEC | |
| 2 | NMPW | 43.5 | 17.4 | 57.0 | 159.3 | NS ^b | 15.8 ^c | NS | NS | 58.6 |
| | NMPP/FITZ | NS | 19.2 | 66.3 | NS | NS | NS | 0.2 ^d | <0.1 | <21.4 |
| | NMPE | 31.7 | 29.4 | 23.7 | NS | 58.4 | 1.2 | 1.2 | 4.0 | 21.4 |
| | DEPTH MEAN | 37.6 | 22.0 | 49.0 | 159.3 | 58.4 | 8.5 | 0.7 | - | <33.0 |
| 7 | NMPW | 16.6 | 1.6 | 15.7 | 29.8 | 23.4 | 18.4 ^c | .7 | NS | 15.2 |
| | NMPP/FITZ | NS | 17.4 | 93.3 | 59.7 | 48.0 | NS | NS ^d | <0.1 | <43.7 |
| | NMPE | 20.4 | 1.3 | 7.1 | 50.9 | 25.2 | 19.0 | 0.2 | 0.3 | 15.6 |
| | DEPTH MEAN | 18.5 | 6.8 | 38.7 | 46.8 | 32.2 | 18.7 | 0.4 | - | <22.5 |
| 12 | NMPW | 1.1 | 0.4 | 6.2 | 7.4 | 27.6 | 17.6 ^c | 0.1 | NS | 8.6 |
| | NMPP/FITZ | NS | 2.8 | 30.2 | 42.9 | 23.4 | NS | <0.1 ^d | <0.1 | <16.6 |
| | NMPE | 0.7 | 0.2 | 21.7 | 6.3 | 15.0 | 5.3 ^c | <0.1 | 0.1 | <6.2 |
| | DEPTH MEAN | 0.9 | 1.1 | 19.4 | 18.9 | 22.0 | 11.4 | - | - | <10.0 |
| 17 | NMPW | 0.4 | 0.1 | 1.1 | 0.4 | 21.6 | 4.0 ^c | 0.1 | NS | 4.0 |
| | NMPP/FITZ | NS | 0.2 | 5.9 | 8.1 | 30.4 | NS | <0.1 ^d | <0.1 | <7.5 |
| | NMPE | 0.2 | 0 | 1.7 | 0.2 | 1.5 | 0.4 ^c | 0.1 | <0.1 | <0.5 |
| | DEPTH MEAN | 0.3 | 0.1 | 2.9 | 2.9 | 17.8 | 2.2 | - | - | <3.7 |

Original Sample

^amg/m²/exposure period^bPlates set on 9 September^cSample taken on 8 October^dPlates set on 2 November;

Sample taken on 25 November

NS = No sample

- = Not applicable

APPENDIX VIC-1c

PHAEOPIGMENT CONCENTRATIONS^a: BUOY PERIPHYTON SUBSTRATES

NINE MILE POINT VICINITY - 1976

| SAMPLE DEPTH (FT) | TRANSECT | DATES | | | | | | | | ANNUAL MEAN |
|-------------------------|------------|--------|-------|-------|-------|-----------------|-------------------|-------------------|--------|----------------|
| | | 11 MAY | 2 JUN | 1 JUL | 4 AUG | 8 SEP | 5,8 OCT | 2 NOV | 10 DEC | |
| 2 | NMPW | 0 | 4.2 | 12.1 | 222.0 | NS ^b | 8.2 ^c | NS | NS | 49.3 |
| | NMPP/FITZ | NS | 5.6 | 11.1 | NS | NS | NS | 0.4 ^e | 0.1 | 4.3 |
| | NMPE | 8.0 | 4.9 | 0 | NS | 31.2 | 0.2 ^d | <0.1 | 0.4 | <6.4 |
| | DEPTH MEAN | 4.0 | 4.9 | 7.7 | 222.0 | 31.2 | 4.2 | - | 0.2 | <19.3 |
| 7 | NMPW | 4.4 | 0.3 | 2.1 | 47.5 | 9.6 | 26.8 ^c | <0.1 | NS | <13.0 |
| | NMPP/FITZ | NS | 3.0 | 12.0 | 97.5 | 8.0 | NS | NS ^e | 0.1 | 24.1 |
| | NMPE | 0 | 0.3 | 3.0 | 67.6 | 5.4 | 11.4 ^d | <0.1 | <0.1 | <11.0 |
| | DEPTH MEAN | 2.2 | 1.2 | 5.7 | 70.9 | 7.7 | 19.1 | - | - | <14.9 |
| 12 | NMPW | 0.8 | 0.2 | 1.2 | 42.1 | 16.8 | 45.6 ^c | <0.1 | NS | <15.3 |
| | NMPP/FITZ | NS | 0.6 | 3.8 | 137.7 | 9.6 | NS | <0.1 ^e | <0.1 | <25.3 |
| | NMPE | 0.5 | 0.2 | 1.5 | 22.9 | 3.6 | 2.7 ^c | 0.1 | 0.1 | 4.0 |
| | DEPTH MEAN | 0.6 | 0.3 | 2.2 | 67.6 | 10.0 | 24.2 | - | - | <13.8 |
| 17 | NMPW | 0.1 | 0.2 | 1.8 | 25.7 | 7.8 | 1.8 ^c | 0.1 | NS | 5.4 |
| | NMPP/FITZ | NS | 0.2 | 2.4 | 37.9 | 14.4 | NS | <0.1 ^e | 0.1 | <9.2 |
| | NMPE | 0.2 | 0.2 | 2.8 | 21.1 | 1.4 | 1.2 ^c | <0.1 | 0.1 | <3.4 |
| | DEPTH MEAN | 0.2 | 0.2 | 2.3 | 28.2 | 7.9 | 1.5 | - | 0.1 | <5.7 |

Original Sample

^a mg/m²/exposure period

^b Plates set on 9 September

^c Sample taken on 8 October

^d Sample taken on 5 October

^e Plates set on 2 November; sample taken on 25 November

NS = No sample

- = Not applicable

APPENDIX VIC-1d

BIOMASS^a: BUOY PERIPHYTON SUBSTRATES

NINE MILE POINT VICINITY - 1976

| SAMPLE DEPTH (FT) | STATION | DATES | | | | | | | | | | | |
|-------------------------|------------|---------------------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|
| | | 11 MAY ^b | | | 2 JUN | | | 1 JUL | | | 4 AUG | | |
| | | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN |
| 2 | NMPW | 69.4 | 73.9 | 71.65 | 65.0 | 66.9 | 65.95 | 115.0 | 87.0 | 101.00 | 234.9 | 252.8 | 243.85 |
| | NMPP/FITZ | NS | NS | - | 40.2 | 32.4 | 36.30 | 85.2 | 66.0 | 75.60 | NS | NS | - |
| | NMPE | 79.6 | 97.1 | 88.35 | 68.4 | 41.0 | 54.70 | 31.8 | 31.5 | 31.65 | NS | NS | - |
| | DEPTH MEAN | 74.50 | 85.50 | 80.00 | 57.87 | 46.77 | 52.32 | 77.33 | 61.50 | 69.42 | 234.90 | 252.80 | 243.85 |
| 7 | NMPW | NS | 10.0 | 10.00 | 3.9 | 4.9 | 4.40 | 18.4 | 11.1 | 14.75 | NS | 61.4 | 61.4 |
| | NMPP/FITZ | NS | NS | - | NS | 36.8 | 36.80 | 73.2 | 82.5 | 77.85 | 136.4 | NS | 136.4 |
| | NMPE | 12.8 | 15.7 | 14.25 | 5.2 | 4.5 | 4.85 | 24.4 | 20.5 | 22.45 | 184.2 | 182.0 | 183.1 |
| | DEPTH MEAN | 12.80 | 12.85 | 12.83 | 4.55 | 15.40 | 11.06 | 38.67 | 38.03 | 38.35 | 160.30 | 121.70 | 141.00 |
| 12 | NMPW | 1.9 | 2.7 | 2.30 | 1.8 | 1.7 | 1.75 | 29.3 | 27.1 | 28.20 | 70.4 | 63.9 | 67.15 |
| | NMPP/FITZ | NS | NS | - | 4.4 | 5.6 | 5.00 | 36.4 | 29.5 | 32.95 | 162.9 | 146.5 | 154.70 |
| | NMPE | 3.2 | 2.5 | 2.85 | 2.4 | 1.7 | 2.05 | 18.4 | 26.8 | 22.60 | 104.8 | 141.6 | 123.20 |
| | DEPTH MEAN | 2.55 | 2.60 | 2.58 | 2.87 | 3.00 | 2.93 | 28.03 | 27.80 | 27.92 | 112.70 | 117.33 | 115.02 |
| 17 | NMPW | 1.3 | 1.6 | 1.45 | 1.5 | 2.2 | 1.85 | 17.9 | 18.9 | 18.40 | 108.8 | 132.9 | 120.85 |
| | NMPP/FITZ | NS | NS | - | 2.3 | 1.5 | 1.90 | 11.7 | 14.7 | 13.20 | 157.1 | 126.2 | 141.65 |
| | NMPE | 1.7 | 1.9 | 1.80 | 1.2 | 2.1 | 1.65 | 20.5 | 19.1 | 19.80 | 107.7 | 95.6 | 101.65 |
| | DEPTH MEAN | 1.50 | 1.75 | 1.63 | 1.67 | 1.93 | 1.80 | 16.70 | 17.57 | 17.13 | 124.53 | 118.23 | 121.38 |

^a mg/dm²

^b NMPP/FITZ buoy structure lost

NS = No sample

BIOMASS^a: BUOY PERIPHYTON SUBSTRATES

NINE MILE POINT VICINITY - 1976

| SAMPLE DEPTH (FT) | TRANSECT | DATES | | | | | | | | | | | | ANNUAL MEAN |
|-------------------------|------------|-----------------|-----------------|--------|-------------------|--------------------|--------|------------------|------------------|------|--------|------|------|----------------|
| | | 8 SEP | | | 5,8 OCT | | | 2 NOV | | | 10 DEC | | | |
| | | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | |
| 2 | NMPW | NS ^b | NS ^b | - | NA ^c | NA ^c | - | NS | NS | - | NS | NS | - | 120.61 |
| | NMPP/FITZ | NS | NS | - | NS | NS | - | 1.2 ^e | 1.2 ^e | 1.20 | 1.6 | 2.0 | 1.80 | 28.73 |
| | NMPE | 158.6 | 151.4 | 155.00 | 5.7 ^d | 8.0 ^d | 6.85 | 3.8 | NS | 3.80 | 3.2 | 6.2 | 4.70 | 52.79 |
| | DEPTH MEAN | 158.60 | 151.40 | 155.00 | 5.70 | 8.00 | 6.85 | 2.50 | 1.20 | 2.07 | 2.40 | 4.10 | 3.25 | 64.86 |
| 7 | NMPW | 120.4 | 216.0 | 168.20 | 74.2 ^c | 64.1 ^c | 69.15 | NS | 4.8 | 4.80 | NS | NS | - | 53.56 |
| | NMPP/FITZ | NS | 208.1 | 208.10 | NS | NS | - | NS ^e | NS ^e | - | 3.1 | NS | 3.10 | 90.02 |
| | NMPE | 137.9 | 127.8 | 132.85 | 21.2 ^d | 24.2 ^d | 22.70 | 1.2 | NS | 1.20 | 0.7 | 2.5 | 1.60 | 50.99 |
| | DEPTH MEAN | 129.15 | 183.97 | 162.04 | 47.70 | 44.15 | 45.92 | 1.20 | 4.80 | 3.00 | 1.90 | 2.50 | 2.10 | 59.19 |
| 12 | NMPW | 284.1 | 176.0 | 230.05 | 49.5 ^c | 35.2 ^c | 42.35 | 1.2 | 0.6 | 0.90 | NS | NS | - | 53.24 |
| | NMPP/FITZ | 142.1 | NA | 142.10 | NS | NS | - | 2.2 ^e | 2.0 ^e | 2.10 | 1.9 | 1.2 | 1.55 | 48.61 |
| | NMPE | 91.2 | 119.2 | 105.20 | 18.4 ^c | 20.2 ^c | 19.30 | 1.5 | 1.0 | 1.25 | 1.3 | 0.5 | 0.90 | 34.67 |
| | DEPTH MEAN | 172.47 | 147.60 | 162.52 | 33.95 | 27.70 | 30.82 | 1.63 | 1.20 | 1.42 | 1.60 | 0.85 | 1.22 | 44.75 |
| 17 | NMPW | 199.0 | 219.0 | 209.00 | 93.0 ^c | 76.4 ^c | 84.70 | 0.4 | 1.0 | 0.70 | NS | NS | - | 62.42 |
| | NMPP/FITZ | 121.4 | 154.8 | 138.10 | NS | NS | - | 1.9 ^e | 2.3 ^e | 2.10 | 1.5 | 1.5 | 1.50 | 49.74 |
| | NMPE | 116.5 | 76.3 | 96.40 | 54.4 ^c | 159.7 ^c | 107.05 | 1.1 | 1.4 | 1.25 | 1.2 | 1.7 | 1.45 | 41.38 |
| | DEPTH MEAN | 145.63 | 150.03 | 147.83 | 73.70 | 118.05 | 95.88 | 1.13 | 1.57 | 1.35 | 1.35 | 1.60 | 1.48 | 50.78 |

^a mg/dm²/exposure period;
ash-free dry weight

^b Plates set on 9 September

^c Sample taken on 8 October
^d Sample taken on 5 October

^e Plates set on 2 November;
 Sample taken on 25 November

 NS = No sample
 NA = Not analyzed
 - = Not applicable

APPENDIX VIC-1e

ABUNDANCE OF SELECTED TAXA* OF PHYTOPERIPHYTON

* Cryptophyta and Dinophyta were not identified from buoy substrates

Lawler, Matusky & Skelly Engineers

ABUNDANCE^a OF BACILLARIOPHYCEAE ON BUOY PERIPHYTON SUBSTRATES

NINE MILE POINT VICINITY - 1976

| SAMPLE DEPTH (FT) | STATION | DATE | | | | | | | |
|-------------------------|------------|---------------------|-----------------------|---------------------|-----------------------|---------------------|----------|---------------------|-----------------------|
| | | 11 MAY | | 2 JUN ₂ | | 1 JUL ₂ | | 4 AUG ₂ | |
| | | No./dm ² | % | No./dm ² | % | No./dm ² | % | No./dm ² | % |
| 2 | NMPW | 3.99 | E7 99.77 | 3.50 | E7 92.94 | 1.11 | E8 35.10 | 2.26 | E8 11.51 |
| | NMPP/FITZ | NS ^c | - | 3.91 | E7 96.91 | 1.08 | E8 26.74 | NS ^d | - |
| | NMPE | 7.65 | E7 99.68 | 6.42 | E7 98.96 | 1.00 | E8 29.42 | NS ^d | - |
| | DEPTH MEAN | 5.82 | E7 | 4.61 | E7 | 1.06 | E8 | 2.26 | E8 |
| 7 | NMPW | 1.94 | E7 ^b 95.33 | 5.58 | E6 ^b 98.00 | 6.06 | E6 11.77 | 3.87 | E7 ^b 18.02 |
| | NMPP/FITZ | NS ^c | - | 4.62 | E7 ^b 97.13 | 7.75 | E7 16.71 | 5.28 | E7 6.65 |
| | NMPE | 2.34 | E7 97.70 | 3.48 | E6 93.45 | 8.79 | E6 15.41 | 1.73 | E7 16.90 |
| | DEPTH MEAN | 2.14 | E7 | 18.42 | E6 | 30.78 | E6 | 3.63 | E7 |
| 12 | NMPW | 1.41 | E6 94.88 | 2.56 | E5 93.92 | 1.84 | E6 26.13 | 4.06 | E7 17.24 |
| | NMPP/FITZ | NS ^c | - | 6.76 | E6 95.35 | 3.46 | E7 9.73 | 5.43 | E7 9.71 |
| | NMPE | 8.36 | E5 97.28 | 1.53 | E5 91.11 | 2.76 | E6 5.26 | 2.85 | E6 31.54 |
| | DEPTH MEAN | 11.23 | E5 | 23.90 | E5 | 13.07 | E6 | 32.58 | E6 |
| 17 | NMPW | 3.51 | E5 85.44 | 6.36 | E4 100.00 | 3.45 | E5 4.54 | 3.75 | E6 24.71 |
| | NMPP/FITZ | NS ^c | - | 4.60 | E5 99.03 | 1.81 | E6 49.56 | 1.05 | E7 24.15 |
| | NMPE | 1.20 | E5 100.00 | 6.40 | E4 93.22 | 9.04 | E5 1:55 | 1.62 | E5 7.54 |
| | DEPTH MEAN | 2.36 | E5 | 19.59 | E4 | 10.20 | E5 | 48.04 | E5 |

ABUNDANCE^a OF BACILLARIOPHYCEAE ON BUOY PERIPHYTON SUBSTRATES (Continued)

NINE MILE VICINITY - 1976

| SAMPLE DEPTH (FT) | STATION | DATE | | | | | | | | | | | | GRAND MEAN | | | | |
|-------------------------|------------|---------------------|-----------------|-------|-----------------|---------------------|-------|------------------|-----------------|---------------------|-------|-----------------|-----------------|---------------|---------------------|--------|----|--|
| | | 8 SEP | | | | 5 OCT | | | | 2 NOV | | | | | 10 DEC | | | |
| | | No./dm ² | | % | | No./dm ² | | % | | No./dm ² | | % | | | No./dm ² | | % | |
| 2 | NMPW | NS ^{de} | - | | 1.34 | E7 ^{bf} | 3.44 | | NS ^d | - | | NS ^c | - | | 8.51 | E7 | | |
| | NMPP/FITZ | NS ^d | - | | NS ^c | - | | 6.25 | E5 ^g | 99.53 | | 1.20 | E4 | 100.00 | 3693.42 | E4 | | |
| | NMPE | 1.64 | E8 | 9.88 | 1.75 | E6 | 3.54 | | 9.55 | E6 ^b | 56.15 | | 3.92 | E6 | 99.61 | 59.98 | E6 | |
| | DEPTH MEAN | 1.64 | E8 | | 7.58 | E6 | | | 50.88 | E5 | | | 196.60 | E4 | | | | |
| 7 | NMPW | 2.51 | E7 | 3.38 | 9.33 | E6 ^f | 1.42 | | 5.64 | E5 | 77.75 | | NS ^c | - | | 149.62 | E5 | |
| | NMPP/FITZ | 9.03 | E6 ^b | 0.87 | NS ^c | - | | NS ^{bg} | - | | | 4.09 | E3 ^b | 100.00 | 30922.35 | E3 | | |
| | NMPE | 1.12 | E7 | 2.77 | 6.61 | E6 | 7.42 | | 1.37 | E5 | 68.33 | | 4.96 | E5 | 99.63 | 89.27 | E5 | |
| | DEPTH MEAN | 15.11 | E6 | | 7.97 | E6 | | | 2.34 | E5 | | | 250.04 | E3 | | | | |
| 12 | NMPW | 6.55 | E7 | 18.37 | 3.29 | E7 ^f | 12.42 | | 5.57 | E5 | 75.36 | | NS ^c | - | | 204.38 | E5 | |
| | NMPP/FITZ | 3.28 | E7 ^b | 3.53 | NS ^c | - | | 7.89 | E4 ^g | 100.00 | | 7.63 | E3 | 100.00 | 21424.42 | E3 | | |
| | NMPE | 6.05 | E7 | 26.45 | 1.03 | E7 ^f | 28.86 | | 1.85 | E4 | 26.82 | | 2.36 | E5 | 100.00 | 970.67 | E4 | |
| | DEPTH MEAN | 5.29 | E7 | | 2.16 | E7 | | | 21.81 | E4 | | | 121.82 | E3 | | | | |
| 17 | NMPW | 1.25 | E7 | 24.00 | 1.97 | E7 ^f | 57.58 | | 6.82 | E4 | 40.45 | | NS ^c | - | | 525.40 | E4 | |
| | NMPP/FITZ | 4.53 | E7 | 19.04 | NS ^c | - | | 1.82 | E4 ^g | 100.00 | | 3.38 | E3 | 100.00 | 9681.93 | E3 | | |
| | NMPE | 1.98 | E6 | 21.59 | 1.55 | E6 ^f | 20.57 | | 4.65 | E3 | 32.25 | | 5.43 | E4 | 100.00 | 604.87 | E3 | |
| | DEPTH MEAN | 19.93 | E6 | | 10.62 | E6 | | | 30.35 | E3 | | | 28.84 | E3 | | | | |

% = Bacillariophyceae
Total Phytoperiphyton per station and date

NS = No sample
- = Not applicable

^a Mean of R-1 and R-2

^b One sample only

^c Substrate lost

^d Substrate lost

^e Plates set on 9 Sep

^f Sample taken 8 Oct

^g Plates set on 2 Nov; sample taken 2 Nov

ABUNDANCE^a OF CHLOROPHYTA ON BUOY PERIPHYTON SUBSTRATES

NINE MILE POINT VICINITY - 1976

| SAMPLE DEPTH (FT) | STATION | DATES | | | | | | | | | | | | | | | |
|-------------------------|------------|---------------------|-----------------|-------|-------|---------------------|------|-------|----|---------------------|-----------------|-----------------|-------|---------------------|--|---|--|
| | | 11 MAY | | | | 2 JUN | | | | 1 JUL | | | | 4 AUG | | | |
| | | No./dm ² | | % | | No./dm ² | | % | | No./dm ² | | % | | No./dm ² | | % | |
| 2 | NMPW | 9.33 | E4 | 0.23 | 2.66 | E6 | 7.06 | 1.35 | E7 | 4.27 | 2.04 | E7 | 1.04 | | | | |
| | NMPP/FITZ | NS ^c | | - | 1.25 | E6 | 3.09 | 1.59 | E7 | 3.95 | NS ^d | | - | | | | |
| | NMPE | 8.29 | E4 | 0.11 | 5.58 | E5 | 0.86 | 4.46 | E6 | 1.31 | NS ^d | | - | | | | |
| | DEPTH MEAN | 8.81 | E4 | | 14.89 | E5 | | 11.22 | E6 | | 2.04 | E7 | | | | | |
| 7 | NMPW | 8.37 | E5 ^b | 4.12 | 1.14 | E5 | 2.00 | 4.81 | E6 | 9.32 | 6.99 | E6 ^b | 3.25 | | | | |
| | NMPP/FITZ | NS ^c | | - | 1.36 | E6 ^b | 2.87 | 1.69 | E7 | 3.65 | 2.10 | E7 | 2.65 | | | | |
| | NMPE | 5.19 | E5 | 2.17 | 2.44 | E5 | 6.55 | 1.99 | E6 | 3.48 | 1.32 | E6 | 1.29 | | | | |
| | DEPTH MEAN | 6.78 | E5 | | 5.73 | E5 | | 7.90 | E6 | | 9.77 | E6 | | | | | |
| 12 | NMPW | 6.81 | E4 | 4.59 | 1.44 | E4 | 5.31 | 7.86 | E5 | 11.18 | 1.52 | E6 | 0.65 | | | | |
| | NMPP/FITZ | NS ^c | | - | 3.30 | E5 | 4.65 | 7.91 | E6 | 2.22 | 1.11 | E7 | 1.98 | | | | |
| | NMPE | 2.34 | E4 | 2.72 | 1.49 | E4 | 8.89 | 1.10 | E6 | 2.09 | 6.38 | E5 | 7.05 | | | | |
| | DEPTH MEAN | 4.58 | E4 | | 11.98 | E4 | | 32.65 | E5 | | 44.19 | E5 | | | | | |
| 17 | NMPW | 5.98 | E4 | 14.56 | 0 | | - | 2.71 | E5 | 3.57 | 1.58 | E6 | 10.42 | | | | |
| | NMPP/FITZ | NS ^c | | - | 4.50 | E3 | 0.97 | 5.59 | E4 | 1.53 | 2.13 | E5 | 0.49 | | | | |
| | NMPE | 0 | | - | 4.65 | E3 | 6.78 | 5.35 | E5 | 0.92 | 5.12 | E5 | 23.86 | | | | |
| | DEPTH MEAN | 2.99 | E4 | | 3.05 | E3 | | 28.73 | E4 | | 7.68 | E5 | | | | | |

ABUNDANCE^a OF CHLOROPHYTA ON BUOY PERIPHYTON SUBSTRATES (Continued)

NINE MILE POINT VICINITY - 1976

| SAMPLE DEPTH (FT) | STATION | DATES | | | | | | | | GRAND MEAN | | | | | |
|-------------------------|------------|---------------------|-----------------|------|---------------------|------------------|-----------------|---------------------|------------------|----------------|---------------------|---------|---------|---------|----|
| | | 8 SEP | | | 5 OCT | | | 2 NOV | | | 10 DEC | | | | |
| | | No./dm ² | % | | No./dm ² | % | | No./dm ² | % | | No./dm ² | % | | | |
| 2 | NMPW | NS ^{de} | - | | 4.77 | E6 ^{bf} | 1.23 | | NS ^d | - | | 828.47 | E4 | | |
| | NMPP/FITZ | NS ^d | - | | NS ^c | - | | 2.95 | E3 ^g | 0.47 | | 4288.24 | E3 | | |
| | NMPE | 6.75 | E7 | 4.06 | | 5.09 | E5 | 1.03 | | 0 ^b | - | | 1044.65 | E4 | |
| | DEPTH MEAN | 6.75 | E7 | | | 26.40 | E5 | | | 1.48 | E3 | | | | |
| 7 | NMPW | 1.45 | E7 ^b | 1.95 | | 1.53 | E7 ^f | 2.33 | | 0 ^b | - | | 60.79 | E5 | |
| | NMPP/FITZ | 2.60 | E7 ^b | 2.50 | | NS ^c | - | | NS ^{dg} | - | | 10.88 | E6 | | |
| | NMPE | 7.41 | E6 | 1.84 | | 3.93 | E6 | 4.41 | | 0 ^b | - | | 1926.86 | E3 | |
| | DEPTH MEAN | 15.97 | E6 | | | 9.62 | E6 | | | 0 | | | | | |
| 12 | NMPW | 1.30 | E7 ^b | 3.64 | | 8.76 | E6 ^f | 3.31 | | 3.10 | E3 | 0.42 | | 3450.23 | E3 |
| | NMPP/FITZ | 8.76 | E6 ^b | 0.94 | | NS ^c | - | | 0 ^g | - | | 46.83 | E5 | | |
| | NMPE | 1.97 | E7 | 8.61 | | 1.13 | E6 ^f | 3.17 | | 0 | - | | 282.58 | E4 | |
| | DEPTH MEAN | 13.82 | E6 | | | 4.94 | E6 | | | 1.03 | E3 | | | | |
| 17 | NMPW | 1.06 | E6 | 2.04 | | 2.40 | E6 ^f | 7.01 | | 4.65 | E3 | 2.76 | | 767.92 | E3 |
| | NMPP/FITZ | 5.42 | E6 | 2.28 | | NS ^c | - | | 0 ^g | - | | 948.90 | E3 | | |
| | NMPE | 6.01 | E5 | 6.57 | | 1.41 | E6 ^f | 18.81 | | 9.30 | E2 | 6.45 | | 3829.48 | E2 |
| | DEPTH MEAN | 23.60 | E5 | | | 1.90 | E6 | | | 18.60 | E2 | | | | |

^a = Chlorophyta
Total Phytoperiphyton per station and date

NS = No sample
- = Not applicable

^d Mean of R-1 and R-2

^b One sample only

^c Buoy structure lost

^d Substrate lost

^e Plates set on 9 Sep

^f Sample taken 8 Oct

^g Plates set on 2 Nov; sample taken 25

ABUNDANCE^a OF CHRYSOPHYTA* ON BUOY PERIPHYTON SUBSTRATES

NINE MILE POINT VICINITY - 1976

| SAMPLE DEPTH (FT) | STATION | DATE | | | | | | | |
|-------------------------|------------|---------------------|---|---------------------|------|---------------------|---|---------------------|---|
| | | 11 MAY | | 2 JUN | | 1 JUL | | 4 AUG | |
| | | No./dm ² | % | No./dm ² | % | No./dm ² | % | No./dm ² | % |
| 2 | NMPW | 0 | - | 0 | - | 0 | - | 0 ^d | - |
| | NMPP/FITZ | NS ^c | - | 0 | - | 0 | - | NS ^d | - |
| | NMPE | 0 | - | 0 | - | 0 | - | NS ^d | - |
| | DEPTH MEAN | 0 | | 0 | | 0 | | 0 | |
| 7 | NMPW | 0 ^b | - | 0 ^b | - | 0 | - | 0 ^b | - |
| | NMPP/FITZ | NS ^c | - | 0 ^b | - | 0 | - | 0 | - |
| | NMPE | 0 | - | 0 | - | 0 | - | 0 | - |
| | DEPTH MEAN | 0 | | 0 | | 0 | | 0 | |
| 12 | NMPW | 0 | - | 2.11 E3 | 0.77 | 0 | - | 0 | - |
| | NMPP/FITZ | NS ^c | - | 0 | - | 0 | - | 0 | - |
| | NMPE | 0 | - | 0 | - | 0 | - | 0 | - |
| | DEPTH MEAN | 0 | | 0.70 E3 | | 0. | | 0 | |
| 17 | NMPW | 0 | - | 0 | - | 0 | - | 0 | - |
| | NMPP/FITZ | NS ^c | - | 0 | - | 0 | - | 0 | - |
| | NMPE | 0 | - | 0 | - | 0 | - | 0 | - |
| | DEPTH MEAN | 0 | | 0 | | 0 | | 0 | |

*Chrysophyta does not include Bacillariophyceae (see Table

ABUNDANCE^a OF CHRYSOPHYTA* ON BUOY PERIPHYTON SUBSTRATES (Continued)

NINE MILE POINT VICINITY - 1976

| SAMPLE DEPTH (FT) | STATION | DATE | | | | | | GRAND MEAN | | | | | | |
|-------------------------|------------|---------------------|----|------|---------------------|-----------------|---------------------|------------------|--------|--|---------------------|---|--|----------|
| | | 8 SEP | | | 5 OCT | | 2 NOV | | 10 DEC | | | | | |
| | | No./dm ² | % | | No./dm ² | % | No./dm ² | | % | | No./dm ² | % | | |
| 2 | NMPW | NS ^{de} | - | | 0 ^{bf} | - | | NS ^d | - | | NS ^c | - | | 0 |
| | NMPP/FITZ | NS ^d | - | | NS ^c | - | | 0 ^g | - | | 0 | - | | 0 |
| | NMPE | 2.60 | E5 | 0.02 | 0 | - | | 0 ^b | - | | 0 | - | | 0.37 E5 |
| | DEPTH MEAN | 2.60 | E5 | | 0 | | | 0 | | | 0 | | | |
| 7 | NMPW | 0 ^b | - | | 0 ^f | - | | 0 ^b | - | | NS ^c | - | | 0 |
| | NMPP/FITZ | 0 ^b | - | | NS ^c | - | | NS ^{dg} | - | | 0 ^b | - | | 0 |
| | NMPE | 0 | - | | 0 | - | | 0 ^b | - | | 0 | - | | 0 |
| | DEPTH MEAN | 0 | | | 0 | | | 0 | | | 0 | | | |
| 12 | NMPW | 1.42 | E5 | 0.04 | 5.49 | E4 ^f | 0.02 | 0 | - | | NS ^c | - | | 28.43 E3 |
| | NMPP/FITZ | 0 ^b | - | | NS ^c | - | | 0 ^g | - | | 0 | - | | 0 |
| | NMPE | 0 | - | | 0 ^f | - | | 0 | - | | 0 | - | | 0 |
| | DEPTH MEAN | 0.47 | E5 | | 2.74 | E4 | | 0 | | | 0 | | | |
| 17 | NMPW | 0 | - | | 0 ^f | - | | 0 | - | | NS ^c | - | | 0 |
| | NMPP/FITZ | 0 | - | | NS ^c | - | | 0 ^g | - | | 0 | - | | 0 |
| | NMPE | 0 | - | | 4.34 | E3 ^f | 0.06 | 0 | - | | 0 | - | | 0.54 E3 |
| | DEPTH MEAN | 0 | | | 2.17 | E3 | | 0 | | | 0 | | | |

% = Chrysophyta
Total Phytoperiphyton per station and date

NS = No sample
- = Not applicable

^a Mean of R-1 and R-2

^b One sample only

^c Substrate lost

^d Substrate lost

^e Plates set on 9 Sep

^f Sample taken 8 Oct

^g Plates set on 2 Nov; sample taken 25 Nov

ABUNDANCE^a OF EUGLENOPHYTA ON BUOY PERIPHYTON SUBSTRATES

NINE MILE POINT VICINITY - 1976

| SAMPLE DEPTH- (FT) | STATION | DATE | | | | | | | | | | | | | | | |
|--------------------------|------------|---------------------|----|------|--|---------------------|----|------|--|---------------------|----|------|--|---------------------|--|---|--|
| | | 11 MAY | | | | 2 JUN | | | | 1 JUL | | | | 4 AUG | | | |
| | | No./dm ² | | % | | No./dm ² | | % | | No./dm ² | | % | | No./dm ² | | % | |
| 2 | NMPW | 0 | | - | | 0 | | - | | 0 | | - | | 0 | | - | |
| | NMPP/FITZ | NS ^c | | - | | 0 | | - | | 0 | | - | | NS ^d | | - | |
| | NMPE | 1.66 | E5 | 0.22 | | 1.16 | E5 | 0.18 | | 0 | | - | | NS ^d | | - | |
| | DEPTH MEAN | 0.83 | E5 | | | 0.39 | E5 | | | 0 | | | | 0 | | - | |
| 7 | NMPW | 1.12 ^b | E5 | 0.55 | | 0 ^b | | - | | 0 | | - | | 0 ^b | | - | |
| | NMPP/FITZ | NS ^c | | - | | 0 ^b | | - | | 0 | | - | | 0 | | - | |
| | NMPE | 2.98 | E4 | 0.12 | | 0 | | - | | 0 | | - | | 0 | | - | |
| | DEPTH MEAN | 7.09 | E4 | | | 0 | | | | 0 | | | | 0 | | - | |
| 12 | NMPW | 7.85 | E3 | 0.53 | | 0 | | - | | 4.81 | E3 | 0.07 | | 0 | | - | |
| | NMPP/FITZ | NS ^c | | - | | 0 | | - | | 0 | | - | | 0 | | - | |
| | NMPE | 0 | | - | | 0 | | - | | 0 | | - | | 0 | | - | |
| | DEPTH MEAN | 3.92 | E3 | | | 0 | | | | 1.60 | E3 | | | 0 | | - | |
| 17 | NMPW | 0 | | - | | 0 | | - | | 0 | | - | | 0 | | - | |
| | NMPP/FITZ | NS ^c | | - | | 0 | | - | | 0 | | - | | 0 | | - | |
| | NMPE | 0 | | - | | 0 | | - | | 7.66 | E3 | 0.01 | | 0 | | - | |
| | DEPTH MEAN | 0 | | | | 0 | | | | 2.55 | E3 | | | 0 | | | |

ABUNDANCE^a OF EUGLENOPHYTA ON BUOY PERIPHYTON SUBSTRATES (Continued)

NINE MILE POINT VICINITY - 1976

| SAMPLE DEPTH (FT) | STATION | DATES | | | | | | | | GRAND MEAN |
|-------------------------|------------|---------------------|---|---------------------|---|---------------------|---|---------------------|---|---------------|
| | | 8 SEP | | 5 OCT | | 2 NOV | | 10 DEC | | |
| | | No./dm ² | % | No./dm ² | % | No./dm ² | % | No./dm ² | % | |
| 2 | NMPW | NS ^{de} | - | 0 ^{bf} | - | NS ^d | - | NS ^c | - | 0 |
| | NMPP/FITZ | NS ^d | - | NS ^c | - | 0 ^g | - | 0 | - | 0 |
| | NMPE | 0 | - | 0 | - | 0 | - | 0 | - | 0.40 E5 |
| | DEPTH MEAN | 0 | | 0 | | 0 | | 0 | | |
| 7 | NMPW | 0 ^b | - | 0 ^f | - | 0 ^b | - | NS ^c | - | 0.16 E5 |
| | NMPP/FITZ | 0 ^b | - | NS ^c | - | NS ^{dg} | - | 0 ^b | - | 0 |
| | NMPE | 0 | - | 0 | - | 0 ^b | - | 0 | - | 0.37 E4 |
| | DEPTH MEAN | 0 | | 0 | | 0 | | 0 | | |
| 12 | NMPW | 0 ^b | - | 0 ^f | - | 0 | - | NS ^c | - | 1.81 E3 |
| | NMPP/FITZ | 0 ^b | - | NS ^c | - | 0 ^g | - | 0 | - | 0 |
| | NMPE | 0 | - | 0 ^f | - | 0 | - | 0 | - | 0 |
| | DEPTH MEAN | 0 | | 0 | | 0 | | 0 | | |
| 17 | NMPW | 0 | - | 0 ^f | - | 0 | - | NS ^c | - | 0 |
| | NMPP/FITZ | 0 | - | NS ^c | - | 0 ^g | - | 0 | - | 0 |
| | NMPE | 0 | - | 0 ^f | - | 0 | - | 0 | - | 1.96 E3 |
| | DEPTH MEAN | 0 | | 0 | | 0 | | 0 | | |

% = Euglenophyta
Total Phytoperiphyton per station and date

NS = No sample
- = Not applicable

^a Mean of R-1 and R-2

^b One sample only

^c Buoy structure lost

^d Substrate lost

^e Plates set on 9 Sep

^f Sample taken 8 Oct

^g Plates set on 2 Nov; sample taken 25 Nov

ABUNDANCE^a OF MYXOPHYTA ON BUOY PERIPHYTON SUBSTRATES

NINE MILE POINT VICINITY - 1976

| SAMPLE DEPTH (FT) | STATION | DATE | | | | | | | | | | | |
|-------------------------|------------|---------------------|---|---------------------|---|---------------------|----|-------|--|---------------------|-----------------|-------|--|
| | | 11 MAY | | 2 JUN | | 1 JUL | | | | 4 AUG | | | |
| | | No./dm ² | % | No./dm ² | % | No./dm ² | | % | | No./dm ² | | % | |
| 2 | NMPW | 0 | - | 0 | - | 1.92 | E8 | 60.63 | | 1.71 | E9 | 87.45 | |
| | NMPP/FITZ | NS ^c | - | 0 | - | 2.80 | E8 | 69.31 | | NS ^d | | - | |
| | NMPE | 0 | - | 0 | - | 2.36 | E8 | 69.27 | | NS ^d | | - | |
| | DEPTH MEAN | 0 | - | 0 | | 2.36 | E8 | | | 1.71 | E9 | | |
| 7 | NMPW | 0 ^b | - | 0 ^b | - | 4.07 | E7 | 78.91 | | 1.69 | E8 ⁱ | 78.73 | |
| | NMPP/FITZ | NS ^c | - | 0 ^b | - | 3.69 | E8 | 79.64 | | 7.20 | E8 | 90.70 | |
| | NMPE | 0 | - | 0 | - | 4.63 | E7 | 81.11 | | 8.36 | E7 | 81.81 | |
| | DEPTH MEAN | 0 | | 0 | | 15.20 | E7 | | | 32.42 | E7 | | |
| 12 | NMPW | 0 | - | 0 | - | 4.40 | E6 | 62.62 | | 1.93 | E8 | 82.12 | |
| | NMPP/FITZ | NS ^c | - | 0 | - | 3.13 | E8 | 88.05 | | 4.94 | E8 | 88.31 | |
| | NMPE | 0 | - | 0 | - | 4.86 | E7 | 92.64 | | 5.56 | E6 | 61.41 | |
| | DEPTH MEAN | 0 | | 0 | | 122.00 | E6 | | | 230.85 | E6 | | |
| 17 | NMPW | 0 | - | 0 | - | 6.99 | E6 | 91.89 | | 9.85 | E6 | 64.88 | |
| | NMPP/FITZ | NS ^c | - | 0 | - | 1.78 | E6 | 48.90 | | 3.29 | E7 | 75.37 | |
| | NMPE | 0 | - | 0 | - | 5.67 | E7 | 97.51 | | 1.47 | E6 | 68.60 | |
| | DEPTH MEAN | 0 | | 0 | | 21.82 | E6 | | | 14.74 | E6 | | |

ABUNDANCE^a OF MYXOPHYTA ON BUOY PERIPHYTON SUBSTRATES (Continued)

NINE MILE POINT VICINITY - 1976

| SAMPLE DEPTH (FT) | STATION | DATE | | | | | | | | GRAND MEAN | | | | | |
|-------------------------|------------|------------------|-----------------|-------|-----------------|------------------|-------|------------------|-----------------|-----------------|----------------|-----------------|---|---------|----|
| | | 8 SEP | | | | 5 OCT | | 2 NOV | | | 1 DEC | | | | |
| | | No./dm | | % | No./dm | | % | No./dm | | | % | No./dm | | % | |
| 2 | NMPW | NS ^{de} | - | | 3.70 | E8 ^{bf} | 95.33 | | NS ^d | - | | NS ^c | - | 4.54 | E8 |
| | NMPP/FITZ | NS ^d | - | | NS ^c | - | | 0 ^g | - | | 0 | - | | 0.70 | E8 |
| | NMPE | 1.43 | E9 | 86.05 | 4.70 | E7 | 95.42 | | 7.46 | E6 ^b | 43.85 | 0 | - | 245.78 | E6 |
| | DEPTH MEAN | 1.43 | E9 | | 20.85 | E7 | | | 3.73 | E6 | | 0 | | | |
| 7 | NMPW | 7.04 | E8 ^b | 94.68 | 6.33 | E8 ^f | 96.25 | | 1.61 | E5 ^b | 22.25 | NS ^c | - | 2209.80 | E5 |
| | NMPP/FITZ | 1.01 | E9 ^b | 96.63 | NS ^c | - | | NS ^{dg} | - | | 0 ^b | - | | 3.50 | E8 |
| | NMPE | 3.85 | E8 | 95.40 | 7.86 | E7 | 88.17 | | 6.36 | E4 ^b | 31.67 | 0 | - | 7419.54 | E4 |
| | DEPTH MEAN | 7.00 | E8 | | 35.58 | E7 | | | 7.49 | E4 | | 0 | | | |
| 12 | NMPW | 2.78 | E8 ^b | 77.95 | 2.23 | E8 ^f | 84.25 | | 1.79 | E5 | 24.22 | NS ^c | - | 997.97 | E5 |
| | NMPP/FITZ | 8.89 | E8 ^b | 95.53 | NS ^c | - | | 0 ^g | - | | 0 | - | | 2.83 | E8 |
| | NMPE | 1.48 | E8 | 64.94 | 2.43 | E7 | 67.96 | | 5.04 | E4 | 73.18 | 0 | - | 2831.38 | E4 |
| | DEPTH MEAN | 4.38 | E8 | | 12.36 | E7 | | | 7.65 | E4 | | 0 | | | |
| 17 | NMPW | 3.85 | E7 | 73.95 | 1.21 | E7 ^f | 35.41 | | 9.57 | E4 | 56.79 | NS ^c | - | 964.80 | E4 |
| | NMPP/FITZ | 1.87 | E8 | 78.68 | NS ^c | - | | 0 ^g | - | | 0 | - | | 36.95 | E6 |
| | NMPE | 6.58 | E6 | 71.84 | 4.56 | E6 ^f | 60.57 | | 8.84 | E3 | 61.30 | 0 | - | 8664.86 | E3 |
| | DEPTH MEAN | 77.36 | E6 | | 8.33 | E6 | | | 34.84 | E3 | | 0 | | | |

^a % = Myxophyta
Total Phytoperiphyton per station and date

NS = No sample
- = Not applicable

^a Mean of R-1 and R-2

^b One sample only

^c Buoy structure lost

^d Substrate lost

^e Plates set on 9 Sep

^f Sample taken 8 Oct

^g Plates set on 2 Nov; sample taken 25 Nov

APPENDIX VIC-1f

ABUNDANCE OF SELECTED SPECIES OF PHYTOPERIPHYTON

ABUNDANCE* AND PERCENT COMPOSITION OF DIATOMA ELONGATUM (BACILLARIOPHYCEAE)
IN BUOY PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH (FT) | TRANSECT | DATES | | | | | | | |
|---------------|-----------|------------------|------------------|------------------|-----------------|-----------------|------------------------------|------------------------------|-----------------|
| | | MAY | JUNE | JULY | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER |
| 2 | NMPW | 1.61E07 40.25 | 2.27E07 60.25 | 8.92E07 28.16 | 7.24E07 3.70 | NS | 0.00E00 0.00 | NS | NS |
| | NMPP/FITZ | NS | 2.24E07 55.41 | 7.59E07 18.83 | NS | NS | NS | 0.00E00 ^a 0.00 | 0.00E00 0.00 |
| | NMPE | 3.48E07 45.33 | 4.17E07 64.31 | 5.96E07 17.49 | NS | 1.72E05 0.01 | 0.00E00 0.00 | 0.00E00 ^a 0.00 | 9.30E04 2.36 |
| 7 | NMPW | 1.03E07 50.48 | 3.41E06 59.83 | 4.09E06 7.93 | 3.16E05 0.15 | 5.00E05 0.07 | 0.00E00 0.00 | 0.00E00 0.00 | NS |
| | NMPP/FITZ | NS | 3.20E07 67.39 | 4.86E07 10.47 | 1.52E06 0.19 | 0.00E00 0.00 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPE | 1.77E06 7.40 | 2.09E06 56.07 | 5.69E06 9.98 | 7.50E04 0.07 | 0.00E00 0.00 | 1.07E04 0.01 | 0.00E00 0.00 | 5.58E03 1.12 |
| 12 | NMPW | 3.71E05 25.02 | 1.57E05 57.47 | 1.18E06 16.85 | 3.76E05 0.16 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 ^a 0.00 | NS |
| | NMPP/FITZ | NS | 4.23E06 59.73 | 2.01E07 5.64 | 1.94E06 0.35 | 0.00E00 0.00 | NS | 7.29E02 0.92 | 6.51E02 8.54 |
| | NMPE | 6.21E04 7.22 | 1.15E05 68.89 | 1.64E06 3.13 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 ^a 0.00 | 0.00E00 0.00 | 1.00E04 4.25 |
| 17 | NMPW | 1.43E05 34.89 | 1.49E04 23.42 | 1.52E05 2.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS |
| | NMPP/FITZ | NS | 3.58E05 77.15 | 1.20E06 33.01 | 1.75E05 0.40 | 0.00E00 0.00 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPE | 3.21E04 26.64 | 3.41E04 49.67 | 4.41E05 0.76 | 6.70E04 3.12 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 |

* IF TWO REPLICATE SAMPLES; NUMBER OF CELLS/DM*2
NS NO SAMPLE TAKEN

^aSpecies identified only, not enumerated

ABUNDANCE* AND PERCENT COMPOSITION OF DIATOMA VULGARE (BACILLARIOPHYTES)
IN BUCCHIERIIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH (FT) | TRANSECT | DATES | | | | | | | | | |
|---------------|-----------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|--|--|
| | | MAY | JUNE | JULY | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER | | |
| 2 | NMPW | 1.38E06 3.45 | 7.82E05 2.08 | 0.00E00 0.00 | 5.54E06 0.28 | NS | 1.93E05 0.05 | NS | NS | | |
| | NMPP/FITZ | NS | 1.74E06 4.32 | 8.07E05 0.20 | NS | NS | NS | 0.00E00 0.00 | 0.00E00 0.00 | | |
| | NMPE | 7.50E05 0.98 | 5.60E05 0.86 | 0.00E00 0.00 | NS | 0.00E00 0.00 | 2.51E04 0.05 | 0.00E00 0.00 | 0.00E00 0.00 | | |
| | NMPW | 2.23E05 1.10 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 3.66E04 0.01 | 2.60E04 3.59 | NS | | |
| | NMPP/FITZ | NS | 3.49E05 0.73 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 0.00E00 0.00 | 0.00E00 0.00 | | |
| | NMPE | 2.04E05 0.85 | 2.44E04 0.65 | 0.00E00 0.00 | 0.00E00 0.00 | 7.85E04 0.02 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | | |
| 12 | NMPW | 1.63E04 1.10 | 3.32E04 12.20 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 1.10E05 0.04 | 0.00E00 0.00 | NS | | |
| | NMPP/FITZ | NS | 1.64E05 2.31 | 6.73E04 0.02 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 0.00E00 0.00 | 0.00E00 0.00 | | |
| | NMPE | 0.00E00 0.00 | 7.44E03 4.44 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 2.48E03 0.01 | 0.00E00 0.00 | 3.60E04 15.25 | | |
| | NMPW | 1.58E04 3.85 | 1.77E04 27.81 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | | |
| | NMPP/FITZ | NS | 6.29E03 1.36 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 4.28E03 23.57 | 0.00E00 0.00 | | |
| | NMPE | 2.79E03 2.32 | 8.06E02 1.17 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 1.51E04 0.20 | 0.00E00 0.00 | 0.00E00 0.00 | | |

* MEAN OF TWO REPLICATE SAMPLES; NUMBER OF CELLS/DM²
NS = NO SAMPLE TAKEN

^a Species identified only, not enumerated

ABUNDANCE* AND PERCENT COMPOSITION OF FRAGILARIA VAUCHERIAE (BACILLARIOPHYCEAE)
IN BUOY PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH (FT) | TRANSECT | DATES | | | | | | | | | |
|---------------|-----------|---------|---------|---------|---------|-----------|---------|----------|----------|--|--|
| | | MAY | JUNE | JULY | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER | | |
| 2 | NMPW | 1.29E06 | 3.27E05 | 2.26E06 | 0.00E00 | NS | 0.00E00 | NS | NS | | |
| | | 3.22 | 0.87 | 0.71 | 0.00 | | 0.00 | | | | |
| | NMPP/FITZ | NS | 1.71E05 | 4.79E06 | NS | NS | NS | 1.02E05 | 3.26E03 | | |
| | | | 0.42 | 1.19 | | | | 16.28 | 27.13 | | |
| | NMPE | 4.16E06 | 2.10E05 | 6.08E05 | NS | 0.00E00 | 1.91E03 | 1.55E05 | 2.56E05 | | |
| | | 5.42 | 0.32 | 0.18 | | 0.00 | 0.00 | 0.91 | 6.49 | | |
| 7 | NMPW | 6.14E05 | 1.85E05 | 4.68E05 | 0.00E00 | 0.00E00 | 0.00E00 | 6.95E03 | NS | | |
| | | 3.02 | 3.24 | 0.91 | 0.00 | 0.00 | 0.00 | 0.96 | | | |
| | NMPP/FITZ | NS | 4.09E05 | 5.88E06 | 0.00E00 | 0.00E00 | NS | 0.00E00 | 0.00E00 | | |
| | | | 0.86 | 1.27 | 0.00 | 0.00 | | 0.00 | 0.00 | | |
| | NMPE | 1.17E06 | 6.44E04 | 3.02E05 | 7.05E06 | 0.00E00 | 0.00E00 | 3.35E03 | 9.00E04 | | |
| | | 4.89 | 1.73 | 0.53 | 6.90 | 0.00 | 0.00 | 1.67 | 18.09 | | |
| 12 | NMPW | 5.08E04 | 6.76E03 | 5.12E04 | 0.00E00 | 0.00E00 | 0.00E00 | 1.00E04 | NS | | |
| | | 3.43 | 2.48 | 0.73 | 0.00 | 0.00 | 0.00 | 1.36 | | | |
| | NMPP/FITZ | NS | 7.81E04 | 4.15E06 | 0.00E00 | 0.00E00 | NS | 9.06E03 | 8.06E02 | | |
| | | | 1.10 | 1.17 | 0.00 | 0.00 | | 11.48 | 10.57 | | |
| | NMPE | 4.99E04 | 0.00E00 | 1.13E05 | 3.80E05 | 0.00E00 | 0.00E00 | 4.50E03 | 4.49E04 | | |
| | | 5.81 | 0.00 | 0.22 | 4.20 | 0.00 | 0.00 | 6.53 | 19.05 | | |
| 17 | NMPW | 1.87E04 | 1.24E03 | 1.41E04 | 0.00E00 | 0.00E00 | 0.00E00 | 4.93E03 | NS | | |
| | | 4.55 | 1.95 | 0.19 | 0.00 | 0.00 | 0.00 | 2.93 | | | |
| | NMPP/FITZ | NS | 2.05E03 | 1.24E05 | 0.00E00 | 0.00E00 | NS | 3.57E02 | 0.00E00 | | |
| | | | 0.44 | 3.40 | 0.00 | 0.00 | | 1.97 | 0.00 | | |
| | NMPE | 8.37E03 | 2.78E03 | 2.87E04 | 1.18E04 | 0.00E00 | 0.00E00 | 0.00E00 | 1.42E04 | | |
| | | 6.95 | 4.04 | 0.05 | 0.55 | 0.00 | 0.00 | 0.00 | 26.17 | | |

* OF TWO REPLICATE SAMPLES; NUMBER OF CELLS/DM*2
NO SAMPLE TAKEN

^aSpecies identified only, not enumerated

ABUNDANCE* AND PERCENT POSITION OF GOMPHONEMA OLIVACEUM (BACILLARIOPH)
IN BUCY PHYTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH (FT) | TRANSECT | DATES | | | | | | | |
|---------------|-----------|------------------|------------------|-----------------|------------------------------|------------------------------|-----------------|------------------|------------------|
| | | MAY | JUNE | JULY | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER |
| 2 | NMPW | 1.73E07 43.31 | 8.86E04 23.53 | 1.21E04 0.38 | 0.00E00 0.00 | NS | 1.16E04 0.30 | NS | NS |
| | NMPP/FITZ | NS | 1.18E07 29.32 | 3.76E05 0.09 | NS | NS | NS | 7.30E04 11.62 | 1.36E03 11.37 |
| | NMPE | 3.03E07 39.47 | 1.70E07 26.23 | 7.49E05 0.22 | NS | 3.44E05 0.02 | 2.83E05 0.57 | 7.91E04 46.49 | 2.69E04 68.38 |
| 7 | NMPW | 4.71E04 23.14 | 1.63E04 28.59 | 7.02E04 0.14 | 0.00E00 0.00 | 0.00E00 0.00 | 3.66E04 0.01 | 3.09E05 42.58 | NS |
| | NMPP/FITZ | NS | 7.12E04 14.99 | 4.12E05 0.09 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPE | 1.74E07 72.80 | 6.55E05 17.59 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 1.70E05 0.19 | 1.00E05 50.00 | 1.62E05 32.51 |
| 12 | NMPW | 6.81E05 45.91 | 4.74E03 1.82 | 9.61E03 0.14 | 0.00E00 0.00 | 0.00E00 0.00 | 3.44E04 0.01 | 1.23E05 16.67 | NS |
| | NMPP/FITZ | NS | 1.51E04 21.27 | 0.00E00 0.00 | 0.00E00 ^a 0.00 | 0.00E00 0.00 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPE | 5.71E05 66.43 | 8.37E03 5.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 ^a 0.00 | 8.62E04 0.24 | 5.86E03 8.51 | 1.03E04 4.36 |
| 17 | NMPW | 7.92E04 19.27 | 8.37E03 13.17 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 4.93E04 0.14 | 3.91E03 2.32 | NS |
| | NMPP/FITZ | NS | 3.39E04 7.29 | 1.72E03 0.05 | 0.00E00 0.00 | 0.00E00 ^a 0.00 | NS | 1.12E03 6.15 | 0.00E00 0.00 |
| | NMPE | 4.37E04 36.29 | 0.00E00 0.00 | 7.66E03 0.01 | 0.00E00 ^a 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 9.30E02 6.45 | 1.67E03 3.09 |

* MEAN OF TWO REPLICATE SAMPLES; NUMBER OF CELLS/DM*2
NS = NO SAMPLE TAKEN

^aSpecies identified only, not enumerated

ABUNDANCE* AND PERCENT COMPOSITION OF NITZSCHIA DISSIPATA (BACILLARIOPHYCEAE)
IN BUOY PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - 1974

| DEPTH (FT) | TRANSECT | DATES | | | | | | | |
|---------------|-----------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|-----------------|
| | | MAY | JUNE | JULY | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER |
| 2 | NMPW | 2.14E06 5.35 | 1.15E05 0.30 | 7.55E06 2.39 | 1.15E08 5.89 | NS | 8.71E06 2.24 | NS | NS |
| | NMPP/FITZ | NS | 4.10E05 1.02 | 2.11E07 5.24 | NS | NS | NS | 8.94E03 1.43 | 0.00E00 0.00 |
| | NMPE | 2.28E06 2.97 | 2.10E06 3.23 | 0.00E00 0.00 | NS | 1.43E08 8.58 | 3.90E05 0.79 | 1.33E06 7.84 | 2.33E04 0.59 |
| 7 | NMPW | 0.00E00 0.00 | 5.12E04 0.90 | 6.87E05 1.33 | 3.51E07 16.33 | 1.34E07 1.80 | 7.74E06 1.18 | 1.55E05 21.29 | NS |
| | NMPP/FITZ | NS | 1.23E06 2.58 | 1.43E07 3.08 | 4.00E07 5.03 | 2.25E06 0.22 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPE | 5.77E05 2.41 | 5.27E03 0.14 | 0.00E00 0.00 | 2.46E06 2.41 | 6.70E06 1.66 | 5.02E06 5.63 | 3.01E04 15.00 | 3.72E03 0.75 |
| 12 | NMPW | 8.47E03 0.57 | 0.00E00 0.00 | 1.97E05 2.80 | 3.19E07 13.53 | 5.62E07 15.77 | 2.67E07 10.10 | 2.82E05 38.17 | NS |
| | NMPP/FITZ | NS | 2.57E05 3.63 | 7.07E06 1.99 | 3.15E07 5.64 | 1.73E07 1.86 | NS | 0.00E00 0.00 | 6.51E02 8.54 |
| | NMPE | 1.29E04 1.50 | 0.00E00 0.00 | 0.00E00 0.00 | 9.66E05 10.67 | 4.14E07 18.13 | 9.51E06 26.59 | 6.54E03 9.50 | 0.00E00 0.00 |
| 17 | NMPW | 4.74E03 1.15 | 0.00E00 0.00 | 4.78E04 0.63 | 1.80E06 11.88 | 8.30E06 15.95 | 1.72E07 50.21 | 1.26E04 7.45 | NS |
| | NMPP/FITZ | NS | 1.14E04 2.45 | 2.29E05 6.29 | 6.49E06 14.87 | 2.76E07 11.59 | NS | 5.58E02 3.07 | 0.00E00 0.00 |
| | NMPE | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 1.18E04 0.55 | 3.20E05 3.49 | 1.05E06 13.92 | 4.65E02 3.23 | 0.00E00 0.00 |

* OF TWO REPLICATE SAMPLES; NUMBER OF CELLS/DM*2
NO SAMPLE TAKEN

ABUNDANCE AND PERCENT COMPOSITION OF SYNEURA CYCLOPUM (BACILLARIACEAE)
IN PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH (FT) | TRANSECT | MAY | JUNE | JULY | DATES AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER |
|---------------|-----------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|-------------------|
| 2 | NMPW | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 0.00E00 0.00 | NS | NS |
| | NMPP/FITZ | NS | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | NS | 3.36E05 53.55 | 7.38E03 61.50 |
| | NMPE | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 7.63E05 19.38 |
| 7 | NMPW | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS |
| | NMPP/FITZ | NS | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 0.00E00 0.00 | 4.09E03 100.00 |
| | NMPE | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 2.03E05 40.77 |
| 12 | NMPW | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS |
| | NMPP/FITZ | NS | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 6.22E04 78.84 | 4.22E03 55.29 |
| | NMPE | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 1.17E05 49.69 |
| 17 | NMPW | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS |
| | NMPP/FITZ | NS | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 1.08E04 59.35 | 3.38E03 100.00 |
| | NMPE | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 3.22E04 59.31 |

* MEAN OF TWO REPLICATE SAMPLES; NUMBER OF CELLS/DM²
NS = NO SAMPLE TAKEN

ABUNDANCE* AND PERCENT COMPOSITION OF LYNGBYA DIGUETII (MYXOPHYTA)
IN BUOY PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH (FT) | TRANSECT | DATES | | | | | | | |
|---------------|-----------|---------|---------|---------|---------|-----------|---------|----------|----------|
| | | MAY | JUNE | JULY | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER |
| 2 | NMPW | 0.00E00 | 0.00E00 | 1.92E08 | 1.71E09 | NS | 3.70E08 | NS | NS |
| | | 0.00 | 0.00 | 60.63 | 87.33 | | 95.33 | | |
| | NMPP/FITZ | NS | 0.00E00 | 2.79E08 | NS | NS | NS | 0.00E00 | 0.00E00 |
| | | | 0.00 | 69.20 | | | | 0.00 | 0.00 |
| | NMPE | 0.00E00 | 0.00E00 | 2.36E08 | NS | 1.43E09 | 4.70E07 | 7.46E06 | 0.00E00 |
| | | 0.00 | 0.00 | 69.27 | | 85.92 | 95.42 | 43.85 | 0.00 |
| 7 | NMPW | 0.00E00 | 0.00E00 | 3.74E07 | 1.69E08 | 6.45E08 | 6.33E08 | 1.61E05 | NS |
| | | 0.00 | 0.00 | 72.50 | 78.73 | 86.79 | 96.17 | 22.25 | |
| | NMPP/FITZ | NS | 0.00E00 | 3.67E08 | 7.19E08 | 7.38E08 | NS | 0.00E00 | 0.00E00 |
| | | | 0.00 | 79.10 | 90.48 | 70.99 | | 0.00 | 0.00 |
| | NMPE | 0.00E00 | 0.00E00 | 3.98E07 | 8.36E07 | 3.80E08 | 7.84E07 | 6.36E04 | 0.00E00 |
| | | 0.00 | 0.00 | 69.84 | 81.81 | 94.26 | 87.97 | 31.67 | 0.00 |
| 12 | NMPW | 0.00E00 | 0.00E00 | 4.03E06 | 1.93E08 | 2.62E08 | 2.21E08 | 1.79E05 | NS |
| | | 0.00 | 0.00 | 57.35 | 82.12 | 73.59 | 83.42 | 24.22 | |
| | NMPP/FITZ | NS | 0.00E00 | 3.00E08 | 4.94E08 | 8.89E08 | NS | 0.00E00 | 0.00E00 |
| | | | 0.00 | 84.22 | 88.31 | 95.53 | | 0.00 | 0.00 |
| | NMPE | 0.00E00 | 0.00E00 | 3.99E07 | 5.56E06 | 1.39E08 | 2.37E07 | 5.04E04 | 0.00E00 |
| | | 0.00 | 0.00 | 76.10 | 61.41 | 60.61 | 66.33 | 73.18 | 0.00 |
| 17 | NMPW | 0.00E00 | 0.00E00 | 6.99E06 | 9.49E06 | 3.82E07 | 1.21E07 | 9.57E04 | NS |
| | | 0.00 | 0.00 | 91.89 | 62.51 | 73.51 | 35.23 | 56.79 | |
| | NMPP/FITZ | NS | 0.00E00 | 1.58E06 | 3.22E07 | 1.87E08 | NS | 0.00E00 | 0.00E00 |
| | | | 0.00 | 43.25 | 73.89 | 78.68 | | 0.00 | 0.00 |
| | NMPE | 0.00E00 | 0.00E00 | 5.18E07 | 1.47E06 | 5.17E06 | 4.34E06 | 8.84E03 | 0.00E00 |
| | | 0.00 | 0.00 | 89.11 | 68.60 | 56.49 | 57.64 | 61.30 | 0.00 |

* M OF TWO REPLICATE SAMPLES; NUMBER OF CELLS/DM*2
NO SAMPLE TAKEN

ABUNDANCE AND PERCENT COMPOSITION OF SELECTED TAXA OF ZOOPLANKTON
IN BUDY PERIPHERY COLLECTIONS

NINE MILE POINT VICINITY - MAY 1976

| DEPTH | TRANSECT | | CILIATA | SUCTORIA | ROTIFERA | OTHER |
|-------|-----------|--------|---------|----------|----------|---------|
| 2 | NMPW | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP/FITZ | | NS | NS | NS | NS |
| | | | | | | |
| 7 | NMPE | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPW | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| 12 | NMPP/FITZ | | NS | NS | NS | NS |
| | | | | | | |
| | NMPE | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| 17 | NMPW | ABUND. | 6.59E03 | 2.77E04 | 0.00E00 | 0.00E00 |
| | | PERCT | 19.22 | 80.78 | 0.00 | 0.00 |
| | NMPP/FITZ | | NS | NS | NS | NS |
| | | | | | | |
| | NMPE | ABUND. | 1.03E04 | 1.51E04 | 0.00E00 | 0.00E00 |
| | | PERCT | 40.66 | 59.34 | 0.00 | 0.00 |
| | NMPW | ABUND. | 1.06E04 | 1.32E04 | 0.00E00 | 0.00E00 |
| | | PERCT | 44.71 | 55.29 | 0.00 | 0.00 |
| | NMPP/FITZ | | NS | NS | NS | NS |
| | | | | | | |
| | NMPE | ABUND. | 6.36E03 | 6.01E03 | 0.00E00 | 0.00E00 |
| | | PERCT | 51.39 | 48.61 | 0.00 | 0.00 |

* MEAN OF TWO REPLICATE SAMPLES; NUMBER OF ORGANISMS/DM*2
NS = NO SAMPLE TAKEN

APPENDIX VIC-1g

ABUNDANCE* AND PERCENT COMPOSITION OF SELECTED TAXA OF ZOOPLANKTON
IN BODY PERIPLANKTON COLLECTIONS

NINE MILE POINT VICINITY - JUNE 1976

| DEPTH | TRANSECT | | CILIATA | SUCTORIA | ROTIFERA | OTHER |
|-------|-----------|--------|---------|----------|----------|---------|
| 2 | NMPW | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP/FITZ | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| 7 | NMPW | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP/FITZ | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | ABUND. | 0.00E00 | 6.46E02 | 0.00E00 | 0.00E00 |
| | | PERCT | 0.00 | 100.00 | 0.00 | 0.00 |
| 12 | NMPW | ABUND. | 0.00E00 | 1.05E03 | 0.00E00 | 0.00E00 |
| | | PERCT | 0.00 | 100.00 | 0.00 | 0.00 |
| | NMPP/FITZ | ABUND. | 0.00E00 | 1.48E04 | 0.00E00 | 0.00E00 |
| | | PERCT | 0.00 | 100.00 | 0.00 | 0.00 |
| | NMPE | ABUND. | 1.86E03 | 5.58E03 | 0.00E00 | 9.30E02 |
| | | PERCT | 22.23 | 66.67 | 0.00 | 11.11 |
| 17 | NMPW | ABUND. | 4.03E03 | 4.65E03 | 0.00E00 | 0.00E00 |
| | | PERCT | 46.43 | 53.57 | 0.00 | 0.00 |
| | NMPP/FITZ | ABUND. | 0.00E00 | 1.84E04 | 0.00E00 | 0.00E00 |
| | | PERCT | 0.00 | 100.00 | 0.00 | 0.00 |
| | NMPE | ABUND. | 5.81E03 | 8.06E02 | 0.00E00 | 0.00E00 |
| | | PERCT | 87.82 | 12.18 | 0.00 | 0.00 |

* OF TWO REPLICATE SAMPLES; NUMBER OF ORGANISMS/D
NO SAMPLE TAKEN

ABUNDANCE AND PERCENT COMPOSITION OF SELECTED TAXA OF ZOOPLANKTON
IN BODY PERIPHERY COLLECTIONS

NINE MILE POINT VICINITY - JUNE 1976

| DEPTH | TRANSECT | | CILIATA | SUCTORIA | ROTIFERA | OTHER |
|-------|-----------|--------|---------|----------|----------|---------|
| 2 | NMPW | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP/FITZ | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| 7 | NMPW | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP/FITZ | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | ABUND. | 6.39E04 | 0.00E00 | 0.00E00 | 0.00E00 |
| | | PERCT | 100.00 | 0.00 | 0.00 | 0.00 |
| 12 | NMPW | ABUND. | 1.53E05 | 0.00E00 | 0.00E00 | 0.00E00 |
| | | PERCT | 100.00 | 0.00 | 0.00 | 0.00 |
| | NMPP/FITZ | ABUND. | 6.73E04 | 0.00E00 | 0.00E00 | 0.00E00 |
| | | PERCT | 100.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| 17 | NMPW | ABUND. | 1.89E05 | 2.17E04 | 0.00E00 | 0.00E00 |
| | | PERCT | 89.69 | 10.31 | 0.00 | 0.00 |
| | NMPP/FITZ | ABUND. | 1.26E05 | 1.72E03 | 0.00E00 | 0.00E00 |
| | | PERCT | 98.66 | 1.34 | 0.00 | 0.00 |
| | NMPE | ABUND. | 1.53E04 | 2.10E04 | 0.00E00 | 0.00E00 |
| | | PERCT | 42.19 | 57.81 | 0.00 | 0.00 |

* MEAN OF TWO REPLICATE SAMPLES; NUMBER OF ORGANISMS/DM*2
NS = NO SAMPLE TAKEN

APPENDIX VIC-1g

ABUNDANCE* AND PERCENT COMPOSITION OF SELECTED TAXA OF ZOOPERIPHYTON
IN BUOY PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - AUGUST 1976

| DEPTH | TRANSECT | | CILIATA | SUCTORIA | ROTIFERA | OTHER |
|-------|-----------|---------|---------|----------|----------|-------|
| 2 | NMPW | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 | |
| | NMPP/FITZ | NS | NS | NS | NS | |
| | NMPE | NS | NS | NS | NS | |
| 7 | NMPW | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 | |
| | NMPP/FITZ | | | | | |
| | ABUND. | 1.38E05 | 0.00E00 | 0.00E00 | 0.00E00 | |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 | |
| | NMPE | | | | | |
| | ABUND. | 2.25E05 | 0.00E00 | 0.00E00 | 0.00E00 | |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 | |
| 12 | NMPW | | | | | |
| | ABUND. | 1.38E05 | 0.00E00 | 0.00E00 | 0.00E00 | |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 | |
| | NMPP/FITZ | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 | |
| | NMPE | | | | | |
| | ABUND. | 1.04E05 | 0.00E00 | 0.00E00 | 0.00E00 | |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 | |
| 17 | NMPW | | | | | |
| | ABUND. | 2.22E05 | 0.00E00 | 0.00E00 | 0.00E00 | |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 | |
| | NMPP/FITZ | | | | | |
| | ABUND. | 8.42E04 | 2.66E04 | 0.00E00 | 0.00E00 | |
| | PERCT | 76.00 | 24.00 | 0.00 | 0.00 | |
| | NMPE | | | | | |
| | ABUND. | 9.98E04 | 0.00E00 | 0.00E00 | 0.00E00 | |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 | |

* OF TWO REPLICATE SAMPLES; NUMBER OF ORGANISMS/
NO SAMPLE TAKEN

ABUNDANCE* AND PERCENT COMPOSITION OF SELECTED TAXA OF ZOOEPHYTON
IN BUOY PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - SEPTEMBER 1976

| DEPTH | TRANSECT | | CILIATA | SUCTORIA | ROTIFERA | OTHER |
|-------|-----------|--------|---------|----------|----------|---------|
| 2 | NMPW | | NS | NS | NS | NS |
| | NMPP/FITZ | | NS | NS | NS | NS |
| | NMPE | | | | | |
| | | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| 7 | NMPW | | | | | |
| | | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP/FITZ | | | | | |
| | | ABUND. | 3.75E05 | 0.00E00 | 0.00E00 | 0.00E00 |
| | | PERCT | 100.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | | |
| | | ABUND. | 9.74E04 | 0.00E00 | 0.00E00 | 0.00E00 |
| | | PERCT | 100.00 | 0.00 | 0.00 | 0.00 |
| 12 | NMPW | | | | | |
| | | ABUND. | 2.13E05 | 0.00E00 | 0.00E00 | 1.13E04 |
| | | PERCT | 94.96 | 0.00 | 0.00 | 5.04 |
| | NMPP/FITZ | | | | | |
| | | ABUND. | 1.99E05 | 0.00E00 | 0.00E00 | 0.00E00 |
| | | PERCT | 100.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | | |
| | | ABUND. | 8.59E04 | 0.00E00 | 0.00E00 | 0.00E00 |
| | | PERCT | 100.00 | 0.00 | 0.00 | 0.00 |
| 17 | NMPW | | | | | |
| | | ABUND. | 8.56E04 | 1.98E03 | 0.00E00 | 1.00E04 |
| | | PERCT | 87.72 | 2.03 | 0.00 | 10.25 |
| | NMPP/FITZ | | | | | |
| | | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 5.53E03 |
| | | PERCT | 0.00 | 0.00 | 0.00 | 100.00 |
| | NMPE | | | | | |
| | | ABUND. | 0.00E00 | 6.68E03 | 0.00E00 | 2.64E03 |
| | | PERCT | 0.00 | 71.70 | 0.00 | 28.30 |

* MEAN OF TWO REPLICATE SAMPLES; NUMBER OF ORGANISMS/DM*2
NS = NO SAMPLE TAKEN

APPENDIX VIC-1g

ABUNDANCE* AND PERCENT COMPOSITION OF SELECTED TAXA OF ZOOPERIPHYTON
IN BUOY PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - OCTOBER 1976

| DEPTH | TRANSECT | CILIATA | SUCTORIA | ROTIFERA | OTHER |
|-------|-----------|---------|----------|----------|---------|
| 2 | NMPW | | | | |
| | ABUND. | 6.45E04 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 |
| | NMPP/FITZ | NS | NS | NS | NS |
| 7 | NMPE | | | | |
| | ABUND. | 9.91E03 | 1.60E04 | 0.00E00 | 0.00E00 |
| | PERCT | 38.25 | 61.75 | 0.00 | 0.00 |
| | NMPP/FITZ | NS | NS | NS | NS |
| 12 | NMPW | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP/FITZ | NS | NS | NS | NS |
| 17 | NMPE | | | | |
| | ABUND. | 1.07E04 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 |
| | NMPP/FITZ | NS | NS | NS | NS |
| 17 | NMPW | | | | |
| | ABUND. | 2.41E05 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 |
| | NMPP/FITZ | NS | NS | NS | NS |
| 17 | NMPE | | | | |
| | ABUND. | 5.60E04 | 1.18E04 | 0.00E00 | 0.00E00 |
| | PERCT | 82.61 | 17.39 | 0.00 | 0.00 |
| | NMPP/FITZ | NS | NS | NS | NS |
| 17 | NMPW | | | | |
| | ABUND. | 8.88E04 | 7.44E03 | 0.00E00 | 2.20E03 |
| | PERCT | 90.21 | 7.56 | 0.00 | 2.23 |
| | NMPP/FITZ | NS | NS | NS | NS |
| 17 | NMPE | | | | |
| | ABUND. | 1.69E05 | 0.00E00 | 0.00E00 | 1.49E04 |
| | PERCT | 91.89 | 0.00 | 0.00 | 8.11 |

* OF TWO REPLICATE SAMPLES; NUMBER OF ORGANISMS/D
 NO SAMPLE TAKEN

ABUNDANCE* AND PERCENT COMPOSITION OF SELECTED TAXA OF ZOOEPHYTE
IN BUOY PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - NOVEMBER 1976

| DEPTH | TRANSECT | CILIATA | SUCTORIA | ROTIFERA | OTHER |
|-------|-----------|---------|----------|----------|---------|
| 2 | NMPW | NS | NS | NS | NS |
| | NMPP/FITZ | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | |
| | ABUND. | 1.55E04 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 |
| 7 | NMPW | | | | |
| | ABUND. | 0.00E00 | 5.21E03 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 100.00 | 0.00 | 0.00 |
| | NMPP/FITZ | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | |
| | ABUND. | 3.35E03 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 |
| 12 | NMPW | | | | |
| | ABUND. | 7.75E02 | 3.35E03 | 0.00E00 | 0.00E00 |
| | PERCT | 18.79 | 81.21 | 0.00 | 0.00 |
| | NMPP/FITZ | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | |
| | ABUND. | 0.00E00 | 2.73E03 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 100.00 | 0.00 | 0.00 |
| 17 | NMPW | | | | |
| | ABUND. | 9.30E02 | 1.24E04 | 0.00E00 | 0.00E00 |
| | PERCT | 6.99 | 93.01 | 0.00 | 0.00 |
| | NMPP/FITZ | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | |
| | ABUND. | 1.86E03 | 5.58E03 | 0.00E00 | 0.00E00 |
| | PERCT | 25.01 | 74.99 | 0.00 | 0.00 |

* MEAN OF TWO REPLICATE SAMPLES; NUMBER OF ORGANISMS/DM*2
NS = NO SAMPLE TAKEN

APPENDIX VIC-1g

ABUNDANCE* AND PERCENT COMPOSITION OF SELECTED TAXA OF ZOOEPHYTE
IN BUOY PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - DECEMBER 1976

| DEPTH TRANSECT | | CILIATA | SUCTORIA | ROTIFERA | OTHER |
|----------------|-----------|---------|----------|----------|---------|
| 2 | NMPW | NS | NS | NS | NS |
| | NMPP/FITZ | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| 7 | NMPW | NS | NS | NS | NS |
| | NMPP/FITZ | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| 12 | NMPW | NS | NS | NS | NS |
| | NMPP/FITZ | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| 17 | NMPW | NS | NS | NS | NS |
| | NMPP/FITZ | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |

* MEAN OF TWO REPLICATE SAMPLES; NUMBER OF ORGANISMS/DM
NS = NO SAMPLE TAKEN

PERCENT LIGHT TRANSMITTANCE VALUES AT
BOTTOM PERIPHYTON STATIONS

NINE MILE POINT VICINITY - 1976

| SAMPLING DATE | TRANSECT/DEPTH CONTOUR (FT) | | | | | | | | | | | | | | |
|---------------------|-----------------------------|------|------|------|------|---------------|------|------|------|------|---------------|------|------|------|------|
| | NMPW | | | | | NMPP | | | | | FITZ | | | | |
| | 5 | 10 | 20 | 30 | 40 | 5 | 10 | 20 | 30 | 40 | 5 | 10 | 20 | 30 | 40 |
| 11 MAY | NS | 2.0 | 0.04 | 0 | 0 | 7.8 | 1.0 | 0.10 | 0.03 | 0 | 4.2 | 2.8 | 0.32 | 0.02 | 0 |
| 14 JUN ^a | 18.0 | 5.4 | 1.0 | 0.27 | 0.20 | NS | 3.2 | 1.4 | 0.40 | 0.17 | 7.6 | 4.5 | 2.2 | 0.78 | 0.20 |
| 16 JUL | 0.40 | 0.12 | 0.02 | 0.01 | NS | 0.90 | 0.17 | 0.03 | 0.01 | 0.00 | 0.90 | 0.08 | 0.02 | 0.01 | 0 |
| 19 AUG | 2.1 | 1.8 | 1.3 | 0.40 | NS | NS | 3.1 | 2.5 | 1.1 | 0.20 | NS | 2.6 | 2.2 | 1.5 | 0.60 |
| 16 SEP | 6.7 | 3.2 | 0.26 | 0.18 | 0.03 | 3.7 | 2.8 | 0.42 | 0.24 | 0.07 | 2.30 | 1.20 | 0.34 | 0.11 | 0.72 |
| 27 AUG | 0.30 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | 2.2 | NS | NS |
| 26 NOV | 20.0 | 10.5 | 5.0 | 2.0 | NS | 15.0 | 5.0 | 3.0 | 1.5 | 0.70 | 17.0 | 5.0 | 4.5 | NS | NS |
| 16 DEC | NOT AVAILABLE | | | | | NOT AVAILABLE | | | | | NOT AVAILABLE | | | | |

^aValues \pm 2%

^bSample taken 25 Nov

NS = No sample

APPENDIX VIC-2b

BIOMASS^a: BOTTOM PERIPHYTON SUBSTRATES

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT | DATES | | | | | | | | | | | |
|--------------------------|------------|---------------------|------------------|------|--------|------|-------|------------------|------------------|-------|--------|-------|-------|
| | | 11 MAY ^b | | | 14 JUN | | | 16 JUL | | | 19 AUG | | |
| | | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN |
| 5 | NMPW | NS | NS | - | 6.4 | 5.6 | 6.00 | 11.4 | 7.5 | 9.45 | 14.9 | 31.0 | 22.95 |
| | FITZ | NS | NS | - | 12.5 | 7.7 | 10.10 | 4.8 | 6.0 | 5.40 | NS | NS | - |
| | NMPP | 1.1 ^c | 0.4 ^c | 0.75 | NS | NS | - | 6.0 ^d | 2.0 ^d | 4.00 | NS | NS | - |
| | NMPE | 3.1 | 7.1 | 5.10 | 5.4 | 1.8 | 3.60 | 8.0 | 3.4 | 5.70 | NA | 65.5 | 65.50 |
| | DEPTH MEAN | 2.10 | 3.75 | 2.92 | 8.10 | 5.03 | 6.57 | 7.55 | 4.72 | 6.14 | 14.90 | 48.25 | 37.13 |
| 10 | NMPW | 2.4 | NS | 2.40 | 8.6 | NS | 8.60 | 6.2 | 7.5 | 6.85 | 7.8 | 4.5 | 6.15 |
| | FITZ | 2.2 | 3.4 | 2.80 | 1.6 | NS | 1.60 | 11.6 | 12.2 | 11.90 | 13.9 | 8.8 | 11.35 |
| | NMPP | NS | 6.6 | 6.60 | NS | 6.8 | 6.80 | 4.8 | 3.0 | 3.90 | NS | 10.4 | 10.40 |
| | NMPE | 1.9 | 1.1 | 1.50 | 10.4 | 5.8 | 8.10 | 6.5 | 8.8 | 7.65 | 12.5 | 20.2 | 16.35 |
| | DEPTH MEAN | 2.17 | 3.70 | 2.93 | 6.87 | 6.30 | 6.64 | 7.28 | 7.88 | 7.58 | 11.40 | 10.98 | 11.16 |
| 20 | NMPW | 1.9 | 2.9 | 2.40 | NS | 5.0 | 5.00 | 10.5 | 7.4 | 8.95 | 6.4 | 6.3 | 6.35 |
| | FITZ | NS | NS | - | 8.9 | 9.0 | 8.95 | 6.6 | 4.0 | 5.30 | 25.3 | 22.5 | 23.90 |
| | NMPP | 3.4 | 2.3 | 2.85 | 10.7 | 6.4 | 8.55 | 8.8 | 5.5 | 7.15 | 9.9 | 20.7 | 15.30 |
| | NMPE | 1.6 | 1.3 | 1.45 | 7.8 | 8.5 | 8.15 | 6.0 | NS | 6.00 | 5.8 | 19.7 | 12.75 |
| | DEPTH MEAN | 2.30 | 2.17 | 2.23 | 9.13 | 7.22 | 8.04 | 7.98 | 5.63 | 6.97 | 11.85 | 17.30 | 14.58 |
| 30 | NMPW | 0.9 | 0.3 | 0.60 | 3.4 | 1.4 | 2.40 | 3.8 | 6.7 | 5.25 | 1.7 | NS | 1.70 |
| | FITZ | NS | 1.0 | 1.00 | 1.4 | 2.5 | 1.95 | 13.5 | 21.6 | 17.55 | 17.8 | 34.0 | 25.90 |
| | NMPP | 2.0 | 2.3 | 2.15 | 2.2 | NS | 2.20 | 15.4 | 3.3 | 9.35 | 4.4 | 7.2 | 5.80 |
| | NMPE | 1.3 | 2.0 | 1.65 | NS | 9.5 | 9.50 | 14.8 | 9.0 | 11.90 | 6.3 | 8.5 | 7.40 |
| | DEPTH MEAN | 1.4 | 1.40 | 1.40 | 2.33 | 4.47 | 3.40 | 11.88 | 10.15 | 11.01 | 7.55 | 16.57 | 11.41 |
| 40 | NMPW | NS | NS | - | NS | NS | - | NS | NS | - | NS | NS | - |
| | FITZ | NS | NS | - | 1.4 | 1.0 | 1.20 | 12.6 | 16.5 | 14.55 | 13.2 | 11.5 | 12.35 |
| | NMPP | 1.0 | 1.6 | 1.30 | 2.3 | 1.3 | 1.80 | 9.3 | 6.7 | 8.00 | 4.6 | NS | 4.60 |
| | NMPE | 0.8 | 1.2 | 1.00 | 6.0 | 7.9 | 6.95 | 15.6 | 7.5 | 11.55 | 15.7 | 17.4 | 16.55 |
| | DEPTH MEAN | 0.90 | 1.40 | 1.15 | 3.23 | 3.40 | 3.32 | 12.50 | 10.23 | 11.38 | 11.17 | 14.45 | 12.48 |

^amg/dm²; ash free weight

^bPlates set on 15 April

^cPlates reset on 21 April

- = Not applicable

^dPlates set on 17 June

NA = Not analyzed

NS = No sample

BIOMASS^a: BODYPHYTE PERIPHYTON SUBSTRATES

NINE MILE POINT VICINITY - 1976

| DEPTH CONTOUR (FT) | TRANSECT | DATES | | | | | | | | | | | | ANNUAL MEAN |
|--------------------------|------------|------------------|------------------|-------|------------------|------------------|------|------------------|------------------|------|------------------|------------------|------|----------------|
| | | 16 SEP | | | 27,30 OCT | | | 26 NOV | | | 16 DEC | | | |
| | | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | |
| 5 | NMPW | 3.7 | 3.6 | 3.65 | 1.9 ^c | 6.2 ^c | 4.05 | 2.8 | 2.7 | 2.75 | 1.0 | 1.3 | 1.15 | 7.14 |
| | FITZ | NS | NS | - | NS ^d | NS ^d | - | NS | 4.3 | 4.30 | 2.6 | 2.2 | 2.40 | 5.73 |
| | NMPP | 23.0 | NS | 23.00 | NS ^d | NS ^d | - | 1.9 | 3.9 | 2.90 | 2.0 | 2.4 | 2.20 | 4.74 |
| | NMPE | 14.6 | 20.8 | 17.70 | NS ^d | NS ^d | - | 1.5 ^f | 2.9 ^f | 2.20 | 0.9 | NS | 0.90 | 11.25 |
| | DEPTH MEAN | 13.77 | 12.20 | 13.14 | 1.90 | 6.20 | 4.05 | 2.07 | 3.45 | 2.86 | 1.62 | 1.97 | 1.77 | 7.57 |
| 10 | NMPW | 3.0 | 2.8 | 2.90 | NS | NS | - | 3.1 | 2.5 | 2.80 | 1.1 | 1.1 | 1.10 | 4.22 |
| | FITZ | NS | NS | - | NS | NS | - | 2.7 | 2.3 | 2.50 | 1.8 | 2.4 | 2.10 | 5.72 |
| | NMPP | 12.7 | NS | 12.70 | NS | NS | - | 3.2 | 1.9 | 2.55 | 2.4 | NS | 2.40 | 5.76 |
| | NMPE | 23.0 | 20.0 | 21.50 | NS | NS | - | 5.1 ^f | 4.2 ^f | 4.65 | 0.8 | 1.5 | 1.15 | 8.70 |
| | DEPTH MEAN | 12.90 | 11.40 | 12.30 | - | - | - | 3.52 | 2.72 | 3.12 | 1.52 | 1.67 | 1.59 | 6.24 |
| 20 | NMPW | 3.4 | 2.2 | 2.80 | NS | NS | - | 2.7 | 3.7 | 3.20 | 1.1 | 0.9 | 1.00 | 4.18 |
| | FITZ | 9.7 | 8.4 | 9.05 | 2.5 ^e | 3.6 ^e | 3.05 | 3.7 | 2.6 | 3.15 | 2.2 | 1.8 | 2.00 | 7.91 |
| | NMPP | 3.0 | 6.0 | 4.50 | NS | NS | - | 2.7 | 1.2 | 1.95 | 2.0 | NS | 2.00 | 6.35 |
| | NMPE | 3.4 | 10.8 | 7.10 | 2.2 ^c | 2.4 ^c | 2.30 | NS ^f | NS ^f | - | 1.4 ^g | 1.4 ^g | 1.40 | 5.56 |
| | DEPTH MEAN | 4.88 | 6.85 | 5.86 | 2.35 | 3.00 | 2.68 | 3.03 | 2.50 | 2.77 | 1.68 | 1.37 | 1.54 | 6.04 |
| 30 | NMPW | 4.4 | 1.9 | 3.15 | NS | NS | - | 1.9 | 5.9 | 3.90 | 1.1 | 1.9 | 1.50 | 2.72 |
| | FITZ | 30.0 | 2.4 | 16.20 | NS | NS | - | NS | NS | - | 3.0 ^g | 3.3 ^g | 3.15 | 11.86 |
| | NMPP | 0.9 | 0.3 | 0.60 | NS | NS | - | 1.6 | NS | 1.60 | NS | NS | - | 3.96 |
| | NMPE | 2.0 | 1.8 | 1.90 | NS | NS | - | NS ^f | NS ^f | - | NS ^g | NS ^g | - | 6.13 |
| | DEPTH MEAN | 9.32 | 1.60 | 5.46 | - | - | - | 1.75 | 5.90 | 3.13 | 2.05 | 2.60 | 2.32 | 6.06 |
| 40 | NMPW | 1.8 ^b | 2.1 ^b | 1.95 | NS | NS | - | NS | NS | - | 1.2 ^g | 1.0 ^g | 1.10 | 1.53 |
| | FITZ | 16.3 | 12.0 | 14.15 | NS | NS | - | NS | NS | - | 3.1 ^g | 2.1 ^g | 2.60 | 8.97 |
| | NMPP | NS | NS | - | NS | NS | - | 3.2 | 1.6 | 2.40 | 1.6 | 0.6 | 1.10 | 3.07 |
| | NMPE | 0.7 | 0.5 | 0.60 | NS | NS | - | 2.7 ^f | 3.6 ^f | 3.15 | NS | NS | - | 6.63 |
| | DEPTH MEAN | 6.27 | 4.87 | 5.57 | - | - | - | 2.95 | 2.60 | 2.78 | 1.97 | 1.23 | 1.60 | 5.65 |

^a mg/dm²/exposure period;
ash-free dry weight
^b Plates set on 20 August

^c Sample taken on 27 October
^d Plates set on 2 November
- = Not applicable
NS = No sample

^e Sample taken on 30 October
^f Sample taken on 25 November
^g Plates set on 6 December

APPENDIX VIC-2c

ABUNDANCE AND PERCENT COMPOSITION OF SELECTED TAXA OF PHYTOPERIPHYTON
IN BOTTOM PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - MAY 1976

| DEPTH | TRANSECT (FT) | CHLORO- PHYTA | CHRYSO- PHYTA | EUGLENO- PHYTA | BACILLAR- IOPHYCEAE | MYXO- PHYTA | DINO- PHYTA | CRYPTO- PHYTA | OTHER |
|-------|------------------|------------------|------------------|-------------------|------------------------|----------------|----------------|------------------|---------|
| 5 | NMPW | NS | NS | NS | NS | NS | NS | NS | NS |
| | NMPP | | | | | | | | |
| | ABUND. | 9.04E03 | 0.00E00 | 3.01E03 | 6.33E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 12.00 | 0.00 | 4.00 | 84.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | FITZ | NS | NS | NS | NS | NS | NS | NS | NS |
| | NMPE | | | | | | | | |
| | ABUND. | 1.22E05 | 0.00E00 | 2.71E04 | 1.53E06 | 1.36E04 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 7.14 | 0.00 | 1.59 | 90.48 | 0.79 | 0.00 | 0.00 | 0.00 |
| 10 | NMPW | | | | | | | | |
| | ABUND. | 4.79E03 | 0.00E00 | 0.00E00 | 8.62E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 5.26 | 0.00 | 0.00 | 94.74 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP | | | | | | | | |
| | ABUND. | 3.98E04 | 0.00E00 | 0.00E00 | 5.02E05 | 1.59E04 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 7.14 | 0.00 | 0.00 | 90.00 | 2.86 | 0.00 | 0.00 | 0.00 |
| | FITZ | | | | | | | | |
| | ABUND. | 4.74E03 | 0.00E00 | 0.00E00 | 9.00E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 5.00 | 0.00 | 0.00 | 95.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 2.52E05 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 20 | NMPW | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 3.20E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 6.78E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | FITZ | NS | NS | NS | NS | NS | NS | NS | NS |
| | NMPE | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 1.78E05 | 9.15E03 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 95.12 | 4.88 | 0.00 | 0.00 | 0.00 |
| 30 | NMPW | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 4.25E03 | 4.68E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 8.33 | 91.67 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 8.27E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | FITZ | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 4.17E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 8.28E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 40 | NMPW | NS | NS | NS | NS | NS | NS | NS | NS |
| | NMPP | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 1.16E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | FITZ | NS | NS | NS | NS | NS | NS | NS | NS |
| | NMPE | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 4.26E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |

* Mean of two replicate samples; number of cells/dm²
 ** Chrysophyta minus Bacillariophyceae

NS = No sample

Plates set 15 April and retrieved 11 May
 exception: NMPP-5 ft - 21 April set

APPENDIX VIC-2c

ABUNDANCE* AND PERCENT COMPOSITION OF SELECTED TAXA OF PHYTOPERIPHYTON
IN BOTTOM PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - JUNE 1976

| DEPTH TRANSECT (FT) | CHLORO- PHYTA | CHRYSO- PHYTA | EUGLEND- PHYTA | BACILLAR- IOPHYCEAE | MYXO- PHYTA | DINO- PHYTA | CRYPTO- PHYTA | OTHER |
|------------------------|--|-----------------------|-----------------------|------------------------|------------------------|-----------------------|-----------------------|-----------------------|
| 5 | NMPW ABUND. 6.80E05 PERCT 19.03 NMPP NS | 0.00E00 0.00 NS | 0.00E00 0.00 NS | 1.68E06 47.09 NS | 1.21E06 33.88 NS | 0.00E00 0.00 NS | 0.00E00 0.00 NS | 0.00E00 0.00 NS |
| | FITZ ABUND. 2.95E06 PERCT 39.59 | 0.00E00 0.00 | 1.10E04 0.15 | 4.48E06 59.96 | 2.21E04 0.30 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPE ABUND. 9.63E05 PERCT 41.08 | 0.00E00 0.00 | 1.45E03 0.06 | 3.23E05 13.79 | 1.06E06 45.07 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 |
| 10 | NMPW ABUND. 1.75E06 PERCT 15.03 | 0.00E00 0.00 | 0.00E00 0.00 | 9.89E06 84.97 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPP ABUND. 6.53E05 PERCT 8.46 | 0.00E00 0.00 | 0.00E00 0.00 | 3.22E06 41.70 | 3.84E06 49.84 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 |
| | FITZ ABUND. 4.94E05 PERCT 18.27 | 0.00E00 0.00 | 0.00E00 0.00 | 1.38E06 51.11 | 8.28E05 30.62 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPE ABUND. 1.16E06 PERCT 11.45 | 0.00E00 0.00 | 0.00E00 0.00 | 3.56E06 35.15 | 5.40E06 53.40 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 |
| 20 | NMPW ABUND. 4.83E05 PERCT 19.56 | 0.00E00 0.00 | 0.00E00 0.00 | 4.50E05 18.22 | 1.54E06 62.22 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPP ABUND. 4.36E05 PERCT 27.69 | 5.15E03 0.33 | 0.00E00 0.00 | 1.13E06 71.99 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 |
| | FITZ ABUND. 5.96E05 PERCT 20.94 | 0.00E00 0.00 | 4.20E03 0.15 | 1.76E06 61.90 | 4.84E05 17.01 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPE ABUND. 1.24E06 PERCT 29.95 | 1.31E04 0.32 | 0.00E00 0.00 | 2.37E06 57.03 | 5.27E05 12.70 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 |
| 30 | NMPW ABUND. 4.44E04 PERCT 8.49 | 7.07E03 1.35 | 0.00E00 0.00 | 1.44E05 27.50 | 3.27E05 62.65 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPP ABUND. 1.86E04 PERCT 41.67 | 3.72E03 8.33 | 0.00E00 0.00 | 2.23E04 50.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 |
| | FITZ ABUND. 1.18E05 PERCT 32.69 | 0.00E00 0.00 | 0.00E00 0.00 | 2.32E05 64.47 | 1.02E04 2.84 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPE ABUND. 1.81E05 PERCT 24.10 | 2.71E04 3.61 | 0.00E00 0.00 | 5.43E05 72.29 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 |
| 40 | NMPW NS | NS | NS | NS | NS | NS | NS | NS |
| | NMPP ABUND. 1.34E04 PERCT 20.43 | 0.00E00 0.00 | 1.37E03 2.10 | 5.07E04 77.48 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 |
| | FITZ ABUND. 6.27E03 PERCT 9.06 | 0.00E00 0.00 | 0.00E00 0.00 | 6.29E04 90.94 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPE ABUND. 1.59E05 PERCT 30.96 | 0.00E00 0.00 | 2.23E03 0.44 | 3.12E05 60.95 | 3.92E04 7.65 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 |

* Mean of two replicate samples; number of cells/dm²
 ** Chrysophyta minus Bacillariophyceae

NS = No sample

Plates set 11 May and retrieved 14 June

APPENDIX VIC-2c

ABUNDANCE* AND PERCENT COMPOSITION OF SELECTED TAXA OF PHYTOPERIPHYTON
IN BOTTOM PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - JULY 1976

| DEPTH | TRANSECT | CHLORO- | CHRYSO- | EUGLENO- | BACILLAR- | MYXO- | DINO- | CRYPTO- | OTHER |
|-------|----------|---------|---------|----------|-----------|---------|---------|---------|---------|
| (FT) | | PHYTA | PHYTA | PHYTA | IOPHYCEAE | PHYTA | PHYTA | PHYTA | |
| 5 | NMPW | | | | | | | | |
| | ABUND. | 2.48E06 | 4.17E04 | 0.00E00 | 1.25E06 | 1.65E07 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 12.24 | 0.21 | 0.00 | 6.16 | 81.39 | 0.00 | 9.00 | 0.00 |
| | NMPP | | | | | | | | |
| | ABUND. | 4.68E05 | 6.16E03 | 6.08E03 | 5.92E04 | 8.44E05 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 33.83 | 0.44 | 0.44 | 4.28 | 61.01 | 0.00 | 0.00 | 0.00 |
| 10 | FITZ | | | | | | | | |
| | ABUND. | 1.02E06 | 0.00E00 | 3.64E04 | 9.28E05 | 3.13E06 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 19.95 | 0.00 | 0.71 | 18.16 | 61.18 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | | | | | |
| | ABUND. | 7.23E06 | 4.16E04 | 3.57E04 | 4.21E05 | 1.00E07 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 40.75 | 0.23 | 0.20 | 2.38 | 56.44 | 0.00 | 0.00 | 0.00 |
| 20 | NMPW | | | | | | | | |
| | ABUND. | 4.66E05 | 1.03E04 | 0.00E00 | 2.44E06 | 6.12E06 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 5.15 | 0.11 | 0.00 | 27.03 | 67.71 | 0.00 | 0.00 | 0.00 |
| | NMPP | | | | | | | | |
| | ABUND. | 2.80E05 | 1.50E04 | 5.46E03 | 4.92E05 | 2.34E06 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 8.95 | 0.48 | 0.17 | 15.72 | 74.67 | 0.00 | 0.00 | 0.00 |
| 30 | FITZ | | | | | | | | |
| | ABUND. | 1.56E05 | 0.00E00 | 0.00E00 | 3.23E06 | 1.61E07 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.80 | 0.00 | 0.00 | 16.60 | 82.60 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | | | | | |
| | ABUND. | 1.05E06 | 0.00E00 | 0.00E00 | 2.46E06 | 1.26E07 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 6.54 | 0.00 | 0.00 | 15.27 | 78.19 | 0.00 | 0.00 | 0.00 |
| 40 | NMPW | | | | | | | | |
| | ABUND. | 2.02E05 | 0.00E00 | 2.93E03 | 3.43E05 | 3.63E05 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 22.20 | 0.00 | 0.32 | 37.62 | 39.86 | 0.00 | 0.00 | 0.00 |
| | NMPP | | | | | | | | |
| | ABUND. | 1.25E04 | 0.00E00 | 0.00E00 | 1.50E05 | 1.11E05 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 4.57 | 0.00 | 0.00 | 55.00 | 40.43 | 0.00 | 0.00 | 0.00 |
| 30 | FITZ | | | | | | | | |
| | ABUND. | 1.88E05 | 0.00E00 | 0.00E00 | 5.56E05 | 8.03E05 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 12.14 | 0.00 | 0.00 | 35.96 | 51.90 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | | | | | |
| | ABUND. | 6.40E04 | 5.81E03 | 2.33E04 | 3.55E05 | 3.26E05 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 8.27 | 0.75 | 3.01 | 45.86 | 42.11 | 0.00 | 0.00 | 0.00 |
| 30 | NMPW | | | | | | | | |
| | ABUND. | 1.24E05 | 4.58E03 | 5.92E03 | 1.18E05 | 4.66E04 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 41.36 | 1.53 | 1.98 | 39.54 | 15.59 | 0.00 | 0.00 | 0.00 |
| | NMPP | | | | | | | | |
| | ABUND. | 3.74E04 | 1.25E04 | 0.00E00 | 6.93E04 | 4.33E05 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 6.77 | 2.26 | 0.00 | 12.53 | 78.44 | 0.00 | 0.00 | 0.00 |
| 30 | FITZ | | | | | | | | |
| | ABUND. | 1.80E05 | 0.00E00 | 0.00E00 | 1.97E05 | 3.10E05 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 26.19 | 0.00 | 0.00 | 28.65 | 45.16 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | | | | | |
| | ABUND. | 4.43E05 | 3.79E03 | 5.17E03 | 1.67E05 | 2.58E04 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 68.72 | 0.59 | 0.80 | 25.89 | 4.01 | 0.00 | 0.00 | 0.00 |
| 40 | NMPW | NS | NS | NS | NS | NS | NS | NS | NS |
| | NMPP | | | | | | | | |
| | ABUND. | 3.27E04 | 0.00E00 | 0.00E00 | 2.93E04 | 3.55E05 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 7.83 | 0.00 | 0.00 | 7.01 | 85.16 | 0.00 | 0.00 | 0.00 |
| | FITZ | | | | | | | | |
| | ABUND. | 7.81E04 | 0.00E00 | 0.00E00 | 9.67E04 | 4.39E05 | 0.00E00 | 0.00E00 | 0.00E00 |
| 40 | NMPE | | | | | | | | |
| | ABUND. | 2.20E05 | 0.00E00 | 3.23E03 | 1.69E05 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 56.10 | 0.00 | 0.82 | 43.07 | 0.00 | 0.00 | 0.00 | 0.00 |

* Mean of two replicate samples; number of cells/dm²
 ** Chrysophyta minus Bacillariophyceae

NS = No sample

Plates set 14 June and retrieved 16 July
 exception: NMPP-5 ft - 17 June set

APPENDIX VIC-2c

ABUNDANCE* AND PERCENT COMPOSITION OF SELECTED TAXA OF PHYTOPERIPHYTON
IN BOTTOM PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - AUGUST 1976

| DEPTH | TRANSECT | CHLORO- PHYTA | CHRYSO-A PHYTA | EUGLEND- PHYTA | BACILLAR- IOPHYCEAE | MYXO- PHYTA | DINO- PHYTA | CRYPTO- PHYTA | OTHER |
|-------|----------|------------------|-------------------|-------------------|------------------------|----------------|----------------|------------------|---------|
| 5 | NMPW | | | | | | | | |
| | ABUND. | 1.92E06 | 2.14E04 | 0.00E00 | 4.12E06 | 5.01E07 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 3.42 | 0.04 | 0.00 | 7.33 | 89.20 | 0.00 | 0.00 | 0.00 |
| | NMPP | NS | NS | NS | NS | NS | NS | NS | NS |
| | FITZ | NS | NS | NS | NS | NS | NS | NS | NS |
| | NMPE | | | | | | | | |
| | ABUND. | 1.83E06 | 6.76E04 | 3.38E04 | 6.25E06 | 1.24E08 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 1.38 | 0.05 | 0.03 | 4.74 | 93.79 | 0.00 | 0.00 | 0.00 |
| 10 | NMPW | | | | | | | | |
| | ABUND. | 9.76E05 | 6.64E03 | 0.00E00 | 1.97E06 | 2.33E07 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 3.72 | 0.03 | 0.00 | 7.51 | 88.75 | 0.00 | 0.00 | 0.00 |
| | NMPP | | | | | | | | |
| | ABUND. | 1.46E06 | 1.66E04 | 0.00E00 | 2.42E05 | 4.26E07 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 3.30 | 0.04 | 0.00 | 0.54 | 96.12 | 0.00 | 0.00 | 0.00 |
| | FITZ | | | | | | | | |
| | ABUND. | 1.07E06 | 2.53E04 | 0.00E00 | 1.92E06 | 3.77E07 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 2.63 | 0.06 | 0.00 | 4.72 | 92.59 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | | | | | |
| | ABUND. | 1.04E06 | 7.81E03 | 0.00E00 | 6.70E06 | 2.92E07 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 2.80 | 0.02 | 0.00 | 18.13 | 79.05 | 0.00 | 0.00 | 0.00 |
| | NMPW | | | | | | | | |
| | ABUND. | 4.88E04 | 0.00E00 | 0.00E00 | 3.62E05 | 4.21E05 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 5.87 | 0.00 | 0.00 | 43.52 | 50.61 | 0.00 | 0.00 | 0.00 |
| | NMPP | | | | | | | | |
| | ABUND. | 8.75E04 | 1.67E03 | 1.67E03 | 4.81E05 | 1.89E05 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 11.51 | 0.22 | 0.22 | 63.25 | 24.81 | 0.00 | 0.00 | 0.00 |
| | FITZ | | | | | | | | |
| | ABUND. | 1.29E05 | 3.39E04 | 5.41E03 | 4.74E05 | 1.77E05 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 15.70 | 4.14 | 0.66 | 57.89 | 21.61 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | | | | | |
| | ABUND. | 5.07E04 | 1.40E03 | 9.92E02 | 2.16E05 | 2.03E05 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 10.75 | 0.30 | 0.21 | 45.69 | 43.05 | 0.00 | 0.00 | 0.00 |
| 30 | NMPW | | | | | | | | |
| | ABUND. | 1.14E04 | 0.00E00 | 0.00E00 | 1.43E04 | 1.43E05 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 6.78 | 0.00 | 0.00 | 8.47 | 84.75 | 0.00 | 0.00 | 0.00 |
| | NMPP | | | | | | | | |
| | ABUND. | 6.30E04 | 2.10E03 | 0.00E00 | 8.24E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 42.72 | 1.42 | 0.00 | 55.86 | 0.00 | 0.00 | 0.00 | 0.00 |
| | FITZ | | | | | | | | |
| | ABUND. | 7.83E05 | 0.00E00 | 7.91E03 | 3.04E05 | 3.01E05 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 56.10 | 0.00 | 0.57 | 21.78 | 21.55 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | | | | | |
| | ABUND. | 1.46E05 | 0.00E00 | 0.00E00 | 1.31E05 | 3.32E05 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 23.93 | 0.00 | 0.00 | 21.55 | 54.52 | 0.00 | 0.00 | 0.00 |
| 40 | NMPW | NS | NS | NS | NS | NS | NS | NS | NS |
| | NMPP | | | | | | | | |
| | ABUND. | 7.56E04 | 4.20E03 | 0.00E00 | 9.24E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 43.90 | 2.44 | 0.00 | 53.66 | 0.00 | 0.00 | 0.00 | 0.00 |
| | FITZ | | | | | | | | |
| | ABUND. | 1.48E05 | 0.00E00 | 0.00E00 | 5.91E04 | 2.05E04 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 64.99 | 0.00 | 0.00 | 26.01 | 9.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | | | | | |
| | ABUND. | 1.22E05 | 2.48E03 | 0.00E00 | 3.17E05 | 1.01E05 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 22.56 | 0.46 | 0.00 | 58.43 | 18.56 | 0.00 | 0.00 | 0.00 |

* Mean or two replicate samples; number of cells/dm²
 ** Chrysophyta minus Bacillariophyceae

NS = No sample

Plates set 16 July and retrieved 19 August
 exception: NMPW-40 ft - 20 July set

APPENDIX VIC-2c

ABUNDANCE* AND PERCENT COMPOSITION OF SELECTED TAXA OF PHYTOPLANKTON
IN BOTTOM PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - SEPTEMBER 1976

| DEPTH | TRANSECT | CHLORO- PHYTA | CHRYSO- PHYTA | EUGLENO- PHYTA | BACILLAR- IOPHYCEAE | MYXO- PHYTA | DINO- PHYTA | CRYPTO- PHYTA | OTHER |
|-------|----------|------------------|------------------|-------------------|------------------------|----------------|----------------|------------------|---------|
| 5 | NMPW | | | | | | | | |
| | ABUND. | 1.89E06 | 0.00E00 | 0.00E00 | 1.41E05 | 1.57E07 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 10.63 | 0.00 | 0.00 | 0.79 | 88.57 | 0.00 | 0.00 | 0.00 |
| | NMPP | | | | | | | | |
| | ABUND. | 1.90E06 | 2.03E05 | 0.00E00 | 3.74E05 | 1.60E08 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 1.17 | 0.12 | 0.00 | 0.23 | 98.47 | 0.00 | 0.00 | 0.00 |
| | FITZ | NS | NS | NS | NS | NS | NS | NS | NS |
| | NMPE | | | | | | | | |
| | ABUND. | 5.33E06 | 0.00E00 | 1.06E04 | 6.45E05 | 4.54E07 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 10.37 | 0.00 | 0.02 | 1.26 | 88.35 | 0.00 | 0.00 | 0.00 |
| 10 | NMPW | | | | | | | | |
| | ABUND. | 9.65E05 | 0.00E00 | 0.00E00 | 5.84E05 | 2.07E07 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 4.33 | 0.00 | 0.00 | 2.62 | 93.05 | 0.00 | 0.00 | 0.00 |
| | NMPP | | | | | | | | |
| | ABUND. | 3.19E06 | 2.24E04 | 0.00E00 | 2.87E06 | 9.70E07 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 3.09 | 0.02 | 0.00 | 2.78 | 94.11 | 0.00 | 0.00 | 0.00 |
| | FITZ | NS | NS | NS | NS | NS | NS | NS | NS |
| | NMPE | | | | | | | | |
| | ABUND. | 2.01E06 | 0.00E00 | 0.00E00 | 4.75E06 | 4.64E07 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 3.79 | 0.00 | 0.00 | 8.93 | 87.27 | 0.00 | 0.00 | 0.00 |
| 20 | NMPW | | | | | | | | |
| | ABUND. | 1.59E05 | 5.86E03 | 0.00E00 | 1.16E06 | 1.33E06 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 5.99 | 0.22 | 0.00 | 43.79 | 50.00 | 0.00 | 0.00 | 0.00 |
| | NMPP | | | | | | | | |
| | ABUND. | 3.27E05 | 0.00E00 | 3.05E03 | 7.18E05 | 8.22E05 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 17.49 | 0.00 | 0.16 | 38.39 | 43.95 | 0.00 | 0.00 | 0.00 |
| | FITZ | | | | | | | | |
| | ABUND. | 4.52E05 | 1.93E03 | 0.00E00 | 5.66E05 | 1.63E06 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 17.06 | 0.07 | 0.00 | 21.38 | 61.49 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | | | | | |
| | ABUND. | 5.72E05 | 5.60E03 | 0.00E00 | 3.66E05 | 3.49E05 | 1.98E03 | 0.00E00 | 0.00E00 |
| | PERCT | 44.21 | 0.43 | 0.00 | 28.25 | 26.95 | 0.15 | 0.00 | 0.00 |
| 30 | NMPW | | | | | | | | |
| | ABUND. | 2.59E05 | 1.09E04 | 9.07E03 | 7.65E04 | 3.90E04 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 65.64 | 2.77 | 2.30 | 19.39 | 9.90 | 0.00 | 0.00 | 0.00 |
| | NMPP | | | | | | | | |
| | ABUND. | 4.22E04 | 1.18E03 | 0.00E00 | 2.83E04 | 5.70E04 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 32.77 | 0.91 | 0.00 | 22.02 | 44.30 | 0.00 | 0.00 | 0.00 |
| | FITZ | | | | | | | | |
| | ABUND. | 2.64E05 | 0.00E00 | 0.00E00 | 4.54E04 | 1.40E05 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 58.67 | 0.00 | 0.00 | 10.11 | 31.22 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | | | | | |
| | ABUND. | 3.71E04 | 0.00E00 | 0.00E00 | 1.61E04 | 6.19E04 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 32.23 | 0.00 | 0.00 | 13.96 | 53.80 | 0.00 | 0.00 | 0.00 |
| 40 | NMPW | | | | | | | | |
| | ABUND. | 6.28E04 | 2.94E03 | 0.00E00 | 7.20E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 45.60 | 2.14 | 0.00 | 52.27 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP | NS | NS | NS | NS | NS | NS | NS | NS |
| | FITZ | | | | | | | | |
| | ABUND. | 7.78E04 | 0.00E00 | 0.00E00 | 4.06E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 65.70 | 0.00 | 0.00 | 34.30 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | | | | | |
| | ABUND. | 5.38E04 | 0.00E00 | 0.00E00 | 7.61E03 | 3.46E04 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 56.06 | 0.00 | 0.00 | 7.92 | 36.01 | 0.00 | 0.00 | 0.00 |

* Mean of two replicate samples; number of cells/dm²
 ** Chrysophyta minus Bacillariophyceae

NS = No sample

Plates set 19 August and retrieved 16 September
 exception: NMPW-40 ft - 20 August set

ABUNDANCE AND PERCENT COMPOSITION OF SELECTED TAXA OF PHYTOPERIPHYTON
IN BOTTOM PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - OCTOBER 1976

| DEPTH | TRANSECT (FT) | CHLORO- PHYTA | CHRYSO- PHYTA | EUGLENO- PHYTA | BACILLAR- IOPHYCEAE | MYXO- PHYTA | DINO- PHYTA | CRYPTO- PHYTA | OTHER |
|-------|------------------|------------------|------------------|-------------------|------------------------|----------------|----------------|------------------|---------|
| 5 | NMPW | | | | | | | | |
| | ABUND. | 6.15E05 | 0.00E00 | 0.00E00 | 7.00E05 | 4.01E06 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 11.56 | 0.00 | 0.00 | 13.15 | 75.29 | 0.00 | 0.00 | 0.00 |
| | NMPP | NS | NS | NS | NS | NS | NS | NS | NS |
| | FITZ | NS | NS | NS | NS | NS | NS | NS | NS |
| | NMPE | | | | | | | | |
| 10 | ABUND. | NS | NS | NS | NS | NS | NS | NS | NS |
| | NMPW | NS | NS | NS | NS | NS | NS | NS | NS |
| | NMPP | NS | NS | NS | NS | NS | NS | NS | NS |
| | FITZ | NS | NS | NS | NS | NS | NS | NS | NS |
| | NMPE | NS | NS | NS | NS | NS | NS | NS | NS |
| | NMPW | NS | NS | NS | NS | NS | NS | NS | NS |
| 20 | NMPP | | | | | | | | |
| | ABUND. | NS | NS | NS | NS | NS | NS | NS | NS |
| | FITZ | | | | | | | | |
| | ABUND. | 4.41E04 | 0.00E00 | 0.00E00 | 1.40E05 | 8.69E04 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 16.29 | 0.00 | 0.00 | 51.64 | 32.07 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | | | | | |
| 30 | ABUND. | 4.48E03 | 0.00E00 | 0.00E00 | 6.33E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 6.61 | 0.00 | 0.00 | 93.39 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPW | NS | NS | NS | NS | NS | NS | NS | NS |
| | NMPP | NS | NS | NS | NS | NS | NS | NS | NS |
| | FITZ | NS | NS | NS | NS | NS | NS | NS | NS |
| | NMPE | NS | NS | NS | NS | NS | NS | NS | NS |
| 40 | NMPW | NS | NS | NS | NS | NS | NS | NS | NS |
| | NMPP | NS | NS | NS | NS | NS | NS | NS | NS |
| | FITZ | NS | NS | NS | NS | NS | NS | NS | NS |
| | NMPE | NS | NS | NS | NS | NS | NS | NS | NS |

Plates set 16 September and
retrieved 27 and 30 October
(27 Oct., NMPW-5 and NMPE-20;
30 Oct., FITZ-20)* Mean of two replicate samples
** Chrysophyta minus Bacillario-
phyceae

NS = No sample

APPENDIX VIC-2c

ABUNDANCE AND PERCENT COMPOSITION OF SELECTED TAXA OF PHYTOPLANKTON
IN BOTTOM PERIPLANKTON COLLECTIONS

NINE MILE POINT VICINITY - NOVEMBER 1976

| DEPTH TRANSECT (FT) | | CHLORO- PHYTA | CHRYSO- PHYTA | EUGLENO- PHYTA | BACILLAR- IOPHYCEAE | MYXO- PHYTA | DIND- PHYTA | CRYPTO- PHYTA | OTHER |
|------------------------|--------|------------------|------------------|-------------------|------------------------|----------------|----------------|------------------|---------|
| 5 | NMPW | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 3.76E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 9.26E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | FITZ | | | | | | | | |
| | ABUND. | 3.96E04 | 0.00E00 | 0.00E00 | 5.60E03 | 1.66E03 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 5.17 | 0.00 | 0.00 | 73.10 | 21.72 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | | | | | |
| | ABUND. | 5.35E04 | 0.00E00 | 0.00E00 | 2.29E03 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 19.49 | 0.00 | 0.00 | 80.51 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10 | NMPW | | | | | | | | |
| | ABUND. | 1.72E04 | 0.00E00 | 0.00E00 | 1.91E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 47.41 | 0.00 | 0.00 | 52.59 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 2.23E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | FITZ | | | | | | | | |
| | ABUND. | 1.44E04 | 0.00E00 | 0.00E00 | 1.02E03 | 9.27E04 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 6.87 | 0.00 | 0.00 | 48.76 | 44.37 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 2.09E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 20 | NMPW | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 1.21E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 3.45E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | FITZ | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 2.02E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | NS | NS | NS | NS | NS | NS | NS | NS |
| 30 | NMPW | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 1.16E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 1.84E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | FITZ | NS | NS | NS | NS | NS | NS | NS | NS |
| | NMPE | NS | NS | NS | NS | NS | NS | NS | NS |
| 40 | NMPW | NS | NS | NS | NS | NS | NS | NS | NS |
| | NMPP | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 9.19E03 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | FITZ | NS | NS | NS | NS | NS | NS | NS | NS |
| | NMPE | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 5.45E03 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |

NS = No sample

* Mean or two replicates; number of cells/dm²
** Chrysophyta minus Bacillariophyceae

Plates set and-retrieved on a variable schedule

Plates set on 27 October: NMPW-5
NMPE-20Plates set on 2 November: NMPP-5
FITZ-5
NMPE-5Plates retrieved 25 November: NMPE-5
NMPE-10
NMPE-40Plates retrieved 26 November: NMPW-5
NMPP-5
FITZ-5

Plates set on 30 October: FITZ-20

| | | | | |
|---------|---------|---------|---------|---------|
| NMPW-10 | NMPP-10 | NMPP-20 | NMPP-30 | NMPP-40 |
| FITZ-10 | FITZ-20 | FITZ-30 | FITZ-40 | FITZ-50 |

| | | | | |
|---------|---------|---------|---------|---------|
| NMPP-10 | NMPP-20 | NMPP-30 | NMPP-40 | NMPP-50 |
| FITZ-10 | FITZ-20 | FITZ-30 | FITZ-40 | FITZ-50 |

APPENDIX C

ABUNDANCE* AND PERCENT COMPOSITION OF SELECTED TAXA OF PHYTOPERIPHYTON IN BOTTOM PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - OCTOBER 1976

| DEPTH TRANSECT (FT) | | CHLORO- PHYTA | CHRYSO- PHYTA | EUGLENO- PHYTA | BACILLAR- IOPHYCEAE | MYXO- PHYTA | DINO- PHYTA | CRYPTO- PHYTA | OTHER |
|------------------------|--------|------------------|------------------|-------------------|------------------------|----------------|----------------|------------------|---------|
| 5 | NMPW | | | | | | | | |
| | ABUND. | 6.15E05 | 0.00E00 | 0.00E00 | 7.00E05 | 4.01E06 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 11.56 | 0.00 | 0.00 | 13.15 | 75.29 | 0.00 | 0.00 | 0.00 |
| | NMPP | NS | NS | NS | NS | NS | NS | NS | NS |
| | FITZ | NS | NS | NS | NS | NS | NS | NS | NS |
| 10 | NMPE | | | | | | | | |
| | ABUND. | NS | NS | NS | NS | NS | NS | NS | NS |
| | NMPW | NS | NS | NS | NS | NS | NS | NS | NS |
| | NMPP | NS | NS | NS | NS | NS | NS | NS | NS |
| | FITZ | NS | NS | NS | NS | NS | NS | NS | NS |
| 20 | NMPE | NS | NS | NS | NS | NS | NS | NS | NS |
| | NMPW | NS | NS | NS | NS | NS | NS | NS | NS |
| | NMPP | NS | NS | NS | NS | NS | NS | NS | NS |
| | ABUND. | NS | NS | NS | NS | NS | NS | NS | NS |
| | FITZ | NS | NS | NS | NS | NS | NS | NS | NS |
| 30 | NMPE | | | | | | | | |
| | ABUND. | 4.41E04 | 0.00E00 | 0.00E00 | 1.40E05 | 8.69E04 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 16.29 | 0.00 | 0.00 | 51.64 | 32.07 | 0.00 | 0.00 | 0.00 |
| | NMPP | NS | NS | NS | NS | NS | NS | NS | NS |
| | FITZ | NS | NS | NS | NS | NS | NS | NS | NS |
| 40 | NMPE | | | | | | | | |
| | ABUND. | 4.48E03 | 0.00E00 | 0.00E00 | 6.33E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 6.61 | 0.00 | 0.00 | 93.39 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP | NS | NS | NS | NS | NS | NS | NS | NS |
| | FITZ | NS | NS | NS | NS | NS | NS | NS | NS |

Plates set 16 September and
retrieved 27 and 30 October
(27 Oct., NMPW-5 and NMPE-20;
30 Oct., FITZ-20)

* Mean of two replicate samples
** Chrysophyta minus Bacillario-
phyceae

NS = No sample

APPENDIX VIC-2c

ABUNDANCE AND PERCENT COMPOSITION OF SELECTED TAXA OF PHYTOPLANKTON
IN BOTTOM PERIPLANKTON COLLECTIONS

NINE MILE POINT VICINITY - NOVEMBER 1976

| DEPTH | TRANSECT | CHLORO- PHYTA | CHRYSO- PHYTA | EUGLENO- PHYTA | BACILLAR- IOPHYCEAE | HYXO- PHYTA | DIND- PHYTA | CRYPTO- PHYTA | OTHER |
|-------|----------|------------------|------------------|-------------------|------------------------|----------------|----------------|------------------|---------|
| (FT) | | | | | | | | | |
| 5 | NMPW | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 3.96E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 9.26E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | FITZ | | | | | | | | |
| | ABUND. | 3.96E04 | 0.00E00 | 0.00E00 | 5.60E03 | 1.66E05 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 5.17 | 0.00 | 0.00 | 73.10 | 21.72 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | | | | | |
| | ABUND. | 5.35E04 | 0.00E00 | 0.00E00 | 2.29E05 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 19.49 | 0.00 | 0.00 | 80.51 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10 | NMPW | | | | | | | | |
| | ABUND. | 1.72E04 | 0.00E00 | 0.00E00 | 1.91E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 47.41 | 0.00 | 0.00 | 52.59 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 2.23E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | FITZ | | | | | | | | |
| | ABUND. | 1.44E04 | 0.00E00 | 0.00E00 | 1.02E05 | 9.27E04 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 6.87 | 0.00 | 0.00 | 48.76 | 44.37 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 2.09E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 20 | NMPW | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 1.21E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 3.45E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | FITZ | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 2.02E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | NS | NS | NS | NS | NS | NS | NS | NS |
| 30 | NMPW | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 1.16E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 1.84E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | FITZ | NS | NS | NS | NS | NS | NS | NS | NS |
| | NMPE | NS | NS | NS | NS | NS | NS | NS | NS |
| 40 | NMPW | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 9.19E03 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | FITZ | NS | NS | NS | NS | NS | NS | NS | NS |
| | NMPE | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 5.45E03 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |

NS = No sample

* Mean or two replicates; number of cells/dm²
** Chrysophyta minus Bacillariophyceae

Plates set and-retrieved on a variable schedule

Plates set on 27 October: NMPW-5
NMPE-20Plates set on 2 November: NMPP-5
FITZ-5
NMPE-5Plates retrieved 25 November: NMPE-5
NMPE-10
NMPE-40Plates retrieved 26 November: NMPW-5
NMPP-5
FITZ-5

Plates set on 30 October: FITZ-20

| | | | |
|---------|---------|---------|---------|
| NMPW-10 | NMPW-20 | NMPW-30 | NMPP-40 |
| NMPP-10 | NMPP-20 | NMPP-30 | FITZ-40 |
| FITZ-10 | FITZ-20 | FITZ-30 | NMPE-40 |
| NMPE-10 | | | NMPP-40 |

| | | | |
|---------|---------|---------|---------|
| NMPW-10 | NMPW-20 | NMPW-30 | NMPP-40 |
| NMPP-10 | NMPP-20 | NMPP-30 | |
| FITZ-10 | FITZ-20 | | |

APPENDIX VIC-2c
ABUNDANCE* AND PERCENT COMPOSITION OF SELECTED TAXA OF PHYTOPERIPHYTON
IN BOTTOM PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - DECEMBER 1976

| DEPTH TRANSECT (FT) | | CHLORO- PHYTA | CHRYSO-A PHYTA | EUGLENO- PHYTA | BACILLAR- IOPHYCEAE | MYXO- PHYTA | DIND- PHYTA | CRYPTO- PHYTA | OTHER |
|------------------------|--------|------------------|-------------------|-------------------|------------------------|----------------|----------------|------------------|---------|
| 5 | NMPW | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 3.43E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP | | | | | | | | |
| | ABUND. | 0.00E00 | 5.58E02 | 0.00E00 | 1.23E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 4.35 | 0.00 | 95.65 | 0.00 | 0.00 | 0.00 | 0.00 |
| | FITZ | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 5.52E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 1.83E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10 | NMPW | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 1.18E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 1.15E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | FITZ | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 4.07E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 1.69E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 20 | NMPW | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 1.66E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 2.08E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | FITZ | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 1.65E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 1.70E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 30 | NMPW | | | | | | | | |
| | ABUND. | 4.09E03 | 0.00E00 | 0.00E00 | 1.71E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 19.30 | 0.00 | 0.00 | 80.70 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP | NS | NS | NS | NS | NS | NS | NS | NS |
| | FITZ | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 1.18E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | NS | NS | NS | NS | NS | NS | NS | NS |
| | NMPW | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 1.27E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP | | | | | | | | |
| 40 | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 4.54E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | FITZ | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 4.06E03 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | NS | NS | NS | NS | NS | NS | NS | NS |

* Mean of two replicate samples; number of cells/dm²

** Chrysophyta minus Bacillariophyceae

NS = No sample

Plates set 26 November and retrieved 16 December

exception: NMPE-5 - 25 November set

NMPE-10 - 25 November set

NMPE-40 - 25 November set

NMPE-20 - 6 December set

NMPE-30 - 6 December set

FITZ-30 - 6 December set

NMPW-40 - 6 December set

FITZ-40 - 6 December set

APPENDIX VIC-2d

ABUNDANCE OF SELECTED SPECIES OF PHYTOPERIPHYTON

ABUNDANCE* AND PERCENT COMPOSITION OF ASTERIONELLA FORMOSA (BACILLARIOPHYCEAE)
IN BOTTOM PERITONTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH (FT) | TRANSECT | MAY | JUNE | JULY | DATES AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER |
|---------------|----------|------------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------------------|
| 5 | NMPW | NS | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 ^a 0.00 |
| | NMPP | 0.00E00 0.00 | NS | 1.08E03 0.08 | NS | 0.00E00 0.00 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | FITZ | NS | 4.84E04 0.65 | 0.00E00 0.00 | NS | NS | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPE | 0.00E00 0.00 | 1.45E03 0.06 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| 10 | NMPW | 0.00E00 0.00 | 3.57E04 0.31 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPP | 0.00E00 0.00 | 0.00E00 0.00 | 3.54E03 0.11 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | FITZ | 0.00E00 0.00 | 2.00E04 0.74 | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPE | 0.00E00 0.00 | 2.51E04 0.25 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| 20 | NMPW | 9.15E03 28.57 | 1.10E04 0.44 | 1.14E04 1.25 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPP | 0.00E00 0.00 | 9.42E04 5.99 | 1.98E03 0.73 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | FITZ | NS | 2.43E04 0.86 | 1.25E04 0.81 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPE | 0.00E00 0.00 | 6.76E04 1.63 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 0.00E00 0.00 |
| 30 | NMPW | 8.51E03 16.67 | 1.78E04 3.40 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPP | 6.89E03 3.33 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 0.00E00 0.00 | NS |
| | FITZ | 0.00E00 0.00 | 5.63E04 15.65 | 7.63E03 1.11 | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | 0.00E00 0.00 |
| | NMPE | 8.72E03 10.53 | 9.95E04 13.25 | 5.17E03 0.80 | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | NS |
| 40 | NMPW | NS | NS | NS | NS | 1.79E03 1.30 | NS | NS | 0.00E00 0.00 |
| | NMPP | 0.00E00 0.00 | 1.17E04 17.80 | 3.16E03 0.76 | 0.00E00 0.00 | NS | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | FITZ | NS | 3.75E04 54.26 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | 0.00E00 0.00 |
| | NMPE | 1.42E04 33.33 | 2.84E04 5.55 | 1.36E04 3.45 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 0.00E00 0.00 | NS |

* MEAN OF TWO REPLICATE SAMPLES; NUMBER OF CELLS/DMA²
NS = NO SAMPLE TAKEN

^a Species identified only, not enumerated

ABUNDANCE* AND PERCENT COMPOSITION OF DIATOMA ELONGATUM (BACILLARIOPHYCEAE)
IN BOTTOM PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH (FT) | TRANSECT | DATES | | | | | | | |
|---------------|----------|---------|---------|---------|---------|-----------|---------|----------|----------|
| | | MAY | JUNE | JULY | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER |
| 5 | NMPW | NS | 2.34E05 | 0.00E00 | 8.99E03 | 0.00E00 | 2.30E03 | 0.00E00 | 0.00E00 |
| | | | 6.54 | 0.00 | 0.02 | 0.00 | 0.04 | 0.00 | 0.00 |
| | NMPP | 2.41E04 | NS | 0.00E00 | NS | 0.00E00 | NS | 2.58E03 | 0.00E00 |
| | | 32.00 | | 0.00 | | 0.00 | | 2.79 | 0.00 |
| | FITZ | NS | 1.18E05 | 0.00E00 | NS | NS | NS | 0.00E00 | 2.48E03 |
| | | | 1.58 | 0.00 | | | | 0.00 | 4.50 |
| 10 | NMPE | 8.59E05 | 3.00E04 | 4.70E04 | 0.00E00 | 0.00E00 | NS | 0.00E00 | 9.61E02 |
| | | 50.26 | 1.28 | 0.26 | 0.00 | 0.00 | | 0.00 | 5.26 |
| | NMPW | 9.58E03 | 4.05E06 | 0.00E00 | 0.00E00 | 0.00E00 | NS | 0.00E00 | 6.20E02 |
| | | 10.53 | 34.78 | 0.00 | 0.00 | 0.00 | | 0.00 | 5.25 |
| | NMPP | 6.76E04 | 2.25E05 | 1.77E03 | 0.00E00 | 0.00E00 | NS | 9.19E02 | 0.00E00 |
| | | 15.71 | 2.91 | 0.06 | 0.00 | 0.00 | | 4.13 | 0.00 |
| 20 | FITZ | 1.42E04 | 2.34E05 | 0.00E00 | 0.00E00 | NS | NS | 2.87E03 | 1.98E03 |
| | | 15.00 | 8.64 | 0.00 | 0.00 | | | 1.37 | 4.87 |
| | NMPE | 1.02E05 | 1.61E06 | 1.07E05 | 0.00E00 | 0.00E00 | NS | 0.00E00 | 2.77E03 |
| | | 40.35 | 15.96 | 0.66 | 0.00 | 0.00 | | 0.00 | 16.39 |
| | NMPW | 1.37E04 | 2.96E05 | 0.00E00 | 4.59E03 | 0.00E00 | NS | 0.00E00 | 0.00E00 |
| | | 42.86 | 12.00 | 0.00 | 0.55 | 0.00 | | 0.00 | 0.00 |
| 30 | NMPP | 1.94E04 | 7.17E05 | 9.61E02 | 0.00E00 | 0.00E00 | NS | 0.00E00 | 1.74E03 |
| | | 28.57 | 45.55 | 0.35 | 0.00 | 0.00 | | 0.00 | 8.33 |
| | FITZ | NS | 8.28E05 | 1.48E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | | | 29.12 | 0.96 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | 8.69E04 | 1.11E06 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | NS | 0.00E00 |
| | | 46.34 | 26.86 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 |
| 40 | NMPW | 1.28E04 | 7.57E04 | 1.35E03 | 0.00E00 | 0.00E00 | NS | 0.00E00 | 0.00E00 |
| | | 25.00 | 14.49 | 0.45 | 0.00 | 0.00 | | 0.00 | 0.00 |
| | NMPP | 3.45E04 | 7.44E03 | 0.00E00 | 0.00E00 | 0.00E00 | NS | 0.00E00 | NS |
| | | 41.67 | 16.67 | 0.00 | 0.00 | 0.00 | | 0.00 | |
| | FITZ | 9.26E03 | 6.08E04 | 0.00E00 | 0.00E00 | 0.00E00 | NS | NS | 0.00E00 |
| | | 22.22 | 16.91 | 0.00 | 0.00 | 0.00 | | | 0.00 |
| 40 | NMPE | 1.74E04 | 2.17E05 | 5.17E03 | 0.00E00 | 0.00E00 | NS | NS | NS |
| | | 21.05 | 28.92 | 0.80 | 0.00 | 0.00 | | | |
| | NMPW | NS | NS | NS | NS | 0.00E00 | NS | NS | 0.00E00 |
| | | | | | | 0.00 | | | 0.00 |
| | NMPP | 0.00E00 | 8.24E03 | 1.05E03 | 0.00E00 | NS | NS | 2.12E03 | 0.00E00 |
| | | 0.00 | 12.58 | 0.25 | 0.00 | | | 23.13 | 0.00 |
| 40 | FITZ | NS | 2.31E03 | 3.72E03 | 0.00E00 | 0.00E00 | NS | NS | 0.00E00 |
| | | | 3.35 | 0.61 | 0.00 | 0.00 | | | 0.00 |
| | NMPE | 3.55E03 | 1.33E05 | 1.00E04 | 3.19E04 | 0.00E00 | NS | 0.00E00 | NS |
| | | 8.33 | 25.98 | 2.55 | 5.88 | 0.00 | | 0.00 | |

* NEAR TWO REPLICATE SAMPLES; NUMBER OF CELLS/DM*2
NS = NO SAMPLE TAKEN

ABUNDANCE* AND PERCENT COMPOSITION OF FRAGILARIA CAPUCINA (BACILLARIOPHYCEAE)
IN BOTTOM PERIODIC COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH (FT) | TRANSECT | DATES | | | | | | | |
|---------------|----------|---------|---------|---------|---------|-----------|---------|----------|----------|
| | | MAY | JUNE | JULY | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER |
| 5 | NMPW | NS | 4.58E04 | 8.17E04 | 0.00E00 | 0.00E00 | 1.09E03 | 3.22E03 | 0.00E00 |
| | | | 1.28 | 0.40 | 0.00 | 0.00 | 0.02 | 8.12 | 0.00 |
| | NMPP | 0.00E00 | NS | 0.00E00 | NS | 0.00E00 | NS | 7.32E03 | 0.00E00 |
| | | 0.00 | | 0.00 | | 0.00 | | 7.91 | 0.00 |
| | FITZ | NS | 1.15E04 | 1.50E04 | NS | NS | NS | 1.32E04 | 6.51E02 |
| | | | 15.35 | 0.29 | | | | 1.72 | 1.18 |
| | NMPE | 2.71E04 | 2.11E04 | 1.03E04 | 0.00E00 | 0.00E00 | NS | 4.59E03 | 0.00E00 |
| | | 1.59 | 0.90 | 0.06 | 0.00 | 0.00 | | 1.61 | 0.00 |
| 10 | NMPW | 2.87E04 | 8.93E05 | 2.52E05 | 0.00E00 | 0.00E00 | NS | 0.00E00 | 0.00E00 |
| | | 31.58 | 7.67 | 2.79 | 0.00 | 0.00 | | 0.00 | 0.00 |
| | NMPP | 0.00E00 | 5.31E05 | 0.00E00 | 1.66E04 | 1.66E05 | NS | 1.03E03 | 0.00E00 |
| | | 0.00 | 6.88 | 0.00 | 0.04 | 0.16 | | 4.64 | 0.00 |
| | FITZ | 5.68E04 | 1.74E05 | 0.00E00 | 5.22E04 | NS | NS | 7.18E02 | 0.00E00 |
| | | 60.00 | 6.42 | 0.00 | 0.13 | | | 0.34 | 0.00 |
| | NMPE | 0.00E00 | 1.99E05 | 1.79E05 | 0.00E00 | 3.80E05 | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 1.96 | 1.11 | 0.00 | 0.71 | | 0.00 | 0.00 |
| 20 | NMPW | 0.00E00 | 0.00E00 | 8.80E03 | 0.00E00 | 0.00E00 | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 0.00 | 0.97 | 0.00 | 0.00 | | 0.00 | 0.00 |
| | NMPP | 0.00E00 | 1.03E04 | 0.00E00 | 3.09E04 | 7.99E03 | NS | 2.33E03 | 0.00E00 |
| | | 0.00 | 0.65 | 0.00 | 4.07 | 0.43 | | 6.73 | 0.00 |
| | FITZ | NS | 2.73E05 | 3.39E04 | 6.62E03 | 3.94E03 | 3.33E03 | 3.45E03 | 1.80E03 |
| | | | 9.61 | 2.19 | 0.81 | 0.15 | 1.23 | 17.05 | 10.88 |
| | NMPE | 0.00E00 | 4.80E05 | 0.00E00 | 0.00E00 | 0.00E00 | 4.56E03 | NS | 0.00E00 |
| | | 0.00 | 11.58 | 0.00 | 0.00 | 0.00 | 6.74 | | 0.00 |
| 30 | NMPW | 0.00E00 | 1.49E03 | 3.23E03 | 0.00E00 | 0.00E00 | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 0.28 | 1.08 | 0.00 | 0.00 | | 0.00 | 0.00 |
| | NMPP | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | NS | 0.00E00 | NS |
| | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | |
| | FITZ | 0.00E00 | 2.74E04 | 0.00E00 | 3.82E03 | 0.00E00 | NS | NS | 2.14E03 |
| | | 0.00 | 7.62 | 0.00 | 0.27 | 0.00 | | | 18.11 |
| | NMPE | 0.00E00 | 4.52E04 | 0.00E00 | 0.00E00 | 0.00E00 | NS | NS | NS |
| | | 0.00 | 6.02 | 0.00 | 0.00 | 0.00 | | | |
| 40 | NMPW | NS | NS | NS | NS | 0.00E00 | NS | NS | 0.00E00 |
| | | | | | | 0.00 | | | 0.00 |
| | NMPP | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | NS | NS | 0.00E00 | 9.92E02 |
| | | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | 2.19 |
| | FITZ | NS | 3.26E03 | 0.00E00 | 1.02E04 | 2.97E04 | NS | NS | 0.00E00 |
| | | | 4.75 | 0.00 | 4.50 | 25.10 | | | 0.00 |
| | NMPE | 0.00E00 | 2.68E04 | 6.46E03 | 5.43E04 | 0.00E00 | NS | 0.00E00 | NS |
| | | 0.00 | 5.24 | 1.64 | 10.00 | 0.00 | | 0.00 | |

* MEAN OF TWO REPLICATE SAMPLES; NUMBER OF CELLS/DM*2
NS = NO SAMPLE TAKEN

ABUNDANCE* AND PERCENT COMPOSITION OF FRAGILARIA VAUCHERIAE (BACILLARIOPHYCEAE)
IN BOTTOM PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - 1974

| DEPTH (FT) | TRANSECT | DATES | | | | | | | |
|---------------|----------|------------------|------------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|
| | | MAY | JUNE | JULY | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER |
| 5 | NMPW | NS | 1.64E05 4.58 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 3.27E03 0.06 | 1.69E04 42.64 | 2.15E04 62.57 |
| | NMPP | 9.04E03 12.00 | NS | 0.00E00 0.00 | NS | 0.00E00 0.00 | NS | 3.92E04 42.33 | 4.19E03 32.61 |
| | FITZ | NS | 1.19E04 16.01 | 0.00E00 0.00 | NS | NS | NS | 2.83E05 36.90 | 1.85E04 33.56 |
| | NMPE | 1.04E05 6.08 | 7.97E04 3.40 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 1.23E05 43.33 | 6.73E03 36.84 |
| | NMPW | 0.00E00 0.00 | 1.04E06 8.90 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 0.00E00 0.00 | 3.94E03 33.34 |
| | NMPP | 0.00E00 0.00 | 6.73E05 8.73 | 1.77E03 0.06 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 9.99E03 44.85 | 2.88E03 25.00 |
| 10 | FITZ | 0.00E00 0.00 | 2.54E05 9.38 | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | 4.62E04 22.12 | 1.80E04 44.22 |
| | NMPE | 6.18E04 24.56 | 8.37E04 0.83 | 0.00E00 0.00 | 0.00E00 0.00 | 2.15E05 0.40 | NS | 6.36E03 30.39 | 6.96E03 41.12 |
| | NMPW | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 0.00E00 0.00 | 3.10E03 18.69 |
| | NMPP | 0.00E00 0.00 | 1.30E04 0.83 | 0.00E00 0.00 | 0.00E00 0.00 | 2.15E04 1.15 | NS | 4.51E03 13.05 | 6.95E03 33.34 |
| | FITZ | NS | 4.04E04 1.42 | 0.00E00 0.00 | 0.00E00 0.00 | 1.76E04 0.67 | 1.47E04 5.43 | 8.38E03 41.48 | 3.01E03 18.20 |
| | NMPE | 0.00E00 0.00 | 1.65E05 3.98 | 0.00E00 0.00 | 0.00E00 0.00 | 3.27E03 0.25 | 7.90E03 11.65 | NS | 6.08E03 35.77 |
| 20 | NMPW | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 3.32E03 28.48 | 1.86E03 8.77 |
| | NMPP | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 6.89E03 37.50 | NS |
| | FITZ | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | 2.14E03 18.11 |
| | NMPE | 0.00E00 0.00 | 1.81E04 2.41 | 0.00E00 0.00 | 0.00E00 0.00 | 1.61E03 1.40 | NS | NS | NS |
| | NMPW | NS | NS | NS | NS | 0.00E00 0.00 | NS | NS | 0.00E00 0.00 |
| | NMPP | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | 0.00E00 0.00 | 7.94E03 17.50 |
| 30 | FITZ | NS | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | 0.00E00 0.00 |
| | NMPE | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 3.50E03 64.22 | NS |
| | NMPW | NS | NS | NS | NS | 0.00E00 0.00 | NS | NS | 0.00E00 0.00 |
| | NMPP | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | 0.00E00 0.00 | 7.94E03 17.50 |
| | FITZ | NS | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | 0.00E00 0.00 |
| | NMPE | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 3.50E03 64.22 | NS |
| 40 | NMPW | NS | NS | NS | NS | 0.00E00 0.00 | NS | NS | 0.00E00 0.00 |
| | NMPP | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | 0.00E00 0.00 | 7.94E03 17.50 |
| | FITZ | NS | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | 0.00E00 0.00 |
| | NMPE | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 3.50E03 64.22 | NS |
| | NMPW | NS | NS | NS | NS | 0.00E00 0.00 | NS | NS | 0.00E00 0.00 |
| | NMPP | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | 0.00E00 0.00 | 7.94E03 17.50 |

* MEAN OF TWO REPLICATE SAMPLES; NUMBER OF CELLS/DM²
NS = NO SAMPLE TAKEN

ABUNDANCE* AND PERCENT COMPOSITION OF GOMPHONEMA OLIVACEUM (BACILLARIOPHYCEA)
IN BOTTOM PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH (FT) | TRANSECT | MAY | JUNE | JULY | DATES AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER |
|---------------|----------|------------------|-----------------|-----------------|------------------------------|-----------------|-----------------|------------------|------------------|
| 5 | NMPW | NS | 1.80E03 0.05 | 0.00E00 0.00 | 0.00E00 ^a 0.00 | 7.31E03 0.04 | 2.42E05 4.54 | 3.42E03 8.63 | 5.32E03 15.51 |
| | NMPP | 1.51E04 20.00 | NS | 0.00E00 0.00 | NS | 0.00E00 0.00 | NS | 2.58E03 2.77 | 5.58E02 4.35 |
| | FITZ | NS | 8.05E04 1.08 | 1.10E04 0.22 | NS | NS | NS | 1.08E05 14.14 | 2.11E04 38.17 |
| | NMPE | 1.76E05 10.32 | 9.18E03 0.39 | 1.48E04 0.08 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 5.90E04 20.71 | 1.92E03 10.52 |
| 10 | NMPW | 0.00E00 0.00 | 1.89E05 1.63 | 2.76E04 0.30 | 0.00E00 0.00 | 1.38E04 0.06 | NS | 7.61E02 2.09 | 7.29E02 6.17 |
| | NMPP | 8.76E04 15.71 | 5.18E04 0.67 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | FITZ | 4.74E03 5.00 | 2.47E05 9.14 | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | 7.90E03 3.78 | 5.40E03 13.24 |
| | NMPE | 1.77E04 7.02 | 6.42E04 0.63 | 1.71E04 0.11 | 0.00E00 0.00 | 8.56E03 0.02 | NS | 0.00E00 0.00 | 7.29E02 4.31 |
| 20 | NMPW | 0.00E00 0.00 | 1.10E04 0.44 | 2.85E03 0.31 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPP | 4.84E03 7.14 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 1.56E03 0.08 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | FITZ | NS | 3.50E04 1.23 | 0.00E00 0.00 | 0.00E00 0.00 | 3.65E03 0.14 | 1.18E03 0.43 | 3.76E03 18.61 | 1.80E03 10.88 |
| | NMPE | 0.00E00 0.00 | 1.31E04 0.32 | 5.81E03 0.75 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 8.06E02 4.74 |
| 30 | NMPW | 4.25E03 8.33 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 1.11E03 9.50 | 1.02E03 4.83 |
| | NMPP | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 0.00E00 0.00 | NS |
| | FITZ | 0.00E00 0.00 | 4.90E03 1.36 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | 2.14E03 18.11 |
| | NMPE | 8.72E03 10.53 | 2.71E04 3.61 | 5.17E03 0.80 | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | NS |
| 40 | NMPW | NS | NS | NS | NS | 0.00E00 0.00 | NS | NS | 0.00E00 0.00 |
| | NMPP | 0.00E00 0.00 | 5.14E03 7.85 | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | 0.00E00 0.00 | 1.44E04 31.65 |
| | FITZ | NS | 0.00E00 0.00 | 3.72E03 0.61 | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | 0.00E00 0.00 |
| | NMPE | 0.00E00 0.00 | 5.25E03 1.02 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 9.76E02 17.89 | NS |

* MEAN OF TWO REPLICATE SAMPLES; NUMBER OF CELLS/DM*2
NS = NO SAMPLE TAKEN

^a Species identified only, not enumerated

ABUNDANCE* AND PERCENT COMPOSITION OF NAVICULA CRYPTOCEPHALA (BACILLARIOPHYCEAE)
IN BOTTOM PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH (FT) | TRANSECT | DATES | | | | | | | |
|---------------|----------|------------------|-----------------|-----------------|------------------------------|-----------------|------------------------------|------------------|-----------------|
| | | MAY | JUNE | JULY | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER |
| 5 | NMPW | NS | 1.29E04 0.36 | 7.48E03 0.04 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 ^a 0.00 | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPP | 0.00E00 0.00 | NS | 1.08E03 0.08 | NS | 0.00E00 0.00 | NS | 2.80E03 3.02 | 0.00E00 0.00 |
| | FITZ | NS | 5.73E04 0.77 | 0.00E00 0.00 | NS | NS | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPE | 1.81E04 1.06 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| 10 | NMPW | 4.79E03 5.26 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 9.19E03 0.04 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPP | 0.00E00 0.00 | 7.77E04 1.01 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 9.19E02 4.13 | 0.00E00 0.00 |
| | FITZ | 0.00E00 0.00 | 4.01E04 1.48 | 0.00E00 0.00 | 0.00E00 ^a 0.00 | NS | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPE | 4.41E03 1.75 | 1.25E04 0.12 | 1.71E04 0.11 | 0.00E00 0.00 | 1.60E04 0.03 | NS | 9.05E02 4.32 | 0.00E00 0.00 |
| 20 | NMPW | 4.58E03 14.29 | 1.10E04 0.44 | 0.00E00 0.00 | 0.00E00 0.00 | 1.26E03 0.05 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPP | 0.00E00 0.00 | 1.58E04 1.00 | 0.00E00 0.00 | 0.00E00 0.00 | 1.53E04 0.82 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | FITZ | NS | 2.36E04 0.83 | 0.00E00 0.00 | 0.00E00 0.00 | 1.72E03 0.07 | 0.00E00 ^a 0.00 | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPE | 4.58E03 2.44 | 1.51E04 0.36 | 5.81E03 0.75 | 0.00E00 0.00 | 3.27E03 0.25 | 0.00E00 ^a 0.00 | NS | 0.00E00 0.00 |
| 30 | NMPW | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPP | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 1.18E03 0.91 | NS | 0.00E00 0.00 | NS |
| | FITZ | 4.63E03 11.11 | 4.90E03 1.36 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | 0.00E00 0.00 |
| | NMPE | 4.36E03 5.26 | 9.04E03 1.20 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | NS |
| 40 | NMPW | NS | NS | NS | NS | 0.00E00 0.00 | NS | NS | 0.00E00 0.00 |
| | NMPP | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | 1.06E03 11.57 | 0.00E00 0.00 |
| | FITZ | NS | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | 0.00E00 0.00 |
| | NMPE | 0.00E00 0.00 | 1.51E03 0.29 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 0.00E00 0.00 | NS |

* MEAN OF TWO REPLICATE SAMPLES; NUMBER OF CELLS/DM²
= NO SAMPLE TAKEN

^a Species identified only, not enumerated

ABUNDANCE* AND PERCENT COMPOSITION OF NAVICULA TRIPUNCTATA (BACILLARIOPHYCEA)
IN BOTTOM PERMEATION COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH (FT) | TRANSECT | DATES | | | | | | | |
|---------------|----------|---------|---------|---------|---------|-----------|---------|----------|----------|
| | | MAY | JUNE | JULY | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER |
| 5 | NMFW | NS | 2.16E05 | 9.70E04 | 1.90E05 | 3.62E03 | 5.50E03 | 3.22E03 | 5.41E03 |
| | | | 6.06 | 0.48 | 0.34 | 0.02 | 0.10 | 8.12 | 15.78 |
| | NMPP | 6.03E03 | NS | 1.12E04 | NS | 3.38E04 | NS | 1.10E04 | 5.58E03 |
| | | 8.00 | | 0.81 | | 0.02 | | 11.86 | 43.48 |
| | FITZ | NS | 3.73E05 | 8.89E04 | NS | NS | NS | 5.28E03 | 7.97E03 |
| | | | 4.99 | 1.74 | | | | 0.69 | 14.45 |
| | NMPE | 1.81E04 | 5.73E03 | 5.68E04 | 4.06E05 | 1.86E03 | NS | 1.54E03 | 2.88E03 |
| | | 1.06 | 0.24 | 0.32 | 0.31 | 0.00 | | 0.54 | 15.79 |
| 10 | NMPW | 0.00E00 | 6.07E05 | 4.60E05 | 2.12E05 | 1.32E05 | NS | 7.61E02 | 1.35E02 |
| | | 0.00 | 5.22 | 5.09 | 0.81 | 0.59 | | 2.09 | 11.42 |
| | NMPP | 1.91E05 | 3.50E05 | 7.83E04 | 2.54E04 | 5.21E05 | NS | 2.76E03 | 0.00E00 |
| | | 34.29 | 4.53 | 2.50 | 0.06 | 0.51 | | 12.37 | 0.00 |
| | FITZ | 1.42E04 | 1.07E05 | 3.63E05 | 5.50E04 | NS | NS | 1.09E04 | 4.68E03 |
| | | 115.00 | 3.95 | 1.26 | 0.13 | | | 5.22 | 11.49 |
| | NMPE | 1.32E04 | 8.16E04 | 1.30E05 | 4.60E05 | 5.47E05 | NS | 5.45E03 | 4.28E03 |
| | | 5.26 | 0.81 | 0.81 | 1.24 | 1.03 | | 26.06 | 25.28 |
| 20 | NMPW | 0.00E00 | 7.68E04 | 4.33E04 | 7.17E04 | 1.95E05 | NS | 2.63E03 | 4.12E03 |
| | | 0.00 | 3.11 | 4.75 | 8.62 | 7.33 | | 21.76 | 24.86 |
| | NMPP | 0.00E00 | 7.81E04 | 7.73E04 | 7.15E04 | 7.16E04 | NS | 2.25E03 | 1.74E03 |
| | | 0.00 | 4.97 | 28.29 | 9.41 | 3.83 | | 6.53 | 8.33 |
| | FITZ | NS | 1.36E05 | 1.85E05 | 1.20E04 | 5.76E04 | 1.98E04 | 2.04E03 | 6.91E03 |
| | | | 4.77 | 11.95 | 1.47 | 2.18 | 7.30 | 10.09 | 41.84 |
| | NMPE | 0.00E00 | 2.57E04 | 1.05E05 | 2.17E04 | 3.15E04 | 9.07E03 | NS | 3.64E03 |
| | | 0.00 | 0.62 | 13.53 | 4.60 | 2.43 | 13.39 | | 22.63 |
| 30 | NMPW | 4.25E03 | 1.15E04 | 1.32E04 | 2.85E03 | 1.13E04 | NS | 0.00E00 | 3.91E03 |
| | | 8.33 | 2.21 | 4.41 | 1.70 | 2.85 | | 0.00 | 18.42 |
| | NMPP | 2.07E04 | 3.72E03 | 8.31E03 | 4.20E03 | 6.46E03 | NS | 0.00E00 | NS |
| | | 25.00 | 8.33 | 1.50 | 2.85 | 5.02 | | 0.00 | |
| | FITZ | 4.63E03 | 4.90E03 | 1.90E04 | 3.82E03 | 0.00E00 | NS | NS | 0.00E00 |
| | | 11.11 | 1.36 | 2.77 | 0.27 | 0.00 | | | 0.00 |
| | NMPE | 4.36E03 | 0.00E00 | 3.79E03 | 2.98E03 | 8.04E02 | NS | NS | NS |
| | | 5.26 | 0.00 | 0.59 | 0.49 | 0.70 | | | |
| 40 | NMPW | NS | NS | NS | NS | 1.79E03 | NS | NS | 0.00E00 |
| | | | | | | 1.30 | | | 0.00 |
| | NMPP | 2.91E03 | 3.77E03 | 1.05E03 | 0.00E00 | NS | NS | 0.00E00 | 3.97E03 |
| | | 25.00 | 5.76 | 0.25 | 0.00 | | | 0.00 | 8.75 |
| | FITZ | NS | 1.64E03 | 1.12E04 | 0.00E00 | 1.29E03 | NS | NS | 1.80E03 |
| | | | 2.37 | 1.82 | 0.00 | 1.09 | | | 44.29 |
| | NMPE | 3.55E03 | 3.74E03 | 6.46E03 | 2.48E03 | 6.89E02 | NS | 9.76E02 | NS |
| | | 8.33 | 0.73 | 1.64 | 0.46 | 0.72 | | 17.89 | |

* MEAN OF TWO REPLICATE SAMPLES; NUMBER OF CELLS/DM*2
NS = NO SAMPLE TAKEN

ABUNDANCE*, AND PERCENT COMPOSITION OF NITZSCHIA DISSIPATA (BACILLARIOPHYCEAE)
IN BOTTOM PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH (FT) | TRANSECT | MAY | JUNE | JULY | DATE AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER |
|---------------|----------|---------|---------|---------|----------------|-----------|---------|----------|----------|
| 5 | NMPW | NS | 0.00E00 | 5.80E05 | 2.96E06 | 2.05E04 | 2.29E05 | 5.63E03 | 0.00E00 |
| | | | 0.00 | 2.87 | 5.28 | 0.12 | 4.30 | 14.21 | 0.00 |
| | NMPP | 0.00E00 | NS | 5.98E03 | NS | 1.69E04 | NS | 4.74E03 | 9.77E02 |
| | | 0.00 | | 0.43 | | 0.01 | | 5.12 | 7.61 |
| | FITZ | NS | 3.77E05 | 3.99E05 | NS | NS | NS | 2.64E04 | 0.00E00 |
| 10 | | | 5.05 | 7.81 | | | | 3.45 | 0.00 |
| | NMPE | 1.36E04 | 9.56E03 | 9.87E03 | 2.97E04 | 6.35E04 | NS | 7.75E02 | 0.00E00 |
| | | 0.79 | 0.41 | 0.06 | 2.18 | 0.12 | | 0.27 | 0.00 |
| | NMPW | 0.00E00 | 7.14E04 | 1.14E06 | 1.01E06 | 1.25E05 | NS | 1.15E03 | 0.00E00 |
| | | 0.00 | 0.61 | 12.63 | 3.85 | 0.56 | | 3.16 | 0.00 |
| 20 | NMPP | 0.00E00 | 0.00E00 | 2.77E05 | 6.63E04 | 6.97E05 | NS | 2.76E03 | 0.00E00 |
| | | 0.00 | 0.00 | 8.86 | 0.15 | 0.68 | | 12.37 | 0.00 |
| | FITZ | 0.00E00 | 6.01E04 | 2.04E06 | 1.01E06 | NS | NS | 1.54E04 | 3.41E03 |
| | | 0.00 | 2.22 | 10.47 | 2.48 | | | 7.35 | 8.37 |
| | NMPE | 0.00E00 | 0.00E00 | 1.36E06 | 2.79E04 | 1.80E06 | NS | 4.56E03 | 0.00E00 |
| 30 | | 0.00 | 0.00 | 8.43 | 7.55 | 3.38 | | 21.81 | 0.00 |
| | NMPW | 0.00E00 | 0.00E00 | 2.34E04 | 1.31E04 | 6.28E04 | NS | 8.76E02 | 2.11E03 |
| | | 0.00 | 0.00 | 2.57 | 1.57 | 2.37 | | 7.26 | 12.71 |
| | NMPP | 0.00E00 | 0.00E00 | 8.81E03 | 4.55E03 | 1.56E03 | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 0.00 | 3.22 | 0.60 | 0.08 | | 0.00 | 0.00 |
| 40 | FITZ | NS | 1.75E04 | 8.38E04 | 3.89E04 | 3.84E04 | 1.29E04 | 8.62E02 | 0.00E00 |
| | | | 0.62 | 5.42 | 4.74 | 1.45 | 4.77 | 4.26 | 0.00 |
| | NMPE | 0.00E00 | 3.77E04 | 6.98E04 | 2.13E04 | 2.60E04 | 9.02E03 | NS | 0.00E00 |
| | | 0.00 | 0.91 | 9.02 | 4.52 | 2.01 | 13.31 | | 0.00 |
| | NMPW | 0.00E00 | 0.00E00 | 1.45E04 | 0.00E00 | 4.59E03 | NS | 0.00E00 | 2.51E03 |
| 50 | | 0.00 | 0.00 | 4.86 | 0.00 | 1.16 | | 0.00 | 11.84 |
| | NMPP | 0.00E00 | 0.00E00 | 5.15E03 | 5.98E03 | 0.00E00 | NS | 2.30E03 | NS |
| | | 0.00 | 0.00 | 0.93 | 4.05 | 0.00 | | 12.50 | |
| | FITZ | 0.00E00 | 2.05E03 | 3.88E03 | 0.00E00 | 6.89E02 | NS | NS | 0.00E00 |
| | | 0.00 | 0.57 | 0.56 | 0.00 | 0.15 | | | 0.00 |
| 60 | NMPE | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | 8.04E02 | NS | NS | NS |
| | | 0.00 | 0.00 | 0.00 | 0.00 | 0.70 | | | |
| | NMPW | NS | NS | NS | NS | 5.38E03 | NS | NS | 0.00E00 |
| | | | | | | 3.91 | | | 0.00 |
| | NMPP | 0.00E00 | 0.00E00 | 4.19E03 | 0.00E00 | NS | NS | 0.00E00 | 1.98E03 |
| 70 | | 0.00 | 0.00 | 1.00 | 0.00 | | | 0.00 | 4.38 |
| | FITZ | NS | 0.00E00 | 0.00E00 | 0.00E00 | 8.19E02 | NS | NS | 0.00E00 |
| | | | 0.00 | 0.00 | 0.00 | 0.69 | | | 0.00 |
| | NMPE | 3.55E03 | 2.23E03 | 6.78E03 | 4.96E03 | 6.89E02 | NS | 0.00E00 | NS |
| | | 8.33 | 0.44 | 1.73 | 0.91 | 0.72 | | 0.00 | |

*AN OF TWO REPLICATE SAMPLES; NUMBER OF CELLS/DM
= NO. SAMPLE TAKEN

ABUNDANCE* AND PERCENT COMPOSITION OF SYNEDRA CYCLOPUM (BACILLARIOPHYCEAE)
IN BOTTOM PERMEATION COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH (FT) | TRANSECT | MAY | JUNE | JULY | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER |
|---------------|----------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|-------------------|
| 5 | NMPW | NS | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 2.41E03 6.09 | 1.05E03 3.08 |
| | NMPP | 0.00E00 0.00 | NS | 0.00E00 0.00 | NS | 0.00E00 0.00 | NS | 1.27E04 13.72 | 0.00E00 0.00 |
| | FITZ | NS | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | NS | 5.28E04 6.90 | 2.54E03 4.61 |
| | NMPE | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 2.39E04 8.39 | 2.88E03 15.79 |
| 10 | NMPW | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 1.30E04 35.76 | 3.32E03 28.09 |
| | NMPP | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 9.19E02 4.13 | 8.65E03 75.00 |
| | FITZ | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | 9.33E03 4.46 | 7.26E03 17.81 |
| | NMPE | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 1.82E03 8.71 | 0.00E00 0.00 |
| 20 | NMPW | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 8.57E03 70.98 | 3.07E03 18.50 |
| | NMPP | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 2.55E04 73.69 | 8.68E03 41.67 |
| | FITZ | NS | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 8.62E02 4.26 | 1.80E03 10.88 |
| | NMPE | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 5.15E03 30.29 |
| 30 | NMPW | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 7.22E03 62.02 | 7.81E03 36.84 |
| | NMPP | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 9.19E03 50.00 | NS |
| | FITZ | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | 5.40E03 45.67 |
| | NMPE | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | NS |
| 40 | NMPW | NS | NS | NS | NS | 0.00E00 0.00 | NS | NS | 1.27E04 100.00 |
| | NMPP | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | 3.65E03 39.69 | 1.51E04 33.36 |
| | FITZ | NS | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | 2.26E03 55.74 |
| | NMPE | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 0.00E00 0.00 | NS |

* MEAN OF TWO REPLICATE SAMPLES; NUMBER OF CELLS/DM*2
NS = NO SAMPLE TAKEN

ABUNDANCE AND PERCENT COMPOSITION OF SYNEURA ULNA (BACILLARIOPHYCEAE)
IN BOTTOM PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH (FT) | TRANSECT | DATES | | | | | | | |
|---------------|----------|---------|---------|---------|---------|-----------|---------|----------|----------|
| | | MAY | JUNE | JULY | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER |
| 5 | NMPW | NS | 1.80E03 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | 2.41E03 | 0.00E00 |
| | | | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 6.09 | 0.00 |
| | NMPP | 0.00E00 | NS | 0.00E00 | NS | 0.00E00 | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| | FITZ | NS | 2.21E04 | 0.00E00 | NS | NS | NS | 0.00E00 | 1.30E03 |
| | | | 0.30 | 0.00 | | | | 0.00 | 2.36 |
| | NMPE | 4.52E03 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | NS | 7.75E02 | 0.00E00 |
| | | 0.26 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.27 | 0.00 |
| 10 | NMPW | 4.79E03 | 0.00E00 | 3.72E02 | 0.00E00 | 0.00E00 | NS | 0.00E00 | 0.00E00 |
| | | 5.26 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 |
| | NMPP | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 |
| | FITZ | 0.00E00 | 1.34E04 | 0.00E00 | 0.00E00 | NS | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 0.49 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| | NMPE | 0.00E00 | 8.37E03 | 0.00E00 | 0.00E00 | 0.00E00 | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 0.08 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 |
| 20 | NMPW | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 |
| | NMPP | 0.00E00 | 3.15E04 | 0.00E00 | 0.00E00 | 0.00E00 | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 2.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 |
| | FITZ | NS | 3.19E04 | 0.00E00 | 0.00E00 | 3.86E03 | 1.09E03 | 0.00E00 | 0.00E00 |
| | | | 1.12 | 0.00 | 0.00 | 0.15 | 0.40 | 0.00 | 0.00 |
| | NMPE | 0.00E00 | 8.10E04 | 0.00E00 | 0.00E00 | 0.00E00 | 3.36E03 | NS | 0.00E00 |
| | | 0.00 | 1.95 | 0.00 | 0.00 | 0.00 | 4.96 | | 0.00 |
| 30 | NMPW | 0.00E00 | 3.53E03 | 0.00E00 | 0.00E00 | 0.00E00 | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 0.68 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 |
| | NMPP | 0.00E00 | 7.44E03 | 0.00E00 | 0.00E00 | 0.00E00 | NS | 0.00E00 | NS |
| | | 0.00 | 16.67 | 0.00 | 0.00 | 0.00 | | 0.00 | |
| | FITZ | 0.00E00 | 0.00E00 | 0.00E00 | 2.37E04 | 3.39E03 | NS | NS | 0.00E00 |
| | | 0.00 | 0.00 | 0.00 | 1.70 | 0.75 | | | 0.00 |
| | NMPE | 8.72E03 | 9.04E03 | 0.00E00 | 0.00E00 | 0.00E00 | NS | NS | NS |
| | | 10.53 | 1.20 | 0.00 | 0.00 | 0.00 | | | |
| 40 | NMPW | NS | NS | NS | NS | 0.00E00 | NS | NS | 0.00E00 |
| | | | | | | 0.00 | | | 0.00 |
| | NMPP | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | NS | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| | FITZ | NS | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | NS | NS | 0.00E00 |
| | | | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 |
| | NMPE | 0.00E00 | 9.19E03 | 0.00E00 | 0.00E00 | 0.00E00 | NS | 0.00E00 | NS |
| | | 0.00 | 1.79 | 0.00 | 0.00 | 0.00 | | 0.00 | |

MEAN OF TWO REPLICATE SAMPLES; NUMBER OF CELLS/DM³
NS = NO SAMPLE TAKEN

ABUNDANCE* AND PERCENT COMPOSITION OF PEDIASTRUM BORYANUM (CHLOROPHYTA)
IN BOTTOM PERIPLANKTON COLLECTIONS

NINE MILE POINT VICINITY - 1974

| DEPTH (FT) | TRANSECT | MAY | JUNE | JULY | DATES AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER |
|---------------|----------|-----------------|-----------------|-----------------|------------------|------------------|-----------------|-----------------|-----------------|
| 5 | NMPW | NS | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPP | 0.00E00 0.00 | NS | 0.00E00 0.00 | NS | 0.00E00 0.00 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | FITZ | NS | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPE | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 5.41E05 0.41 | 0.00E00 0.00 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| 10 | NMPW | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPP | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 2.04E05 0.20 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | FITZ | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPE | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| 20 | NMPW | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 2.02E04 0.74 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPP | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 4.89E04 2.61 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | FITZ | NS | 0.00E00 0.00 | 0.00E00 0.00 | 2.21E04 2.67 | 1.46E04 0.55 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPE | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 1.41E04 1.07 | 0.00E00 0.00 | NS | 0.00E00 0.00 |
| 30 | NMPW | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPP | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 0.00E00 0.00 | NS |
| | FITZ | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 1.19E05 8.51 | 2.04E04 4.55 | NS | NS | 0.00E00 0.00 |
| | NMPE | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 1.11E04 1.82 | 0.00E00 0.00 | NS | NS | NS |
| 40 | NMPW | NS | NS | NS | NS | 0.00E00 0.00 | NS | NS | 0.00E00 0.00 |
| | NMPP | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 6.72E04 37.02 | NS | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | FITZ | NS | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 1.81E04 15.28 | NS | NS | 0.00E00 0.00 |
| | NMPE | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | NS | 0.00E00 0.00 | NS |

* MEAN OF TWO REPLICATE SAMPLES; NUMBER OF CELLS/DM*2
NS = NO SAMPLE TAKEN

ABUNDANCE* AND PERCENT COMPOSITION OF SCENEDESMUS OBLIQUUS (CHLOROPHYTA).
IN BOTTOM PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH (FT) | TRANSECT | DATES | | | | | | | |
|---------------|----------|---------|---------|---------|---------|-----------|---------|----------|----------|
| | | MAY | JUNE | JULY | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER |
| 5 | NMPW | NS | 1.03E05 | 6.45E04 | 4.96E04 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | | | 2.88 | 0.32 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP | 0.00E00 | NS | 0.00E00 | NS | 0.00E00 | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| 10 | FITZ | NS | 9.03E05 | 5.55E04 | NS | NS | NS | 0.00E00 | 0.00E00 |
| | | | 12.09 | 1.09 | | | | 0.00 | 0.00 |
| | NMPE | 9.04E04 | 1.31E05 | 4.13E04 | 6.76E05 | 0.00E00 | NS | 0.00E00 | 0.00E00 |
| | | 5.27 | 5.59 | 0.23 | 0.51 | 0.00 | | 0.00 | 0.00 |
| | NMPW | 0.00E00 | 1.00E06 | 9.76E04 | 5.31E04 | 0.00E00 | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 8.59 | 1.08 | 0.20 | 0.00 | | 0.00 | 0.00 |
| | NMPP | 3.98E04 | 4.14E05 | 1.53E04 | 0.00E00 | 0.00E00 | NS | 0.00E00 | 0.00E00 |
| | | 7.14 | 5.37 | 0.49 | 0.00 | 0.00 | | 0.00 | 0.00 |
| 20 | FITZ | 0.00E00 | 6.01E04 | 0.00E00 | 0.00E00 | NS | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 2.22 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| | NMPE | 0.00E00 | 3.60E05 | 8.51E04 | 3.04E05 | 0.00E00 | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 3.56 | 0.53 | 0.82 | 0.00 | | 0.00 | 0.00 |
| | NMPW | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 |
| | NMPP | 0.00E00 | 1.89E05 | 0.00E00 | 1.67E03 | 0.00E00 | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 12.01 | 0.00 | 0.22 | 0.00 | | 0.00 | 0.00 |
| 30 | FITZ | NS | 4.16E04 | 0.00E00 | 0.00E00 | 1.46E04 | 0.00E00 | 0.00E00 | 0.00E00 |
| | | | 1.46 | 0.00 | 0.00 | 0.55 | 0.00 | 0.00 | 0.00 |
| | NMPE | 0.00E00 | 3.04E05 | 0.00E00 | 0.00E00 | 1.58E04 | 0.00E00 | NS | 0.00E00 |
| | | 0.00 | 7.34 | 0.00 | 0.00 | 1.22 | 0.00 | | 0.00 |
| | NMPW | 0.00E00 | 1.19E04 | 0.00E00 | 0.00E00 | 0.00E00 | NS | 0.00E00 | 4.09E03 |
| | | 0.00 | 2.28 | 0.00 | 0.00 | 0.00 | | 0.00 | 19.30 |
| | NMPP | 0.00E00 | 1.49E04 | 0.00E00 | 0.00E00 | 0.00E00 | NS | 0.00E00 | NS |
| | | 0.00 | 33.33 | 0.00 | 0.00 | 0.00 | | 0.00 | |
| 40 | FITZ | 0.00E00 | 4.57E04 | 0.00E00 | 0.00E00 | 0.00E00 | NS | NS | 0.00E00 |
| | | 0.00 | 12.69 | 0.00 | 0.00 | 0.00 | | | 0.00 |
| | NMPE | 0.00E00 | 0.00E00 | 2.28E04 | 0.00E00 | 0.00E00 | NS | NS | NS |
| | | 0.00 | 0.00 | 3.53 | 0.00 | 0.00 | | | |
| | NMPW | NS | NS | NS | NS | 0.00E00 | NS | NS | 0.00E00 |
| | | | | | | 0.00 | | | 0.00 |
| | NMPP | 0.00E00 | 8.24E03 | 0.00E00 | 0.00E00 | NS | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 12.58 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| | FITZ | NS | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | NS | NS | 0.00E00 |
| | | | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 |
| | NMPE | 0.00E00 | 5.67E03 | 0.00E00 | 0.00E00 | 0.00E00 | NS | 0.00E00 | NS |
| | | 0.00 | 1.11 | 0.00 | 0.00 | 0.00 | | 0.00 | |

*MEAN OF TWO REPLICATE SAMPLES; NUMBER OF CELLS/D
NS = NO SAMPLE TAKEN

ABUNDANCE AND PERCENT COMPOSITION OF SCENEDESMUS QUADRICAUDA (CHLOROPHYTA)
IN BOTTOM PERMUTATION COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH (FT) | TRANSECT | MAY | JUNE | JULY | DATES AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER |
|---------------|----------|---------|---------|---------|-----------------|-----------|---------|----------|----------|
| 5 | NMPW | NS | 7.19E03 | 4.73E05 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | | | 0.20 | 2.34 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP | 0.00E00 | NS | 2.00E04 | NS | 0.00E00 | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | | 1.45 | | 0.00 | | 0.00 | 0.00 |
| | FITZ | NS | 1.77E05 | 1.15E05 | NS | NS | NS | 0.00E00 | 0.00E00 |
| 10 | | | 2.37 | 2.26 | | | | 0.00 | 0.00 |
| | NMPE | 0.00E00 | 1.56E04 | 6.01E04 | 2.70E05 | 3.08E04 | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 0.67 | 0.34 | 0.21 | 0.06 | | 0.00 | 0.00 |
| | NMPW | 0.00E00 | 1.43E05 | 2.05E05 | 8.99E03 | 4.86E04 | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 1.23 | 2.26 | 0.03 | 0.22 | | 0.00 | 0.00 |
| 20 | NMPP | 0.00E00 | 2.59E04 | 9.82E03 | 3.32E04 | 3.36E05 | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 0.34 | 0.31 | 0.07 | 0.33 | | 0.00 | 0.00 |
| | FITZ | 0.00E00 | 2.67E04 | 4.61E04 | 0.00E00 | NS | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 0.99 | 0.24 | 0.00 | | | 0.00 | 0.00 |
| | NMPE | 0.00E00 | 2.09E05 | 4.40E04 | 9.95E04 | 3.55E05 | NS | 0.00E00 | 0.00E00 |
| 30 | | 0.00 | 2.07 | 0.27 | 0.27 | 0.67 | | 0.00 | 0.00 |
| | NMPW | 0.00E00 | 4.39E04 | 1.85E05 | 1.15E04 | 7.58E03 | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 1.78 | 20.32 | 1.38 | 0.29 | | 0.00 | 0.00 |
| | NMPP | 0.00E00 | 9.45E04 | 7.69E03 | 4.46E04 | 1.99E04 | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 6.01 | 2.81 | 5.86 | 1.06 | | 0.00 | 0.00 |
| 40 | FITZ | NS | 1.33E05 | 1.69E05 | 5.53E04 | 7.16E04 | 6.46E03 | 0.00E00 | 0.00E00 |
| | | | 4.66 | 10.91 | 6.75 | 2.70 | 2.39 | 0.00 | 0.00 |
| | NMPE | 0.00E00 | 1.33E05 | 4.65E04 | 2.23E04 | 9.35E04 | 0.00E00 | NS | 0.00E00 |
| | | 0.00 | 3.20 | 6.02 | 4.73 | 7.22 | 0.00 | | 0.00 |
| | NMPW | 0.00E00 | 5.30E03 | 4.04E04 | 1.14E04 | 4.59E03 | NS | 0.00E00 | 0.00E00 |
| 50 | | 0.00 | 1.01 | 13.51 | 6.78 | 1.16 | | 0.00 | 0.00 |
| | NMPP | 0.00E00 | 0.00E00 | 3.32E04 | 3.99E04 | 1.40E04 | NS | 0.00E00 | NS |
| | | 0.00 | 0.00 | 6.02 | 27.05 | 10.84 | | 0.00 | |
| | FITZ | 0.00E00 | 0.00E00 | 1.41E05 | 7.07E04 | 3.22E04 | NS | NS | 0.00E00 |
| | | 0.00 | 0.00 | 20.57 | 5.07 | 7.17 | | | 0.00 |
| 60 | NMPE | 0.00E00 | 3.62E04 | 3.83E05 | 8.37E03 | 0.00E00 | NS | NS | NS |
| | | 0.00 | 4.82 | 59.45 | 1.38 | 0.00 | | | |
| | NMPW | NS | NS | NS | NS | 4.49E04 | NS | NS | 0.00E00 |
| | | | | | | 32.57 | | | 0.00 |
| | NMPP | 0.00E00 | 0.00E00 | 1.27E04 | 4.20E03 | NS | NS | 0.00E00 | 0.00E00 |
| 70 | | 0.00 | 0.00 | 3.03 | 2.44 | | | 0.00 | 0.00 |
| | FITZ | NS | 0.00E00 | 5.21E04 | 1.43E04 | 1.01E04 | NS | NS | 0.00E00 |
| | | | 0.00 | 8.48 | 6.30 | 8.51 | | | 0.00 |
| | NMPE | 0.00E00 | 3.43E04 | 2.17E05 | 1.53E04 | 1.04E04 | NS | 0.00E00 | NS |
| | | 0.00 | 6.71 | 55.28 | 2.81 | 10.79 | | 0.00 | |

* MEAN OF TWO REPLICATE SAMPLES; NUMBER OF CELLS/DM*2
NS = NO SAMPLE TAKEN

ABUNDANCE AND PERCENT COMPOSITION OF LYNGBYA DIGUETII (MYXOPHYTA)
IN BOTTOM PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH (FT) | TRANSECT | DATES | | | | | | | |
|---------------|----------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------------|
| | | MAY | JUNE | JULY | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER |
| 5 | NMPW | NS | 1.05E06 29.39 | 1.61E07 79.68 | 4.19E07 74.60 | 1.50E07 84.48 | 3.74E06 70.34 | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPP | 0.00E00 0.00 | NS | 8.38E05 60.53 | NS | 1.59E08 97.85 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | FITZ | NS | 0.00E00 0.00 | 3.09E06 60.49 | NS | NS | NS | 1.66E05 21.72 | 0.00E00 0.00 |
| | NMPE | 0.00E00 0.00 | 2.31E05 9.87 | 9.89E06 55.76 | 1.24E08 93.79 | 3.78E07 73.69 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | 10 | NMPW | 0.00E00 0.00 | 0.00E00 0.00 | 4.39E06 48.49 | 1.87E07 71.41 | 1.97E07 88.36 | NS | 0.00E00 0.00 |
| 10 | NMPP | 0.00E00 0.00 | 3.37E06 43.63 | 2.32E06 74.22 | 4.00E07 90.30 | 8.51E07 82.51 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | FITZ | 0.00E00 0.00 | 8.14E05 30.12 | 1.55E07 79.32 | 2.23E07 54.77 | NS | NS | 8.99E04 42.99 | 0.00E00 0.00 |
| | NMPE | 0.00E00 0.00 | 3.72E06 36.81 | 1.19E07 74.07 | 2.87E07 77.55 | 4.26E07 80.21 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | 20 | NMPW | 0.00E00 0.00 | 1.54E06 62.22 | 2.20E05 24.09 | 4.21E05 50.61 | 9.59E05 36.13 | NS | 0.00E00 0.00 |
| | NMPP | 0.00E00 0.00 | 0.00E00 0.00 | 7.88E04 28.82 | 1.80E05 23.71 | 4.63E05 24.75 | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| 20 | FITZ | NS | 4.12E05 14.48 | 8.00E05 51.71 | 5.52E04 6.73 | 1.27E06 47.99 | 5.89E04 21.73 | 0.00E00 0.00 | 0.00E00 0.00 |
| | NMPE | 0.00E00 0.00 | 1.13E05 2.73 | 3.02E05 39.10 | 2.00E05 42.46 | 2.01E05 15.55 | 0.00E00 0.00 | NS | 0.00E00 0.00 |
| | 30 | NMPW | 0.00E00 0.00 | 3.27E05 62.66 | 8.08E03 2.70 | 1.43E05 84.75 | 0.00E00 0.00 | NS | 0.00E00 0.00 |
| | NMPP | 0.00E00 0.00 | 0.00E00 0.00 | 4.33E05 78.44 | 0.00E00 0.00 | 4.25E04 33.01 | NS | 0.00E00 0.00 | NS |
| | FITZ | 0.00E00 0.00 | 0.00E00 0.00 | 2.99E05 43.46 | 2.37E05 17.01 | 1.33E05 29.71 | NS | NS | 0.00E00 0.00 |
| 30 | NMPE | 0.00E00 0.00 | 0.00E00 0.00 | 0.00E00 0.00 | 3.16E05 51.92 | 5.95E04 51.71 | NS | NS | NS |
| | 40 | NMPW | NS | NS | NS | 0.00E00 0.00 | NS | NS | 0.00E00 0.00 |
| | NMPP | 0.00E00 0.00 | 0.00E00 0.00 | 3.55E05 85.16 | 0.00E00 0.00 | NS | NS | 0.00E00 0.00 | 0.00E00 0.00 |
| | FITZ | NS | 0.00E00 0.00 | 4.39E05 71.52 | 0.00E00 0.00 | 0.00E00 0.00 | NS | NS | 0.00E00 0.00 |
| | NMPE | 0.00E00 0.00 | 3.92E04 7.65 | 0.00E00 0.00 | 7.35E04 13.53 | 3.46E04 36.01 | NS | 0.00E00 0.00 | NS |

MEAN OF TWO REPLICATE SAMPLES; NUMBER OF CELLS/DM
= NO SAMPLE TAKEN

ABUNDANCE* AND PERCENT COMPOSITION OF PHORMIDIUM MINNESOTENSE (MYXOPHYTA)
IN BOTTOM PERMUTATION COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DEPTH (FT) | TRANSECT | DATES | | | | | | | |
|---------------|----------|---------|---------|---------|---------|-----------|---------|----------|----------|
| | | MAY | JUNE | JULY | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER |
| 5 | NMPW | NS | 0.00E00 | 1.23E05 | 9.51E05 | 1.20E04 | 2.30E04 | 0.00E00 | 0.00E00 |
| | | | 0.00 | 0.61 | 1.69 | 0.07 | 0.43 | 0.00 | 0.00 |
| | NMPP | 0.00E00 | NS | 0.00E00 | NS | 6.75E04 | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | | 0.00 | | 0.04 | | 0.00 | 0.00 |
| | FITZ | NS | 0.00E00 | 3.54E04 | NS | NS | NS | 0.00E00 | 0.00E00 |
| | | | 0.00 | 0.69 | | | | 0.00 | 0.00 |
| | NMPE | 0.00E00 | 7.02E04 | 1.20E05 | 0.00E00 | 8.50E04 | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 3.00 | 0.68 | 0.00 | 0.17 | | 0.00 | 0.00 |
| 10 | NMPW | 0.00E00 | 0.00E00 | 1.67E06 | 5.52E05 | 1.32E04 | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 0.00 | 18.42 | 2.10 | 0.06 | | 0.00 | 0.00 |
| | NMPP | 0.00E00 | 2.72E05 | 1.43E04 | 1.05E06 | 1.79E05 | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 3.52 | 0.46 | 2.37 | 0.17 | | 0.00 | 0.00 |
| | FITZ | 0.00E00 | 0.00E00 | 6.38E05 | 3.15E06 | NS | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 0.00 | 3.28 | 7.74 | | | 0.00 | 0.00 |
| | NMPE | 0.00E00 | 1.65E06 | 5.91E05 | 5.54E05 | 6.14E05 | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 16.34 | 3.67 | 1.50 | 1.16 | | 0.00 | 0.00 |
| 20 | NMPW | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | 8.20E04 | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 0.00 | 0.00 | 0.00 | 3.09 | | 0.00 | 0.00 |
| | NMPP | 0.00E00 | 0.00E00 | 0.00E00 | 8.34E03 | 0.00E00 | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 0.00 | 0.00 | 1.10 | 0.00 | | 0.00 | 0.00 |
| | FITZ | NS | 0.00E00 | 0.00E00 | 2.83E04 | 3.72E04 | 0.00E00 | 0.00E00 | 0.00E00 |
| | | | 0.00 | 0.00 | 3.45 | 1.41 | 0.00 | 0.00 | 0.00 |
| | NMPE | 0.00E00 | 3.65E05 | 0.00E00 | 0.00E00 | 8.18E03 | 0.00E00 | NS | 0.00E00 |
| | | 0.00 | 8.80 | 0.00 | 0.00 | 0.63 | 0.00 | | 0.00 |
| 30 | NMPW | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | 3.90E04 | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 0.00 | 0.00 | 0.00 | 9.90 | | 0.00 | 0.00 |
| | NMPP | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | NS | 0.00E00 | NS |
| | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | |
| | FITZ | 0.00E00 | 0.00E00 | 0.00E00 | 6.33E04 | 0.00E00 | NS | NS | 0.00E00 |
| | | 0.00 | 0.00 | 0.00 | 4.54 | 0.00 | | | 0.00 |
| | NMPE | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | NS | NS | NS |
| | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| 40 | NMPW | NS | NS | NS | NS | 0.00E00 | NS | NS | 0.00E00 |
| | | | | | | 0.00 | | | 0.00 |
| | NMPP | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | NS | NS | 0.00E00 | 0.00E00 |
| | | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| | FITZ | NS | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | NS | NS | 0.00E00 |
| | | | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 |
| | NMPE | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | NS | 0.00E00 | NS |
| | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | |

* MEAN OF TWO REPLICATE SAMPLES; NUMBER OF CELLS/DM*2
NS = NO SAMPLE TAKEN

APPENDIX VIC-2e

ABUNDANCE* AND PERCENT COMPOSITION OF SELECTED TAXA OF ZOOEPERIPHYTON
IN BOTTOM PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - MAY 1976

| DEPTH | TRANSECT | CILIATA | SUCTORIA | ROTIFERA | OTHER | DEPTH | TRANSECT | CILIATA | SUCTORIA | ROTIFERA | OTHER |
|-------|----------|---------|----------|----------|---------|-------|----------|---------|----------|----------|---------|
| 5 | NMPW | NS | NS | NS | NS | | | | | | |
| | NMPP | | | | | | NMPP | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | | ABUND. | 2.91E03 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 | | PERCT | 100.00 | 0.00 | 0.00 | 0.00 |
| | FITZ | NS | NS | NS | NS | | FITZ | NS | NS | NS | NS |
| | NMPE | | | | | | NMPE | | | | |
| | ABUND. | 0.00E00 | 1.36E04 | 0.00E00 | 0.00E00 | | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 100.00 | 0.00 | 0.00 | | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| 10 | NMPW | | | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| | NMPP | | | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| | FITZ | | | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| | NMPE | | | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| 20 | NMPW | | | | | | | | | | |
| | ABUND. | 1.83E04 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| | NMPP | | | | | | | | | | |
| | ABUND. | 3.88E04 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| | FITZ | NS | NS | NS | NS | | | | | | |
| | NMPE | | | | | | | | | | |
| | ABUND. | 4.58E03 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| 30 | NMPW | | | | | | | | | | |
| | ABUND. | 4.25E03 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| | NMPP | | | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| | FITZ | | | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| | NMPE | | | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| 40 | NMPW | NS | NS | NS | NS | | | | | | |

* MEAN OF TWO REPLICATE SAMPLES; NUMBER OF ORGANISMS/DM*2
NS = NO SAMPLE TAKEN

APPENDIX VIC-

ABUNDANCE* AND PERCENT COMPOSITION OF SELECTED TAXA OF ZOOPERIPHYTON
IN BOTTOM PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - JUNE 1976

| DEPTH | TRANSECT | CILIATA | SUCTORIA | ROTIFERA | OTHER | DEPTH | TRANSECT | CILIATA | SUCTORIA | ROTIFERA | OTHER |
|-------|----------|---------|----------|----------|---------|-------|----------|---------|----------|----------|---------|
| 5 | NMPW | | | | | 40 | NMPW | NS | NS | NS | NS |
| | ABUND. | 1.31E05 | 3.82E04 | 0.00E00 | 0.00E00 | | NMPP | | | | |
| | PERCT | 77.40 | 22.60 | 0.00 | 0.00 | | ABUND. | 9.26E03 | 2.75E03 | 0.00E00 | 0.00E00 |
| | NMPP | NS | NS | NS | NS | | PERCT | 77.13 | 22.87 | 0.00 | 0.00 |
| | FITZ | | | | | | FITZ | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 1.21E04 | | ABUND. | 2.31E03 | 3.10E04 | 0.00E00 | 1.64E04 |
| | PERCT | 0.00 | 0.00 | 0.00 | 100.00 | | PERCT | 4.66 | 62.32 | 0.00 | 33.03 |
| | NMPE | | | | | | NMPE | | | | |
| | ABUND. | 2.72E04 | 1.91E03 | 0.00E00 | 0.00E00 | | ABUND. | 5.62E04 | 7.10E04 | 0.00E00 | 6.73E03 |
| | PERCT | 93.43 | 6.57 | 0.00 | 0.00 | | PERCT | 41.95 | 53.02 | 0.00 | 5.03 |
| 10 | NMPW | | | | | | | | | | |
| | ABUND. | 0.00E00 | 1.08E04 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 0.00 | 100.00 | 0.00 | 0.00 | | | | | | |
| | NMPP | | | | | | | | | | |
| | ABUND. | 1.85E04 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| | FITZ | | | | | | | | | | |
| | ABUND. | 4.67E04 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| | NMPE | | | | | | | | | | |
| | ABUND. | 2.01E04 | 6.26E03 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 76.28 | 23.72 | 0.00 | 0.00 | | | | | | |
| 20 | NMPW | | | | | | | | | | |
| | ABUND. | 1.21E05 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| | NMPP | | | | | | | | | | |
| | ABUND. | 3.36E04 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| | FITZ | | | | | | | | | | |
| | ABUND. | 4.41E04 | 4.20E03 | 0.00E00 | 4.20E03 | | | | | | |
| | PERCT | 84.00 | 8.00 | 0.00 | 8.00 | | | | | | |
| | NMPE | | | | | | | | | | |
| | ABUND. | 5.10E04 | 1.12E04 | 0.00E00 | 3.00E04 | | | | | | |
| | PERCT | 55.33 | 12.15 | 0.00 | 32.52 | | | | | | |
| 30 | NMPW | | | | | | | | | | |
| | ABUND. | 4.21E04 | 0.00E00 | 0.00E00 | 1.49E03 | | | | | | |
| | PERCT | 96.59 | 0.00 | 0.00 | 3.41 | | | | | | |
| | NMPP | | | | | | | | | | |
| | ABUND. | 1.86E04 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| | FITZ | | | | | | | | | | |
| | ABUND. | 4.09E03 | 2.08E04 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 16.42 | 83.58 | 0.00 | 0.00 | | | | | | |
| | NMPE | | | | | | | | | | |
| | ABUND. | 7.24E04 | 1.81E04 | 0.00E00 | 9.04E03 | | | | | | |
| | PERCT | 72.73 | 18.18 | 0.00 | 9.09 | | | | | | |

* MEAN OF TWO REPLICATE SAMPLES; NUMBER OF ORGANISMS/DM*2
NS = NO SAMPLE TAKEN

APPENDIX VIC-2e

ABUNDANCE* AND PERCENT COMPOSITION OF SELECTED TAXA OF ZOOEPERIPHYTON
IN BOTTOM PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - JULY 1976

| DEPTH | TRANSECT | CILIATA | SUCTORIA | ROTIFERA | OTHER | DEPTH | TRANSECT | CILIATA | SUCTORIA | ROTIFERA | OTHER |
|-------|----------|---------|----------|----------|---------|-------|----------|---------|----------|----------|---------|
| 5 | NMPW | | | | | 40 | PERCT | 52.90 | 43.24 | 0.00 | 3.87 |
| | ABUND. | 4.40E04 | 0.00E00 | 0.00E00 | 0.00E00 | | NMPW | NS | NS | NS | NS |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| | NMPP | | | | | | NMPP | | | | |
| | ABUND. | 9.76E03 | 5.01E03 | 0.00E00 | 0.00E00 | | ABUND. | 1.98E04 | 6.33E03 | 0.00E00 | 0.00E00 |
| | PERCT | 66.09 | 33.91 | 0.00 | 0.00 | | PERCT | 75.80 | 24.20 | 0.00 | 0.00 |
| | FITZ | | | | | | FITZ | | | | |
| | ABUND. | 2.29E04 | 0.00E00 | 0.00E00 | 0.00E00 | | ABUND. | 5.95E04 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 | | PERCT | 100.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | | | NMPE | | | | |
| | ABUND. | 1.54E04 | 3.06E04 | 0.00E00 | 0.00E00 | | ABUND. | 5.60E04 | 1.66E04 | 0.00E00 | 0.00E00 |
| | PERCT | 33.51 | 66.49 | 0.00 | 0.00 | | PERCT | 77.11 | 22.89 | 0.00 | 0.00 |
| 10 | NMPW | | | | | | | | | | |
| | ABUND. | 8.66E03 | 1.59E04 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 35.29 | 64.71 | 0.00 | 0.00 | | | | | | |
| | NMPP | | | | | | | | | | |
| | ABUND. | 9.29E04 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| | FITZ | | | | | | | | | | |
| | ABUND. | 1.15E04 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| | NMPE | | | | | | | | | | |
| | ABUND. | 3.47E04 | 3.55E04 | 0.00E00 | 5.24E03 | | | | | | |
| | PERCT | 45.96 | 47.09 | 0.00 | 6.95 | | | | | | |
| 20 | NMPW | | | | | | | | | | |
| | ABUND. | 9.35E04 | 9.32E03 | 0.00E00 | 4.72E03 | | | | | | |
| | PERCT | 86.94 | 8.67 | 0.00 | 4.39 | | | | | | |
| | NMPP | | | | | | | | | | |
| | ABUND. | 4.51E04 | 5.33E03 | 0.00E00 | 2.20E03 | | | | | | |
| | PERCT | 85.70 | 10.13 | 0.00 | 4.17 | | | | | | |
| | FITZ | | | | | | | | | | |
| | ABUND. | 2.13E04 | 2.96E03 | 0.00E00 | 5.38E03 | | | | | | |
| | PERCT | 71.89 | 9.97 | 0.00 | 18.14 | | | | | | |
| | NMPE | | | | | | | | | | |
| | ABUND. | 1.16E04 | 1.74E04 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 40.00 | 60.00 | 0.00 | 0.00 | | | | | | |
| 30 | NMPW | | | | | | | | | | |
| | ABUND. | 9.40E04 | 1.52E04 | 0.00E00 | 5.18E03 | | | | | | |
| | PERCT | 82.20 | 13.26 | 0.00 | 4.53 | | | | | | |
| | NMPP | | | | | | | | | | |
| | ABUND. | 2.54E04 | 2.98E03 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 89.50 | 10.50 | 0.00 | 0.00 | | | | | | |
| | FITZ | | | | | | | | | | |
| | ABUND. | 8.37E04 | 3.88E03 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 95.57 | 4.43 | 0.00 | 0.00 | | | | | | |
| | NMPE | | | | | | | | | | |
| | ABUND. | 7.99E04 | 6.53E04 | 0.00E00 | 5.83E03 | | | | | | |

* MEAN OF TWO REPLICATE SAMPLES; NUMBER OF SPECIES/DM*2
NS = NO SAMPLE TAKEN

ABUNDANCE AND PERCENT COMPOSITION OF SELECTED TAXA OF ZOOEPHYPHYTON
IN BOTTOM PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - AUGUST-1976

| DEPTH | TRANSECT | CILIATA | SUCTORIA | ROTIFERA | OTHER | DEPTH | TRANSECT | CILIATA | SUCTORIA | ROTIFERA | OTHER |
|-------|----------|---------|----------|----------|---------|-------|----------|---------|----------|----------|---------|
| 5 | NMPW | | | | | | NMPP | | | | |
| | ABUND. | 8.99E03 | 0.00E00 | 0.00E00 | 0.00E00 | | ABUND. | 4.20E03 | 4.20E03 | 0.00E00 | 0.00E00 |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 | | PERCT | 50.00 | 50.00 | 0.00 | 0.00 |
| | NMPP | NS | NS | NS | NS | | FITZ | | | | |
| | FITZ | NS | NS | NS | NS | | ABUND. | 2.00E05 | 0.00E00 | 0.00E00 | 1.12E04 |
| | | | | | | | PERCT | 94.71 | 0.00 | 0.00 | 5.29 |
| | NMPE | | | | | | NMPE | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | | ABUND. | 1.38E04 | 0.00E00 | 0.00E00 | 7.44E03 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 | | PERCT | 65.02 | 0.00 | 0.00 | 34.98 |
| 10 | NMPW | | | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| | NMPP | | | | | | | | | | |
| | ABUND. | 9.34E03 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| | FITZ | | | | | | | | | | |
| | ABUND. | 5.89E04 | 1.13E04 | 0.00E00 | 1.13E04 | | | | | | |
| | PERCT | 72.27 | 13.87 | 0.00 | 13.87 | | | | | | |
| | NMPE | | | | | | | | | | |
| | ABUND. | 7.81E03 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| 20 | NMPW | | | | | | | | | | |
| | ABUND. | 1.05E04 | 1.30E03 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 88.94 | 11.06 | 0.00 | 0.00 | | | | | | |
| | NMPP | | | | | | | | | | |
| | ABUND. | 4.78E04 | 0.00E00 | 0.00E00 | 1.11E04 | | | | | | |
| | PERCT | 81.21 | 0.00 | 0.00 | 18.79 | | | | | | |
| | FITZ | | | | | | | | | | |
| | ABUND. | 5.60E04 | 3.20E03 | 0.00E00 | 2.21E03 | | | | | | |
| | PERCT | 91.18 | 5.22 | 0.00 | 3.60 | | | | | | |
| | NMPE | | | | | | | | | | |
| | ABUND. | 9.92E02 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| 30 | NMPW | | | | | | | | | | |
| | ABUND. | 5.70E03 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| | NMPP | | | | | | | | | | |
| | ABUND. | 1.18E04 | 1.02E04 | 0.00E00 | 6.14E03 | | | | | | |
| | PERCT | 41.95 | 36.21 | 0.00 | 21.84 | | | | | | |
| | FITZ | | | | | | | | | | |
| | ABUND. | 1.26E05 | 1.58E04 | 0.00E00 | 1.56E04 | | | | | | |
| | PERCT | 80.07 | 10.05 | 0.00 | 9.88 | | | | | | |
| | NMPE | | | | | | | | | | |
| | ABUND. | 1.37E04 | 0.00E00 | 0.00E00 | 1.58E03 | | | | | | |
| | PERCT | 89.63 | 0.00 | 0.00 | 10.37 | | | | | | |
| 40 | NMPW | NS | NS | NS | NS | | | | | | |

* MEAN OF TWO REPLICATE SAMPLES; NUMBER OF ORGANISMS/DM²
NS = NO SAMPLE TAKEN

APPENDIX VIC-2e

ABUNDANCE* AND PERCENT COMPOSITION OF SELECTED TAXA OF ZOOEPHERIPHYTON
IN BOTTOM PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - SEPTEMBER 1976

| DEPTH | TRANSECT | CILIATA | SUCTORIA | ROTIFERA | OTHER | DEPTH | TRANSECT | CILIATA | SUCTORIA | ROTIFERA | OTHER |
|-------|----------|---------|----------|----------|---------|-------|----------|---------|----------|----------|---------|
| 5 | NMPW | | | | | | ABUND. | 7.18E03 | 1.79E03 | 0.00E00 | 0.00E00 |
| | ABUND. | 1.49E04 | 0.00E00 | 0.00E00 | 0.00E00 | | PERCT | 80.00 | 20.00 | 0.00 | 0.00 |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 | | NMPP | NS | NS | NS | NS |
| | NMPP | | | | | | FITZ | | | | |
| | ABUND. | 3.38E04 | 0.00E00 | 0.00E00 | 0.00E00 | | ABUND. | 2.34E04 | 1.83E04 | 0.00E00 | 5.04E03 |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 | | PERCT | 50.09 | 39.13 | 0.00 | 10.77 |
| | FITZ | NS | NS | NS | NS | | ABUND. | 3.11E03 | 7.61E03 | 0.00E00 | 0.00E00 |
| | NMPE | | | | | | PERCT | 29.05 | 70.95 | 0.00 | 0.00 |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| 10 | NMPW | | | | | | | | | | |
| | ABUND. | 3.09E04 | 4.59E03 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 87.06 | 12.94 | 0.00 | 0.00 | | | | | | |
| | NMPP | | | | | | | | | | |
| | ABUND. | 8.96E04 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| | FITZ | NS | NS | NS | NS | | | | | | |
| | NMPE | | | | | | | | | | |
| | ABUND. | 2.27E04 | 2.71E04 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 45.62 | 54.38 | 0.00 | 0.00 | | | | | | |
| 20 | NMPW | | | | | | | | | | |
| | ABUND. | 5.59E04 | 5.05E03 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 91.72 | 8.28 | 0.00 | 0.00 | | | | | | |
| | NMPP | | | | | | | | | | |
| | ABUND. | 1.08E04 | 9.24E03 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 53.90 | 46.10 | 0.00 | 0.00 | | | | | | |
| | FITZ | | | | | | | | | | |
| | ABUND. | 2.78E04 | 2.23E04 | 0.00E00 | 7.10E03 | | | | | | |
| | PERCT | 48.61 | 38.99 | 0.00 | 12.40 | | | | | | |
| | NMPE | | | | | | | | | | |
| | ABUND. | 3.81E04 | 7.24E03 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 84.03 | 15.97 | 0.00 | 0.00 | | | | | | |
| 30 | NMPW | | | | | | | | | | |
| | ABUND. | 1.80E04 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| | NMPP | | | | | | | | | | |
| | ABUND. | 2.64E03 | 2.64E03 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 50.00 | 50.00 | 0.00 | 0.00 | | | | | | |
| | FITZ | | | | | | | | | | |
| | ABUND. | 8.24E04 | 2.00E04 | 0.00E00 | 1.12E04 | | | | | | |
| | PERCT | 72.50 | 17.61 | 0.00 | 9.88 | | | | | | |
| | NMPE | | | | | | | | | | |
| | ABUND. | 1.25E04 | 1.49E04 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 45.61 | 54.39 | 0.00 | 0.00 | | | | | | |
| 40 | NMPW | | | | | | | | | | |

* MEAN OF TWO REPLICATE SAMPLES; NUMBER OF ORGANISMS/DM*2.
NS = NO SAMPLE TAKEN

ABUNDANCE* AND PERCENT COMPOSITION OF SELECTED TAXA OF ZOOPLANKTON
IN BOTTOM PLANKTON COLLECTIONS

NINE MILE POINT VICINITY - OCTOBER 1976

| DEPTH | TRANSECT | CILIATA | SUCTORIA | ROTIFERA | OTHER |
|-------|----------|---------|----------|----------|---------|
| 5 | NMPW | | | | |
| | ABUND. | 1.11E04 | 9.36E03 | 0.00E00 | 0.00E00 |
| | PERCT | 54.34 | 45.66 | 0.00 | 0.00 |
| | NMPP | NS | NS | NS | NS |
| | FITZ | NS | NS | NS | NS |
| 10 | NMPE | | | | |
| | ABUND. | NS | NS | NS | NS |
| | NMPW | NS | NS | NS | NS |
| | NMPP | NS | NS | NS | NS |
| | FITZ | NS | NS | NS | NS |
| 20 | NMPE | NS | NS | NS | NS |
| | NMPW | NS | NS | NS | NS |
| | NMPP | NS | NS | NS | NS |
| | ABUND. | NS | NS | NS | NS |
| | FITZ | | | | |
| 30 | ABUND. | 5.86E04 | 3.33E03 | 0.00E00 | 0.00E00 |
| | PERCT | 94.63 | 5.37 | 0.00 | 0.00 |
| | NMPE | | | | |
| | ABUND. | 7.15E04 | 2.94E04 | 0.00E00 | 0.00E00 |
| | PERCT | 70.86 | 29.14 | 0.00 | 0.00 |
| 40 | NMPW | NS | NS | NS | NS |
| | NMPP | NS | NS | NS | NS |
| | FITZ | NS | NS | NS | NS |
| | NMPE | NS | NS | NS | NS |
| | NMPW | NS | NS | NS | NS |

* MEAN OF TWO REPLICATE SAMPLES; NUMBER OF ORGANISMS/DM*2
NS = NO SAMPLE TAKEN

APPENDIX VIC-2e

ABUNDANCE* AND PERCENT COMPOSITION OF SELECTED TAXA OF ZOOEPHYPHYTON
IN BOTTOM PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - NOVEMBER 1976

| DEPTH | TRANSECT | CILIATA | SUCTORIA | ROTIFERA | OTHER | DEPTH | TRANSECT | CILIATA | SUCTORIA | ROTIFERA | OTHER |
|-------|----------|---------|----------|----------|---------|-------|----------|---------|----------|----------|---------|
| 5 | NMPW | | | | | | NMPP | | | | |
| | ABUND. | 1.00E03 | 0.00E00 | 0.00E00 | 0.00E00 | | ABUND. | 1.06E03 | 4.25E03 | 0.00E00 | 0.00E00 |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 | | PERCT | 20.01 | 79.99 | 0.00 | 0.00 |
| | NMPP | | | | | | FITZ | NS | NS | NS | NS |
| | ABUND. | 8.62E02 | 0.00E00 | 0.00E00 | 0.00E00 | | NMPE | | | | |
| | PERCT | 100.00 | 0.00 | 0.00 | 0.00 | | ABUND. | 0.00E00 | 9.76E02 | 0.00E00 | 0.00E00 |
| | FITZ | | | | | | PERCT | 0.00 | 100.00 | 0.00 | 0.00 |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| | NMPE | | | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| 10 | NMPW | | | | | | | | | | |
| | ABUND. | 7.61E02 | 0.00E00 | 0.00E00 | 2.30E03 | | | | | | |
| | PERCT | 24.89 | 0.00 | 0.00 | 75.11 | | | | | | |
| | NMPP | | | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| | FITZ | | | | | | | | | | |
| | ABUND. | 1.29E03 | 1.44E03 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 47.36 | 52.64 | 0.00 | 0.00 | | | | | | |
| | NMPE | | | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| 20 | NMPW | | | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| | NMPP | | | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| | FITZ | | | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| | NMPE | NS | NS | NS | NS | | | | | | |
| 30 | NMPW | | | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| | NMPP | | | | | | | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 | | | | | | |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| | FITZ | NS | NS | NS | NS | | | | | | |
| | NMPE | NS | NS | NS | NS | | | | | | |
| 40 | NMPW | | | | | | | | | | |
| | | NS | NS | NS | NS | | | | | | |

* MEAN OF TWO REPLICATE SAMPLES; NUMBER OF ORGANISMS/DH*2
NS = NO SAMPLE TAKEN

APPENDIX VIC-2e

ABUNDANCE* AND PERCENT COMPOSITION OF SELECTED TAXA OF ZOOEPHERIPHYTON
IN BOTTOM PERIPHYTON COLLECTIONS

NINE MILE POINT VICINITY - DECEMBER 1976

| DEPTH | TRANSECT | CILIATA | SUCTORIA | ROTIFERA | OTHER |
|-------|----------|---------|----------|----------|---------|
| 5 | NMPW | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | FITZ | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| 10 | NMPW | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | FITZ | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| 20 | NMPW | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | FITZ | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| 30 | NMPW | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP | NS | NS | NS | NS |
| | FITZ | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| 40 | NMPW | | | | |

| DEPTH | TRANSECT | CILIATA | SUCTORIA | ROTIFERA | OTHER |
|-------|----------|---------|----------|----------|---------|
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPP | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | FITZ | | | | |
| | ABUND. | 0.00E00 | 0.00E00 | 0.00E00 | 0.00E00 |
| | PERCT | 0.00 | 0.00 | 0.00 | 0.00 |
| | NMPE | NS | NS | NS | NS |

* MEAN OF TWO REPLICATE SAMPLES; NUMBER OF ORGANISMS/DH*2
NS = NO SAMPLE TAKEN



CHAPTER VII

APPENDIX VIIA-1

ABUNDANCE OF ALEWIFE IN SEINE COLLECTIONS^a

NINE MILE POINT VICINITY - 1976

| DATE | START TIME ^b | NMPW | NMPP | FITZ | NMPE | DAILY MEAN |
|----------------------------|----------------------------|-------|-------|-------|-------|---------------|
| 14 APR | 0915 | 0 | 0 | 0 | 0 | 0 |
| 30 APR | 1800 | 0 | 23 | 8 | 0 | 7.8 |
| 14 MAY | 0910 | 1 | 58 | 0 | 1 | 15.0 |
| 24 MAY | 1420 | 143 | 1304 | 305 | 1 | 438.2 |
| 4 JUN | 1030 | 0 | 78 | 0 | 0 | 19.5 |
| 18 JUN | 0910 | 183 | 21 | 0 | 0 | 51.0 |
| 6 JUL | 1145 | 168 | 7 | 124 | 0 | 74.8 |
| 15 JUL | 1155 | 6 | 6 | 10 | 0 | 5.5 |
| 3 AUG | 1435 | 45 | 2 | 31 | 24 | 25.5 |
| 20 AUG | 0930 | 2554 | 2153 | 280 | 44 | 1257.8 |
| 9 SEP | 1120 | 1031 | 12 | 698 | 1711 | 863.0 |
| 30 SEP | 0945 | 3 | 29 | 30 | 0 | 15.5 |
| 12 OCT | 1025 | 0 | 0 | 510 | 1055 | 391.2 |
| 2 NOV ^c | 1110 | 0 | 0 | 0 | 0 | 0 |
| 12 NOV | 1100 | 0 | 0 | 0 | 0 | 0 |
| 27 NOV | 1050 | 0 | 0 | 0 | 0 | 0 |
| 6 DEC | 0920 | 0 | 0 | 0 | 0 | 0 |
| GRAND ^d MEAN | | 243.2 | 217.2 | 117.4 | 166.8 | |

^a Successful haul

^b Earliest time period for that sampling date

^c October sample; rough lake conditions

^d April-December sampling period

APPENDIX VIIA-2

ABUNDANCE OF BROWN TROUT IN SEINE COLLECTIONS^a

NINE MILE POINT VICINITY - 1976

| DATE | START TIME ^b | NMPW | NMPP | FITZ | NMPE | DAILY MEAN |
|----------------------------|----------------------------|------|------|------|------|---------------|
| 14 APR | 0915 | 0 | 0 | 0 | 0 | 0 |
| 30 APR | 1800 | 0 | 0 | 3 | 0 | 0.8 |
| 14 MAY | 0910 | 0 | 0 | 0 | 0 | 0 |
| 24 MAY | 1420 | 0 | 0 | 0 | 0 | 0 |
| 4 JUN | 1030 | 0 | 0 | 0 | 0 | 0 |
| 18 JUN | 0910 | 0 | 0 | 0 | 0 | 0 |
| 6 JUL | 1145 | 0 | 0 | 0 | 2 | 0.5 |
| 15 JUL | 1155 | 0 | 0 | 0 | 0 | 0 |
| 3 AUG | 1435 | 0 | 0 | 0 | 0 | 0 |
| 20 AUG | 0930 | 0 | 0 | 0 | 0 | 0 |
| 9 SEP | 1120 | 0 | 0 | 0 | 0 | 0 |
| 30 SEP | 0945 | 0 | 0 | 0 | 0 | 0 |
| 12 OCT | 1025 | 0 | 0 | 0 | 0 | 0 |
| 2 NOV ^c | 1110 | 0 | 0 | 0 | 0 | 0 |
| 12 NOV | 1100 | 0 | 0 | 0 | 0 | 0 |
| 27 NOV | 1050 | 0 | 0 | 0 | 0 | 0 |
| 6 DEC | 0920 | 0 | 0 | 0 | 0 | 0 |
| GRAND ^d MEAN | | 0 | 0 | 0.2 | 0.1 | |

^a Successful haul^b Earliest time period for that sampling date^c October sample; rough lake conditions^d April-December sampling period

APPENDIX VIIA-3

ABUNDANCE OF COHO SALMON IN SEINE COLLECTIONS^a

NINE MILE POINT VICINITY - 1976

| DATE | START _b TIME | NMPW | NMPP | FITZ | NMPE | DAILY MEAN |
|----------------------------|----------------------------|------|------|------|------|---------------|
| 14 APR | 0915 | 0 | 0 | 0 | 0 | 0 |
| 30 APR | 1800 | 0 | 0 | 0 | 0 | 0 |
| 14 MAY | 0910 | 0 | 0 | 0 | 0 | 0 |
| 24 MAY | 1420 | 0 | 0 | 1 | 0 | 0.2 |
| 4 JUN | 1030 | 0 | 0 | 0 | 0 | 0 |
| 18 JUN | 0910 | 3 | 1 | 11 | 2 | 4.2 |
| 6 JUL | 1145 | 0 | 0 | 0 | 0 | 0 |
| 15 JUL | 1155 | 0 | 0 | 2 | 0 | 0.5 |
| 3 AUG | 1435 | 0 | 0 | 0 | 0 | 0 |
| 20 AUG | 0930 | 0 | 0 | 0 | 0 | 0 |
| 9 SEP | 1120 | 0 | 0 | 0 | 0 | 0 |
| 30 SEP | 0945 | 0 | 0 | 0 | 0 | 0 |
| 12 OCT | 1025 | 0 | 0 | 0 | 0 | 0 |
| 2 NOV ^c | 1110 | 0 | 0 | 0 | 0 | 0 |
| 12 NOV | 1100 | 0 | 0 | 0 | 0 | 0 |
| 27 NOV | 1050 | 0 | 0 | 0 | 0 | 0 |
| 6 DEC | 0920 | 0 | 0 | 0 | 0 | 0 |
| GRAND ^d MEAN | | 0.2 | 0.1 | 0.8 | 0.1 | |

^a Successful haul

^b Earliest time period for that sampling date

^c October sample; rough lake conditions

^d April-December sampling period

APPENDIX VIIA-4

ABUNDANCE OF EMERALD SHINER IN SEINE COLLECTIONS^a

NINE MILE POINT VICINITY - 1976

| DATE | START TIME ^b | NMPW | NMPP | FITZ | NMPE | DAILY MEAN |
|-------------------------|----------------------------|------|------|------|------|---------------|
| 14 APR | 0915 | 0 | 7 | 1 | 0 | 2.0 |
| 30 APR | 1800 | 0 | 111 | 1 | 0 | 28.0 |
| 14 MAY | 0910 | 0 | 181 | 0 | 3 | 46.0 |
| 24 MAY | 1420 | 2 | 58 | 13 | 1 | 18.5 |
| 18 JUN | 0910 | 2 | 2 | 6 | 2 | 3.0 |
| 15 JUL | 1155 | 0 | 1 | 0 | 0 | 0.2 |
| 3 AUG | 1435 | 14 | 3 | 0 | 0 | 4.2 |
| 9 SEP | 1120 | 0 | 1 | 0 | 0 | 0.2 |
| 30 SEP | 0945 | 0 | 1 | 2 | 0 | 0.8 |
| 12 OCT | 1025 | 0 | 1 | 0 | 0 | 0.2 |
| 12 NOV | 1100 | 2 | 0 | 0 | 1 | 0.8 |
| 27 NOV | 1050 | 0 | 114 | 0 | 4 | 29.5 |
| GRAND MEAN ^c | | 1.2 | 28.2 | 1.4 | 0.6 | |

None collected in 4 Jun, 6 Jul, 20 Aug, 2 Nov^d, and 6 Dec Seine collections

^a Successful haul

^b Earliest time period for that sampling date

^c April-December sampling period

^d 2 Nov sample represents October collection

APPENDIX VIIA-5

ABUNDANCE OF GIZZARD SHAD IN SEINE COLLECTIONS^a

NINE MILE POINT VICINITY - 1976

| DATE | START TIME ^b | NMPW | NMPP | FITZ | NMPE | DAILY MEAN |
|----------------------------|----------------------------|------|------|------|------|---------------|
| 14 APR | 0915 | 2 | 23 | 5 | 10 | 10.0 |
| 30 APR | 1800 | 0 | 165 | 2 | 0 | 41.8 |
| 14 MAY | 0910 | 0 | 961 | 0 | 0 | 240.2 |
| 24 MAY | 1420 | 1 | 116 | 10 | 0 | 31.8 |
| 4 JUN | 1030 | 0 | 326 | 0 | 0 | 81.5 |
| 18 JUN | 0910 | 1 | 2 | 0 | 0 | 0.8 |
| 6 JUL | 1145 | 0 | 1 | 1 | 0 | 0.5 |
| 3 AUG | 1435 | 0 | 4 | 0 | 0 | 1.0 |
| 30 SEP | 0945 | 1 | 1 | 0 | 0 | 0.5 |
| GRAND MEAN ^c | | 0.3 | 94.1 | 1.1 | 0.6 | |

None collected in 15 Jul, 20 Aug-9 Sep, and 12 Oct-6 Dec seine collections

^a Successful haul

^b Earliest time period for that sampling date

^c April-December sampling period

APPENDIX VIIA-6

ABUNDANCE OF RAINBOW SMELT IN SEINE COLLECTIONS^a

NINE MILE POINT VICINITY - 1976

| DATE | START TIME ^b | NMPW | NMPP | FITZ | NMPE | DAILY MEAN |
|----------------------------|----------------------------|------|------|------|------|---------------|
| 14 APR | 0915 | 4 | 2 | 0 | 0 | 1.5 |
| 30 APR | 1800 | 0 | 0 | 0 | 0 | 0 |
| 14 MAY | 0910 | 0 | 0 | 0 | 0 | 0 |
| 24 MAY | 1420 | 4 | 1 | 2 | 2 | 2.2 |
| 4 JUN | 1030 | 0 | 0 | 0 | 0 | 0 |
| 18 JUN | 0910 | 0 | 0 | 0 | 0 | 0 |
| 6 JUL | 1145 | 0 | 0 | 0 | 0 | 0 |
| 15 JUL | 1155 | 0 | 0 | 0 | 0 | 0 |
| 3 AUG | 1435 | 0 | 0 | 0 | 0 | 0 |
| 20 AUG | 0930 | 0 | 0 | 0 | 0 | 0 |
| 9 SEP | 1120 | 0 | 0 | 0 | 0 | 0 |
| 30 SEP | 0945 | 0 | 0 | 0 | 0 | 0 |
| 12 OCT | 1025 | 0 | 0 | 0 | 0 | 0 |
| 2 NOV ^c | 1110 | 0 | 0 | 0 | 0 | 0 |
| 12 NOV | 1100 | 0 | 0 | 0 | 0 | 0 |
| 27 NOV | 1050 | 0 | 0 | 0 | 0 | 0 |
| 6 DEC | 0920 | 0 | 0 | 0 | 0 | 0 |
| GRAND ^d MEAN | | 0.5 | 0.2 | 0.1 | 0.1 | |

^a Successful haul^b Earliest time period for that sampling date^c October sample; rough lake conditions^d April-December sampling period

APPENDIX VIIA-7

ABUNDANCE OF SPOTTAIL SHINER IN SEINE COLLECTIONS^a

NINE MILE POINT VICINITY - 1976

| DATE | START TIME ^b | NMPW | NMPP | FITZ | NMPE | DAILY MEAN |
|----------------------------|----------------------------|------|------|------|------|---------------|
| 14 APR | 0915 | 0 | 0 | 0 | 0 | 0 |
| 30 APR | 1800 | 0 | 0 | 0 | 0 | 0 |
| 14 MAY | 0910 | 0 | 0 | 0 | 0 | 0 |
| 24 MAY | 1420 | 0 | 1 | 0 | 0 | 0.2 |
| 4 JUN | 1030 | 0 | 19 | 0 | 1 | 5.0 |
| 18 JUN | 0910 | 1 | 0 | 0 | 3 | 1.0 |
| 6 JUL | 1145 | 0 | 0 | 0 | 0 | 0 |
| 15 JUL | 1155 | 0 | 0 | 0 | 0 | 0 |
| 3 AUG | 1435 | 0 | 2 | 0 | 0 | 0.5 |
| 20 AUG | 0930 | 0 | 0 | 0 | 0 | 0 |
| 9 SEP | 1120 | 0 | 0 | 0 | 0 | 0 |
| 30 SEP | 0945 | 0 | 0 | 0 | 3 | 0.8 |
| 12 OCT | 1025 | 0 | 0 | 0 | 0 | 0 |
| 2 NOV ^c | 1110 | 0 | 0 | 0 | 0 | 0 |
| 12 NOV | 1100 | 0 | 0 | 0 | 0 | 0 |
| 27 NOV | 1050 | 0 | 0 | 0 | 0 | 0 |
| 6 DEC | 0920 | 0 | 0 | 0 | 0 | 0 |
| GRAND ^d MEAN | | 0.1 | 1.3 | 0 | 0.4 | |

^a Successful haul^b Earliest time period for that sampling date^c October sample; rough lake conditions^d April-December sampling period

APPENDIX VIIA-8

ABUNDANCE OF THREESPIN STICKLEBACK IN SEINE COLLECTIONS^a

NINE MILE POINT VICINITY - 1976

| DATE | START TIME ^b | NMPW | NMPP | FITZ | NMPE | DAILY MEAN |
|----------------------------|----------------------------|------|------|------|------|---------------|
| 14 APR | 0915 | 0 | 0 | 0 | 0 | 0 |
| 30 APR | 1800 | 0 | 0 | 0 | 0 | 0 |
| 14 MAY | 0910 | 0 | 0 | 43 | 185 | 57.0 |
| 24 MAY | 1420 | 9 | 8 | 45 | 7 | 17.2 |
| 4 JUN | 1030 | 0 | 2 | 5 | 9 | 4.0 |
| 18 JUN | 0910 | 0 | 1 | 1 | 126 | 32.0 |
| 6 JUL | 1145 | 0 | 0 | 0 | 0 | 0 |
| 15 JUL | 1155 | 0 | 0 | 0 | 5 | 1.2 |
| 3 AUG | 1435 | 0 | 0 | 0 | 0 | 0 |
| 20 AUG | 0930 | 0 | 0 | 0 | 0 | 0 |
| 9 SEP | 1120 | 0 | 0 | 0 | 0 | 0 |
| 30 SEP | 0945 | 0 | 0 | 0 | 0 | 0 |
| 12 OCT | 1025 | 0 | 0 | 0 | 0 | 0 |
| 2 NOV ^c | 1110 | 0 | 0 | 0 | 0 | 0 |
| 12 NOV | 1100 | 0 | 0 | 0 | 0 | 0 |
| 27 NOV | 1050 | 0 | 0 | 0 | 0 | 0 |
| 6 DEC | 0920 | 0 | 0 | 0 | 0 | 0 |
| GRAND ^d MEAN | | 0.5 | 0.6 | 5.5 | 19.5 | |

^a Successful haul^b Earliest time period for that sampling date^c October sample; rough lake conditions^d April-December sampling period

APPENDIX VIIA-9

ABUNDANCE OF WHITE PERCH IN SEINE COLLECTIONS^a

NINE MILE POINT VICINITY - 1976

| DATE | START TIME ^b | NMPW | NMPP | FITZ | NMPE | DAILY MEAN |
|----------------------------|----------------------------|------|------|------|------|---------------|
| 14 APR | 0915 | 0 | 0 | 0 | 0 | 0 |
| 30 APR | 1800 | 0 | 3 | 0 | 0 | 0.8 |
| 14 MAY | 0910 | 0 | 2 | 0 | 0 | 0.5 |
| 24 MAY | 1420 | 0 | 6 | 1 | 0 | 1.8 |
| 4 JUN | 1030 | 0 | 1 | 0 | 0 | 0.2 |
| 18 JUN | 0910 | 0 | 44 | 0 | 0 | 11.0 |
| 6 JUL | 1145 | 1 | 2 | 1 | 0 | 1.0 |
| 15 JUL | 1155 | 0 | 0 | 0 | 0 | 0 |
| 3 AUG | 1435 | 0 | 0 | 0 | 0 | 0 |
| 20 AUG | 0930 | 0 | 2 | 0 | 0 | 0.5 |
| 9 SEP | 1120 | 0 | 0 | 0 | 0 | 0 |
| 30 SEP | 0945 | 0 | 0 | 0 | 0 | 0 |
| 12 OCT | 1025 | 0 | 1 | 0 | 0 | 0.2 |
| 2 NOV ^c | 1110 | 0 | 0 | 0 | 0 | 0 |
| 12 NOV | 1100 | 1 | 0 | 0 | 0 | 0.2 |
| 27 NOV | 1050 | 0 | 0 | 0 | 0 | 0 |
| 6 DEC | 0920 | 0 | 0 | 0 | 0 | 0 |
| GRAND ^d MEAN | | 0.1 | 3.6 | 0.1 | 0 | |

^aSuccessful haul^bEarliest time period for that sampling date^cOctober sample; rough lake conditions^dApril-December sampling period

APPENDIX VIIA-10

ABUNDANCE OF YELLOW PERCH IN SEINE COLLECTIONS^a

NINE MILE POINT VICINITY - 1976

| DATE | START TIME ^b | NMPW | NMPP | FITZ | NMPE | DAILY MEAN |
|----------------------------|----------------------------|------|------|------|------|---------------|
| 14 APR | 0915 | 0 | 0 | 0 | 0 | 0 |
| 30 APR | 1800 | 0 | 0 | 0 | 0 | 0 |
| 14 MAY | 0910 | 0 | 0 | 0 | 0 | 0 |
| 24 MAY | 1420 | 0 | 0 | 0 | 0 | 0 |
| 4 JUN | 1030 | 0 | 12 | 0 | 0 | 3.0 |
| 18 JUN | 0910 | 0 | 3 | 0 | 13 | 4.0 |
| 6 JUL | 1145 | 0 | 0 | 0 | 0 | 0 |
| 15 JUL | 1155 | 0 | 0 | 0 | 0 | 0 |
| 3 AUG | 1435 | 0 | 0 | 0 | 0 | 0 |
| 20 AUG | 0930 | 0 | 0 | 0 | 0 | 0 |
| 9 SEP | 1120 | 0 | 0 | 0 | 0 | 0 |
| 30 SEP | 0945 | 0 | 0 | 0 | 0 | 0 |
| 12 OCT | 1025 | 0 | 0 | 0 | 0 | 0 |
| 2 NOV ^c | 1110 | 0 | 0 | 0 | 0 | 0 |
| 12 NOV | 1100 | 0 | 0 | 0 | 0 | 0 |
| 27 NOV | 1050 | 0 | 0 | 0 | 0 | 0 |
| 2 DEC | 0920 | 0 | 0 | 0 | 0 | 0 |
| GRAND ^d MEAN | | 0 | 0.9 | 0 | 0.8 | |

^aSuccessful haul^bEarliest time period for that sampling date^cOctober sample; rough lake conditions^dApril-December sampling period

APPENDIX VII B-1

ABUNDANCE^a OF ALEWIFE IN BOTTOM TRAWL COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | DAY ^c NIGHT | 20 FT DEPTH CONTOUR | | | | 40 FT DEPTH CONTOUR | | | | 60 FT DEPTH CONTOUR | | | | DAILY MEAN |
|----------------------------|---------------------------|---------------------|----------------|----------------|------|---------------------|----------------|--------------------|-------|---------------------|----------------|-------------------|-------|---------------|
| | | NMPW | NMPP/ FITZ | NMPE | MEAN | NMPW | NMPP/ FITZ | NMPE | MEAN | NMPW | NMPP/ FITZ | NMPE | MEAN | |
| 9 APR | 1045 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 2100 ^N | 92 | 38 | 2 | 44.0 | 29 | 69 | 3 | 33.7 | 0 | 78 | 32 | 36.7 | 19.1 |
| 22 APR | 0955 ^D | 0 | 0 | 0 | 0 | 0 | 55 | 0 | 18.3 | 9 | 17 | 22 | 16.0 | |
| 29 APR | 2150 ^N | NS | NS | NS | - | 134 | 33 | 125 | 97.3 | 40 | 142 | 134 | 105.3 | 47.4 |
| 13 MAY | 1010 ^D | 18 | 27 | 1 | 15.3 | 5 | 30 | 0 | 11.7 | 3 | 13 | 0 | 5.3 | |
| | 2245 ^N | 23 | 14 | 7 | 14.7 | 22 | 4 | 7 | 11.0 | 10 | 2 | 1 | 4.3 | 10.4 |
| 25 MAY | 0940 ^D | 45 | 32 | 21 | 32.7 | 4 | 24 | 4 | 10.7 | 4 | 231 | 0 | 78.3 | |
| | 2130 ^N | 10 | 87 | 25 | 40.7 | 5 | 28 | 16 | 16.3 | 4 | 13 | 12 | 9.7 | 31.4 |
| 8 JUN | 0930 ^D | 0 | 2 | 0 | 0.7 | 87 | 0 | 0 | 29.0 | 0 | 0 | 0 | 0 | |
| | 2305 ^N | 0 | 2 | 4 | 2.0 | 1 | 0 | 0 | 0.3 | 1 | 1 | 2 | 1.3 | 5.6 |
| 24 JUN | 0830 ^D | 1 | 0 | 0 ^g | 0.3 | 0 ^g | 1 ^g | 770 ^g | 257.0 | 0 ^g | 0 ^g | 478 ^g | 159.3 | |
| 29 JUN | 2355 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 45 ^b | 15.0 | 0 | 0 | 121 ^b | 40.3 | 78.7 |
| 16 JUL | 1004 ^D | 0 | 0 | 0 | 0 | 2 | 1 | 79 ^b | 27.3 | 2 | 1 | 121 ^b | 41.3 | |
| | 0040 ^N | 4 | 5 | 1 | 3.3 | 9 | 7 | 3 ^b | 6.3 | 6 | 11 | 3 ^b | 6.7 | 14.2 |
| 27 JUL | 0935 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 0 ^b | 0 | |
| 28 JUL | 2235 ^N | 1 | 0 | 0 | 0.3 | 0 | 0 | 0 ^b | 0 | 2 | 8 | 42 ^b | 17.3 | 2.9 |
| 12 AUG | 1015 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 9 ^b | 3.0 | 0 | 0 | 3 ^b | 1.0 | |
| 10 AUG | 2327 ^N | 0 | 2 | 0 | 0.7 | 0 | 0 | 1 ^b | 0.3 | 0 | 1 | 0 ^b | 0.3 | 0.9 |
| 26 AUG | 0900 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 0 ^b | 0 | |
| | 2230 ^N | 0 | 0 | 1 | 0.3 | 0 | 0 | 0 ^b | 0 | 2 | 0 | 0 ^b | 0.7 | 0.2 |
| 7 SEP | 1000 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 12 ^b | 4.0 | |
| | 2130 ^N | 5 ^f | 3 | 1 | 3.0 | 6 ^f | 0 | 0 ^b | 2.0 | 0 ^f | 0 ^f | 1 ^b | 0.3 | 1.6 |
| 23 SEP | 0930 ^D | 0 ^d | 0 ^d | 5 | 1.7 | 0 ^d | 0 ^d | 0 ^b | 0 | 0 ^d | 0 ^d | 7 ^b | 2.3 | |
| 24 SEP | 2105 ^N | 0 | 0 | 0 | 0 | 14 | 0 ^e | 0 ^b | 4.7 | 45 | 35 | 448 ^b | 176.0 | 30.8 |
| 12 OCT | 0940 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 1798 ^b | 599.3 | 0 ^g | 0 | 270 ^b | 90.0 | |
| 19 OCT | 2030 ^N | 13 | 0 | 0 ^h | 4.3 | 22 | 5 | 0 ^b | 9.0 | 12 | 1 | 383 ^{bh} | 132.0 | 139.1 |
| 27 OCT | 1340 ^D | 0 | 0 ⁱ | 0 ⁱ | 0 | 0 | 1 ⁱ | 1245 ^{bi} | 415.3 | 0 | 0 ⁱ | 0 ^b | 0 | |
| 3 NOV | 1910 ^N | 10 | 2 | 9 | 7.0 | 8 | 6 | 137 ^b | 50.3 | 27 | 8 | 92 ^{bi} | 42.3 | 85.8 |
| 12 NOV | 1035 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 1 ^b | 0.3 | 0 | 0 | 2 ^b | 0.7 | |
| 9 NOV | 2010 ^N | 4 | 0 | 0 | 1.3 | 2 | 3 | 10 ^b | 5.0 | 2 | 0 | 0 ^b | 0.7 | 1.3 |
| 26 NOV | 0955 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 5 ^b | 1.7 | 0 | 0 | 582 ^b | 194.0 | |
| | 1935 ^N | 2 | 7 | 38 | 15.7 | 1 | 23 | 58 ^b | 27.3 | 1 | 4 | 156 ^b | 53.7 | 48.7 |
| 20 DEC | 1000 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 1 ^b | 0.3 | |
| 15 DEC | 1850 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 0 ^b | 0 | 0.1 |
| GRAND MEAN ^k | DAY NIGHT | 3.8 10.2 | 3.6 10.0 | 1.6 5.5 | | 5.8 14.9 | 6.6 10.5 | 230.1 23.8 | | 1.1 8.9 | 15.4 17.9 | 88.1 83.9 | | |

^a Catch/15 minute effort; flat otter trawl^b Standard Yankee Trawl^c Earliest time period recorded for that

sampling date

^d Sample taken 25 Sep^e 10 minute trawl^f Sample taken 8 Sep^g 17 minute trawl^h Sample taken 12 Octⁱ Sample taken 30 Oct^j Sample taken 27 Oct^k April-December Sampling period^l Sample taken 28 Jun

NS = No sample

- = Not applicable

APPENDIX VIIB-2

ABUNDANCE^a OF BROWN TROUT IN BOTTOM TRAWL COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | DAY ^c NIGHT | 20 FT DEPTH CONTOUR | | | | 40 FT DEPTH CONTOUR | | | | 60 FT DEPTH CONTOUR | | | | DAILY MEAN |
|----------------------------|---------------------------|---------------------|---------------|--------|------|---------------------|---------------|-------------------|------|---------------------|---------------|-------------------|------|---------------|
| | | NMPW | NMPP/ FITZ | NMPE | MEAN | NMPW | NMPP/ FITZ | NMPE ^b | MEAN | NMPW | NMPP/ FITZ | NMPE ^b | MEAN | |
| 16 JUL | 1004 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.3 | 0.1 |
| | 0040 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| GRAND MEAN ^d | DAY NIGHT | 0 0 | 0 0 | 0 0 | | 0 0 | 0 0 | 0 0 | | 0 0 | 0 0 | 0.1 0 | | |

None collected in .9 April-30 June and 27 Jul-15 Dec bottom trawl collections

^a Catch/15 minute effort; flat otter trawl

^b Standard Yankee Trawl

^c Earliest time period recorded for that sampling date

^d April-December sampling period

APPENDIX VII B-3

ABUNDANCE^a OF GIZZARD SHAD IN BOTTOM TRAWL COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | DAY ^c NIGHT | 20 FT DEPTH CONTOUR | | | | 40 FT DEPTH CONTOUR | | | | 60 FT DEPTH CONTOUR | | | | DAILY MEAN |
|----------------------------|---------------------------|---------------------|----------------|----------------|------|---------------------|----------------|-----------------|------|---------------------|----------------|-----------------|------|---------------|
| | | NMPW | FITZ | NMPE | MEAN | NMPW | FITZ | NMPE | MEAN | NMPW | FITZ | NMPE | MEAN | |
| 22 APR | 0955 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 |
| 29 APR | 2150 ^N | NS | NS | NS | - | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.3 | |
| 12 OCT | 0940 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 1 ^b | 0.3 | 0 ^d | 0 | 0 ^b | 0 | 0.1 |
| 19 OCT | 2030 ^N | 1 | 0 | 0 ^e | 0.3 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 0 ^{be} | 0 | |
| 27 OCT | 1340 ^D | 0 | 0 ^f | 0 ^f | 0 | 0 | 0 ^f | 1 ^{bf} | 0.3 | 0 | 0 ^f | 0 ^b | 0 | 0.1 |
| 3 NOV | 1910 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 0 ^{bg} | 0 | |
| 26 NOV | 0955 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 |
| | 1935 ^N | 1 | 0 | 0 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 20 DEC | 1000 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 |
| 15 DEC | 1850 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.3 | 0 | 0 | 0 | 0 | |
| GRAND MEAN ^h | DAY NIGHT | 0 0.1 | 0 0 | 0 0 | | 0 0 | 0 0 | 0.1 0.1 | | 0 0 | 0 0 | 0 0.1 | | |

None collected in 9 Apr, 13 May-24 Sep, and 9-12 Nov bottom trawl collections

^a Catch/15 minute effort; flat otter trawl

^b Standard Yankee Trawl

^c Earliest time period recorded for that sampling date

^d 17 minute trawl

^e Sample taken 12 Oct

^f Sample taken 30 Oct

^g Sample taken 27 Oct

^h April-December sampling period

NS = No sample

- = Not applicable

APPENDIX VIIB-4

ABUNDANCE^a OF JOHNNY DARTER IN BOTTOM TRAWL COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | DAY ^c NIGHT | 20 FT DEPTH CONTOUR | | | | 40 FT DEPTH CONTOUR | | | | 60 FT DEPTH CONTOUR | | | | DAILY MEAN |
|----------------------------|--|---------------------|----------------|----------------|------|---------------------|-----------------|-----------------|------|---------------------|----------------|-------------------|-------|---------------|
| | | NMPW | NMPP/ FITZ | NMPE | MEAN | NMPW | NMPP/ FITZ | NMPE | MEAN | NMPW | NMPP/ FITZ | NMPE | MEAN | |
| 25 MAY | 0940 ^D 2130 ^N | 0 | 0 | 2 | 0.7 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0.7 | 0.3 |
| | | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0.7 | 0 | 0 | 0 | 0 | |
| 8 JUN | 0930 ^D 2305 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 |
| | | 0 | 3 | 2 | 1.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 24 JUN | 0830 ^D | 0 | 0 | 0 ^l | 0 | 0 ^l | 28 ^l | 3 ^l | 10.3 | 3 ^l | 1 ^l | 18 ^l | 7.3 | 3.2 |
| 30 JUN | 2355 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 1.7 | |
| 16 JUL | 1004 ^D 0040 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 20 ^b | 6.7 | 0 | 0 | 20 ^b | 6.7 | 30.9 |
| | | 2 | 0 | 7 | 3.0 | 0 | 0 | 45 ^b | 15.0 | 0 | 0 | 463 ^b | 154.3 | |
| 27 JUL | 0935 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 0 ^b | 0 | 22.3 |
| 28 JUL | 2235 ^N | 0 | 0 | 0 | 0 | 2 | 0 | 0 ^b | 0.7 | 0 | 5 | 394 ^b | 133.0 | |
| 12 AUG | 1015 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1.0 | 0 | 0 | 13 | 4.3 | 5.2 |
| 10 AUG | 2327 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 10.0 | 0 | 0 | 48 | 16.0 | |
| 26 AUG | 0900 ^D 2230 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 2.0 | 0 | 0 | 0 | 0 | 35.2 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 9.3 | 0 | 0 | 600 | 200.0 | |
| 7 SEP | 1000 ^D 2130 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 12 ^b | 4.0 | 1.2 |
| | | 0 | 0 | 4 | 1.3 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 5 ^b | 1.7 | |
| 23 SEP | 0930 ^D | 0 ^d | 0 ^d | 3 | 1.0 | 0 ^d | 0 ^d | 10 ^b | 3.3 | 0 ^d | 0 ^d | 323 ^b | 107.7 | 60.3 |
| 24 SEP | 2105 ^N | 0 | 0 | 0 | 0 | 0 | 0 ^e | 0 ^b | 0 | 0 | 0 | 750 ^b | 250.0 | |
| 12 OCT | 0940 ^D | 0 | 0 | 0 ^h | 0 | 0 | 0 | 3 ^b | 1.0 | 0 ^g | 0 | 2 ^b | 0.7 | 1.6 |
| 19 OCT | 2030 ^N | 0 | 0 | 0 ^h | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 24 ^{bh} | 8.0 | |
| 27 OCT | 1340 ^D | 0 | 0 ⁱ | 0 ⁱ | 0 | 0 | 0 ⁱ | 5 ^{bi} | 1.7 | 0 | 0 | 0 ^b | 0 | 26.2 |
| 3 NOV | 1910 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 48 ^b | 16.0 | 0 | 1 | 418 ^{bj} | 139.7 | |
| 12 NOV | 1035 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 0 ^b | 0 | 0.2 |
| 9 NOV | 2010 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 4 ^b | 1.3 | 0 | 0 | 0 ^b | 0 | |
| 26 NOV | 0955 ^D 1935 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 1 ^b | 0.3 | 9.9 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 3 ^b | 1.0 | 0 | 0 | 175 ^b | 58.3 | |
| 20 DEC | 1000 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 0 ^b | 0 | 0.1 |
| 15 DEC | 1850 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 1 ^b | 0.3 | |
| GRAND MEAN ^k | DAY NIGHT | 0.0 0.1 | 0.0 0.2 | 0.3 0.8 | | 0.0 0.2 | 1.6 0.0 | 2.9 9.4 | | 0.3 0.0 | 0.1 0.4 | 22.9 169.5 | | |

None collected in 9 Apr - 13 May bottom trawl collections

^a Catch/15 minute effort; flat otter trawl
^c Standard Yankee Trawl
^d Earliest time period recorded for that sampling date

^d Sample taken 25 Sep
^e 10 minute trawl
^f Sample taken 8 Sep
^g 17 minute trawl

^h Sample taken 12 Oct
ⁱ Sample taken 30 Oct
^j Sample taken 27 Oct
^k April - December sampling period
^l Sample taken 28 Jun

APPENDIX VIIB-5

ABUNDANCE^a OF RAINBOW SMELT IN BOTTOM TRAWL COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | DAY ^c NIGHT | 20 FT DEPTH CONTOUR | | | | 40 FT DEPTH CONTOUR | | | | 60 FT DEPTH CONTOUR | | | | DAILY MEAN |
|----------------------------|---|---------------------|----------------|----------------|------|---------------------|----------------|------------------|-------|---------------------|----------------|-------------------|-------|---------------|
| | | NMPW | NMPP/ FITZ | NMPE | MEAN | NMPW | NMPP/ FITZ | NMPE | MEAN | NMPW | NMPP/ FITZ | NMPE | MEAN | |
| 9 APR | 1045 ^D 2100 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.0 |
| 22 APR | 0955 ^D 29 APR 2150 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.7 |
| 13 MAY | 1010 ^D 2245 ^N | 1 | 0 | 0 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 |
| 25 MAY | 0940 ^D 2130 ^N | 0 | 1 | 0 | 0.3 | 1 | 1 | 0 | 0.7 | 1 | 0 | 0 | 0.3 | 1.7 |
| 8 JUN | 0930 ^D 2305 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0.7 | 0 | 0 | 0 | 0 | 0.3 |
| 24 JUN | 0830 ^D 29 JUN 2355 ^N | 0 | 0 | 0 ^z | 0 | 0 ^z | 2 ^z | 99 ^z | 33.7 | 1 ^z | 0 ^z | 216 ^z | 72.3 | 19.8 |
| 16 JUL | 1004 ^D 0040 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 2 ^b | 0.7 | 0 | 0 | 5 ^b | 1.7 | 1.3 |
| 27 JUL | 0935 ^D 28 JUL 2235 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 0 ^b | 0 | 0.1 |
| 12 AUG | 1015 ^D 10 AUG 2327 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 10 ^b | 3.3 | 0 | 0 | 92 ^b | 30.7 | 7.9 |
| 26 AUG | 0900 ^D 2230 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 76 ^b | 25.3 | 0 | 0 | 0 ^b | 0 | 19.9 |
| 7 SEP | 1000 ^D 2130 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 105 ^b | 35.0 | 6.2 |
| 23 SEP | 0930 ^D 24 SEP 2105 ^N | 0 ^d | 0 ^d | 17 | 5.7 | 0 ^d | 0 ^d | 0 ^b | 0 | 0 ^d | 0 ^d | 75 ^b | 25.0 | 6.9 |
| 12 OCT | 0940 ^D 19 OCT 2030 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 478 ^b | 159.3 | 0 ^g | 0 | 449 ^b | 149.7 | 54.8 |
| 27 OCT | 1340 ^D 3 NOV 1910 ^N | 0 | 0 ⁱ | 0 ⁱ | 0 | 0 | 0 ⁱ | 87 ^{bi} | 29.0 | 0 | 0 ⁱ | 0 ^b | 0 | 18.8 |
| 12 NOV | 1035 ^D 9 NOV 2010 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 2 ^b | 0.7 | 0 | 0 | 263 ^b | 87.7 | 14.8 |
| 26 NOV | 0955 ^D NOV 1935 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 4 ^b | 1.3 | 0 | 0 | 2666 ^b | 888.7 | 191.8 |
| 20 DEC | 1000 ^D 15 DEC 1850 ^N | 3 | 0 | 0 | 1.0 | 0 | 1 | 236 ^b | 79.0 | 2 | 0 | 973 ^b | 325.0 | 98.2 |
| GRAND MEAN ^k | DAY NIGHT | 0.2 1.4 | 0.1 1.1 | 1.0 0.9 | | 0.1 1.4 | 0.2 10.2 | 58.6 20.8 | | 0.2 0.9 | 0 2.7 | 284.9 85.8 | | |

^aCatch/15 minute effort; flat otter trawl^bStandard Yankee Trawl^cEarliest time period recorded for that sampling date

NS = No sample

- = Not applicable

^dSample taken 25 Sep^e10 minute trawl^fSample taken 8 Sep^g17 minute trawl^hSample taken 12 OctⁱSample taken 30 Oct^jSample taken 27 Oct^kApril-December sampling period^zSample taken 28 Jun

APPENDIX VIIB-6

ABUNDANCE^a OF SMALLMOUTH BASS IN BOTTOM TRAWL COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | DAY ^c NIGHT | 20 FT DEPTH CONTOUR | | | | 40 FT DEPTH CONTOUR | | | | 60 FT DEPTH CONTOUR | | | | DAILY MEAN |
|----------------------------|---------------------------|---------------------|----------------|--------|------|---------------------|----------------|-------------------|------|---------------------|----------------|-------------------|------|---------------|
| | | NMPP/ NMPW | FITZ | NMPE | MEAN | NMPP/ NMPW | FITZ | NMPE ^b | MEAN | NMPP/ NMPW | FITZ | NMPE ^b | MEAN | |
| 23 SEP | 0930 ^D | 0 ^d | 0 ^d | 0 | 0 | 0 ^d | 0 ^d | 0 | 0 | 0 ^d | 0 ^d | 0 | 0 | |
| 24 SEP | 2105 ^N | 0 | 0 | 0 | 0 | 0 | 0 ^e | 0 | 0 | 0 | 0 | 1 | 0.3 | 0.1 |
| 20 DEC | 1000 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 15 DEC | 1850 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.3 | 0 | 0 | 0 | | 0.1 |
| GRAND MEAN ^f | DAY NIGHT | 0 0 | 0 0 | 0 0 | | 0 0 | 0 0 | 0 0.1 | | 0 0 | 0 0 | 0 0.1 | | |

None collected in 9 Apr-7 Sep and 12 Oct-26 Nov bottom trawl collections

^a Catch/15 minute effort; flat otter trawl

^b Standard Yankee Trawl

^c Earliest time period recorded for that sampling date

^d Sample taken 25 Sep

^e 10 minute trawl

^f April-December sampling period

APPENDIX VIIB-7

ABUNDANCE^a OF SPOTTAIL SHINER IN BOTTOM TRAWL COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | DAY ^c NIGHT | 20 FT DEPTH CONTOUR | | | | 40 FT DEPTH CONTOUR | | | | 60 FT DEPTH CONTOUR | | | | DAILY MEAN |
|----------------------------|---------------------------|---------------------|----------------|----------------|------|---------------------|-----------------|------------------|------|---------------------|----------------|-------------------|-------|---------------|
| | | NMPW | NMPP/ FITZ | NMPE | MEAN | NMPW | NMPP/ FITZ | NMPE | MEAN | NMPW | NMPP/ FITZ | NMPE | MEAN | |
| 9 APR | 1045 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 2100 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.3 | 0.1 |
| 22 APR | 0955 ^D | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0.3 | 0 | 0 | 0 | 0 | |
| 29 APR | 2150 ^N | NS | NS | NS | - | 1 | 0 | 0 | 0.3 | 0 | 0 | 0 | 0 | 0.1 |
| 25 MAY | 0940 ^D | 0 | 0 | 1 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 2130 ^N | 1 | 1 | 1 | 1.0 | 0 | 1 | 0 | 0.3 | 0 | 0 | 0 | 0 | 0.3 |
| 24 JUN | 0830 ^D | 0 | 0 | 0 ² | 0 | 0 ² | 14 ² | 165 ² | 59.7 | 0 ² | 1 ² | 36 ² | 12.3 | |
| 29 JUN | 2355 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 0 ^b | 0 | 12.0 |
| 16 JUL | 1004 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 171 ^b | 57.0 | 0 | 0 | 10 ^b | 3.3 | |
| | 0040 ^N | 0 | 0 | 0 | 0 | 0 | 1 | 0 ^b | 0.3 | 0 | 1 | 0 ^b | 0.3 | 10.2 |
| 26 AUG | 0900 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 1 | 0 | 0 ^b | 0.3 | |
| | 2230 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 0 ^b | 0 | 0.1 |
| 7 SEP | 1000 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 62 ^b | 20.7 | |
| | 2130 ^N | 0 ^f | 1 | 4 | 1.7 | 0 ^f | 0 | 0 ^b | 0 | 0 ^f | 0 ^f | 1 ^b | 0.3 | 3.8 |
| 23 SEP | 0930 ^D | 0 ^d | 0 ^d | 67 | 22.3 | 0 ^d | 0 ^d | 0 ^b | 0 | 0 ^d | 0 ^d | 124 ^b | 41.3 | |
| 24 SEP | 2105 ^N | 0 | 0 | 0 | 0 | 0 | 0 ^e | 0 ^b | 0 | 0 | 0 | 26 ^b | 8.7 | 12.1 |
| 12 OCT | 0940 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 46 ^b | 15.3 | 0 ^g | 0 | 139 ^b | 46.3 | |
| 19 OCT | 2030 ^N | 0 | 0 | 0 ^h | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 6 ^{bh} | 2.0 | 10.6 |
| 27 OCT | 1340 ^D | 0 | 0 ⁱ | 0 ⁱ | 0 | 0 | 0 ⁱ | 0 ^{bi} | 0 | 0 | 0 ⁱ | 0 ^b | 0 | |
| 3 NOV | 1910 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 54 ^b | 18.0 | 1 | 0 | 338 ^{bj} | 113.0 | 21.8 |
| 12 NOV | 1035 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 0 ^b | 0 | |
| 9 NOV | 2010 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 3 ^b | 1.0 | 0 | 0 | 0 ^b | 0 | 0.2 |
| 26 NOV | 0955 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 0 ^b | 0 | |
| | 1935 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 1 ^b | 0.3 | 0 | 0 | 54 ^b | 18.0 | 3.1 |
| 20 DEC | 1000 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 1 ^b | 0.3 | |
| 15 DEC | 1850 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 4 ^b | 1.3 | 0 | 0 | 25 ^b | 8.3 | 1.7 |
| GRAND MEAN ^k | DAY NIGHT | 0 0.1 | 0 0.1 | 4.0 0.3 | | 0 0.1 | 0.9 0.1 | 22.5 3.6 | | 0.1 0.1 | 0.1 0.1 | 21.9 26.5 | | |

None collected in 13 May, 8 Jun, and 27 Jul-12 Aug bottom trawl collections

^aCatch/15 minute effort; flat otter trawl
^bStandard Yankee Trawl^cEarliest time period recorded for that sampling date^dSample taken 25 Sep^e10 minute trawl^fSample taken 8 Sep^g17 minute trawl^hSample taken 12 OctⁱSample taken 30 Oct^jSample taken 27 Oct^kApril-December Sampling^lSample taken 28 Jun

NS = No sample

- = Not applicable

APPENDIX VII

ABUNDANCE^a OF THREESPINE STICKLEBACK IN BOTTOM TRAWL COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | DAY ^c NIGHT | 20 FT DEPTH CONTOUR | | | | 40 FT DEPTH CONTOUR | | | | 60 FT DEPTH CONTOUR | | | | DAILY MEAN |
|----------------------------|---------------------------|---------------------|---------------|----------------|------|---------------------|----------------|-----------------|------|---------------------|----------------|----------------|------|---------------|
| | | NMPW | NMPP/ FITZ | NMPE | MEAN | NMPW | NMPP/ FITZ | NMPE | MEAN | NMPW | NMPP/ FITZ | NMPE | MEAN | |
| 22 APR | 0955 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 |
| 29 APR | 2150 ^N | NS | NS | NS | - | 5 | 0 | 1 | 2.0 | 0 | 0 | 0 | 0 | |
| 13 MAY | 1010 ^D | 0 | 0 | 149 | 49.7 | 0 | 0 | 7 | 2.3 | 0 | 0 | 3 | 1.0 | 8.8 |
| | 2245 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 25 MAY | 0940 ^D | 3 | 0 | 0 | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 |
| | 2130 ^N | 0 | 1 | 0 | 0.3 | 0 | 1 | 0 | 0.3 | 0 | 0 | 0 | 0 | |
| 24 JUN | 0830 ^D | 0 | 0 | 0 ^e | 0 | 0 ^e | 9 ^e | 24 ^e | 11.0 | 0 ^e | 0 ^e | 4 ^e | 1.3 | 2.2 |
| 29 JUN | 2355 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 3 ^b | 1.0 | |
| 16 JUL | 1004 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 0 ^b | 0 | 0.2 |
| | 0040 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 3 ^b | 1.0 | |
| GRAND MEAN ^d | DAY NIGHT | 0.2 0 | 0 0.1 | 8.8 0 | | 0 0.3 | 0.5 0.1 | 1.8 0.1 | | 0 0 | 0 0 | 0.4 0.4 | | |

None collected in 9 Apr, 8 Jun, and 27 Jul-20 Dec bottom trawl collections

^a Catch/15 minute effort; flat otter trawl^b Standard Yankee trawl^c Earliest time period recorded for that sampling date^d April-December sampling period^e Sample taken 28 Jun

NS = No sample

- = Not applicable

APPENDIX VIIB-9

ABUNDANCE^a OF TROUT-PERCH IN BOTTOM TRAWL COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | DAY ^c NIGHT | 20 FT DEPTH CONTOUR | | | | 40 FT DEPTH CONTOUR | | | | 60 FT DEPTH CONTOUR | | | | DAILY MEAN |
|----------------------------|---------------------------|---------------------|----------------|----------------|------|---------------------|----------------|------------------|------|---------------------|----------------|-------------------|-------|---------------|
| | | NMPW | NMPP/ FITZ | NMPE | MEAN | NMPW | NMPP/ FITZ | NMPE | MEAN | NMPW | NMPP/ FITZ | NMPE | MEAN | |
| 13 MAY | 1010 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 |
| | 2245 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0.3 | |
| 25 MAY | 0940 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 |
| | 2130 ^N | 0 | 1 | 0 | 0.3 | 0 | 0 | 1 | 0.3 | 0 | 0 | 0 | 0 | |
| 24 JUN | 0830 ^D | 0 | 0 | 0 ² | 0 | 0 ² | 6 ² | 38 ² | 14.7 | 0 ² | 0 ² | 104 ² | 34.7 | 8.4 |
| | 2355 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1.0 | |
| 16 JUL | 1004 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 69 ^b | 23.0 | 0 | 0 | 71 ^b | 23.7 | 9.4 |
| | 0040 ^N | 0 | 0 | 3 | 1.0 | 0 | 0 | 5 ^b | 1.7 | 0 | 0 | 22 ^b | 7.3 | |
| 27 JUL | 0935 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 0 ^b | 0 | 0.6 |
| | 2235 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 8 | 2 ^b | 3.3 | |
| 12 AUG | 1015 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 1.3 | 0 | 0 | 131 | 43.7 | 8.1 |
| | 2327 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 2.0 | 0 | 0 | 5 | 1.7 | |
| 26 AUG | 0900 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 1.7 | 0 | 0 | 0 | 0 | 1.1 |
| | 2230 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 4.7 | |
| 7 SEP | 1000 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 269 ^b | 89.7 | 23.3 |
| | 2130 ^N | 0 | 0 | 8 | 2.7 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 5 ^b | 1.7 | |
| 23 SEP | 0930 ^D | 0 ^d | 0 ^d | 30 | 10.0 | 0 ^d | 0 ^d | 0 ^b | 0 | 0 ^d | 0 ^d | 42 ^b | 14.0 | 23.3 |
| | 2105 ^N | 0 | 0 | 0 | 0 | 0 | 0 ^e | 0 ^b | 0 | 1 | 0 | 346 ^b | 115.7 | |
| 12 OCT | 0940 ^D | 0 | 0 | 0 ^h | 0 | 0 | 0 | 108 ^b | 36.0 | 0 ^g | 0 | 59 ^b | 19.7 | 9.6 |
| | 2030 ^N | 0 | 0 | 0 ^h | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 6 ^{bh} | 2.0 | |
| 27 OCT | 1340 ^D | 0 | 0 ⁱ | 0 ⁱ | 0 | 0 | 0 ⁱ | 0 ^{bi} | 0 | 0 | 0 ⁱ | 0 ^b | 0 | 11.3 |
| | 3 NOV | 0 | 0 | 0 | 0 | 0 | 0 | 14 ^b | 4.7 | 1 | 0 | 188 ^{bj} | 63.0 | |
| 26 NOV | 0955 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 0 ^b | 0 | 0.3 |
| | 1935 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 6 ^b | 2.0 | |
| GRAND MEAN ^k | DAY | 0.0 | 0.0 | 1.8 | | 0.0 | 0.4 | 13.2 | | 0.0 | 0.0 | 39.8 | | |
| | NIGHT | 0.0 | 0.1 | 0.7 | | 0.0 | 0.0 | 1.5 | | 0.2 | 0.5 | 35.1 | | |

None collected in 9 Apr, 22-29 Apr, 8 Jun, 9-12 Nov, and 15-20 Dec bottom trawl collections

^aCatch/15 minute effort; flat otter trawl^bStandard Yankee Trawl^cEarliest time period recorded for that sampling date^dSample taken 25 Sep^e10 minute trawl^fSample taken 8 Sep^g17 minute trawl^hSample taken 12 OctⁱSample taken 30 Oct^jSample taken 27 Oct^kApril-December sampling period²Sample taken 28 Jun

APPENDIX VIIB-10

ABUNDANCE^a OF WHITE PERCH IN BOTTOM TRAWL COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | DAY ^c NIGHT | 20 FT DEPTH CONTOUR | | | | 40 FT DEPTH CONTOUR | | | | 60 FT DEPTH CONTOUR | | | | DAILY MEAN |
|----------------------------|---------------------------|---------------------|----------------|----------------|------|---------------------|----------------|-----------------|------|---------------------|----------------|------------------|------|---------------|
| | | NMPW | NMPP/ FITZ | NMPE | MEAN | NMPW | NMPP/ FITZ | NMPE | MEAN | NMPW | NMPP/ FITZ | NMPE | MEAN | |
| 13 MAY | 1010 ^D | 0 | 0 | 1 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 |
| | 2245 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 24 JUN | 0830 ^D | 0 | 0 | 0 ² | 0 | 0 ² | 0 ² | 1 ² | 0.3 | 0 ² | 0 ² | 0 ² | 0 | 0.1 |
| 29 JUN | 2355 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 0 ^b | 0 | |
| 16 JUL | 1004 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 1 ^b | 0.3 | 0 | 0 | 0 ^b | 0 | 0.1 |
| | 0040 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 0 ^b | 0 | |
| 26 AUG | 0900 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 0 ^b | 0 | 0.1 |
| | 2230 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 2 ^b | 0.7 | |
| 7 SEP | 1000 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 4 ^b | 1.3 | 0.3 |
| | 2130 ^N | 0 ^f | 0 | 2 | 0.7 | 0 | 0 | 0 ^b | 0 | 0 ^f | 0 ^f | 0 ^b | 0 | |
| 23 SEP | 0930 ^D | 0 ^d | 0 ^d | 14 | 4.7 | 0 ^d | 0 ^d | 0 ^b | 0 | 0 ^d | 0 ^d | 1 ^b | 0.3 | 1.9 |
| 24 SEP | 2105 ^N | 0 | 0 | 0 | 0 | 0 | 0 ^e | 0 ^b | 0 | 0 | 0 | 19 ^b | 6.3 | |
| 12 OCT | 0940 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 12 ^b | 4.0 | 0 ^g | 0 | 5 ^b | 1.7 | 1.0 |
| 19 OCT | 2030 ^N | 0 | 0 | 0 ^h | 0 | 0 | 0 | 1 ^b | 0.3 | 0 | 0 | 0 ^{bh} | 0 | |
| 27 OCT | 1340 ^D | 0 | 0 ⁱ | 0 ⁱ | 0 | 0 | 0 ⁱ | 0 ^{bi} | 0 | 0 | 0 ⁱ | 0 ^b | 0 | 5.1 |
| 3 NOV | 1910 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 54 ^b | 18.0 | 0 | 0 | 37 ^{bj} | 12.3 | |
| 12 NOV | 1035 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 0 ^b | 0 | 0.1 |
| 9 NOV | 2010 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 2 ^b | 0.7 | 0 | 0 | 0 ^b | 0 | |
| 26 NOV | 0955 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 0 ^b | 0 | 2.6 |
| | 1935 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 2 ^b | 0.7 | 0 | 0 | 45 ^b | 15.0 | |
| 20 DEC | 1000 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 0 ^b | 0 | 0.4 |
| 15 DEC | 1850 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 1 ^b | 0.3 | 0 | 0 | 6 ^b | 2.0 | |
| GRAND MEAN ^k | DAY NIGHT | 0 0 | 0 0 | 0.9 0.1 | | 0 0 | 0 0 | 0.8 3.5 | | 0 0 | 0 0 | 0.6 6.4 | | |

None collected: 9-29 Apr, 25 May-8 Jun, and 27 Jul-12 Aug

^aCatch/15 minute effort; flat otter trawl^cStandard Yankee Trawl^eEarliest time period recorded for that sampling date^dSample taken 25 Sep^f10 minute trawl^gSample taken 8 Sep^h17 minute trawlⁱSample taken 12 Oct^jSample taken 30 Oct^kSample taken 27 Oct^lApril-December sampling period^mSample taken 28 Jun

APPENDIX VIIB-11

ABUNDANCE^a OF YELLOW PERCH IN BOTTOM TRAWL COLLECTIONS

NINE MILE POINT VICINITY - 1976

| DATE | DAY ^c NIGHT | 20 FT DEPTH CONTOUR | | | | 40 FT DEPTH CONTOUR | | | | 60 FT DEPTH CONTOUR | | | | DAILY MEAN |
|----------------------------|---------------------------|---------------------|----------------|----------------|------|---------------------|----------------|-----------------|------|---------------------|----------------|------------------|------|---------------|
| | | NMPW | NMPP/ FITZ | NMPE | MEAN | NMPW | NMPP/ FITZ | NMPE | MEAN | NMPW | NMPP/ FITZ | NMPE | MEAN | |
| 8 JUN | 0930 ^D | 0 | 1 | 0 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 |
| | 2305 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 24 JUN | 0830 ^D | 0 | 0 | 0 ^k | 0 | 0 ^k | 0 ^k | 3 ^k | 1.0 | 0 ^k | 0 ^k | 0 ^k | 0 | 0.2 |
| 29 JUN | 2355 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 0 ^b | 0 | |
| 16 JUL | 1004 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 1 ^b | 0.3 | 0 | 0 | 0 ^b | 0 | 0.1 |
| | 0040 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 0 ^b | 0 | |
| 23 SEP | 0930 ^D | 0 ^d | 0 ^d | 0 | 0 | 0 ^d | 0 ^d | 0 ^b | 0 | 0 ^d | 0 ^d | 2 ^b | 0.7 | 1.1 |
| 24 SEP | 2105 ^N | 0 | 0 | 0 | 0 | 0 | 0 ^e | 0 ^b | 0 | 0 | 0 | 17 ^b | 5.7 | |
| 12 OCT | 0940 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 8 ^b | 2.7 | 0 ^f | 0 | 5 ^b | 1.7 | 0.7 |
| 19 OCT | 2030 ^N | 0 | 0 | 0 ^g | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 0 ^{bg} | 0 | |
| 27 OCT | 1340 ^D | 0 | 0 ^h | 0 ^h | 0 | 0 | 0 ^h | 0 ^{bh} | 0 | 0 | 0 ^h | 0 ^b | 0 | 0.7 |
| 3 NOV | 1910 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 13 ^{bi} | 4.3 | |
| 12 NOV | 1035 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 1 ^b | 0.3 | 0.1 |
| 9 NOV | 2010 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 0 ^b | 0 | |
| 26 NOV | 0955 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 1 ^b | 0.3 | 0.4 |
| | 1935 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 6 ^b | 2.0 | |
| 20 DEC | 1000 ^D | 0 | 0 | 0 | 0 | 0 | 0 | 0 ^b | 0 | 0 | 0 | 0 ^b | 0 | 0.1 |
| 15 DEC | 1850 ^N | 0 | 0 | 0 | 0 | 0 | 0 | 1 ^b | 0.3 | 0 | 0 | 1 ^b | 0.3 | |
| GRAND MEAN ^j | DAY NIGHT | 0 0 | 0.1 0 | 0 0 | | 0 0 | 0 0 | 0.7 0.1 | | 0 0 | 0 0 | 0.5 2.2 | | |

None collected: 9 Apr-25 May and 27 Jul-7 Sep.

^aCatch/15 minute effort; flat otter trawl^bStandard Yankee Trawl^cEarliest time period recorded for that sampling date^dSample taken 25 Sep^e10 minute trawl^fSample taken Oct 19 night^gSample taken 30 Oct day^hSample taken 27 Oct nightⁱSample taken 27 Oct^jApril-December sampling period^kSample taken 28 Jun

APPENDIX VIIC-1

ABUNDANCE (NO./ACRE) OF SELECTED SPECIES IN SPECIAL YANKEE TRAWL/OTTER TRAWL PROGRAM

NINE MILE POINT VICINITY - JUNE 28, 29, 1976

I. YANKEE TRAWL

| SPECIES | | NMPE-40 FT | | | | NMPE-60 FT | | | |
|-------------------------------|---|------------|-------|-------|-------|------------|-------|-------|-------|
| | | R-1 | R-2 | R-3 | MEAN | R-1 | R-2 | R-3 | MEAN |
| ALEWIFE | D | 558.0 | 260.9 | 67.4 | 295.4 | 346.4 | 571.0 | 315.2 | 410.9 |
| | N | 32.6 | 34.0 | 30.4 | 32.3 | 87.7 | 48.6 | 15.2 | 50.5 |
| RAINBOW SMELT | D | 71.7 | 127.5 | 38.4 | 79.2 | 156.5 | 194.2 | 281.2 | 210.6 |
| | N | 10.9 | 8.7 | 8.7 | 9.4 | 17.4 | 15.9 | 69.6 | 34.3 |
| SPOTTAIL SHINER | D | 119.6 | 43.5 | 42.8 | 68.6 | 26.1 | 18.8 | 29.7 | 24.9 |
| | N | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 2.9 | 1.2 |
| JOHNNY DARTER | D | 2.2 | 2.2 | 5.8 | 3.4 | 13.0 | 14.5 | 36.2 | 21.2 |
| | N | 0.0 | 0.0 | 0.0 | 0.0 | 3.6 | 11.6 | 8.7 | 8.0 |
| THREESPIN STICKLEBACK | D | 17.4 | 25.4 | 15.9 | 19.6 | 2.9 | 2.2 | 13.8 | 6.3 |
| | N | 0.0 | 2.2 | 2.2 | 1.5 | 2.2 | 0.7 | 0.0 | 1.0 |
| TOTAL (ALL SPECIES CAUGHT) | D | 800.7 | 479.7 | 191.3 | 490.6 | 621.0 | 857.2 | 767.4 | 748.5 |
| | N | 43.5 | 44.9 | 42.0 | 43.5 | 113.0 | 80.4 | 104.3 | 99.2 |

II. OTTER TRAWL

| SPECIES | | NMPE-40 FT | | | | NMPE-60 FT | | | |
|-------------------------------|---|------------|------|------|------|------------|------|------|------|
| | | R-1 | R-2 | R-3 | MEAN | R-1 | R-2 | R-3 | MEAN |
| ALEWIFE | D | 0.0 | 4.7 | 1.9 | 2.2 | 0.9 | 7.5 | 6.5 | 5.0 |
| | N | 0.9 | 0.0 | 1.9 | 0.9 | 0.9 | 0.0 | 2.8 | 1.2 |
| RAINBOW SMELT | D | 0.0 | 10.3 | 27.1 | 12.5 | 0.0 | 7.5 | 15.9 | 7.8 |
| | N | 3.7 | 0.0 | 0.0 | 1.2 | 0.9 | 0.9 | 3.7 | 1.8 |
| SPOTTAIL SHINER | D | 0.0 | 1.9 | 1.9 | 1.3 | 0.0 | 0.9 | 0.9 | 0.6 |
| | N | 0.0 | 0.0 | 0.9 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 |
| JOHNNY DARTER | D | 0.0 | 12.1 | 0.9 | 4.3 | 0.0 | 34.6 | 21.2 | 18.6 |
| | N | 29.9 | 8.4 | 32.7 | 23.7 | 0.0 | 0.9 | 0.9 | 0.6 |
| THREESPIN STICKLEBACK | D | 0.0 | 10.3 | 4.7 | 5.0 | 0.0 | 0.9 | 0.0 | 0.3 |
| | N | 1.9 | 0.0 | 0.9 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 |
| TOTAL (ALL SPECIES CAUGHT) | D | 0.0 | 44.8 | 44.0 | 29.6 | 1.9 | 57.9 | 73.8 | 44.5 |
| | N | 45.8 | 8.4 | 42.0 | 32.1 | 1.9 | 1.9 | 7.5 | 3.8 |

D = Day collection
N = Night collection

APPENDIX VIIC- 2

ABUNDANCE (NO./1000 m³) OF SELECTED SPECIES IN SPECIAL YANKEE TRAWL/OTTER TRAWL PROGRAM

NINE MILE POINT VICINITY - JUNE 28, 29, 1976

I. YANKEE TRAWL

| SPECIES | | NMPE-40 FT | | | | NMPE-60 FT | | | |
|-------------------------------|---|------------|------|------|------|------------|------|------|------|
| | | R-1 | R-2 | R-3 | MEAN | R-1 | R-2 | R-3 | MEAN |
| ALEWIFE | D | 56.6 | 26.5 | 6.8 | 30.0 | 35.1 | 57.9 | 32.0 | 41.7 |
| | N | 3.3 | 3.4 | 3.1 | 3.3 | 8.9 | 4.9 | 1.5 | 5.1 |
| RAINBOW SMELT | D | 7.3 | 12.9 | 3.9 | 8.0 | 15.9 | 19.7 | 28.5 | 21.4 |
| | N | 1.1 | 0.9 | 0.9 | 1.0 | 1.8 | 1.6 | 7.0 | 3.5 |
| SPOTTAIL SHINER | D | 12.1 | 4.4 | 4.3 | 6.9 | 2.6 | 1.9 | 3.0 | 2.5 |
| | N | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.1 |
| JOHNNY DARTER | D | 0.2 | 0.2 | 0.6 | 0.3 | 1.3 | 1.5 | 3.7 | 2.2 |
| | N | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 1.2 | 0.9 | 0.8 |
| THREESPIN STICKLEBACK | D | 1.8 | 2.6 | 1.6 | 2.0 | 0.3 | 0.2 | 1.4 | 0.6 |
| | N | 0.0 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.0 | 0.1 |
| TOTAL (ALL SPECIES CAUGHT) | D | 81.2 | 48.7 | 19.4 | 49.8 | 63.0 | 87.0 | 77.9 | 76.0 |
| | N | 4.4 | 4.6 | 4.3 | 4.4 | 11.5 | 8.2 | 10.6 | 10.1 |

II. OTTER TRAWL

| SPECIES | | NMPE-40 FT | | | | NMPE-60 FT | | | |
|-------------------------------|---|------------|------|------|------|------------|------|------|------|
| | | R-1 | R-2 | R-3 | MEAN | R-1 | R-2 | R-3 | MEAN |
| ALEWIFE | D | 0.0 | 2.5 | 1.0 | 1.2 | 0.5 | 4.0 | 3.5 | 2.7 |
| | N | 0.5 | 0.0 | 1.0 | 0.5 | 0.5 | 0.0 | 1.5 | 0.7 |
| RAINBOW SMELT | D | 0.0 | 5.6 | 14.6 | 6.7 | 0.0 | 4.0 | 8.6 | 4.2 |
| | N | 2.0 | 0.0 | 0.0 | 0.7 | 0.5 | 0.5 | 2.0 | 1.0 |
| SPOTTAIL SHINER | D | 0.0 | 1.0 | 1.0 | 0.7 | 0.0 | 0.5 | 0.5 | 0.3 |
| | N | 0.0 | 0.0 | 0.5 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| JOHNNY DARTER | D | 0.0 | 6.6 | 0.5 | 2.4 | 0.0 | 18.7 | 21.2 | 13.3 |
| | N | 16.2 | 4.5 | 17.7 | 12.8 | 0.0 | 0.5 | 0.5 | 0.3 |
| THREESPIN STICKLEBACK | D | 0.0 | 5.6 | 2.5 | 2.7 | 0.0 | 0.5 | 0.0 | 0.2 |
| | N | 1.0 | 0.0 | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| TOTAL (ALL SPECIES CAUGHT) | D | 0.0 | 24.2 | 23.7 | 16.0 | 1.0 | 31.3 | 39.9 | 24.1 |
| | N | 24.7 | 4.5 | 22.7 | 17.3 | 1.0 | 1.0 | 4.0 | 2.0 |

D = Day collection
N = Night collection

MASTER TIME SHEET FOR SELECTED GILL NET COLLECTIONS
NINE MILE POINT VICINITY - 1976

| SAMPLING PERIOD | DATE | 15 FT CONTOUR | | | | 40 FT CONTOUR | | | | | | | |
|-----------------|------|---------------|-------|-------|-------|---------------------------|-------|-------|-------|------------------------------|-------|-------|-------|
| | | NMPW | NMPP | FITZ | NMPE | BOTTOM GILL NET (DAY SET) | | | | SURFACE GILL NET (NIGHT SET) | | | |
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 14 - 16 APR | 4-14 | 0650* | 0850* | 0740* | 0715* | 0715 | 0835 | 0800 | 0735 | - | - | - | - |
| | | 1610 | 1925 | 1800 | 1613 | 1645 | 1830 | 1820 | 1705 | 1710 | 1820 | 1810 | 1650 |
| | 4-15 | 0715 | 0945 | 1040 | 0650 | 0908 | 1210 | 0915 | 0825 | 0945 | 1130 | 0850 | 0805 |
| | | 1620 | 1750 | 1625 | 1550 | 1705 | 1830 | 1707 | 1650 | 1700 | 1815 | 1700 | 1640 |
| | 4-16 | 0650° | 0855° | 0910° | 0635° | - | - | - | - | 0820 | 1000 | 0740 | 0720 |
| 29 APR - 1 MAY | 4-29 | 1725* | 1840* | 1850* | 1805* | - | - | - | - | 1740* | 1820* | 1825* | 1735* |
| | 4-30 | 1010 | 1015 | 0941 | 0720 | 0800* | 1125* | 0822* | 0920* | 0800 | 1045 | 0753 | 0855 |
| | | 1810 | 1945 | 1935 | 1700 | 1730 | 1910 | 1820 | 1735 | 1750* | 1935* | 1910* | 1740* |
| | 5-1 | 1025 | 0930 | 0835 | 0640 | 0840* | 0655* | 0745* | 0750* | 0830 | 0700 | NL | 0755 |
| | | 1800° | 1815° | 1820° | 1730° | 1740 | 1855 | 1835 | 1745 | - | - | - | - |
| 11 - 13 MAY | 5-11 | 0703* | 0641* | 0645* | 0725* | 0656* | 0634* | 0655* | 0735* | - | - | - | - |
| | | 1700 | 1805 | 1800 | 1700 | 1735 | 1855 | 1840 | 1725 | 1730* | 1850* | 1825* | 1740* |
| | 5-12 | ↓ | ↓ | ↓ | ↓ | Nst | Nst | Nst | Nst | ↓ | ↓ | ↓ | ↓ |
| | 5-13 | 0630° | 0750° | 0620° | 0620° | - | - | - | - | 0735 | 0900 | 1110 | 0850 |
| 23 - 25 MAY | 5-23 | 0600* | 0625* | 0555* | 0625* | 0610* | 0640* | 0610* | 0640* | - | - | - | - |
| | | 1745 | 2030 | 2025 | 1850 | 1830 | 1945 | 1940 | 1815 | 1825* | 1910* | 1935* | 1810* |
| | 5-24 | 0630 | 0900 | 0930 | 0640 | 0755* | 1115* | 0900* | 0755* | 0735 | 1000 | 0845 | 0735 |
| | | 1705 | 1826 | 1950 | 1715 | 1733 | 1918 | 1935 | 1815 | 1745* | 1915* | 1925* | 1800* |
| | 5-25 | 0610° | 0715° | 0745° | 0610° | - | - | - | - | 0640 | 0800 | 0825 | 0700 |
| 8 - 10 JUN | 6-8 | 0545* | 0625* | 0535* | 0615* | 0600* | 0635* | 0550* | 0630* | - | - | - | - |
| | | 1825 | 1850 | 1915 | 1755 | 1800 | 1935 | 1945 | 1835 | 1755* | 1930* | 2005* | 1835* |
| | 6-9 | 0550 | 0730 | 0820 | 0550 | 0630* | 0710* | 0915* | 0745* | 0635 | 0715 | 0915 | 0745 |
| | | 1935 | 1800 | 1915 | 1745 | 1912 | 1830 | 2000 | 1845 | 1930* | 1825* | 2000* | 1835* |
| | 6-10 | 0610° | 0805° | 0855° | 0630° | - | - | - | - | 0720 | 0855 | NL | 0800 |

15 Ft Stations: each time represents a harvest and set time unless otherwise indicated as Initial Set (*) or Final Harvest (°)

40 Ft Stations: the collection alternates between a surface and bottom sample; set time (*)

NL = Net lost

Nst = Net not set

- = Not applicable

APPENDIX VIID-1 (Continued)

MASTER TIME SHEET FOR SELECTED GILL NET COLLECTIONS
NINE MILE POINT VICINITY - 1976 (Continued)

| SAMPLING PERIOD | DATE | 15 FT CONTOUR | | | | 40 FT CONTOUR | | | | | | | |
|-----------------|------|---------------|-------|-------|-------|---------------------------|-------|-------|-------|------------------------------|-------|-------|-------|
| | | NMPW | NMPP | FITZ | NMPE | BOTTOM GILL NET (DAY SET) | | | | SURFACE GILL NET (NIGHT SET) | | | |
| | | | | | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 21 - 23 JUN | 6-21 | 0541* | 0620* | 0550* | 0625* | 0603* | 0635* | 0605* | 0635* | - | - | - | - |
| | | 1720 | 1855 | 1905 | 1730 | 1805 | ↓ | 1940 | 1805 | 1825* | NSt | 1940* | 1825* |
| | 6-22 | 0945 | 0600 | 0750 | 0545 | 0910* | 0735 | 0850* | 0700* | 0850 | - | 0855 | 0710 |
| | | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | NSt | NSt | NSt | NSt |
| | 6-23 | 0740° | 0830° | 0830° | 0545° | 0710 | 0940 | 0945 | 0726 | - | - | - | - |
| 6 - 8 JUL | 7-6 | 0550* | 0659* | 0535* | 0610* | 0615* | 0718* | 0550* | 0620* | - | - | - | - |
| | | 1850 | 1710 | 1826 | 1700 | 1925 | 1800 | 1900 | 1731 | 1920* | 1820* | 1930* | 1753* |
| | 7-7 | 0550 | 0755 | 0810 | 0555 | 0650* | 1015* | 1007* | 0735* | 0655 | 1020 | 0930 | 0712 |
| | | 1735 | 2000 | 1916 | 1745 | 1800 | 1920 | 1946 | 1847 | 1825* | 1930* | 2020* | 1910* |
| | 7-8 | 0525° | 0730° | 0845° | 0605° | - | - | - | - | 0625 | 0900 | NL | 0745 |
| 19 - 21 JUL | 7-19 | 0645* | 0605* | 0615* | 0700* | 0655* | 0620* | 0635* | 0715* | - | - | - | - |
| | | 1655 | 1835 | 1710 | 1850 | 1730 | 1920 | 1759 | 1940 | 1800* | 1945* | 1755* | 1945* |
| | 7-20 | 0552 | 0731 | 0830 | 0605 | 0700* | 0907* | 1010* | 0800* | 0630 | 0834 | 0940 | 0720 |
| | | 1655 | 1910 | 1825 | 1655 | 1730 | 1810 | 1855 | 1735 | 1725* | 1805* | 1820* | 1750* |
| | 7-21 | 0555° | 0730° | 0900° | 0630° | - | - | - | - | 0635 | 0815 | 1015 | 0800 |
| 2 - 4 AUG | 8-2 | 1655* | 1725* | 1815* | 1720* | - | - | - | - | 1705* | 1740* | 1835* | 1740* |
| | | 0545 | 0800 | 0855 | 0615 | 0650* | 0905* | 1025* | 0840* | 0655 | 0915 | 1030 | NL |
| | 8-3 | 1710 | 1815 | 1820 | 1710 | 1730 | 1840 | 1850 | 1745 | 1735* | 1900* | 1845* | 1740* |
| | | 0545 | 0700 | 0845 | 0600 | 0630* | 0750* | 1020* | 0750* | 0630 | 0755 | 0955 | 0740 |
| | 8-4 | 1655° | 1730° | 1805° | 1710° | 1710 | 1745 | 1828 | 1740 | - | - | - | - |

15 Ft Stations: each time represents a harvest and set time unless otherwise indicated as Initial Set (*) or Final Harvest (°)

40 Ft Stations: the collection alternates between a surface and bottom sample; set time (*)

NL = Net lost
NSt = Net not set
- = applicable

APPENDIX A-1 (Continued)

MASTER TIME SHEET FOR SELECTED GILL NET COLLECTIONS
NINE MILE POINT VICINITY - 1976 (Continued)

| SAMPLING PERIOD | DATE | 15 FT CONTOUR | | | | 40 FT CONTOUR | | | | | | | |
|-----------------|------|---------------|-------|-------|-------|---------------------------|-------|-------|-------|------------------------------|-------|-------|-------|
| | | NMPW | NMPP | FITZ | NMPE | BOTTOM GILL NET (DAY SET) | | | | SURFACE GILL NET (NIGHT SET) | | | |
| | | | | | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 17 - 19 AUG | 8-17 | 1705* | 1735* | 1800* | 1725* | - | - | - | - | 1715* | 1750* | 1810* | 1735* |
| | | 0705 | 0954 | 1100 | 0630 | 0825* | 0910* | 1055* | 0855* | 0755 | 0915 | 1030 | 0805 |
| | 8-18 | 1710 | 1935 | 2000 | 1750 | 1745 | 1850 | 1940 | 1812 | 1755* | 1859* | 1940* | 1830* |
| | | 0952 | 0625 | 1035 | 0630 | 0915* | 0750* | 0955* | 0820* | 0855 | 0718 | 0935 | 0755 |
| | 8-19 | 1650° | 1825° | 1829° | 1700° | 1715 | 1800 | 1846 | 1734 | - | - | - | - |
| 1 - 3 SEP | 9-1 | 0605* | 0640* | 0723* | 0635* | 0615* | 0650* | 0745* | 0650* | - | - | - | - |
| | | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | Nst | Nst | Nst | Nst |
| | 9-2 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | - | - | - | - |
| | | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | Nst | Nst | Nst | Nst |
| | 9-3 | 0630° | 0925° | 0625° | 0625° | 0745 | 0940 | 0750 | 0800 | - | - | - | - |
| 13 - 15 SEP | 9-13 | 0700* | 0735* | 0725* | 0740* | 0710* | 0745* | 0713* | 0752* | - | - | - | - |
| | | 1710 | 1805 | 1805 | 1645 | 1650 | 1725 | 1825 | 1710 | 1700* | 1725* | 1840* | 1725* |
| | 9-14 | 0705 | 0900 | 0915 | 0725 | 0815* | 1005* | 0950* | 0837* | 0800 | 0955 | 0955 | 0825 |
| | | 1640 | 1745 | 1755 | 1650 | 1700 | 1810 | 1815 | 1715 | 1715* | 1815* | 1830* | 1725* |
| | 9-15 | 0700° | 0850° | 0940° | 0715° | - | - | - | - | 0750 | 0920 | 1030 | 0835 |
| 4 - 6 OCT | 10-4 | 0646* | 0750* | 0709* | 0747* | 0735* | 0805* | 0719* | 0753* | - | - | - | - |
| | | 1650 | 1820 | 1915 | 1709 | 1720 | 1905 | 1900 | 1815 | 1745* | 1910* | 1855* | 1830* |
| | 10-5 | 0715 | 0930 | 0915 | 0730 | 0840* | 1035* | 1030* | 0820* | 0813 | 1015 | 1010 | 0810 |
| | | 1720 | 1750 | 1800 | 1700 | 1640 | 1820 | 1845 | 1725 | 1700* | 1830* | 1840* | 1720* |
| | 10-6 | 0700° | 0850° | 0907° | 0725° | - | - | - | - | 0800 | 0940 | 0945 | 0825 |

15 Ft Stations: each time represents a harvest and set time unless otherwise indicated as Initial Set (*) or Final Harvest (°)

40 Ft Stations: the collection alternates between a surface and bottom sample; set time (*)

NL = Net lost
 NSt = Net not set
 - = Not applicable

APPENDIX VIID-1 (Continued)

MASTER TIME SHEET FOR SELECTED GILL NET COLLECTIONS
NINE MILE POINT VICINITY - 1976 (Continued)

| SAMPLING PERIOD | DATE | 15 FT CONTOUR | | | | 40 FT CONTOUR | | | | | | | |
|-----------------|-------|---------------|-------|-------|-------|---------------------------|-------|-------|-------|------------------------------|-------|-------|-------|
| | | NMPW | NMPP | FITZ | NMPE | BOTTOM GILL NET (DAY SET) | | | | SURFACE GILL NET (NIGHT SET) | | | |
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 19 - 24 OCT | 10-19 | 0756* | 0826* | 0740* | 0900* | 0806* | 0835* | 0810* | 0917* | - | - | - | - |
| | | 1555 | 1745 | 1655 | 1555 | 1620 | 1720 | 1720 | 1615 | 1625* | 1725* | 1735* | 1625* |
| | 10-20 | 0730 | 0910 | 0855 | 0725 | 0830* | 0955* | 1002* | 0820* | 0815 | 1000 | 1010 | 0825 |
| | | 1535 | 1640 | 1616 | 1530 | 1600 | 1650 | 1700 | 1545 | 1555* | 1635* | 1730* | 1554* |
| | 10-24 | 1310° | 1315° | 1048° | 1020° | - | - | - | - | 1130 | 1220 | 1159 | NL |
| 2 - 4 NOV | 11-2 | 0714* | 0744* | 0655* | 0735* | 0726* | 0751* | 0711* | 0753* | - | - | - | - |
| | | 1608 | 1453 | 1458 | 1410 | 1630 | 1523 | 1515 | 1425 | 1642* | 1535* | 1523* | 1435* |
| | 11-3 | 0705 | 0840 | 0825 | 0650 | 0755* | 0910* | 0945* | 0740* | 0735 | 0915 | 0925 | 0745 |
| | | 1430 | 1535 | 1510 | 1416 | 1450 | 1600 | 1524 | 1432 | 1506* | 1610* | 1540* | 1445* |
| | 11-4 | 0700° | 0830° | 0750° | 0635° | - | - | - | - | 0740 | 0900 | 0815 | 0715 |
| 15 - 17 NOV | 11-15 | 0800* | 0840* | 0845* | 0922* | 0815* | 0850* | 0900* | 0932* | - | - | - | - |
| | | 1330 | 1430 | 1450 | 1335 | 1400 | 1505 | 1510 | 1400 | 1350* | 1500* | 1520* | 1450* |
| | 11-16 | 1200 | 0720 | 1000 | 0730 | Nst | 0945* | 1047* | 0840* | 1245 | 0855 | 1055 | 0850 |
| | | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | Nst | Nst | Nst | Nst |
| | 11-17 | 0715° | 0750° | 0835° | 0710° | - | 0805 | 0905 | 0755 | - | - | - | - |
| 6 - 8 DEC | 12-6 | 0815* | 0900* | 0830* | 0910* | 0835* | 0914* | 0840* | 0920* | - | - | - | - |
| | | 1340 | 1440 | 1525 | 1345 | 1400 | 1455 | 1535 | 1415 | 1410* | 1505* | 1555* | 1450* |
| | 12-7 | 0730 | 0830 | 0825 | 0725 | 0800* | 0920* | 0915* | 0755* | 0745 | 0905 | 0855 | 0746 |
| | | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | Nst | Nst | Nst | Nst |
| | 12-8 | 1500° | 1526° | 1450° | 1410° | 1400 | 1530 | 1509 | 1430 | - | - | - | - |

15 Ft Stations: each time represents a harvest and set time unless otherwise indicated as Initial Set (*) or Final Harvest (°)

40 Ft Stations: the collection alternates between a surface and bottom sample; set time (*)

NL = Net lost
Nst = Net not set
- = Not applicable

APPENDIX VIID-2a

ABUNDANCE OF SELECTED SPECIES AT THE 15 FT DEPTH CONTOUR

ABUNDANCE* OF ALEWIFE IN DAY/NIGHT GILL NET COLLECTIONS

15 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|-------------------------|------------------------|------------------------|--------------------------|------------------------|------------------------|------------------------|-----------------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 14-16 APR | MEAN RANGE | 77.12 54.10 - 100.14 | NAP | NAP | 32.80 8.14 - 57.47 | 10.52 13.86 - 17.17 | 5.59 2.27 - 8.91 | 1.62 1.16 - 2.09 | 2.00 0 - 4.01 |
| 29 APR- 1 MAY | MEAN RANGE | NAP | NAP | NAP | 118.20 86.05 - 150.34 | 26.29 1.58 - 51.00 | 58.12 51.79 - 64.46 | 49.18 11.08 - 87.27 | 1.80 1.11 - 2.48 |
| 11-13 MAY | MEAN RANGE | NS | NS | NS | NS | - 2.41 - NS | - 2.11 - NS | - 4.27 - NS | - 10.02 - NS |
| 23-25 MAY | MEAN RANGE | 78.69 64.20 - 93.18 | - NAP - 21.53 | NAP | 56.60 42.59 - 70.61 | 13.96 13.61 - 14.30 | 17.02 7.63 - 26.41 | 31.18 12.41 - 49.94 | 0.56 0 - 1.13 |
| 8-10 JUN | MEAN RANGE | 9.22 7.94 - 10.51 | - 3.79 - NAP | NAP | 6.75 5.03 - 8.47 | 0.48 0 - 0.95 | 1.14 0 - 2.29 | 0.55 0 - 1.10 | 0.52 0 - 1.03 |
| 21-23 JUN | MEAN RANGE | - NAP - NS | - 37.89 - NS | - NAP - NS | - NAP - NS | - 0 - NS | - 4.77 - NS | - 0 - NS | - 2.17 - NS |
| 6-8 JUL | MEAN RANGE | 69.87 40.36 - 99.38 | - NAP - 129.39 | NAP | NAP | 9.16 8.17 - 10.15 | 59.62 36.74 - 82.49 | 3.34 1.08 - 5.60 | - 1.11 - NAP |
| 19-21 JUL | MEAN RANGE | NAP | 30.37 29.19 - 31.55 | NAP | - 45.87 - NAP | 3.50 1.09 - 5.90 | 10.71 2.88 - 18.54 | 24.63 21.78 - 27.48 | 21.53 5.54 - 37.52 |
| 2-4 AUG | MEAN RANGE | NAP | - NAP - 28.24 | NAP | NAP | 11.04 0 - 22.07 | 0 | 0 | 0 |
| 17-19 AUG | MEAN RANGE | NAP | - NAP - 22.15 | - 11.29 - NAP | - NAP - 30.32 | 0.86 0 - 1.72 | 0 | 0.66 0 - 1.33 | 0 |
| 13-15 SEP | MEAN RANGE | 25.04 23.28 - 26.79 | NAP | NAP | 23.56 18.82 - 28.30 | 0 | 0 | 0 | 0 |
| 4-6 OCT | MEAN RANGE | 44.38 30.80 - 57.95 | 7.98 4.75 - 11.20 | 21.02 10.29 - 31.75 | 15.44 14.15 - 16.72 | 0.60 0 - 1.19 | 0 | 1.49 0 - 2.98 | 0 |
| 19-24 OCT | MEAN RANGE | - 13.13 - NS | - 10.16 - NS | - 18.19 - NS | - 5.48 - NS | 0 | 0 | 0 | 0 |
| 2-4 NOV | MEAN RANGE | 7.74 6.59 - 8.88 | 6.81 0.71 - 12.91 | 5.92 2.17 - 9.67 | NAP | 0 | 0 | 0 | 0 |
| 15-17 NOV | MEAN RANGE | - NAP - NS | - 11.46 - NS | - NAP - NS | - NAP - NS | - 0 - NS | - 0 - NS | - 0 - NS | - 0 - NS |

NAP = Not applicable, time interval inappropriate for designated day or night period
 NS = No day/night sample
 - = Not applicable

*Catch/12 hr effort, no fish of this species collected in the remaining gill net collections

Revised

ABUNDANCE* OF BROWN TROUT IN DAY/NIGHT GILL NET COLLECTIONS

15 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|------------------|-----------------|------------------|---------------------|-------------|------------------|------------------|----------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 14-16 APR | MEAN RANGE | 0 | NAp | NAp | 1.64 1.63 - 1.64 | 0 | 0 | 0 | 0 |
| 29 APR- 1 MAY | MEAN RANGE | NAp | NAp | NAp | 0 | 0 | 0 | 0.62 0 - 1.23 | 0 |
| 11-13 MAY | MEAN RANGE | NS | NS | NS | NS | - 0 - NS | - 0 - NS | - 0 - NS | - 1.25 - NS |
| 23-25 MAY | MEAN RANGE | 0 | - NAp - 0 | NAp | 0.97 0.93 - 1.01 | 0 | 0 | 0 | 0 |
| 8-10 JUN | MEAN RANGE | 0.56 0 - 1.13 | - 1.89 - NAp | NAp | 0 | 0 | 0 | 0 | 0 |
| 21-23 JUN | MEAN RANGE | - NAp - NS | - 3.25 - NS | - NAp - NS | - NAp - NS | - 0 - NS | - 0 - NS | - 0 - NS | - 0 - NS |
| 6-8 JUL | MEAN RANGE | 0.50 0 - 1.01 | - NAp - 0 | NAp | NAp | 0 | 0 | 0 | - 0 - NAp |
| 19-21 JUL | MEAN RANGE | NAp | 0 0 | NAp | - 1.07 - NAp | 0 | 0 | 0.55 0 - 1.10 | 0 |
| 2-4 NOV | MEAN RANGE | 0 | 0 | 0.34 0 - 0.69 | NAp | 0 | 0.89 0 - 1.78 | 0 | 0 |

NAp = Not applicable, time interval inappropriate for designated
day or night period
NS = No day/night sample
- = Not applicable

*Catch/12 hr effort, no fish of this species collected
in the remaining gill net collections

ABUNDANCE* OF COHO SALMON IN DAY/NIGHT GILL NET COLLECTIONS

15 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|------------------|--------------|------|------------------|------|------|------|------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 29 APR- 1 MAY | MEAN RANGE | Nap | Nap | Nap | 0.46 0 - 0.91 | 0 | 0 | 0 | 0 |
| 23-25 MAY | MEAN RANGE | 0.47 0 - 0.94 | - Nap - 0 | Nap | 0.46 0 - 0.93 | 0 | 0 | 0 | 0 |
| 8-10 JUN | MEAN RANGE | 0 | - 0 - Nap | Nap | 1.00 0 - 2.01 | 0 | 0 | 0 | 0 |

Nap = Not applicable, time interval inappropriate for designated
day or night period
- = Not applicable

*Catch/12 hr effort, no fish of this species collected
in the remaining gill net collections

ABUNDANCE* OF RAINBOW SMELT IN DAY/NIGHT GILL NET COLLECTIONS

15 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|---------------------|---------------------|---------------------|---------------------|------------------|------------------|------------------|------------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 14-16 APR | MEAN RANGE | 4.00 0.83 - 7.16 | NAP | NAP | 1.64 1.63 - 1.64 | 0 | 0 | 0 | 0.67 0 - 1.34 |
| 29 APR- 1 MAY | MEAN RANGE | NAP | NAP | NAP | 2.68 2.63 - 2.72 | 0.75 0 - 1.50 | 0 0 | 0.62 0 - 1.23 | 0.62 0 - 1.24 |
| 11-13 MAY | MEAN RANGE | NS | NS | NS | NS | - 0 - NS | - 0 - NS | - 2.13 - NS | - 0 - NS |
| 23-25 MAY | MEAN RANGE | 0 | - NAP - 2.81 | NAP | 0 | 1.14 0 - 2.27 | 1.27 0 - 2.54 | 0 | 0.56 0 - 1.13 |
| 8-10 JUN | MEAN RANGE | 0 | - 0 - NAP | NAP | 2.02 0 - 4.03 | 0 | 0.48 0 - 0.97 | 0 | 0 |
| 4-6 OCT | MEAN RANGE | 1.30 0.83 - 1.76 | 0 | 1.65 1.59 - 1.71 | 7.91 0 - 15.82 | 0 | 0 | 0 | 0 |
| 19-24 OCT | MEAN RANGE | - 2.32 - NS | - 0 - NS | - 7.58 - NS | - 0.78 - NS | 0 | 0 | 0 | 0 |
| 2-4 NOV | MEAN RANGE | 1.1 0 - 2.20 | 7.35 5.43 - 9.27 | 1.72 0 - 3.45 | NAP | 0 | 0 | 0 | 0 |
| 15-17 NOV | MEAN RANGE | - NAP - NS | - 2.15 - NS | - NAP - NS | - NAP - NS | - 0 - NS | - 0 - NS | - 0 - NS | - 0 - NS |

NAP = Not applicable, time interval inappropriate for designated day or night period
 NS = No day/night sample
 - = Not applicable

*Catch/12 hr effort, no fish of this species collected in the remaining gill net collections

ABUNDANCE* OF SMALLMOUTH BASS IN DAY/NIGHT GILL NET COLLECTIONS

15 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|----------------|------------------|------------------|---------------------|------------------|---------------------|------------------|------------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 29 APR- 1 MAY | MEAN RANGE | NAp | NAp | NAp | 2.65 0.91 - 4.39 | 0 | 0.68 0 - 1.37 | 0.62 0 - 1.23 | 1.11 0 - 2.22 |
| 23-25 MAY | MEAN RANGE | 0 | - NAp - 0 | NAp | 0 | 0 | 1.06 0.85 - 1.27 | 0.42 0 - 0.83 | 0 |
| 8-10 JUN | MEAN RANGE | 0 | - 0 - NAp | NAp | 1.48 0.94 - 2.01 | 0 | 0 | 0 | 0.50 0 - 1.01 |
| 6-8 JUL | MEAN RANGE | 0 | - NAp - 0 | NAp | NAp | 0 | 3.08 1.18 - 4.97 | 0 | - 2.22 - NAp |
| 19-21 JUL | MEAN RANGE | NAp | 0.98 0 - 1.95 | NAp | - 0 - NAp | 0.54 0 - 1.09 | 0 | 0.60 0 - 1.21 | 0.50 0 - 1.01 |
| 2-4 AUG | MEAN RANGE | NAp | - NAp - 0.94 | NAp | NAp | 0 | 0 | 0 | 0.55 0 - 1.10 |
| 17-19 AUG | MEAN RANGE | NAp | - NAp - 0 | - 0 - NAp | - NAp - 0 | 0 | 1.50 0 - 3.00 | 0.76 0 - 1.52 | 0.53 0 - 1.06 |
| 13-15 SEP | MEAN RANGE | 0 | NAp | NAp | 0 | 0 | 1.94 1.14 - 2.74 | 0.69 0 - 1.38 | 0 |
| 4-6 OCT | MEAN RANGE | 0 | 0.40 0 - 0.80 | 0.43 0 - 0.86 | 0 | 1.19 0 - 2.38 | 3.43 0 - 6.86 | 0.50 0 - 0.99 | 0 |
| 19-24 OCT | MEAN RANGE | - 0.77 - NS | - 0 - NS | - 0 - NS | - 0 - NS | 0 | 0 | 0 | 0 |

NAp = Not applicable, time interval inappropriate for designated day or night period
 NS = No day/night sample
 - = Not applicable

*Catch/12 hr effort, no fish of this species collected in the remaining gill net collections

ABUNDANCE* OF SPOTTAIL SHINER IN DAY/NIGHT GILL NET COLLECTIONS

15 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|------------------------|---------------------|---------------------|-------------------------|---------------------|------------------------|-----------------------|------------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 14-16 APR | MEAN RANGE | 14.94 11.59 - 18.30 | NAp | NAp | 0.82 0 - 1.63 | 0 | 0 | 0 | 0 |
| 29 APR- 1 MAY | MEAN RANGE | NAp | NAp | NAp | 64.40 22.83 - 105.96 | 2.25 0 - 4.50 | 1.32 1.26 - 1.37 | 6.66 0 - 13.33 | 0 |
| 11-13 MAY | MEAN RANGE | NS | NS | NS | NS | - 4.82 - NS | - 1.05 - NS | - 0 - NS | - 0 - NS |
| 23-25 MAY | MEAN RANGE | 9.18 0.94 - 17.43 | - NAp - 40.26 | NAp | 40.76 19.27 - 62.25 | 1.64 1.02 - 2.27 | 21.47 19.08 - 23.86 | 10.68 8.13 - 13.24 | 1.14 0 - 2.27 |
| 8-10 JUN | MEAN RANGE | 9.83 9.46 - 10.20 | - 8.53 - NAp | NAp | 56.78 38.27 - 75.29 | 0.44 0 - 0.87 | 0 | 0.44 0 - 0.88 | 0 |
| 21-23 JUN | MEAN RANGE | - NAp - NS | - 27.07 - NS | - NAp - NS | - NAp - NS | - 0 - NS | - 0 - NS | - 0 - NS | - 0 - NS |
| 6-8 JUL | MEAN RANGE | 21.28 14.20 - 28.36 | - NAp - 20.87 | NAp | NAp | 0 | 0 | 0 | - 0 - NAp |
| 19-21 JUL | MEAN RANGE | NAp | 4.78 3.71 - 5.84 | NAp | - 29.87 - NAp | 1.18 0 - 2.36 | 0.48 0 - 0.96 | 1.65 0 - 3.30 | 0 |
| 2-4 AUG | MEAN RANGE | NAp | - NAp - 12.24 | NAp | NAp | 0 | 0 | 0 | 0 |
| 17-19 AUG | MEAN RANGE | NAp | - NAp - 6.65 | - 4.94 - NAp | - NAp - 4.74 | 0.86 0 - 1.72 | 0 | 0.76 0 - 1.52 | 0.53 0 - 1.06 |
| 13-15 SEP | MEAN RANGE | 9.70 5.17 - 14.23 | NAp | NAp | 34.18 26.64 - 41.73 | 0 | 0 | 0 | 0 |
| 4-6 OCT | MEAN RANGE | 33.32 17.48 - 49.17 | 2.00 0.79 - 3.20 | 2.11 0.79 - 3.43 | 37.54 33.45 - 41.62 | 0 | 0 | 0 | 0 |
| 19-24 OCT | MEAN RANGE | - 9.27 - NS | - 1.56 - NS | - 12.13 - NS | - 9.39 - NS | 0 | 0 | 0 | 0 |
| 2-4 NOV | MEAN RANGE | 0 | 0.36 0 - 0.71 | 2.18 0 - 4.35 | NAp | 0 | 0 | 0 | 0 |
| 15-17 NOV | MEAN RANGE | - NAp - NS | - 0.72 - NS | - NAp - NS | - NAp - NS | - 0 - NS | - 0 - NS | - 0 - NS | - 0 - NS |

NAp = Not applicable, time interval inappropriate for designated
day or night period
NS = No day/night sample
- = Not applicable

*Catch/12 hr effort, no fish of this species collected
in the remaining gill net collections

ABUNDANCE* OF TROUT-PERCH IN DAY/NIGHT GILL NET COLLECTIONS

15 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|-------------------|-------------------|-------------|-------------------|----------------|-----------|----------------|----------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 14-16 APR | MEAN RANGE | 2.07 0-4.14 | NAp | NAp | 0 | 0 | 0 | 0 | 0 |
| 29 APR- 1 MAY | MEAN RANGE | NAp | NAp | NAp | 7.58 7.02-8.15 | 0 | 0 | 0 | 0 |
| 23-25 MAY | MEAN RANGE | 1.38 0-2.75 | - NAp-1.87 | NAp | 1.48 0.93-2.03 | 0.56 0-1.13 | 0 | 0.42 0-0.83 | 0.56 0-1.13 |
| 8-10 JUN | MEAN RANGE | 2.80 1.05-4.54 | - 4.74-NAp | NAp | 0.50 0-1.01 | 0 | 0 | 0 | 0 |
| 21-23 JUN | MEAN RANGE | - NAp-NS | - 3.25-NS | - NAp-NS | - NAp-NS | - 0-NS | - 0-NS | - 0-NS | - 0-NS |
| 6-8 JUL | MEAN RANGE | 0.50 0-1.01 | - NAp-1.04 | NAp | NAp | 0 | 0 | 0 | - 0-NAp |
| 19-21 JUL | MEAN RANGE | NAp | 1.44 0.93-1.95 | NAp | - 0-NAp | 0 | 0 | 0 | 0 |
| 4-6 OCT | MEAN RANGE | 0 | 0 | 0 | 0.42 0-0.83 | 0 | 0 | 0 | 0 |

*Catch/12 hr effort, no fish of this species collected in the remaining gill net collections

NAp = Not applicable, time interval inappropriate for designated day or night period

NS = No day/night sample

- = Not applicable

ABUNDANCE* OF WHITE PERCH IN DAY/NIGHT GILL NET COLLECTIONS

15 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|-----------------------|------------------------|---------------------|------------------------|---------------------|------------------------|---------------------|------------------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 14-16 APR | MEAN RANGE | 0.40 0 - 0.80 | NAP | NAP | 0 | 0 | 0.56 0 - 1.13 | 1.16 0 - 2.32 | 1.34 0 - 2.68 |
| 29 APR- 1 MAY | MEAN RANGE | NAP | NAP | NAP | 4.00 2.72 - 5.27 | 0 | 0 | 1.21 0 - 2.42 | 1.11 0 - 2.22 |
| 11-13 MAY | MEAN RANGE | NS | NS | NS | NS | 10.85 - NS | 20.00 - NS | 2.13 - NS | 0 - NS |
| 23-25 MAY | MEAN RANGE | 3.26 2.75 - 3.76 | - NAP - 11.24 | NAP | 1.94 1.86 - 2.03 | 0.51 0 - 1.02 | 14.44 11.08 - 17.81 | 2.65 1.16 - 4.14 | 1.53 1.13 - 1.93 |
| 8-10 JUN | MEAN RANGE | 9.92 7.36 - 12.47 | - 7.58 - NAP | NAP | 4.90 3.76 - 6.04 | 4.58 3.49 - 5.68 | 3.74 2.90 - 4.57 | 1.98 1.76 - 2.20 | 2.57 0 - 5.14 |
| 21-23 JUN | MEAN RANGE | - NAP - NS | - 34.36 - NS | - NAP - NS | - NAP - NS | 5.15 - NS | 9.54 - NS | 12.68 - NS | 11.91 - NS |
| 6-8 JUL | MEAN RANGE | 15.66 4.06 - 27.27 | - NAP - 16.70 | NAP | NAP | 5.38 4.62 - 6.13 | 11.82 5.96 - 17.68 | 6.12 4.67 - 7.57 | - 3.32 - NAP |
| 19-21 JUL | MEAN RANGE | NAP | 29.84 26.27 - 33.40 | NAP | - 18.13 - NAP | 2.81 2.36 - 3.26 | 5.46 5.15 - 5.76 | 5.17 4.84 - 5.50 | 21.86 18.25 - 25.48 |
| 2-4 AUG | MEAN RANGE | NAP | - NAP - 41.41 | NAP | NAP | 2.10 0 - 4.20 | 3.47 3.43 - 3.51 | 0.64 0 - 1.27 | 2.75 0 - 5.50 |
| 17-19 AUG | MEAN RANGE | NAP | - NAP - 14.40 | - 18.35 - NAP | - NAP - 39.79 | 0 | 1.74 1.00 - 2.48 | 0 | 3.75 1.14 - 6.35 |
| 13-15 SEP | MEAN RANGE | 9.02 1.67 - 16.38 | NAP | NAP | 16.95 13.09 - 20.81 | 0 | 0 | 0 | 0 |
| 4-6 OCT | MEAN RANGE | 2.58 1.66 - 3.51 | 9.15 8.70 - 9.60 | 4.16 3.18 - 5.14 | 1.26 0 - 2.51 | 0 | 0 | 0 | 0 |
| 19-24 OCT | MEAN RANGE | - 0.77 - NS | - 3.91 - NS | - 2.27 - NS | - 1.57 - NS | 0 | 0 | 0 | 0.86 0 - 1.73 |
| 2-4 NOV | MEAN RANGE | 0 | 0.68 0 - 1.36 | 0.70 0.69 - 0.72 | NAP | 0 | 0 | 0 | 0 |
| 15-17 NOV | MEAN RANGE | - NAP - NS | - 2.87 - NS | - NAP - NS | - NAP - NS | 0 - NS | 0 - NS | 0 - NS | 0 - NS |
| 6-8 DEC | MEAN RANGE | - 0 - NS | - 1.35 - NS | - 0 - NS | - 0 - NS | 0 - NS | 0 - NS | 0 - NS | 0 - NS |

Nap = Not applicable, time interval inappropriate for designated day or night period
 NS = No day/night sample
 - = Not applicable

*Catch/12 hr effort, no fish of this species collected in the remaining gill net collections

Revised/final

ABUNDANCE* OF WHITE SUCKER IN DAY/NIGHT GILL NET COLLECTIONS

15 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|-------------------|-------------------|-------------------|-------------------|----------------|-------------------|-------------------|----------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 14-16 APR | MEAN RANGE | 0 | Nap | Nap | 0 | 0 | 0.56 0-1.13 | 0 | 0 |
| 29 APR- 1 MAY | MEAN RANGE | Nap | Nap | Nap | 5.82 4.39-7.25 | 0 | 0.68 0-1.37 | 0 | 1.66 0-3.32 |
| 11-13 MAY | MEAN RANGE | NS | NS | NS | NS | - 0-NS | - 3.13-NS | - 0-NS | - 0-NS |
| 23-25 MAY | MEAN RANGE | 0.46 0-0.92 | - Nap-3.75 | Nap | 1.44 1.01-1.86 | 1.02 0-2.04 | 2.76 1.27-4.26 | 1.00 0.83-1.16 | 0 |
| 8-10 JUN | MEAN RANGE | 1.14 0-2.27 | - 0.95-Nap | Nap | 1.94 1.88-2.01 | 0 | 0 | 0 | 0.50 0-1.01 |
| 6-8 JUL | MEAN RANGE | 2.14 1.01-3.27 | - Nap-0 | Nap | Nap | 0 | 0 | 0 | - 1.11-Nap |
| 19-21 JUL | MEAN RANGE | Nap | 0 | Nap | - 1.07-Nap | 0 | 0 | 0.55 0-1.10 | 0 |
| 2-4 AUG | MEAN RANGE | Nap | - Nap-0 | Nap | Nap | 0 | 0 | 0 | 0.54 0-1.07 |
| 17-19 AUG | MEAN RANGE | Nap | - Nap-2.22 | - 2.82-Nap | - Nap-0.95 | 0 | 0 | 0 | 0 |
| 13-15 SEP | MEAN RANGE | 2.54 1.72-3.35 | Nap | Nap | 2.06 1.66-2.45 | 0.59 0-1.18 | 0 | 0 | 0 |
| 4-6 OCT | MEAN RANGE | 0.88 0-1.76 | 1.19 0.80-1.58 | 0.43 0-0.86 | 0.83 0-1.66 | 0 | 0 | 0 | 0 |
| 19-24 OCT | MEAN RANGE | - 0.77-NS | - 0-NS | - 2.27-NS | - 2.35-NS | 0 | 0 | 0 | 0 |
| 2-4 NOV | MEAN RANGE | 1.10 0-2.20 | 0 | 0.70 0.69-0.72 | Nap | 0 | 0 | 0 | 0 |
| 15-17 NOV | MEAN RANGE | - Nap-NS | - 0-NS | - Nap-NS | - Nap-NS | - 0-NS | - 0-NS | - 0-NS | - 5.69-NS |

*Catch/12 hr effort, no fish of this species collected in the remaining gill net collections

Nap = Not applicable, time interval inappropriate for designated day or night period

NS = No day/night sample

- = Not applicable

ABUNDANCE* OF YELLOW PERCH IN DAY/NIGHT GILL NET COLLECTIONS

15 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-----------------------|---------------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 29 APR- 1 MAY | MEAN RANGE | NAp | NAp | NAp | 3.56 2.72 - 4.39 | 0 | 2.68 1.26 - 4.11 | 3.04 1.23 - 4.85 | 0 |
| 11-13 MAY | MEAN RANGE | NS | NS | NS | NS | - 0 - NS | - 6.32 - NS | - 2.13 - NS | - 0 - NS |
| 23-25 MAY | MEAN RANGE | 0 | - NAp - 5.62 | NAp | 1.90 1.01 - 2.79 | 0.51 0 - 1.02 | 4.46 2.56 - 6.36 | 5.06 0.83 - 9.29 | 4.94 1.93 - 7.94 |
| 8-10 JUN | MEAN RANGE | 0.56 0 - 1.13 | - 2.84 - NAp | NAp | 5.94 2.82 - 9.06 | 3.79 0 - 7.58 | 3.96 1.14 - 6.77 | 6.26 1.10 - 11.41 | 3.60 0 - 7.20 |
| 21-23 JUN | MEAN RANGE | - NAp - NS | - 2.17 - NS | - NAp - NS | - NAp - NS | - 5.15 - NS | - 1.91 - NS | - 2.72 - NS | - 0 - NS |
| 6-8 JUL | MEAN RANGE | 0 | - NAp - 1.04 | NAp | NAp | 3.69 0 - 7.38 | 3.84 2.98 - 4.71 | 2.02 1.87 - 2.16 | - 0 - NAp |
| 19-21 JUL | MEAN RANGE | NAp | 2.39 1.86 - 2.92 | NAp | - 4.27 - NAp | 2.81 2.36 - 3.26 | 4.42 3.09 - 5.76 | 16.00 1.21 - 30.78 | 2.08 1.11 - 3.04 |
| 2-4 AUG | MEAN RANGE | NAp | - NAp - 3.76 | NAp | NAp | 1.05 0 - 2.10 | 1.16 1.14 - 1.17 | 0.64 0 - 1.29 | 0 |
| 17-19 AUG | MEAN RANGE | NAp | - NAp - 0 | - 2.12 - NAp | - NAp - 4.74 | 0 | 0.62 0 - 1.24 | 0 | 0 |
| 13-15 SEP | MEAN RANGE | 1.28 0.84 - 1.72 | NAp | NAp | 5.33 1.66 - 9.00 | 0 | 0 | 0 | 0 |
| 4-6 OCT | MEAN RANGE | 3.46 1.66 - 5.27 | 3.18 2.40 - 3.96 | 2.44 1.71 - 3.18 | 2.50 1.67 - 3.33 | 0.60 0 - 1.19 | 0 | 0.99 0 - 1.98 | 0 |
| 19-24 OCT | MEAN RANGE | - 0.77 - NS | - 0 - NS | - 2.27 - NS | - 5.48 - NS | 0 | 0 | 0 | 0 |
| 2-4 NOV | MEAN RANGE | 0 | 0.34 0 - 0.68 | 0.69 0 - 1.38 | NAp | 0 | 0 | 0 | 0 |

NAp = Not applicable, time interval inappropriate for designated
day or night period
NS = No day/night sample
- = Not applicable

*Catch/12 hr effort, no fish of this species collected
in the remaining gill net collections

APPENDIX VIID-2b

ABUNDANCE OF SELECTED SPECIES AT THE 40 FT DEPTH CONTOUR

ABUNDANCE* OF ALEWIFE IN DAY/NIGHT GILL NET COLLECTIONS

40 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|---------------------------|-----------------------|------------------------|----------------------|------------------------|--------------------------|------------------------|------------------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 14-16 APR | MEAN RANGE | Nap | Nap | Nap | - Nap - 22.09 | 41.81 20.21 - 63.40 | 42.10 38.72 - 45.47 | 33.98 31.35 - 36.61 | 14.06 2.85 - 25.26 |
| 29 APR- 1 MAY | MEAN RANGE | 209.92 148.19 - 271.64 | - Nap - 363.68 | - 121.19 - NL | - Nap - 67.37 | 55.65 2.67 - 108.63 | 140.58 100.0 - 181.16 | 43.30 28.8 - 57.79 | 28.22 22.99 - 33.45 |
| 11-13 MAY | MEAN RANGE | NS | NS | NS | NS | - 9.01 - NSt | - 8.74 - NSt | - 22.47 - NSt | - 13.42 - NSt |
| 23-25 MAY | MEAN RANGE | - Nap - 117.06 | Nap | Nap | - Nap - 155.08 | 42.38 36.12 - 48.65 | 37.26 26.83 - 47.69 | 52.86 40.82 - 64.89 | 24.45 11.61 - 37.29 |
| 8-10 JUN | MEAN RANGE | 17.38 10.14 - 24.63 | - 26.55 - Nap | - Nap - NL | Nap | 2.36 0 - 4.72 | 1.06 0 - 2.12 | 0.43 0 - 0.86 | 0.54 0 - 1.09 |
| 21-23 JUN | MEAN RANGE | - Nap - NSt | NSt | - Nap - NSt | - Nap - NSt | - 21.94 - NS | NS | - 0 - NS | - 6.26 - NS |
| 6-8 JUL | MEAN RANGE | - 24.86 - Nap | Nap | - Nap - NL | Nap | 8.19 4.56 - 11.82 | 8.24 5.28 - 11.21 | 43.55 36.06 - 51.04 | 6.44 3.21 - 9.66 |
| 19-21 JUL | MEAN RANGE | Nap | Nap | Nap | - 314.94 - Nap | 2.28 1.13 - 3.43 | 3.84 3.69 - 3.98 | 22.22 5.49 - 38.95 | 4.72 1.93 - 7.51 |
| 2-4 AUG | MEAN RANGE | - Nap - 26.94 | - Nap - 110.55 | Nap | - NL - 34.29 | 2.25 2.25 - 2.25 | 11.79 6.05 - 17.53 | 10.79 5.90 - 15.68 | 4.62 0 - 9.25 |
| 17-19 AUG | MEAN RANGE | Nap | - Nap - 194.86 | Nap | - Nap - 93.91 | 5.25 0 - 10.50 | 1.83 1.18 - 2.48 | 20.42 15.09 - 25.76 | 27.24 16.80 - 37.69 |
| 1-3 SEP | MEAN RANGE | NS | NS | NS | NS | NS | NS | NS | NS |
| 13-15 SEP | MEAN RANGE | 50.86 32.91 - 68.80 | Nap | Nap | - 28.00 - Nap | 1.30 1.24 - 1.37 | 31.63 14.85 - 48.41 | 10.16 7.50 - 12.83 | 4.82 1.29 - 8.34 |
| 4-6 OCT | MEAN RANGE | 11.46 8.00 - 14.93 | Nap | Nap | 6.78 4.77 - 8.78 | 0 | 5.46 0 - 10.91 | 0 | 19.57 3.47 - 35.67 |
| 19-24 OCT | MEAN RANGE | - 47.75 - NS | - Nap - NS | - Nap - NS | - 23.25 - NS | 0 | 13.7 0 - 27.43 | 0 | 0 |
| 2-4 NOV | MEAN RANGE | 28.86 12.09 - 45.63 | 33.72 4.28 - 63.17 | 29.44 28.94 - 29.94 | 8.26 4.89 - 11.64 | 0 | 0 | 0 | 0 |
| 15-17 NOV | MEAN RANGE | - Nap - NSt | - 77.69 - NSt | - Nap - NSt | - Nap - NSt | - 0 - NSt | - 0 - NS | - 0 - NS | - 0 - NS |
| 6-8 DEC | MEAN RANGE | - 0 - NSt | - 0 - NSt | - 0 - NSt | - 0 - NSt | - 0 - NS | - 0 - NS | - 0 - NS | - 0 - NS |

Nap = Not applicable, time interval inappropriate for designated day or night period

*Catch/12 hr effort

NL = Net lost

NS = No day/night sample

NSt = Net not set

- = Not applicable

Revised/final

ABUNDANCE* OF BROWN TROUT IN DAY/NIGHT GILL NET COLLECTIONS

40 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE. | NIGHT | | | | DAY | | | |
|--------------|----------------|---------------------|--------------|---------------|-----------------|------|------|------------------|------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 14-16 APR | MEAN RANGE | NAp | NAp | NAp | - NAp - 0 | 0 | 0 | 0.58 0 - 1.16 | 0 |
| 8-10 JUN | MEAN RANGE | 1.96 1.89 - 2.03 | - 0 - NAp | - NAp - NL | NAp | 0 | 0 | 0 | 0 |
| 19-21 JUL | MEAN RANGE | NAp | NAp | NAp | - 0 - NAp | 0 | 0 | 0.52 0 - 1.05 | 0 |
| 13-15 SEP | MEAN RANGE | 0 | NAp | NAp | - 0.80 - NAp | 0 | 0 | 0 | 0 |

NAp = Not applicable, time interval inappropriate for designated
day or night period
NS = No day/night sample
- = Not applicable

*Catch/12 hr effort, no fish of this species collected
in the remaining gill net collections

Revised

ABUNDANCE* OF COHO SALMON IN DAY/NIGHT GILL NET COLLECTIONS

40 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|---------|---------------|-------|------------|--------|---------|------|------|------|------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 29 APR- | MEAN | 0 | - | - | - | 0 | 0 | 0 | 0 |
| 1 MAY | RANGE | | Nap - 1.05 | 0 - NL | Nap - 0 | | | | |

Nap = Not applicable, time interval inappropriate for designated
day or night period

NL = Net lost

- = Not applicable

*Catch/12 hr effort, no fish of this species collected
in the remaining gill net collections

ABUNDANCE* OF RAINBOW SMELT IN DAY/NIGHT GILL NET COLLECTIONS

40 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|---------------------|---------------------|---------------------|---------------------|------------------------|-----------------------|------------------------|-----------------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 14-16 APR | MEAN RANGE | NAp | NAp | NAp | - NAp - 22.91 | 9.0 0 - 18.11 | 10.2 9.47 - 10.89 | 11.5 9.29 - 13.73 | 0.6 0 - 1.26 |
| 29 APR- 1 MAY | MEAN RANGE | 7.5 3.27 - 11.72 | - NAp - 6.31 | - 7.13 - NL | - NAp - 6.74 | 2.53 0 - 5.05 | 47.8 9.0 - 86.71 | 48.4 21.05 - 75.85 | 5.0 1.21 - 8.73 |
| 11-13 MAY | MEAN RANGE | NS | NS | NS | NS | - 1.13 - NSt | - 0 - NSt | - 5.11 - NSt | - 1.22 - NSt |
| 23-25 MAY | MEAN RANGE | - NAp - 0.93 | NAp | NAp | - NAp - 7.38 | 18.38 15.57 - 21.18 | 20.75 2.98 - 38.52 | 18.40 18.14 - 18.67 | 10.03 3.48 - 16.58 |
| 8-10 JUN | MEAN RANGE | 0 | - 0 - NAp | - NAp - NL | NAp | 0 | 0.46 0 - 0.92 | 1.30 0 - 2.59 | 0 |
| 4-6 OCT | MEAN RANGE | 1.64 0.80 - 2.49 | NAp | NAp | 0 | 0 | 0.54 0 - 1.09 | 0 | 0 |
| 19-24 OCT | MEAN RANGE | - 0.76 - NS | - NAp - NS | - NAp - NS | - 0 - NS | 0 | 0 | 0 | 0 |
| 2-4 NOV | MEAN RANGE | 0.36 0 - 0.72 | 1.04 0.71 - 1.36 | 2.50 0.67 - 4.34 | 0.72 0.70 - 0.73 | 0 | 0 | 0 | 0 |
| 6-8 DEC | MEAN RANGE | - 0 - NSt | - 0 - NSt | - 0.71 - NSt | - 0 - NSt | - 0 - NS | - 0 - NS | - 0 - NS | - 0 - NS |

NAp = Not applicable, time interval inappropriate for designated day or night period

NL = Net lost

NS = No day/night sample

NSt = Net not set

- = Not applicable

*Catch/12 hr effort, no fish of this species collected in the remaining gill net collections

Revised/final

ABUNDANCE* OF SPOTTAIL SHINER IN DAY/NIGHT GILL NET COLLECTIONS

40 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE. | NIGHT | | | | DAY | | | |
|------------------|----------------|----------------|--------------|----------------|----------------|----------------------|-----------------------|---------------------------|-----------------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 14-16 APR | MEAN RANGE | NAP | NAP | NAP | - NAP - 0 | 1.4 1.26 - 1.51 | 3.1 2.42 - 3.79 | 5.4 0 - 10.68 | 0 |
| 29 APR- 1 MAY | MEAN RANGE | 0 | - NAP - 0 | - 0 - NL | - NAP - 0 | 5.68 .0 - 11.37 | 36.9 32.0 - 41.81 | 22.7 17.72 - 27.69 | 4.2 1.21 - 7.27 |
| 11-13 MAY | MEAN RANGE | NS | NS | NS | NS | - 4.51 - NSt | - 0.97 - NSt | - 25.53 - NSt | - 8.54 - NSt |
| 23-25 MAY | MEAN RANGE | - NAP - 0 | NAP | NAP | - NAP - 0 | 0 | 5.62 2.98 - 8.25 | 49.75 13.33 - 86.17 | 22.65 6.97 - 38.33 |
| 8-10 JUN | MEAN RANGE | 0 | - 0 - NAP | - NAP - NL | NAP | 0.5 0 - 1.0 | 0 | 0.99 0.86 - 1.12 | 4.32 0.99 - 7.64 |
| 21-23 JUN | MEAN RANGE | - NAP - NSt | NSt | - NAP - NSt | - NAP - NSt | - 1.99 - NS | NS | - 2.65 - NS | - 11.48 - NS |
| 6-8 JUL | MEAN RANGE | - 0 - NAP | NAP | - NAP - NL | NAP | 1.61 0 - 3.22 | 0 | 74.88 65.91 - 83.85 | 9.65 5.37 - 13.93 |
| 19-21 JUL | MEAN RANGE | NAP | NAP | NAP | - 0 - NAP | 6.80 1.14 - 12.47 | 16.61 12.0 - 21.22 | 160.53 126.32 - 194.74 | 4.92 4.83 - 5.01 |
| 2-4 AUG | MEAN RANGE | - NAP - 0 | - NAP - 0 | NAP | - NL - NAP | 0.56 0 - 1.13 | 0 | 2.85 0 - 5.70 | 0 |
| 17-19 AUG | MEAN RANGE | NAP | - NAP - 0 | NAP | - NAP - 0 | 0 | 0 | 2.05 1.36 - 2.74 | 0 |
| 4-6 OCT | MEAN RANGE | 0 | NAP | NAP | 0 | 0 | 0 | 1.24 1.03 - 1.45 | 0 |

NAP = Not applicable, time interval inappropriate for designated
day or night period

NL = Net lost

NS = No day/night sample

NSt = Net not set

- = Not applicable

*Catch/12 hr effort, no fish of this species collected
in the remaining gill net collections

Revised

ABUNDANCE* OF SMALLMOUTH BASS IN DAY/NIGHT GILL NET COLLECTIONS

40 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|----------------|--------------|----------------|----------------|---------------------|--------------------|-----------------|------------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 14-16 APR | MEAN RANGE | NAp | NAp | NAp | - NAp - 0 | 0.6 0 - 1.26 | 2.8 1.89 - 3.63 | 2.3 0 - 4.58 | 0 |
| 29 APR- 1 MAY | MEAN RANGE | 0 | - NAp - 0 | - 0 - NL | - NAp - 0 | 0 | 0.8 0 - 1.55 | 0 | 0 |
| 11-13 MAY | MEAN RANGE | NS | NS | NS | NS | - 0 - NSt | - 0.97 - NSt | - 0 - NSt | - 0 - NSt |
| 17-19 AUG | MEAN RANGE | NAp | - NAp - 0 | NAp | - NAp - 0 | 0 | 0.62 0 - 1.24 | 0 | 0 |
| 13-15 SEP | MEAN RANGE | 0 | NAp | NAp | - 0 - NAp | 2.61 2.48 - 2.74 | 0 | 0 | 3.87 0 - 7.74 |
| 4-6 OCT | MEAN RANGE | 0 | NAp | NAp | 0 | 1.23 0 - 2.46 | 0 | 0 | 0 |
| 15-17 NOV | MEAN RANGE | - NAp - NSt | - 0 - NSt | - NAp - NSt | - NAp - NSt | - 0 - NSt | - 3.84 - NS | - 0 - NS | - 0 - NS |

NAp = Not applicable, time interval inappropriate for designated
day or night period
NS = No day/night sample
NSt = Net not set
- = Not applicable
NL = Net lost

*Catch/12 hr effort, no fish of this species collected
in the remaining gill net collections

ABUNDANCE* OF TROUT-PERCH IN DAY/NIGHT GILL NET COLLECTIONS

40 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|-------------|------------|-------------|-------------|---------------|--------------------|-------------------|-----------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 14-16 APR | MEAN RANGE | NAP | NAP | NAP | - NAP-0 | 0 | 7.50 3.63-11.37 | 3.05 0-6.10 | 0 |
| 29 APR- 1 MAY | MEAN RANGE | 0 | - NAP-0 | - 0-NS | - NAP-0 | 0 | 5.64 2.00-9.29 | 2.82 1.20-4.43 | 0.60 0-1.21 |
| 11-13 MAY | MEAN RANGE | NS | NS | NS | NS | - 5.63-NS | - 0-NS | - 2.04-NS | - 1.22-NS |
| 23-25 MAY | MEAN RANGE | - NAP-0 | NAP | NAP | - NAP-0 | 0 | 1.38 0-2.75 | 2.78 1.13-4.44 | 6.22 0-12.43 |
| 8-10 JUN | MEAN RANGE | 0 | - 0-NAP | - NAP-NL | NAP | 0 | 0 | 0.86 0-1.72 | 0 |
| 21-23 JUN | MEAN RANGE | - NAP-NS | NS | - NAP-NS | - NAP-NS | - 1.00-NAP | NAP | - 0.88-NAP | - 0-NAP |
| 6-8 JUL | MEAN RANGE | - 0-NAP | NAP | - NAP-NL | NAP | 0 | 0 | 1.53 1.24-1.82 | 0 |
| 19-21 JUL | MEAN RANGE | NAP | NAP | NAP | - 0-NAP | 0 | 0.46 0-0.92 | 2.26 1.37-3.16 | 0 |
| 2-4 AUG | MEAN RANGE | - NAP-0 | - NAP-0 | NAP | - NL-0 | 0 | 0.62 0-1.25 | 0 | 0 |

*Catch/12 hr effort, no fish of this species collected in the remaining gill net collections

NAP = Not applicable, time interval inappropriate for designated day or night period

NL = Net lost

NS = No day/night sample

- = Not applicable

ABUNDANCE* OF WHITE PERCH IN DAY/NIGHT GILL NET COLLECTIONS

40 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|------------------|--------------|----------------|-----------------|------------------|---------------------|------------------|---------------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 14-16 APR | MEAN RANGE | NAP | NAP | NAP | - NAP - 0 | 0 | 0.58 0 - 1.16 | 0.60 0 - 1.21 | 0 |
| 29 APR- 1 MAY | MEAN RANGE | 0 | - NAP - 0 | - 0 - NL | - NAP - 0 | 0 | 1.5 0 - 3.0 | 1.2 0 - 2.41 | 0 |
| 11-13 MAY | MEAN RANGE | NS | NS | NS | NS | - 2.25 - NSt | - 0.97 - NSt | - 3.06 - NSt | - 0 - NSt |
| 23-25 MAY | MEAN RANGE | - NAP - 0 | NAP | NAP | - NAP - 0.92 | 0 | 0.46 0 - 0.92 | 0.56 0 - 1.13 | 0 |
| 8-10 JUN | MEAN RANGE | 0.50 0 - 1.01 | - 0 - NAP | - NAP - NL | NAP | 0.47 0 - 0.94 | 0 | 0 | 0 |
| 21-23 JUN | MEAN RANGE | - NAP - NSt | NSt | - NAP - NSt | - NAP - NSt | - 3.99 - NS | NS | - 2.65 - NS | - 1.04 - NS |
| 6-8 JUL | MEAN RANGE | - 0 - NAP | NAP | - NAP - NL | NAP | 1.08 0 - 2.15 | 1.98 0 - 3.96 | 1.86 0 - 3.73 | 1.60 1.07 - 2.14 |
| 19-21 JUL | MEAN RANGE | NAP | NAP | NAP | - 0 - NAP | 0.57 0 - 1.14 | 4.24 1.85 - 6.63 | 1.37 0 - 2.74 | 0.62 0 - 1.25 |
| 2-4 AUG | MEAN RANGE | - NAP - 0 | - NAP - 0 | NAP | - NL - 0 | 0 | 0.60 0 - 1.21 | 0 | 0 |
| 17-19 AUG | MEAN RANGE | NAP | - NAP - 0 | NAP | - NAP - 0 | 0 | 1.21 1.18 - 1.24 | 0 | 7.78 7.76 - 7.80 |
| 13-15 SEP | MEAN RANGE | 0 | NAP | NAP | - 0.80 - NAP | 0 | 0 | 0 | 0.64 0 - 1.29 |

NAP = Not applicable, time interval inappropriate for designated
day or night period
NL = Net lost
NS = No day/night sample
NSt = Net not set
- = Not applicable

*Catch/12 hr effort, no fish of this species collected
in the remaining gill net collections

ABUNDANCE* OF WHITE SUCKER IN DAY/NIGHT GILL NET COLLECTIONS

40 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE. | NIGHT | | | | DAY | | | |
|--------------|----------------|-------------|------------|-------------|-------------|----------------|----------------|----------------|-------------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 11-13 MAY | MEAN RANGE | NS | NS | NS | NS | - 0-NS | - 0.97-NS | - 0-NS | - 1.22-NS |
| 23-25 MAY | MEAN RANGE | - NAp-0 | NAp | NAp | - NAp-0 | 0 | 0.74 0-1.49 | 0.89 0-1.78 | 3.69 1.16-6.22 |
| 8-10 JUN | MEAN RANGE | 0 | - 0-NAp | - NAp-NL | NAp | 0 | 0 | 0 | 0.50 0-0.99 |
| 21-23 JUN | MEAN RANGE | - NAp-NS | NS | - NAp-NS | - NAp-NS | - 0-NAp | NAp | - 1.77-NAp | - 0-NAp |
| 6-8 JUL | MEAN RANGE | - 0-NAp | NAp | - NAp-NL | NAp | 0.54 0-1.07 | 0 | 0 | 0 |
| 19-21 JUL | MEAN RANGE | NAp | NAp | NAp | - 0-NAp | 0.56 0-1.13 | 1.32 0-2.65 | 0.52 0-1.05 | 1.11 0.97-1.25 |
| 2-4 AUG | MEAN RANGE | - NAp-0 | - NAp-0 | NAp | - NL-0 | 0.56 0-1.13 | 0 | 0 | 0 |
| 17-19 AUG | MEAN RANGE | NAp | - NAp-0 | NAp | - NAp-0 | 0.75 0-1.50 | 0 | 0 | 0.64 0-1.29 |
| 13-15 SEP | MEAN RANGE | 0 | NAp | NAp | - 0-NAp | 0.62 0-1.24 | 0 | 0 | 0 |
| 6-8 DEC | MEAN RANGE | - 0-NSt | - 0-NSt | - 0-NSt | - 0-NSt | - 0-NS | - 0-NS | - 1.73-NS | - 2.44-NS |

*Catch/12 hr effort, no fish of this species collected in the remaining gill net collections

NAp = Not applicable, time interval inappropriate for
designated day or night period
NS = No day/night sample

NL = Net lost
NSt = Net not set
- = No applicable

ABUNDANCE* OF YELLOW PERCH IN DAY/NIGHT GILL NET COLLECTIONS

40 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|----------------------------|-----------------|----------------------------|----------------------------|--------------------------|--------------------------|--------------------------|-----------------------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 29 APR- 1 MAY | MEAN RANGE | 0 | - NAp - 0 | - 0 - NL | - NAp - 0 | 0 | 0 | 0.6 0 - 1.11 | 1.4 0 - 2.91 |
| 11-13 MAY | MEAN RANGE | NS | NS | NS | NS | - 0 - NS _t | - 0 - NS _t | - 0 - NS _t | - 1.22 - NS _t |
| 23-25 MAY | MEAN RANGE | - NAp - 0 | NAp | NAp | - NAp - 0 | 0 | 0.74 0 - 1.49 | 0 | 0 |
| 8-10 JUN | MEAN RANGE | 0 | - 0 - NAp | - NAp - NL | NAp | 0 | 1.59 0 - 3.18 | 0.56 0 - 1.12 | 2.63 1.99 - 3.27 |
| 21-23 JUN | MEAN RANGE | - NAp - NS _t | NS _t | - NAp - NS _t | - NAp - NS _t | - 1.00 - NS | NS | - 2.65 - NS | - 4.17 - NS |
| 6-8 JUL | MEAN RANGE | - 0 - NAp | NAp | - NAp - NL | NAp | 3.06 1.82 - 4.30 | 1.22 1.12 - 1.32 | 10.73 8.70 - 12.76 | 3.76 2.14 - 5.37 |
| 19-21 JUL | MEAN RANGE | NAp | NAp | NAp | - 0 - NAp | 1.71 1.13 - 2.29 | 7.87 6.46 - 9.28 | 45.50 21.05 - 69.94 | 6.32 3.87 - 8.77 |
| 2-4 AUG | MEAN RANGE | - NAp - 0 | - NAp - 0 | NAp | - NL - 0 | 3.38 3.38 - 3.38 | 0 | 1.42 0 - 2.85 | 3.30 0 - 6.61 |
| 17-19 AUG | MEAN RANGE | NAp | - NAp - 0 | NAp | - NAp - 0 | 2.14 1.29 - 3.00 | 1.80 1.24 - 2.36 | 6.82 5.42 - 8.23 | 0.64 0 - 1.29 |
| 13-15 SEP | MEAN RANGE | 0 | NAp | NAp | - 0 - NAp | 0 | 0 | 0 | 0.64 0 - 1.29 |
| 4-6 OCT | MEAN RANGE | 0 | NAp | NAp | 0 | 7.23 2.46 - 12.00 | 1.55 0 - 3.10 | 0 | 0 |
| 19-24 OCT | MEAN RANGE | - 0 - NS | - NAp - NS | - NAp - NS | - 0 - NS | - 0 - NS | - 1.37 - NS | - 1.31 - NS | - 0 - NS |
| 2-4 NOV | MEAN RANGE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.92 0 - 1.84 |

NAp = Not applicable, time interval inappropriate for designated day or night period

NL = Net lost

NS = No day/night sample

NS_t = Net not set

- = Not applicable

*Catch/12 hr effort, no fish of this species collected in the remaining gill net collections

APPENDIX VIID-3a

BIOMASS OF SELECTED SPECIES AT THE 15 FT DEPTH CONTOUR

BIOMASS* OF ALEWIFE IN DAY/NIGHT GILL NET COLLECTIONS

15 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|-------------------------|----------------------|-----------------------|-------------------------|-----------------------|-------------------------|------------------------|----------------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 14-16 APR | MEAN RANGE | 2603.8 1769.2-3438.4 | Nap | Nap | 1050.6 268.8-1832.4 | 403.0 138.6-667.3 | 193.4 83.3-303.4 | 56.0 40.5-71.5 | - NF-139.3 |
| 29 APR- 1 MAY | MEAN RANGE | Nap | Nap | Nap | 3685.5 2763.8-4607.2 | 911.09 51.8-1770.2 | 1926.2 1791.5-2060.8 | 1729.8 375.2-3084.4 | 54.9 30.4-79.4 |
| 11-13 MAY | MEAN RANGE | NS | NS | NS | NS | - 92.7-NS | - 37.1-NS | - 146.0-NS | - 321.5-NS |
| 23-25 MAY | MEAN RANGE | 2312.0 1790.2-2833.8 | - Nap-604.6 | Nap | 1662.0 1272.3-2051.8 | 319.4 283.0-355.9 | 486.4 244.0-728.8 | 472.2 218.7-725.7 | - NF-35.0 |
| 8-10 JUN | MEAN RANGE | 249.3 209.0-289.6 | - 105.6-Nap | Nap | 204.1 135.0-273.2 | - NF-30.6 | - NF-42.4 | - NF-36.7 | - NF-38.8 |
| 21-23 JUN | MEAN RANGE | - Nap-NS | - 1025.7-NS | - Nap-NS | - Nap-NS | - NF-NS | - 74.9-NS | - NF-NS | - 73.0-NS |
| 6-8 JUL | MEAN RANGE | 1990.9 1210.4-2771.4 | - Nap-3793.4 | Nap | Nap | 263.6 202.7-324.5 | 1286.0 794.8-1777.1 | 78.3 22.4-134.2 | - 35.3-Nap |
| 19-21 JUL | MEAN RANGE | Nap | 872.2 814.5-929.8 | Nap | - 1173.6-Nap | 100.8 20.6-180.9 | 313.4 81.8-545.0 | 529.4 339.6-719.1 | 545.1 113.3-976.9 |
| 2-4 AUG | MEAN RANGE | Nap | - Nap-816.9 | Nap | Nap | - NF-561.6 | NF | NF | NF |
| 17-19 AUG | MEAN RANGE | Nap | - Nap-612.2 | - 364.7-Nap | - Nap-791.2 | - NF-Nan | NF | - NF-44.7 | NF |
| 13-15 SEP | MEAN RANGE | 873.5 772.7-974.3 | Nap | Nap | 719.6 577.2-861.9 | NF | NF | NF | NF |
| 4-6 OCT | MEAN RANGE | 1628.5 1174.8-2082.2 | 285.8 176.6-395.0 | 773.2 370.2-1176.2 | 536.2 476.2-596.1 | - NF-45.3 | NF | - NF-104.4 | NF |
| 19-24 OCT | MEAN RANGE | - 469.4-NS | - 377.3-NS | - 706.8-NS | - 202.3-NS | NF | NF | NF | NF |
| 2-4 NOV | MEAN RANGE | 297.0 262.7-331.2 | 246.8 35.7-457.9 | 201.2 79.5-322.9 | Nap | NF | NF | NF | NF |
| 15-17 NOV | MEAN RANGE | - Nap-NS | - 360.8-NS | - Nap-NS | - Nap-NS | - NF-NS | - NF-NS | - NF-NS | - NF-NS |

No fish of this species collected in the remaining gill net collections.

*Grams/12-hr effort, estimated weight based on number of fish analyzed

NF = No fish collected

NS = No day/night sample

- = Not applicable

Nan = Not analyzed

Nap = Not applicable, time interval inappropriate
designated day or night period

BIOMASS* OF BROWN TROUT IN DAY/NIGHT GILL NET COLLECTIONS

15 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|----------------|-----------------|----------------|-------------------------|------------|----------------|----------------|----------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 14-16 APR | MEAN RANGE | NF | NAP | NAP | 2671.4 2606.9-2735.8 | NF | NF | NF | NF |
| 29 APR- 1 MAY | MEAN RANGE | NAP | NAP | NAP | NF | NF | NF | - NF-827.8 | NF |
| 11-13 MAY | MEAN RANGE | NS | NS | NS | NS | - NF-NS | - NF-NS | - NF-NS | - 1813.4-NS |
| 23-25 MAY | MEAN RANGE | NF | - NAP-NF | NAP | 1724.5 1667.5-1781.5 | NS | NF | NF | NF |
| 8-10 JUN | MEAN RANGE | - NF-2452.9 | - 3361.3-NAP | NAP | NF | NF | NF | NF | NF |
| 21-23 JUN | MEAN RANGE | - NAP-NS | - NAN-NS | - NAP-NS | - NAP-NS | - NF-NS | - NF-NS | - NF-NS | - NF-NS |
| 6-8 JUL | MEAN RANGE | - NF-1953.7 | - NAP-NF | NAP | NAP | NF | NF | NF | - NF-NAP |
| 19-21 JUL | MEAN RANGE | NAP | NF | NAP | - 3643.4-NAP | NF | NF | - NF-2925.7 | NF |
| 2-4 NOV | MEAN RANGE | NF | NF | - NF-1778.1 | NAP | NF | - NF-3788.7 | NF | NF |

No fish of this species collected in the remaining gill net collections.

*Grams/12-hr effort, estimated weight based on number of fish analyzed

NAN = Not analyzed

NAP = Not applicable, time interval inappropriate
for designated day or night period

NF = No fish collected

NS = No day/night sample

- = Not applicable

BIOMASS* OF COHO SALMON IN DAY/NIGHT GILL NET COLLECTIONS

15 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|----------------|-------------|------|----------------|------|------|------|------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 29 APR- 1 MAY | MEAN RANGE | Nap | Nap | Nap | - NF-1511.6 | NF | NF | NF | NF |
| 23-25 MAY | MEAN RANGE | - NF-1795.4 | - Nap-0 | Nap | - NF-1886.8 | NF | NF | NF | NF |
| 8-10 JUN | MEAN RANGE | NF | - NF-Nap | Nap | - NF-3485.5 | NF | NF | NF | NF |

No fish of this species collected in the remaining gill net collections

*Grams/12-hr effort, estimated weight based on number of fish analyzed

Nap = Not applicable, time interval inappropriate
for designated day or night period

NF = No fish collected

BIOMASS* OF RAINBOW SMELT IN DAY/NIGHT GILL NET COLLECTIONS

15 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|---------------------|----------------------|-------------------|-------------------|--------------|--------------|--------------|--------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 14-16 APR | MEAN RANGE | 146.9 15.6-278.2 | NAP | NAP | 67.4 51.3-83.5 | NF | NF | NF | - NF-28.1 |
| 29 APR- 1 MAY | MEAN RANGE | NAP | NAP | NAP | 77.8 67.6-88.0 | - NF-33.9 | NF | - NF-31.5 | - NF-34.7 |
| 11-13 MAY | MEAN RANGE | NS | NS | NS | NS | - NF-NS | - NF-NS | - 39.4-NS | - NF-NS |
| 23-25 MAY | MEAN RANGE | NF | - NAP-116.6 | NAP | NF | - NF-77.0 | - NF-58.4 | NF | - NF-24.4 |
| 8-10 JUN | MEAN RANGE | NF | - NF-NAP | NAP | - NF-84.1 | NF | - NF-NAN | NF | NF |
| 4-6 OCT | MEAN RANGE | - NAN-113.0 | NF | 61.4 44.5-78.4 | - NF-498.1 | NF | NF | NF | NF |
| 19-24 OCT | MEAN RANGE | - 97.9-NS | - NF-NS | - 254.6-NS | - 35.1-NS | NF | NF | NF | NF |
| 2-4 NOV | MEAN RANGE | - NF-69.4 | 240.4 125.7-355.1 | - NF-100.2 | NAP | NF | NF | NF | NF |
| 15-17 NOV | MEAN RANGE | - NAP-NS | - 56.4-NS | - NAP-NS | - NAP-NS | - NF-NS | - NF-NS | - NF-NS | - NF-NS |

No fish of this species collected in the remaining gill net collections.

*Grams/12-hr effort, estimated weight based on number of fish analyzed

NF = No fish collected

NS = No day/night sample

- = Not applicable

NAN = Not analyzed

NAP = Not applicable, time interval inappropriate
for designated day or night period

BIOMASS* OF SMALLMOUTH BASS IN DAY/NIGHT GILL NET COLLECTIONS

15 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|---------------|----------------|---------------|------------------------|----------------|-------------------------|----------------|-----------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 29 APR- 1 MAY | MEAN RANGE | NAP | NAP | NAP | 2567.8 756.7-4378.9 | NF | - NF-1368.6 | - NF-1260.6 | - NF-2370.5 |
| 23-25 MAY | MEAN RANGE | NF | - NAP-NF | NAP | NF | NF | 331.8 663.6-842.8 | - NF-828.7 | NF |
| 8-10 JUN | MEAN RANGE | NF | - NF-NAP | NAP | 1453.4 853.1-2053.8 | NF | NF | NF | - NF-578.2 |
| 6-8 JUL | MEAN RANGE | NF | - NF-NAP | NAP | NAP | NF | 2499.2 1201.7-3796.8 | NF | - 1509.2-NAP |
| 19-21 JUL | MEAN RANGE | NAP | - NF-1658.7 | NAP | - NF-NAP | - NF-866.3 | NF | - NF-314.2 | - NF-42.2 |
| 2-4 AUG | MEAN RANGE | NAP | - NAP-571.2 | NAP | NAP | NF | NF | NF | - NF-1247.8 |
| 17-19 AUG | MEAN RANGE | NAP | - NAP-NF | - NF-NAP | - NAP-NF | NF | - NF-2673.7 | - NF-424.2 | - NF-1141.8 |
| 13-15 SEP | MEAN RANGE | NF | NAP | NAP | NF | NF | 1890.3 1425.0-2355.6 | - NF-824.3 | NF |
| 4-6 OCT | MEAN RANGE | NF | - NF-330.0 | - NF-723.0 | NF | - NF-2760.9 | - NF-4273.4 | - NF-1159.8 | NF |
| 19-24 OCT | MEAN RANGE | - 213.3-NS | - NF-NS | - NF-NS | - NF-NS | NF | NF | NF | NF |

No fish of this species collected in the remaining gill net collections.

*Grams/12-hr effort, estimated weight based on number of fish analyzed

NAP = Not applicable, time interval inappropriate
for designated day or night period

NF = No fish collected

NS = No day/night sample

- = Not applicable

BIOMASS* OF SPOTTAIL SHINER IN NIGHT GILL NET COLLECTIONS

15 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|----------------------|--------------------|-------------------|------------------------|---------------|----------------------|----------------------|--------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 14-16 APR | MEAN RANGE | 291.6 223.6-359.7 | NAP | NAP | - NF-23.1 | NF | NF | NF | NF |
| 29 APR- 1 MAY | MEAN RANGE | NAP | NAP | NAP | 1227.1 448.6-2005.6 | - NF-75.2 | 24.9 24.9-24.9 | 119.4 NF-238.7 | NF |
| 11-13 MAY | MEAN RANGE | NS | NS | NS | NS | - 101.7-NS | - 17.0-NS | - NF-NS | - NF-NS |
| 23-25 MAY | MEAN RANGE | 173.0 15.4-330.5 | - NAP-697.8 | NAP | 781.0 380.0-1182.0 | - NAN-18.2 | 408.7 386.5-430.9 | 207.3 164.0-250.6 | - NF-47.0 |
| 8-10 JUN | MEAN RANGE | 192.2 177.6-206.7 | - 160.6-NAP | NAP | 1118.9 735.3-1502.5 | - NF-NAN | NF | - NF-17.7 | NF |
| 21-23 JUN | MEAN RANGE | - NAP-NS | - 508.4-NS | - NAP-NS | - NAP-NS | - NF-NS | - NF-NS | - NF-NS | - NF-NS |
| 6-8 JUL | MEAN RANGE | 394.6 269.8-519.5 | - NAP-361.2 | NAP | NAP | NF | NF | NF | - NF-NAP |
| 19-21 JUL | MEAN RANGE | NAP | 85.8 69.7-101.8 | NAP | - 555.2-NAP | - NF-49.6 | - NF-15.1 | - NF-58.1 | NF |
| 2-4 AUG | MEAN RANGE | NAP | - NAP-220.5 | NAP | NAP | NF | NF | NF | NF |
| 17-19 AUG | MEAN RANGE | NAP | - NAP-119.0 | - 86.1-NAP | - NAP-99.1 | - NF-NAN | NF | - NF-NAN | - NF-NAN |
| 13-15 SEP | MEAN RANGE | 202.3 106.7-297.9 | NAP | NAP | 641.6 497.5-785.8 | NF | NF | NF | NF |
| 4-6 OCT | MEAN RANGE | 684.9 386.9-982.9 | 38.6 17.0-60.2 | 39.6 15.6-63.5 | 769.0 687.7-850.2 | NF | NF | NF | NF |
| 19-24 OCT | MEAN RANGE | - 189.4-NS | - 26.1-NS | - 172.7-NS | - 178.6-NS | NF | NF | NF | NF |
| 2-4 NOV | MEAN RANGE | NF | - NF-8.5 | - NF-59.5 | NAP | NF | NF | NF | NF |
| 15-17 NOV | MEAN RANGE | - NAP-NS | - NAN-NS | - NAP-NS | - NAP-NS | - NF-NS | - NF-NS | - NF-NS | - NF-NS |

No fish of this species collected in the remaining gill net collections.

*Grams/12-hr effort, estimated weight based on number of fish analyzed

NAN = Not analyzed

NAP = Not applicable, time interval inappropriate
for designated day or night period

NF = No fish collected

NS = No day/night sample

- = Not applicable

BIOMASS* OF TROUT-PERCH IN DAY/NIGHT GILL NET COLLECTIONS

15 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE. | NIGHT | | | | DAY | | | |
|------------------|----------------|----------------|-------------------|-------------|----------------------|-------------|------------|--------------|--------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 14-16 APR | MEAN RANGE | - NF-86.4 | Nap | Nap | NF | NF | NF | NF | NF |
| 29 APR- 1 MAY | MEAN RANGE | Nap | Nap | Nap | 129.0 118.1-139.9 | NF | NF | NF | NF |
| 23-25 MAY | MEAN RANGE | - NF-45.2 | - Nap-28.1 | Nap | 31.2 21.0-41.4 | - NF-NAn | NF | - 13.3-NF | - NF-16.0 |
| 8-10 JUN | MEAN RANGE | - NAn-121.7 | - 98.5-Nap | Nap | - 14.9-NF | NF | NF | NF | NF |
| 21-23 JUN | MEAN RANGE | - Nap-NS | - 54.8-NS | - Nap-NS | - Nap-NS | - NF-NS | - NF-NS | - NF-NS | - NF-NS |
| 6-8 JUL | MEAN RANGE | - NF-15.6 | - Nap-18.8 | Nap | Nap | NF | NF | NF | - NF-Nap |
| 19-21 JUL | MEAN RANGE | Nap | 23.0 14.2-31.8 | Nap | - NF-Nap | NF | NF | NF | NF |
| 4-6 OCT | MEAN RANGE | NF | NF | NF | - NF-11.2 | NF | NF | NF | NF |

No fish of this species collected in the remaining gill net collections.

*Grams/12-hr effort, estimated weight based on number of fish analyzed

NAn = Not analyzed

Nap = Not applicable, time interval inappropriate
for designated day or night period

NF = No fish collected

NS = No day/night sample

- = Not applicable

BIOMASS* OF WHITE PERCH IN NIGHT GILL NET COLLECTIONS

15 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|-------------------------|-------------------------|----------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 14-16 APR | MEAN RANGE | - NF-543.4 | - Nap | Nap | NF | NF | - NF-579.9 | - NF-862.5 | - NF-274.6 |
| 29 APR- 1 MAY | MEAN RANGE | Nap | Nap | Nap | 449.5 234.6-664.4 | NF | NF | - NF-502.3 | - NF-433.7 |
| 11-13 MAY | MEAN RANGE | NS | NS | NS | NS | - 2237.5-NS | - 5736.6-NS | - 512.9-NS | - NF-NS |
| 23-25 MAY | MEAN RANGE | 715.6 448.0-983.3 | - Nap-1676.4 | Nap | 250.2 239.8-260.7 | - NF-266.2 | 2189.7 1878.2-2501.2 | 347.0 75.1-619.0 | 382.4 232.4-532.3 |
| 8-10 JUN | MEAN RANGE | 2298.6 1741.7-2855.5 | - 1376.2-Nap | Nap | 1118.0 743.9-1492.1 | 1122.8 944.7-1300.9 | 1100.2 657.3-1543.2 | 383.2 337.2-429.2 | - NF-899.7 |
| 21-23 JUN | MEAN RANGE | - Nap-NS | - 8375.9-NS | - Nap-NS | - Nap-NS | - 1736.8-NS | - 1810.5-NS | - 2714.0-NS | - 3325.6-NS |
| 6-8 JUL | MEAN RANGE | 3001.2 594.5-5407.9 | - Nap-2785.1 | Nap | Nap | 1089.0 1031.6-1146.4 | 2684.2 1020.9-4347.5 | 1370.4 1015.2-1725.6 | - 1124.7-Nap |
| 19-21 JUL | MEAN RANGE | Nap | 5207.8 4985.8-5429.8 | Nap | - 5313.0-Nap | 1006.3 606.0-1406.6 | 1208.5 1059.4-1357.6 | 1132.1 1003.5-1260.7 | 5129.6 4113.2-6146.1 |
| 2-4 AUG | MEAN RANGE | NAP | - Nap-6651.8 | Nap | Nap | - NF-843.2 | 786.3 613.0-959.6 | - NF-347.7 | - NF-1270.5 |
| 17-19 AUG | MEAN RANGE | Nap | - Nap-2879.0 | - 3271.4-Nap | - Nap-7473.1 | NF | 312.8 237.7-388.0 | NF | 810.0 176.4-1443.7 |
| 13-15 SEP | MEAN RANGE | 1350.8 196.3-2505.2 | Nap | Nap | 3331.6 2314.6-4348.7 | NF | NF | NF | NF |
| 4-6 OCT | MEAN RANGE | 208.3 92.1-324.5 | 955.8 943.2-968.5 | 297.0 155.2-438.8 | - NF-242.9 | NF | NF | NF | NF |
| 19-24 OCT | MEAN RANGE | - 184.6-NS | - 614.5-NS | - 169.9-NS | - 403.8-NS | NF | NF | NF | - NF-591.7 |
| 2-4 NOV | MEAN RANGE | NF | - NF-207.9 | 92.2 61.3-123.1 | Nap | NF | NF | NF | NF |
| 15-17 NOV | MEAN RANGE | - Nap-NS | - 338.0-NS | - Nap-NS | - Nap-NS | - NF-NS | - NF-NS | - NF-NS | - NF-NS |
| 6-8 DEC | MEAN RANGE | - NF-NS | - 115.5-NS | - NF-NS | - NF-NS | - NF-NS | - NF-NS | - NF-NS | - NF-NS |

No fish of this species collected in the remaining gill net collections.
*Grams/12-hr effort, estimated weight based on number of fish analyzed

NF = No fish collected
NS = No day/night sample
- = Not applicable

Nap = Not applicable, time interval inappropriate
for designated day or night period

BIOMASS* OF WHITE SUCKER IN DAY/NIGHT GILL NET COLLECTIONS

15 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|-------------------------|------------------------|------------------|-------------------------|----------------|-------------------------|----------------------|----------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 14-16 APR | MEAN RANGE | NF | Nap | Nap | NF | NF | - 1030.9-NF | NF | NF |
| 29 APR- 1 MAY | MEAN RANGE | Nap | Nap | Nap | 5482.0 3302.9-7661.0 | NF | - NF-639.1 | NF | - NF-3473.7 |
| 11-13 MAY | MEAN RANGE | NS | NS | NS | NS | - NF-NS | - 3340.9-NS | - NF-NS | - NF-NS |
| 23-25 MAY | MEAN RANGE | - NF-899.9 | - Nap-4226.8 | Nap | 831.2 688.3-974.1 | - 2683.6-NF | 2044.8 1302.3-2787.3 | 308.6 117.1-500.1 | NF |
| 8-10 JUN | MEAN RANGE | - NF-2130.2 | - 944.6-Nap | Nap | 1609.4 1031.0-2187.8 | NF | NF | NF | - NF-900.7 |
| 6-8 JUL | MEAN RANGE | 1880.0 516.2-3243.8 | - Nap-NF | Nap | Nap | NF | NF | NF | - 887.4-Nap |
| 19-21 JUL | MEAN RANGE | Nap | NF | Nap | - 976.6-Nap | NF | NF | - 364.3-NF | NF |
| 2-4 AUG | MEAN RANGE | Nap | - Nap-NF | Nap | Nap | NF | NF | NF | - NF-1080.9 |
| 17-19 AUG | MEAN RANGE | Nap | - Nap-876.6 | - 1782.0-Nap | - Nap-515.9 | NF | NF | NF | NF |
| 13-15 SEP | MEAN RANGE | 2305.5 1758.9-2852.1 | Nap | Nap | 1719.4 979.2-2459.7 | - 1114.4-NF | NF | NF | NF |
| 4-6 OCT | MEAN RANGE | - NF-1521.8 | 1114.0 419.4-1808.5 | - 139.8-NF | - NF-854.0 | NF | NF | NF | NF |
| 19-24 OCT | MEAN RANGE | - 712.7-NS | - NF-NS | - 1127.4-NS | - 1892.9-NS | NF | NF | NF | NF |
| 2-4 NOV | MEAN RANGE | - NF-1603.8 | NF | - 326.6-368.9 | Nap | NF | NF | NF | NF |
| 15-17 NOV | MEAN RANGE | - Nap-NS | - NF-NS | - Nap-NS | - Nap-NS | - NF-NS | - NF-NS | - NF-NS | - 5065.5-NS |

No fish of this species collected in the remaining gill net collections.

*Grams/12-hr effort, estimated weight based on number of fish analyzed

Nap = Not analyzed

NF = Not applicable, time interval inappropriate
for designated day or night period

NF = No fish collected

NS = No day/night sample

- = Not applicable

BIOMASS* OF YELLOW PERCH IN DAY/NIGHT GILL NET COLLECTIONS

15 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|----------------------|----------------------|----------------------|----------------------|----------------------|-----------------------|-----------------------|-----------------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 29 APR- 1 MAY | MEAN RANGE | NAp | NAp | NAp | 400.4 246.2-554.5 | NF | 290.5 122.0-459.0 | 313.2 67.0-559.4 | NF |
| 11-13 MAY | MEAN RANGE | NS | NS | NS | NS | - NF-NS | - 747.4-NS | - 163.8-NS | - NF-NS |
| 23-25 MAY | MEAN RANGE | NF | - NAp-1252.6 | NAp | 286.7 157.4-416.0 | - NF-47.3 | 806.0 299.0-1313.1 | 297.5 71.2-523.8 | 708.0 134.1-1281.9 |
| 8-10 JUN | MEAN RANGE | - NF-293.3 | 647.0-NAp | NAp | 404.9 321.9-487.9 | - NF-798.4 | 495.1 366.4-623.8 | 763.1 333.9-1192.3 | - NF-2200.6 |
| 21-23 JUN | MEAN RANGE | - NAp-NS | - 363.9-NS | - NAp-NS | - NAp-NS | - 1452.7-NS | - 506.2-NS | - 239.6-NS | - NF-NS |
| 6-8 JUL | MEAN RANGE | NF | - NAp-40.4 | NAp | NAp | - NF-1668.2 | 830.1 744.3-915.9 | 557.0 533.3-580.8 | - NF-NAp |
| 19-21 JUL | MEAN RANGE | NAp | 73.6 64.9-82.4 | NAp | - 185.5-NAp | 266.6 113.0-420.1 | 310.8 152.1-469.4 | 841.6 21.4-1661.9 | 508.6 349.2-667.9 |
| 2-4 AUG | MEAN RANGE | NAp | - NAp-584.3 | NAp | NAp | - NF-614.6 | 120.1 18.5-221.7 | - NF-468.1 | NF |
| 17-19 AUG | MEAN RANGE | NAp | - NAp-NF | - 41.1-NAp | - NAp-117.8 | NF | - NF-193.9 | NF | NF |
| 13-15 SEP | MEAN RANGE | 132.0 105.0-159.1 | NAp | NAp | 276.0 115.8-436.3 | NF | NF | NF | NF |
| 4-6 OCT | MEAN RANGE | 365.2 201.5-529.0 | 269.8 229.6-310.1 | 333.0 305.7-360.4 | 175.3 151.5-199.1 | - NF-333.6 | NF | - NF-263.4 | NF |
| 19-24 OCT | MEAN RANGE | - 123.0-NS | - NF-NS | - 132.9-NS | - 789.2-NS | NF | NF | NF | NF |
| 2-4 NOV | MEAN RANGE | NF | - NF-43.6 | - NF- 65.6 | NAp | NF | NF | NF | NF |

No fish of this species collected in the remaining gill net collections.

*Grams/12-hr effort, estimated weight based on number of fish analyzed

NAp = Not applicable, time interval inappropriate
for designated day or night period

NF = No fish collected

NS = No day/night sample

- = Not applicable

APPENDIX VIID-3b

BIOMASS OF SELECTED SPECIES AT THE 40 FT DEPTH CONTOUR

BIOMASS* OF ALEWIFE IN NIGHT GILL NET COLLECTIONS

40 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|-------------------------|------------------------|-----------------------|----------------------|-------------------------|-------------------------|-------------------------|-----------------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 14-16 APR | MEAN RANGE | NAP | NAP | NAP | - NAP-782.3 | 1539.2 726.6-2351.8 | 1467.6 1341.8-1593.4 | 1256.5 1177.8-1335.2 | 494.8 92.6-897.0 |
| 29 APR- 1 MAY | MEAN RANGE | 5103.8 3901.5-6306.1 | - NAP-11369.5 | - 2136.2-NL | - NAP-1252.3 | 1854.4 91.6-3617.1 | 4156.0 3041.1-5270.9 | 1442.2 1002.9-1881.5 | 841.2 594.2-1088.2 |
| 11-13 MAY | MEAN RANGE | NS | NS | NS | NS | - 312.6-NSt | - 254.1-NSt | - 617.4-NSt | - 425.9-NSt |
| 23-25 MAY | MEAN RANGE | - NAP-1838.4 | NAP | NAP | - NAP-3306.3 | 1236.1 1020.2-1452.0 | 1110.1 873.0-1347.2 | 1399.4 1017.3-1781.4 | 613.6 322.1-905.2 |
| 8-10 JUN | MEAN RANGE | 445.1 270.3-619.9 | - 479.7-NAP | - NAP-NL | NAP | - NF-131.2 | - NF-66.9 | - NF-26.2 | - NF-NAN |
| 21-23 JUN | MEAN RANGE | - NAP-NSt | NSt | - NAP-NSt | - NAP-NSt | - 588.5-NS | NS | - NF-NS | - 173.3-NS |
| 6-8 JUL | MEAN RANGE | - 599.6-NAP | NAP | - NAP-NL | NAP | 228.6 143.3-313.9 | 245.9 141.5-350.3 | 1018.6 833.3-1204.0 | 181.7 85.4-278.0 |
| 19-21 JUL | MEAN RANGE | NAP | NAP | NAP | - 3770.2-NAP | 65.8 29.5-102.0 | 98.9 81.3-116.5 | 566.8 142.9-990.6 | 150.4 40.5-260.2 |
| 2-4 AUG | MEAN RANGE | - NAP-408.3 | - NAP-1673.6 | NAP | - NL-673.7 | - NAN-74.0 | 316.0 88.1-543.9 | 286.4 166.1-406.7 | - NF-307.6 |
| 17-19 AUG | MEAN RANGE | NAP | - NAP-5608.6 | NAP | - NAP-1477.8 | - NF-318.5 | - NAN-111.6 | 736.9 562.4-911.4 | 497.0 302.2-691.8 |
| 1-3 SEP | MEAN RANGE | NS | NS | NS | NS | NS | NS | NS | NS |
| 13-15 SEP | MEAN RANGE | 1268.2 991.2-1545.1 | NAP | NAP | - 630.9-NAP | - NAN-35.2 | 818.4 242.2-1394.5 | 386.0 278.3-493.7 | 147.8 47.6-248.0 |
| 4-6 OCT | MEAN RANGE | 394.6 287.4-501.7 | NAP | NAP | 227.8 161.6-294.1 | NF | - NF-435.9 | NF | 655.2 134.3-1176.1 |
| 19-24 OCT | MEAN RANGE | - 1459.4-NS | - NAP-NS | - NAP-NS | - 728.0-NS | NF | - 943.9-NF | NF | NF |
| 2-4 NOV | MEAN RANGE | 970.2 359.6-1580.8 | 1025.4 155.9-1894.9 | 965.5 920.6-1010.3 | 258.6 165.6-351.6 | NF | NF | NF | NF |
| 15-17 NOV | MEAN RANGE | - NAP-NSt | - 2478.9-NSt | - NAP-NSt | - NAP-NSt | - NF-NSt | - NF-NS | - NF-NS | - NF-NS |
| 6-8 DEC | MEAN RANGE | - NF-NSt | - NF-NSt | - NF-NSt | - NF-NSt | - NF-NS | - NF-NS | - NF-NS | - NF-NS |

No fish of this species collected in the remaining gill net collections.

*Grams/12-hr effort, estimated weight based on number of fish analyzed

NAN = Not analyzed

NAP = Not applicable, time interval inappropriate
for designated day or night period

NF = No fish collected

NL = Net lost

NS = No day/night sample

NSt = Net not set

- = Not applicable

BIOMASS* OF BROWN TROUT IN DAY/NIGHT GILL NET COLLECTIONS

40 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|--------------|---------------|------------------------|-------------|-------------|----------------|------|------|----------------|------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 14-16 APR | MEAN RANGE | NAP | NAP | NAP | - NAP-NF | NF | NF | - NF-1838.6 | NF |
| 8-10 JUN | MEAN RANGE | 1596.0 186.8-2405.3 | - NF-NAP | - NAP-NL | NAP | NF | NF | NF | NF |
| 19-21 JUL | MEAN RANGE | NAP | NAP | NAP | - NF-NAP | NF | NF | - NF-4248.9 | NF |
| 13-15 SEP | MEAN RANGE | NF | NAP | NAP | - 829.1-NAP | NF | NF | NF | NF |

No fish of this species collected in the remaining gill net collections

*Grams/12 hr effort, estimated weight based on number of fish analyzed

NAP = Not applicable, time interval inappropriate for designated day or night period

NL = Net lost

NF = No fish collected

- = Not applicable

BIOMASS* OF COHO SALMON IN DAY/NIGHT GILL NET COLLECTIONS

40 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|-------|--------------|------------|-------------|------|------|------|------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 29 APR- 1 MAY | MEAN RANGE | NF | - NAP-NAN | - NF-NL | - NAP-NF | NF | NF | NF | NF |

No fish of this species collected in the remaining gill net collections.

*Grams/12-hr effort, estimated weight based on number of fish analyzed

NF = No fish collected

NL = Net lost

- = Not applicable

NAN = Not analyzed

NAP = Not applicable, time interval inappropriate for designated
day or night period

BIOMASS* OF RAINBOW SMELT IN DAY/NIGHT GILL NET COLLECTIONS

40 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|-------------------------|-------------------------|---------------------------|-------------------------|---------------------------|-------------------------|----------------------------|---------------------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 14-16 APR | MEAN RANGE | Nap | Nap | Nap | - Nap-652.2 | - NF-658.7 | 313.1 290.7-335.5 | 399.6 279.2-519.9 | - NF-24.3 |
| 29 APR- 1 MAY | MEAN RANGE | 216.1 142.0-290.2 | - Nap-199.5 | - 287.7-NL | - Nap-266.1 | - NF-177.1 | 1656.2 263.1-3049.4 | 1454.8 611.4-2298.1 | 179.3 33.4-325.2 |
| 11-13 MAY | MEAN RANGE | NS | NS | NS | NS | - 26.9-NS _t | - NF-NS _t | - 177.1-NS _t | - 40.4-NS _t |
| 23-25 MAY | MEAN RANGE | - Nap-92.9 | Nap | Nap | - Nap-215.0 | 1006.2 980.9-1031.5 | 857.0 86.4-1627.7 | 957.9 913.7-1002.1 | 311.2 76.4-546.1 |
| 8-10 JUN | MEAN RANGE | NF | - NF-Nap | - Nap-NL | Nap | NF | - NF-NAn | - NF-89.2 | NF |
| 4-6 OCT | MEAN RANGE | 69.4 26.1-112.7 | Nap | Nap | NF | NF | - NF-55.0 | NF | NF |
| 19-24 OCT | MEAN RANGE | - 24.3-NS | - Nap-NS | - Nap-NS | - NF-NS | NF | NF | NF | NF |
| 2-4 NOV | MEAN RANGE | - NF-22.7 | 32.2 26.7-37.7 | 99.1 18.0-180.2 | 47.6 23.0-72.1 | NF | NF | NF | NF |
| 6-8 DEC | MEAN RANGE | - NF-NS _t | - NF-NS _t | - 18.1-NS _t | - NF-NS _t | - NF-NS | - NF-NS | - NF-NS | - NF-NS |

No fish of this species collected in the remaining gill net collections.

*Grams/12-hr effort, estimated weight based on number of fish analyzed

NAn = Not analyzed

Nap = Not applicable, time interval inappropriate for designated
day or night period

NF = No fish collected

NL = Net lost

NS = No day/night sample

NS_t = Net not set

- = Not applicable

BIOMASS* OF SMALLMOUTH BASS IN DAY/NIGHT GILL NET COLLECTIONS

40 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|--------------|-------------|--------------|--------------|-----------------------|-------------------------|----------------|----------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 14-16 APR | MEAN RANGE | Nap | Nap | Nap | - NAP-NF | - NF-1374.2 | 3324.1 2154.4-4493.8 | - NF-5222.3 | NF |
| 29 APR- 1 MAY | MEAN RANGE | NF | - NAP-NF | - NF-NL | - NAP-NF | NF | - NF-1880.2 | NF | NF |
| 11-13 MAY | MEAN RANGE | NS | NS | NS | NS | - NF-NSt | - 1180.5-NSt | - NF-NSt | - NF-NSt |
| 17-19 AUG | MEAN RANGE | Nap | - NAP-NF | Nap | - NAP-NF | NF | - NF-1558.4 | NF | NF |
| 13-15 SEP | MEAN RANGE | NF | Nap | Nap | - NF-Nap | 950.1 825.0-1075.2 | NF | NF | - NF-6658.9 |
| 4-6 OCT | MEAN RANGE | NF | Nap | Nap | NF | - NF-1312.7 | NF | NF | NF |
| 15-17 NOV | MEAN RANGE | - NAP-NSt | - NF-NSt | - NAP-NSt | - NAP-NSt | - NF-NSt | - 4890.4-NS | - NF-NS | - NF-NS |

No fish of this species collected in the remaining gill net collections.
*Grams/12-hr effort, estimated weight based on number of fish analyzed

Nap = Not applicable, time interval inappropriate for designated
day or night period

NF = No fish collected
NL = Net lost
NS = No day/night sample
NSt = Net not set
- = Not applicable

BIOMASS* OF SPOTTAIL SHINER IN DAY/NIGHT GILL NET COLLECTIONS

40 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|--------------|-------------|--------------|--------------|---------------------|----------------------|-------------------------|----------------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 14-16 APR | MEAN RANGE | NAP | NAP | NAP | - NAP-NF | 27.2 21.8-32.5 | 73.2 41.6-104.8 | - NF-214.2 | NF |
| 29 APR- 1 MAY | MEAN RANGE | NF | - NAP-NF | - NF-NL | - NAP-NF | - NAv-231.2 | 752.0 622.7-881.4 | 435.2 353.7-516.6 | 83.2 19.0-147.4 |
| 11-13 MAY | MEAN RANGE | NS | NS | NS | NS | - 84.9-NSt | - 20.6-NSt | - 504.2-NSt | - 160.1-NSt |
| 23-25 MAY | MEAN RANGE | - NAP-NF | NAP | NAP | - NAP-NF | NF | 109.6 56.9-162.3 | 1058.3 274.7-1841.9 | 493.6 147.9-839.3 |
| 8-10 JUN | MEAN RANGE | NF | - NF-NAP | - NAP-NL | NAP | - NF-14.8 | NF | - NAN-24.8 | 88.9 20.8-157.0 |
| 21-23 JUN | MEAN RANGE | - NAP-NSt | NSt | - NAP-NSt | - NAP-NSt | - 43.5-NS | NS | - 53.2-NS | - 238.0-NS |
| 6-8 JUL | MEAN RANGE | - NF-NAP | NAP | - NAP-NL | NAP | - NF-62.4 | NF | 1399.0 1207.8-1590.1 | 183.8 104.8-262.9 |
| 19-21 JUL | MEAN RANGE | NAP | NAP | NAP | - NF-NAP | 126.3 21.9-230.7 | 309.9 224.0-395.8 | 2937.6 2277.6-3597.6 | 86.0 81.6-90.5 |
| 2-4 AUG | MEAN RANGE | - NAP-NF | - NAP-NF | NAP | - NL-NAP | - NF-20.9 | NF | - NF-106.9 | NF |
| 17-19 AUG | MEAN RANGE | NAP | - NAP-NF | NAP | - NAP-NF | NF | NF | - NAN-42.5 | NF |
| 4-6 OCT | MEAN RANGE | NF | NAP | NAP | NF | NF | NF | 14.0 11.3-16.8 | NF |

No fish of this species collected in the remaining gill net collections.
*Grams/12-hr effort, estimated weight based on number of fish analyzed

NAN = Not analyzed

NAP = Not applicable, time interval inappropriate for designated
day or night period

NAv = Data not available
NF = No fish collected
NL = Net lost
NS = No day/night sample
NSt = Net not set
- = Not applicable

BIOMASS* OF TROUT-PERCH IN DAY/NIGHT GILL NET COLLECTIONS

40 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|-------------|-------------|-------------|-------------|---------------|---------------------|-------------------|---------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 14-16 APR | MEAN RANGE | Nap | Nap | Nap | Nap-NF | NF | 185.0 70.9-299.0 | - NF-108.4 | NF |
| 29 APR- 1 MAY | MEAN RANGE | NF | - Nap-NF | - NF-NS | - Nap-NF | NF | 126.3 41.2-211.4 | 50.6 23.6-77.5 | - NF-38.8 |
| 11-13 MAY | MEAN RANGE | NS | NS | NS | NS | - 100.8-NS | - NF-NS | - 50.6-NS | - 24.3-NS |
| 23-25 MAY | MEAN RANGE | - Nap-NF | Nap | Nap | - Nap-NF | NF | - 36.7-NF | 50.2 18.9-81.4 | - 224.4-NF |
| 8-10 JUN | MEAN RANGE | NF | - NF-Nap | - Nap-NL | Nap | NF | NF | - 29.0-NF | NF |
| 21-23 JUN | MEAN RANGE | - Nap-NS | NS | - Nap-NS | - Nap-NS | 24.7-Nap | Nap | - NAn-Nap | - NF-Nap |
| 6-8 JUL | MEAN RANGE | - NF-Nap | Nap | Nap-NL | Nap | NF | NF | 25.6 22.4-28.7 | NF |
| 19-21 JUL | MEAN RANGE | Nap | Nap | Nap | - NF-Nap | NF | - 14.7-NF | 39.2 19.5-58.9 | NF |
| 2-4 AUG | MEAN RANGE | - Nap-NF | - Nap-NF | Nap | NL-NF | NF | - 23.5-NF | NF | NF |

No fish of this species collected in the remaining gill net collections.

*Grams/12-hr effort, estimated weight based on number of fish analyzed

NAn = Not analyzed

Nap = Not applicable, time interval inappropriate
for designated day or night period

NF = No fish collected

NL = Net lost

NS = No day/night sample

- = Not applicable

BIOMASS* OF WHITE PERCH IN DAY/NIGHT GILL NET COLLECTIONS

40 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|--------------|-------------|--------------|----------------|----------------|-----------------------|----------------|-------------------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 14-16 APR | MEAN RANGE | Nap | Nap | Nap | - Nap-NF | NF | - NF-241.4 | - NF-436.7 | NF |
| 29 APR- 1 MAY | MEAN RANGE | NF | - Nap-NF | - NF-NL | - Nap-NF | NF | - NF-388.1 | - NF-290.6 | NF |
| 11-13 MAY | MEAN RANGE | NS | NS | NS | NS | - 420.3-NSt | - 402.7-NSt | - 344.1-NSt | - NF-NSt |
| 23-25 MAY | MEAN RANGE | - Nap-NF | Nap | Nap | - Nap-156.3 | NF | - NF-323.9 | - NF-187.9 | NF |
| 8-10 JUN | MEAN RANGE | - NF-78.0 | - NF-Nap | - Nap-NL | Nap | - NF-225.1 | NF | NF | NF |
| 21-23 JUN | MEAN RANGE | - Nap-NSt | NSt | - Nap-NSt | - Nap-NSt | - 942.5-NS | NS | - 645.5-NS | - 189.1-NS |
| 6-8 JUL | MEAN RANGE | - NF-Nap | Nap | - Nap-NL | Nap | - NF-370.3 | - NF-819.6 | - NF-1403.8 | 480.1 350.3-609.9 |
| 19-21 JUL | MEAN RANGE | Nap | Nap | Nap | - NF-Nap | - NF-311.4 | 920.2 492.5-1347.9 | - NF-446.2 | - NF-231.5 |
| 2-4 AUG | MEAN RANGE | - Nap-NF | - Nap-NF | Nap | - NL-NF | NF | - NF-707.2 | NF | NF |
| 17-19 AUG | MEAN RANGE | Nap | - Nap-NF | Nap | - Nap-NF | NF | 208.2 194.8-221.7 | NF | 1457.4 1404.5-1510.4 |
| 13-15 SEP | MEAN RANGE | NF | Nap | Nap | - 205.3-Nap | NF | NF | NF | - NF-167.7 |

No fish of this species collected in the remaining gill net collections.
*Grams/12-hr effort, estimated weight based on number of fish analyzed

NAn = Not analyzed

Nap = Not applicable, time interval inappropriate
for designated day or night period

NF = No fish collected

NL = Net lost

NS = No day/night sample

NSt = Net not set

- = Not applicable

BIOMASS* OF WHITE SUCKER IN DAY/NIGHT GILL NET COLLECTIONS

40 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE. | NIGHT | | | | DAY | | | |
|--------------|----------------|-------------|-------------|-------------|-------------|----------------|----------------|----------------|------------------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 11-13 MAY | MEAN RANGE | NS | NS | NS | NS | - NF-NS | - 366.4-NS | - NF-NS | - 1270.4-NS |
| 23-25 MAY | MEAN RANGE | - Nap-NF | Nap | Nap | - Nap-NF | NF | - NF-1797.8 | - 975.8-NF | 2511.3 789.7-4232.9 |
| 8-10 JUN | MEAN RANGE | NF | - NF-Nap | - Nap-NL | Nap | NF | NF | NF | - 1361.7-NF |
| 21-23 JUN | MEAN RANGE | - Nap-NS | NS | - Nap-NS | - Nap-NS | - NF-Nap | Nap | - 970.2-Nap | - NF-Nap |
| 6-8 JUL | MEAN RANGE | - NF-Nap | Nap | - Nap-NL | Nap | - NF-860.9 | NF | NF | NF |
| 19-21 JUL | MEAN RANGE | Nap | Nap | Nap | - NF-Nap | - 604.9-NF | - NF-3539.6 | 978.1-NF | 1469.6 974.3-1964.9 |
| 2-4 AUG | MEAN RANGE | - Nap-NF | - Nap-NF | Nap | - NL-NF | 792.1-NF | NF | NF | NF |
| 17-19 AUG | MEAN RANGE | Nap | - Nap-NF | Nap | - Nap-NF | - NF-1689.0 | NF | NF | - 1497.9-NF |
| 13-15 SEP | MEAN RANGE | NF | Nap | Nap | - NF-Nap | - 536.4-NF | NF | NF | NF |
| 6-8 DEC | MEAN RANGE | - NF-NSt | - NF-NSt | - NF-NSt | - NF-NSt | - NF-NS | - NF-NS | - 1939.3-NS | - 2213.1-NS |

No fish of this species collected in the remaining gill net collections.

*Grams/12-hr effort, estimated weight based on number of fish analyzed

Nap = No applicable, time interval inappropriate
for designated day or night period

NF = No fish collected

NL = Net lost

NS = No day/night sample

NSt = Net not set

- = Not applicable

BIOMASS* OF YELLOW PERCH IN DAY/NIGHT GILL NET COLLECTIONS

40 FT DEPTH CONTOUR, NINE MILE POINT VICINITY - 1976

| DATE | MEAN RANGE | NIGHT | | | | DAY | | | |
|------------------|---------------|--------------|-------------|--------------|--------------|----------------------|----------------------|------------------------|----------------------|
| | | NMPW | NMPP | FITZ | NMPE | NMPW | NMPP | FITZ | NMPE |
| 29 APR- 1 MAY | MEAN RANGE | NF | - NAp-NF | - NF-NL | - NAp-NF | NF | NF | - NF-367.4 | - NF-46.4 |
| 11-13 MAY | MEAN RANGE | NS | NS | NS | NS | - NF-NSt | - NF-NSt | - NF-NSt | - 49.5-NSt |
| 23-25 MAY | MEAN RANGE | - NAp-NF | NAp | NAp | - NAp-NF | NF | - NF-426.3 | NF | NF |
| 8-10 JUN | MEAN RANGE | NF | - NF-NAp | - NAp-NL | NAp | NF | - NF-330.9 | - NF-21.4 | 85.4 82.1-88.8 |
| 21-23 JUN | MEAN RANGE | - NAp-NSt | NSt | - NAp-NSt | - NAp-NSt | - 69.7-NS | NS | - 93.4-NS | - 227.6-NS |
| 6-8 JUL | MEAN RANGE | - NF-NAp | NAp | - NAp-NL | NAp | 383.5 93.7-673.3 | - NAn-17.7 | 342.9 239.6-446.2 | 129.7 55.9-203.5 |
| 19-21 JUL | MEAN RANGE | NAp | NAp | NAp | - NF-NAp | 169.0 27.2-310.8 | 358.3 184.9-531.7 | 1811.1 787.4-2834.8 | 164.6 100.8-228.4 |
| 2-4 AUG | MEAN RANGE | - NAp-NF | - NAp-NF | NAp | - NL-NF | 170.4 48.0-292.9 | NF | - NF-NAn | - NF-138.9 |
| 17-19 AUG | MEAN RANGE | NAp | - NAp-NF | NAp | - NAp-NF | 309.4 39.5-579.3 | 215.0 65.0-365.1 | 670.2 302.2-1038.3 | - NF-50.4 |
| 13-15 SEP | MEAN RANGE | NF | NAp | NAp | - NF-NAp | NF | NF | NF | - NF-76.6 |
| 4-6 OCT | MEAN RANGE | NF | NAp | NAp | NF | 788.6 656.8-920.4 | - NF-895.7 | NF | NF |
| 19-24 OCT | MEAN RANGE | - NF-NS | - NAp-NS | - NAp-NS | - NF-NS | - NF-120.8 | - 430.9-NF | - 430.9-NF | NF |
| 2-4 NOV | MEAN RANGE | NF | NF | NF | NF | NF | NF | NF | - NF-115.0 |

No fish of this species collected in the remaining gill net collections.

*Grams/12-hr effort, estimated weight based on number of fish analyzed

NAn = Not analyzed

NAp = Not applicable, time interval inappropriate
for designated day or night period

NF = No fish collected

NL = Net lost

NS = No day/night sample

NSt = Net not set

- = Not applicable

SMALLMOUTH BASS: REPRODUCTIVE CYCLEEXPERIMENTAL AND CONTROL SITES^a, NINE MILE POINT VICINITY - 1976

| DATE ^b | MALE | | | | FEMALE | | | |
|-------------------|-------------------------------|----------|-------------------------------|----------|-------------------------------|----------|-------------------------------|----------|
| | EXPERIMENTAL SITE (N=36) | | CONTROL SITE (N=32) | | EXPERIMENTAL SITE (N=40) | | CONTROL SITE (N=31) | |
| | COEF. MATURITY + STD. DEV. | NO. FISH | COEF. MATURITY + STD. DEV. | NO. FISH | COEF. MATURITY + STD. DEV. | NO. FISH | COEF. MATURITY + STD. DEV. | NO. FISH |
| 14 APR | 0.58 + 0.19 | 4 | 0.67 | 1 | 6.91 + 1.02 | 5 | - | - |
| 29 APR | 0.48 + 0.06 | 5 | 0.47 + 0.13 | 6 | 6.86 + 1.50 | 5 | 7.59 + 1.99 | 4 |
| 11 MAY | 0.49 | 1 | 0.53 + 0.12 | 2 | 6.87 | 1 | - | - |
| 23 MAY | 0.44 | 1 | 0.59 + 0.17 | 2 | 6.46 + 0.81 | 3 | - | - |
| 8 JUN | | | 0.38 + 0.05 | 2 | | | 12.29 + 4.04 | 2 |
| 21 JUN | | | | | 5.25 | 1 | | |
| 6 JUL | 1.83 + 2.80 | 3 | 0.26 + 0.00 | 2 | 4.19 + 2.76 | 4 | | |
| 19 JUL | 0.27 | 1 | 0.22 + 0.07 | 3 | 2.64 | 1 | 7.59 | 1 |
| 2 AUG | | | 0.18 + 0.12 | 2 | 0.60 | 1 | 2.57 + 1.38 | 7 |
| 17 AUG | 0.25 + 0.05 | 3 | | | 1.00 + 0.70 | 7 | 1.95 + 1.18 | 7 |
| 1 SEP | 0.42 + 0.18 | 7 | 0.42 + .29 | 2 | 1.49 + 0.76 | 7 | 1.89 + 1.02 | 4 |
| 13 SEP | 0.36 + 0.19 | 6 | 0.66 + .38 | 5 | 1.16 + 0.90 | 2 | 1.87 + 0.27 | 5 |
| 4 OCT | 0.48 + 0.20 | 4 | 0.62 + 0.35 | 4 | 2.40 + 1.47 | 5 | | |
| 19 OCT | | | 0.48 | 1 | | | | |
| 2 NOV | | | | | | | 0.75 | 1 |
| 15 NOV | 0.30 | 1 | | | 2.87 | 1 | | |
| 6 DEC | | | | | | | | |

COEF. MATURITY = coefficient of maturity

N = Number of fish analyzed

^a Experimental Site: gill nets, 15, 30, and 40 ft depth contours along NMPP and FITZ transects

Control Site: gill nets, 15, 30, and 40 ft depth contours along NMPW and NMPE transects

^b Date of initial gill net set; set period approximately 48 hrs; coefficient of maturity data available for selected sampling dates (fish not collected or collected and not analyzed for the remaining sampling dates)

- = Not applicable, fish either not analyzed or not caught

APPENDIX VIIF-1

FECUNDITY DATA : SMALLMOUTH BASS

NINE MILE POINT VICINITY - JUNE 1976

I. CONTROL SITE*

| AGE | NUMBER OF FISH | TOTAL LENGTH (mm) | | PARTIAL WEIGHT (g) | | OVARY WEIGHT/FISH | | TOTAL EGGS/OVARY | |
|-----|----------------|----------------------|-------|-----------------------|-------|-------------------|--------------------|------------------|--------------------|
| | | MEAN | RANGE | MEAN | RANGE | MEAN | STANDARD DEVIATION | MEAN | STANDARD DEVIATION |
| VII | 1 | 374 | - | 764.8 | - | 115.81 | - | 25260 | - |

II. EXPERIMENTAL SITE - None collected

*Bottom Gill Net: NMPE-15 ft

- = Not applicable

FECUNDITY DATA : WHITE PERCH

NINE MILE POINT VICINITY - APRIL-JUNE 1976

I. CONTROL SITE^a

| AGE | NUMBER OF FISH | TOTAL LENGTH (mm) | | PARTIAL WEIGHT (g) | | OVARY WEIGHT/FISH | | TOTAL EGGS/OVARY | |
|------|----------------|-------------------|-----------|--------------------|-------------|-------------------|--------------------|------------------|--------------------|
| | | MEAN | RANGE | MEAN | RANGE | MEAN | STANDARD DEVIATION | MEAN | STANDARD DEVIATION |
| IV | 1 | 224 | - | 159.3 | - | 14.92 | - | 180742 | - |
| V | 2 | 250 | 250 - 251 | 217.4 | 203.9-231.0 | 46.03 | 27.18 | 252820 | 144407 |
| VI | 1 | 274 | - | 291.6 | - | 35.93 | - | 191183 | - |
| VII | 0 | - | - | - | - | - | - | - | - |
| VIII | 1 | 314 | - | 533.7 | - | 79.26 | - | 468560 | - |
| IX | 1 | 309 | - | 526.6 | - | 138.34 | - | 232794 | - |

II. EXPERIMENTAL SITE^b

| AGE | NUMBER OF FISH | TOTAL LENGTH (mm) | | PARTIAL WEIGHT (g) | | OVARY WEIGHT/FISH | | TOTAL EGGS/OVARY | |
|-----|----------------|-------------------|-----------|--------------------|-------------|-------------------|--------------------|------------------|--------------------|
| | | MEAN | RANGE | MEAN | RANGE | MEAN | STANDARD DEVIATION | MEAN | STANDARD DEVIATION |
| III | 3 | 216 | 201 - 231 | 159.5 | 109.3-209.7 | 14.69 | 12.37 | 139980 | 92896 |
| IV | 4 | 229 | 212 - 256 | 192.9 | 148.1-282.5 | 34.44 | 14.79 | 271167 | 117022 |
| V | 3 | 264 | 252 - 272 | 286.8 | 236.2-337.5 | 52.93 | 8.66 | 386708 | 22228 |
| VI | 0 | - | - | - | - | - | - | - | - |
| VII | 1 | 250 | - | 242.3 | - | 60.04 | - | 424373 | - |

^aBottom Gill Net: NMPW-15', NMPW-30', NMPE-15'^bBottom Gill Net: NMPP-15', NMPP-30', NMPP-40', FITZ-15', FITZ-30'

- = Not applicable

APPENDIX VIIF-3

FECUNDITY DATA : YELLOW PERCH

NINE MILE POINT VICINITY - APRIL-MAY 1976

I. CONTROL SITE^a

| AGE | NUMBER OF FISH | TOTAL LENGTH (mm) | | PARTIAL WEIGHT (g) | | OVARY WEIGHT/FISH | | TOTAL EGGS/OVARY | |
|-----|----------------|-------------------|-------|--------------------|-------|-------------------|--------------------|------------------|--------------------|
| | | MEAN | RANGE | MEAN | RANGE | MEAN | STANDARD DEVIATION | MEAN | STANDARD DEVIATION |
| - | 1 | 292 | - | 305.5 | - | 98.2 | - | 90989 | - |

II. EXPERIMENTAL SITE^b

| AGE | NUMBER OF FISH | TOTAL LENGTH (mm) | | PARTIAL WEIGHT (g) | | OVARY WEIGHT/FISH | | TOTAL EGGS/OVARY | |
|-----|----------------|-------------------|-----------|--------------------|------------|-------------------|--------------------|------------------|--------------------|
| | | MEAN | RANGE | MEAN | RANGE | MEAN | STANDARD DEVIATION | MEAN | STANDARD DEVIATION |
| II | 1 | 164 | - | 47.3 | - | 14.35 | - | 9273 | - |
| III | 3 | 232 | 195 - 282 | 160.9 | 91.1-266.1 | 55.59 | 34.7 | 37392 | 31419 |

^aBottom Gill Net: NMPE-15'

^bBottom Gill Net: NMPP-15', FITZ-15'

- = Not applicable

APPENDIX VIIG-1

GUT CONTENTS OF WHITE PERCH

EXPERIMENTAL AND CONTROL SITES, NINE MILE POINT VICINITY - AUGUST 1976

| TAXON | EXPERIMENTAL ^a n = 9 (3) | | | | | CONTROL ^b n = 11 (0) | | | | |
|---------------------------------|-------------------------------------|------------|------|------------|-------|---------------------------------|------------|------|------------|-------|
| | NUMBER PRESENT | DRY WEIGHT | | OCCURRENCE | | NUMBER PRESENT | DRY WEIGHT | | OCCURRENCE | |
| | | MG | % | NO. GUTS | % | | MG | % | NO. GUTS | % |
| PISCES | | | | | | | | | | |
| <u>Etheostoma nigrum</u> | 1 | 16.6 | 1.1 | 1 | 16.7 | 6 | 1214.0 | 25.6 | 1 | 9.1 |
| UID (vertebral column) | 23 | 146.2 | 9.8 | 3 | 50.0 | 1 | 0.4 | <0.1 | 1 | 9.1 |
| TOTAL (Pisces) | 24 | 162.8 | 10.9 | 3 | 50.0 | 7 | 1214.4 | 25.6 | 2 | 18.2 |
| MOLLUSCA | | | | | | | | | | |
| Gastropoda | 7 | 9.4 | 0.6 | 1 | 16.7 | 117 | 131.9 | 2.8 | 6 | 54.5 |
| Pulmonata | 3 | | | 1 | 16.7 | 37 | | | 4 | 36.4 |
| <u>Physa</u> sp. | (3) | | | 1 | 16.7 | (1) | | | 1 | 9.1 |
| <u>Lymnaea</u> sp. | | | | | | (36) | | | 3 | 27.3 |
| Prosobranchia | 4 | | | 1 | 16.7 | 80 | | | 6 | 54.5 |
| <u>Amnicola</u> sp. | | | | | | (19) | | | 4 | 36.4 |
| <u>Bithynia tentaculata</u> | (1) | | | 1 | 16.7 | (1) | | | 1 | 9.1 |
| <u>Valvata</u> sp. | (1) | | | 1 | 16.7 | (60) | | | 4 | 36.4 |
| <u>Goniobasis</u> sp. | (2) | | | 1 | 16.7 | | | | | |
| Pelecypoda | | | | | | | | | | |
| Sphaeriidae | 1 | 1.8 | 0.1 | 1 | 16.7 | 261 | 208.8 | 4.4 | 4 | 36.4 |
| ARTHROPODA | | | | | | | | | | |
| Crustacea | | | | | | | | | | |
| Copepoda | | | | | | 4 | 0.3 | <0.1 | 2 | 18.2 |
| Cladocera | 1 | 0.2 | <0.1 | 1 | 16.7 | 2 | 0.2 | <0.1 | 1 | 9.1 |
| Ostracoda | 1 | 0.1 | <0.1 | 1 | 16.7 | 6 | 0.6 | <0.1 | 2 | 18.2 |
| Isopoda | | | | | | | | | | |
| <u>Asellus</u> sp. | | | | | | 2 | 1.0 | <0.1 | 2 | 18.2 |
| Amphipoda | | | | | | | | | | |
| <u>Gammarus fasciatus</u> | 3142 | 1252.2 | 84.1 | 6 | 100.0 | 1835 | 1322.7 | 27.9 | 11 | 100.0 |
| <u>Pontoporeia affinis</u> | | | | | | 7020 | 1756.8 | 37.1 | 5 | 45.5 |
| Arachnida | | | | | | | | | | |
| Hydracarina | | | | | | 3 | 0.4 | <0.1 | 2 | 18.2 |
| Insecta | | | | | | | | | | |
| Diptera | | | | | | | | | | |
| UID pupae | 111 | 8.5 | 0.6 | 4 | 66.7 | 6 | 1.8 | <0.1 | 3 | 27.3 |
| Chironomidae | 102 | 51.0 | 3.4 | 4 | 66.7 | 166 | 83.0 | 1.8 | 8 | 72.7 |
| Tanytarsini | | | | | | | | | | |
| <u>Rheotanytarsus</u> sp. | (3) | | | 2 | 33.3 | (3) | | | 2 | 18.2 |
| <u>Micropsectra</u> | | | | | | | | | | |
| (<u>Tanytarsus</u>) sp. | | | | | | (33) | | | 3 | 27.3 |
| Chironomini | | | | | | | | | | |
| <u>Chironomus</u> sp. | | | | | | (46) | | | 3 | 27.3 |
| <u>Cryptochironomus</u> sp. | | | | | | (10) | | | 4 | 36.4 |
| <u>Dicrotendipes</u> sp. | (2) | | | 2 | 33.3 | | | | | |
| <u>Demicryptochironomus</u> sp. | | | | | | (1) | | | 1 | 9.1 |
| <u>Microtendipes</u> sp. | | | | | | (3) | | | 3 | 27.3 |
| <u>Parachironomus</u> sp. | (3) | | | 2 | 33.3 | (2) | | | 2 | 18.2 |
| <u>Paracladopelma</u> sp. | | | | | | (40) | | | 3 | 27.3 |
| <u>Phaenopsectra</u> sp. | | | | | | (1) | | | 1 | 9.1 |
| <u>Polypedilum</u> sp. | | | | | | (2) | | | 1 | 9.1 |
| Orthocladinae | | | | | | | | | | |
| <u>Heterotrissocladius</u> sp. | | | | | | (9) | | | 2 | 18.2 |
| <u>Psectrocladius</u> sp. | (93) | | | 3 | 50.0 | | | | | |
| Tanypodinae | | | | | | | | | | |
| <u>Procladius</u> sp. | | | | | | (14) | | | 3 | 27.3 |
| Diamesinae | | | | | | | | | | |
| <u>Potthastia</u> sp. | | | | | | (1) | | | 1 | 9.1 |

APPENDIX VIIG-1 (Continued)

GUT CONTENTS OF WHITE PERCH (Continued)

EXPERIMENTAL AND CONTROL SITES, NINE MILE POINT VICINITY - AUGUST 1976

| TAXON | EXPERIMENTAL ^a n _d = 9 (3) | | | | | CONTROL ^b n = 11 (0) | | | | |
|-------------------------------|--|-------------------------|------|-------------------------|------|---------------------------------|-------------------------|------|-------------------------|------|
| | NUMBER PRESENT ^c | DRY WEIGHT ^d | | OCCURRENCE ^e | | NUMBER PRESENT ^c | DRY WEIGHT ^d | | OCCURRENCE ^e | |
| | | mg | % | NO. GUTS ^e | % | | mg | % | NO. GUTS ^e | % |
| ARTHROPODA (Continued) | | | | | | | | | | |
| Insecta (Continued) | | | | | | | | | | |
| UID Chironomidae | (1) | | | 1 | 16.7 | (1) | | | 1 | 9.1 |
| Trichoptera | | | | | | | | | | |
| <u>Athripsodes</u> sp. | 1 | 0.2 | <0.1 | 1 | 16.7 | 6 | 8.6 | 0.2 | 3 | 27.2 |
| <u>Oecetis</u> sp. | | | | | | 1 | 4.1 | 0.1 | 1 | 9.1 |
| Hydropsychidae | | | | | | 1 | 0.1 | <0.1 | 1 | 9.1 |
| NEMATODA | | | | | | | | | | |
| ANNELEIDA | | | | | | | | | | |
| Oligochaeta | 1 | 0.4 | <0.1 | 1 | 16.7 | 5 | 1.8 | <0.1 | 3 | 27.2 |
| Hirudinea | | | | | | | | | | |
| Glossiphoniidae | | | | | | 2 | 1.6 | <0.1 | 1 | 9.1 |
| BRYOZOA (statoblasts) | 8 | 1.4 | 0.1 | 2 | 33.3 | | | | | |
| COELENTERATA | | | | | | | | | | |
| <u>Cordylophora lacustris</u> | ~2 | 1.4 | 0.1 | 2 | 33.3 | | | | | |
| TOTAL (All Prey) | 3400 | 1489.0 | 99.9 | - | - | 9444 | 4738.2 | 99.9 | - | - |
| Miscellaneous | | | | | | | | | | |
| Oligochaeta (setae) | - | - | - | 3 | 50.0 | - | - | - | 3 | 27.3 |

^aEXPERIMENTAL SITE

NMPP-15 ft Bottom Gill Net: 2 fish

FITZ-15 ft Bottom Gill Net: 7 fish

^bCONTROL SITE

NMPE-15 ft Bottom Gill Net: 11 fish

^cNumber present = number of prey species
recorded in all stomachs analyzed^dDry weight = dry weight of that prey species
in all stomachs analyzed^eOccurrence = number of guts in which a
particular prey species occursn = Total number of fish analyzed (number of
empty stomachs)

- = Not applicable

APPENDIX VIII-1

LENGTH FREQUENCY FOR YELLOW PERCH^a

NINE MILE POINT VICINITY, - APRIL - JUNE, 1976

| LENGTH INTERVAL (CM) | JAN ^b | | FEB ^b | | NUMBER OF FISH | | | | MAY | | JUN | |
|----------------------------|------------------|------|------------------|------|------------------|-----|-------|------|-------|------|-------|------|
| | NO. | PCNT | NO. | PCNT | MAR ^b | APR | NO. | PCNT | NO. | PCNT | NO. | PCNT |
| 1.1- 1.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 1.1- 2.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 2.1- 3.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 3.1- 4.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 4.1- 5.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 5.1- 6.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 6.1- 7.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 7.1- 8.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 8.1- 9.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 9.1- 10.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | .8 | 4 | 2.1 |
| 10.1- 11.0 | 0 | .0 | 0 | .0 | 0 | .0 | 2 | 4.8 | 11 | 8.4 | 25 | 13.0 |
| 11.1- 12.0 | 0 | .0 | 0 | .0 | 0 | .0 | 5 | 11.9 | 18 | 13.7 | 30 | 15.6 |
| 12.1- 13.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 5 | 2.6 |
| 13.1- 14.0 | 0 | .0 | 0 | .0 | 0 | .0 | 2 | 4.8 | 3 | 2.3 | 8 | 4.2 |
| 14.1- 15.0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 2.4 | 17 | 13.0 | 12 | 6.3 |
| 15.1- 16.0 | 0 | .0 | 0 | .0 | 0 | .0 | 2 | 4.8 | 8 | 6.1 | 10 | 5.2 |
| 16.1- 17.0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 2.4 | 8 | 6.1 | 8 | 4.2 |
| 17.1- 18.0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 2.4 | 8 | 6.1 | 7 | 3.6 |
| 18.1- 19.0 | 0 | .0 | 0 | .0 | 0 | .0 | 5 | 11.9 | 10 | 7.6 | 9 | 4.7 |
| 19.1- 20.0 | 0 | .0 | 0 | .0 | 0 | .0 | 7 | 16.7 | 8 | 6.1 | 15 | 7.8 |
| 20.1- 21.0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 2.4 | 5 | 3.8 | 9 | 4.7 |
| 21.1- 22.0 | 0 | .0 | 0 | .0 | 0 | .0 | 2 | 4.8 | 7 | 5.3 | 2 | 1.0 |
| 22.1- 23.0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 2.4 | 2 | 1.5 | 8 | 4.2 |
| 23.1- 24.0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 2.4 | 3 | 2.3 | 3 | 1.6 |
| 24.1- 25.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 5 | 3.8 | 4 | 2.1 |
| 25.1- 26.0 | 0 | .0 | 0 | .0 | 0 | .0 | 3 | 7.1 | 4 | 3.1 | 10 | 5.2 |
| 26.1- 27.0 | 0 | .0 | 0 | .0 | 0 | .0 | 5 | 11.9 | 3 | 2.3 | 14 | 7.3 |
| 27.1- 28.0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 2.4 | 5 | 3.8 | 3 | 1.6 |
| 28.1- 29.0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 2.4 | 2 | 1.5 | 4 | 2.1 |
| 29.1- 30.0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 2.4 | 2 | 1.5 | 0 | .0 |
| 30.1- 31.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | .5 |
| 31.1- 32.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | .8 | 0 | .0 |
| 32.1- 33.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | .5 |
| TOTAL COLLECTED | 0 | | 0 | | 0 | | 42 | | 132 | | 205 | |
| TOTAL ANALYZED | 0 | | 0 | | 0 | | 42 | | 131 | | 192 | |
| MEAN LENGTH | | | | | | | 19.5 | | 17.7 | | 17.4 | |
| VARIANCE | | | | | | | 30.93 | | 29.62 | | 34.66 | |

^aAll gill net collections^bNo collections scheduled

APPENDIX VIII-1 (Continued)

LENGTH FREQUENCY FOR YELLOW PERCH^a

NINE MILE POINT VICINITY - JULY - DECEMBER, 1976

| LENGTH INTERVAL (CM) | JUL | | AUG | | SEP | | OCT | | NOV | | DEC | |
|----------------------------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
| | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT |
| .1- 1.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 1.1- 2.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 2.1- 3.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 3.1- 4.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 4.1- 5.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 5.1- 6.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 6.1- 7.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 7.1- 8.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 8.1- 9.0 | 8 | 2.2 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 9.1- 10.0 | 67 | 18.3 | 20 | 7.1 | 2 | .6 | 0 | .0 | 0 | .0 | 0 | .0 |
| 10.1- 11.0 | 49 | 13.4 | 78 | 27.6 | 13 | 4.1 | 0 | .0 | 0 | .0 | 0 | .0 |
| 11.1- 12.0 | 28 | 7.6 | 54 | 19.1 | 25 | 8.0 | 4 | 1.3 | 0 | .0 | 0 | .0 |
| 12.1- 13.0 | 26 | 7.1 | 20 | 7.1 | 31 | 9.9 | 11 | 3.7 | 0 | .0 | 0 | .0 |
| 13.1- 14.0 | 47 | 12.8 | 21 | 7.4 | 44 | 14.0 | 13 | 4.3 | 3 | 11.1 | 1 | 7.7 |
| 14.1- 15.0 | 27 | 7.4 | 22 | 7.8 | 38 | 12.1 | 62 | 20.7 | 7 | 25.9 | 1 | 7.7 |
| 15.1- 16.0 | 20 | 5.4 | 14 | 4.9 | 36 | 11.5 | 60 | 20.0 | 3 | 11.1 | 2 | 15.4 |
| 16.1- 17.0 | 18 | 4.9 | 8 | 2.8 | 20 | 6.4 | 25 | 8.3 | 5 | 18.5 | 1 | 7.7 |
| 17.1- 18.0 | 17 | 4.6 | 9 | 3.2 | 29 | 9.2 | 27 | 9.0 | 2 | 7.4 | 2 | 15.4 |
| 18.1- 19.0 | 13 | 3.5 | 6 | 2.1 | 24 | 7.6 | 22 | 7.3 | 0 | .0 | 1 | 7.7 |
| 19.1- 20.0 | 6 | 1.6 | 6 | 2.1 | 13 | 4.1 | 25 | 8.3 | 1 | 3.7 | 0 | .0 |
| 20.1- 21.0 | 2 | .5 | 2 | .7 | 10 | 3.2 | 16 | 5.3 | 1 | 3.7 | 1 | 7.7 |
| 21.1- 22.0 | 2 | .5 | 4 | 1.4 | 7 | 2.2 | 6 | 2.0 | 2 | 7.4 | 1 | 7.7 |
| 22.1- 23.0 | 5 | 1.4 | 4 | 1.4 | 5 | 1.6 | 2 | .7 | 0 | .0 | 0 | .0 |
| 23.1- 24.0 | 1 | .3 | 1 | .4 | 2 | .6 | 3 | 1.0 | 1 | 3.7 | 0 | .0 |
| 24.1- 25.0 | 3 | .8 | 2 | .7 | 3 | 1.0 | 4 | 1.3 | 0 | .0 | 0 | .0 |
| 25.1- 26.0 | 9 | 2.5 | 2 | .7 | 5 | 1.6 | 5 | 1.7 | 0 | .0 | 1 | 7.7 |
| 26.1- 27.0 | 9 | 2.5 | 5 | 1.8 | 1 | .3 | 4 | 1.3 | 0 | .0 | 0 | .0 |
| 27.1- 28.0 | 3 | .8 | 4 | 1.4 | 3 | 1.0 | 4 | 1.3 | 1 | 3.7 | 1 | 7.7 |
| 28.1- 29.0 | 3 | .8 | 0 | .0 | 2 | .6 | 3 | 1.0 | 0 | .0 | 0 | .0 |
| 29.1- 30.0 | 2 | .5 | 1 | .4 | 0 | .0 | 3 | 1.0 | 1 | 3.7 | 1 | 7.7 |
| 30.1- 31.0 | 1 | .3 | 0 | .0 | 0 | .0 | 1 | .3 | 0 | .0 | 0 | .0 |
| 31.1- 32.0 | 1 | .3 | 0 | .0 | 1 | .3 | 0 | .0 | 0 | .0 | 0 | .0 |
| 32.1- 33.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| TOTAL COLLECTED | 397 | | 301 | | 352 | | 317 | | 27 | | 14 | |
| TOTAL ANALYZED | 367 | | 283 | | 314 | | 309 | | 27 | | 13 | |
| MEAN LENGTH | 14.2 | | 13.6 | | 15.9 | | 17.3 | | 17.5 | | 19.4 | |
| VARIANCE | 24.75 | | 18.12 | | 14.69 | | 13.97 | | 17.28 | | 26.53 | |

^aAll gill net collections

LENGTH-FREQUENCY GULLMOUTH BASS^a

NINE MILE POINT VICINITY - APRIL - JUNE, 1976

| LENGTH INTERVAL (CM) | JAN ^b | | FEB ^b | | MAR ^b | | APR | | MAY | | JUN | |
|----------------------------|------------------|------|------------------|------|------------------|------|------|------|------|------|-------|------|
| | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT |
| 1.1- 1.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 1.1- 2.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 2.1- 3.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 3.1- 4.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 4.1- 5.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 5.1- 6.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 6.1- 7.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 7.1- 8.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 8.1- 9.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 9.1- 10.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 10.1- 11.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 11.1- 12.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 12.1- 13.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 13.1- 14.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 14.1- 15.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 15.1- 16.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 16.1- 17.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 17.1- 18.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 18.1- 19.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 19.1- 20.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 20.1- 21.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 21.1- 22.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 22.1- 23.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 23.1- 24.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 24.1- 25.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 25.1- 26.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 26.1- 27.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 27.1- 28.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 28.1- 29.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 29.1- 30.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 30.1- 31.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 31.1- 32.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 16.7 |
| 32.1- 33.0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 3.1 | 1 | 6.7 | 0 | .0 |
| 33.1- 34.0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 3.1 | 0 | .0 | 0 | .0 |
| 34.1- 35.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 2 | 13.3 | 0 | .0 |
| 35.1- 36.0 | 0 | .0 | 0 | .0 | 0 | .0 | 3 | 9.4 | 1 | 6.7 | 0 | .0 |
| 36.1- 37.0 | 0 | .0 | 0 | .0 | 0 | .0 | 2 | 6.3 | 1 | 6.7 | 2 | 33.3 |
| 37.1- 38.0 | 0 | .0 | 0 | .0 | 0 | .0 | 4 | 12.5 | 3 | 20.0 | 1 | 16.7 |
| 38.1- 39.0 | 0 | .0 | 0 | .0 | 0 | .0 | 12 | 31.3 | 3 | 20.0 | 0 | .0 |
| 39.1- 40.0 | 0 | .0 | 0 | .0 | 0 | .0 | 7 | 21.9 | 2 | 13.3 | 1 | 16.7 |
| 40.1- 41.0 | 0 | .0 | 0 | .0 | 0 | .0 | 4 | 12.5 | 2 | 13.3 | 0 | .0 |
| 41.1- 42.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 16.7 |
| 42.1- 43.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 43.1- 44.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 44.1- 45.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| TOTAL COLLECTED | 0 | | 0 | | 0 | | 32 | | 15 | | 6 | |
| TOTAL ANALYZED | 0 | | 0 | | 0 | | 32 | | 15 | | 6 | |
| MEAN LENGTH | | | | | | | 38.2 | | 37.4 | | 37.1 | |
| VARIANCE | | | | | | | 3.32 | | 5.57 | | 12.59 | |

^aAll gill net collections^bNo collections scheduled

APPENDIX VIII-2 (Continued)

LENGTH-FREQUENCY OF SMALLMOUTH BASS^a

NINE MILE POINT VICINITY - JULY - DECEMBER, 1976

| LENGTH INTERVAL (CM) | NUMBER OF FISH | | | | | | | | | | | |
|----------------------------|----------------|------|-----|------|-----|------|-----|------|-----|------|-----|-------|
| | JUL | | AUG | | SEP | | OCT | | NOV | | DEC | |
| | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT |
| .1- 1.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 1.1- 2.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 2.1- 3.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 3.1- 4.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 4.1- 5.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 5.1- 6.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 6.1- 7.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 7.1- 8.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 8.1- 9.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 9.1- 10.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 10.1- 11.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 11.1- 12.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 12.1- 13.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 13.1- 14.0 | 2 | 11.1 | 1 | 4.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 14.1- 15.0 | 0 | .0 | 0 | .0 | 1 | 2.0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 15.1- 16.0 | 0 | .0 | 0 | .0 | 1 | 2.0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 16.1- 17.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 17.1- 18.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 18.1- 19.0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 5.9 | 0 | .0 | 0 | .0 |
| 19.1- 20.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 20.1- 21.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 21.1- 22.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 22.1- 23.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 23.1- 24.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 24.1- 25.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 25.1- 26.0 | 3 | 16.7 | 2 | 8.0 | 4 | 8.2 | 2 | 11.8 | 0 | .0 | 0 | .0 |
| 26.1- 27.0 | 1 | 5.6 | 0 | .0 | 1 | 2.0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 27.1- 28.0 | 0 | .0 | 0 | .0 | 3 | 6.1 | 1 | 5.9 | 0 | .0 | 0 | .0 |
| 28.1- 29.0 | 0 | .0 | 0 | .0 | 1 | 2.0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 29.1- 30.0 | 0 | .0 | 1 | 4.0 | 0 | .0 | 1 | 5.9 | 1 | 20.0 | 0 | .0 |
| 30.1- 31.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 20.0 | 0 | .0 |
| 31.1- 32.0 | 0 | .0 | 0 | .0 | 3 | 6.1 | 1 | 5.9 | 0 | .0 | 0 | .0 |
| 32.1- 33.0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 5.9 | 0 | .0 | 0 | .0 |
| 33.1- 34.0 | 2 | 11.1 | 1 | 4.0 | 2 | 4.1 | 0 | .0 | 0 | .0 | 0 | .0 |
| 34.1- 35.0 | 0 | .0 | 1 | 4.0 | 2 | 4.1 | 1 | 5.9 | 0 | .0 | 1 | 100.0 |
| 35.1- 36.0 | 2 | 11.1 | 1 | 4.0 | 6 | 12.2 | 0 | .0 | 0 | .0 | 0 | .0 |
| 36.1- 37.0 | 0 | .0 | 1 | 4.0 | 3 | 6.1 | 2 | 11.8 | 0 | .0 | 0 | .0 |
| 37.1- 38.0 | 0 | .0 | 7 | 28.0 | 3 | 6.1 | 0 | .0 | 0 | .0 | 0 | .0 |
| 38.1- 39.0 | 4 | 22.2 | 4 | 16.0 | 7 | 14.3 | 1 | 5.9 | 0 | .0 | 0 | .0 |
| 39.1- 40.0 | 2 | 11.1 | 4 | 16.0 | 3 | 6.1 | 4 | 23.5 | 2 | 40.0 | 0 | .0 |
| 40.1- 41.0 | 0 | .0 | 0 | .0 | 5 | 10.2 | 2 | 11.8 | 1 | 20.0 | 0 | .0 |
| 41.1- 42.0 | 0 | .0 | 0 | .0 | 2 | 4.1 | 0 | .0 | 0 | .0 | 0 | .0 |
| 42.1- 43.0 | 2 | 11.1 | 0 | .0 | 1 | 2.0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 43.1- 44.0 | 0 | .0 | 1 | 4.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 44.1- 45.0 | 0 | .0 | 1 | 4.0 | 1 | 2.0 | 0 | .0 | 0 | .0 | 0 | .0 |

TOTAL COLLECTED

19

25

49

17

5

1

TOTAL ANALYZED

18

25

49

17

5

1

MEAN LENGTH

32.6

35.9

33.8

35.9

34.9

VARIANCE

80.41

40.58

43.40

31.60

^aAll gill net collections

CHAPTER VIII

APPENDIX VIIIA-1a

ABUNDANCE AND BIOVOLUME OF MAJOR TAXA
OF PHYTOPLANKTON

ABUNDANCE AND BIOVOLUME OF MAJOR TAXA OF PHYTOPLANKTON IN SURFACE WHOLE WATER COLLECTIONS*
AT THE DISCHARGE OF THE FITZPATRICK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| TAXON | 28 APR | 26 MAY | 23 JUN | 29 JUL | 25 AUG | 22 SEP | 20 OCT | 17 NOV |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| MYXOPHYCEAE | | | | | | | | |
| ABUNDANCE (CELLS/ML) | 728 | 989 | 4299 | 1317 | 4450 | 7556 | 3500 | 806 |
| PERC'T | 15.70 | 25.18 | 38.36 | 44.40 | 59.81 | 56.66 | 52.18 | 41.61 |
| BIOVOLUME (MG/CU.M) | 9 | 11 | 6 | 4 | 205 | 220 | 50 | 11 |
| PERC'T | 0.32 | 0.83 | 0.47 | 0.72 | 10.07 | 10.25 | 3.85 | 1.27 |
| CHLOROPHYCEAE | | | | | | | | |
| ABUNDANCE (CELLS/ML) | 967 | 1196 | 3021 | 738 | 2428 | 4531 | 1320 | 321 |
| PERC'T | 20.85 | 30.45 | 26.95 | 24.88 | 32.63 | 33.98 | 19.68 | 16.57 |
| BIOVOLUME (MG/CU.M) | 103 | 85 | 242 | 61 | 501 | 922 | 372 | 179 |
| PERC'T | 3.56 | 6.33 | 19.52 | 12.21 | 24.58 | 42.91 | 28.41 | 20.09 |
| EUGLENOPHYCEAE | | | | | | | | |
| ABUNDANCE (CELLS/ML) | 312 | 13 | 0 | 0 | 0 | 0 | 0 | 0 |
| PERC'T | 6.73 | 0.33 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| BIOVOLUME (MG/CU.M) | 1105 | 45 | 0 | 0 | 0 | 0 | 0 | 0 |
| PERC'T | 38.25 | 3.33 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| CHRYSOPHYCEAE | | | | | | | | |
| ABUNDANCE (CELLS/ML) | 354 | 65 | 1103 | 119 | 136 | 167 | 369 | 114 |
| PERC'T | 7.63 | 1.65 | 9.84 | 4.01 | 1.83 | 1.25 | 5.50 | 5.89 |
| BIOVOLUME (MG/CU.M) | 52 | 10 | 123 | 8 | 8 | 13 | 32 | 23 |
| PERC'T | 1.81 | 0.76 | 9.95 | 1.68 | 0.38 | 0.60 | 2.46 | 2.61 |
| BACILLARIOPHYCEAE | | | | | | | | |
| ABUNDANCE (CELLS/ML) | 2039 | 1132 | 2139 | 356 | 374 | 644 | 203 | 304 |
| PERC'T | 43.96 | 28.82 | 19.08 | 12.00 | 5.03 | 4.83 | 3.03 | 15.69 |
| BIOVOLUME (MG/CU.M) | 1444 | 717 | 823 | 83 | 158 | 681 | 373 | 394 |
| PERC'T | 50.01 | 53.65 | 66.47 | 16.67 | 7.73 | 31.67 | 28.49 | 44.36 |

* ORIGINAL SAMPLE

ABUNDANCE AND BIOVOLUME OF MAJOR TAXA OF PHYTOPLANKTON IN SURFACE WHOLE WATER COLLECTIONS AT THE DISCHARGE AFTBAY (continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| TAXON (CONTINUED) | 28 APR | 26 MAY | 23 JUN | DATE 29 JUL | 25 AUG | 22 SEP | 20 OCT | 17 NOV |
|----------------------------|---------|---------|---------|----------------|---------|---------|---------|--------|
| <i>CRYPTOPHYCEAE</i> | | | | | | | | |
| ABUNDANCE (CELLS/ML) | 228 | 507 | 646 | 429 | 0 | 416 | 1291 | 384 |
| PERC'T | 4.92 | 12.91 | 5.76 | 14.46 | 0.00 | 3.12 | 19.25 | 19.82 |
| BIOVOLUME (MG/CU.M) | 105 | 111 | 45 | 319 | 0 | 223 | 419 | 247 |
| PERC'T | 3.64 | 8.32 | 3.60 | 63.87 | 0.00 | 10.38 | 32.05 | 27.82 |
| <i>DINOPHYCEAE</i> | | | | | | | | |
| ABUNDANCE (CELLS/ML) | 10 | 26 | 0 | 7 | 52 | 21 | 24 | 8 |
| PERC'T | 0.22 | 0.66 | 0.00 | 0.24 | 0.70 | 0.16 | 0.36 | 0.41 |
| BIOVOLUME (MG/CU.M) | 70 | 358 | 0 | 24 | 1166 | 90 | 62 | 34 |
| PERC'T | 2.41 | 26.77 | 0.00 | 4.85 | 57.23 | 4.18 | 4.75 | 3.85 |
| <i>TOTAL PHYTOPLANKTON</i> | | | | | | | | |
| ABUNDANCE (CELLS/ML) | 4638 | 3928 | 11208 | 2966 | 7440 | 13335 | 6707 | 1937 |
| BIOVOLUME (MG/CU.M) | 2887.81 | 1336.93 | 1238.58 | 498.71 | 2037.53 | 2149.44 | 1309.01 | 888.42 |

* ORIGINAL SAMPLE

ABUNDANCE AND BIOVOLUME OF MAJOR TAXA OF PHYTOPLANKTON IN SURFACE WHOLE WATER COLLECTIONS*
AT THE CHARGE AFTBAY (CONTINUED)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| TAXON | DATE 20 DEC | ANNUAL MEAN |
|--------------------------|----------------|----------------|
| MYXOPHYCEAE | | |
| ABUNDANCE (CELLS/ML) | 1378 | 2780 |
| PERC'T | 54.29 | 45.75 |
| BIOVOLUME (MG/CU.M) | 52 | 63 |
| PERC'T | 4.95 | 4.25 |
| CHLOROPHYCEAE | | |
| ABUNDANCE (CELLS/ML) | 177 | 1633 |
| PERC'T | 6.97 | 26.87 |
| BIOVOLUME (MG/CU.M) | 10 | 275 |
| PERC'T | 0.97 | 18.47 |
| EUGLENOPHYCEAE | | |
| ABUNDANCE (CELLS/ML) | 0 | 36 |
| PERC'T | 0.00 | 0.59 |
| BIOVOLUME (MG/CU.M) | 0 | 128 |
| PERC'T | 0.00 | 8.58 |
| CHRYSPHYCEAE | | |
| ABUNDANCE (CELLS/ML) | 303 | 303 |
| PERC'T | 11.94 | 4.99 |
| BIOVOLUME (MG/CU.M) | 33 | 34 |
| PERC'T | 3.18 | 2.26 |
| BACILLARIOPHYCEAE | | |
| ABUNDANCE (CELLS/ML) | 539 | 859 |
| PERC'T | 21.24 | 14.13 |
| BIOVOLUME (MG/CU.M) | 883 | 617 |
| PERC'T | 84.35 | 41.48 |

| TAXON (CONTINUED) | DATE 20 DEC | ANNUAL MEAN |
|----------------------------|----------------|----------------|
| CRYPTOPHYCEAE | | |
| ABUNDANCE (CELLS/ML) | 141 | 449 |
| PERC'T | 5.56 | 7.39 |
| BIOVOLUME (MG/CU.M) | 69 | 171 |
| PERC'T | 6.55 | 11.48 |
| DINOPHYCEAE | | |
| ABUNDANCE (CELLS/ML) | 0 | 16 |
| PERC'T | 0.00 | 0.27 |
| BIOVOLUME (MG/CU.M) | 0 | 200 |
| PERC'T | 0.00 | 13.47 |
| TOTAL PHYTOPLANKTON | | |
| ABUNDANCE (CELLS/ML) | 2538 | 6077 |
| BIOVOLUME (MG/CU.M) | 1046.74 | 1488.13 |

* ORIGINAL SAMPLE

APPENDIX, VIIIA-1b

ABUNDANCE AND BIOVOLUME OF SELECTED
SPECIES OF PHYTOPLANKTON

ABUNDANCE* AND BIOVOLUME** OF SELECTED SPECIES OF PHYTOPLANKTON IN SURFACE WHOLE WATER COLLECTIONS
AT DISCHARGE AFTBAY.

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - APRIL - JULY 1976

| SPECIES | 28 APR | | 26 MAY | | 23 JUN | | 29 JUL | |
|----------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | ABUNDANCE | BIOVOLUME | ABUNDANCE | BIOVOLUME | ABUNDANCE | BIOVOLUME | ABUNDANCE | BIOVOLUME |
| ANACYSTIS AERUGINOSA | | | | | | | | |
| NO. A | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| PERC'T | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| CHROOCOCCUS DISPERSUS VAR. MINOR | | | | | | | | |
| NO. A | 83 | 0.02 | 208 | 0.15 | 3997 | 2.09 | 1180 | 0.62 |
| PERC'T | 1.79 | 0.00 | 5.30 | 0.01 | 35.66 | 0.17 | 39.78 | 0.12 |
| COELOSPHAERIUM KUETZINGIANUM | | | | | | | | |
| NO. A | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| PERC'T | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| COELOSPHAERIUM KUETZINGIANUM | | | | | | | | |
| NO. A | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| PERC'T | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| OSCILLATORIA LIMNETICA | | | | | | | | |
| NO. A | 645 | 9.23 | 573 | 7.37 | 302 | 3.70 | 124 | 2.08 |
| PERC'T | 13.91 | 0.32 | 14.59 | 0.55 | 2.69 | 0.30 | 4.18 | 0.42 |
| EUDORINA ELEGANS | | | | | | | | |
| NO. B | 187 | 50.23 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| PERC'T | 4.03 | 1.74 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ANKISTRODESMUS FALCATUS | | | | | | | | |
| NO. A | 42 | 0.51 | 338 | 4.38 | 604 | 3.16 | 26 | 0.16 |
| PERC'T | 0.91 | 0.02 | 8.60 | 0.33 | 5.39 | 0.25 | 0.88 | 0.03 |
| COELASTRUM MICROPORUM | | | | | | | | |
| NO. A | 0 | 0.00 | 0 | 0.00 | 42 | 1.73 | 0 | 0.00 |
| PERC'T | 0.00 | 0.00 | 0.00 | 0.00 | 0.37 | 0.14 | 0.00 | 0.00 |
| EUGLENA GASTEROSTEUS | | | | | | | | |
| NO. B | 281 | 1016.33 | 13 | 44.56 | 0 | 0.00 | 0 | 0.00 |
| PERC'T | 6.06 | 35.19 | 0.33 | 3.33 | 0.00 | 0.00 | 0.00 | 0.00 |

| SPECIES (CONTINUED) | 28 APR | | 26 MAY | | 23 JUN | | 29 JUL | |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | ABUNDANCE | BIOVOLUME | ABUNDANCE | BIOVOLUME | ABUNDANCE | BIOVOLUME | ABUNDANCE | BIOVOLUME |
| <i>CYCLOTELLA ATONUS</i> | | | | | | | | |
| NO. A | 31 | 2.68 | 208 | 15.92 | 625 | 42.92 | 304 | 26.44 |
| PERC'T | 0.67 | 0.09 | 5.30 | 1.19 | 5.58 | 3.47 | 10.25 | 5.30 |
| <i>MELOSIRA BINDERANA</i> | | | | | | | | |
| NO. B | 791 | 814.55 | 221 | 252.51 | 0 | 0.00 | 0 | 0.00 |
| PERC'T | 17.05 | 28.21 | 5.63 | 18.89 | 0.00 | 0.00 | 0.00 | 0.00 |
| <i>STEPHANODISCUS HANTZSCHII</i> | | | | | | | | |
| NO. B | 489 | 277.44 | 26 | 16.68 | 458 | 451.25 | 0 | 0.00 |
| PERC'T | 10.54 | 9.61 | 0.66 | 1.25 | 4.09 | 36.43 | 0.00 | 0.00 |
| <i>STEPHANODISCUS NIAGARAE</i> | | | | | | | | |
| NO. B | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| PERC'T | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| <i>STEPHANODISCUS ASTREA</i> VAR. <i>MINUTULA</i> | | | | | | | | |
| NO. B | 31 | 28.74 | 0 | 0.00 | 21 | 60.78 | 9 | 24.36 |
| PERC'T | 0.67 | 1.00 | 0.00 | 0.00 | 0.19 | 4.91 | 0.30 | 4.89 |
| <i>ASTERIONELLA FORMOSA</i> | | | | | | | | |
| NO. B | 167 | 76.71 | 234 | 144.10 | 0 | 0.00 | 0 | 0.00 |
| PERC'T | 3.60 | 2.66 | 5.96 | 10.78 | 0.00 | 0.00 | 0.00 | 0.00 |
| <i>TABELLARIA FENESTRATA</i> | | | | | | | | |
| NO. B | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| PERC'T | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| <i>CRYPTOMONAS EROSA</i> | | | | | | | | |
| NO. B | 52 | 84.24 | 13 | 35.49 | 0 | 0.00 | 35 | 60.65 |
| PERC'T | 1.12 | 2.92 | 0.33 | 2.65 | 0.00 | 0.00 | 1.18 | 12.16 |
| <i>KATABLEPHARIS OVALIS</i> | | | | | | | | |
| NO. A | 135 | 10.95 | 247 | 25.80 | 625 | 42.42 | 278 | 22.80 |
| PERC'T | 2.91 | 0.38 | 6.29 | 1.93 | 5.58 | 3.42 | 9.37 | 4.57 |
| <i>RHODOMONAS MINUTA</i> VAR. <i>NANNOPLANKTICA</i> | | | | | | | | |
| NO. A | 31 | 5.90 | 221 | 38.01 | 21 | 2.11 | 0 | 0.00 |
| PERC'T | 0.67 | 0.20 | 5.63 | 2.84 | 0.19 | 0.17 | 0.00 | 0.00 |
| <i>PERIDINIUM CINCTUM</i> | | | | | | | | |
| NO. B | 0 | 0.00 | 13 | 333.85 | 0 | 0.00 | 0 | 0.00 |
| PERC'T | 0.00 | 0.00 | 0.33 | 24.97 | 0.00 | 0.00 | 0.00 | 0.00 |

* NUMBER OF CELLS/ML; ORIGINAL SAMPLE

** MG/CU.M; ORIGINAL SAMPLE

A SPECIES OCCURRING IN TOP 10 OF PHYTOPLANKTON
BY ABUNDANCE OVER THE ENTIRE SAMPLING PERIOD

B SPECIES OCCURRING IN TOP 10 OF PHYTOPLANKTON
BY BIOVOLUME OVER THE ENTIRE SAMPLING PERIOD

C SPECIES OCCURRING IN TOP 10 OF PHYTOPLANKTON
BY ABUNDANCE AND BIOVOLUME OVER THE ENTIRE
SAMPLING PERIOD

AT THE CHARGE APTBAY (CONTINUED)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - AUGUST - NOVEMBER 1976

[illegible]

| SPECIES (CONTINUED) | 25 AUG | | 22 SEP | | 20 OCT | | 17 NOV | |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | ABUNDANCE | BIOVOLUME | ABUNDANCE | BIOVOLUME | ABUNDANCE | BIOVOLUME | ABUNDANCE | BIOVOLUME |
| <i>CYCLOTELLA ATOMUS</i> | | | | | | | | |
| NO. A | 83 | 7.52 | 83 | 6.33 | 94 | 6.23 | 185 | 16.48 |
| PERC'T | 1.12 | 0.37 | 0.62 | 0.29 | 1.40 | 0.48 | 9.55 | 1.86 |
| <i>MELOSIRA BINDERANA</i> | | | | | | | | |
| NO. B | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| PERC'T | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| <i>STEPHANODISCUS RANTZSCHII</i> | | | | | | | | |
| NO. B | 0 | 0.00 | 83 | 49.36 | 31 | 19.65 | 10 | 8.87 |
| PERC'T | 0.00 | 0.00 | 0.62 | 2.30 | 0.46 | 1.50 | 0.52 | 1.00 |
| <i>STEPHANODISCUS NIAGARAE</i> | | | | | | | | |
| NO. B | 0 | 0.00 | 0 | 0.00 | 3 | 155.29 | 0 | 0.00 |
| PERC'T | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 11.86 | 0.00 | 0.00 |
| <i>STEPHANODISCUS ASTREA</i> VAR. <i>MINUTULA</i> | | | | | | | | |
| NO. B | 0 | 0.00 | 21 | 33.00 | 3 | 6.36 | 10 | 29.38 |
| PERC'T | 0.00 | 0.00 | 0.16 | 1.54 | 0.04 | 0.49 | 0.52 | 3.31 |
| <i>ASTERIONELLA FORMOSA</i> | | | | | | | | |
| NO. B | 0 | 0.00 | 0 | 0.00 | 5 | 3.85 | 5 | 3.24 |
| PERC'T | 0.00 | 0.00 | 0.00 | 0.00 | 0.07 | 0.29 | 0.26 | 0.36 |
| <i>TABELLARIA FENNESTRATA</i> | | | | | | | | |
| NO. B | 0 | 0.00 | 0 | 0.00 | 36 | 153.83 | 75 | 310.82 |
| PERC'T | 0.00 | 0.00 | 0.00 | 0.00 | 0.54 | 11.75 | 3.87 | 34.99 |
| <i>CRYPTOMONAS EROSA</i> | | | | | | | | |
| NO. B | 0 | 0.00 | 104 | 175.03 | 42 | 117.70 | 34 | 119.73 |
| PERC'T | 0.00 | 0.00 | 0.78 | 8.14 | 0.63 | 8.99 | 1.76 | 13.48 |
| <i>KATABLEPHARIS OVALIS</i> | | | | | | | | |
| NO. A | 0 | 0.00 | 187 | 13.11 | 104 | 9.82 | 16 | 1.19 |
| PERC'T | 0.00 | 0.00 | 1.40 | 0.61 | 1.55 | 0.75 | 0.83 | 0.13 |
| <i>RHODOMONAS MINUTA</i> VAR. <i>NANNOPLANTICA</i> | | | | | | | | |
| NO. A | 0 | 0.00 | 83 | 10.55 | 916 | 142.19 | 221 | 54.32 |
| PERC'T | 0.00 | 0.00 | 0.62 | 0.49 | 13.66 | 10.86 | 11.41 | 6.11 |
| <i>PERIDINIUM CINCTUM</i> | | | | | | | | |
| NO. B | 42 | 1105.20 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| PERC'T | 0.56 | 54.24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

* NUMBER OF CELLS/ML; ORIGINAL SAMPLE

** MG/CU.M; ORIGINAL SAMPLE

A SPECIES OCCURRING IN TOP 10 OF PHYTOPLANKTON
BY ABUNDANCE OVER THE ENTIRE SAMPLING PERIOD

B SPECIES OCCURRING IN TOP 10 OF PHYTOPLANKTON
BY BIOVOLUME OVER THE ENTIRE SAMPLING PERIOD

C SPECIES OCCURRING IN TOP 10 OF PHYTOPLANKTON
BY ABUNDANCE AND BIOVOLUME OVER THE ENTIRE
SAMPLING PERIOD

ABUNDANCE* AND BIOVOLUME** OF SELECTED SPECIES OF PHYTOPLANKTON IN SURFACE WHOLE WATER COLLECTIONS
AT THE DISCHARGE AREA (CONTINUED)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - DECEMBER 1976

| SPECIES | 20 DEC | |
|----------------------------------|-----------|-----------|
| | ABUNDANCE | BIOVOLUME |
| ANACYSTIS AERUGINOSA | | |
| NO. A | 0 | 0.00 |
| PERC'T | 0.00 | 0.00 |
| CHROOCOCCUS DISPERSUS VAR. MINOR | | |
| NO. A | 200 | 0.43 |
| PERC'T | 7.88 | 0.04 |
| COELOSPHAERIUM KUETZINGIANUM | | |
| NO. A | 0 | 0.00 |
| PERC'T | 0.00 | 0.00 |
| COELOSPHAERIUM KUETZINGIANUM | | |
| NO. A | 0 | 0.00 |
| PERC'T | 0.00 | 0.00 |
| OSCILLATORIA LIMNETICA | | |
| NO. A | 260 | 4.44 |
| PERC'T | 10.24 | 0.42 |
| EUDORINA ELEGANS | | |
| NO. B | 0 | 0.00 |
| PERC'T | 0.00 | 0.00 |
| ANKISTRODESMUS FALCATUS | | |
| NO. A | 54 | 0.85 |
| PERC'T | 2.13 | 0.08 |
| COELASTRUM MICROPORUM | | |
| NO. A | 0 | 0.00 |
| PERC'T | 0.00 | 0.00 |
| EUGLENA GASTEROSTEUS | | |
| NO. B | 0 | 0.00 |
| PERC'T | 0.00 | 0.00 |

| SPECIES (CONTINUED) | 20 DEC | |
|---------------------------------------|-----------|-----------|
| | ABUNDANCE | BIOVOLUME |
| CYCLOTELLA ATOMUS | | |
| NO. A | 208 | 18.57 |
| PERC'T | 8.20 | 1.77 |
| MELOSIRA BINDERANA | | |
| NO. B | 0 | 0.00 |
| PERC'T | 0.00 | 0.00 |
| STEPHANODISCUS HANTZSCHII | | |
| NO. B | 96 | 81.64 |
| PERC'T | 3.78 | 7.80 |
| STEPHANODISCUS NIAGARAE | | |
| NO. B | 6 | 323.06 |
| PERC'T | 0.24 | 30.86 |
| STEPHANODISCUS ASTREA VAR. MINUTULA | | |
| NO. B | 62 | 176.29 |
| PERC'T | 2.44 | 16.84 |
| ASTERIONELLA FORMOSA | | |
| NO. B | 90 | 55.68 |
| PERC'T | 3.55 | 5.32 |
| TABELLARIA FENESTRATA | | |
| NO. B | 19 | 77.17 |
| PERC'T | 0.75 | 7.37 |
| CRYPTOMONAS EROSA | | |
| NO. B | 8 | 29.47 |
| PERC'T | 0.32 | 2.82 |
| KATABLEPHARIS OVALIS | | |
| NO. A | 29 | 2.22 |
| PERC'T | 1.14 | 0.21 |
| RHODOMONAS MINUTA VAR. HANNOPLANCTICA | | |
| NO. A | 46 | 11.25 |
| PERC'T | 1.81 | 1.07 |
| PERIDINIUM CINCTUM | | |
| NO. B | 0 | 0.00 |
| PERC'T | 0.00 | 0.00 |

* NUMBER OF CELLS/ML; ORIGINAL SAMPLE

** MG/CU.M; ORIGINAL SAMPLE

A SPECIES OCCURRING IN TOP 10 OF PHYTOPLANKTON
BY ABUNDANCE OVER THE ENTIRE SAMPLING PERIOD

B SPECIES OCCURRING IN TOP 10 OF PHYTOPLANKTON
BY BIOVOLUME OVER THE ENTIRE SAMPLING PERIOD

C SPECIES OCCURRING IN TOP 10 OF PHYTOPLANKTON
BY ABUNDANCE AND BIOVOLUME OVER THE ENTIRE
SAMPLING PERIOD

CHLOROPHYLL A CONCENTRATION IN WHOLE WATER COLLECTIONS

JAMES A. FITZPATRICK NUCLEAR POWER PLANT AND VICINITY - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) | ΔT^d | INTAKE | | | DISCHARGE | | | 3°SIMULATION | | | 2°SIMULATION | | | 3°LAKE | | | 2°LAKE | | |
|------------|--|----------------------|--------------|--------|------|------|-----------|------|------|--------------|------|------|--------------|------|------|------------------|------------------|------|------------------|------------------|------|
| | | | | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN |
| 14 | ^a 1202 | 5.5 ^f | 13.5 | 19.7 | 19.0 | 19.4 | 19.0 | 16.7 | 17.8 | NOT REQUIRED | | | NOT REQUIRED | | | NOT REQUIRED | | | NOT REQUIRED | | |
| APR | ^b 2254 | 5.8 ^f | 13.6 | 17.7 | 18.3 | 18.0 | 18.0 | 18.0 | 18.0 | NOT REQUIRED | | | NOT REQUIRED | | | NOT REQUIRED | | | NOT REQUIRED | | |
| 28 | ^a 1311 | 8.9 ^f | 14.6 | 13.0 | 14.2 | 13.6 | 15.2 | 14.8 | 15.0 | NOT REQUIRED | | | NOT REQUIRED | | | NOT REQUIRED | | | NOT REQUIRED | | |
| APR | ^b 0132 | 8.6 ^f | 13.4 | 4.9 | 4.9 | 4.9 | 8.1 | 6.1 | 7.1 | NOT REQUIRED | | | NOT REQUIRED | | | NOT REQUIRED | | | NOT REQUIRED | | |
| 12 | ^a 0958 | 10.4 ^c | 14.4 | 11.2 | 8.7 | 10.0 | 11.2 | 12.0 | 11.6 | 12.0 | 11.5 | 11.8 | 11.5 | 9.6 | 10.6 | NOT REQUIRED | | | NOT REQUIRED | | |
| MAY | ^b 2225 | 10.3 ^c | 14.6 | 9.3 | 9.6 | 9.4 | 10.9 | 10.6 | 10.8 | 11.7 | 10.9 | 11.3 | 9.3 | 9.3 | 9.3 | NOT REQUIRED | | | NOT REQUIRED | | |
| 26 | ^a 1012 | 9.9 ^c | 15.5 | 4.9 | 4.9 | 4.9 | 4.2 | 4.7 | 4.4 | NOT REQUIRED | | | NOT REQUIRED | | | 4.7 | 4.0 | 4.4 | 4.9 | 4.7 | 4.8 |
| MAY | ^b 2144 | 11.0 ^c | 15.2 | 5.1 | 5.8 | 5.4 | 4.9 | 4.7 | 4.8 | 5.8 | 4.9 | 5.4 | 4.7 | 5.1 | 4.9 | NOT REQUIRED | | | NOT REQUIRED | | |
| 9 | ^a 1021 | 11.4 ^c | 12.9 | 8.2 | 8.2 | 8.2 | NaN | 7.2 | - | 7.7 | 8.6 | 8.2 | 7.5 | 7.2 | 7.4 | NOT REQUIRED | | | NOT REQUIRED | | |
| JUN | ^b 2145 | 13.3 ^c | 14.3 | 9.3 | 7.7 | 8.5 | 9.1 | 8.6 | 8.8 | 9.3 | 9.1 | 9.2 | 8.9 | 8.2 | 8.6 | NOT REQUIRED | | | NOT REQUIRED | | |
| 23, 28 JUN | ^a 1018 | 17.3 ^c | 15.8 | 7.7 | NaN | - | 4.9 | 4.7 | 4.8 | NOT REQUIRED | | | NOT REQUIRED | | | 4.7 | 4.9 | 4.8 | 8.9 | 9.8 | 9.4 |
| | ^b 2143 | NA | NA | 5.1 | 6.1 | 5.6 | 5.4 | 4.9 | 5.2 | 5.8 | 5.1 | 5.4 | 5.4 | 5.1 | 5.2 | NOT REQUIRED | | | NOT REQUIRED | | |
| 20 | ^a 1019 | 19.7 ^c | 14.2 | 8.6 | 7.2 | 7.9 | 5.4 | 4.9 | 5.2 | 7.5 | 7.5 | 7.5 | 7.5 | 6.3 | 6.9 | NOT REQUIRED | | | NOT REQUIRED | | |
| JUL | ^b 2149 | 20.3 ^c | 14.8 | 12.8 | 13.5 | 13.2 | 8.9 | 9.1 | 9.0 | 14.2 | 13.1 | 13.6 | 16.3 | 13.8 | 15.0 | NOT REQUIRED | | | NOT REQUIRED | | |
| 29 | ^a 1016 | 20.0 ^c | 13.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | NOT REQUIRED | | | NOT REQUIRED | | | 1.9 ^g | 1.6 ^g | 1.8 | 2.1 ^g | 2.1 ^g | 2.1 |
| JUL | ^b 2142 | 19.6 ^c | 12.0 | 0.9 | 1.2 | 1.0 | 0.5 | 1.9 | 1.2 | 0.9 | 0.7 | 0.8 | 1.9 | 1.6 | 1.8 | NOT REQUIRED | | | NOT REQUIRED | | |
| 11 | ^a 0951 | 19.4 ^c | 15.1 | 3.9 | 2.5 | 3.2 | 2.5 | 3.1 | 2.8 | 4.2 | 3.9 | 4.0 | 3.4 | 4.8 | 4.1 | NOT REQUIRED | | | NOT REQUIRED | | |
| AUG | ^b 2112 | 20.3 ^c | 14.7 | 3.1 | 4.5 | 3.8 | 3.4 | 4.5 | 4.0 | 0.6 | 2.5 | 1.6 | 4.2 | 4.2 | 4.2 | NOT REQUIRED | | | NOT REQUIRED | | |
| 25 | ^a 0950 | 21.7 ^c | 15.0 | 4.2 | 4.0 | 4.1 | 2.6 | 4.4 | 3.5 | NOT REQUIRED | | | NOT REQUIRED | | | 3.7 | 3.0 | 3.4 | 4.0 | 4.2 | 4.1 |
| AUG | ^b 2116 | 21.8 ^c | 15.8 | 7.7 | 7.5 | 7.6 | 6.5 | 6.8 | 6.6 | 7.5 | 6.3 | 6.9 | 7.0 | 6.8 | 6.9 | NOT REQUIRED | | | NOT REQUIRED | | |
| 8 | ^a 1000 | 19.6 ^c | 15.8 | 6.1 | 6.1 | 6.1 | 5.5 | 5.4 | 5.4 | 7.0 | 6.1 | 6.6 | 6.5 | 6.8 | 6.6 | NOT REQUIRED | | | NOT REQUIRED | | |
| SEP | ^b 2109 | 21.5 ^c | 15.8 | 6.3 | 6.5 | 6.4 | 5.8 | 5.1 | 5.4 | 6.3 | 4.7 | 5.5 | 4.9 | 6.3 | 5.6 | NOT REQUIRED | | | NOT REQUIRED | | |

APPENDIX VIIIA-2a (Continued)

CHLOROPHYLL A CONCENTRATION^e IN WHOLE WATER COLLECTIONS (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT AND VICINITY - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) | ΔT ^d | INTAKE | | | DISCHARGE | | | 3°SIMULATION | | | 2°SIMULATION | | | 3°LAKE | | | 2°LAKE | | |
|------|--|----------------------|-------------------------|--------|-----|------|-----------|-----|------|--------------|-----|------|--------------|-----|------|--------------|-----|------|--------------|-----|------|
| | | | | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN |
| 22 | a ₁₀₃₈ | 18.7 ^c | 14.4 | 6.1 | 6.1 | 6.1 | 4.9 | 4.4 | 4.6 | 4.9 | 4.7 | 4.8 | 4.7 | 5.8 | 5.2 | NO SAMPLE | | | NO SAMPLE | | |
| SEP | b ₂₁₁₆ | 18.0 ^c | 14.8 | 6.1 | 8.9 | 7.5 | 7.5 | 5.6 | 6.6 | 8.8 | 7.6 | 8.2 | 8.8 | 9.9 | 9.4 | NOT REQUIRED | | | NOT REQUIRED | | |
| 6 | a ₁₀₂₃ | 15.8 ^c | 14.3 | 6.8 | 5.6 | 6.2 | 4.7 | 5.6 | 5.2 | 6.1 | 4.9 | 5.5 | 6.2 | 4.2 | 5.2 | NOT REQUIRED | | | NOT REQUIRED | | |
| OCT | b ₂₁₂₆ | 16.3 ^c | 13.9 | 5.6 | 5.1 | 5.4 | 4.7 | 4.4 | 4.6 | 4.7 | 4.4 | 4.6 | 4.7 | 4.9 | 4.8 | NOT REQUIRED | | | NOT REQUIRED | | |
| 20 | a ₁₀₀₄ | 12.4 ^c | 12.9 | 3.7 | 4.0 | 3.8 | 3.5 | 3.7 | 3.6 | NOT REQUIRED | | | NOT REQUIRED | | | 4.0 | 4.7 | 4.4 | 3.5 | 3.7 | 3.6 |
| OCT | b ₂₁₂₁ | 12.2 ^c | 13.0 | 2.3 | 1.4 | 1.8 | 2.8 | 2.6 | 2.7 | 3.3 | 3.0 | 3.2 | 3.5 | 1.2 | 2.4 | NOT REQUIRED | | | NOT REQUIRED | | |
| 3 | a ₁₀₃₀ | 10.6 ^c | 15.0 | 0.1 | 1.2 | 0.6 | 2.1 | 2.3 | 2.2 | 2.1 | 1.2 | 1.6 | 1.4 | 1.9 | 1.6 | NOT REQUIRED | | | NOT REQUIRED | | |
| NOV | b ₂₁₀₄ | 10.6 ^c | 15.1 | 2.6 | 1.9 | 2.2 | 1.9 | 2.6 | 2.2 | 2.3 | 1.9 | 2.1 | 1.6 | 2.6 | 2.1 | NOT REQUIRED | | | NOT REQUIRED | | |
| 17 | a ₁₀₃₀ | 7.8 ^c | 12.9 | 0.2 | 1.9 | 1.0 | 2.1 | 2.3 | 2.2 | 2.1 | 1.9 | 2.0 | 2.1 | 1.4 | 1.8 | NO SAMPLE | | | NO SAMPLE | | |
| NOV | b ₂₂₄₇ | 8.0 ^c | 14.1 | 1.6 | 2.8 | 2.2 | 2.8 | 2.6 | 2.7 | 2.8 | 2.3 | 2.6 | 2.6 | 2.1 | 2.4 | NOT REQUIRED | | | NOT REQUIRED | | |
| 1 | a ₁₁₀₅ | 3.8 ^c | 14.5 | 8.6 | 7.9 | 8.2 | 8.6 | 8.9 | 8.8 | 9.3 | 7.9 | 8.6 | 7.5 | 8.4 | 8.0 | NOT REQUIRED | | | NOT REQUIRED | | |
| DEC | b ₂₂₃₂ | 3.8 ^c | 14.6 | 9.3 | 8.4 | 8.8 | 6.1 | 7.9 | 7.0 | 8.9 | 7.0 | 8.0 | 7.9 | 7.9 | 7.9 | NOT REQUIRED | | | NOT REQUIRED | | |
| 15, | a ₁₁₀₆ | 1.4 ^c | 15.3 | 5.4 | 5.6 | 5.5 | 5.9 | 5.0 | 5.4 | 0.9 | 3.1 | 2.0 | 4.0 | 4.7 | 4.4 | NO SAMPLE | | | NO SAMPLE | | |
| 19 | b ₂₁₃₀ | 2.6 ^c | 13.1 | 2.6 | 2.6 | 2.6 | 2.6 | 2.3 | 2.4 | 2.1 | 2.6 | 2.4 | 2.6 | 2.3 | 2.4 | NOT REQUIRED | | | NOT REQUIRED | | |

^{a/b}Time in 2400 hrs. of Intake Sample^cIntake temperature before tempering

NA = Not available

^dDischarge - Intake Temperature^eµg/l

NaN = Not analyzed, sample lost

^fIntake temperature after tempering

8Collections at sites 2° and 3° F lower than boil temperature (samples were not collected in boil)

- = Not applicable

Revised/Final

APPENDIX VIIIA-2b

CHLOROPHYLL A CONCENTRATION^e IN WHOLE WATER COLLECTIONS AFTER SEVEN-HOUR INCUBATION PERIOD

JAMES A. FITZPATRICK NUCLEAR POWER PLANT AND VICINITY - 1976

| DATE* | DAY ^a | INTAKE TEMP. (°C) ^c | ΔT^d | INTAKE | | | DISCHARGE | | | 3°SIMULATION | | | 2°SIMULATION | | | 3°LAKE | | | 2°LAKE | | |
|-------|--------------------|-----------------------------------|--------------|--------|-----|------|-----------|-----|------|--------------|-----|------|--------------|-----|------|--------------|-----|------|--------------|-----|------|
| | NIGHT ^b | | | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN |
| 22 | a ₁₀₃₈ | 18.7 | 14.4 | 4.4 | 4.7 | 4.6 | 3.0 | 3.3 | 3.2 | 4.7 | 5.1 | 4.9 | 4.4 | 4.7 | 4.6 | NO SAMPLE | | | NO SAMPLE | | |
| SEP | b ₂₁₁₆ | 18.0 | 14.8 | 5.2 | 4.7 | 5.0 | 4.1 | 5.2 | 4.6 | 4.7 | 5.2 | 5.0 | 9.8 | 2.9 | 6.4 | NOT REQUIRED | | | NOT REQUIRED | | |
| 6 | a ₁₀₂₃ | 15.8 | 14.3 | 5.1 | 5.4 | 5.2 | 4.4 | 5.1 | 4.8 | 6.3 | 4.2 | 5.2 | 3.5 | 4.2 | 3.8 | NOT REQUIRED | | | NOT REQUIRED | | |
| OCT | b ₂₁₂₆ | 16.3 | 13.9 | 6.3 | 3.5 | 4.9 | 4.4 | 5.8 | 5.1 | 6.5 | 6.5 | 6.5 | 5.6 | 7.0 | 6.3 | NOT REQUIRED | | | NOT REQUIRED | | |
| 20 | a ₁₀₀₄ | 12.4 | 12.9 | 2.6 | 3.7 | 3.2 | 4.4 | 4.7 | 4.6 | NOT REQUIRED | | | NOT REQUIRED | | | 4.7 | 4.7 | 4.7 | 4.7 | 3.7 | 4.2 |
| OCT | b ₂₁₂₁ | 12.2 | 13.0 | 2.8 | 2.1 | 2.4 | 3.3 | 4.0 | 3.6 | 2.8 | 3.7 | 3.2 | 3.0 | 2.8 | 2.9 | NOT REQUIRED | | | NOT REQUIRED | | |
| 3 | a ₁₀₃₀ | 10.6 | 15.0 | 3.0 | 1.9 | 2.4 | 1.2 | 2.1 | 1.6 | 3.3 | 3.0 | 3.2 | 3.0 | 1.9 | 2.4 | NOT REQUIRED | | | NOT REQUIRED | | |
| NOV | b ₂₁₀₄ | 10.6 | 15.1 | 1.9 | 2.1 | 2.0 | 1.6 | 1.4 | 1.5 | 1.9 | 1.6 | 1.8 | 1.2 | 1.2 | 1.2 | NOT REQUIRED | | | NOT REQUIRED | | |
| 17 | a ₁₀₃₀ | 7.8 | 12.9 | 0.7 | 1.4 | 1.0 | 1.4 | 1.4 | 1.4 | 2.1 | 1.4 | 1.8 | 1.6 | 1.6 | 1.6 | NO SAMPLE | | | NO SAMPLE | | |
| NOV | b ₂₂₄₇ | 8.0 | 14.1 | 3.7 | 2.6 | 3.2 | 2.3 | 3.0 | 2.6 | 2.3 | 2.8 | 2.6 | 2.6 | 3.0 | 2.8 | NOT REQUIRED | | | NOT REQUIRED | | |
| 1 | a ₁₁₀₅ | 3.8 | 14.5 | 9.1 | 9.3 | 9.2 | 9.8 | 8.9 | 9.4 | 8.9 | 7.5 | 8.2 | 8.9 | 9.3 | 9.1 | NOT REQUIRED | | | NOT REQUIRED | | |
| DEC | b ₂₂₃₂ | 3.8 | 14.6 | 8.4 | 6.5 | 7.4 | 7.2 | 7.5 | 7.4 | 7.2 | 7.9 | 7.6 | 8.4 | 7.0 | 7.7 | NOT REQUIRED | | | NOT REQUIRED | | |
| 15, | a ₁₁₀₆ | 1.4 | 15.3 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | 5.0 | 4.4 | 4.7 | 3.7 | 4.4 | 4.0 | NO SAMPLE | | | NO SAMPLE | | |
| 19 | a ₁₁₀₆ | 1.4 | 15.3 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | 5.0 | 4.4 | 4.7 | 3.7 | 4.4 | 4.0 | NO SAMPLE | | | NO SAMPLE | | |
| DEC | b ₂₁₃₀ | 2.6 | 13.1 | 1.9 | 1.6 | 1.8 | 1.6 | 1.9 | 1.8 | 1.6 | 1.9 | 1.8 | 2.1 | 1.4 | 1.8 | NOT REQUIRED | | | NOT REQUIRED | | |

a/b Time in 2400 hrs. of Intake Sample

^c Intake temperature before tempering

^d Discharge - Intake Temperature

^e $\mu\text{g/l}$

* Not required in sampling program prior to 22 Sep

APPENDIX VIIIA-2c

CHLOROPHYLL A CONCENTRATION^e IN WHOLE WATER COLLECTIONS AFTER TWENTY-FOUR HOUR INCUBATION PERIOD

JAMES A. FITZPATRICK NUCLEAR POWER PLANT AND VICINITY - 1976

| DATE* | DAY ^a | INTAKE TEMP. (°C) ^c | ΔT ^d | INTAKE | | | DISCHARGE | | | 3°SIMULATION | | | 2°SIMULATION | | | 3°LAKE | | | 2°LAKE | | |
|-------|--------------------------|-----------------------------------|-------------------------|--------|-----|------|-----------|------|------|--------------|-----|------|--------------|------|------|--------------|-----|------|--------------|-----|------|
| | NIGHT ^b | | | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN |
| 22 | a ¹⁰³⁸ | 18.7 | 14.4 | 4.4 | 4.7 | 4.6 | 4.0 | 3.5 | 3.8 | 4.7 | 6.1 | 5.4 | 4.9 | 5.4 | 5.2 | NO SAMPLE | | | NO SAMPLE | | |
| SEP | b ²¹¹⁶ | 18.0 | 14.8 | 2.9 | 7.0 | 5.0 | 6.4 | 8.2 | 7.3 | 7.0 | 8.8 | 7.9 | 8.8 | 11.1 | 10.0 | NOT REQUIRED | | | NOT REQUIRED | | |
| 6 | a ¹⁰²³ | 15.8 | 14.3 | 4.9 | 5.6 | 5.2 | 4.4 | 4.7 | 4.6 | 5.6 | 4.7 | 5.2 | 4.2 | 5.1 | 4.6 | NOT REQUIRED | | | NOT REQUIRED | | |
| OCT | b ²¹²⁶ | 16.3 | 13.9 | 3.5 | 5.4 | 4.4 | 4.4 | 5.1 | 4.8 | 3.5 | 5.1 | 4.3 | 5.1 | 4.7 | 4.9 | NOT REQUIRED | | | NOT REQUIRED | | |
| 20 | a ¹⁰⁰⁴ | 12.4 | 12.9 | 2.8 | 2.1 | 2.4 | 2.1 | 1.9 | 2.0 | NOT REQUIRED | | | NOT REQUIRED | | | 3.0 | 2.6 | 2.8 | 3.0 | 2.1 | 2.6 |
| OCT | b ²¹²¹ | 12.2 | 13.0 | 4.2 | 4.9 | 4.6 | 4.2 | 2.3 | 3.2 | 2.6 | 3.3 | 3.0 | 2.3 | 2.1 | 2.2 | NOT REQUIRED | | | NOT REQUIRED | | |
| 3 | a ¹⁰³⁰ | 10.6 | 15.0 | 1.9 | 2.1 | 2.0 | 1.9 | 2.3 | 2.1 | 2.1 | 1.6 | 1.8 | 2.6 | 2.6 | 2.6 | NOT REQUIRED | | | NOT REQUIRED | | |
| NOV | b ²¹⁰⁴ | 10.6 | 15.1 | 2.1 | 2.6 | 2.4 | 1.9 | 2.1 | 2.0 | 1.9 | 2.1 | 2.0 | 2.6 | 2.6 | 2.6 | NOT REQUIRED | | | NOT REQUIRED | | |
| 17 | a ¹⁰³⁰ | 7.8 | 12.9 | 1.6 | 2.1 | 1.8 | 1.9 | 2.1 | 2.0 | 2.6 | 2.1 | 2.4 | 1.9 | 2.1 | 2.0 | NO SAMPLE | | | NO SAMPLE | | |
| NOV | b ²²⁴⁷ | 8.0 | 14.1 | 2.8 | 2.1 | 2.4 | 1.9 | 2.6 | 2.2 | 2.3 | 2.8 | 2.6 | 2.3 | 2.1 | 2.2 | NOT REQUIRED | | | NOT REQUIRED | | |
| 1 | a ¹¹⁰⁵ | 3.8 | 14.5 | 10.3 | 9.8 | 10.0 | 9.6 | 11.7 | 10.6 | 9.1 | 9.6 | 9.4 | 9.1 | 9.1 | 9.1 | NOT REQUIRED | | | NOT REQUIRED | | |
| DEC | b ²²³² | 3.8 | 14.6 | 8.9 | 7.2 | 8.0 | 8.4 | 7.9 | 8.2 | 8.6 | 8.9 | 8.8 | 9.1 | 8.2 | 8.6 | NOT REQUIRED | | | NOT REQUIRED | | |
| 15, | 15 DEC a ¹¹⁰⁶ | 1.4 | 15.3 | 5.0 | 5.3 | 5.2 | 4.7 | 5.6 | 5.2 | 4.4 | 4.0 | 4.2 | 4.0 | 5.3 | 4.6 | NO SAMPLE | | | NO SAMPLE | | |
| 19 | 19 DEC b ²¹³⁰ | 2.6 | 13.1 | 2.6 | 2.6 | 2.6 | 2.6 | 3.0 | 2.8 | 2.8 | 2.3 | 2.6 | 3.3 | 3.0 | 3.2 | NOT REQUIRED | | | NOT REQUIRED | | |

a/b Time in 2400 hrs. of Intake Sample
c Intake temperature before tempering

d Discharge - Intake Temperature
e $\mu\text{g/l}$

* Not required in sampling program prior to 22 Sep

APPENDIX VIIIA-2d

CHLOROPHYLL A CONCENTRATION^e IN WHOLE WATER COLLECTIONS AFTER FORTY-EIGHT HOUR INCUBATION PERIOD

JAMES A. FITZPATRICK NUCLEAR POWER PLANT AND VICINITY - 1976

| DATE [*] | DAY ^a | INTAKE TEMP. (°C) ^c | ΔT^d | INTAKE | | | DISCHARGE | | | 3°SIMULATION | | | 2°SIMULATION | | | 3°LAKE | | | 2°LAKE | | |
|-------------------|--------------------|-----------------------------------|--------------|--------|------|------|-----------|------|------|--------------|------|------|--------------|------|------|--------------|-----|------|--------------|-----|------|
| | NIGHT ^b | | | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN |
| 22 | ^a 1038 | 18.7 | 14.4 | 4.7 | 4.0 | 4.4 | 3.3 | 3.7 | 3.5 | 5.4 | 6.5 | 6.0 | 7.2 | 6.3 | 6.8 | NO SAMPLE | | | NO SAMPLE | | |
| SEP | ^b 2116 | 18.0 | 14.8 | 22.2 | 22.8 | 22.5 | 19.2 | 14.6 | 16.9 | 23.3 | 17.5 | 20.4 | 16.9 | 21.6 | 19.2 | NOT REQUIRED | | | NOT REQUIRED | | |
| 6 | ^a 1023 | 15.8 | 14.3 | 4.2 | 4.7 | 4.4 | 2.8 | 3.7 | 3.2 | 4.0 | 4.0 | 4.0 | 3.0 | 4.0 | 3.5 | NOT REQUIRED | | | NOT REQUIRED | | |
| OCT | ^b 2126 | 16.3 | 13.9 | 5.6 | 4.9 | 5.2 | 4.0 | 3.5 | 3.8 | 4.7 | 4.2 | 4.4 | 4.2 | 4.4 | 4.3 | NOT REQUIRED | | | NOT REQUIRED | | |
| 20 | ^a 1004 | 12.4 | 12.9 | 4.4 | 2.3 | 3.4 | 2.3 | 2.3 | 2.3 | NOT REQUIRED | | | NOT REQUIRED | | | 2.6 | 2.6 | 2.6 | 4.9 | 2.1 | 3.5 |
| OCT | ^b 2121 | 12.2 | 13.0 | 4.4 | 4.9 | 4.6 | 3.5 | 3.5 | 3.5 | 3.3 | 4.2 | 3.8 | 3.3 | 3.5 | 3.4 | NOT REQUIRED | | | NOT REQUIRED | | |
| 3 | ^a 1030 | 10.6 | 15.0 | 3.5 | 1.6 | 2.6 | 1.9 | 2.3 | 2.1 | 1.9 | 1.6 | 1.8 | 1.4 | 1.6 | 1.5 | NOT REQUIRED | | | NOT REQUIRED | | |
| NOV | ^b 2104 | 10.6 | 15.1 | 1.9 | 2.3 | 2.1 | 1.9 | 1.4 | 1.6 | 1.4 | 1.6 | 1.5 | 1.6 | 1.6 | 1.6 | NOT REQUIRED | | | NOT REQUIRED | | |
| 17 | ^a 1030 | 7.8 | 12.9 | 3.3 | 6.3 | 4.8 | 0.5 | 1.4 | 1.0 | 2.8 | 1.2 | 2.0 | 2.6 | 2.6 | 2.6 | NO SAMPLE | | | NO SAMPLE | | |
| NOV | ^b 2247 | 8.0 | 14.1 | 0.8 | 3.0 | 1.9 | 1.2 | 2.6 | 1.9 | 1.6 | 2.8 | 2.2 | 2.1 | 2.3 | 2.2 | NOT REQUIRED | | | NOT REQUIRED | | |
| 1 | ^a 1105 | 3.8 | 14.5 | 10.7 | 9.8 | 10.2 | 9.8 | 9.3 | 9.6 | 9.3 | 10.3 | 9.8 | 8.9 | 9.3 | 9.1 | NOT REQUIRED | | | NOT REQUIRED | | |
| DEC | ^b 2232 | 3.8 | 14.6 | 2.8 | 3.3 | 3.0 | 0.5 | <0.1 | - | 1.4 | 0.9 | 1.2 | 1.4 | 5.6 | 3.5 | NOT REQUIRED | | | NOT REQUIRED | | |
| 15, | ^a 1106 | 1.4 | 15.3 | 6.5 | 7.5 | 7.0 | 3.3 | 2.3 | 2.8 | 2.8 | 4.9 | 3.8 | 5.6 | 4.9 | 5.2 | NO SAMPLE | | | NO SAMPLE | | |
| 19 | ^a 1106 | 1.4 | 15.3 | 6.5 | 7.5 | 7.0 | 3.3 | 2.3 | 2.8 | 2.8 | 4.9 | 3.8 | 5.6 | 4.9 | 5.2 | NO SAMPLE | | | NO SAMPLE | | |
| DEC | ^b 2130 | 2.6 | 13.1 | 3.3 | 3.3 | 3.3 | 3.0 | 1.4 | 2.2 | 3.5 | 3.0 | 3.2 | 6.8 | 2.6 | 4.7 | NOT REQUIRED | | | NOT REQUIRED | | |

^{a/b} Time in 2400 hrs. of Intake Sample
^c Intake temperature before tempering

^d Discharge - Intake Temperature
^e $\mu\text{g/l}$

- = Not applicable

* Not required in sampling program prior to 22 Sep

APPENDIX VIIIA-2e

CHLOROPHYLL A CONCENTRATION^e IN WHOLE WATER COLLECTIONS AFTER SEVENTY-TWO HOUR INCUBATION PERIOD

JAMES A. FITZPATRICK. NUCLEAR POWER PLANT AND VICINITY - 1976

| DATE | DAY ^a | INTAKE TEMP. (°C) ^c | Δ T ^d | INTAKE | | | DISCHARGE | | | 3°SIMULATION | | | 2°SIMULATION | | | 3°LAKE | | | 2°LAKE | | |
|------|--------------------|-----------------------------------|------------------|--------|------|------|-----------|-----|------|--------------|------|------|--------------|------|------|--------------|-----|------|--------------|-----|------|
| | NIGHT ^b | | | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN |
| 22 | a 1038 | 18.7 | 14.4 | 4.9 | 5.4 | 5.2 | 3.7 | 5.1 | 4.4 | 6.3 | 6.8 | 6.6 | 6.5 | 6.8 | 6.6 | NO SAMPLE | | | NO SAMPLE | | |
| SEP | b 2116 | 18.0 | 14.8 | 10.3 | 8.2 | 9.2 | 8.6 | 7.2 | 7.9 | 6.8 | 9.6 | 8.2 | 7.5 | 9.6 | 8.6 | NOT REQUIRED | | | NOT REQUIRED | | |
| 6 | a 1023 | 15.8 | 14.3 | 4.2 | 3.0 | 3.6 | 2.8 | 3.3 | 3.0 | 5.6 | 5.8 | 5.7 | 5.1 | 3.5 | 4.3 | NOT REQUIRED | | | NOT REQUIRED | | |
| OCT | b 2126 | 16.3 | 13.9 | 2.6 | 1.2 | 1.9 | 1.4 | 1.4 | 1.4 | 3.0 | 1.4 | 2.2 | 2.8 | 2.8 | 2.8 | NOT REQUIRED | | | NOT REQUIRED | | |
| 20 | a 1004 | 12.4 | 12.9 | 3.3 | 3.3 | 3.3 | 2.6 | 1.9 | 2.2 | NOT REQUIRED | | | NOT REQUIRED | | | 3.5 | 1.6 | 2.6 | 3.5 | 3.3 | 3.4 |
| OCT | b 2121 | 12.2 | 13.0 | 2.1 | 2.8 | 2.4 | 2.3 | 3.5 | 2.9 | 1.9 | 5.1 | 3.5 | 3.5 | 3.9 | 3.7 | NOT REQUIRED | | | NOT REQUIRED | | |
| 3 | a 1030 | 10.6 | 15.0 | 1.9 | 1.4 | 1.6 | 1.2 | 1.2 | 1.2 | 1.6 | 2.1 | 1.8 | 1.6 | 1.6 | 1.6 | NOT REQUIRED | | | NOT REQUIRED | | |
| NOV | b 2104 | 10.6 | 15.1 | NA | 1.6 | - | 4.0 | 1.9 | 3.0 | 2.3 | 2.3 | 2.3 | 1.9 | 1.6 | 1.8 | NOT REQUIRED | | | NOT REQUIRED | | |
| 17 | a 1030 | 7.8 | 12.9 | 3.0 | 2.1 | 2.6 | 2.6 | 2.8 | 2.7 | 2.1 | 2.8 | 2.4 | 3.3 | 1.4 | 2.4 | NO SAMPLE | | | NO SAMPLE | | |
| NOV | b 2247 | 8.0 | 14.1 | NAn | NAn | - | NAn | NAn | - | NAn | NAn | - | NAn | NAn | - | NOT REQUIRED | | | NOT REQUIRED | | |
| 1 | a 1105 | 3.8 | 14.5 | 9.0 | 10.1 | 9.6 | 8.9 | 9.5 | 9.2 | 11.2 | 11.8 | 11.5 | 9.2 | 10.9 | 10.0 | NOT REQUIRED | | | NOT REQUIRED | | |
| DEC | b 2232 | 3.8 | 14.6 | 13.1 | 13.5 | 13.3 | 9.6 | 7.7 | 8.6 | 6.5 | 8.4 | 7.4 | 10.0 | 8.2 | 9.1 | NOT REQUIRED | | | NOT REQUIRED | | |
| 15, | a 1106 | 1.4 | 15.3 | 14.7 | 16.3 | 15.5 | 8.4 | 8.2 | 8.3 | 4.2 | 4.0 | 4.1 | 4.4 | 4.7 | 4.6 | NO SAMPLE | | | NO SAMPLE | | |
| 19 | b 19 DEC | | | | | | | | | | | | | | | | | | | | |
| DEC | b 2130 | 2.6 | 13.1 | 5.8 | 5.5 | 5.6 | 4.1 | 4.4 | 4.2 | 3.8 | 4.7 | 4.2 | 6.1 | 4.7 | 5.4 | NOT REQUIRED | | | NOT REQUIRED | | |

^{a/b} Time in 2400 hrs. of Intake Sample

^c Intake temperature before tempering

^d Discharge - Intake Temperature

^e μg/l

NA = Not available

NAn = Not analyzed

- = Not applicable

* No required in sampling program prior to 22 Sep

PHAEOPIGMENT CONCENTRATION^e IN WHOLE WATER COLLECTIONS

JAMES A. FITZPATRICK NUCLEAR POWER PLANT AND VICINITY - 1976

| DATE | DAY ^a | INTAKE TEMP. (°C) | ΔT ^d | INTAKE | | | DISCHARGE | | | 3°SIMULATION | | | 2°SIMULATION | | | 3°LAKE | | | 2°LAKE | | |
|--------|--------------------------|----------------------|-----------------|--------|------|------|-----------|------|------|--------------|------|------|--------------|------|------|------------------|------------------|------|------------------|------------------|------|
| | NIGHT ^b | | | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN |
| 14 | ^a 1202 | 5.5 ^f | 13.5 | <0.1 | <0.1 | - | 0.9 | 2.5 | 1.7 | NOT REQUIRED | | | NOT REQUIRED | | | NOT REQUIRED | | | NOT REQUIRED | | |
| APR | ^b 2254 | 5.8 ^f | 13.6 | 1.8 | <0.1 | - | <0.1 | <0.1 | - | NOT REQUIRED | | | NOT REQUIRED | | | NOT REQUIRED | | | NOT REQUIRED | | |
| 28 | ^a 1311 | 8.9 ^f | 14.6 | 2.9 | 2.4 | 2.6 | 2.2 | 2.8 | 2.5 | NOT REQUIRED | | | NOT REQUIRED | | | NOT REQUIRED | | | NOT REQUIRED | | |
| APR | ^b 0132 | 8.6 ^f | 13.4 | 2.2 | 1.7 | 2.0 | 0.3 | 0.9 | 0.6 | NOT REQUIRED | | | NOT REQUIRED | | | NOT REQUIRED | | | NOT REQUIRED | | |
| 12 | ^a 0958 | 10.4 ^c | 14.4 | 3.4 | 7.0 | 5.2 | 3.4 | 2.3 | 2.8 | 3.0 | 3.4 | 3.2 | 3.0 | 4.3 | 3.6 | NOT REQUIRED | | | NOT REQUIRED | | |
| MAY | ^b 2225 | 10.3 ^c | 14.6 | 3.6 | 4.3 | 4.0 | 3.0 | 3.7 | 3.4 | 3.9 | 3.9 | 3.9 | 4.6 | 3.6 | 4.1 | NOT REQUIRED | | | NOT REQUIRED | | |
| 26 | ^a 1012 | 9.9 ^c | 15.5 | 1.5 | 1.4 | 1.4 | 1.3 | 1.7 | 1.5 | NOT REQUIRED | | | NOT REQUIRED | | | 1.9 | 0.6 | 1.2 | <0.1 | 1.0 | 0.5 |
| MAY | ^b 2144 | 11.0 ^c | 15.2 | 2.5 | 1.3 | 1.9 | 2.6 | 3.0 | 2.8 | 2.2 | 1.7 | 2.0 | 3.0 | 2.1 | 2.6 | NOT REQUIRED | | | NOT REQUIRED | | |
| 9 | ^a 1021 | 11.4 ^c | 12.9 | 1.1 | 0.9 | 1.0 | NaN | 2.2 | 2.2 | 1.3 | 0.9 | 1.1 | 0.5 | <0.1 | 0.2 | NOT REQUIRED | | | NOT REQUIRED | | |
| JUN | ^b 2145 | 13.3 ^c | 14.3 | 0.4 | 2.4 | 1.4 | 1.1 | 1.1 | 1.1 | 0.7 | 1.7 | 1.2 | 1.8 | 2.0 | 1.9 | NOT REQUIRED | | | NOT REQUIRED | | |
| 23, 28 | ^a 23 JUN 1018 | 17.3 ^c | 15.8 | 2.4 | NaN | 2.4 | 3.7 | 4.5 | 4.1 | NOT REQUIRED | | | NOT REQUIRED | | | 4.5 | 2.1 | 3.3 | 4.1 | 3.0 | 3.6 |
| JUN | ^b 28 JUN 2143 | NA | NA | 1.3 | 0.6 | 1.0 | <1.0 | 0.6 | - | 1.1 | 1.8 | 1.4 | 1.8 | 1.5 | 1.6 | NOT REQUIRED | | | NOT REQUIRED | | |
| 20 | ^a 1019 | 19.7 ^c | 14.2 | 1.4 | 1.5 | 1.4 | 1.7 | 2.6 | 2.2 | 2.0 | 2.6 | 2.3 | 2.9 | 3.3 | 3.1 | NOT REQUIRED | | | NOT REQUIRED | | |
| JUL | ^b 2149 | 20.3 ^c | 14.8 | 1.3 | 1.7 | 1.5 | 2.8 | 2.3 | 2.6 | 0.1 | <0.1 | - | <0.1 | <0.1 | - | NOT REQUIRED | | | NOT REQUIRED | | |
| 29 | ^a 1016 | 20.0 ^c | 13.6 | 1.7 | 1.7 | 1.7 | 1.7 | 1.4 | 1.6 | NOT REQUIRED | | | NOT REQUIRED | | | 1.2 ^g | 2.1 ^g | 1.6 | 2.3 ^g | 2.6 ^g | 2.4 |
| JUL | ^b 2142 | 19.6 ^c | 12.0 | 1.7 | 1.2 | 1.4 | 2.5 | 0.4 | 1.4 | 1.6 | 1.9 | 1.8 | <0.1 | 0.2 | - | NOT REQUIRED | | | NOT REQUIRED | | |
| 11 | ^a 0951 | 19.4 ^c | 15.1 | 3.3 | 4.8 | 4.0 | 3.1 | 2.6 | 2.8 | NOT REQUIRED | | | NOT REQUIRED | | | 3.4 | 0.7 | 2.0 | 3.8 | 0.9 | 2.4 |
| AUG | ^b 2112 | 20.3 ^c | 14.7 | 5.7 | 1.9 | 3.8 | 0 | 1.9 | 1.0 | 6.3 | 4.6 | 5.4 | 3.6 | 1.4 | 2.5 | NOT REQUIRED | | | NOT REQUIRED | | |
| 25 | ^a 0950 | 21.7 ^c | 15.0 | 3.4 | 1.2 | 2.3 | 1.6 | 1.2 | 1.4 | NOT REQUIRED | | | NOT REQUIRED | | | 0.9 | 0.8 | 0.8 | 1.3 | 0.2 | 0.8 |
| AUG | ^b 2116 | 21.8 ^c | 15.8 | 2.0 | 2.0 | 2.0 | 1.5 | 2.7 | 2.1 | 2.2 | 2.0 | 2.1 | 2.2 | 2.1 | 2.2 | NOT REQUIRED | | | NOT REQUIRED | | |
| 8 | ^a 1000 | 19.6 ^c | 15.8 | 0.4 | 0.7 | 0.6 | 2.3 | 2.5 | 2.4 | 1.2 | 1.2 | 1.2 | 1.5 | 1.1 | 1.3 | NOT REQUIRED | | | NOT REQUIRED | | |
| SEP | ^b 2109 | 21.5 ^c | 15.8 | 2.0 | 1.7 | 1.8 | 0.8 | 1.3 | 1.0 | 1.6 | 1.0 | 1.3 | 1.5 | 1.4 | 1.4 | NOT REQUIRED | | | NOT REQUIRED | | |

APPENDIX VIIIA-3a (Continued)

PHAEOPIGMENT CONCENTRATION^e IN WHOLE WATER COLLECTIONS (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT AND VICINITY - 1976

| DATE | DAY ^a | INTAKE TEMP. (°C) | ΔT^d | INTAKE | | | DISCHARGE | | | 3°SIMULATION | | | 2°SIMULATION | | | 3°LAKE | | | 2°LAKE | | |
|------|--------------------------|----------------------|--------------|--------|------|------|-----------|-----|------|--------------|-----|------|--------------|------|------|--------------|------|------|--------------|-----|------|
| | NIGHT ^b | | | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN |
| 22 | ^a 1038 | 18.7 ^c | 14.4 | 1.8 | 1.3 | 1.6 | 1.1 | 2.4 | 1.8 | 2.4 | 2.0 | 2.2 | 2.4 | 1.9 | 2.2 | NO SAMPLE | | | NO SAMPLE | | |
| SEP | ^b 2116 | 18.0 ^c | 14.8 | 6.2 | 6.0 | 6.1 | 2.2 | 5.1 | 3.6 | 6.3 | 5.5 | 5.9 | 4.4 | 2.9 | 3.6 | NOT REQUIRED | | | NOT REQUIRED | | |
| 6 | ^a 1023 | 15.8 ^c | 14.3 | 1.1 | 2.1 | 1.6 | 1.6 | 1.5 | 1.6 | 0.3 | 1.7 | 1.0 | 1.3 | 1.6 | 1.4 | NOT REQUIRED | | | NOT REQUIRED | | |
| OCT | ^b 2126 | 16.3 ^c | 13.9 | 0.9 | 1.3 | 1.1 | 0.5 | 0.9 | 0.7 | 0.8 | 0.7 | 0.8 | 1.3 | 1.8 | 1.6 | NOT REQUIRED | | | NOT REQUIRED | | |
| 20 | ^a 1004 | 12.4 ^c | 12.9 | 0.3 | 0.1 | 0.2 | 0.5 | 0.2 | 0.4 | NOT REQUIRED | | | NOT REQUIRED | | | 0.1 | <0.1 | - | 0.8 | 0.3 | 0.6 |
| OCT | ^b 2121 | 12.2 ^c | 13.0 | 1.9 | 2.5 | 2.2 | 1.0 | 1.7 | 1.4 | 0.9 | 1.3 | 1.1 | 0.1 | 2.4 | 1.2 | NOT REQUIRED | | | NOT REQUIRED | | |
| 3 | ^a 1030 | 10.6 ^c | 15.0 | 3.6 | 1.5 | 2.6 | 0.3 | 0.1 | 0.2 | <0.1 | 0.6 | - | 0.2 | <0.1 | - | NOT REQUIRED | | | NOT REQUIRED | | |
| NOV | ^b 2104 | 10.6 ^c | 15.1 | 0.5 | 0.8 | 0.6 | 0.8 | 0.2 | 0.5 | 0.9 | 0.8 | 0.8 | 1.2 | 0.3 | 0.8 | NOT REQUIRED | | | NOT REQUIRED | | |
| 17 | ^a 1030 | 7.8 ^c | 12.9 | 2.7 | 1.3 | 2.0 | 1.1 | 0.7 | 0.9 | 1.4 | 1.2 | 1.3 | 1.7 | 1.9 | 1.8 | NO SAMPLE | | | NO SAMPLE | | |
| NOV | ^b 2247 | 8.0 ^c | 14.1 | 1.4 | <0.1 | - | 0.1 | 0.5 | 0.3 | 0.1 | 0.6 | 0.4 | 0.3 | 0.9 | 0.6 | NOT REQUIRED | | | NOT REQUIRED | | |
| 1 | ^a 1105 | 3.8 ^c | 14.5 | 2.2 | 4.3 | 3.2 | 2.4 | 2.7 | 2.6 | 2.2 | 2.6 | 2.4 | 3.7 | 2.5 | 3.1 | NOT REQUIRED | | | NOT REQUIRED | | |
| DEC | ^b 2232 | 3.8 ^c | 14.6 | 3.2 | 1.6 | 2.4 | 4.1 | 3.3 | 3.7 | 1.8 | 2.6 | 2.2 | 0.5 | 2.0 | 1.2 | NOT REQUIRED | | | NOT REQUIRED | | |
| 15, | ^a 15 DEC 1106 | 1.4 ^c | 15.3 | 0.8 | 0.4 | 0.6 | 0.6 | 1.8 | 1.2 | 6.2 | 1.0 | 3.6 | 1.1 | 0.9 | 1.0 | NO SAMPLE | | | NO SAMPLE | | |
| 19 | ^b 19 DEC 2130 | 2.6 ^c | 13.1 | 0.3 | 0.3 | 0.3 | 1.0 | 0.9 | 1.0 | 0.9 | 0.2 | 0.6 | 0.7 | 0.4 | 0.6 | NOT REQUIRED | | | NOT REQUIRED | | |
| DEC | | | | | | | | | | | | | | | | | | | | | |

a/b Time in 2400 hrs. of Intake Sample
^c Intake temperature before tempering
 NAn = Not analyzed, sample lost
 - = applicable

^d Discharge - Intake Temperature
^e $\mu\text{g/l}$
^f Intake temperature after tempering
 NA = Not available

^g Collections at sites 2° and 3°F lower than the boil temperature (samples were not collected in boil)

PRIMARY PRODUCTION^b AFTER FOUR-HOUR INCUBATION PERIOD

JAMES A. FITZPATRICK NUCLEAR POWER PLANT AND VICINITY - 1976

| DATE | DAY ^a | INTAKE TEMP. (°C) | ΔT ^d | INTAKE | | | DISCHARGE | | | 3°SIMULATION | | | 2°SIMULATION | | | 3°LAKE | | | 2°LAKE | | |
|--------|------------------|----------------------|-----------------|--------|-------|-------|-----------|-------|-------|--------------|-------|-------|--------------|-------|-------|--------------------|--------------------|-------|--------------------|--------------------|-------|
| | | | | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN |
| 14 APR | 1202 | 5.5 ^f | 13.5 | 44.63 | NR | - | 44.01 | NR | - | NO SAMPLE | | | NO SAMPLE | | | NOT REQUIRED | | | NOT REQUIRED | | |
| 28 APR | 1311 | 8.9 ^f | 14.6 | 27.24 | NR | - | 36.68 | NR | - | NO SAMPLE | | | NO SAMPLE | | | NO SAMPLE | | | NO SAMPLE | | |
| 12 MAY | 0958 | 10.4 ^c | 14.4 | 13.46 | 39.13 | 26.30 | 41.07 | 47.34 | 44.21 | 88.86 | 76.34 | 82.60 | 58.93 | 51.32 | 55.12 | NOT REQUIRED | | | NOT REQUIRED | | |
| 26 MAY | 1012 | 9.9 ^c | 15.5 | 8.80 | 9.73 | 9.26 | 10.62 | 12.68 | 11.65 | NOT REQUIRED | | | NOT REQUIRED | | | 15.12 | 13.49 | 14.30 | 14.54 | 12.52 | 13.53 |
| 9 JUN | 1021 | 11.4 ^c | 12.9 | 17.62 | 16.55 | 17.08 | 11.96 | 14.86 | 13.41 | 21.62 | 20.78 | 21.20 | 21.82 | 19.32 | 20.57 | NOT REQUIRED | | | NOT REQUIRED | | |
| 23 JUN | 1018 | 17.3 ^c | 15.8 | 23.54 | 23.06 | 23.30 | 14.91 | 14.04 | 14.48 | NOT REQUIRED | | | NOT REQUIRED | | | 28.50 | 16.70 | 22.60 | 50.48 | 43.85 | 47.16 |
| 20 JUL | 1019 | 19.7 ^c | NA | 20.19 | 20.38 | 20.28 | 9.30 | 11.11 | 10.20 | 20.72 | 36.53 | 28.62 | 37.04 | 31.68 | 34.36 | NOT REQUIRED | | | NOT REQUIRED | | |
| 29 JUL | 1016 | 20.0 ^c | NA | 8.59 | 8.20 | 8.40 | 6.66 | 5.44 | 6.05 | NOT REQUIRED | | | NOT REQUIRED | | | 29.97 ^e | 24.02 ^e | 27.00 | 20.92 ^e | 19.14 ^e | 20.03 |
| 11 AUG | 0951 | 19.4 ^c | 15.1 | 16.11 | 18.92 | 17.52 | 12.63 | 14.66 | 13.64 | 20.88 | 20.39 | 20.64 | 21.42 | 19.31 | 20.36 | NOT REQUIRED | | | NOT REQUIRED | | |
| 25 AUG | 0950 | 21.7 ^c | 15.0 | 26.85 | 30.15 | 28.50 | 19.54 | 19.93 | 19.74 | NOT REQUIRED | | | NOT REQUIRED | | | 31.58 | 38.40 | 34.99 | 38.04 | 37.64 | 37.84 |
| 8 SEP | 1000 | 19.6 ^c | 15.8 | 21.90 | 23.86 | 22.88 | 20.12 | 20.08 | 20.10 | 33.44 | 33.10 | 33.27 | 35.29 | 33.08 | 34.18 | NOT REQUIRED | | | NOT REQUIRED | | |
| 22 SEP | 1038 | 18.7 ^c | 14.4 | 14.87 | 14.54 | 14.70 | 9.50 | 12.24 | 10.87 | 17.24 | 23.19 | 20.22 | 21.20 | 20.68 | 20.94 | NO SAMPLE | | | NO SAMPLE | | |
| 6 OCT | 1023 | 15.8 ^c | 14.3 | 13.15 | 10.56 | 11.86 | 12.30 | 13.18 | 12.74 | 20.40 | 22.16 | 21.28 | 23.22 | 21.35 | 22.28 | NOT REQUIRED | | | NOT REQUIRED | | |
| 20 OCT | 1004 | 12.4 ^c | 12.9 | 6.98 | 8.69 | 7.84 | 7.76 | 8.13 | 7.94 | NOT REQUIRED | | | NOT REQUIRED | | | 9.64 | 9.05 | 9.34 | 13.18 | 12.22 | 12.70 |
| 3 NOV | 1030 | 10.6 ^c | 15.0 | 5.80 | 6.24 | 6.02 | 4.94 | 6.21 | 5.58 | 7.02 | 7.33 | 7.18 | 8.54 | 7.99 | 8.26 | NOT REQUIRED | | | NOT REQUIRED | | |
| 17 NOV | 1030 | 7.8 ^c | 12.9 | 2.65 | 4.69 | 3.67 | 3.42 | 4.70 | 4.06 | 5.94 | 5.38 | 5.66 | 4.12 | 5.88 | 5.00 | NO SAMPLE | | | NO SAMPLE | | |
| 1 DEC | 1105 | 3.8 ^c | 14.5 | 27.98 | 28.70 | 28.34 | 33.58 | 33.69 | 33.64 | 39.50 | 45.02 | 42.26 | 38.56 | 43.50 | 41.03 | NOT REQUIRED | | | NOT REQUIRED | | |
| 15 DEC | 1106 | 1.4 ^c | 15.3 | 6.40 | 6.46 | 6.43 | 7.86 | 10.30 | 9.08 | 8.70 | 11.51 | 10.10 | 9.42 | 10.36 | 9.89 | NO SAMPLE | | | NO SAMPLE | | |

^aTime in 2400 hrs. of Intake Sample
^bC-14, 2 light and 1 dark bottle, mg C/m³/hr

- = Not applicable

^cIntake temperature before tempering
^dDischarge - Intake temperature

NA = Not available

^eCollections at sites 2° and 3°F lower than boil temperature (samples were not collected in boil)
^fIntake temperature after tempering
 NR = Not required in work scope

APPENDIX VIIIA-4b

PRIMARY PRODUCTION AFTER SEVEN-HOUR INCUBATION PERIOD

JAMES A. FITZPATRICK NUCLEAR POWER PLANT AND VICINITY - 1976

| DATE | DAY ^a | INTAKE TEMP. (°C) | ΔT^d | INTAKE | | | DISCHARGE | | | 3°SIMULATION | | | 2°SIMULATION | | | 3°LAKE | | | 2°LAKE | | |
|------------------|--------------------|----------------------|--------------|--------|-------|-------|-----------|-------|-------|--------------|-------|-------|--------------|-------|-------|--------------------|--------------------|-------|--------------------|--------------------|-------|
| | NIGHT ^b | | | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN |
| 14 | ^a 1202 | 5.5 ^g | 13.5 | 12.84 | NR | - | 23.52 | NR | - | NO SAMPLE | | | NO SAMPLE | | | NOT REQUIRED | | | NOT REQUIRED | | |
| APR ^f | ^b 2254 | 5.8 ^g | 13.6 | 1.96 | NR | - | 25.63 | NR | - | NO SAMPLE | | | NO SAMPLE | | | NOT REQUIRED | | | NOT REQUIRED | | |
| 28 | ^a 1311 | 8.9 ^g | 14.6 | 32.01 | NR | - | 26.08 | NR | - | NO SAMPLE | | | NO SAMPLE | | | NO SAMPLE | | | NO SAMPLE | | |
| APR ^f | ^b 0132 | 8.6 ^g | 13.4 | 22.28 | NR | - | 19.20 | NR | - | NO SAMPLE | | | NO SAMPLE | | | NOT REQUIRED | | | NOT REQUIRED | | |
| 12 | ^a 0958 | 10.4 ^c | 14.4 | 28.14 | 7.62 | 17.88 | 28.20 | 28.89 | 28.54 | 38.25 | 45.52 | 41.88 | 37.01 | 31.37 | 34.19 | NOT REQUIRED | | | NOT REQUIRED | | |
| MAY ^e | ^b 2225 | 10.3 ^c | 14.6 | 17.83 | 25.20 | 21.52 | 34.57 | 42.60 | 38.58 | 41.36 | 45.62 | 43.49 | 39.60 | 37.32 | 38.46 | NOT REQUIRED | | | NOT REQUIRED | | |
| 26 | ^a 1012 | 9.9 ^c | 15.5 | 11.22 | 11.97 | 11.60 | 11.80 | 13.19 | 12.50 | NOT REQUIRED | | | NOT REQUIRED | | | 17.84 | 18.20 | 18.02 | 19.40 | 18.70 | 19.05 |
| MAY ^e | ^b 2144 | 11.0 ^c | 15.2 | 5.45 | 6.63 | 6.04 | 8.27 | 9.35 | 8.81 | 10.33 | 10.50 | 10.42 | 11.10 | 11.94 | 11.52 | NOT REQUIRED | | | NOT REQUIRED | | |
| 9 | ^a 1021 | 11.4 ^c | 12.9 | 15.24 | 15.59 | 15.42 | 10.28 | 10.56 | 10.42 | 16.92 | 16.76 | 16.84 | 15.58 | 15.63 | 15.60 | NOT REQUIRED | | | NOT REQUIRED | | |
| JUN ^e | ^b 2145 | 13.3 ^c | 14.3 | 11.75 | 17.54 | 14.64 | 8.15 | 10.19 | 9.17 | 10.44 | 10.11 | 10.28 | 10.45 | 9.68 | 10.06 | NOT REQUIRED | | | NOT REQUIRED | | |
| 23, 28 | ^a 1018 | 17.3 ^c | 15.8 | 21.39 | 28.09 | 24.74 | 13.94 | 15.33 | 14.64 | NOT REQUIRED | | | NOT REQUIRED | | | 18.23 | 12.95 | 15.59 | 32.33 | 30.20 | 31.26 |
| JUN ^e | ^b 2143 | NA | NA | 9.04 | 11.62 | 10.33 | 6.32 | 5.34 | 5.83 | 7.32 | 7.68 | 7.50 | 9.10 | 11.56 | 10.33 | NOT REQUIRED | | | NOT REQUIRED | | |
| 20 | ^a 1019 | 19.7 ^c | 14.2 | 20.45 | 21.93 | 21.19 | 7.08 | 7.76 | 7.42 | 31.29 | 21.24 | 26.26 | 36.62 | 22.94 | 29.78 | NOT REQUIRED | | | NOT REQUIRED | | |
| JUL ^e | ^b 2149 | 20.3 ^c | 14.8 | 11.18 | 11.83 | 11.50 | 11.50 | 11.61 | 11.56 | 7.28 | 10.93 | 9.10 | 23.41 | 11.29 | 17.35 | NOT REQUIRED | | | NOT REQUIRED | | |
| 29 | ^a 1016 | 20.0 ^c | 13.6 | 8.64 | 7.52 | 8.08 | 5.87 | 4.30 | 5.08 | NOT REQUIRED | | | NOT REQUIRED | | | 17.88 ^h | 20.43 ^h | 19.16 | 11.07 ^h | 18.45 ^h | 14.76 |
| JUL ^e | ^b 2142 | 19.6 ^c | 12.0 | 3.87 | 5.39 | 4.63 | 2.17 | 3.67 | 2.92 | 3.37 | 1.98 | 2.68 | 2.39 | 3.98 | 3.18 | NOT REQUIRED | | | NOT REQUIRED | | |
| 11 | ^a 0951 | 19.4 ^c | 15.1 | 17.34 | 16.22 | 16.78 | 12.98 | 13.85 | 13.42 | 20.76 | 23.00 | 21.88 | 20.26 | 19.49 | 19.88 | NOT REQUIRED | | | NOT REQUIRED | | |
| AUG ^e | ^b 2112 | 20.3 ^c | 14.7 | 12.63 | 15.09 | 13.86 | 8.72 | 12.47 | 10.60 | 11.58 | 14.48 | 13.03 | 17.03 | 15.54 | 16.28 | NOT REQUIRED | | | NOT REQUIRED | | |
| 25 | ^a 0950 | 21.7 ^c | 15.0 | 25.23 | 34.25 | 29.74 | 20.32 | 21.07 | 20.70 | NOT REQUIRED | | | NOT REQUIRED | | | 31.56 | 38.01 | 34.78 | 41.21 | 36.92 | 39.06 |
| AUG ^e | ^b 2116 | 21.8 ^c | 15.8 | 24.49 | 29.31 | 26.90 | 21.10 | 19.84 | 20.47 | 23.23 | 27.62 | 25.42 | 24.15 | 20.73 | 22.44 | NOT REQUIRED | | | NOT REQUIRED | | |
| 8 | ^a 1000 | 19.6 ^c | 15.8 | 22.89 | 25.81 | 24.35 | 20.51 | 22.95 | 21.73 | 30.95 | 36.28 | 33.62 | 35.14 | 35.19 | 35.16 | NOT REQUIRED | | | NOT REQUIRED | | |
| SEP ^e | ^b 09 | 21.5 ^c | 15.8 | 29.12 | 28.71 | 28.92 | 16.79 | 18.56 | 17.68 | 16.16 | 16.30 | | 15.36 | 14.44 | 14.90 | NOT REQUIRED | | | NOT REQUIRED | | |

PRIMARY PRODUCTION AFTER SEVEN-HOUR INCUBATION PERIOD (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT AND VICINITY - 1976

| DATE | DAY ^a | INTAKE TEMP. (°C) | ΔT^d | INTAKE | | | DISCHARGE | | | 3°SIMULATION | | | 2°SIMULATION | | | 3°LAKE | | | 2°LAKE | | |
|------------------|--------------------|----------------------|--------------|-----------------|-------|-------|-----------|-------|-------|-----------------|-------|-------|--------------|-------|-------|----------------|-----|------|----------------|-----|------|
| | NIGHT ^b | | | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN |
| 22 | ^a 1038 | 18.7 ^c | 14.4 | 10.25 | 10.77 | 10.51 | 7.66 | 10.16 | 8.91 | 12.20 | 15.49 | 13.84 | 15.16 | 14.87 | 15.02 | NO SAMPLE | | | NO SAMPLE | | |
| SEP ^e | ^b 2116 | 18.0 ^c | 14.8 | 11.80 | 15.77 | 13.78 | 27.18 | 27.18 | 27.18 | 21.27 | 17.42 | 19.34 | 26.73 | 16.51 | 21.62 | NOT REQUIRED | | | NOT REQUIRED | | |
| 6 | ^a 1023 | 15.8 ^c | 14.3 | 12.70 | 13.63 | 13.16 | 9.00 | 10.09 | 9.54 | 12.56 | 17.13 | 14.84 | 17.18 | 14.59 | 15.88 | NOT REQUIRED | | | NOT REQUIRED | | |
| OCT ^e | ^b 2126 | 16.3 ^c | 13.9 | 9.00 | 9.05 | 9.02 | 9.10 | 11.31 | 10.20 | 12.35 | 11.07 | 11.71 | 15.00 | 10.14 | 12.57 | NOT REQUIRED | | | NOT REQUIRED | | |
| 20 | ^a 1004 | 12.4 ^c | 12.9 | 6.42 | 6.37 | 6.40 | 5.74 | 4.05 | 4.90 | NOT REQUIRED | | | NOT REQUIRED | | | 7.27 8.01 7.64 | | | 7.88 7.53 7.70 | | |
| OCT ^e | ^b 2121 | 12.2 ^c | 13.0 | 5.03 | 4.85 | 4.94 | 5.83 | 5.69 | 5.76 | NA ^v | 6.21 | - | 6.77 | 7.28 | 7.02 | NOT REQUIRED | | | NOT REQUIRED | | |
| 3 | ^a 1030 | 10.6 ^c | 15.0 | 3.46 | 5.02 | 4.24 | 3.41 | 3.49 | 3.45 | 3.83 | 4.79 | 4.31 | 4.28 | 3.47 | 3.88 | NOT REQUIRED | | | NOT REQUIRED | | |
| NOV ^e | ^b 2104 | 10.6 ^c | 15.1 | NA ^v | 4.86 | - | 3.02 | 3.60 | 3.31 | 4.19 | 4.00 | 4.10 | 4.39 | 3.21 | 3.80 | NOT REQUIRED | | | NOT REQUIRED | | |
| 17 | ^a 1030 | 7.8 ^c | 12.9 | 1.93 | 1.69 | 1.81 | 2.17 | 1.68 | 1.92 | 2.29 | 3.45 | 2.87 | 2.68 | 2.85 | 2.76 | NO SAMPLE | | | NO SAMPLE | | |
| NOV ^e | ^b 2247 | 8.0 ^c | 14.1 | 2.39 | 2.96 | 2.68 | 2.07 | 3.16 | 2.62 | 1.84 | 3.09 | 2.46 | 2.40 | 3.56 | 2.98 | NOT REQUIRED | | | NOT REQUIRED | | |
| 1 | ^a 1105 | 3.8 ^c | 14.5 | 19.79 | 20.21 | 20.00 | 19.59 | 19.29 | 19.44 | 22.73 | 24.94 | 23.84 | 22.46 | 23.71 | 23.08 | NOT REQUIRED | | | NOT REQUIRED | | |
| DEC ^e | ^b 2232 | 3.8 ^c | 14.6 | 19.11 | 18.26 | 18.68 | 17.27 | 28.37 | 22.82 | 34.83 | 15.63 | 25.23 | 25.30 | 21.75 | 23.52 | NOT REQUIRED | | | NOT REQUIRED | | |
| 15, 19 | ^a 1106 | 1.4 ^c | 15.3 | 5.71 | 7.24 | 6.48 | 5.15 | 5.01 | 5.08 | 5.20 | 6.57 | 5.88 | 6.47 | 5.37 | 5.92 | NO SAMPLE | | | NO SAMPLE | | |
| DEC ^e | ^b 2130 | 2.6 ^c | 13.1 | 6.67 | 6.62 | 6.64 | 4.94 | 4.46 | 4.70 | 3.11 | 4.12 | 3.62 | 3.63 | 3.02 | 3.32 | NOT REQUIRED | | | NOT REQUIRED | | |

^{a/b} Time in 2400 hrs. of Intake Sample^c Intake temperature before tempering^d Discharge - Intake Temperature^v NAV = Light bottle reading not available^e C-14, 1 light and 1 dark bottle, mg C/m³/hr^f C-14, 2 light and 1 dark bottle, mg C/m³/hr^g Intake temperature after tempering

NA = Not available

^h Collection at sites 2° and 3° F lower than boil temperature (samples were not collected in boil)

NR = Not required in work scope

- = Not applicable

PRIMARY PRODUCTION AFTER TWENTY-FOUR-HOUR INCUBATION PERIOD

JAMES A. FITZPATRICK NUCLEAR POWER PLANT AND VICINITY - 1976

| DATE | DAY ^a | INTAKE TEMP. (°C) | ΔT ^d | INTAKE | | | DISCHARGE | | | 3°SIMULATION | | | 2°SIMULATION | | | 3°LAKE | | | 2°LAKE | | |
|------------------|--------------------|----------------------|-----------------|--------|-------|-------|-----------|-------|-------|--------------|-------|-------|--------------|-------|--------------|--------------------|-------------------|--------------|-------------------|-------------------|-------|
| | NIGHT ^b | | | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN |
| 14 | ^a 1202 | 5.5 ^g | 13.5 | 32.56 | NR | - | 33.17 | NR | - | NO SAMPLE | | | NO SAMPLE | | | NOT REQUIRED | | | NOT REQUIRED | | |
| APR ^f | ^b 2254 | 5.8 ^g | 13.6 | 0.32 | NR | - | 13.27 | NR | - | NO SAMPLE | | | NO SAMPLE | | | NOT REQUIRED | | | NOT REQUIRED | | |
| 28 | ^a 1311 | 8.9 ^g | 14.6 | 15.35 | NR | - | 20.74 | NR | - | NO SAMPLE | | | NO SAMPLE | | | NO SAMPLE | | | NO SAMPLE | | |
| APR ^f | ^b 0132 | 8.6 ^g | 13.4 | 3.98 | NR | - | 2.22 | NR | - | NO SAMPLE | | | NO SAMPLE | | | NOT REQUIRED | | | NOT REQUIRED | | |
| 12 | ^a 0958 | 10.4 ^c | 14.4 | 36.05 | 38.90 | 37.48 | 27.66 | 36.59 | 32.12 | 41.20 | 42.15 | 41.68 | 38.91 | 42.31 | 40.61 | NOT REQUIRED | | | NOT REQUIRED | | |
| MAY ^e | ^b 2225 | 10.3 ^c | 14.6 | 19.53 | 32.77 | 26.15 | 29.87 | 44.43 | 37.15 | 20.32 | 30.99 | 25.66 | 32.00 | 24.46 | 28.23 | NOT REQUIRED | | | NOT REQUIRED | | |
| 26 | ^a 1012 | 9.9 ^c | 15.5 | 8.43 | 9.59 | 9.01 | 7.26 | 7.99 | 7.62 | NOT REQUIRED | | | NOT REQUIRED | | | 8.55 | 9.92 | 9.24 | 11.13 | 10.34 | 10.74 |
| MAY ^e | ^b 2144 | 11.0 ^c | 15.2 | 6.52 | 7.35 | 6.94 | 5.90 | 9.59 | 7.74 | 8.73 | 9.74 | 9.24 | 12.54 | 8.32 | 10.43 | NOT REQUIRED | | | NOT REQUIRED | | |
| 9 | ^a 1021 | 11.4 ^c | 12.9 | 7.29 | 9.68 | 8.48 | 5.07 | 6.13 | 5.60 | 6.56 | 8.62 | 7.59 | 8.74 | 7.51 | 8.12 | NOT REQUIRED | | | NOT REQUIRED | | |
| JUN ^e | ^b 2145 | 13.3 ^c | 14.3 | 10.28 | 14.23 | 12.26 | 8.13 | 8.20 | 8.16 | 5.99 | 7.81 | 6.90 | 2.10 | 0.27 | 1.18 | NOT REQUIRED | | | NOT REQUIRED | | |
| 23, 28 | ^a 1018 | 17.3 ^c | 15.8 | 14.11 | 13.54 | 13.82 | 9.48 | 10.54 | 10.01 | NOT REQUIRED | | | NOT REQUIRED | | | 13.28 | 8.28 | 10.78 | 18.63 | 16.78 | 17.70 |
| JUN ^e | ^b 2143 | NA | NA | 5.48 | 11.66 | 8.57 | 4.09 | 6.27 | 5.18 | 4.65 | 3.06 | 3.86 | 4.56 | 4.83 | 4.70 | NOT REQUIRED | | | NOT REQUIRED | | |
| 20 | ^a 1019 | 19.7 ^c | 14.2 | 10.48 | 16.08 | 13.28 | 4.97 | 5.14 | 5.06 | 9.52 | 8.92 | 9.22 | 9.90 | 12.30 | 11.10 | NOT REQUIRED | | | NOT REQUIRED | | |
| JUL ^e | ^b 2149 | 20.3 ^c | 14.8 | 18.74 | 10.99 | 14.86 | 7.69 | 6.95 | 7.32 | 9.62 | 6.92 | 8.27 | 8.99 | 20.76 | 14.88 | NOT REQUIRED | | | NOT REQUIRED | | |
| 29 | ^a 1016 | 20.0 ^c | 13.6 | 4.14 | 3.43 | 3.78 | 1.96 | 2.18 | 2.07 | NOT REQUIRED | | | NOT REQUIRED | | | 10.08 ^h | 8.75 ^h | 9.42 | 8.13 ^h | 7.90 ^h | 8.02 |
| JUL ^e | ^b 2142 | 19.6 ^c | 12.0 | 4.22 | 3.39 | 3.80 | 2.04 | 1.77 | 1.90 | 1.61 | 3.11 | 2.36 | 2.20 | 2.74 | 2.47 | NOT REQUIRED | | | NOT REQUIRED | | |
| 11 | ^a 0951 | 19.4 ^c | 15.1 | 11.56 | 11.21 | 11.38 | 5.65 | 8.91 | 7.28 | 10.83 | 13.75 | 12.29 | 14.05 | 11.44 | 12.74 | NOT REQUIRED | | | NOT REQUIRED | | |
| AUG ^e | ^b 2112 | 20.3 ^c | 14.7 | 16.63 | 13.13 | 14.88 | 10.42 | 10.04 | 10.23 | 9.83 | 11.59 | 10.71 | 12.62 | 12.55 | 12.58 | NOT REQUIRED | | | NOT REQUIRED | | |
| 25 | ^a 0950 | 21.7 ^c | 15.0 | 16.59 | 29.99 | 23.29 | 15.68 | 18.48 | 17.08 | NOT REQUIRED | | | NOT REQUIRED | | | 27.23 | 32.12 | 29.68 | 29.10 | 26.80 | 27.95 |
| AUG ^e | ^b 2116 | 21.8 ^c | 15.8 | 16.07 | 20.24 | 18.16 | 15.57 | 17.91 | 16.74 | 12.90 | 18.06 | 15.48 | 26.29 | 21.25 | 23.77 | NOT REQUIRED | | | NOT REQUIRED | | |
| 8 | ^a 1000 | 19.6 ^c | 15.8 | 20.23 | 14.02 | 17.12 | 14.35 | 13.68 | 14.02 | 19.94 | 21.82 | 20.88 | 21.78 | 20.37 | 21.08 | NOT REQUIRED | | | NOT REQUIRED | | |
| SEP ^e | ^b 2109 | 21.5 ^c | 15.8 | 18.98 | 26.86 | 22.92 | 15.24 | 15.03 | 15.14 | 11.44 | 12.45 | 11.94 | 13.79 | 10.43 | 12.11 | NOT REQUIRED | | | NOT REQUIRED | | |
| 22 | ^a 1038 | 18.7 ^c | 14.4 | 7.74 | 5.93 | 6.84 | 5.21 | 5.59 | 5.40 | 6.46 | 9.09 | 7.78 | 7.20 | 8.00 | 7.60 | NO SAMPLE | | | NO SAMPLE | | |
| SEP ^e | ^b 2116 | 18.0 ^c | 14.8 | 8.24 | 21.28 | 14.76 | 11.35 | 22.99 | 15.20 | 15.36 | 15.28 | 16.07 | 16.25 | 16.16 | NOT REQUIRED | | | NOT REQUIRED | | | |

APPENDIX VIIIA-4c (Continued)

PRIMARY PRODUCTION AFTER TWENTY-FOUR-HOUR INCUBATION PERIOD (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT AND VICINITY - 1976

| DATE | DAY ^a | INTAKE TEMP. (°C) | ΔT^d | INTAKE | | | DISCHARGE | | | 3°SIMULATION | | | 2°SIMULATION | | | 3°LAKE | | | 2°LAKE | | |
|------------------|--------------------|----------------------|--------------|-----------------|-------|-------|-----------|-------|-------|-----------------|------|------|--------------|-------|------|--------------|------|------|--------------|------|------|
| | NIGHT ^b | | | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN |
| 6 | ^a 1023 | 15.8 ^c | 14.3 | 9.06 | 7.83 | 8.44 | 7.29 | 7.05 | 7.17 | 9.45 | 9.16 | 9.30 | 9.99 | 9.08 | 9.54 | NOT REQUIRED | | | NOT REQUIRED | | |
| OCT ^e | ^b 2126 | 16.3 ^c | 13.9 | 6.04 | 7.52 | 6.78 | 8.08 | 8.11 | 8.10 | 8.22 | 8.36 | 8.29 | 8.27 | 8.77 | 8.52 | NOT REQUIRED | | | NOT REQUIRED | | |
| 20 | ^a 1004 | 12.4 ^c | 12.9 | 3.65 | 4.86 | 4.26 | 3.13 | 3.26 | 3.20 | NOT REQUIRED | | | NOT REQUIRED | | | 4.22 | 4.34 | 4.28 | 3.68 | 4.61 | 4.14 |
| OCT ^e | ^b 2121 | 12.2 ^c | 13.0 | 3.24 | 4.32 | 3.78 | 3.09 | 3.88 | 3.48 | NA ^v | 3.21 | - | 3.39 | 3.26 | 3.32 | NOT REQUIRED | | | NOT REQUIRED | | |
| 3 | ^a 1030 | 10.6 ^c | 15.0 | 2.04 | 1.60 | 1.82 | 1.29 | 1.48 | 1.38 | 1.96 | 1.88 | 1.92 | 0.82 | 1.69 | 1.26 | NOT REQUIRED | | | NOT REQUIRED | | |
| NOV ^e | ^b 2104 | 10.6 ^c | 15.1 | NA ^v | 1.90 | - | 1.92 | 1.65 | 1.78 | 2.01 | 2.00 | 2.00 | 1.35 | 2.76 | 2.06 | NOT REQUIRED | | | NOT REQUIRED | | |
| 17 | ^a 1030 | 7.8 ^c | 12.9 | 1.31 | 1.30 | 1.30 | 1.37 | 0.63 | 1.00 | 1.53 | 1.76 | 1.64 | 1.22 | 1.20 | 1.21 | NO SAMPLE | | | NO SAMPLE | | |
| NOV ^e | ^b 2247 | 8.0 ^c | 14.1 | 1.12 | 1.22 | 1.17 | 0.99 | 1.27 | 1.13 | 0.73 | 0.76 | 0.74 | 1.26 | 0.88 | 1.07 | NOT REQUIRED | | | NOT REQUIRED | | |
| 1 | ^a 1105 | 3.8 ^c | 14.5 | 11.27 | 10.75 | 11.01 | 4.59 | 4.67 | 4.63 | 6.25 | 8.59 | 7.42 | 6.98 | 5.17 | 6.08 | NOT REQUIRED | | | NOT REQUIRED | | |
| DEC ^e | ^b 2232 | 3.8 ^c | 14.6 | 9.31 | 11.20 | 10.26 | 12.48 | 11.42 | 11.95 | 5.88 | 4.07 | 4.98 | 4.11 | 12.00 | 8.06 | NOT REQUIRED | | | NOT REQUIRED | | |
| 15, 19 | ^a 1106 | 1.4 ^c | 15.3 | 1.59 | 5.30 | 3.44 | 3.61 | 2.65 | 3.13 | 2.55 | 2.65 | 2.60 | 2.29 | 3.07 | 2.68 | NO SAMPLE | | | NO SAMPLE | | |
| DEC ^e | ^b 2130 | 2.6 ^c | 13.1 | 1.43 | 5.71 | 3.57 | 3.09 | 1.53 | 2.31 | 2.04 | 2.80 | 2.42 | 1.67 | 1.36 | 1.52 | NOT REQUIRED | | | NOT REQUIRED | | |

^{a/b} Time in 2400 hrs. of Intake Sample

^c Intake temperature before tempering

^d Discharge - Intake Temperature

^e C-14, 1 light and 1 dark bottle, mg C/m³/hr

^f C-14, 2 light and 1 dark bottle, mg C/m³/hr

^g Intake temperature after tempering

^h Collections at sites 2° and 3°F lower than boil temperature (samples were not collected in boil)

NA = Not available

NA^v = Light bottle reading not available

NR = Not required in work scope

- = Not applicable

APPENDIX VIIIA-4d

PRIMARY PRODUCTION AFTER FORTY-EIGHT-HOUR INCUBATION PERIOD

JAMES A. FITZPATRICK NUCLEAR POWER PLANT AND VICINITY - 1976

| DATE | DAY ^a | INTAKE TEMP. (°C) | ΔT^d | INTAKE | | | DISCHARGE | | | 3°SIMULATION | | | 2°SIMULATION | | | 3°LAKE | | | 2°LAKE | | |
|------------------|-----------------------------|----------------------|--------------|--------|-------|-------|-----------|-------|-------|--------------|-------|-------|--------------|-------|-------|--------------------|--------------------|-------|-------------------|--------------------|-------|
| | NIGHT ^b | | | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN |
| 14 | ^a 1202 | 5.5 ^g | 13.5 | 22.70 | NR | - | 33.42 | NR | - | NO SAMPLE | | | NO SAMPLE | | | NOT REQUIRED | | | NOT REQUIRED | | |
| APR ^f | ^b 2254 | 5.8 ^g | 13.6 | 26.50 | NR | - | 16.34 | NR | - | NO SAMPLE | | | NO SAMPLE | | | NOT REQUIRED | | | NOT REQUIRED | | |
| 28 | ^a 1311 | 8.9 ^g | 14.6 | 10.08 | NR | - | 16.35 | NR | - | NO SAMPLE | | | NO SAMPLE | | | NO SAMPLE | | | NO SAMPLE | | |
| APR ^f | ^b 0132 | 8.6 ^g | 13.4 | 11.47 | NR | - | 8.16 | NR | - | NO SAMPLE | | | NO SAMPLE | | | NOT REQUIRED | | | NOT REQUIRED | | |
| 12 | ^a 0958 | 10.4 ^c | 14.4 | 34.01 | 36.06 | 35.04 | 20.73 | 21.57 | 21.15 | 23.66 | 41.37 | 32.52 | 19.56 | 19.49 | 19.52 | NOT REQUIRED | | | NOT REQUIRED | | |
| MAY ^e | ^b 2225 | 10.3 ^c | 14.6 | 15.29 | 17.28 | 16.28 | 36.41 | 34.91 | 35.66 | 19.64 | 11.03 | 15.34 | 37.44 | 27.32 | 32.38 | NOT REQUIRED | | | NOT REQUIRED | | |
| 26 | ^a 1012 | 9.9 ^c | 15.5 | 7.01 | 4.79 | 5.90 | 4.09 | 5.13 | 4.61 | NOT REQUIRED | | | NOT REQUIRED | | | 9.95 | 7.87 | 8.91 | 5.82 | 7.69 | 6.76 |
| MAY ^e | ^b 2144 | 11.0 ^c | 15.2 | 8.43 | 7.74 | 8.08 | 5.61 | 8.89 | 7.25 | 5.28 | 7.77 | 6.52 | 7.06 | 6.00 | 6.53 | NOT REQUIRED | | | NOT REQUIRED | | |
| 9 | ^a 1021 | 11.4 ^c | 12.9 | 6.74 | 5.94 | 6.34 | 4.08 | 4.31 | 4.20 | 5.96 | 6.61 | 6.28 | 8.41 | 4.56 | 6.48 | NOT REQUIRED | | | NOT REQUIRED | | |
| JUN ^e | ^b 2145 | 13.3 ^c | 14.3 | 10.07 | 9.41 | 9.74 | 5.72 | 5.20 | 5.46 | 3.46 | 2.77 | 3.12 | 3.25 | 6.68 | 4.96 | NOT REQUIRED | | | NOT REQUIRED | | |
| 23, 28 | ^a 23 JUN 1018 | 17.3 ^c | 15.8 | 11.53 | 11.18 | 11.36 | 7.81 | 8.42 | 8.12 | NOT REQUIRED | | | NOT REQUIRED | | | 8.85 | 7.43 | 8.14 | 19.03 | 21.43 | 20.23 |
| JUN ^e | ^b 28 JUN 2143 | NA | NA | 7.06 | 7.94 | 7.50 | 3.89 | 4.03 | 3.96 | 3.54 | 3.23 | 3.38 | 7.31 | 5.08 | 6.20 | NOT REQUIRED | | | NOT REQUIRED | | |
| 20 | ^a 1019 | 19.7 ^c | 14.2 | 11.79 | 8.72 | 10.26 | 4.01 | 5.25 | 4.63 | 4.45 | 4.93 | 4.69 | 8.67 | 7.61 | 8.14 | NOT REQUIRED | | | NOT REQUIRED | | |
| JUL ^e | ^b 2149 | 20.3 ^c | 14.8 | 11.47 | 15.94 | 13.70 | 11.17 | 9.27 | 10.22 | 4.31 | 5.88 | 5.10 | 8.88 | 8.06 | 8.47 | NOT REQUIRED | | | NOT REQUIRED | | |
| 29 | ^a 1016 | 20.0 ^c | 13.6 | 5.32 | 4.32 | 4.82 | 3.03 | 3.20 | 3.12 | NOT REQUIRED | | | NOT REQUIRED | | | 14.53 ^h | 10.03 ^h | 12.28 | 5.63 ^h | 10.02 ^h | 7.82 |
| JUL ^e | ^b 2142 | 19.6 ^c | 12.0 | 4.11 | 2.17 | 3.14 | 2.19 | 1.76 | 1.98 | 1.36 | 0.92 | 1.14 | 1.31 | 1.84 | 1.58 | NOT REQUIRED | | | NOT REQUIRED | | |
| 11 | ^a 0951 | 19.4 ^c | 15.1 | 10.31 | 7.58 | 8.94 | 4.94 | 6.23 | 5.58 | 8.15 | 8.75 | 8.45 | 6.79 | 7.96 | 7.38 | NOT REQUIRED | | | NOT REQUIRED | | |
| AUG ^e | ^b 2112 | 20.3 ^c | 14.7 | 11.37 | 15.23 | 13.30 | 11.14 | 11.01 | 11.08 | 19.65 | 9.59 | 14.62 | 16.09 | 10.50 | 13.30 | NOT REQUIRED | | | NOT REQUIRED | | |
| 25 | ^a 0950 | 21.7 ^c | 15.0 | 13.97 | 17.68 | 15.82 | 12.05 | 11.49 | 11.77 | NOT REQUIRED | | | NOT REQUIRED | | | 15.54 | 19.44 | 17.49 | 21.18 | 20.16 | 20.67 |
| AUG ^e | ^b 2116 | 21.8 ^c | 15.8 | 5.91 | 6.60 | 6.26 | 4.90 | 14.85 | 9.88 | 12.49 | 10.30 | 11.40 | 15.20 | 16.31 | 15.76 | NOT REQUIRED | | | NOT REQUIRED | | |
| 8 | ^a 1000 | 19.6 ^c | 15.8 | 13.81 | 10.99 | 12.40 | 11.35 | 11.72 | 11.54 | 13.82 | 15.35 | 14.58 | 14.31 | 14.05 | 14.18 | NOT REQUIRED | | | NOT REQUIRED | | |
| SEP ^e | ^b 2109 | 21.5 ^c | 15.8 | 12.61 | 20.31 | 16.46 | 19.11 | 12.28 | 15.70 | 11.54 | 16.56 | 14.05 | 19.47 | 14.19 | 16.83 | NOT REQUIRED | | | NOT REQUIRED | | |
| 22 | 1038 | 18.7 ^c | 14.4 | 4.52 | 6.53 | 5.52 | 4.52 | 4.88 | 4.70 | 5.71 | 6.04 | 5.88 | 6.71 | 6.79 | 6.75 | NO SAMPLE | | | NO SAMPLE | | |
| SEP ^e | ^b 2116 | 18.0 ^c | 14.8 | 15.99 | 16.56 | 16.28 | 19.06 | 22.78 | 20.92 | 04 | 12.14 | 13.59 | 9.93 | 8.88 | 9.40 | NOT REQUIRED | | | NOT REQUIRED | | |

APPENDIX VIIIA-4d (Continued)

PRIMARY PRODUCTION AFTER FORTY-EIGHT-HOUR INCUBATION PERIOD (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT AND VICINITY - 1976

| DATE | DAY ^a | INTAKE TEMP. (°C) | ΔT^d | INTAKE | | | DISCHARGE | | | 3°SIMULATION | | | 2°SIMULATION | | | 3°LAKE | | | 2°LAKE | | |
|-----------|-----------------------------|----------------------|--------------|-----------------|------|------|-----------|------|------|-----------------|------|------|--------------|------|------|--------------|------|------|--------------|------|------|
| | NIGHT ^b | | | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN |
| 6 | ^a 1023 | 15.8 ^c | 14.3 | 6.66 | 6.98 | 6.82 | 5.06 | 6.44 | 5.75 | 6.80 | 7.23 | 7.02 | 7.41 | 7.64 | 7.52 | NOT REQUIRED | | | NOT REQUIRED | | |
| | ^b 2126 | 16.3 ^c | 13.9 | 5.62 | 6.87 | 6.24 | 6.03 | 6.52 | 6.28 | 9.06 | 6.02 | 7.54 | 7.49 | 7.30 | 7.40 | NOT REQUIRED | | | NOT REQUIRED | | |
| 20 | ^a 1004 | 21.4 ^c | 12.9 | 2.13 | 3.29 | 2.71 | 2.22 | 2.78 | 2.50 | NOT REQUIRED | | | NOT REQUIRED | | | 3.64 | 2.99 | 3.32 | 2.57 | 2.83 | 2.70 |
| | ^b 2121 | 12.2 ^c | 13.0 | 2.15 | 3.44 | 2.80 | 1.81 | 1.82 | 1.82 | NA ^v | 2.00 | - | 2.01 | 2.79 | 2.40 | NOT REQUIRED | | | NOT REQUIRED | | |
| 3 | ^a 1030 | 10.6 ^c | 15.0 | 1.77 | 1.30 | 1.54 | 1.12 | 0.86 | 0.99 | 0.84 | 1.29 | 1.06 | 1.49 | 0.54 | 1.02 | NOT REQUIRED | | | NOT REQUIRED | | |
| | ^b 2104 | 10.6 ^c | 15.1 | NA ^v | 2.31 | - | 1.11 | 1.38 | 1.24 | 0.86 | 0.96 | 0.91 | 1.21 | 1.30 | 1.26 | NOT REQUIRED | | | NOT REQUIRED | | |
| 17 | ^a 1030 | 7.8 ^c | 12.9 | 0.71 | 0.60 | 0.66 | 0.45 | 0.53 | 0.49 | 0.80 | 0.89 | 0.84 | 0.65 | 0.72 | 0.68 | NO SAMPLE | | | NO SAMPLE | | |
| | ^b 2247 | 8.0 ^c | 14.1 | 0.48 | 0.70 | 0.59 | 0.45 | 0.58 | 0.52 | 0.45 | 0.52 | 0.48 | 0.54 | 0.38 | 0.46 | NOT REQUIRED | | | NOT REQUIRED | | |
| 1 | ^a 1105 | 3.8 ^c | 14.5 | - | 3.94 | - | 3.26 | 2.06 | 2.66 | 2.03 | 2.89 | 2.46 | 1.78 | 3.15 | 2.46 | NOT REQUIRED | | | NOT REQUIRED | | |
| | ^b 2232 | 3.8 ^c | 14.6 | - | - | - | 3.92 | 3.50 | 3.71 | 2.80 | 4.88 | 3.84 | 5.75 | 2.22 | 3.98 | NOT REQUIRED | | | NOT REQUIRED | | |
| 9, 10 | ^a 10 DEC 0925 | 3.0 ^c | 16.5 | 1.70 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | ^b 9 DEC 2109 | 5.3 ^c | 16.3 | 0.38 | 2.00 | 1.19 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 15, 19 | ^a 15 DEC 1106 | 1.4 ^c | 15.3 | 2.41 | 1.84 | 2.12 | 1.11 | 3.50 | 2.30 | 1.83 | 1.01 | 1.42 | 1.33 | 1.60 | 1.46 | NO SAMPLE | | | NO SAMPLE | | |
| | ^b 19 DEC 2130 | 2.6 ^c | 13.1 | 0.72 | 0.92 | 0.82 | 2.13 | 1.20 | 1.66 | 0.64 | 0.68 | 0.66 | 0.79 | 1.03 | 0.91 | NOT REQUIRED | | | NOT REQUIRED | | |

^{a/b} Time in 2400 hrs. of Intake Sample

^c Intake temperature before tempering

^d Discharge - Intake Temperature

^e C-14, 1 light and 1 dark bottle, mg C/m³/hr

^f C-14, 2 light and 1 dark bottle, mg C/m³/hr

^g Intake temperature after tempering

^h Collections at sites 2° and 3°F lower than boil temperature (samples were not collected in boil)

ⁱ Same collection as 1 Dec

NA = Not available

NA^v = Light bottle reading not available

NR = Not required in work scope

- = Not applicable

APPENDIX VIIIA-4e

PRIMARY PRODUCTION AFTER SEVENTY-TWO-HOUR INCUBATION PERIOD

JAMES A. FITZPATRICK NUCLEAR POWER PLANT AND VICINITY - 1976

| DATE | DAY ^a | INTAKE TEMP. (°C) | ΔT^d | INTAKE | | | DISCHARGE | | | 3°SIMULATION | | | 2°SIMULATION | | | 3°LAKE | | | 2°LAKE | | |
|------------------|--------------------------------|----------------------|--------------|--------|-------|-------|-----------|-------|-------|--------------|-------|-------|--------------|-------|-------|--------------------|--------------------|-------|-------------------|--------------------|-------|
| | NIGHT ^b | | | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN |
| 14 | ^a 1202 | 5.5 ^g | 13.5 | 20.60 | NR | - | 16.00 | NR | - | NO SAMPLE | | | NO SAMPLE | | | NOT REQUIRED | | | NOT REQUIRED | | |
| APR ^f | ^b 2254 | 5.8 ^g | 13.6 | 24.95 | NR | - | 4.43 | NR | - | NO SAMPLE | | | NO SAMPLE | | | NOT REQUIRED | | | NOT REQUIRED | | |
| 28 | ^a 1311 | 8.9 ^g | 14.6 | 14.08 | NR | - | 14.74 | NR | - | NO SAMPLE | | | NO SAMPLE | | | NO SAMPLE | | | NO SAMPLE | | |
| APR ^f | ^b 0132 | 8.6 ^g | 13.4 | 9.03 | NR | - | 5.21 | NR | - | NO SAMPLE | | | NO SAMPLE | | | NOT REQUIRED | | | NOT REQUIRED | | |
| 12 | ^a 0958 | 10.4 ^c | 14.4 | 33.33 | 38.72 | 36.02 | 15.44 | 24.84 | 20.14 | 18.05 | 36.49 | 27.27 | 18.76 | 13.92 | 16.34 | NOT REQUIRED | | | NOT REQUIRED | | |
| MAY ^e | ^b 2225 | 10.3 ^c | 14.6 | 18.62 | 13.82 | 16.22 | 19.70 | 30.06 | 24.88 | 30.69 | 5.85 | 18.27 | 15.19 | 13.19 | 14.19 | NOT REQUIRED | | | NOT REQUIRED | | |
| 26 | ^a 1012 | 9.9 ^c | 15.5 | 6.77 | 5.03 | 5.90 | 2.53 | 4.78 | 3.66 | NOT REQUIRED | | | NOT REQUIRED | | | 4.69 | 4.17 | 4.43 | 6.94 | 4.06 | 5.50 |
| MAY ^e | ^b 2144 | 11.0 ^c | 15.2 | 5.43 | 8.95 | 7.19 | 7.72 | 5.93 | 6.82 | 5.07 | 2.96 | 4.02 | 5.27 | 5.12 | 5.20 | NOT REQUIRED | | | NOT REQUIRED | | |
| 9 | ^a 1021 ^h | 11.4 ^c | 12.9 | 3.28 | 4.77 | 4.02 | 2.19 | 2.42 | 2.30 | 3.46 | 2.91 | 3.18 | 3.24 | 2.54 | 2.89 | NOT REQUIRED | | | NOT REQUIRED | | |
| JUN ^e | ^b 2145 | 13.3 ^c | 14.3 | 5.89 | 7.63 | 6.76 | 4.49 | 4.83 | 4.66 | 2.06 | 2.58 | 2.32 | 3.17 | 2.68 | 2.92 | NOT REQUIRED | | | NOT REQUIRED | | |
| 23, 28 | ^a 1018 | 17.3 ^c | 15.8 | 10.90 | 9.94 | 10.42 | 6.93 | 5.85 | 6.39 | NOT REQUIRED | | | NOT REQUIRED | | | 7.02 | 6.65 | 6.84 | 13.92 | 13.75 | 13.84 |
| JUN ^e | ^b 2143 | NA | NA | 8.10 | 7.73 | 7.92 | 5.34 | 6.24 | 5.79 | 2.88 | 2.41 | 2.64 | 4.64 | 5.90 | 5.27 | NOT REQUIRED | | | NOT REQUIRED | | |
| 20 | ^a 1019 | 19.7 ^c | 14.2 | 12.17 | 12.92 | 12.54 | 6.64 | 6.67 | 6.66 | 8.19 | 6.71 | 7.45 | 12.89 | 7.15 | 10.02 | NOT REQUIRED | | | NOT REQUIRED | | |
| JUL ^e | ^b 2149 | 20.3 ^c | 14.8 | 18.66 | 17.55 | 18.10 | 19.65 | 20.53 | 20.09 | 5.12 | 4.51 | 4.82 | 13.00 | 16.09 | 14.54 | NOT REQUIRED | | | NOT REQUIRED | | |
| 29 | ^a 1016 | 20.0 ^c | 13.6 | 7.78 | 7.25 | 7.52 | 7.36 | 5.27 | 6.32 | NOT REQUIRED | | | NOT REQUIRED | | | 16.33 ⁱ | 15.14 ⁱ | 15.74 | 9.89 ⁱ | 10.62 ⁱ | 10.26 |
| JUL ^e | ^b 2142 | 19.6 ^c | 12.0 | 6.08 | 5.77 | 5.92 | 3.50 | 2.51 | 3.00 | 2.10 | 1.94 | 2.02 | 1.66 | 2.93 | 2.30 | NOT REQUIRED | | | NOT REQUIRED | | |
| 15 | ^a 0951 | 19.4 ^c | 15.1 | 6.77 | 8.45 | 7.61 | 6.65 | 5.63 | 6.14 | 7.25 | 7.68 | 7.46 | 9.19 | 9.41 | 9.30 | NOT REQUIRED | | | NOT REQUIRED | | |
| AUG ^e | ^b 2112 | 20.3 ^c | 14.7 | 10.02 | 10.47 | 10.24 | 10.64 | 9.59 | 10.12 | 6.73 | 10.94 | 8.84 | 11.32 | 12.90 | 12.11 | NOT REQUIRED | | | NOT REQUIRED | | |
| 25 | ^a 0950 | 21.7 ^c | 15.0 | 12.94 | 15.77 | 14.36 | 11.77 | 17.39 | 14.58 | NOT REQUIRED | | | NOT REQUIRED | | | 16.85 | 19.08 | 17.96 | 13.98 | 14.21 | 14.10 |
| AUG ^e | ^b 2116 | 21.8 ^c | 15.8 | 4.04 | 19.73 | 11.88 | 13.80 | 18.00 | 15.90 | 13.37 | 9.30 | 11.34 | 14.67 | 15.47 | 15.07 | NOT REQUIRED | | | NOT REQUIRED | | |
| 8 | ^a 1000 | 19.6 ^c | 15.8 | 22.15 | 6.80 | 14.48 | 16.18 | 11.99 | 14.08 | 13.97 | 13.30 | 13.64 | 15.83 | 14.31 | 15.07 | NOT REQUIRED | | | NOT REQUIRED | | |
| SEP ^e | ^b 2109 | 21.5 ^c | 15.8 | 11.89 | 16.47 | 14.18 | 16.46 | 14.46 | 15.46 | 14.35 | 12.91 | 13.63 | 20.49 | 14.93 | 17.71 | NOT REQUIRED | | | NOT REQUIRED | | |
| 22 | ^a 1038 | 18.7 ^c | 14.4 | 3.26 | 4.77 | 4.02 | 3.53 | 3.29 | 3.41 | 4.80 | 5.70 | 5.25 | 4.88 | 5.44 | 5.16 | NO SAMPLE | | | NO SAMPLE | | |
| SEP ^e | ^b 2116 | 18.0 ^c | 14.8 | 2.29 | 3.49 | 2.89 | 2.01 | 3.29 | 2.65 | 2.83 | 3.68 | 2.76 | 3.54 | 5.44 | 4.49 | NOT REQUIRED | | | NOT REQUIRED | | |

APPENDIX VIIIA-4e (Continued)

PRIMARY PRODUCTION AFTER SEVENTY-TWO-HOUR INCUBATION PERIOD (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT AND VICINITY - 1976

| DATE | DAY ^a | INTAKE TEMP. (°C) | ΔT^d | INTAKE | | | DISCHARGE | | | 3°SIMULATION | | | 2°SIMULATION | | | 3°LAKE | | | 2°LAKE | | |
|------------------|---------------------|----------------------|--------------|-----------------|-----------------|------|-----------------|-----------------|------|-----------------|-----------------|------|--------------|------|------|--------------|------|------|--------------|------|------|
| | NIGHT ^b | | | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN |
| 6 | ^a 1023 | 15.8 ^c | 14.3 | 4.97 | 5.54 | 5.26 | 5.25 | 5.11 | 5.18 | 7.06 | 6.75 | 6.90 | 5.99 | 5.88 | 5.94 | NOT REQUIRED | | | NOT REQUIRED | | |
| OCT ^e | ^b 2126 | 16.3 ^c | 13.9 | 4.72 | 5.75 | 5.24 | 5.41 | 5.44 | 5.42 | 0.13 | 5.57 | 2.85 | 4.91 | 6.01 | 5.46 | NOT REQUIRED | | | NOT REQUIRED | | |
| 20 | ^a 1004 | 12.4 ^c | 12.9 | 1.72 | 2.60 | 2.16 | 1.82 | 2.13 | 1.98 | NOT REQUIRED | | | NOT REQUIRED | | | 1.81 | 2.96 | 2.38 | 2.20 | 1.91 | 2.06 |
| OCT ^e | ^b 2121 | 12.2 ^c | 13.0 | 1.51 | 5.61 | 3.56 | 1.52 | 1.70 | 1.61 | NA ^v | 1.05 | - | 1.51 | 1.77 | 1.64 | NOT REQUIRED | | | NOT REQUIRED | | |
| 3 | ^a 1030 | 10.6 ^c | 15.0 | 0.66 | 0.86 | 0.76 | 0.97 | 0.85 | 0.91 | 0.90 | 1.16 | 1.03 | 0.94 | 0.85 | 0.90 | NOT REQUIRED | | | NOT REQUIRED | | |
| NOV ^e | ^b 2104 | 10.6 ^c | 15.1 | NA ^v | 0.89 | - | 1.07 | 1.12 | 1.10 | 1.15 | 0.75 | 0.95 | 0.90 | 0.99 | 0.94 | NOT REQUIRED | | | NOT REQUIRED | | |
| 17 | ^a 1030 | 7.8 ^c | 12.9 | 0.48 | 0.94 | 0.71 | 0.62 | 0.48 | 0.55 | 0.70 | 0.52 | 0.61 | 0.56 | 0.58 | 0.57 | NO SAMPLE | | | NO SAMPLE | | |
| NOV ^e | ^b 2247 | 8.0 ^c | 14.1 | 0.48 | 0.63 | 0.56 | 0.54 | 0.32 | 0.43 | 0.28 | 0.28 | 0.28 | 0.33 | 0.33 | 0.33 | NOT REQUIRED | | | NOT REQUIRED | | |
| 1 | ^a 1105 | 3.8 ^c | 14.5 | NA ⁿ | NA ⁿ | - | NA ⁿ | 2.14 | - | 1.74 | 2.61 | 2.18 | 2.52 | 2.84 | 2.68 | NOT REQUIRED | | | NOT REQUIRED | | |
| DEC ^e | ^a 2232 | 3.8 ^c | 14.6 | NA ⁿ | NA ⁿ | - | NA ⁿ | NA ⁿ | - | NA ⁿ | NA ⁿ | - | 4.57 | 1.43 | 3.00 | NOT REQUIRED | | | NOT REQUIRED | | |
| 9, | ^a 10 DEC | 3.0 ^c | 16.5 | 0.90 | 1.51 | 1.20 | 1.31 | - | - | - | - | - | - | - | - | - | | | - | | |
| 10, | ^a 0925 | 3.0 ^c | 16.5 | 0.90 | 1.51 | 1.20 | 1.31 | - | - | - | - | - | - | - | - | - | | | - | | |
| DEC ^e | ^b 2109 | 5.3 ^c | 16.3 | 1.05 | 1.51 | 1.28 | 1.40 | 1.37 | 1.38 | 0.94 | 0.98 | 0.96 | - | - | - | - | | | - | | |
| 15, | ^a 15 DEC | 1.4 ^c | 15.3 | 6.40 | 1.30 | 3.85 | 2.19 | 2.11 | 2.15 | 1.20 | 1.75 | 1.48 | 2.04 | 1.76 | 1.90 | NO SAMPLE | | | NO SAMPLE | | |
| 19, | ^a 19 DEC | 2.6 ^c | 13.1 | 0.52 | 0.76 | 0.64 | 0.48 | 0.53 | 0.50 | 0.61 | 0.41 | 0.51 | 0.61 | 0.53 | 0.57 | NOT REQUIRED | | | NOT REQUIRED | | |
| DEC ^e | ^a 2130 | 2.6 ^c | 13.1 | 0.52 | 0.76 | 0.64 | 0.48 | 0.53 | 0.50 | 0.61 | 0.41 | 0.51 | 0.61 | 0.53 | 0.57 | NOT REQUIRED | | | NOT REQUIRED | | |

^{a/b} Time in 2400 hrs. of Intake Sample

^c Intake temperature before tempering

^d Discharge - Intake Temperature

^e C-14; 1 light and 1 dark bottle, mg C/m³/hr

^f C-14, 2 light and 1 dark bottle, mg C/m³/hr

^g Intake temperature after tempering

^h 96 hr incubation period

ⁱ Collections at sites 2° and 3°F lower than boil temperature (samples were not collected in boil)

^j Same collection as 1 Dec

NA = Not available

NA^v = Light bottle reading not available

NR = Not required in work scope

NAⁿ = Not analyzed

- = Not applicable

APPENDIX VIII B-1

ABUNDANCE* OF ZOOPLANKTON AT THE DISCHARGE AFTBAY

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - APRIL - JUNE 1976

| SPECIES | 28 APR | | | 26 MAY | | | 23 JUN | | |
|-------------------------------|--------|------|--------|--------|-------|---------|--------|-------|---------|
| | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN |
| PROTOZOA | | | | | | | | | |
| SARCODINA | | | | | | | | | |
| <u>Diffugia</u> sp. | | | | | | | | | |
| SUCTORIA | | | | | | | | | |
| <u>Acineta</u> sp. | | | | | | | 194 | 0 | 97.0 |
| <u>Paracineta</u> sp. | | | | 0 | 1064 | 532.0 | | | |
| <u>Staurophrya elegans</u> | | | | | | | | | |
| <u>Thecacineta</u> sp. | 654 | 2790 | 1722.0 | | | | 194 | 5148 | 2671.0 |
| <u>Tokophrya</u> sp. | | | | | | | | | |
| CILIATA | | | | | | | | | |
| <u>Codonella cratera</u> | | | | 1512 | 2128 | 1820.0 | | | |
| <u>Epistylidae</u> | 0 | 279 | 139.5 | | | | | | |
| <u>Vorticellidae</u> | 9810 | 6696 | 8253.0 | 126 | 0 | 63.0 | 0 | 2106 | 1053.0 |
| ROTIFERA | | | | | | | | | |
| <u>Ascomorpha eucaudis</u> | | | | | | | 194 | 468 | 331.0 |
| <u>Asplanchna priodonta</u> | 1090 | 1116 | 1103.0 | 252 | 266 | 259.0 | 4656 | 4446 | 4551.0 |
| <u>Bdelloidea</u> (order) | 1526 | 837 | 1181.5 | | | | 194 | 234 | 214.0 |
| <u>Brachionus angularis</u> | 1526 | 3069 | 2297.5 | 630 | 798 | 714.0 | 388 | 0 | 194.0 |
| <u>B. caudatus</u> | | | | | | | 0 | 234 | 117.0 |
| <u>B. calyciflorus</u> | 5886 | 6696 | 6291.0 | 1386 | 1862 | 1624.0 | | | |
| <u>B. havanaensis</u> | | | | | | | | | |
| <u>B. quadridentatus</u> | 436 | 558 | 497.0 | | | | | | |
| <u>B. urceolaris</u> | | | | | | | | | |
| <u>Cephalodella</u> sp. | 218 | 279 | 248.5 | | | | 0 | 234 | 117.0 |
| <u>Chromogaster ovalis</u> | | | | | | | | | |
| <u>Collotheca mutabilis</u> | | | | 126 | 0 | 63.0 | 0 | 468 | 234.0 |
| <u>Colurella</u> sp. | | | | | | | | | |
| <u>Conochilus unicornis</u> | | | | | | | 388 | 936 | 662.0 |
| <u>Conochiloides</u> sp. | | | | | | | | | |
| <u>Euchlanis dilatata</u> | | | | | | | | | |
| <u>Euchlanis</u> sp. | | | | 252 | 0 | 126.0 | | | |
| <u>Filinia longiseta</u> | 654 | 0 | 327.0 | 126 | 0 | 63.0 | | | |
| <u>Hexarthra</u> sp. | | | | | | | | | |
| <u>Kellicottia longispina</u> | 0 | 279 | 139.5 | 1764 | 532 | 1148.0 | 46560 | 80496 | 63528.0 |
| <u>Keratella crassa</u> | | | | | | | 2716 | 5148 | 3932.0 |
| <u>K. hiemalis</u> | 436 | 837 | 636.5 | 126 | 0 | 63.0 | | | |
| <u>K. cochlearis</u> | | | | 126 | 0 | 63.0 | 388 | 0 | 194.0 |
| <u>K. earlinae</u> | 0 | 279 | 139.5 | 126 | 0 | 63.0 | 9700 | 7956 | 8828.0 |
| <u>K. quadrata</u> | 2834 | 4743 | 3788.5 | 10584 | 29526 | 20055.0 | 8924 | 12870 | 10897.0 |
| <u>K. valga</u> | | | | | | | | | |
| <u>Lecane</u> sp. | | | | | | | | | |
| <u>Notholca acuminata</u> | 3270 | 5022 | 4146.0 | 882 | 266 | 574.0 | | | |
| <u>N. foliacea</u> | | | | | | | | | |
| <u>N. squamula</u> | 0 | 837 | 418.5 | 504 | 532 | 518.0 | | | |
| <u>N. striata</u> | | | | | | | | | |

*Number of organisms/m³; day collections

APPENDIX VIIIB-1 (Continued)

ABUNDANCE* OF ZOOPLANKTON AT THE DISCHARGE AFTBAY (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - APRIL - JUNE 1976

| SPECIES (continued) | 28 APR | | | 26 MAY | | | 23 JUN | | |
|--------------------------------|--------|------|--------|--------|------|--------|--------|-------|---------|
| | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN |
| ROTIFERA (continued) | | | | | | | | | |
| <u>Ploesoma lenticulare</u> | | | | | | | | | |
| <u>P. hudsoni</u> | | | | | | | 0 | 468 | 234.0 |
| <u>P. truncatum</u> | | | | | | | 388 | 702 | 545.0 |
| <u>Ploesoma sp.</u> | | | | | | | | | |
| <u>Polyarthra vulgaris</u> | 0 | 2511 | 1255.5 | 0 | 266 | 133.0 | 2134 | 1404 | 1769.0 |
| <u>P. dolichoptera</u> | 872 | 1395 | 1133.5 | 3024 | 2128 | 2576.0 | 11834 | 14274 | 13054.0 |
| <u>P. euryptera</u> | | | | | | | | | |
| <u>P. major</u> | | | | 126 | 0 | 63.0 | | | |
| <u>P. remata</u> | | | | 126 | 0 | 63.0 | 0 | 234 | 117.0 |
| <u>Polyarthra sp.</u> | | | | | | | | | |
| <u>Synchaeta lackowitziana</u> | 6104 | 6417 | 6260.5 | 8316 | 3458 | 5887.0 | 0 | 234 | 117.0 |
| <u>S. pectinata</u> | 11554 | 4185 | 7869.5 | 11214 | 5586 | 8400.0 | | | |
| <u>S. tremula</u> | | | | 0 | 266 | 133.0 | | | |
| <u>S. stylata</u> | | | | | | | 101656 | 90090 | 95873.0 |
| <u>Trichocerca multicornis</u> | | | | | | | 0 | 234 | 117.0 |
| <u>T. cylindrica</u> | | | | | | | | | |
| <u>Trichotria sp.</u> | | | | | | | | | |
| COPEPODA (ARTHROPODA) | | | | | | | | | |
| Copepod nauplii | 4360 | 3906 | 4133.0 | 6426 | 7448 | 6937.0 | 4850 | 7488 | 6169.0 |
| CALANOIDA | | | | | | | | | |
| <u>Diaptomus spp.</u> | | | | | | | | | |
| <u>Eurytemora affinis</u> | | | | | | | | | |
| Calanoid - juvenile | 218 | 279 | 248.5 | 252 | 0 | 126.0 | 194 | 468 | 331.0 |
| CYCLOPOIDA | | | | | | | | | |
| <u>Acanthocyclops vernalis</u> | | | | | | | | | |
| <u>Diacyclops bicuspidatus</u> | | | | | | | | | |
| <u>thomasi</u> | 1090 | 558 | 824.0 | 0 | 266 | 133.0 | | | |
| <u>Tropocyclops prasinus</u> | | | | | | | | | |
| <u>mexicanus</u> | | | | | | | | | |
| Cyclopoid - juvenile | 3488 | 3627 | 3557.5 | 6426 | 5320 | 5873.0 | 1552 | 3510 | 2531.0 |
| HARPACTICOIDA | | | | | | | | | |
| Harpacticoid - juvenile | | | | | | | | | |
| CLADOCERA (ARTHROPODA) | | | | | | | | | |
| <u>Alona affinis</u> | | | | | | | | | |
| <u>Alona guttata</u> | | | | | | | | | |
| <u>Bosmina longirostris</u> | | | | 378 | 532 | 455.0 | 6402 | 5850 | 6126.0 |
| <u>Ceriodaphnia lacustris</u> | | | | | | | | | |
| <u>Chydorus sphaericus</u> | 2834 | 1116 | 1975.0 | | | | 0 | 702 | 351.0 |
| <u>Daphnia longiremis</u> | | | | | | | | | |
| <u>Daphnia retrocurva</u> | 0 | 279 | 139.5 | | | | | | |
| <u>Daphnia sp.</u> | | | | | | | | | |
| <u>Eubosmina coregoni</u> | | | | | | | | | |
| <u>Leydigia quadrangularis</u> | 0 | 279 | 139.5 | | | | | | |

*Number of organisms/m³; day collections

APPENDIX VIIIB-1 (Continued)

ABUNDANCE* OF ZOOPLANKTON AT THE DISCHARGE AFTBAY (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - JULY - SEPTEMBER 1976

| SPECIES | 29 JUL | | | 25 AUG | | | 22 SEP | | |
|-------------------------------|--------|-------|---------|--------|-------|---------|--------|-------|---------|
| | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN |
| PROTOZOA | | | | | | | | | |
| SARCODINA | | | | | | | | | |
| <u>Diffugia</u> sp. | | | | 29200 | 42320 | 35760.0 | 2460 | 7875 | 5167.5 |
| SUCTORIA | | | | | | | | | |
| <u>Acineta</u> sp. | 1580 | 1875 | 1727.5 | 0 | 1840 | 920.0 | | | |
| <u>Paracineta</u> sp. | | | | | | | | | |
| <u>Staurophrya elegans</u> | | | | | | | | | |
| <u>Thecacineta</u> sp. | | | | 1460 | 0 | 730.0 | | | |
| <u>Tokophrya</u> sp. | | | | | | | | | |
| CILIATA | | | | | | | | | |
| <u>Codonella cratera</u> | 9480 | 12500 | 10990.0 | 2920 | 5520 | 4220.0 | 7995 | 19950 | 13972.5 |
| <u>Epistylidae</u> | 0 | 10000 | 5000.0 | | | | | | |
| <u>Vorticellidae</u> | | | | 11680 | 0 | 5840.0 | | | |
| ROTIFERA | | | | | | | | | |
| <u>Ascomorpha eucaudis</u> | | | | | | | | | |
| <u>Asplanchna priodonta</u> | 2370 | 3750 | 3060.0 | 0 | 1840 | 920.0 | | | |
| <u>Bdelloidea</u> (order) | | | | 1460 | 0 | 730.0 | 0 | 525 | 262.5 |
| <u>Brachionus angularis</u> | | | | 2920 | 0 | 1460.0 | | | |
| <u>B. caudatus</u> | | | | | | | | | |
| <u>B. calyciflorus</u> | | | | | | | | | |
| <u>B. havanaensis</u> | | | | | | | | | |
| <u>B. quadridentatus</u> | | | | | | | | | |
| <u>B. urceolaris</u> | | | | | | | | | |
| <u>Cephalodella</u> sp. | | | | | | | | | |
| <u>Chromogaster ovalis</u> | | | | | | | | | |
| <u>Collotheca mutabilis</u> | | | | 0 | 1840 | 920.0 | | | |
| <u>Colurella</u> sp. | | | | | | | | | |
| <u>Conochilus unicornis</u> | 0 | 625 | 312.5 | 1460 | 5520 | 3490.0 | | | |
| <u>Conochiloides</u> sp. | | | | 0 | 3680 | 1840.0 | | | |
| <u>Euchlanis dilatata</u> | | | | | | | | | |
| <u>Euchlanis</u> sp. | | | | 0 | 1840 | 920.0 | | | |
| <u>Filinia longiseta</u> | 0 | 1250 | 625.0 | 43800 | 40480 | 42140.0 | 2460 | 1575 | 2017.5 |
| <u>Hexarthra</u> sp. | | | | 4380 | 5520 | 4950.0 | | | |
| <u>Kellicottia longispina</u> | 790 | 1875 | 1332.5 | | | | | | |
| <u>Keratella crassa</u> | 14220 | 25000 | 19610.0 | 73000 | 69920 | 71460.0 | 9840 | 13125 | 11482.5 |
| <u>K. hiemalis</u> | | | | | | | | | |
| <u>K. cochlearis</u> | | | | 0 | 1840 | 920.0 | 615 | 525 | 570.0 |
| <u>K. earlinae</u> | 1580 | 0 | 790.0 | 0 | 1840 | 920.0 | 0 | 525 | 262.5 |
| <u>K. quadrata</u> | 2370 | 2500 | 2435.0 | 2920 | 0 | 1460.0 | 0 | 525 | 262.5 |
| <u>K. valga</u> | | | | | | | | | |
| <u>Lecane</u> sp. | | | | | | | | | |
| <u>Notholca acuminata</u> | | | | | | | | | |
| <u>N. foliacea</u> | | | | | | | | | |
| <u>N. squamula</u> | | | | | | | | | |
| <u>N. striata</u> | | | | | | | | | |

*Number of organisms/m³; day collections

APPENDIX VIIIB-1 (Continued)

ABUNDANCE* OF ZOOPLANKTON AT THE DISCHARGE AFTBAY (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - JULY - SEPTEMBER 1976

| SPECIES (continued) | 29 JUL | | | 25 AUG | | | 22 SEP | | |
|--------------------------------|--------|--------|----------|--------|--------|----------|--------|-------|---------|
| | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN |
| ROTIFERA (continued) | | | | | | | | | |
| <u>Ploesoma lenticulare</u> | | | | 13140 | 0 | 6570.0 | 615 | 525 | 570.0 |
| <u>P. hudsoni</u> | 0 | 625 | 312.5 | | | | | | |
| <u>P. truncatum</u> | 21330 | 29375 | 25352.5 | 5840 | 5520 | 5680.0 | 2460 | 9450 | 5955.0 |
| <u>Ploesoma sp.</u> | | | | | | | | | |
| <u>Polyarthra vulgaris</u> | 3950 | 4375 | 4162.5 | 11680 | 18400 | 15040.0 | 12915 | 18900 | 15907.5 |
| <u>P. dolichoptera</u> | 3160 | 9375 | 6267.5 | | | | 0 | 1050 | 525.0 |
| <u>P. euryptera</u> | | | | 0 | 47840 | 23920.0 | 1230 | 1050 | 1140.0 |
| <u>P. major</u> | | | | 46720 | 14720 | 30720.0 | 6150 | 3150 | 4650.0 |
| <u>P. remata</u> | | | | 0 | 3680 | 1840.0 | 1230 | 0 | 615.0 |
| <u>Polyarthra sp.</u> | | | | | | | | | |
| <u>Synchaeta lackowitziana</u> | | | | | | | 0 | 525 | 262.5 |
| <u>S. pectinata</u> | | | | | | | | | |
| <u>S. tremula</u> | | | | | | | | | |
| <u>S. stylata</u> | 0 | 625 | 312.5 | 7300 | 5520 | 6410.0 | 615 | 1050 | 832.5 |
| <u>Trichocerca multierinis</u> | 3950 | 3125 | 3537.5 | 24820 | 18400 | 21610.0 | 3690 | 7350 | 5520.0 |
| <u>T. cylindrica</u> | | | | 1460 | 1840 | 1650.0 | | | |
| <u>Trichotria sp.</u> | | | | | | | | | |
| COPEPODA (ARTHROPODA) | | | | | | | | | |
| Copepod nauplii | 14220 | 29375 | 21797.5 | 14600 | 12880 | 13740.0 | 8610 | 7350 | 7980.0 |
| CALANOIDA | | | | | | | | | |
| <u>Diaptomus spp.</u> | | | | | | | | | |
| <u>Eurytemora affinis</u> | | | | | | | | | |
| Calanoid - juvenile | 0 | 625 | 312.5 | 0 | 1840 | 920.0 | 0 | 525 | 626.5 |
| CYCLOPOIDA | | | | | | | | | |
| <u>Acanthocyclops vernalis</u> | | | | | | | | | |
| <u>Diacyclops bicuspidatus</u> | | | | | | | | | |
| <u>thomasi</u> | 0 | 625 | 312.5 | 1460 | 0 | 730.0 | 0 | 525 | 262.5 |
| <u>Tropocyclops prasinus</u> | | | | | | | | | |
| <u>mexicanus</u> | | | | 2920 | 0 | 1460.0 | 0 | 4725 | 2362.5 |
| Cyclopoid - juvenile | 18170 | 26250 | 22210.0 | 4380 | 14720 | 9550.0 | 24600 | 23100 | 23850.0 |
| HARPACTICOIDA | | | | | | | | | |
| Harpacticoid - juvenile | | | | | | | | | |
| CLADOCERA (ARTHROPODA) | | | | | | | | | |
| <u>Alona affinis</u> | | | | | | | 0 | 1050 | 525.0 |
| <u>Alona guttata</u> | | | | | | | | | |
| <u>Bosmina longirostris</u> | 86110 | 148125 | 117117.5 | 166440 | 167440 | 166940.0 | 1845 | 6825 | 4335.0 |
| <u>Ceriodaphnia lacustris</u> | | | | 24820 | 12880 | 18850.0 | 1230 | 1050 | 1140.0 |
| <u>Chydorus sphaericus</u> | | | | 2920 | 0 | 1460.0 | 0 | 525 | 262.5 |
| <u>Daphnia longiremis</u> | | | | | | | | | |
| <u>Daphnia retrocurva</u> | 790 | 1250 | 1020.0 | 0 | 3680 | 1840.0 | 4305 | 4200 | 4252.5 |
| <u>Daphnia sp.</u> | | | | 0 | 1840 | 920.0 | | | |
| <u>Eubosmina coregoni</u> | | | | | | | | | |
| <u>Leydigia quadrangularis</u> | | | | | | | | | |

*Number of organisms/m³; day collections

APPENDIX VIIIB-1 (Continued)

ABUNDANCE* OF ZOOPLANKTON AT THE DISCHARGE AFTBAY (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - OCTOBER - DECEMBER 1976

| SPECIES | 20 OCT | | | 17 NOV | | | 19 DEC | | |
|-------------------------------|--------|------|--------|--------|------|--------|--------|-----|-------|
| | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN |
| PROTOZOA | | | | | | | | | |
| SARCODINA | | | | | | | | | |
| <u>Diffflugia</u> sp. | | | | | | | 71 | 0 | 35.5 |
| SUCTORIA | | | | | | | | | |
| <u>Acineta</u> sp. | | | | 328 | 0 | 164.0 | 71 | 0 | 35.5 |
| <u>Paracineta</u> sp. | | | | | | | | | |
| <u>Staurophrya elegans</u> | | | | | | | | | |
| <u>Thecacineta</u> sp | | | | 1312 | 0 | 656.0 | 0 | 238 | 119.0 |
| <u>Tokophrya</u> sp. | | | | | | | | | |
| CILIATA | | | | | | | | | |
| <u>Codonella cratera</u> | 540 | 896 | 718.0 | 656 | 484 | 570.0 | 0 | 119 | 59.5 |
| <u>Epistylidae</u> | | | | | | | | | |
| <u>Vorticellidae</u> | | | | | | | | | |
| ROTIFERA | | | | | | | | | |
| <u>Ascomorpha eucaudis</u> | | | | | | | | | |
| <u>Asplanchna priodonta</u> | 540 | 448 | 494.0 | 5248 | 4356 | 4802.0 | 71 | 476 | 273.5 |
| <u>Bdelloidea</u> (order) | | | | | | | | | |
| <u>Brachionus angularis</u> | | | | | | | 0 | 119 | 59.5 |
| <u>B. caudatus</u> | | | | | | | | | |
| <u>B. calyciflorus</u> | | | | | | | | | |
| <u>B. havanaensis</u> | | | | | | | | | |
| <u>B. quadridentatus</u> | | | | | | | | | |
| <u>B. urceolaris</u> | | | | | | | | | |
| <u>Cephalodella</u> sp. | | | | | | | | | |
| <u>Chromogaster ovalis</u> | | | | | | | | | |
| <u>Collotheca mutabilis</u> | 270 | 0 | 135.0 | 328 | 968 | 648.0 | 0 | 238 | 119.0 |
| <u>Colurella</u> sp. | | | | | | | | | |
| <u>Conochilus unicornis</u> | | | | | | | | | |
| <u>Conochiloides</u> sp. | | | | | | | | | |
| <u>Euchlanis dilatata</u> | | | | | | | | | |
| <u>Euchlanis</u> sp. | | | | | | | | | |
| <u>Filinia longiseta</u> | | | | | | | 0 | 119 | 59.5 |
| <u>Hexarthra</u> sp. | | | | | | | | | |
| <u>Kellicottia longispina</u> | 0 | 448 | 224.0 | 656 | 968 | 812.0 | 143 | 357 | 250.0 |
| <u>Keratella crassa</u> | 540 | 2688 | 1614.0 | 2952 | 3388 | 3170.0 | | | |
| <u>K. hiemalis</u> | | | | | | | | | |
| <u>K. cochlearis</u> | 270 | 0 | 135.0 | | | | | | |
| <u>K. earlinae</u> | | | | 0 | 484 | 242.0 | | | |
| <u>K. quadrata</u> | | | | | | | 0 | 119 | 59.5 |
| <u>K. valga</u> | | | | | | | | | |
| <u>Lecane</u> sp. | | | | | | | | | |
| <u>Notholca acuminata</u> | | | | | | | 0 | 119 | 59.5 |
| <u>N. foliacea</u> | | | | | | | 0 | 119 | 59.5 |
| <u>N. squamula</u> | | | | | | | | | |
| <u>N. striata</u> | | | | | | | | | |

*Number of organisms/m³; day collections

APPENDIX VIIIB-1 (Continued)

ABUNDANCE* OF ZOOPLANKTON AT THE DISCHARGE AFTBAY (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - OCTOBER - DECEMBER 1976

| SPECIES (continued) | 20 OCT | | | 17 NOV | | | 19 DEC | | |
|--------------------------------|--------|-------|---------|--------|-------|---------|--------|------|--------|
| | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN | R-1 | R-2 | MEAN |
| ROTIFERA (continued) | | | | | | | | | |
| <u>Ploesoma lenticulare</u> | | | | | | | | | |
| <u>P. hudsoni</u> | | | | | | | | | |
| <u>P. truncatum</u> | | | | | | | | | |
| <u>Ploesoma sp.</u> | | | | | | | | | |
| <u>Polyarthra vulgaris</u> | 1350 | 1344 | 1347.0 | 984 | 484 | 734.0 | 143 | 238 | 190.5 |
| <u>P. dolichoptera</u> | 0 | 448 | 224.0 | 328 | 968 | 648.0 | 143 | 357 | 250.0 |
| <u>P. euryptera</u> | 0 | 896 | 448.0 | | | | | | |
| <u>P. major</u> | 810 | 1792 | 1301.0 | 0 | 484 | 242.0 | 143 | 0 | 71.5 |
| <u>P. remata</u> | | | | | | | | | |
| <u>Polyarthra sp.</u> | | | | | | | | | |
| <u>Synchaeta lackowitziana</u> | | | | | | | | | |
| <u>S. pectinata</u> | | | | 656 | 484 | 570.0 | 0 | 119 | 59.5 |
| <u>S. tremula</u> | | | | | | | | | |
| <u>S. stylata</u> | 0 | 896 | 448.0 | | | | | | |
| <u>Trichocerca multicornis</u> | 1080 | 1344 | 1212.0 | 656 | 968 | 812.0 | | | |
| <u>T. cylindrica</u> | | | | | | | | | |
| <u>Trichotria sp.</u> | | | | | | | | | |
| COPEPODA (ARTHROPODA) | | | | | | | | | |
| Copepod nauplii | 2160 | 10752 | 6456.0 | 16728 | 16456 | 16592.0 | 1286 | 1904 | 1595.0 |
| CALANOIDA | | | | | | | | | |
| <u>Diaptomus spp.</u> | | | | 328 | 0 | 164.0 | | | |
| <u>Eurytemora affinis</u> | | | | 328 | 0 | 164.0 | 71 | 0 | 35.5 |
| <u>Calanoid - juvenile</u> | 270 | 448 | 359.0 | 1640 | 0 | 820.0 | 0 | 119 | 59.5 |
| CYCLOPOIDA | | | | | | | | | |
| <u>Acanthocyclops vernalis</u> | | | | | | | | | |
| <u>Diacyclops bicuspidatus</u> | | | | | | | | | |
| <u>thomasi</u> | 0 | 448 | 224.0 | 1312 | 2904 | 2108.0 | 71 | 119 | 95.0 |
| <u>Tropocyclops prasinus</u> | | | | | | | | | |
| <u>mexicanus</u> | 1620 | 2688 | 2154.0 | 7544 | 7260 | 7402.0 | 71 | 119 | 95.0 |
| <u>Cyclopoid - juvenile</u> | 7020 | 29120 | 18070.0 | 42312 | 62436 | 52374.0 | 1000 | 4167 | 2583.5 |
| HARPACTICOIDA | | | | | | | | | |
| Harpacticoid - juvenile | | | | | | | | | |
| CLADOCERA (ARTHROPODA) | | | | | | | | | |
| <u>Alona affinis</u> | | | | | | | | | |
| <u>Alona guttata</u> | | | | | | | | | |
| <u>Bosmina longirostris</u> | 1890 | 8512 | 5201.0 | 14760 | 17908 | 16334.0 | 71 | 0 | 35.5 |
| <u>Ceriodaphnia lacustris</u> | 0 | 448 | 224.0 | 328 | 0 | 164.0 | | | |
| <u>Chydorus sphaericus</u> | | | | | | | | | |
| <u>Daphnia longiremis</u> | | | | | | | | | |
| <u>Daphnia retrocurva</u> | 2970 | 9408 | 6189.0 | 7544 | 4840 | 6192.0 | 71 | 0 | 35.5 |
| <u>Daphnia sp.</u> | | | | | | | | | |
| <u>Eubosmina coregoni</u> | 270 | 1344 | 807.0 | | | | | | |
| <u>Leydigia quadrangularis</u> | | | | | | | | | |

*Number of organisms/m³; day collections

Re 15.

APPENDIX VIIIB-2a

MORTALITY OF SELECTED TAXA OF
ARTHROPODA: COPEPODA (IN-PLANT)

NUMBER OF CALANOIDA (ARTHR COPEPODA) OBSERVED IN VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP (°C) ^c | ΔT ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | | |
|------------------------|--|-------------------------------------|-----------------|-----------------------------|-----|------------------------------|-----|------------------------|-----------------------------|-----|------------------------------|-----|------------------------|-----------------------------|--------------|------------------------------|-----|------------------------|-----------------------------|--------------|------------------------------|-----|------------------------|-----|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD ^g | |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^h | R-1 | R-2 | R-1 | R-2 | MEAN ^h | R-1 | R-2 | R-1 | R-2 | MEAN ^h | R-1 | R-2 | R-1 | R-2 | MEAN ^h | |
| 14 APR ⁱ | a | 1130 | 5.1 | 14.0 | 5 | 2 | 13 | 5 | 61 | 3 | 7 | 4 | 15 | 47 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2200 | 5.8 | 13.7 | 2 | 3 | 8 | 9 | 71 | 3 | 3 | 8 | 5 | 54 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| 28-29 APR | a | 28 APR 1200 | 8.9 | 14.6 | 0 | 1 | 1 | 1 | 50 | 1 | 1 | 1 | 1 | 0 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 29 APR 0045 | 8.6 | 13.4 | - | 1 | 0 | 1 | 0 | - | 2 | 0 | 2 | 100 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| 12 MAY | a | 1120 | 10.4 | 14.4 | 0 | 3 | 3 | 4 | 57 | 1 | 5 | 2 | 8 | 40 | 1 | - | 5 | 0 | 80 | 3 | 1 | 5 | 2 | 43 |
| | b | 2400 | 9.2 | 14.5 | 0 | - | 3 | 0 | 100 | 2 | - | 2 | 0 | 0 | 0 | 0 | 2 | 4 | 100 | 0 | 0 | 1 | 3 | 100 |
| 26 MAY | a | 1000 | 10.9 | 14.4 | - | - | 0 | 0 | - | 2 | - | 2 | 0 | 0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2400 | 11.1 | 14.4 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | 1 | 0 | 2 | 50 | 1 | - | 1 | 0 | 0 |
| 9 JUN | a | 1130 | 11.7 | 12.4 | - | 0 | 0 | 1 | 100 | - | 0 | 0 | 1 | 100 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | b | 2300 | 14.1 | 14.3 | - | - | 0 | 0 | - | - | 1 | 0 | 1 | 0 | - | - | 0 | 0 | - | - | 0 | 0 | 1 | 100 |
| 23,28 JUN | a | 23 JUN 1100 | 17.4 | 15.5 | - | - | 0 | 0 | - | 1 | 1 | 1 | 2 | 33 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 28 JUN 2245 | 15.9 | 15.6 | 0 | 0 | 3 | 4 | 100 | 2 | 0 | 2 | 3 | 60 | - | - | 0 | 0 | - | - | 3 | 0 | 3 | 0 |
| 20 JUL | a | 1200 | 19.9 | 14.2 | 3 | 4 | 5 | 4 | 22 | - | 1 | 0 | 1 | 0 | 1 | 0 | 6 | 15 | 95 | 4 | 2 | 12 | 14 | 77 |
| | b | 2305 | 20.3 | 15.1 | - | 0 | 0 | 3 | 100 | - | 2 | 0 | 3 | 33 | 3 | - | 4 | 0 | 25 | 2 | 1 | 2 | 1 | 0 |
| 29 JUL | a | 1200 | 19.8 | 14.0 | - | - | 0 | 0 | - | - | 0 | 0 | 1 | 100 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2320 | 19.6 | 12.2 | 0 | - | 1 | 0 | 100 | 0 | 1 | 2 | 1 | 67 | 53 | - | 65 | 0 | 18 | - | 1 | 0 | 1 | 0 |
| 11 AUG | a | 1140 | 19.2 | 15.6 | 6 | 1 | 6 | 2 | 12 | 1 | 0 | 3 | 1 | 75 | 1 | 1 | 1 | 1 | 0 | - | 3 | 0 | 3 | 0 |
| | b | 2315 | 19.9 | 14.5 | 1 | 0 | 2 | 4 | 83 | 0 | 4 | 4 | 6 | 60 | - | - | 0 | 0 | - | 2 | - | 2 | 0 | 0 |
| 25 AUG | a | 1145 | 21.8 | 15.7 | 3 | 0 | 3 | 1 | 25 | - | 0 | 0 | 1 | 100 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2350 | 21.9 | 17.7 | - | 2 | 0 | 2 | 0 | - | 1 | 0 | 2 | 50 | 1 | 2 | 1 | 2 | 0 | - | 3 | 0 | 3 | 0 |

NUMBER OF CALANOIDA (ARTHROPODA-COPEPODA) OBSERVED IN VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP ^c (°C) ^c | ΔT^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | |
|---------------------|--|--|--------------|-----------------------------|-----|------------------------------|-----|------------------------|-----------------------------|-----|------------------------------|-----|------------------------|-----------------------------|-----|------------------------------|-----|------------------------|-----------------------------|-----|------------------------------|-----|------------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD ^g |
| | | | | R-1 | R-2 | R-1 | R-2 | | R-1 | R-2 | R-1 | R-2 | | R-1 | R-2 | R-1 | R-2 | | R-1 | R-2 | R-1 | R-2 | |
| 8 SEP | a | 1130 | 19.7 | - | - | 0 | 1 | 100 | - | - | 0 | 1 | 100 | - | 44 | 0 | 55 | 20 | - | 2 | 0 | 2 | 0 |
| | b | 2305 | 21.1 | - | 2 | 0 | 2 | 0 | 0 | - | 2 | 0 | 100 | - | - | 0 | 0 | - | 5 | - | 6 | - | 17 |
| 22, 27 SEP | a 22 SEP | 1205 | 18.4 | - | - | 0 | 0 | - | - | 0 | 0 | 1 | 100 | - | - | 0 | 0 | - | - | 1 | 0 | 1 | 0 |
| | b 27 SEP | 2318 | 16.2 | 1 | 3 | 1 | 3 | 0 | - | 1 | 0 | 1 | 0 | - | - | 0 | 0 | - | - | 1 | 0 | 1 | 0 |
| 6 OCT | a | 1027 | 15.7 | 3 | 2 | 3 | 4 | 29 | 1 | - | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 50 | - | - | 0 | 0 | - |
| | b | 2142 | 16.0 | - | 1 | 0 | 3 | 67 | 2 | - | 2 | 0 | 0 | 0 | - | 1 | 0 | 100 | 2 | 1 | 3 | 5 | 63 |
| 20 OCT | a | 1110 | 12.1 | - | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 100 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2358 | 12.0 | 1 | 0 | 1 | 1 | 50 | 2 | - | 2 | 0 | 0 | 1 | 0 | 1 | 1 | 50 | 2 | 1 | 2 | 2 | 25 |
| 20 OCT ^h | a | 1425 | NA | 1 | 1 | 1 | 1 | 0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 3 NOV | a | 1210 | 10.4 | 1 | - | 2 | 0 | 50 | - | 0 | 0 | 1 | 100 | 1 | 0 | 3 | 2 | 80 | 1 | 0 | 2 | 3 | 80 |
| | b | 2345 | 10.4 | - | 2 | 0 | 3 | 33 | 1 | 1 | 3 | 1 | 50 | 1 | 1 | 2 | 3 | 60 | 1 | 3 | 2 | 5 | 43 |
| 17 NOV | a | 1210 | 8.2 | 0 | 2 | 5 | 2 | 71 | 5 | - | 7 | 0 | 29 | 2 | 3 | 3 | 4 | 29 | 1 | 0 | 1 | 4 | 80 |
| | b | 2254 | 7.8 | 0 | 5 | 4 | 6 | 50 | 2 | 0 | 2 | 2 | 50 | 0 | - | 1 | 0 | 100 | 2 | - | 2 | 0 | 0 |
| 1 DEC | a | 1230 | 3.2 | 3 | - | 4 | 0 | 25 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | 0 | 0 | 1 | 100 |
| | b | 2308 | 3.5 | - | - | 0 | 0 | - | - | 0 | 0 | 1 | 100 | 1 | - | 1 | 0 | 0 | - | 0 | 0 | 1 | 100 |
| 19 DEC | a | 1155 | 2.2 | - | 2 | 0 | 2 | 0 | 1 | 1 | 1 | 1 | 0 | - | - | 0 | 0 | - | 0 | - | 2 | 0 | 100 |
| | b | 2321 | 2.5 | 3 | - | 3 | 0 | 0 | - | 3 | 0 | 3 | 0 | 3 | 1 | 3 | 1 | 0 | 1 | - | 1 | 0 | 0 |

^{a/b} Time in 2400 hrs of Intake Sample

^c Intake temperature before tempering

^d Discharge - Intake Temperature

^e Number of live organisms observed

^f Total number of organisms observed

NA = Not available

^g Mean % dead equal to total of dead observed in R-1 and R-2 divided by total organisms observed in R-1 and R-2

^h Sample taken from lake in the vicinity of FitzPatrick Intake

ⁱ Immediate analysis; 28 Apr - 19 Dec analysis after 8-hr incubation period

Not applicable

NUMBER OF CYCLOPOIDA (ARTHROPODA) OBSERVED IN VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | Δ T ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | |
|------------------------|--|--------------------------------------|------------------|-----------------------------|-----|------------------------------|-----|-----------|-----------------------------|-----|------------------------------|-----|-----------|-----------------------------|-------------------|------------------------------|-----|-----------|-----------------------------|-----|------------------------------|-----|-----------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | | MEAN ^g | R-1 | R-2 | R-1 | | R-2 | MEAN ^g | R-1 | R-2 | | R-1 | R-2 | MEAN ^g | R-1 | |
| 14 APR ⁱ | ^a 1130 | 5.1 | 14.0 | 25 | 21 | 34 | 40 | 38 | 9 | 26 | 16 | 41 | 39 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | ^b 2200 | 5.8 | 13.7 | 32 | 32 | 61 | 74 | 53 | 28 | 24 | 57 | 62 | 56 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| 28-29 APR | ^a 28 APR 1200 | 8.9 | 14.6 | 8 | 8 | 12 | 15 | 41 | 19 | 12 | 21 | 15 | 14 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | ^b 29 APR 0045 | 8.6 | 13.4 | 5 | 0 | 5 | 9 | 64 | 7 | 11 | 15 | 20 | 49 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| 12 MAY | ^a 1120 | 10.4 | 14.4 | 10 | 21 | 23 | 30 | 28 | 8 | 7 | 13 | 32 | 67 | 6 | 5 | 9 | 7 | 31 | 3 | 2 | 10 | 11 | 76 |
| | ^b 2400 | 9.2 | 14.5 | 12 | 5 | 24 | 11 | 51 | 2 | 7 | 3 | 14 | 47 | 3 | 11 | 13 | 13 | 46 | 1 | 3 | 10 | 9 | 79 |
| 26 MAY | ^a 1000 | 10.9 | 14.4 | 10 | 15 | 36 | 25 | 59 | 13 | 3 | 51 | 21 | 78 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | ^b 2400 | 11.1 | 14.4 | 52 | 50 | 74 | 78 | 33 | 10 | 21 | 25 | 69 | 67 | 21 | 13 | 54 | 116 | 80 | 14 | 5 | 46 | 42 | 80 |
| 9 JUN | ^a 1130 | 11.7 | 12.4 | 5 | 14 | 8 | 14 | 14 | 9 | 3 | 10 | 5 | 20 | 7 | 4 | 14 | 6 | 45 | 4 | 3 | 6 | 9 | 53 |
| | ^b 2300 | 14.1 | 14.3 | 23 | 16 | 29 | 20 | 20 | 1 | 9 | 1 | 12 | 23 | 6 | 8 | 19 | 26 | 69 | 8 | 13 | 22 | 28 | 58 |
| 23,28 JUN | ^a 23 JUN 1100 | 17.4 | 15.5 | 7 | 9 | 7 | 13 | 20 | 3 | 10 | 8 | 15 | 43 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | ^b 28 JUN 2245 | 15.9 | 15.6 | 14 | 15 | 27 | 20 | 38 | 4 | 6 | 6 | 16 | 55 | 10 | 19 | 22 | 39 | 52 | 16 | 32 | 32 | 49 | 41 |
| 20 JUL | ^a 1200 | 19.9 | 14.2 | 27 | 15 | 43 | 22 | 35 | 2 | 7 | 12 | 21 | 73 | 10 | 19 | 27 | 26 | 45 | 18 | 46 | 30 | 89 | 46 |
| | ^b 2305 | 20.3 | 15.1 | 14 | 25 | 25 | 35 | 35 | 12 | 13 | 20 | 45 | 62 | 13 | 9 | 31 | 19 | 56 | 10 | 18 | 21 | 34 | 49 |
| 29 JUL | ^a 1200 | 19.8 | 14.0 | 28 | 41 | 37 | 44 | 15 | 7 | 21 | 23 | 42 | 57 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | ^b 2320 | 19.6 | 12.2 | 125 | 88 | 161 | 128 | 26 | 38 | 91 | 56 | 156 | 39 | 4 | 97 | 4 | 117 | 17 | 99 | 135 | 142 | 172 | 26 |
| 11 AUG | ^a 1140 | 19.2 | 15.6 | 17 | 41 | 24 | 51 | 23 | 10 | 18 | 16 | 40 | 50 | 25 | 15 | 31 | 24 | 27 | 19 | 22 | 28 | 33 | 33 |
| | ^b 2315 | 19.9 | 14.5 | 30 | 25 | 52 | 37 | 38 | 5 | 10 | 25 | 47 | 79 | 39 | 9 | 49 | 14 | 24 | 18 | 11 | 25 | 17 | 31 |
| 25 AUG | ^a 1145 | 21.8 | 15.7 | 7 | 0 | 8 | 2 | 30 | 1 | 0 | 6 | 8 | 93 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | ^b 2350 | 21.9 | 17.7 | 11 | 10 | 12 | 12 | 12 | 0 | 3 | 15 | 12 | 48 | 15 | 16 | 20 | 23 | 28 | 19 | 3 | 20 | 11 | 29 |

NUMBER OF CYCLOPOIDA (ARTHROPODA-COPEPODA) OBSERVED IN VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | Δ T ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | | |
|------------------------|--|--------------------------------------|------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|--------------|------------------------------|-----|-------------------|-----------------------------|--------------|------------------------------|-----|-------------------|-----------------------------|--------------|------------------------------|-----|-------------------|----|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | |
| 8 SEP | a | 1130 | 19.7 | 15.9 | 87 | 88 | 115 | 129 | 28 | 6 | 22 | 42 | 144 | 85 | 79 | 11 | 91 | 11 | 12 | 76 | 77 | 92 | 90 | 16 |
| | b | 2305 | 21.1 | 16.0 | 15 | 29 | 57 | 57 | 53 | 81 | 4 | 145 | 69 | 60 | 28 | 30 | 38 | 53 | 36 | 37 | 29 | 62 | 49 | 41 |
| 22,27 SEP | a 22 SEP 1205 | 18.4 | 14.8 | 37 | 33 | 49 | 40 | 21 | 0 | 25 | 40 | 54 | 73 | 49 | 38 | 50 | 44 | 7 | 44 | 19 | 55 | 30 | 26 | |
| | b 27 SEP 2318 | 16.2 | 14.7 | 35 | 150 | 72 | 188 | 29 | 7 | 111 | 67 | 151 | 46 | 161 | 156 | 191 | 186 | 16 | 160 | 191 | 209 | 228 | 20 | |
| 6 OCT | a | 1027 | 15.7 | 14.7 | 95 | 102 | 119 | 119 | 17 | 21 | 58 | 37 | 92 | 39 | 54 | 104 | 71 | 118 | 16 | 105 | 147 | 121 | 172 | 14 |
| | b | 2142 | 16.0 | 14.4 | 45 | 89 | 64 | 124 | 29 | 22 | 30 | 43 | 45 | 41 | 32 | 63 | 44 | 87 | 27 | 44 | 80 | 54 | 111 | 25 |
| 20 OCT | a | 1110 | 12.1 | 13.6 | 57 | 84 | 85 | 112 | 28 | 4 | 49 | 32 | 72 | 49 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2358 | 12.0 | 13.5 | 60 | 40 | 95 | 84 | 44 | 35 | 66 | 78 | 109 | 46 | 58 | 59 | 76 | 99 | 33 | 74 | 95 | 147 | 137 | 40 |
| 20 OCT ^h | a | 1425 | NA | NA | 162 | 101 | 181 | 168 | 25 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 3 NOV | a | 1210 | 10.4 | 15.5 | 258 | 123 | 296 | 172 | 19 | 32 | 144 | 86 | 211 | 41 | 148 | 78 | 215 | 121 | 33 | 190 | 194 | 255 | 294 | 30 |
| | b | 2345 | 10.4 | 15.4 | 79 | 75 | 116 | 111 | 32 | 30 | 59 | 52 | 102 | 42 | 83 | 49 | 128 | 81 | 37 | 91 | 94 | 140 | 130 | 32 |
| 17 NOV | a | 1210 | 8.2 | 13.6 | 121 | 95 | 166 | 152 | 32 | 67 | 116 | 156 | 150 | 40 | 89 | 133 | 142 | 234 | 41 | 122 | 226 | 205 | 283 | 29 |
| | b | 2254 | 7.8 | 15.0 | 57 | 49 | 129 | 79 | 49 | 8 | 10 | 34 | 39 | 75 | 52 | 16 | 108 | 49 | 57 | 25 | 16 | 57 | 57 | 64 |
| 1 DEC | a | 1230 | 3.2 | 14.8 | 59 | 29 | 64 | 38 | 14 | 23 | 45 | 33 | 52 | 20 | 27 | 12 | 33 | 18 | 24 | 34 | 17 | 45 | 43 | 42 |
| | b | 2308 | 3.5 | 14.9 | 24 | 24 | 41 | 37 | 38 | 9 | 17 | 17 | 29 | 43 | 37 | 16 | 61 | 39 | 47 | 23 | 30 | 45 | 56 | 48 |
| 19 DEC | a | 1155 | 2.2 | 12.8 | 13 | 23 | 18 | 33 | 29 | 9 | 22 | 16 | 37 | 42 | 11 | 14 | 16 | 18 | 26 | 13 | 24 | 28 | 37 | 43 |
| | b | 2321 | 2.5 | 13.8 | 97 | 53 | 132 | 65 | 24 | 10 | 52 | 35 | 95 | 52 | 18 | 43 | 35 | 63 | 38 | 46 | 17 | 94 | 38 | 52 |

a/b Time in 2400 hrs of Intake Sample
c Intake temperature before tempering
d Discharge - Intake Temperature
e Number of live organisms observed
f Total number of organisms observed
NA = Not Available

g Mean % dead equal to total of dead observed in R-1 and R-2 divided
by total organisms observed in R-1 and R-2
h Sample taken from lake in the vicinity of FitzPatrick Intake
i Immediate analysis; 28 Apr - 19 Dec analysis after 8-hr
incubation period

NUMBER OF COPEPODA¹ (ARTHR²) OBSERVED IN VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | | |
|--------------|--|--------------------------------------|-----------------|---------------------|-----|--------------------|-----|-----|---------------------|-----|--------------------|-----|-----|---------------------|-------------------|--------------------|-----|-----|---------------------|--------------|--------------------|-----|-----|-----|
| | | | | NUMBER ^e | | TOTAL ^f | | % | NUMBER ^e | | TOTAL ^f | | % | NUMBER ^e | | TOTAL ^f | | % | NUMBER ^e | | TOTAL ^f | | % | |
| | | | | R-1 | R-2 | R-1 | R-2 | | MEAN ^g | R-1 | R-2 | R-1 | | R-2 | MEAN ^g | R-1 | R-2 | | R-1 | R-2 | MEAN ^g | R-1 | | R-2 |
| 14 APR | a | 1130 | 5.1 | 14.0 | 34 | 27 | 60 | 49 | 44 | 12 | 34 | 26 | 64 | 49 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2200 | 5.8 | 13.7 | 39 | 46 | 84 | 105 | 55 | 31 | 39 | 82 | 100 | 61 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| 28-29 APR | a 28 APR 1200 | 8.9 | 14.6 | 16 | 15 | 41 | 36 | 60 | 31 | 13 | 42 | 30 | 39 | NO SAMPLE | | | | | NO SAMPLE | | | | | |
| | b 29 APR 0045 | 8.6 | 13.4 | 12 | 3 | 22 | 27 | 69 | 7 | 13 | 36 | 41 | 74 | NO SAMPLE | | | | | NO SAMPLE | | | | | |
| 12 MAY | a | 1120 | 10.4 | 14.4 | 30 | 44 | 85 | 116 | 63 | 36 | 35 | 76 | 125 | 65 | 19 | 10 | 46 | 34 | 64 | 14 | 3 | 42 | 34 | 78 |
| | b | 2400 | 9.2 | 14.5 | 33 | 19 | 70 | 38 | 52 | 18 | 23 | 33 | 52 | 52 | 3 | 31 | 54 | 59 | 70 | 11 | 13 | 46 | 44 | 73 |
| 26 MAY | a | 1000 | 10.9 | 14.4 | 2 | 26 | 88 | 5 | 68 | 22 | 9 | 104 | 49 | 80 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2400 | 11.1 | 14.4 | 86 | 64 | 150 | 137 | 48 | 13 | 26 | 44 | 157 | 81 | 38 | 21 | 115 | 227 | 83 | 18 | 6 | 84 | 99 | 87 |
| 9 JUN | a | 1130 | 11.7 | 12.4 | 7 | 19 | 15 | 27 | 38 | 13 | 4 | 18 | 15 | 48 | 7 | 9 | 24 | 22 | 65 | 8 | 3 | 18 | 15 | 67 |
| | b | 2300 | 14.1 | 14.3 | 50 | 27 | 71 | 44 | 33 | 1 | 13 | 2 | 36 | 63 | 6 | 18 | 41 | 62 | 77 | 15 | 20 | 58 | 58 | 70 |
| 23,28 JUN | a 23 JUN 1100 | 17.4 | 15.5 | 13 | 16 | 26 | 35 | 52 | 22 | 15 | 34 | 49 | 55 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | |
| | b 28 JUN 2245 | 15.9 | 15.6 | 21 | 19 | 47 | 37 | 52 | 6 | 11 | 12 | 32 | 61 | 15 | 36 | 38 | 61 | 59 | 20 | 47 | 50 | 91 | 52 | |
| 20 JUL | a | 1200 | 19.9 | 14.2 | 37 | 26 | 63 | 34 | 35 | 5 | 12 | 18 | 33 | 67 | 11 | 19 | 33 | 41 | 59 | 22 | 48 | 42 | 103 | 52 |
| | b | 2305 | 20.3 | 15.1 | 16 | 27 | 37 | 45 | 48 | 12 | 17 | 25 | 68 | 33 | 20 | 12 | 55 | 28 | 61 | 15 | 37 | 31 | 57 | 52 |
| 29 JUL | a | 1200 | 19.8 | 14.0 | 48 | 73 | 65 | 80 | 17 | 13 | 25 | 41 | 91 | 71 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2320 | 19.6 | 12.2 | 129 | 103 | 179 | 170 | 33 | 46 | 94 | 73 | 189 | 47 | 60 | 117 | 79 | 146 | 21 | 128 | 136 | 184 | 183 | 28 |
| 11 AUG | a | 1140 | 19.2 | 15.6 | 27 | 50 | 38 | 66 | 26 | 14 | 19 | 29 | 49 | 58 | 38 | 18 | 52 | 31 | 33 | 23 | 30 | 31 | 51 | 35 |
| | b | 2315 | 19.9 | 14.5 | 39 | 26 | 79 | 51 | 50 | 10 | 29 | 60 | 92 | 74 | 46 | 10 | 67 | 31 | 43 | 29 | 19 | 41 | 43 | 43 |
| 25 AUG | a | 1145 | 21.8 | 15.7 | 26 | 14 | 32 | 38 | 43 | 3 | 2 | 16 | 16 | 84 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2350 | 21.9 | 17.7 | 21 | 14 | 42 | 31 | 52 | 0 | 5 | 28 | 24 | 90 | 24 | 21 | 40 | 43 | 46 | 32 | 9 | 48 | 26 | 45 |

NUMBER OF COPEPODA¹(ARTHROPODA) OBSERVED IN VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | | |
|------------------------|--|--------------------------------------|-----------------|-----------------------------|-----|------------------------------|-----|-----|---------------------------|-----------------------------|-----|------------------------------|-----|--------------|---------------------------|-----------------------------|-----|------------------------------|--------------|--------------|---------------------------|-----|-----|-----|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % | DEAD MEAN ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % | DEAD MEAN ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % | DEAD MEAN ^g | | | |
| | | | | R-1 | R-2 | R-1 | R-2 | | | R-1 | R-2 | R-1 | R-2 | | | R-1 | R-2 | R-1 | R-2 | | | R-1 | R-2 | R-1 |
| 8 SEP | a | 1130 | 19.7 | 15.9 | 90 | 100 | 123 | 152 | 31 | 11 | 28 | 54 | 176 | 83 | 91 | 59 | 107 | 72 | 16 | 76 | 95 | 97 | 113 | 19 |
| | b | 2305 | 21.1 | 16.0 | 25 | 42 | 76 | 85 | 58 | 88 | 6 | 166 | 88 | 63 | 28 | 38 | 43 | 63 | 38 | 52 | 29 | 83 | 56 | 42 |
| 22,27 SEP | a | 22 SEP 1205 | 18.4 | 14.8 | 41 | 37 | 70 | 46 | 33 | 2 | 25 | 54 | 69 | 78 | 55 | 45 | 57 | 54 | 10 | 47 | 28 | 64 | 43 | 30 |
| | b | 27 SEP 2318 | 16.2 | 14.7 | 36 | 165 | 89 | 208 | 32 | 15 | 118 | 86 | 171 | 48 | 178 | 161 | 214 | 204 | 19 | 168 | 197 | 230 | 247 | 23 |
| 6 OCT | a | 1027 | 15.7 | 14.7 | 103 | 105 | 134 | 129 | 21 | 23 | 59 | 45 | 103 | 45 | 60 | 104 | 80 | 124 | 20 | 105 | 153 | 126 | 192 | 19 |
| | b | 2142 | 16.0 | 14.4 | 52 | 97 | 82 | 138 | 32 | 24 | 36 | 50 | 56 | 43 | 34 | 65 | 49 | 105 | 36 | 46 | 85 | 62 | 135 | 34 |
| 20 OCT | a | 1110 | 12.1 | 13.6 | 62 | 87 | 99 | 131 | 35 | 4 | 58 | 41 | 97 | 55 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2358 | 12.0 | 13.5 | 65 | 48 | 107 | 99 | 45 | 37 | 75 | 94 | 130 | 50 | 66 | 59 | 90 | 115 | 39 | 76 | 97 | 182 | 154 | 49 |
| 20 OCT ^h | a | 1425 | NA | NA | 179 | 109 | 211 | 184 | 27 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 3 NOV | a | 1210 | 10.4 | 15.5 | 291 | 124 | 341 | 203 | 24 | 41 | 148 | 109 | 232 | 45 | 149 | 79 | 243 | 146 | 41 | 217 | 194 | 305 | 329 | 35 |
| | b | 2345 | 10.4 | 15.4 | 85 | 78 | 142 | 141 | 42 | 31 | 64 | 67 | 131 | 52 | 89 | 50 | 157 | 108 | 48 | 94 | 100 | 169 | 175 | 44 |
| 17 NOV | a | 1210 | 8.2 | 13.6 | 147 | 108 | 215 | 184 | 36 | 75 | 126 | 214 | 184 | 49 | 104 | 136 | 175 | 284 | 48 | 132 | 264 | 240 | 347 | 33 |
| | b | 2254 | 7.8 | 15.0 | 62 | 69 | 175 | 114 | 55 | 14 | 11 | 49 | 71 | 79 | 56 | 22 | 176 | 77 | 69 | 39 | 22 | 101 | 96 | 69 |
| 1 DEC | a | 1230 | 3.2 | 14.8 | 65 | 32 | 75 | 51 | 23 | 23 | 63 | 43 | 77 | 28 | 35 | 17 | 49 | 33 | 37 | 51 | 19 | 75 | 61 | 49 |
| | b | 2308 | 3.5 | 14.9 | 31 | 24 | 59 | 55 | 52 | 14 | 18 | 29 | 52 | 60 | 46 | 16 | 81 | 62 | 57 | 23 | 36 | 63 | 89 | 61 |
| 19 DEC | a | 1155 | 2.2 | 12.8 | 18 | 27 | 38 | 51 | 49 | 13 | 28 | 35 | 54 | 54 | 13 | 16 | 23 | 31 | 46 | 16 | 27 | 50 | 61 | 61 |
| | b | 2321 | 2.5 | 13.8 | 123 | 55 | 200 | 94 | 39 | 15 | 67 | 67 | 131 | 59 | 31 | 66 | 65 | 124 | 49 | 60 | 17 | 140 | 81 | 65 |

a/b Time in 2400 hrs of Intake Sample

c Intake temperature before tempering

d Discharge - Intake Temperature

e Number of live organisms observed

f Total number of organisms observed

NA = Not available

- = Not applicable

^gMean % dead equal to total of dead observed in R-1 and R-2 divided by total organisms observed in R-1 and R-2

^hSample taken from lake in the vicinity of FitzPatrick Intake

¹Adults, juveniles, and nauplii

Immediate analysis; 28 Apr - 19 Dec analysis after 8-hr incubation period

APPENDIX VIII B-2b

MORTALITY OF SELECTED TAXA OF
ARTHROPODA: CLADOCERA (IN-PLANT)

NUMBER OF CLADOCERA (ARTHROPODA) OBSERVED IN VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | |
|------------------------|--|--------------------------------------|-----------------|-----------------------------|-----|------------------------------|-----|------------------------|-----------------------------|-----|------------------------------|-----|------------------------|-----------------------------|-------------------|------------------------------|-----|------------------------|-----------------------------|-----|------------------------------|-----|------------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD ^g |
| | | | | R-1 | R-2 | R-1 | R-2 | | MEAN ^g | R-1 | R-2 | R-1 | | R-2 | MEAN ^g | R-1 | R-2 | | R-1 | R-2 | MEAN ^g | R-1 | |
| 14 APR ¹ | a 1130 | 5.1 | 14.0 | - | - | 0 | 0 | - | - | 3 | 0 | 3 | 0 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 2200 | 5.8 | 13.7 | - | 3 | 0 | 3 | 0 | 1 | 0 | 1 | 1 | 50 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| 28-29 APR | a 28 APR 1200 | 8.9 | 14.6 | 13 | 7 | 17 | 8 | 20 | 11 | 6 | 13 | 6 | 10 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 29 APR 0045 | 8.6 | 13.4 | - | - | 0 | 0 | - | 1 | 2 | 1 | 2 | 0 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| 12 MAY | a 1120 | 10.4 | 14.4 | 4 | 2 | 7 | 2 | 33 | - | 4 | 0 | 5 | 20 | 2 | 0 | 3 | 1 | 50 | - | 1 | 0 | 1 | 0 |
| | b 2400 | 9.2 | 14.5 | 3 | - | 3 | 0 | 0 | 1 | 8 | 2 | 10 | 25 | 2 | 4 | 2 | 4 | 0 | 1 | 1 | 1 | 1 | 0 |
| 26 MAY | a 1000 | 10.9 | 14.4 | 3 | 1 | 3 | 1 | 0 | 2 | 1 | 3 | 2 | 40 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2400 | 11.1 | 14.4 | 0 | 3 | 1 | 3 | 25 | 4 | 1 | 5 | 1 | 17 | 4 | 4 | 4 | 4 | 0 | - | 3 | 0 | 3 | 0 |
| 9 JUN | a 1130 | 11.7 | 12.4 | 8 | 20 | 8 | 21 | 3 | 6 | 9 | 6 | 13 | 21 | 4 | 14 | 7 | 16 | 22 | 4 | 7 | 5 | 8 | 15 |
| | b 2300 | 14.1 | 14.3 | 13 | 5 | 13 | 7 | 10 | 3 | 4 | 5 | 7 | 42 | 3 | 4 | 6 | 10 | 56 | 4 | 0 | 8 | 5 | 69 |
| 23,28 JUN | a 23 JUN 1100 | 17.4 | 15.5 | 12 | 24 | 13 | 29 | 14 | 33 | 20 | 33 | 28 | 13 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 28 JUN 2245 | 15.9 | 15.6 | 53 | 23 | 58 | 34 | 17 | 9 | 36 | 22 | 44 | 32 | 35 | 79 | 46 | 98 | 21 | 11 | 48 | 26 | 73 | 40 |
| 20 JUL | a 1200 | 19.9 | 14.2 | 373 | 172 | 443 | 212 | 17 | 36 | 25 | 73 | 61 | 55 | 64 | 144 | 75 | 171 | 15 | 286 | 345 | 343 | 448 | 20 |
| | b 2305 | 20.3 | 15.1 | 120 | 154 | 139 | 179 | 14 | 94 | 37 | 107 | 155 | 50 | 135 | 75 | 168 | 86 | 17 | 84 | 201 | 97 | 255 | 19 |
| 29 JUL | a 1200 | 19.8 | 14.0 | 79 | 126 | 93 | 140 | 12 | 74 | 165 | 110 | 239 | 31 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2320 | 19.6 | 12.2 | 139 | 207 | 177 | 278 | 24 | 28 | 215 | 41 | 270 | 22 | 44 | 234 | 62 | 216 | 19 | 135 | 159 | 175 | 152 | 18 |
| 11 AUG | a 1140 | 19.2 | 15.6 | 45 | 91 | 56 | 112 | 19 | 20 | 33 | 46 | 59 | 49 | 41 | 17 | 50 | 39 | 35 | 34 | 33 | 66 | 49 | 42 |
| | b 2315 | 19.9 | 14.5 | 136 | 68 | 168 | 89 | 21 | 12 | 53 | 39 | 101 | 54 | 83 | 66 | 92 | 88 | 17 | 28 | 77 | 39 | 105 | 27 |
| 25 AUG | a 1145 | 21.8 | 15.7 | 178 | 142 | 185 | 206 | 18 | 10 | 26 | 133 | 101 | 85 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 1350 | 21.9 | 17.7 | 57 | 89 | 83 | 135 | 33 | 2 | | 58 | 75 | 92 | 123 | 97 | 164 | 174 | 35 | 34 | 69 | 74 | 87 | 36 |

NUMBER OF CLADOCERA (ARTHROPODA) SERVED IN VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT^d | INTAKE | | | | | DISCHARGE | | | | | 3° SIMULATION | | | | | 2° SIMULATION | | | | |
|---------------------|--|--------------------------------------|--------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 8 SEP | a 1130 | 19.7 | 15.9 | 9 | 29 | 15 | 39 | 30 | 1 | 11 | 4 | 28 | 63 | 16 | 8 | 20 | 10 | 20 | 13 | 17 | 19 | 23 | 29 |
| | b 2305 | 21.1 | 16.0 | 28 | 31 | 33 | 42 | 21 | 15 | 9 | 38 | 36 | 68 | 15 | 17 | 22 | 26 | 33 | 25 | 5 | 40 | 12 | 42 |
| 22,27 SEP | a 22 SEP 1205 | 18.4 | 14.8 | 18 | 13 | 20 | 17 | 16 | 4 | 11 | 12 | 26 | 61 | 10 | 18 | 10 | 20 | 7 | 18 | 17 | 23 | 27 | 30 |
| | b 27 SEP 2318 | 16.2 | 14.7 | 39 | 79 | 52 | 94 | 19 | 10 | 40 | 24 | 46 | 29 | 58 | 40 | 68 | 45 | 13 | 117 | 75 | 136 | 88 | 14 |
| 6 OCT | a 1027 | 15.7 | 14.7 | 44 | 27 | 45 | 34 | 10 | 3 | 24 | 6 | 31 | 27 | 12 | 28 | 16 | 37 | 25 | 25 | 30 | 29 | 43 | 24 |
| | b 2142 | 16.0 | 14.4 | 8 | 16 | 9 | 23 | 25 | 2 | 3 | 4 | 3 | 29 | 9 | 13 | 10 | 17 | 19 | 12 | 18 | 12 | 22 | 12 |
| 20 OCT | a 1110 | 12.1 | 13.6 | 30 | 65 | 33 | 71 | 9 | 13 | 34 | 19 | 44 | 25 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2358 | 12.0 | 13.5 | 45 | 33 | 55 | 38 | 16 | 21 | 19 | 40 | 33 | 45 | 36 | 79 | 41 | 91 | 13 | 83 | 102 | 101 | 132 | 21 |
| 20 OCT ^h | a 1425 | NA | NA | 58 | 63 | 61 | 84 | 15 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 3 NOV | a 1210 | 10.4 | 15.5 | 23 | 58 | 27 | 64 | 11 | 9 | 19 | 14 | 23 | 24 | 22 | 29 | 29 | 31 | 15 | 40 | 44 | 46 | 50 | 12 |
| | b 2345 | 10.4 | 15.4 | 8 | 21 | 12 | 30 | 31 | 5 | 4 | 7 | 14 | 57 | 57 | 31 | 60 | 35 | 7 | 15 | 39 | 20 | 46 | 18 |
| 17 NOV | a 1210 | 8.2 | 13.6 | 117 | 42 | 126 | 48 | 9 | 57 | 31 | 69 | 47 | 24 | 36 | 42 | 45 | 47 | 15 | 51 | 70 | 57 | 77 | 10 |
| | b 2254 | 7.8 | 15.0 | 56 | 81 | 78 | 93 | 20 | 25 | 47 | 36 | 62 | 27 | 43 | 21 | 53 | 27 | 20 | 25 | 38 | 29 | 50 | 20 |
| 1 DEC | a 1230 | 3.2 | 14.8 | 10 | 7 | 10 | 8 | 6 | 5 | 10 | 5 | 11 | 6 | 9 | 10 | 9 | 10 | 0 | 18 | 26 | 20 | 38 | 24 |
| | b 2308 | 3.5 | 14.9 | 6 | 5 | 6 | 7 | 15 | 3 | 1 | 3 | 2 | 20 | 5 | 15 | 6 | 17 | 13 | 7 | 13 | 11 | 14 | 20 |
| 19 DEC | a 1155 | 2.2 | 12.8 | 2 | - | 3 | 0 | 33 | 2 | - | 2 | 0 | 0 | 1 | 2 | 1 | 2 | 0 | - | 4 | 0 | 6 | 33 |
| | b 2321 | 2.5 | 13.8 | 12 | 4 | 13 | 4 | 6 | 1 | 7 | 1 | 11 | 33 | 3 | 13 | 6 | 13 | 16 | 7 | 14 | 8 | 14 | 5 |

^{a/b} Time in 2400 hrs of Intake Sample

^c Intake temperature before tempering

^d Discharge - Intake Temperature

^e Number of live organisms observed

^f Total number of organisms observed

NA = Not available

^g Mean % dead equal to total of dead observed in R-1 and R-2 divided by total organisms observed in R-1 and R-2

^h Sample taken from lake in the vicinity of FitzPatrick Intake

ⁱ Immediate analysis; 28 Apr - 19 Dec analysis after 8-hr incubation period

- = Not applicable

APPENDIX VIIIB-2c
MORTALITY OF SELECTED TAXA OF
PROTOZOA (IN-PLANT)

NUMBER OF CILIATA (PROTOZOA) OBSERVED IN VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP (°C) ^c | Δ T ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | | |
|------------------------|--|-------------------------------------|------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|--------------|------------------------------|-----|-------------------|-----------------------------|--------------|------------------------------|-----|-------------------|----|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | |
| 14 APR ⁱ | a | 1130 | 5.1 | 14.0 | 11 | - | 12 | 0 | 8 | - | 0 | 0 | 2 | 100 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2200 | 5.8 | 13.7 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | NO SAMPLE | | | | | NO SAMPLE | | | | |
| 28-29 APR | a | 28 APR 1200 | 8.9 | 14.6 | 10 | 60 | 83 | 64 | 52 | 3 | 5 | 45 | 25 | 89 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 29 APR 0045 | 8.6 | 13.4 | 55 | 0 | 56 | 1 | 3 | 6 | 4 | 9 | 10 | 47 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| 12 MAY | a | 1120 | 10.4 | 14.4 | 38 | 1 | 38 | 1 | 0 | 19 | 6 | 19 | 6 | 0 | 1 | 1 | 7 | 1 | 75 | 0 | 15 | 2 | 15 | 12 |
| | b | 2400 | 9.2 | 14.5 | 3 | 11 | 7 | 26 | 58 | 1 | 7 | 1 | 26 | 70 | 0 | 6 | 1 | 17 | 67 | 3 | 3 | 3 | 3 | 0 |
| 26 MAY | a | 1000 | 10.9 | 14.4 | 6 | 3 | 15 | 3 | 50 | 7 | 5 | 13 | 13 | 54 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2400 | 11.1 | 14.4 | 9 | 0 | 10 | 1 | 18 | 2 | 3 | 8 | 14 | 77 | 1 | 1 | 12 | 6 | 89 | 8 | 2 | 8 | 6 | 29 |
| 9 JUN | a | 1130 | 11.7 | 12.4 | 4 | 0 | 6 | 1 | 43 | - | 3 | 0 | 6 | 50 | 0 | 1 | 1 | 3 | 75 | 1 | 4 | 3 | 12 | 23 |
| | b | 2300 | 14.1 | 14.3 | 0 | 0 | 2 | 3 | 100 | 0 | 1 | 2 | 2 | 75 | 0 | - | 2 | 0 | 100 | 4 | - | 7 | 0 | 57 |
| 23,28 JUN | a | 23 JUN 1100 | 17.4 | 15.5 | - | 1 | 0 | 1 | 0 | - | 8 | 0 | 9 | 11 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 28 JUN 2245 | 15.9 | 15.6 | 0 | 0 | 13 | 1 | 100 | 0 | 1 | 7 | 1 | 88 | 1 | 2 | 1 | 2 | 0 | 1 | 2 | 26 | 2 | 89 |
| 20 JUL | a | 1200 | 19.9 | 14.2 | - | - | 0 | 0 | - | 12 | 5 | 22 | 8 | 43 | 9 | 13 | 23 | 44 | 51 | 11 | 0 | 17 | 5 | 50 |
| | b | 2305 | 20.3 | 15.1 | 9 | 4 | 24 | 8 | 59 | 8 | 1 | 17 | 13 | 70 | 4 | 0 | 14 | 11 | 84 | 7 | 2 | 39 | 5 | 80 |
| 29 JUL | a | 1200 | 19.8 | 14.0 | 4 | 10 | 10 | 17 | 48 | 0 | 21 | 12 | 36 | 56 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2320 | 19.6 | 12.2 | 9 | 15 | 16 | 33 | 51 | 20 | 0 | 72 | 2 | 73 | 17 | 6 | 33 | 16 | 53 | 0 | 4 | 4 | 12 | 75 |
| 11 AUG | a | 1140 | 19.2 | 15.6 | 3 | 8 | 8 | 9 | 35 | - | 7 | 0 | 7 | 0 | 1 | 4 | 3 | 8 | 55 | 3 | - | 5 | 0 | 40 |
| | b | 2315 | 19.9 | 14.5 | 1 | 1 | 1 | 4 | 60 | 0 | 1 | 2 | 1 | 67 | 0 | 0 | 3 | 4 | 100 | 1 | 3 | 2 | 3 | 20 |
| 25 AUG | a | 1145 | 21.8 | 15.7 | 46 | 1 | 50 | 4 | 13 | 8 | 2 | 10 | 3 | 23 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2350 | 21.9 | 17.7 | 0 | - | 4 | 0 | 100 | - | 2 | 0 | 3 | 33 | 2 | 2 | 2 | 2 | 0 | 41 | - | 45 | 0 | 8 |

NUMBER OF CILIATA (PROTOZOA) OBSERVED IN VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP ^c (°C) | ΔT ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | | |
|------------------------|--|-------------------------------------|-----------------|-----------------------------|-----|------------------------------|-----|------------------------|-----------------------------|--------------|------------------------------|-----|------------------------|-----------------------------|-------------------|------------------------------|-----|------------------------|-----------------------------|--------------|------------------------------|-----|------------------------|-----|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD ^g | |
| | | | | R-1 | R-2 | R-1 | R-2 | | MEAN ^g | R-1 | R-2 | R-1 | | R-2 | MEAN ^g | R-1 | R-2 | | R-1 | R-2 | MEAN ^g | R-1 | | R-2 |
| 8 SEP | a | 1130 | 19.7 | 15.9 | 1 | 0 | 2 | 1 | 67 | 0 | 1 | 2 | 2 | 75 | - | 0 | 0 | 1 | 100 | 1 | 0 | 1 | 1 | 50 |
| | b | 2305 | 21.1 | 16.0 | 2 | 2 | 7 | 2 | 56 | 8 | 1 | 11 | 7 | 50 | 0 | 0 | 2 | 5 | 100 | 1 | 0 | 2 | 3 | 80 |
| 22, 27 SEP | a 22 SEP 1205 | 18.4 | 14.8 | 0 | 2 | 16 | 23 | 95 | 5 | 3 | 13 | 38 | 84 | 6 | 10 | 55 | 33 | 82 | 0 | 8 | 49 | 21 | 89 | |
| | b 27 SEP 2318 | 16.2 | 14.7 | 0 | 0 | 15 | 12 | 100 | 24 | 0 | 49 | 8 | 58 | 3 | 5 | 7 | 10 | 53 | 1 | 1 | 4 | 3 | 71 | |
| 6 OCT | a | 1027 | 15.7 | 14.7 | 10 | 10 | 31 | 16 | 57 | 1 | 20 | 11 | 35 | 54 | 1 | 14 | 6 | 17 | 35 | 14 | 24 | 29 | 33 | 39 |
| | b | 2142 | 16.0 | 14.4 | 10 | 14 | 34 | 17 | 53 | 5 | 17 | 10 | 26 | 39 | 10 | 11 | 21 | 16 | 43 | 0 | 8 | 47 | 14 | 87 |
| 20 OCT | a | 1110 | 12.1 | 13.6 | 0 | 4 | 3 | 7 | 60 | 1 | 2 | 2 | 2 | 25 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2358 | 12.0 | 13.5 | 0 | 2 | 4 | 3 | 71 | 0 | 0 | 3 | 4 | 100 | 3 | 0 | 8 | 10 | 83 | 0 | 0 | 9 | 2 | 100 |
| 20 OCT ^h | a | 1425 | NA | NA | 1 | 3 | 2 | 5 | 43 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 3 NOV | a | 1210 | 10.4 | 15.5 | 0 | - | 1 | 0 | 100 | 2 | - | 7 | 0 | 71 | 3 | 2 | 8 | 4 | 58 | 2 | 0 | 6 | 1 | 71 |
| | b | 2345 | 10.4 | 15.4 | 8 | 0 | 9 | 9 | 56 | 1 | 3 | 5 | 6 | 64 | 5 | - | 5 | 0 | 0 | 1 | 0 | 1 | 3 | 75 |
| 17 NOV | a | 1210 | 8.2 | 13.6 | 0 | 0 | 1 | 1 | 100 | 1 | 0 | 2 | 1 | 67 | 0 | 0 | 1 | 1 | 100 | 47 | - | 48 | 0 | 2 |
| | b | 2254 | 7.8 | 15.0 | 0 | 5 | 10 | 9 | 74 | 2 | 4 | 8 | 12 | 70 | 0 | 0 | 13 | 9 | 100 | 2 | 0 | 10 | 10 | 90 |
| 1 DEC | a | 1230 | 3.2 | 14.8 | 0 | 0 | 2 | 12 | 100 | 2 | 1 | 9 | 10 | 84 | 7 | 7 | 7 | 8 | 7 | 0 | - | 3 | 0 | 100 |
| | b | 2308 | 3.5 | 14.9 | - | 0 | 0 | 4 | 100 | 2 | 1 | 3 | 1 | 25 | 0 | 2 | 1 | 2 | 33 | 5 | 1 | 16 | 3 | 68 |
| 19 DEC | a | 1155 | 2.2 | 12.8 | - | 0 | 0 | 2 | 100 | - | 1 | 0 | 1 | 0 | 1 | - | 1 | 0 | 0 | 0 | 2 | 1 | 2 | 33 |
| | b | 2321 | 2.5 | 13.8 | 0 | 0 | 2 | 1 | 100 | - | - | 0 | 0 | - | - | 4 | 0 | 4 | 0 | 0 | 0 | 1 | 1 | 100 |

a/b Time in 2400 hrs of Intake Sample

c Intake temperature before tempering

d Discharge - Intake Temperature

e Number of live organisms observed

f Total number of organisms observed

NA = Not available

g Mean % dead equal to total of dead observed in R-1 and R-2 divided by total organisms observed in R-1 and R-2

h Sample taken from lake in the vicinity of FitzPatrick Intake

i Immediate analysis; 28 Apr - 19 Dec analysis after 8-hr incubation period

- Not applicable

NUMBER OF SUCTORIA (PROCTOPODEA) OBSERVED IN VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | Δ T ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | |
|------------------------|--|--------------------------------------|------------------|-----------------------------|-----|------------------------------|-----|--------------------------------|-----------------------------|-----|------------------------------|-----|--------------------------------|-----------------------------|-----|------------------------------|-----|--------------------------------|-----------------------------|-----|------------------------------|-----|--------------------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | Z DEAD MEAN ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | Z DEAD MEAN ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | Z DEAD MEAN ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | Z DEAD MEAN ^g |
| | | | | R-1 | R-2 | R-1 | R-2 | | R-1 | R-2 | R-1 | R-2 | | R-1 | R-2 | R-1 | R-2 | | R-1 | R-2 | R-1 | R-2 | |
| 14 APR ⁱ | ^a 1130 | 5.1 | 14.0 | - | 0 | 0 | 1 | 100 | - | 1 | 0 | 2 | 50 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | ^b 2200 | 5.8 | 13.7 | 1 | 0 | 2 | 3 | 80 | 1 | 0 | 1 | 2 | 67 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| 28-29 APR | ^a 28 APR 1200 | 8.9 | 14.6 | 2 | 4 | 15 | 8 | 74 | 0 | 1 | 3 | 10 | 92 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | ^b 29 APR 0045 | 8.6 | 13.4 | 0 | 0 | 1 | 7 | 100 | 0 | 0 | 4 | 4 | 100 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| 12 MAY | ^a 1120 | 10.4 | 14.4 | 1 | 1 | 1 | 2 | 33 | 0 | 1 | 2 | 1 | 67 | - | 0 | 0 | 2 | 100 | 1 | - | 2 | 0 | 50 |
| | ^b 2400 | 9.2 | 14.5 | 1 | 0 | 2 | 3 | 80 | 1 | 3 | 1 | 6 | 43 | 1 | 2 | 4 | 3 | 57 | 1 | 0 | 5 | 3 | 88 |
| 26 MAY | ^a 1000 | 10.9 | 14.4 | 0 | 0 | 2 | 1 | 100 | - | 1 | 0 | 4 | 75 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | ^b 2400 | 11.1 | 14.4 | 0 | - | 2 | 0 | 100 | 0 | 0 | 1 | 1 | 100 | 0 | 2 | 1 | 2 | 33 | 0 | 3 | 3 | 3 | 50 |
| 9 JUN | ^a 1130 | 11.7 | 12.4 | 2 | 8 | 13 | 8 | 52 | 0 | 0 | 1 | 12 | 100 | 2 | 2 | 3 | 2 | 20 | 0 | 1 | 4 | 5 | 89 |
| | ^b 2300 | 14.1 | 14.3 | 0 | 4 | 9 | 4 | 69 | - | 3 | 0 | 5 | 40 | 1 | 1 | 4 | 4 | 75 | 2 | 0 | 8 | 2 | 80 |
| 23,28 JUN | ^a 23 JUN 1100 | 17.4 | 15.5 | 1 | 5 | 4 | 16 | 70 | 1 | 6 | 2 | 22 | 71 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | ^b 28 JUN 2245 | 15.9 | 15.6 | 3 | 1 | 4 | 7 | 64 | 0 | 1 | 1 | 11 | 92 | 0 | 0 | 7 | 4 | 100 | 1 | 3 | 5 | 5 | 60 |
| 20 JUL | ^a 1200 | 19.9 | 14.2 | - | - | 0 | 0 | - | - | 0 | 0 | 1 | 100 | - | 0 | 0 | 1 | 100 | - | - | 0 | 0 | - |
| | ^b 2305 | 20.3 | 15.1 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | 1 | - | 1 | 0 | 0 | - | - | 0 | 0 | - |
| 29 JUL | ^a 1200 | 19.8 | 14.0 | 0 | 13 | 3 | 14 | 23 | 2 | 0 | 2 | 3 | 60 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | ^b 2320 | 19.6 | 12.2 | - | 1 | 0 | 1 | 0 | - | - | 0 | 0 | - | 0 | - | 3 | 0 | 100 | - | - | 0 | 0 | - |
| 11 AUG | ^a 1140 | 19.2 | 15.6 | 0 | - | 1 | 0 | 100 | 1 | - | 1 | 0 | 0 | - | 0 | 0 | 2 | 100 | - | - | 0 | 0 | - |
| | ^b 2315 | 19.9 | 14.5 | 6 | 1 | 6 | 2 | 12 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| 25 AUG | ^a 1145 | 21.8 | 15.7 | - | - | 0 | 0 | - | 1 | 0 | 1 | 1 | 50 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | ^b 2350 | 21.9 | 17.7 | - | - | 0 | 0 | - | - | 0 | 0 | 1 | 100 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |

NUMBER OF SUCTORIA (PROTOZOA) OBSERVED IN VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | |
|------------------------|--|--------------------------------------|-------------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 8 SEP | a | 1130 | 19.7 | - | - | 0 | 0 | - | 0 | - | 1 | 0 | 100 | - | - | 0 | 0 | - | - | 0 | 0 | 1 | 100 |
| | b | 2305 | 21.1 | - | - | 0 | 0 | - | 0 | - | 1 | 0 | 100 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| 22,27 SEP | a | 22 SEP 1205 | 18.4 | - | 2 | 0 | 2 | 0 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | b | 27 SEP 2318 | 16.2 | - | - | 0 | 0 | - | 3 | - | 6 | 0 | 50 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| 6 OCT | a | 1027 | 15.7 | - | - | 0 | 0 | - | 0 | 2 | 4 | 6 | 80 | - | 0 | 0 | 1 | 100 | - | 0 | 0 | 1 | 100 |
| | b | 2142 | 16.0 | 1 | - | 1 | 0 | 0 | - | - | 0 | 0 | - | - | 2 | 0 | 2 | 0 | 0 | 1 | 1 | 3 | 75 |
| 20 OCT | a | 1110 | 12.1 | 0 | - | 2 | 0 | 100 | - | - | 0 | 0 | - | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2358 | 12.0 | 0 | 0 | 1 | 1 | 100 | 1 | 0 | 1 | 3 | 75 | - | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 50 |
| 20 OCT ^h | a | 1425 | NA | - | - | 0 | 0 | - | NOT REQUIRED | | | | | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 3 NOV | a | 1210 | 10.4 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | b | 2345 | 10.4 | - | 0 | 0 | 11 | 100 | - | - | 0 | 0 | - | - | 1 | 0 | 1 | 0 | 1 | - | 1 | 0 | 0 |
| 17 NOV | a | 1210 | 8.2 | - | 0 | 0 | 1 | 100 | 2 | - | 5 | 0 | 60 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | b | 2254 | 7.8 | 0 | 3 | 3 | 3 | 50 | 1 | - | 1 | 0 | 0 | 0 | - | 2 | 0 | 100 | 0 | - | 1 | 0 | 100 |
| 1 DEC | a | 1230 | 3.2 | 0 | 1 | 1 | 2 | 67 | - | 0 | 0 | 2 | 100 | 2 | 1 | 3 | 2 | 40 | 0 | - | 1 | 0 | 100 |
| | b | 2308 | 3.5 | 0 | 0 | 1 | 4 | 100 | - | 0 | 0 | 1 | 100 | - | - | 0 | 0 | - | 0 | - | 2 | 0 | 100 |
| 19 DEC | a | 1155 | 2.2 | 0 | - | 1 | 0 | 100 | 0 | 0 | 1 | 2 | 100 | 2 | - | 4 | 0 | 50 | - | 0 | 0 | 3 | 100 |
| | b | 2321 | 2.5 | - | - | 0 | 0 | - | 0 | 2 | 2 | 3 | 60 | 0 | 1 | 2 | 1 | 67 | 0 | 1 | 2 | 3 | 80 |

a/b Time in 2400 hrs of Intake Sample

c Intake temperature before tempering

d Discharge - Intake Temperature

e Number of live organisms observed

f Total number of organisms observed

NA = Not available

g Mean % dead equal to total of dead observed in R-1 and R-2 divided by total organisms observed in R-1 and R-2

h Sample taken from lake in the vicinity of FitzPatrick Intake

i Immediate analysis; 28 Apr - 19 Dec analysis after 8-hr

incubation period

Not applicable

NUMBER OF TOTAL PROTONS OBSERVED IN VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | Δ T ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | | |
|------------------------|--|--------------------------------------|------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|--------------|------------------------------|-----|-------------------|-----------------------------|--------------|------------------------------|-----|-------------------|----|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | |
| 14 APR ¹ | a | 1130 | 5.1 | 14.0 | 11 | 0 | 12 | 1 | 15 | - | 1 | 0 | 4 | 75 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2200 | 5.8 | 13.7 | 1 | 0 | 2 | 3 | 80 | 1 | 0 | 1 | 2 | 67 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| 28-29 APR | a | 28 APR 1200 | 8.9 | 14.6 | 12 | 64 | 98 | 72 | 55 | 3 | 6 | 48 | 35 | 89 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 29 APR 0045 | 8.6 | 13.4 | 55 | 0 | 57 | 8 | 15 | 6 | 4 | 13 | 14 | 63 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| 12 MAY | a | 1120 | 10.4 | 14.4 | 39 | 2 | 39 | 3 | 2 | 19 | 7 | 21 | 7 | 7 | 1 | 1 | 7 | 3 | 80 | 1 | 15 | 4 | 15 | 16 |
| | b | 2400 | 9.2 | 14.5 | 4 | 11 | 9 | 29 | 60 | 2 | 10 | 2 | 32 | 65 | 1 | 8 | 5 | 20 | 64 | 4 | 3 | 8 | 6 | 50 |
| 26 MAY | a | 1000 | 10.9 | 14.4 | 6 | 3 | 17 | 4 | 57 | 7 | 6 | 13 | 17 | 57 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2400 | 11.1 | 14.4 | 9 | 0 | 12 | 1 | 31 | 2 | 3 | 9 | 15 | 79 | 1 | 3 | 13 | 8 | 89 | 8 | 5 | 11 | 9 | 35 |
| 9 JUN | a | 1130 | 11.7 | 12.4 | 6 | 8 | 19 | 9 | 50 | 0 | 3 | 1 | 18 | 84 | 2 | 3 | 4 | 5 | 44 | 1 | 4 | 7 | 8 | 67 |
| | b | 2300 | 14.1 | 14.3 | 0 | 4 | 11 | 7 | 78 | 0 | 4 | 2 | 7 | 56 | 1 | 1 | 3 | 4 | 71 | 6 | 0 | 15 | 2 | 71 |
| 23,28 JUN | a | 23 JUN 1100 | 17.4 | 15.5 | 1 | 6 | 4 | 17 | 67 | 1 | 14 | 2 | 31 | 55 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 28 JUN 2245 | 15.9 | 15.6 | 3 | 1 | 17 | 8 | 84 | 0 | 2 | 8 | 12 | 90 | 1 | 2 | 8 | 6 | 79 | 2 | 5 | 31 | 7 | 82 |
| 20 JUL | a | 1200 | 19.9 | 14.2 | 1 | 2 | 6 | 5 | 73 | 12 | 5 | 22 | 9 | 45 | 9 | 13 | 23 | 22 | 51 | 11 | 0 | 17 | 5 | 50 |
| | b | 2305 | 20.3 | 15.1 | 9 | 4 | 24 | 8 | 59 | 8 | 1 | 17 | 13 | 70 | 5 | 0 | 15 | 9 | 81 | 7 | 2 | 39 | 5 | 80 |
| 29 JUL | a | 1200 | 19.8 | 14.0 | 4 | 23 | 13 | 31 | 39 | 2 | 21 | 14 | 39 | 57 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2320 | 19.6 | 12.2 | 9 | 16 | 16 | 33 | 49 | 20 | 0 | 72 | 2 | 73 | 17 | 6 | 36 | 16 | 56 | 0 | 4 | 4 | 12 | 75 |
| 11 AUG | a | 1140 | 19.2 | 15.6 | 14 | 19 | 32 | 40 | 54 | 6 | 26 | 21 | 45 | 52 | 12 | 6 | 25 | 28 | 66 | 16 | 7 | 33 | 9 | 45 |
| | b | 2315 | 19.9 | 14.5 | 12 | 4 | 13 | 13 | 38 | 5 | 14 | 22 | 39 | 69 | 4 | 0 | 22 | 24 | 91 | 6 | 22 | 27 | 43 | 60 |
| 25 AUG | a | 1145 | 21.8 | 15.7 | 52 | 22 | 59 | 55 | 35 | 10 | 8 | 31 | 27 | 60 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2350 | 21.9 | 17.7 | 2 | 2 | 34 | 2 | 89 | 3 | 5 | 16 | 17 | 76 | 3 | 2 | 4 | 11 | 67 | 42 | 1 | 53 | 6 | 27 |

NUMBER OF TOTAL PROTOZOA OBSERVED IN VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | Δ T ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | |
|------------|--|--------------------------------------|------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL ^f COLL'D | | % DEAD | NUMBER LIVE ^e | | TOTAL ^f COLL'D | | % DEAD | NUMBER LIVE ^e | | TOTAL ^f COLL'D | | % DEAD | NUMBER LIVE ^e | | TOTAL ^f COLL'D | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 8 SEP | a 1130 | 19.7 | 15.9 | 1 | 0 | 3 | 1 | 75 | 0 | 2 | 3 | 4 | 71 | - | 2 | 0 | 3 | 33 | 2 | 0 | 2 | 2 | 50 |
| | b 2305 | 21.1 | 16.0 | 3 | 3 | 9 | 3 | 50 | 9 | 4 | 14 | 12 | 50 | 0 | 0 | 2 | 6 | 100 | 1 | 0 | 4 | 4 | 88 |
| 22, 27 SEP | a 22 SEP 1205 | 18.4 | 14.8 | 0 | 6 | 28 | 38 | 91 | 6 | 4 | 17 | 53 | 86 | 10 | 14 | 70 | 43 | 79 | 0 | 23 | 59 | 58 | 80 |
| | b 27 SEP 2318 | 16.2 | 14.7 | 0 | 0 | 15 | 13 | 100 | 28 | 0 | 56 | 9 | 57 | 3 | 5 | 7 | 10 | 53 | 1 | 1 | 4 | 3 | 71 |
| 6 OCT | a 1027 | 15.7 | 14.7 | 10 | 10 | 31 | 16 | 57 | 1 | 23 | 15 | 42 | 58 | 1 | 14 | 6 | 18 | 38 | 14 | 25 | 29 | 35 | 39 |
| | b 2142 | 16.0 | 14.4 | 11 | 14 | 35 | 17 | 52 | 5 | 17 | 11 | 26 | 41 | 10 | 13 | 21 | 18 | 41 | 0 | 9 | 48 | 17 | 86 |
| 20 OCT | a 1110 | 12.1 | 13.6 | 0 | 4 | 5 | 7 | 67 | 1 | 2 | 2 | 2 | 25 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2358 | 12.0 | 13.5 | 0 | 2 | 5 | 4 | 78 | 1 | 0 | 4 | 8 | 92 | 3 | 2 | 8 | 12 | 75 | 1 | 0 | 10 | 3 | 92 |
| 20 OCT h | a 1425 | NA | NA | 1 | 3 | 2 | 6 | 50 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 3 NOV | a 1210 | 10.4 | 15.5 | 0 | - | 1 | 0 | 100 | 2 | - | 7 | 0 | 71 | 3 | 2 | 8 | 4 | 58 | 2 | 0 | 6 | 1 | 71 |
| | b 2345 | 10.4 | 15.4 | 8 | 0 | 9 | 21 | 73 | 3 | 3 | 7 | 6 | 54 | 5 | 1 | 5 | 1 | 0 | 2 | 0 | 2 | 3 | 60 |
| 17 NOV | a 1210 | 8.2 | 13.6 | 0 | 0 | 1 | 3 | 100 | 3 | 0 | 7 | 1 | 62 | 0 | 0 | 1 | 1 | 100 | 48 | - | 49 | 0 | 2 |
| | b 2254 | 7.8 | 15.0 | 0 | 8 | 13 | 12 | 68 | 4 | 4 | 10 | 12 | 64 | 0 | 0 | 15 | 9 | 100 | 2 | 0 | 11 | 10 | 90 |
| 1 DEC | a 1230 | 3.2 | 14.8 | 2 | 1 | 6 | 14 | 85 | 2 | 4 | 9 | 21 | 80 | 9 | 8 | 14 | 10 | 29 | 0 | 1 | 9 | 1 | 90 |
| | b 2308 | 3.5 | 14.9 | 0 | 1 | 1 | 9 | 90 | 2 | 2 | 3 | 3 | 33 | 0 | 3 | 1 | 3 | 25 | 7 | 1 | 20 | 3 | 65 |
| 19 DEC | a 1155 | 2.2 | 12.8 | 0 | 0 | 1 | 2 | 100 | 1 | 1 | 2 | 3 | 60 | 3 | - | 5 | 0 | 40 | 0 | 2 | 1 | 5 | 67 |
| | b 2321 | 2.5 | 13.8 | 0 | 0 | 2 | 1 | 100 | 0 | 2 | 2 | 3 | 60 | 0 | 5 | 2 | 5 | 29 | 0 | 0 | 3 | 3 | 100 |

a/b Time in 2400 hrs of Intake Sample

c Intake temperature before tempering

d Discharge - Intake Temperature

e Number of live organisms observed

f Total number of organisms observed

NA = Not available

g Mean % dead equal to total of dead observed in R-1 and R-2 divided by total organisms observed in R-1 and R-2

h Sample taken from lake in the vicinity of FitzPatrick Intake

i Immediate analysis; 28 Apr - 19 Dec analysis after 8-hr incubation period

APPENDIX VIIIB-2d

MORTALITY OF SELECTED TAXA OF
ROTIFERA (IN-PLANT)

NUMBER OF ROTIFERA OBSERVED IN VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | | |
|------------------------|--|--------------------------------------|-----------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|--------------|------------------------------|-----|-------------------|-----------------------------|--------------|------------------------------|-----|-------------------|----|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | |
| 14 APR ⁱ | a | 1130 | 5.1 | 14.0 | 3 | 6 | 22 | 35 | 84 | 4 | 7 | 21 | 39 | 82 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2200 | 5.8 | 13.7 | 16 | 30 | 92 | 78 | 73 | 8 | 11 | 94 | 119 | 91 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| 28-29 APR | a | 28 APR 1200 | 8.9 | 14.6 | 97 | 56 | 275 | 169 | 65 | 78 | 46 | 167 | 140 | 60 | NO SAMELE | | | | | NO SAMPLE | | | | |
| | b | 29 APR 0045 | 8.6 | 13.4 | 112 | 16 | 155 | 101 | 50 | 29 | 34 | 116 | 187 | 89 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| 12 MAY | a | 1120 | 10.4 | 14.4 | 290 | 386 | 418 | 663 | 37 | 187 | 201 | 341 | 513 | 55 | 69 | 52 | 133 | 125 | 53 | 31 | 38 | 75 | 103 | 61 |
| | b | 2400 | 9.2 | 14.5 | 245 | 109 | 456 | 260 | 51 | 118 | 142 | 317 | 298 | 58 | 38 | 108 | 134 | 287 | 65 | 48 | 70 | 127 | 266 | 70 |
| 26 MAY | a | 1000 | 10.9 | 14.4 | 158 | 160 | 329 | 297 | 43 | 164 | 90 | 315 | 171 | 48 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2400 | 11.1 | 14.4 | 181 | 114 | 373 | 294 | 56 | 59 | 125 | 154 | 303 | 60 | 153 | 95 | 271 | 277 | 55 | 61 | 108 | 154 | 380 | 61 |
| 9 JUN | a | 1130 | 11.7 | 12.4 | 99 | 205 | 213 | 347 | 46 | 75 | 104 | 181 | 224 | 56 | 51 | 86 | 154 | 258 | 67 | 63 | 134 | 220 | 238 | 57 |
| | b | 2300 | 14.1 | 14.3 | 154 | 96 | 383 | 198 | 57 | 23 | 96 | 124 | 250 | 68 | 46 | 85 | 136 | 289 | 69 | 59 | 129 | 167 | 260 | 56 |
| 23,28 JUN | a | 23 JUN 1100 | 17.4 | 15.5 | 234 | 377 | 539 | 826 | 55 | 456 | 133 | 980 | 945 | 69 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 28 JUN 2245 | 15.9 | 15.6 | 149 | 84 | 386 | 306 | 66 | 28 | 75 | 151 | 325 | 78 | 124 | 445 | 209 | 292 | 63 | 50 | 260 | 242 | 579 | 62 |
| 20 JUL | a | 1200 | 19.9 | 14.2 | 98 | 89 | 143 | 138 | 33 | 44 | 76 | 83 | 112 | 38 | 76 | 132 | 94 | 182 | 25 | 89 | 103 | 137 | 177 | 39 |
| | b | 2305 | 20.3 | 15.1 | 109 | 70 | 171 | 114 | 37 | 43 | 72 | 101 | 159 | 56 | 107 | 47 | 204 | 80 | 46 | 95 | 120 | 137 | 208 | 38 |
| 29 JUL | a | 1200 | 19.8 | 14.0 | 50 | 107 | 108 | 139 | 36 | 41 | 73 | 68 | 132 | 43 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2320 | 19.6 | 12.2 | 9 | 35 | 45 | 116 | 73 | 14 | 28 | 28 | 99 | 67 | 22 | 13 | 51 | 49 | 61 | 33 | 22 | 95 | 35 | 58 |
| 11 AUG | a | 1140 | 19.2 | 15.6 | 34 | 48 | 82 | 145 | 64 | 35 | 34 | 94 | 126 | 69 | 26 | 52 | 74 | 102 | 56 | 22 | 27 | 81 | 64 | 66 |
| | b | 2315 | 19.9 | 14.5 | 118 | 67 | 297 | 228 | 65 | 49 | 97 | 185 | 275 | 68 | 62 | 52 | 176 | 153 | 66 | 27 | 40 | 102 | 203 | 78 |
| 25 AUG | a | 1145 | 21.8 | 15.7 | 81 | 59 | 186 | 178 | 61 | 26 | 44 | 165 | 136 | 77 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2350 | 21.9 | 17.7 | 33 | 93 | 189 | 224 | 69 | 17 | 34 | 120 | 190 | 84 | 80 | 192 | 263 | 332 | 54 | 56 | 73 | 280 | 175 | 72 |

NUMBER OF ROTIFERA OBSERVED IN VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | |
|------------------------|--|--------------------------------------|-----------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 8 SEP | ^a 1130 | 19.7 | 15.9 | 74 | 138 | 125 | 226 | 40 | 22 | 71 | 58 | 235 | 68 | 40 | 38 | 93 | 79 | 55 | 39 | 63 | 71 | 147 | 53 |
| | ^b 2305 | 21.1 | 16.0 | 91 | 153 | 241 | 280 | 53 | 135 | 68 | 287 | 273 | 64 | 59 | 55 | 117 | 151 | 57 | 88 | 72 | 245 | 168 | 61 |
| 22, 27 SEP | ^a 22 SEP 1205 | 18.4 | 14.8 | 18 | 30 | 62 | 58 | 60 | 17 | 36 | 68 | 114 | 71 | 22 | 20 | 45 | 49 | 55 | 17 | 29 | 65 | 56 | 62 |
| | ^b 27 SEP 2318 | 16.2 | 14.7 | 31 | 75 | 103 | 153 | 59 | 16 | 41 | 102 | 120 | 74 | 28 | 28 | 97 | 89 | 70 | 42 | 36 | 124 | 130 | 69 |
| 6 OCT | ^a 1027 | 15.7 | 14.7 | 28 | 11 | 61 | 46 | 64 | 10 | 47 | 55 | 84 | 59 | 28 | 12 | 44 | 30 | 46 | 25 | 31 | 53 | 54 | 48 |
| | ^b 2142 | 16.0 | 14.4 | 35 | 21 | 82 | 71 | 63 | 10 | 16 | 42 | 72 | 77 | 14 | 10 | 44 | 48 | 74 | 21 | 21 | 50 | 85 | 69 |
| 20 OCT | ^a 1110 | 12.1 | 13.6 | 4 | 19 | 22 | 31 | 57 | 2 | 4 | 18 | 23 | 85 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | ^b 2358 | 12.0 | 13.5 | 16 | 11 | 32 | 28 | 55 | 12 | 7 | 26 | 22 | 60 | 6 | 5 | 27 | 19 | 76 | 14 | 9 | 47 | 33 | 71 |
| 20 OCT ^h | ^a 1425 | NA | NA | 23 | 24 | 32 | 52 | 44 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 3 NOV | ^a 1210 | 10.4 | 15.5 | 17 | 20 | 23 | 32 | 33 | 11 | 18 | 21 | 30 | 43 | 4 | 13 | 21 | 21 | 60 | 41 | 26 | 53 | 46 | 32 |
| | ^b 2345 | 10.4 | 15.4 | 9 | 7 | 14 | 25 | 59 | 7 | 22 | 11 | 36 | 38 | 23 | 9 | 35 | 14 | 35 | 18 | 8 | 27 | 19 | 43 |
| 17 NOV | ^a 1210 | 8.2 | 13.6 | 22 | 12 | 33 | 27 | 43 | 19 | 17 | 36 | 28 | 44 | 14 | 11 | 25 | 19 | 43 | 19 | 18 | 29 | 29 | 36 |
| | ^b 2254 | 7.8 | 15.0 | 55 | 63 | 113 | 87 | 41 | 12 | 19 | 24 | 44 | 54 | 53 | 36 | 82 | 71 | 42 | 26 | 32 | 63 | 69 | 56 |
| 1 DEC | ^a 1230 | 3.2 | 14.8 | 17 | 26 | 37 | 50 | 51 | 9 | 17 | 21 | 44 | 60 | 48 | 12 | 76 | 44 | 51 | 35 | 19 | 54 | 69 | 56 |
| | ^b 2308 | 3.5 | 14.9 | 39 | 14 | 62 | 60 | 57 | 12 | 14 | 19 | 35 | 52 | 28 | 23 | 51 | 68 | 57 | 27 | 24 | 81 | 61 | 64 |
| 19 DEC | ^a 1155 | 2.2 | 12.8 | 13 | 5 | 46 | 22 | 74 | 6 | 9 | 9 | 20 | 48 | 5 | 5 | 19 | 11 | 67 | 8 | 14 | 24 | 25 | 55 |
| | ^b 2321 | 2.5 | 13.8 | 28 | 7 | 78 | 59 | 74 | 14 | 23 | 26 | 40 | 44 | 18 | 62 | 36 | 108 | 44 | 22 | 20 | 58 | 73 | 68 |

a/b Time in 2400 hrs of Intake Sample

c Intake temperature before tempering

d Discharge - Intake Temperature

e Number of live organisms observed

f Total number of organisms observed

NA = Not available

g Mean % dead equal to total of dead observed in R-1 and R-2 divided by total organisms observed in R-1 and R-2

h Sample taken from lake in the vicinity of FitzPatrick Intake

i Immediate analysis; 28 Apr - 19 Dec analysis after 8-hr incubation period

APPENDIX VIIIIB-2e
MORTALITY OF SELECTED TAXA OF
TOTAL ZOOPLANKTON (IN-PLANT)

NUMBER OF TOTAL ZOOPLANKTON OBSERVED IN VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | |
|------------------------|--|--------------------------------------|-----------------|-----------------------------|-----|------------------------------|-----|-----------|-------------------|-----------------------------|------|------------------------------|-----|--------------|-------------------|-----------------------------|-----|------------------------------|--------------|-----------|-------------------|-----|-----|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | MEAN ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | MEAN ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | MEAN ^g | | |
| | | | | R-1 | R-2 | R-1 | R-2 | | | R-1 | R-2 | R-1 | R-2 | | | R-1 | R-2 | R-1 | R-2 | | | R-1 | R-2 |
| 14 APR ^l | ^a 1130 | 5.1 | 14.0 | 48 | 33 | 94 | 85 | 55 | 16 | 45 | 47 | 157 | 61 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | ^b 2200 | 5.8 | 13.7 | 56 | 79 | 178 | 189 | 63 | 41 | 50 | 178 | 400 | 77 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| 28-29 APR | ^a 28 APR 1200 | 8.9 | 14.6 | 138 | 142 | 431 | 285 | 61 | 123 | 71 | 270 | 211 | 60 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | ^b 29 APR 0045 | 8.6 | 13.4 | 179 | 19 | 234 | 136 | 46 | 43 | 53 | 166 | 244 | 77 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| 12 MAY | ^a 1120 | 10.4 | 14.4 | 363 | 434 | 549 | 784 | 40 | 242 | 247 | 438 | 1088 | 55 | 91 | 63 | 189 | 163 | 56 | 46 | 57 | 121 | 153 | 62 |
| | ^b 2400 | 9.2 | 14.5 | 285 | 139 | 538 | 327 | 51 | 139 | 183 | 354 | 746 | 57 | 44 | 151 | 195 | 370 | 65 | 64 | 151 | 182 | 499 | 70 |
| 26 MAY | ^a 1000 | 10.9 | 14.4 | 189 | 190 | 437 | 361 | 53 | 195 | 106 | 435 | 674 | 55 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | ^b 2400 | 11.1 | 14.4 | 276 | 181 | 536 | 435 | 53 | 78 | 155 | 212 | 476 | 67 | 196 | 123 | 403 | 516 | 65 | 87 | 122 | 249 | 391 | 67 |
| 9 JUN | ^a 1130 | 11.7 | 12.4 | 120 | 252 | 255 | 404 | 43 | 94 | 214 | 206 | 207 | 55 | 64 | 112 | 189 | 301 | 64 | 76 | 148 | 250 | 269 | 57 |
| | ^b 2300 | 14.1 | 14.3 | 217 | 132 | 478 | 256 | 52 | 27 | 144 | 133 | 300 | 67 | 56 | 108 | 186 | 365 | 70 | 84 | 147 | 248 | 325 | 60 |
| 23,28 JUN | ^a 23 JUN 1100 | 17.4 | 15.5 | 260 | 423 | 582 | 907 | 54 | 521 | 703 | 1049 | 1053 | 67 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | ^b 28 JUN 2245 | 15.9 | 15.6 | 226 | 127 | 508 | 385 | 60 | 43 | 124 | 193 | 413 | 72 | 175 | 562 | 301 | 457 | 56 | 83 | 360 | 349 | 750 | 60 |
| 20 JUL | ^a 1200 | 19.9 | 14.2 | 509 | 289 | 655 | 389 | 24 | 97 | 118 | 196 | 215 | 48 | 160 | 308 | 225 | 416 | 27 | 408 | 496 | 539 | 733 | 29 |
| | ^b 2305 | 20.3 | 15.1 | 254 | 255 | 371 | 346 | 29 | 157 | 127 | 250 | 395 | 56 | 267 | 134 | 442 | 203 | 38 | 201 | 360 | 304 | 525 | 34 |
| 29 JUL | ^a 1200 | 19.8 | 14.0 | 181 | 329 | 279 | 390 | 24 | 130 | 284 | 233 | 501 | 44 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | ^b 2320 | 19.6 | 12.2 | 286 | 361 | 417 | 597 | 36 | 108 | 337 | 214 | 560 | 42 | 143 | 370 | 228 | 427 | 29 | 296 | 321 | 458 | 382 | 29 |
| 11 AUG | ^a 1140 | 19.2 | 15.6 | 120 | 208 | 208 | 363 | 43 | 75 | 112 | 190 | 279 | 60 | 117 | 93 | 201 | 200 | 48 | 95 | 97 | 211 | 173 | 50 |
| | ^b 2315 | 19.9 | 14.5 | 305 | 165 | 557 | 381 | 50 | 76 | 193 | 306 | 507 | 67 | 195 | 128 | 357 | 296 | 52 | 90 | 158 | 209 | 394 | 51 |
| 25 AUG | ^a 1145 | 21.8 | 15.7 | 337 | 237 | 462 | 477 | 39 | 49 | 80 | 345 | 280 | 79 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | ^b 2350 | 21.9 | 17.7 | 113 | 198 | 348 | 392 | 58 | 22 | 52 | 222 | 306 | 86 | 230 | 312 | 471 | 560 | 47 | 164 | 152 | 455 | 294 | 58 |

NUMBER OF TOTAL ZOOPLANKTON OBSERVED IN VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. ^c (°C) | ΔT ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | |
|---------------------|--|--------------------------------------|-------------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL ^f COLL'D | | % DEAD | NUMBER LIVE ^e | | TOTAL ^f COLL'D | | % DEAD | NUMBER LIVE ^e | | TOTAL ^f COLL'D | | % DEAD | NUMBER LIVE ^e | | TOTAL ^f COLL'D | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 8 SEP | a | 1130 | 19.7 | 174 | 267 | 266 | 418 | 36 | 34 | 112 | 119 | 443 | 74 | 147 | 107 | 220 | 164 | 34 | 130 | 175 | 189 | 285 | 36 |
| | b | 2305 | 21.1 | 147 | 229 | 359 | 410 | 51 | 247 | 87 | 505 | 409 | 63 | 102 | 110 | 184 | 246 | 51 | 166 | 106 | 372 | 240 | 56 |
| 22, 27 SEP | a 22 SEP | 1205 | 18.4 | 36 | 86 | 139 | 159 | 59 | 29 | 76 | 151 | 262 | 75 | 97 | 97 | 182 | 166 | 44 | 82 | 97 | 211 | 184 | 55 |
| | b 27 SEP | 2318 | 16.2 | 106 | 319 | 259 | 468 | 42 | 69 | 199 | 268 | 346 | 56 | 267 | 234 | 386 | 348 | 32 | 328 | 309 | 494 | 468 | 34 |
| 6 OCT | a | 1027 | 15.7 | 185 | 153 | 271 | 225 | 32 | 37 | 153 | 121 | 260 | 50 | 101 | 158 | 146 | 209 | 27 | 169 | 239 | 237 | 324 | 27 |
| | b | 2142 | 16.0 | 106 | 148 | 208 | 249 | 44 | 41 | 72 | 107 | 157 | 57 | 67 | 101 | 124 | 188 | 46 | 79 | 133 | 172 | 259 | 51 |
| 20 OCT | a | 1110 | 12.1 | 96 | 175 | 159 | 240 | 32 | 20 | 98 | 80 | 166 | 52 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2358 | 12.0 | 126 | 94 | 199 | 169 | 40 | 71 | 101 | 164 | 193 | 52 | 111 | 145 | 166 | 237 | 36 | 174 | 208 | 340 | 322 | 42 |
| 20 OCT ^h | a | 1425 | NA | 261 | 201 | 306 | 326 | 27 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 3 NOV | a | 1210 | 10.4 | 331 | 202 | 392 | 299 | 23 | 63 | 185 | 151 | 285 | 43 | 178 | 123 | 301 | 202 | 40 | 300 | 264 | 410 | 426 | 33 |
| | b | 2345 | 10.4 | 110 | 106 | 177 | 217 | 45 | 46 | 93 | 92 | 187 | 50 | 174 | 91 | 257 | 158 | 36 | 129 | 147 | 218 | 243 | 40 |
| 17 NOV | a | 1210 | 8.2 | 286 | 162 | 375 | 262 | 30 | 154 | 174 | 326 | 260 | 44 | 154 | 189 | 245 | 351 | 43 | 250 | 352 | 375 | 453 | 27 |
| | b | 2254 | 7.8 | 173 | 221 | 379 | 306 | 42 | 55 | 81 | 119 | 189 | 56 | 152 | 79 | 326 | 184 | 55 | 92 | 92 | 204 | 225 | 57 |
| 1 DEC | a | 1230 | 3.2 | 94 | 66 | 128 | 123 | 36 | 39 | 94 | 78 | 153 | 42 | 101 | 47 | 148 | 97 | 40 | 104 | 65 | 158 | 169 | 48 |
| | b | 2308 | 3.5 | 76 | 44 | 128 | 131 | 54 | 31 | 35 | 54 | 92 | 55 | 79 | 57 | 139 | 150 | 53 | 64 | 74 | 175 | 167 | 60 |
| 19 DEC | a | 1155 | 2.2 | 33 | 32 | 88 | 75 | 60 | 22 | 38 | 48 | 77 | 52 | 22 | 23 | 48 | 44 | 51 | 24 | 47 | 75 | 97 | 59 |
| | b | 2321 | 2.5 | 160 | 66 | 293 | 158 | 49 | 30 | 99 | 96 | 185 | 54 | 52 | 146 | 109 | 250 | 45 | 89 | 51 | 209 | 171 | 63 |

a/b Time in 2400 hrs of Intake Sample

c Intake temperature before tempering

d Discharge - Intake Temperature

e Number of live organisms observed

f Total number of organisms observed

NA = Not available

g Mean % dead equal to total of dead observed in R-1 and R-2 divided by total organisms observed in R-1 and R-2

h Sample taken from lake in the vicinity of FitzPatrick Intake

i Immediate analysis; 28 Apr - 19 Dec analysis after 8-hr incubation period

APPENDIX VIIIB-3a

MORTALITY OF SELECTED TAXA OF
ARTHROPODA: COPEPODA (LAKE)

NUMBER OF CALANOIDA (ARTHROPODA-COPEPODA)
OBSERVED IN LAKE VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY

| 1976 DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | 3° LAKE | | | | | 2° LAKE | | | | | |
|---------------|--|--------------------------------------|-----------------|-----------------------------|--------------|------------------------------|----------------|----------------|-------------------|-----------------------------|-----|------------------------------|----------------|-----------|
| | | | | NUMBER ^e LIVE | | TOTAL COLL'D ^f | | % DEAD | MEAN ^g | NUMBER ^e LIVE | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | | | R-1 | R-2 | R-1 | R-2 | |
| 14 APR | a | 1130 | 5.1 | 14.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2200 | 5.8 | 13.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 28-29 APR | a | 28 APR 1200 | 8.9 | 14.6 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 29 APR 0045 | 8.6 | 13.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 12 MAY | a | 1120 | 10.4 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2400 | 9.2 | 14.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 26 MAY | a | 1000 | 10.9 | 14.4 | 0 | 0 | 2 | 2 | 100 | 0 | 0 | 1 | 2 | 100 |
| | b | 2400 | 11.1 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 9 JUN | a | 1130 | 11.7 | 12.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2300 | 14.1 | 14.3 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 23, 28 JUN | a | 23 JUN 1100 | 17.4 | 15.5 | - | 1 | 0 | 2 | 50 | 1 | 1 | 1 | 1 | 0 |
| | b | 28 JUN 2245 | 15.9 | 15.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 JUL | a | 1200 | 19.9 | 14.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2305 | 20.3 | 15.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 29 JUL | a | 1200 | 19.8 | 14.0 | 1 | - | 1 ^h | 0 ^h | 0 | - | - | 0 ^h | 0 ^h | - |
| | b | 2320 | 19.6 | 12.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 11 AUG | a | 1140 | 19.2 | 15.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2315 | 19.9 | 14.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 25 AUG | a | 1145 | 21.8 | 15.7 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | b | 2350 | 21.9 | 17.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

NUMBER OF CALANOIDA (ARTHROPODA-COPEPODA)
OBSERVED IN LAKE VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY

| 1976 DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | Δ T ^d | 3° LAKE | | | | | 2° LAKE | | | | |
|---------------|--|--------------------------------------|------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 8 SEP | a | 1130 | 19.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2305 | 21.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 22, 27 SEP | a 22 SEP | 1205 | 18.4 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 27 SEP | 2318 | 16.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 6 OCT | a | 1027 | 15.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2142 | 16.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 OCT | a | 1110 | 12.1 | 0 | 0 | 1 | 1 | 100 | 0 | - | 1 | 0 | 100 |
| | b | 2358 | 12.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 13 NOV | a | 1210 | 10.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2345 | 10.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 17 NOV | a | 1210 | 8.2 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2254 | 7.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 1 DEC | a | 1230 | 3.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2308 | 3.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 19 DEC | a | 1155 | 2.2 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2321 | 2.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

a/b Time in 2400 hrs of Intake Sample

c Intake temperature before tempering

d Discharge - Intake Temperature

e Number of live organisms observed

f Total number of organisms observed

g Mean % dead equal to total number of
dead organisms observed in R-1 and R-2
divided by the total number of organisms
observed in R-1 and R-2

h Collections at sites 2° and 3°F lower
than the boil temperature (samples
were not taken in boil)

- = Not applicable

NA = Not available

NUMBER OF CYCLOPOIDA (ARTHROPODA-COPEPODA)
OBSERVED IN LAKE VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY

| 1976 DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | Δ T ^d | 3° LAKE | | | | | 2° LAKE | | | | |
|---------------|--|--------------------------------------|------------------|-----------------------------|-----|------------------------------|-----------------|--------------------------------|-----------------------------|-----|------------------------------|-----------------|--------------------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD MEAN ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD MEAN ^g |
| | | | | R-1 | R-2 | R-1 | R-2 | | R-1 | R-2 | R-1 | R-2 | |
| 14 APR | a 1130 | 5.1 | 14.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2200 | 5.8 | 13.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 28-29 APR | a 28 APR 1200 | 8.9 | 14.6 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 29 APR 0045 | 8.6 | 13.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 12 MAY | a 1120 | 10.4 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2400 | 9.2 | 14.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 26 MAY | a 1000 | 10.9 | 14.4 | 28 | 45 | 35 | 54 | 18 | 19 | 9 | 20 | 24 | 36 |
| | b 2400 | 11.1 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 9 JUN | a 1130 | 11.7 | 12.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2300 | 14.1 | 14.3 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 23, 28 JUN | a 23 JUN 1100 | 17.4 | 15.5 | 10 | 16 | 10 | 20 | 13 | 5 | 13 | 6 | 14 | 10 |
| | b 28 JUN 2245 | 15.9 | 15.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 JUL | a 1200 | 19.9 | 14.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2305 | 20.3 | 15.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 29 JUL | a 1200 | 19.8 | 14.0 | 21 | 41 | 22 ^h | 44 ^h | 6 | 36 | 46 | 47 ^h | 46 ^h | 12 |
| | b 2320 | 19.6 | 12.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 11 AUG | a 1140 | 19.2 | 15.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2315 | 19.9 | 14.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 25 AUG | a 1145 | 21.8 | 15.7 | 2 | 1 | 2 | 1 | 0 | - | - | 0 | 0 | - |
| | b 2350 | 21.9 | 17.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

NUMBER OF CYCLOPOIDA (ARTHROPODA-COPEPODA)
OBSERVED IN LAKE VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY

| 1976 DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | Δ T ^d | 3° LAKE | | | | | 2° LAKE | | | | | |
|---------------|--|--------------------------------------|------------------|-----------------------------|--------------|------------------------------|-----|-------------------|-----------------------------|--------------|------------------------------|-----|-------------------|---|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | |
| 8 SEP | a | 1130 | 19.7 | 15.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2305 | 21.1 | 16.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 22, 27 SEP | a 22 SEP | 1205 | 18.4 | 14.8 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 27 SEP | 2318 | 16.2 | 14.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 6 OCT | a | 1027 | 15.7 | 14.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2142 | 16.0 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 OCT | a | 1110 | 12.1 | 13.6 | 15 | 118 | 184 | 143 | 17 | 124 | 72 | 133 | 74 | 5 |
| | b | 2358 | 12.0 | 13.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| NOV | a | 1210 | 10.4 | 15.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2345 | 10.4 | 15.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 17 NOV | a | 1210 | 8.2 | 13.6 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2254 | 7.8 | 15.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 1 DEC | a | 1230 | 3.2 | 14.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2308 | 3.5 | 14.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 19 DEC | a | 1155 | 2.2 | 12.8 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2321 | 2.5 | 13.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

a/b Time in 2400 hrs of Intake Sample

c Intake temperature before tempering

d Discharge - Intake Temperature

e Number of live organisms observed

f Total number of organisms observed

g Mean % dead = total number of dead organisms observed in R-1 and R-2 divided by the total number of organisms observed in R-1 and R-2

h Collections at sites 2° and 3°F lower than the boil temperature (samples were not taken in boil)

- = Not applicable

NA = Not available

NUMBER OF COPEPODA^j(ARTHROPODA) OBSERVED IN
LAKE VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY

| 1976 DATE | DAY ^a NIGHT ^b | INTAKE TEMP (°C) ^c | ΔT ^d | 3° LAKE | | | | | 2° LAKE | | | | | |
|---------------|--|-------------------------------------|-----------------|-----------------------------|-----|------------------------------|-----------------|-----------|-------------------|-----------------------------|-----------------|------------------------------|-----|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | MEAN ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 14 APR | a 1130 | 5.1 | 14.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | |
| | b 2200 | 5.8 | 13.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | |
| 28-29 APR | a 28 APR 1200 | 8.9 | 14.6 | NO SAMPLE | | | | | NO SAMPLE | | | | | |
| | b 29 APR 0045 | 8.6 | 13.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | |
| 12 MAY | a 1120 | 10.4 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | |
| | b 2400 | 9.2 | 14.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | |
| 26 MAY | a 1000 | 10.9 | 14.4 | 57 | 66 | 84 | 92 | 30 | 51 | 24 | 66 | 70 | 45 | |
| | b 2400 | 11.1 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | |
| 9 JUN | a 1130 | 11.7 | 12.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | |
| | b 2300 | 14.1 | 14.3 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | |
| 23, 28 JUN | a 23 JUN 1100 | 17.4 | 15.5 | 16 | 35 | 20 | 43 | 19 | 19 | 19 | 30 | 65 | 60 | |
| | b 28 JUN 2245 | 15.9 | 15.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | |
| 20 JUL | a 1200 | 19.9 | 14.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | |
| | b 2305 | 20.3 | 15.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | |
| 29 JUL | a 1200 | 19.8 | 14.0 | 34 | 45 | 51 ^h | 49 ^h | 34 | 63 | 70 | 41 ^h | 86 ^h | 25 | |
| | b 2320 | 19.6 | 12.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | |
| 11 AUG | a 1140 | 19.2 | 15.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | |
| | b 2315 | 19.9 | 14.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | |
| 25 AUG | a 1145 | 21.8 | 15.7 | 6 | 1 | 7 | 4 | 36 | - | 1 | 0 | 1 | 0 | |
| | b 2350 | 21.9 | 17.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | |

NUMBER OF COPEPODA¹ (ARTHROPODA) OBSERVED IN
LAKE VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY

| 1976 DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT^d | 3° LAKE | | | | | 2° LAKE | | | | |
|---------------|--|--------------------------------------|--------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 8 SEP | a | 1130 | 19.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2305 | 21.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 22, 27 SEP | a | 22 SEP 1205 | 18.4 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 27 SEP 2318 | 16.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 6 OCT | a | 1027 | 15.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2142 | 16.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 OCT | a | 1110 | 12.1 | 165 | 137 | 207 | 182 | 22 | 142 | 108 | 158 | 117 | 9 |
| | b | 2358 | 12.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| NOV | a | 1210 | 10.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2345 | 10.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 17 NOV | a | 1210 | 8.2 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2254 | 7.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 1 DEC | a | 1230 | 3.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2308 | 3.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 19 DEC | a | 1155 | 2.2 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2321 | 2.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

a/b Time in 2400 hrs of Intake Sample

c Intake temperature before tempering

d Discharge - Intake Temperature

e Number of live organisms observed

f Total number of organisms observed

g Mean % dead = total number of dead organisms observed in R-1 and R-2 divided by the total number of organisms observed in R-1 and R-2

h Collections at sites 2° and 3°F lower than the boil temperature (samples were not taken in boil)

¹ Adults, juvenile, nauplii

NA = Not available

- = Not applicable

APPENDIX VIIIIB-3b

MORTALITY OF SELECTED TAXA OF
ARTHROPODA: CLADOCERA (LAKE)

NUMBER OF CLADOCERA (ARTHROPODA) OBSERVED

IN LAKE VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY

| 1976 DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | 3° LAKE | | | | | 2° LAKE | | | | | |
|---------------|--|--------------------------------------|-----------------|-----------------------------|--------------|------------------------------|-----------------|------------------|-------------------|-----------------------------|-----|------------------------------|-----------------|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | MEAN ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 14 APR | a | 1130 | 5.1 | 14.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2200 | 5.8 | 13.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 28-29 APR | a | 28 APR 1200 | 8.9 | 14.6 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 29 APR 0045 | 8.6 | 13.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 12 MAY | a | 1120 | 10.4 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2400 | 9.2 | 14.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 26 MAY | a | 1000 | 10.9 | 14.4 | 2 | 2 | 2 | 2 | 0 | 2 | 4 | 2 | 4 | 0 |
| | b | 2400 | 11.1 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| JUN | a | 1130 | 11.7 | 12.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2300 | 14.1 | 14.3 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 23, 28 JUN | a | 23 JUN 1100 | 17.4 | 15.5 | 14 | 24 | 15 | 37 | 10 | 37 | 23 | 68 | 26 | 36 |
| | b | 28 JUN 2245 | 15.9 | 15.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 JUL | a | 1200 | 19.9 | 14.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2305 | 20.3 | 15.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 29 JUL | a | 1200 | 19.8 | 14.0 | 80 | 201 | 90 ^h | 225 ^h | 11 | 113 | 73 | 151 ^h | 88 ^h | 22 |
| | b | 2320 | 19.6 | 12.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 11 AUG | a | 1140 | 19.2 | 15.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2315 | 19.9 | 14.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 25 AUG | a | 1145 | 21.8 | 15.7 | 22 | 16 | 33 | 24 | 33 | 4 | 3 | 6 | 3 | 22 |
| | b | 2350 | 21.9 | 17.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

NUMBER OF CLADOCERA (ARTHROPODA) OBSERVED
IN LAKE VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY

| 1976 DATE. | DAY ^a NIGHT ^b | INTAKE TEMP ^c (°C) | ΔT ^d | 3° LAKE | | | | | 2° LAKE | | | | |
|---------------|--|-------------------------------------|-----------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|
| | | | | NUMBER ^e LIVE | | TOTAL ^f COLL'D | | % DEAD | NUMBER ^e LIVE | | TOTAL ^f COLL'D | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 8 SEP | a | 1130 | 19.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2305 | 21.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 22, 27 SEP | a 22 SEP | 1205 | 18.4 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 27 SEP | 2318 | 16.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 6 OCT | a | 1027 | 15.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2142 | 16.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 OCT | a | 1110 | 12.1 | 102 | 150 | 106 | 157 | 4 | 32 | 43 | 38 | 45 | 10 |
| | b | 2358 | 12.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 3 NOV | a | 1210 | 10.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2345 | 10.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 17 NOV | a | 1210 | 8.2 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2254 | 7.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 1 DEC | a | 1230 | 3.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2308 | 3.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 19 DEC | a | 1155 | 2.2 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2321 | 2.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

a/b Time in 2400 hrs of Intake Sample
^c Intake temperature before tempering
^d Discharge - Intake Temperature
^e Number of live organisms observed
^f Total number of organisms observed
^g Mean % dead = total number of dead organisms observed in R-1 and R-2 divided by the total number of organisms observed in R-1 and R-2

^h Collections at sites 2° and 3°F lower than the boil temperature (samples were not taken in boil)

- = Not applicable
 NA = Not available

APPENDIX VIIIB-3c

MORTALITY OF SELECTED TAXA OF
PROTOZOA (LAKE)

NUMBER OF CILIATA (PROTOZOA) OBSERVED IN LAKE VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY

| 1976 DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | 3° LAKE | | | | | 2° LAKE | | | | |
|---------------|--|--------------------------------------|-------------------------|-----------------------------|-----|------------------------------|-----------------|-------------------|-----------------------------|-----|------------------------------|-----------------|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 14 APR | a | 1130 | 5.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2200 | 5.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 28-29 APR | a | 28 APR 1200 | 8.9 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 29 APR 0045 | 8.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 12 MAY | a | 1120 | 10.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2400 | 9.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 26 MAY | a | 1000 | 10.9 | 0 | 3 | 14 | 5 | 84 | 4 | 3 | 4 | 9 | 46 |
| | b | 2400 | 11.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 9 JUN | a | 1130 | 11.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2300 | 14.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 23, 28 JUN | a | 23 JUN 1100 | 17.4 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | b | 28 JUN 2245 | 15.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 JUL | a | 1200 | 19.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2305 | 20.3 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 29 JUL | a | 1200 | 19.8 | 0 | 16 | 14 ^h | 29 ^h | 63 | 16 | 4 | 26 ^h | 20 ^h | 57 |
| | b | 2320 | 19.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 11 AUG | a | 1140 | 19.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2315 | 19.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 25 AUG | a | 1145 | 21.8 | 5 | 24 | 5 | 24 | 0 | 19 | 23 | 26 | 23 | 14 |
| | b | 2350 | 21.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

NUMBER OF CILIATA (PROTOZOA) OBSERVED IN LAKE VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY

| 1976 DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | 3°LAKE | | | | | 2°LAKE | | | | |
|--------------|--|--------------------------------------|-----------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 8 SEP | a | 1130 | 19.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2305 | 21.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 22,27 SEP | a | 22 SEP 1205 | 18.4 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 27 SEP 2318 | 16.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 6 OCT | a | 1027 | 15.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2142 | 16.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 OCT | a | 1110 | 12.1 | 0 | 4 | 2 | 4 | 33 | 0 | 15 | 1 | 24 | 40 |
| | b | 2358 | 12.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 3 NOV | a | 1210 | 10.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2345 | 10.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 17 NOV | a | 1210 | 8.2 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2254 | 7.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 1 DEC | a | 1230 | 3.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2308 | 3.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 19 DEC | a | 1155 | 2.2 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2321 | 2.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

a/b Time in 2400 hrs of Intake Sample

c Intake temperature before tempering

d Discharge - Intake Temperature

e Number of live organisms observed

f Total number of organisms observed

g Mean % dead = total number of dead organisms observed in R-1 and R-2 divided by the total number of organisms observed in R-1 and R-2

h Collections at sites 2° and 3°F lower than the boil temperature (samples were not taken in boil)

- = Not applicable

NA = Not available

NUMBER OF SUCTORIA (PROTOZOA) OBSERVED
IN LAKE VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY

| 1976 DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | Δ T ^d | 3° LAKE | | | | | 2° LAKE | | | | | |
|---------------|--|--------------------------------------|------------------|-----------------------------|--------------|------------------------------|----------------|-------------------|-----------------------------|--------------|------------------------------|----------------|-------------------|-----|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | |
| 14 APR | a | 1130 | 5.1 | 14.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2200 | 5.8 | 13.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 28-29 APR | a | 28 APR 1200 | 8.9 | 14.6 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 29 APR 0045 | 8.6 | 13.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 12 MAY | a | 1120 | 10.4 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2400 | 9.2 | 14.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 26 MAY | a | 1000 | 10.9 | 14.4 | - | 1 | 0 | 1 | 0 | - | 0 | 0 | 1 | 100 |
| | b | 2400 | 11.1 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 9 JUN | a | 1130 | 11.7 | 12.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2300 | 14.1 | 14.3 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 23, 28 JUN | a | 23 JUN 1100 | 17.4 | 15.5 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | b | 28 JUN 2245 | 15.9 | 15.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 JUL | a | 1200 | 19.9 | 14.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2305 | 20.3 | 15.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 29 JUL | a | 1200 | 19.8 | 14.0 | - | - | 0 ^h | 0 ^h | - | - | - | 0 ^h | 0 ^h | - |
| | b | 2320 | 19.6 | 12.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 11 AUG | a | 1140 | 19.2 | 15.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2315 | 19.9 | 14.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 25 AUG | a | 1145 | 21.8 | 15.7 | - | - | 0 | 0 | - | 1 | - | 1 | 0 | 0 |
| | b | 2350 | 21.9 | 17.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

NUMBER OF SUCTORIA (PROTOZOA) OBSERVED
IN LAKE VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY

| 1976 DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | 3° LAKE | | | | | 2° LAKE | | | | |
|---------------|--|--------------------------------------|-------------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 8 SEP | a | 1130 | 19.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2305 | 21.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 22, 27 SEP | a 22 SEP | 1205 | 18.4 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 27 SEP | 2318 | 16.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 6 OCT | a | 1027 | 15.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2142 | 16.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 OCT | a | 1110 | 12.1 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | b | 2358 | 12.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| NOV | a | 1210 | 10.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2345 | 10.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 17 NOV | a | 1210 | 8.2 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2254 | 7.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 1 DEC | a | 1230 | 3.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2308 | 3.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 19 DEC | a | 1155 | 2.2 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2321 | 2.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

a/b Time in 2400 hrs of Intake Sample
c Intake temperature before tempering
d Discharge - Intake Temperature
e Number of live organisms observed
f Total number of organisms observed
g Mean % dead = total number of dead
organisms observed in R-1 and R-2
divided by the total number of organisms
observed in R-1 and R-2

h Collections at sites 2° and 3°F lower
than the boil temperature (samples
were not taken in boil)

- = Not applicable
NA = Not available

NUMBER OF TOTAL PROTOZOA OBSERVED IN
LAKE VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY

| 1976 DATE | DAY ^a NIGHT ^b | INTAKE TEMP: (°C) ^c | ΔT^d | 3° LAKE | | | | | 2° LAKE | | | | |
|---------------|--|--------------------------------------|--------------|-----------------------------|-----|------------------------------|-----------------|-------------------|-----------------------------|-----|------------------------------|-----------------|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 14 APR | a 1130 | 5.1 | 14.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2200 | 5.8 | 13.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 28-29 APR | a 28 APR 1200 | 8.9 | 14.6 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 29 APR 0045 | 8.6 | 13.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 12 MAY | a 1120 | 10.4 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2400 | 9.2 | 14.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 26 MAY | a 1000 | 10.9 | 14.4 | 0 | 4 | 14 | 6 | 80 | 4 | 3 | 6 | 10 | 56 |
| | b 2400 | 11.1 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 9 JUN | a 1130 | 11.7 | 12.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2300 | 14.1 | 14.3 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 23, 28 JUN | a 23 JUN 1100 | 17.4 | 15.5 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | b 28 JUN 2245 | 15.9 | 15.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 JUL | a 1200 | 19.9 | 14.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2305 | 20.3 | 15.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 29 JUL | a 1200 | 19.8 | 14.0 | 0 | 16 | 14 ^h | 29 ^h | 63 | 16 | 4 | 26 ^h | 20 ^h | 57 |
| | b 2320 | 19.6 | 12.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 11 AUG | a 1140 | 19.2 | 15.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2315 | 19.9 | 14.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 25 AUG | a 1145 | 21.8 | 15.7 | 5 | 25 | 6 | 27 | 9 | 21 | 25 | 28 | 25 | 13 |
| | b 2350 | 21.9 | 17.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

NUMBER OF TOTAL PROTOZOA OBSERVED IN
LAKE VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY

| 1976 DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | 3° LAKE | | | | | 2° LAKE | | | | |
|---------------|--|--------------------------------------|-------------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|
| | | | | NUMBER ^e LIVE | | TOTAL COLL'D ^f | | % DEAD | NUMBER ^e LIVE | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 8 SEP | a | 1130 | 19.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2305 | 21.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 22, 27 SEP | a | 22 SEP 1205 | 18.4 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 27 SEP 2318 | 16.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 6 OCT | a | 1027 | 15.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2142 | 16.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 OCT | a | 1110 | 12.1 | 0 | 4 | 2 | 4 | 33 | 0 | 16 | 1 | 25 | 38 |
| | b | 2358 | 12.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 13 NOV | a | 1210 | 10.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2345 | 10.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 17 NOV | a | 1210 | 8.2 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2254 | 7.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 1 DEC | a | 1230 | 3.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2308 | 3.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 19 DEC | a | 1155 | 2.2 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2321 | 2.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

a/b Time in 2400 hrs of Intake Sample
c Intake temperature before tempering
d Discharge - Intake Temperature
e Number of live organisms observed
f Total number of organisms observed
g Mean % dead = total number of dead organisms observed in R-1 and R-2 divided by the total number of organisms observed in R-1 and R-2

h Collections at sites 2° and 3°F lower than the boil temperature (samples were not taken in boil)

- = Not applicable
NA = Not available

APPENDIX VIII B-3d
MORTALITY OF SELECTED TAXA OF
ROTIFERA (LAKE)

NUMBER OF ROTIFERA OBSERVED IN LAKE VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY

| 1976 DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | 3° LAKE | | | | | 2° LAKE | | | | |
|---------------|--|--------------------------------------|-----------------|-----------------------------|-----|------------------------------|-----------------|--------------------------------|-----------------------------|-----|------------------------------|-----------------|--------------------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD MEAN ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD MEAN ^g |
| | | | | R-1 | R-2 | R-1 | R-2 | | R-1 | R-2 | R-1 | R-2 | |
| 14 APR | a 1130 | 5.1 | 14.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2200 | 5.8 | 13.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 28-29 APR | a 28 APR 1200 | 8.9 | 14.6 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 29 APR 0045 | 8.6 | 13.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 12 MAY | a 1120 | 10.4 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2400 | 9.2 | 14.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 26 MAY | a 1000 | 10.9 | 14.4 | 81 | 149 | 372 | 290 | 50 | 161 | 103 | 257 | 262 | 49 |
| | b 2400 | 11.1 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | a 1130 | 11.7 | 12.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2300 | 14.1 | 14.3 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 23, 28 JUN | a 23 JUN 1100 | 17.4 | 15.5 | 233 | 296 | 605 | 720 | 60 | 300 | 494 | 919 | 1258 | 63 |
| | b 28 JUN 2245 | 15.9 | 15.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 JUL | a 1200 | 19.9 | 14.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2305 | 20.3 | 15.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 29 JUL | a 1200 | 19.8 | 14.0 | 20 | 37 | 38 ^h | 73 ^h | 49 | 21 | 23 | 47 ^h | 47 ^h | 53 |
| | b 2320 | 19.6 | 12.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 11 AUG | a 1140 | 19.2 | 15.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2315 | 19.9 | 14.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 25 AUG | a 1145 | 21.8 | 15.7 | 92 | 33 | 114 | 56 | 26 | 21 | 49 | 39 | 61 | 30 |
| | b 2350 | 21.9 | 17.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

NUMBER OF ROTIFERA OBSERVED IN LAKE VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY

| 1976 DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT^d | 3° LAKE | | | | | 2° LAKE | | | | |
|---------------|--|--------------------------------------|--------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 8 SEP | a 1130 | 19.7 | 15.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2305 | 21.1 | 16.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 22, 27 SEP | a 22 SEP 1205 | 18.4 | 14.8 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 27 SEP 2318 | 16.2 | 14.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 6 OCT | a 1027 | 15.7 | 14.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2142 | 16.0 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 OCT | a 1110 | 12.1 | 13.6 | 7 | 29 | 17 | 44 | 41 | 4 | 23 | 14 | 35 | 45 |
| | b 2358 | 12.0 | 13.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 3 NOV | a 1210 | 10.4 | 15.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2345 | 10.4 | 15.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 17 NOV | a 1210 | 8.2 | 13.6 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 2254 | 7.8 | 15.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 1 DEC | a 1230 | 3.2 | 14.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2308 | 3.5 | 14.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 19 DEC | a 1155 | 2.2 | 12.8 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 2321 | 2.5 | 13.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

a/b Time in 2400 hrs of Intake Sample

c Intake temperature before tempering

d Discharge - Intake Temperature

e Number of live organisms observed

f Total number of organisms observed

g Mean % dead = total number of dead organisms observed in R-1 and R-2 divided by the total number of organisms observed in R-1 and R-2

h Collections at sites 2° and 3°F lower than the boil temperature (samples were not taken in boil)

- = Not applicable

NA = Not available

APPENDIX VIIIB-3e

MORTALITY OF SELECTED TAXA OF
TOTAL ZOOPLANKTON (LAKE)

NUMBER OF TOTAL ZOOPLANKTON OBSERVED IN LAKE VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY

| 1976 DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT^d | 3° LAKE | | | | | 2° LAKE | | | | |
|---------------|--|--------------------------------------|--------------|-----------------------------|-----|------------------------------|------------------|-------------------|-----------------------------|-----|------------------------------|------------------|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 14 APR | a | 1130 | 5.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2200 | 5.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 28-29 APR | a | 28 APR 1200 | 8.9 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 29 APR 0045 | 8.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 12 MAY | a | 1120 | 10.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2400 | 9.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 26 MAY | a | 1000 | 10.9 | 140 | 321 | 472 | 390 | 46 | 218 | 134 | 331 | 346 | 48 |
| | b | 2400 | 11.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 9 JUN | a | 1130 | 11.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2300 | 14.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 23, 28 JUN | a | 23 JUN 1100 | 17.4 | 263 | 355 | 640 | 790 | 57 | 356 | 536 | 1017 | 1349 | 62 |
| | b | 28 JUN 2245 | 15.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 JUL | a | 1200 | 19.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2305 | 20.3 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 29 JUL | a | 1200 | 19.8 | 134 | 299 | 193 ^h | 376 ^h | 26 | 213 | 170 | 315 ^h | 241 ^h | 31 |
| | b | 2320 | 19.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 11 AUG | a | 1140 | 19.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2315 | 19.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 25 AUG | a | 1145 | 21.8 | 125 | 75 | 160 | 111 | 26 | 46 | 78 | 73 | 90 | 24 |
| | b | 2350 | 21.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

NUMBER OF TOTAL ZOOPLANKTON OBSERVED IN LAKE VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY

| 1976 DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | 3° LAKE | | | | | 2° LAKE | | | | |
|---------------|--|--------------------------------------|-------------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 8 SEP | a | 1130 | 19.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2305 | 21.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 22, 27 SEP | a | 22 SEP 1205 | 18.4 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 27 SEP 2318 | 16.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 6 OCT | a | 1027 | 15.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2142 | 16.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 OCT | a | 1110 | 12.1 | 274 | 320 | 332 | 387 | 17 | 178 | 190 | 211 | 222 | 15 |
| | b | 2358 | 12.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 2 NOV | a | 1210 | 10.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2345 | 10.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 17 NOV | a | 1210 | 8.2 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2254 | 7.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 1 DEC | a | 1230 | 3.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2308 | 3.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 19 DEC | a | 1155 | 2.2 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2321 | 2.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

a/b Time in 2400 hrs of Intake Sample
c Intake temperature before tempering
d Discharge - Intake Temperature
e Number of live organisms observed
f Total number of organisms observed
g Mean % dead = total number of dead organisms observed in R-1 and R-2 divided by the total number of organisms observed in R-1 and R-2

h Collections at sites 2° and 3°F lower than the boil temperature (samples were not taken in boil)

- = Not applicable
NA = Not available

APPENDIX VIIIB-4a
MORTALITY OF SELECTED SPECIES OF
CLADOCERA (IN-PLANT)

NUMBER OF BOSMINA LONGIROSTRIS (CLADOCERA) OBSERVED IN VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | |
|------------------------|--|--------------------------------------|-----------------|-----------------------------|-----|------------------------------|-----|--------------------------------|-----------------------------|-----|------------------------------|-----|--------------------------------|-----------------------------|-----|------------------------------|-----|--------------------------------|-----------------------------|-----|------------------------------|-----|--------------------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD MEAN ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD MEAN ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD MEAN ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD MEAN ^g |
| | | | | R-1 | R-2 | R-1 | R-2 | | R-1 | R-2 | R-1 | R-2 | | R-1 | R-2 | R-1 | R-2 | | R-1 | R-2 | R-1 | R-2 | |
| 14 APR ¹ | a 1130 | 5.1 | 14.0 | - | - | 0 | 0 | - | - | 3 | 0 | 3 | 0 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 2200 | 5.8 | 13.7 | - | 2 | 0 | 2 | 0 | 1 | 0 | 1 | 1 | 50 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| 28-29 APR | a 28 APR 1200 | 8.9 | 14.6 | 1 | 2 | 1 | 2 | 100 | - | - | 0 | 0 | - | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 29 APR 0045 | 8.6 | 13.4 | - | - | 0 | 0 | - | 1 | - | 1 | 0 | 0 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| 12 MAY | a 1120 | 10.4 | 14.4 | 0 | 2 | 3 | 2 | 60 | - | 2 | 0 | 3 | 33 | 1 | 0 | 2 | 1 | 67 | - | 1 | 0 | 1 | 0 |
| | b 2400 | 9.2 | 14.5 | 3 | - | 3 | 0 | 0 | 1 | 5 | 1 | 6 | 14 | 2 | 4 | 2 | 4 | 0 | - | - | 0 | 0 | - |
| 26 MAY | a 1000 | 10.9 | 14.4 | 3 | 1 | 3 | 1 | 0 | 2 | 1 | 3 | 2 | 40 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2400 | 11.1 | 14.4 | 0 | 3 | 1 | 3 | 25 | 0 | 1 | 1 | 1 | 50 | 4 | 4 | 4 | 4 | 0 | - | 2 | 0 | 2 | 0 |
| 9 JUN | a 1130 | 11.7 | 12.4 | 4 | 13 | 4 | 14 | 6 | 5 | 4 | 5 | 8 | 31 | 3 | 9 | 6 | 10 | 25 | 4 | 7 | 5 | 7 | 8 |
| | b 2300 | 14.1 | 14.3 | 10 | 4 | 10 | 6 | 12 | 3 | 4 | 5 | 7 | 42 | 3 | 4 | 6 | 10 | 56 | 2 | 0 | 6 | 4 | 80 |
| 23,28 JUN | a 23 JUN 1100 | 17.4 | 15.5 | 11 | 20 | 12 | 24 | 14 | 33 | 17 | 33 | 25 | 14 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 28 JUN 2245 | 15.9 | 15.6 | 53 | 19 | 58 | 30 | 18 | 9 | 35 | 22 | 43 | 32 | 34 | 75 | 43 | 94 | 20 | 11 | 47 | 26 | 71 | 40 |
| 20 JUL | a 1200 | 19.9 | 14.2 | 369 | 172 | 439 | 212 | 17 | 35 | 25 | 72 | 61 | 55 | 63 | 144 | 74 | 170 | 15 | 285 | 344 | 341 | 446 | 20 |
| | b 2305 | 20.3 | 15.1 | 120 | 154 | 139 | 179 | 14 | 94 | 35 | 107 | 153 | 50 | 133 | 74 | 166 | 85 | 18 | 84 | 200 | 97 | 254 | 19 |
| 29 JUL | a 1200 | 19.8 | 14.0 | 76 | 126 | 90 | 140 | 12 | 73 | 164 | 109 | 237 | 32 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2320 | 19.6 | 12.2 | 139 | 205 | 176 | 276 | 24 | 28 | 212 | 41 | 267 | 22 | 42 | 177 | 60 | 212 | 20 | 134 | 157 | 174 | 179 | 18 |
| 11 AUG | a 1140 | 19.2 | 15.6 | 24 | 52 | 29 | 71 | 24 | 12 | 18 | 35 | 38 | 59 | 16 | 10 | 23 | 28 | 49 | 26 | 14 | 51 | 27 | 49 |
| | b 2315 | 19.9 | 14.5 | 95 | 41 | 119 | 54 | 21 | 9 | 23 | 28 | 55 | 61 | 42 | 46 | 50 | 65 | 23 | 25 | 64 | 35 | 89 | 28 |
| 25 AUG | a 1145 | 21.8 | 15.7 | 160 | 130 | 167 | 190 | 19 | 3 | 25 | 114 | 91 | 86 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2350 | 21.9 | 17.7 | 53 | 74 | 75 | 116 | 34 | 1 | 7 | 49 | 67 | 93 | 101 | 80 | 138 | 149 | 37 | 23 | 61 | 55 | 76 | 36 |

NUMBER OF BOSMINA LONGIROSTRIS (CLADOCERA) OBSERVED IN VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT -- 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | | |
|------------------------|--|--------------------------------------|-----------------|-----------------------------|-----|------------------------------|-----|--------------------------------|-----------------------------|--------------|------------------------------|-----|--------------------------------|-----------------------------|--------------|------------------------------|-----|--------------------------------|-----------------------------|--------------|------------------------------|-----|--------------------------------|-----|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD MEAN ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD MEAN ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD MEAN ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD MEAN ^g | |
| | | | | R-1 | R-2 | R-1 | R-2 | | R-1 | R-2 | R-1 | R-2 | | R-1 | R-2 | R-1 | R-2 | | R-1 | R-2 | R-1 | R-2 | | R-1 |
| 8 SEP | a | 1130 | 19.7 | 15.9 | 2 | 7 | 5 | 9 | 36 | - | 1 | 0 | 1 | 0 | 9 | 1 | 11 | 2 | 23 | 2 | 3 | 5 | 5 | 50 |
| | b | 2305 | 21.1 | 16.0 | 6 | 8 | 8 | 12 | 30 | 2 | 0 | 5 | 6 | 82 | 2 | 2 | 4 | 3 | 43 | 8 | 1 | 11 | 1 | 25 |
| 22, 27 SEP | a | 22 SEP 1205 | 18.4 | 14.8 | 6 | 9 | 6 | 11 | 12 | 0 | 5 | 3 | 13 | 69 | 7 | 10 | 7 | 11 | 6 | 12 | 5 | 16 | 10 | 35 |
| | b | 27 SEP 2318 | 16.2 | 14.7 | 18 | 49 | 21 | 62 | 19 | 6 | 25 | 12 | 29 | 24 | 26 | 30 | 32 | 33 | 14 | 71 | 43 | 82 | 53 | 16 |
| 6 OCT | a | 1027 | 15.7 | 14.7 | 39 | 21 | 40 | 26 | 9 | 3 | 17 | 4 | 21 | 20 | 9 | 15 | 12 | 22 | 29 | 20 | 23 | 21 | 35 | 23 |
| | b | 2142 | 16.0 | 14.4 | 7 | 11 | 8 | 15 | 22 | 2 | 2 | 4 | 2 | 33 | 7 | 8 | 7 | 10 | 12 | 9 | 14 | 9 | 17 | 12 |
| 20 OCT | a | 1110 | 12.1 | 13.6 | 15 | 53 | 16 | 57 | 7 | 3 | 11 | 7 | 19 | 46 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2358 | 12.0 | 13.5 | 18 | 16 | 24 | 18 | 19 | 9 | 5 | 14 | 14 | 50 | 14 | 49 | 15 | 54 | 23 | 54 | 71 | 66 | 86 | 18 |
| 20 OCT ^h | a | 1425 | NA | NA | 30 | 26 | 33 | 34 | 16 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 3 NOV | a | 1210 | 10.4 | 15.5 | 19 | 53 | 21 | 56 | 6 | 9 | 14 | 13 | 17 | 23 | 20 | 21 | 25 | 22 | 13 | 34 | 34 | 40 | 37 | 12 |
| | b | 2345 | 10.4 | 15.4 | 7 | 19 | 11 | 28 | 33 | 4 | 0 | 6 | 10 | 75 | 53 | 28 | 54 | 32 | 6 | 15 | 34 | 19 | 40 | 17 |
| 17 NOV | a | 1210 | 8.2 | 13.6 | 83 | 30 | 88 | 31 | 5 | 35 | 28 | 45 | 37 | 23 | 26 | 31 | 31 | 35 | 14 | 30 | 52 | 33 | 54 | 6 |
| | b | 2254 | 7.8 | 15.0 | 40 | 60 | 51 | 69 | 17 | 13 | 46 | 20 | 55 | 21 | 39 | 19 | 41 | 24 | 11 | 20 | 35 | 22 | 43 | 15 |
| 1 DEC | a | 1230 | 3.2 | 14.8 | 4 | 6 | 4 | 7 | 9 | 1 | 7 | 1 | 8 | 11 | 5 | 8 | 5 | 8 | 0 | 6 | 11 | 6 | 20 | 35 |
| | b | 2308 | 3.5 | 14.9 | 4 | 1 | 4 | 3 | 29 | - | 1 | 0 | 2 | 50 | 4 | 11 | 4 | 12 | 6 | 5 | 7 | 7 | 8 | 20 |
| 19 DEC | a | 1155 | 2.2 | 12.8 | 2 | - | 2 | 0 | 0 | 1 | - | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | - | 2 | 0 | 3 | 33 |
| | b | 2321 | 2.5 | 13.8 | 10 | 4 | 11 | 4 | 7 | 1 | 7 | 1 | 9 | 20 | 2 | 9 | 5 | 9 | 21 | 7 | 14 | 8 | 14 | 5 |

a/b Time in 2400 hrs of Intake Sample
c Intake temperature before tempering
d Discharge - Intake Temperature
e Number of live organisms observed
f Total number of organisms observed

g Total of dead observed in R-1 and R-2 divided by total organisms
observed in R-1 and R-2
h Sample taken from lake in vicinity of FitzPatrick Intake
i Immediate analysis; 28 Apr - 19 Dec analysis after 8-hr
incubation period
Not applicable
Not available

APPENDIX VIIIB-4b

MORTALITY OF SELECTED SPECIES OF
COPEPODA: CYCLOPOIDA (IN-PLANT)

NUMBER OF TROPOCYCLOPS PRASINUS MEXICANUS (COPEPODA : CYCLOPOIDA) OBSERVED IN VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE * | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | |
|------------------------|--|--------------------------------------|-----------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 14 ₁ APR | a 1130 | 5.1 | 14.0 | - | - | 0 | 0 | - | - | 1 | 0 | 1 | 0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2200 | 5.8 | 13.7 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 12 MAY | a 1120 | 10.4 | 14.4 | - | - | 0 | 0 | - | - | 1 | 0 | 1 | 0 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | b 2400 | 9.2 | 14.5 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | 1 | 1 | 1 | 1 | 0 |
| 9 JUN | a 1130 | 11.7 | 12.4 | 1 | - | 1 | 0 | 0 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | b 2300 | 14.1 | 14.3 | 0 | - | 1 | 0 | 100 | - | 1 | 0 | 1 | 0 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| 23, 28 JUN | a 23 JUN 1100 | 17.4 | 15.5 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 28 JUN 2245 | 15.9 | 15.6 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | 1 | 0 | 1 | 0 | - | - | 0 | 0 | - |
| 20 JUL | a 1200 | 19.9 | 14.2 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | b 2305 | 20.3 | 15.1 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | 1 | 0 | 1 | 0 |
| 29 JUL | a 1200 | 19.8 | 14.0 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2320 | 19.6 | 12.2 | - | 0 | 0 | 1 | 100 | - | 1 | 0 | 1 | 0 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| 11 AUG | a 1140 | 19.2 | 15.6 | - | 10 | 0 | 12 | 17 | 1 | - | 1 | 0 | 0 | 2 | - | 2 | 0 | 0 | 4 | 2 | 4 | 2 | 0 |
| | b 2315 | 19.9 | 14.5 | 2 | - | 2 | 0 | 0 | - | 4 | 0 | 8 | 50 | 2 | 2 | 2 | 2 | 0 | - | - | 0 | 0 | - |
| 25 AUG | a 1145 | 21.8 | 15.7 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2350 | 21.9 | 17.7 | - | 1 | 0 | 1 | 0 | 0 | - | 1 | 0 | 100 | - | 0 | 0 | 1 | 100 | - | - | 0 | 0 | - |
| 8 SEP | a 1130 | 19.7 | 15.9 | 5 | 7 | 5 | 9 | 14 | - | - | 0 | 0 | - | 3 | 3 | 3 | 3 | 0 | 4 | 12 | 4 | 12 | 0 |
| | b 2305 | 21.1 | 16.0 | - | - | 0 | 0 | - | 4 | - | 5 | 0 | 20 | 0 | 2 | 1 | 2 | 33 | 3 | - | 4 | 0 | 25 |

species was not collected on the following dates: 28-29 May

NUMBER OF TROPOCYCLOPS PRASINUS MEXICANUS (COPEPODA : CYCLOPOIDA) OBSERVED IN VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | |
|------------------------|--|--------------------------------------|-----------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 22, 27 SEP | a 22 SEP 1205 | 18.4 | 14.8 | 4 | 3 | 4 | 3 | 0 | - | 5 | 0 | 9 | 44 | 5 | - | 5 | 0 | 0 | 3 | 4 | 4 | 4 | 12 |
| | b 27 SEP 2318 | 16.2 | 14.7 | 22 | 29 | 27 | 29 | 9 | 2 | 18 | 10 | 27 | 46 | - | - | 0 | 0 | - | 35 | 45 | 40 | 48 | 9 |
| 6 OCT | a 1027 | 15.7 | 14.7 | 27 | 30 | 31 | 32 | 10 | 4 | 16 | 13 | 24 | 46 | 19 | 41 | 22 | 44 | 9 | 38 | 47 | 45 | 55 | 15 |
| | b 2142 | 16.0 | 14.4 | 17 | 35 | 19 | 45 | 19 | 12 | 9 | 17 | 15 | 34 | 20 | 31 | 26 | 40 | 23 | 22 | 34 | 25 | 49 | 24 |
| 20 OCT | a 1110 | 12.1 | 13.6 | 1 | 9 | 1 | 12 | 23 | 0 | 0 | 6 | 6 | 100 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2358 | 12.0 | 13.5 | 10 | 14 | 19 | 25 | 45 | 10 | 11 | 17 | 14 | 32 | 14 | 16 | 16 | 35 | 41 | 12 | 16 | 26 | 21 | 40 |
| 20 OCT ^h | a 1425 | NA | NA | 34 | 19 | 36 | 31 | 21 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 3 NOV | a 1210 | 10.4 | 15.5 | 18 | 14 | 18 | 18 | 11 | 1 | 10 | 3 | 20 | 52 | 10 | 11 | 19 | 11 | 30 | 18 | 14 | 18 | 26 | 27 |
| | b 2345 | 10.4 | 15.4 | 3 | 2 | 6 | 6 | 58 | 0 | 3 | 5 | 3 | 63 | 14 | 3 | 15 | 8 | 26 | 10 | 5 | 15 | 9 | 38 |
| 17 NOV | a 1210 | 8.2 | 13.6 | 11 | 11 | 13 | 16 | 24 | 15 | 10 | 23 | 15 | 34 | 12 | 3 | 20 | 10 | 50 | 12 | 28 | 17 | 29 | 13 |
| | b 2254 | 7.8 | 15.0 | 5 | 6 | 15 | 6 | 48 | 0 | 1 | 6 | 4 | 90 | 0 | 3 | 5 | 3 | 62 | 2 | 3 | 6 | 13 | 74 |
| 1 DEC | a 1230 | 3.2 | 14.8 | - | 2 | 0 | 2 | 0 | 1 | - | 1 | 0 | 0 | - | 0 | 0 | 4 | 100 | - | 1 | 0 | 1 | 0 |
| | b 2308 | 3.5 | 14.9 | 0 | 3 | 2 | 3 | 40 | - | - | 0 | 0 | - | - | 0 | 0 | 2 | 100 | 0 | 2 | 3 | 2 | 60 |
| 19 DEC | a 1155 | 2.2 | 12.8 | 2 | 0 | 3 | 2 | 60 | 1 | 1 | 1 | 1 | 0 | 2 | - | 2 | 0 | 0 | 0 | 2 | 1 | 3 | 50 |
| | b 2321 | 2.5 | 13.8 | 0 | 2 | 3 | 2 | 60 | 1 | 0 | 1 | 1 | 50 | - | 1 | 0 | 2 | 50 | 0 | 0 | 1 | 1 | 100 |

a/b Time in 2400 hrs of Intake Sample

c Intake temperature before tempering

d Discharge - Intake Temperature

e Number of live organisms observed

f Total number of organisms observed

g Total of dead observed in R-1 and R-2 divided by total organisms observed in R-1 and R-2

h Sample taken from lake in vicinity of FitzPatrick Intake

i Immediate analysis; 28 Apr - 19 Dec analysis after 8-hr incubation period

- = Not applicable

NA = Not available

APPENDIX VIII B-4c

MORTALITY OF SELECTED SPECIES OF
ROTIFERA (IN-PLANT)

NUMBER OF KERATELLA CRASSA (POLYDORIFERA) OBSERVED IN VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | T ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | |
|-------------------------|--|--------------------------------------|----------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 14, APR ⁱ | a 1130 | 5.1 | 14.0 | 1 | 2 | 1 | 6 | 57 | 0 | 0 | 2 | 4 | 100 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 2200 | 5.8 | 13.7 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | NO SAMPLE | | | | | NO SAMPLE | | | | |
| 28-29 APR | a 28 APR 1200 | 8.9 | 14.6 | - | 0 | 0 | 1 | 100 | - | 0 | 0 | 1 | 100 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 29 APR 0045 | 8.6 | 13.4 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | NO SAMPLE | | | | | NO SAMPLE | | | | |
| 12 MAY | a 1120 | 10.4 | 14.4 | 1 | - | 1 | 0 | 0 | 1 | 1 | 2 | 1 | 33 | 1 | - | 1 | 0 | 0 | - | - | 0 | 0 | - |
| | b 2400 | 9.2 | 14.5 | - | 0 | 0 | 2 | 100 | 0 | - | 1 | 0 | 100 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| 26 MAY | a 1000 | 10.9 | 14.4 | 2 | - | 2 | 0 | 0 | - | - | 0 | 0 | - | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2400 | 11.1 | 14.4 | - | - | 0 | 0 | - | 1 | 2 | 1 | 3 | 25 | - | 5 | 0 | 6 | 17 | - | 2 | 0 | 3 | 33 |
| 9 JUN | a 1130 | 11.7 | 12.4 | 3 | 1 | 4 | 1 | 20 | 3 | 1 | 3 | 1 | 0 | 1 | 3 | 4 | 4 | 50 | 0 | 0 | 1 | 3 | 100 |
| | b 2300 | 14.1 | 14.3 | 5 | - | 5 | 0 | 0 | - | 3 | 0 | 7 | 57 | 3 | 1 | 4 | 4 | 50 | 1 | - | 5 | 0 | 80 |
| 23, 28 JUN | a 23 JUN 1100 | 17.4 | 15.5 | 19 | 20 | 27 | 22 | 20 | 9 | 21 | 14 | 22 | 17 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 28 JUN 2245 | 15.9 | 15.6 | 11 | 2 | 21 | 7 | 54 | 0 | 4 | 1 | 6 | 43 | 7 | 9 | 9 | 15 | 33 | 7 | 15 | 10 | 19 | 24 |
| 20 JUL | a 1200 | 19.9 | 14.2 | 6 | 2 | 12 | 11 | 65 | 2 | 6 | 8 | 8 | 50 | 4 | 7 | 4 | 13 | 35 | 2 | 7 | 11 | 14 | 64 |
| | b 2305 | 20.3 | 15.1 | 0 | 3 | 8 | 6 | 79 | 1 | 1 | 5 | 4 | 78 | 4 | 1 | 8 | 6 | 64 | 3 | 9 | 3 | 13 | 25 |
| 29 JUL | a 1200 | 19.8 | 14.0 | 7 | 38 | 18 | 45 | 29 | 14 | 31 | 18 | 40 | 22 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2320 | 19.6 | 12.2 | 1 | 6 | 2 | 9 | 36 | 8 | 18 | 9 | 19 | 7 | 3 | 1 | 5 | 2 | 43 | 0 | 1 | 11 | 4 | 93 |
| 11 AUG | a 1140 | 19.2 | 15.6 | 13 | 28 | 17 | 35 | 21 | 25 | 8 | 26 | 46 | 54 | 11 | 18 | 13 | 23 | 19 | 5 | 16 | 20 | 18 | 45 |
| | b 2315 | 19.9 | 14.5 | 54 | 22 | 73 | 24 | 22 | 24 | 49 | 28 | 65 | 22 | 36 | 23 | 38 | 35 | 19 | 13 | 6 | 17 | 44 | 69 |
| 25 AUG | a 1145 | 21.8 | 15.7 | 31 | 45 | 37 | 56 | 18 | 3 | 8 | 50 | 38 | 88 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2350 | 21.9 | 17.7 | 2 | 32 | 56 | 47 | 67 | 1 | 17 | 29 | 61 | 80 | 47 | 133 | 81 | 161 | 26 | 26 | 39 | 99 | 99 | 67 |

NUMBER OF KERATELLA CRASSA (ROTIFERA) OBSERVED IN VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | |
|---------------------|--|--------------------------------------|-------------------------|-----------------------------|-----|------------------------------|-----|------------------------|-----------------------------|-----|------------------------------|-----|------------------------|-----------------------------|-----|------------------------------|-----|------------------------|-----------------------------|-----|------------------------------|-----|------------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD ^g |
| | | | | R-1 | R-2 | R-1 | R-2 | | R-1 | R-2 | R-1 | R-2 | | R-1 | R-2 | R-1 | R-2 | | R-1 | R-2 | R-1 | R-2 | |
| 8 SEP | a | 1130 | 19.7 | 52 | 84 | 66 | 123 | 28 | 18 | 51 | 34 | 138 | 60 | 32 | 30 | 58 | 45 | 40 | 24 | 50 | 36 | 91 | 42 |
| | b | 2305 | 21.1 | 60 | 44 | 85 | 66 | 31 | 91 | 45 | 114 | 89 | 33 | 21 | 21 | 40 | 40 | 48 | 25 | 25 | 83 | 58 | 65 |
| 22, 27 SEP | a 22 SEP | 1205 | 18.4 | 11 | 11 | 22 | 18 | 45 | 9 | 17 | 16 | 25 | 37 | 5 | 10 | 8 | 17 | 40 | 4 | 9 | 15 | 18 | 61 |
| | b 27 SEP | 2318 | 16.2 | 15 | 34 | 20 | 43 | 22 | 7 | 19 | 8 | 22 | 13 | 15 | 4 | 29 | 14 | 56 | 15 | 7 | 20 | 43 | 65 |
| 6 OCT | a | 1027 | 15.7 | 2 | 2 | 3 | 3 | 33 | 0 | 11 | 3 | 11 | 21 | 4 | 2 | 6 | 3 | 33 | 6 | 7 | 6 | 9 | 13 |
| | b | 2142 | 16.0 | 1 | 6 | 3 | 9 | 42 | 4 | - | 4 | 0 | 0 | 2 | 4 | 4 | 7 | 45 | 1 | 8 | 1 | 12 | 31 |
| 20 OCT | a | 1110 | 12.1 | 1 | 2 | 2 | 3 | 40 | 1 | 2 | 2 | 6 | 62 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2358 | 12.0 | 2 | 2 | 2 | 4 | 33 | 3 | 1 | 4 | 1 | 20 | 3 | 3 | 3 | 3 | 0 | 5 | 3 | 5 | 5 | 20 |
| 20 OCT ^h | a | 1425 | NA | 6 | 8 | 8 | 11 | 26 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 3 NOV | a | 1210 | 10.4 | 5 | 4 | 5 | 4 | 0 | 2 | 4 | 2 | 4 | 0 | 3 | 1 | 4 | 1 | 20 | 8 | 6 | 10 | 9 | 26 |
| | b | 2345 | 10.4 | 1 | 2 | 2 | 2 | 25 | 1 | 8 | 2 | 8 | 10 | 7 | 2 | 9 | 2 | 18 | 7 | - | 7 | 0 | 0 |
| 17 NOV | a | 1210 | 8.2 | 1 | 6 | 1 | 6 | 0 | 3 | 7 | 9 | 7 | 38 | 6 | - | 6 | 0 | 0 | 2 | 0 | 4 | 3 | 71 |
| | b | 2254 | 7.8 | 9 | 7 | 12 | 7 | 16 | 3 | 4 | 3 | 7 | 30 | 12 | 10 | 12 | 10 | 0 | 8 | 5 | 9 | 6 | 13 |
| 1 DEC | a | 1230 | 3.2 | - | 2 | 0 | 2 | 0 | 1 | 2 | 1 | 2 | 0 | 3 | 0 | 3 | 3 | 50 | 4 | 1 | 5 | 4 | 44 |
| | b | 2308 | 3.5 | 9 | 3 | 9 | 3 | 0 | - | 2 | 0 | 4 | 50 | 6 | 3 | 6 | 8 | 36 | 2 | 7 | 2 | 7 | 0 |
| 19 DEC | a | 1155 | 2.2 | 3 | 1 | 5 | 1 | 33 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | 0 | 5 | 2 | 6 | 38 |
| | b | 2321 | 2.5 | 0 | 4 | 1 | 6 | 43 | 1 | 11 | 1 | 12 | 8 | 4 | 6 | 5 | 11 | 38 | 9 | 11 | 11 | 16 | 26 |

a/b Time in 2400 hrs of Intake Sample

c Intake temperature before tempering

d Discharge - Intake Temperature

e Number of live organisms observed

f Total number of organisms observed

g Total of dead observed in R-1 and R-2 divided by total organisms observed in R-1 and R-2

h Samples taken in lake in vicinity of FitzPatrick Intake

i Immediate analysis; 28 Apr. - 19 Dec analysis after 8-hr

incubation period

- = Not applicable

NA = Not available

NUMBER OF KERATELLA QUADRATA (ROTIFERA) OBSERVED IN VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE * | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | Δ T ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | | |
|------------------------|--|--------------------------------------|------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|--------------|------------------------------|-----|-------------------|-----------------------------|--------------|------------------------------|-----|-------------------|-----|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | |
| 14 APR ¹ | a | 1130 | 5.1 | 14.0 | 1 | 3 | 4 | 8 | 67 | 0 | 4 | 4 | 9 | 69 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2200 | 5.8 | 13.7 | 2 | 3 | 9 | 13 | 77 | 0 | 0 | 2 | 15 | 100 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| 28-29 APR | a | 28 APR 1200 | 8.9 | 14.6 | 5 | 11 | 47 | 22 | 77 | 2 | 5 | 13 | 17 | 77 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 29 APR 0045 | 8.6 | 13.4 | 15 | 0 | 20 | 16 | 58 | 8 | 3 | 31 | 39 | 84 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| 12 MAY | a | 1120 | 10.4 | 14.4 | 125 | 137 | 164 | 232 | 34 | 50 | 57 | 103 | 226 | 67 | 24 | 19 | 43 | 45 | 51 | 4 | 4 | 24 | 33 | 86 |
| | b | 2400 | 9.2 | 14.5 | 92 | 47 | 135 | 82 | 36 | 31 | 56 | 110 | 128 | 63 | 20 | 36 | 67 | 74 | 60 | 12 | 19 | 35 | 66 | 69 |
| 26 MAY | a | 1000 | 10.9 | 14.4 | 42 | 48 | 134 | 115 | 64 | 20 | 45 | 84 | 111 | 67 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2400 | 11.1 | 14.4 | 6 | 44 | 88 | 107 | 74 | 2 | 30 | 22 | 94 | 72 | 28 | 10 | 56 | 106 | 76 | 4 | 30 | 36 | 102 | 75 |
| 9 JUN | a | 1130 | 11.7 | 12.4 | 21 | 36 | 48 | 75 | 54 | 12 | 22 | 39 | 57 | 65 | 5 | 6 | 36 | 53 | 88 | 3 | 12 | 39 | 32 | 79 |
| | b | 2300 | 14.1 | 14.3 | 35 | 29 | 116 | 77 | 67 | 9 | 2 | 67 | 67 | 92 | 7 | 5 | 35 | 84 | 90 | 12 | 32 | 63 | 98 | 73 |
| 23,28 JUN | a | 23 JUN 1100 | 17.4 | 15.5 | 7 | 12 | 21 | 32 | 64 | 37 | 4 | 46 | 55 | 59 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 28 JUN 2245 | 15.9 | 15.6 | 4 | 0 | 34 | 34 | 94 | 1 | 1 | 13 | 38 | 96 | 0 | 7 | 21 | 32 | 87 | 1 | 18 | 26 | 49 | 75 |
| 20 JUL | a | 1200 | 19.9 | 14.2 | 6 | 4 | 8 | 11 | 47 | 2 | 0 | 4 | 1 | 60 | 2 | 3 | 4 | 7 | 54 | 3 | 0 | 10 | 4 | 79 |
| | b | 2305 | 20.3 | 15.1 | 1 | 0 | 5 | 3 | 88 | 0 | 0 | 1 | 5 | 100 | 0 | 0 | 3 | 3 | 100 | 2 | 0 | 3 | 2 | 60 |
| 29 JUL | a | 1200 | 19.8 | 14.0 | 1 | 0 | 2 | 5 | 86 | 1 | 0 | 3 | 4 | 86 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2320 | 19.6 | 12.2 | 0 | 0 | 4 | 13 | 100 | 0 | 0 | 3 | 19 | 100 | 4 | 1 | 7 | 5 | 58 | 5 | 2 | 16 | 4 | 65 |
| 11 AUG | a | 1140 | 19.2 | 15.6 | 1 | - | 1 | 0 | 0 | - | 2 | 0 | 3 | 33 | 1 | 0 | 2 | 1 | 67 | 0 | - | 1 | 0 | 100 |
| | b | 2315 | 19.9 | 14.5 | 1 | - | 3 | 0 | 67 | - | 1 | 0 | 1 | 0 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| 25 AUG | a | 1145 | 21.8 | 15.7 | - | - | 0 | 0 | - | 2 | - | 2 | 0 | 0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2350 | 21.9 | 17.7 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - |

* This species was not collected on the following date: 8 Sep

NUMBER OF KERATELLA QUADRATA (ROTIFERA) OBSERVED IN VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | |
|------------------------|--|--------------------------------------|-----------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 22, 27 SEP | a 22 SEP 1205 | 18.4 | 14.8 | - | - | 0 | 0 | - | - | 1 | 0 | 1 | 0 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | b 27 SEP 2318 | 16.2 | 14.7 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| 6 OCT | a 1027 | 15.7 | 14.7 | - | - | 0 | 0 | - | - | 0 | 0 | 2 | 100 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | b 2142 | 16.0 | 14.4 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| 20 OCT | a 1110 | 12.1 | 13.6 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2358 | 12.0 | 13.5 | - | - | 0 | 0 | - | 2 | - | 2 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| 20 OCT ^h | a 1425 | NA | NA | - | - | 0 | 0 | - | NOT REQUIRED | | | | | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 3 NOV | a 1210 | 10.4 | 15.5 | - | 1 | 0 | 1 | 0 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | b 2345 | 10.4 | 15.4 | 1 | - | 1 | 0 | 0 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| 17 NOV | a 1210 | 8.2 | 13.6 | 1 | 0 | 1 | 1 | 50 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | 1 | 0 | 1 | 0 |
| | b 2254 | 7.8 | 15.0 | - | 1 | 0 | 1 | 0 | - | - | 0 | 0 | - | - | 0 | 0 | 1 | 100 | - | - | 0 | 0 | - |
| 1 DEC | a 1230 | 3.2 | 14.8 | - | - | 0 | 0 | - | - | 1 | 0 | 1 | 0 | - | - | 0 | 0 | - | - | 1 | 0 | 1 | 0 |
| | b 2308 | 3.5 | 14.9 | - | 0 | 0 | 1 | 100 | 1 | 0 | 1 | 1 | 50 | 2 | - | 3 | 0 | 33 | 2 | - | 2 | 0 | 0 |
| 19 DEC | a 1155 | 2.2 | 12.8 | 2 | 2 | 4 | 2 | 33 | - | 0 | 0 | 1 | 100 | 1 | 1 | 2 | 2 | 50 | 0 | - | 1 | 0 | 100 |
| | b 2321 | 2.5 | 13.8 | 3 | 0 | 4 | 1 | 40 | - | 1 | 0 | 2 | 50 | 2 | 5 | 3 | 7 | 30 | 0 | 1 | 3 | 2 | 80 |

a/b Time in 2400 hrs of Intake Sample

c Intake temperature before tempering

d Discharge - Intake Temperature

e Number of live organisms observed

f Total number of organisms observed

g Total of dead observed in R-1 and R-2 divided by total organisms observed in R-1 and R-2

h Sample taken from lake in vicinity of FitzPatrick Intake

i Immediate analysis; 28 Apr - 19 Dec analysis after 8-hr

incubation period
- = Not applicable

NA = Not available

NUMBER OF POLYARTHRA DOLICHOPTER (ROTIFERA) OBSERVED IN VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | | | | | |
|------------------------|--|--------------------------------------|-----------------|-----------------------------|-----|------------------------------|-----|-----------|-------------------|-----------------------------|-----|------------------------------|-----|--------------|-------------------|-----------------------------|-----|------------------------------|--------------|--------------|-------------------|-----------------------------|-----|------------------------------|-----|-----------|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | MEAN ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | MEAN ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | MEAN ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | MEAN ^g |
| | | | | R-1 | R-2 | R-1 | R-2 | | | R-1 | R-2 | R-1 | R-2 | | | R-1 | R-2 | R-1 | R-2 | | | R-1 | R-2 | R-1 | R-2 | | |
| 14 APR ¹ | a | 1130 | 5.1 | 14.0 | - | 1 | 0 | 1 | 0 | 0 | 2 | 2 | 2 | 50 | NO SAMPLE | | | | | NO SAMPLE | | | | | | | |
| | b | 2200 | 5.8 | 13.7 | 1 | 2 | 4 | 3 | 57 | 1 | 3 | 4 | 6 | 60 | NO SAMPLE | | | | | NO SAMPLE | | | | | | | |
| 28-29 APR | a | 28 APR 1200 | 8.9 | 14.6 | 13 | 1 | 26 | 13 | 64 | 0 | 1 | 4 | 5 | 89 | NO SAMPLE | | | | | NO SAMPLE | | | | | | | |
| | b | 29 APR 0045 | 8.6 | 13.4 | 24 | 0 | 37 | 7 | 45 | 1 | 1 | 4 | 17 | 90 | NO SAMPLE | | | | | NO SAMPLE | | | | | | | |
| 12 MAY | a | 1120 | 10.4 | 14.4 | 45 | 110 | 70 | 180 | 38 | 44 | 40 | 67 | 68 | 38 | 8 | 2 | 19 | 19 | 74 | 3 | 4 | 11 | 16 | 74 | | | |
| | b | 2400 | 9.2 | 14.5 | 22 | 10 | 117 | 80 | 84 | 21 | 13 | 59 | 40 | 66 | 3 | 49 | 16 | 129 | 64 | 3 | 8 | 23 | 98 | 91 | | | |
| 26 MAY | a | 1000 | 10.9 | 14.4 | 6 | 7 | 23 | 30 | 75 | 10 | 6 | 24 | 8 | 50 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | | | |
| | b | 2400 | 11.1 | 14.4 | 2 | 2 | 52 | 45 | 96 | 3 | 0 | 9 | 22 | 90 | 10 | 4 | 33 | 16 | 71 | 6 | 0 | 24 | 17 | 85 | | | |
| 9 JUN | a | 1130 | 11.7 | 12.4 | 0 | 14 | 22 | 55 | 82 | 12 | 6 | 39 | 27 | 73 | 0 | 2 | 15 | 28 | 95 | 2 | 5 | 30 | 28 | 88 | | | |
| | b | 2300 | 14.1 | 14.3 | 21 | 6 | 69 | 9 | 65 | 1 | 13 | 6 | 32 | 63 | 3 | 4 | 12 | 32 | 84 | 3 | 12 | 8 | 22 | 50 | | | |
| 23,28 JUN | a | 23 JUN 1100 | 17.4 | 15.5 | 4 | 15 | 29 | 41 | 73 | 28 | 6 | 61 | 61 | 72 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | | | |
| | b | 28 JUN 2245 | 15.9 | 15.6 | 0 | 0 | 2 | 8 | 100 | 1 | 1 | 7 | 20 | 93 | 0 | 0 | 9 | 18 | 100 | 0 | 17 | 20 | 35 | 69 | | | |
| 20 JUL | a | 1200 | 19.9 | 14.2 | - | - | 0 | 0 | - | 1 | 1 | 2 | 2 | 50 | 4 | 0 | 4 | 2 | 33 | 0 | 1 | 2 | 1 | 67 | | | |
| | b | 2305 | 20.3 | 15.1 | 0 | - | 1 | 0 | 100 | 3 | 0 | 5 | 3 | 62 | 0 | - | 3 | 0 | 100 | 0 | 0 | 1 | 1 | 100 | | | |
| 29 JUL | a | 1200 | 19.8 | 14.0 | 9 | 4 | 14 | 7 | 38 | 2 | 2 | 4 | 15 | 79 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | | | |
| | b | 2320 | 19.6 | 12.2 | 0 | 1 | 2 | 7 | 89 | 0 | 0 | 1 | 1 | 100 | 1 | - | 1 | 0 | 0 | 1 | - | 1 | 0 | 0 | | | |
| 11 AUG | a | 1140 | 19.2 | 15.6 | - | - | 0 | 0 | - | - | 0 | 0 | 1 | 100 | - | - | 0 | 0 | - | - | 0 | 0 | 2 | 100 | | | |
| | b | 2315 | 19.9 | 14.5 | 0 | - | 1 | 0 | 100 | - | 0 | 0 | 2 | 100 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | | | |
| 25 AUG | a | 1145 | 21.8 | 15.7 | - | 0 | 0 | 1 | 100 | - | - | 0 | 0 | - | NOT REQUIRED | | | | | NOT REQUIRED | | | | | | | |
| | b | 2350 | 21.9 | 17.7 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | | | |

NUMBER OF POLYARTHRA DOLICHOPTERA (ROTIFERA) OBSERVED IN VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | T ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | | | |
|------------------------|--|--------------------------------------|----------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|--------------|------------------------------|-----|-------------------|-----------------------------|--------------|------------------------------|-----|-------------------|-----------------------------|--------------|------------------------------|-----|-------------------|-----|---|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | | |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | | |
| 8 SEP | a | 1130 | 19.7 | 15.9 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | 0 | 0 | 1 | 100 | |
| | b | 2305 | 21.1 | 16.0 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | |
| 22,27 SEP | a | 22 SEP 1205 | 18.4 | 14.8 | - | - | 0 | 0 | - | - | 1 | 0 | 2 | 50 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | |
| | b | 27 SEP 2318 | 16.2 | 14.7 | - | - | 0 | 0 | - | 0 | - | 1 | 0 | 100 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | |
| 6 OCT | a | 1027 | 15.7 | 14.7 | 1 | 1 | 1 | 1 | 0 | 0 | - | 3 | 0 | 100 | 2 | - | 2 | 0 | 0 | - | - | - | 0 | 0 | - |
| | b | 2142 | 16.0 | 14.4 | - | 0 | 0 | 1 | 100 | 0 | - | 1 | 0 | 100 | 0 | - | 1 | 0 | 100 | - | - | 0 | 0 | - | |
| 20 OCT | a | 1110 | 12.1 | 13.6 | - | - | 0 | 0 | - | - | 0 | 0 | 1 | 100 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | |
| | b | 2358 | 12.0 | 13.5 | - | - | 0 | 0 | - | 2 | - | 2 | 0 | 0 | - | 0 | 0 | 1 | 100 | 0 | - | 2 | 0 | 100 | |
| 20 OCT ^h | a | 1425 | NA | NA | 0 | - | 1 | 0 | 100 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | NOT REQUIRED | | | | | |
| 3 NOV | a | 1210 | 10.4 | 15.5 | 0 | 0 | 1 | 1 | 100 | 0 | - | 1 | 0 | 100 | - | - | 0 | 0 | - | 1 | 1 | 1 | 1 | 0 | |
| | b | 2345 | 10.4 | 15.4 | - | 0 | 0 | 1 | 100 | 1 | - | 1 | 0 | 0 | 0 | - | 1 | 0 | 100 | - | 0 | 0 | 2 | 100 | |
| 17 NOV | a | 1210 | 8.2 | 13.6 | 1 | 0 | 1 | 2 | 67 | 0 | 0 | 1 | 2 | 100 | 0 | 0 | 2 | 2 | 100 | 1 | 0 | 3 | 1 | 75 | |
| | b | 2254 | 7.8 | 15.0 | 0 | 0 | 11 | 5 | 100 | 0 | 0 | 1 | 3 | 100 | 0 | 3 | 4 | 6 | 70 | 0 | 2 | 8 | 7 | 87 | |
| 1 DEC | a | 1230 | 3.2 | 14.8 | 0 | 3 | 4 | 14 | 83 | 0 | 1 | 5 | 8 | 92 | 6 | 0 | 17 | 16 | 82 | 4 | 10 | 9 | 17 | 46 | |
| | b | 2308 | 3.5 | 14.9 | 10 | 0 | 22 | 20 | 76 | 0 | 0 | 4 | 7 | 100 | 0 | 0 | 8 | 20 | 100 | 0 | 0 | 27 | 19 | 100 | |
| 19 DEC | a | 1155 | 2.2 | 12.8 | 1 | 0 | 11 | 3 | 93 | 1 | 1 | 2 | 3 | 60 | 2 | 1 | 3 | 1 | 25 | 0 | 1 | 3 | 3 | 83 | |
| | b | 2321 | 2.5 | 13.8 | 0 | 0 | 18 | 9 | 100 | 1 | 0 | 1 | 3 | 75 | 0 | 11 | 4 | 21 | 56 | 1 | 0 | 2 | 9 | 91 | |

^{a/b} Time in 2400 hrs of Intake Sample

^c Intake temperature before tempering

^d Discharge - Intake Temperature

^e Number of live organisms observed

^f Total number of organisms observed

^g Total of dead observed in R-1 and R-2 divided by total organisms observed in R-1 and R-2

^h Samples taken from lake in vicinity of FitzPatrick Intake

ⁱ Immediate analysis; 28 Apr - 19 Dec analysis after 8-hr

^j Incubation period

Not applicable

Not available

NUMBER OF POLYARTHRA MAJOR (ROTIFERA) OBSERVED IN VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE* | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | Δ T ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | | | | | |
|------------------------|--|--------------------------------------|------------------|-----------------------------|-----|------------------------------|-----|-----------|-------------------|-----------------------------|-----|------------------------------|-----|--------------|-------------------|-----------------------------|-----|------------------------------|--------------|-----------|-------------------|-----------------------------|-----|------------------------------|-----|-----------|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | MEAN ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | MEAN ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | MEAN ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | MEAN ^g |
| | | | | R-1 | R-2 | R-1 | R-2 | | | R-1 | R-2 | R-1 | R-2 | | | R-1 | R-2 | R-1 | R-2 | | | R-1 | R-2 | R-1 | R-2 | | |
| 26 MAY ¹ | ^a 1000 | 10.9 | 14.4 | - | - | 0 | 0 | - | 0 | - | 1 | 0 | 100 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | | | | |
| | ^b 2400 | 11.1 | 14.4 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | | | | |
| 9 JUN | ^a 1130 | 11.7 | 12.4 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | | | | |
| | ^b 2300 | 14.1 | 14.3 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | 0 | 0 | 1 | 0 | - | - | - | 0 | 0 | - | | | |
| 23,28 JUN | ^a 23 JUN 1100 | 17.4 | 15.5 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | NOT REQUIRED | | | | | NOT REQUIRED | | | | | | | | |
| | ^b 28 JUN 2245 | 15.9 | 15.6 | - | - | 0 | 0 | - | 1 | 0 | 3 | 2 | 80 | - | - | 0 | 0 | - | 0 | 0 | 1 | 2 | 100 | | | | |
| 20 JUL | ^a 1200 | 19.9 | 14.2 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | 1 | - | 1 | 0 | 0 | 1 | - | 2 | 0 | 50 | | | | |
| | ^b 2305 | 20.3 | 15.1 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | 0 | - | 1 | 0 | 100 | - | - | 0 | 0 | - | | | | |
| 29 JUL | ^a 1200 | 19.8 | 14.0 | - | 0 | 0 | 1 | 100 | - | - | 0 | 0 | - | NOT REQUIRED | | | | | NOT REQUIRED | | | | | | | | |
| | ^b 2320 | 19.6 | 12.2 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | | | | |
| 11 AUG | ^a 1140 | 19.2 | 15.6 | 6 | 8 | 30 | 70 | 86 | 1 | 9 | 23 | 45 | 85 | 7 | 22 | 39 | 40 | 63 | 10 | 6 | 41 | 23 | 75 | | | | |
| | ^b 2315 | 19.9 | 14.5 | 11 | 26 | 106 | 131 | 84 | 6 | 16 | 67 | 100 | 87 | 5 | 7 | 85 | 52 | 91 | 5 | 18 | 57 | 100 | 85 | | | | |
| 25 AUG | ^a 1145 | 21.8 | 15.7 | 4 | 0 | 36 | 51 | 95 | 0 | 1 | 32 | 8 | 98 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | | | | |
| | ^b 2350 | 21.9 | 17.7 | 1 | 7 | 51 | 54 | 92 | 1 | 1 | 10 | 32 | 95 | 4 | 6 | 55 | 39 | 89 | 6 | 0 | 63 | 3 | 91 | | | | |
| 8 SEP | ^a 1130 | 19.7 | 15.9 | 0 | 2 | 7 | 6 | 85 | 1 | 3 | 3 | 9 | 67 | - | 2 | 0 | 2 | 0 | 0 | 2 | 1 | 3 | 50 | | | | |
| | ^b 2305 | 21.1 | 16.0 | 0 | 0 | 21 | 11 | 100 | 7 | 0 | 27 | 11 | 82 | 3 | 0 | 6 | 6 | 75 | 3 | 1 | 10 | 5 | 73 | | | | |
| 22,27 SEP. | ^a 22 SEP 1205 | 18.4 | 14.8 | 0 | 3 | 4 | 7 | 73 | 0 | 0 | 10 | 6 | 100 | 0 | 0 | 5 | 5 | 100 | 2 | 0 | 7 | 5 | 83 | | | | |
| | ^b 27 SEP 2318 | 16.2 | 14.7 | 0 | 4 | 30 | 26 | 93 | 0 | 2 | 10 | 9 | 89 | 1 | 0 | 12 | 19 | 97 | 5 | 8 | 37 | 22 | 78 | | | | |

* This species was not collected on the following dates: 14 Apr, 28-29 Apr, 12 May

NUMBER OF POLYARTHRA MAJOR (ROTIFERA) OBSERVED IN VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | |
|---------------------|--|--------------------------------------|-------------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 6 OCT | ^a 1027 | 15.7 | 14.7 | 2 | 4 | 12 | 9 | 71 | 0 | 0 | 4 | 5 | 100 | 2 | 2 | 3 | 7 | 60 | 1 | 2 | 4 | 5 | 67 |
| | ^b 2142 | 16.0 | 14.4 | 0 | 0 | 15 | 16 | 100 | 0 | 0 | 5 | 4 | 100 | 1 | 1 | 5 | 17 | 91 | 0 | 0 | 7 | 14 | 100 |
| 20 OCT | ^a 1110 | 12.1 | 13.6 | 0 | 2 | 4 | 7 | 82 | 0 | 0 | 3 | 4 | 100 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | ^b 2358 | 12.0 | 13.5 | 0 | 0 | 6 | 5 | 100 | 0 | 0 | 7 | 2 | 100 | 0 | 0 | 10 | 7 | 100 | 2 | 0 | 12 | 8 | 90 |
| 20 OCT ^h | ^a 1425 | NA | NA | 2 | 5 | 2 | 9 | 36 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 3 NOV | ^a 1210 | 10.4 | 15.5 | - | 2 | 0 | 4 | 50 | 0 | 1 | 1 | 2 | 67 | - | - | 0 | 0 | - | 1 | 1 | 2 | 5 | 71 |
| | ^b 2345 | 10.4 | 15.4 | - | 0 | 0 | 6 | 100 | 1 | 2 | 1 | 3 | 25 | 1 | - | 1 | 0 | 0 | 0 | 0 | 2 | 1 | 100 |
| 17 NOV | ^a 1210 | 8.2 | 13.6 | 0 | 0 | 2 | 1 | 100 | - | 1 | 0 | 1 | 0 | 0 | - | 3 | 0 | 100 | 0 | - | 2 | 0 | 100 |
| | ^b 2254 | 7.8 | 15.0 | 0 | 0 | 8 | 6 | 100 | 3 | 0 | 4 | 3 | 57 | 3 | 0 | 5 | 9 | 79 | 0 | 0 | 5 | 8 | 100 |
| 1 DEC | ^a 1230 | 3.2 | 14.8 | 0 | 0 | 1 | 1 | 100 | 0 | 0 | 3 | 3 | 100 | 0 | 1 | 3 | 4 | 86 | - | 0 | 0 | 3 | 100 |
| | ^b 2308 | 3.5 | 14.9 | 0 | 0 | 5 | 12 | 100 | - | 1 | 0 | 2 | 50 | 0 | 0 | 1 | 5 | 100 | 0 | 0 | 4 | 1 | 100 |
| 19 DEC | ^a 1155 | 2.2 | 12.8 | 0 | - | 7 | 0 | 100 | 1 | - | 2 | 0 | 50 | 0 | - | 4 | 0 | 100 | 2 | 0 | 5 | 1 | 67 |
| | ^b 2321 | 2.5 | 13.8 | 4 | 1 | 13 | 10 | 78 | 0 | - | 1 | 0 | 100 | 0 | 2 | 5 | 6 | 82 | 0 | 0 | 3 | 11 | 100 |

^{a/b} Time in 2400 hrs of Intake Sample

^c Intake temperature before tempering

^d Discharge - Intake Temperature

^e Number of live organisms observed

^f Total number of organisms observed

^g Total of dead observed in R-1 and R-2 divided by total organisms observed in R-1 and R-2

^h Samples taken from lake in the vicinity of FitzPatrick Intake

ⁱ 26 May - 19 Dec analysis after 8-hr incubation period

- = Not applicable

NA = Not available

NUMBER OF SYNCHAETA LACKOWITZIANA (ROTIFERA) OBSERVED IN VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE * | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | | |
|------------------------|--|--------------------------------------|-----------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|--------------|------------------------------|-----|-------------------|-----------------------------|--------------|------------------------------|-----|-------------------|----|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | |
| 14 APR ^h | a | 1130 | 5.1 | 14.0 | 1 | 0 | 5 | 7 | 92 | 0 | 0 | 5 | 6 | 100 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2200 | 5.8 | 13.7 | 6 | 8 | 30 | 23 | 74 | 0 | 5 | 28 | 31 | 92 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| 28-29 APR | a | 28 APR 1200 | 8.9 | 14.6 | 12 | 4 | 22 | 18 | 60 | 21 | 7 | 28 | 23 | 45 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 29 APR 0045 | 8.6 | 13.4 | 11 | 3 | 21 | 27 | 71 | 3 | 10 | 10 | 39 | 73 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| 12 MAY | a | 1120 | 10.4 | 14.4 | 15 | 20 | 22 | 47 | 49 | 19 | 10 | 31 | 25 | 48 | 14 | 8 | 18 | 14 | 31 | 1 | 0 | 1 | 5 | 83 |
| | b | 2400 | 9.2 | 14.5 | 34 | 8 | 41 | 18 | 29 | 7 | 12 | 13 | 29 | 55 | 7 | 6 | 13 | 23 | 64 | 10 | 16 | 16 | 27 | 40 |
| 26 MAY | a | 1000 | 10.9 | 14.4 | 5 | 28 | 20 | 40 | 45 | 49 | 11 | 66 | 13 | 24 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2400 | 11.1 | 14.4 | 64 | 28 | 83 | 41 | 26 | 2 | 45 | 14 | 64 | 40 | 41 | 4 | 64 | 13 | 42 | 15 | 27 | 31 | 59 | 53 |
| 9 JUN | a | 1130 | 11.7 | 12.4 | 14 | 71 | 34 | 81 | 26 | 21 | 18 | 28 | 25 | 26 | 18 | 37 | 27 | 72 | 44 | 32 | 33 | 60 | 43 | 37 |
| | b | 2300 | 14.1 | 14.3 | 26 | 31 | 29 | 32 | 7 | 4 | 33 | 5 | 37 | 12 | 6 | 60 | 16 | 75 | 28 | 22 | 48 | 24 | 50 | 5 |
| 23,28 JUN | a | 23 JUN 1100 | 17.4 | 15.5 | 0 | - | 3 | 0 | 100 | - | 0 | 0 | 1 | 100 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 28 JUN 2245 | 15.9 | 15.6 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| 20 JUL | a | 1200 | 19.9 | 14.2 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | 1 | 0 | 1 | 0 | 1 | - | 1 | 0 | 0 |
| | b | 2305 | 20.3 | 15.1 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | 2 | 0 | 2 | 0 |
| 29 JUL | a | 1200 | 19.8 | 14.0 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2320 | 19.6 | 12.2 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| 11 AUG. | a | 1140 | 19.2 | 15.6 | 0 | - | 1 | 0 | 100 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | b | 2315 | 19.9 | 14.5 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| 25 AUG | a | 1145 | 21.8 | 15.7 | 1 | - | 1 | 0 | 0 | - | - | 0 | 0 | - | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2350 | 21.9 | 17.7 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - |

* This species was not collected on the following dates: 8 Sep, 20 Oct, 3 Nov

NUMBER OF SYNCHAETA LACKOWITZIANA (ROTIFERA) OBSERVED IN VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | |
|---------------|--|--------------------------------------|-------------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 22, 27 SEP | a 22 SEP | 1205 | 18.4 | - | - | 0 | 0 | - | - | 0 | 0 | 1 | 100 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | b 27 SEP | 2318 | 16.2 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| 6 OCT | a | 1027 | 15.7 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | b | 2142 | 16.0 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | 1 | 0 | 1 | 0 |
| 17 NOV | a | 1210 | 8.2 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | b | 2254 | 7.8 | - | 3 | 0 | 3 | 0 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| 1 DEC | a | 1230 | 3.2 | - | - | 0 | 0 | - | 1 | - | 1 | 0 | 0 | 0 | - | 1 | 0 | 100 | - | 0 | 0 | 4 | 100 |
| | b | 2308 | 3.5 | - | 0 | 0 | 1 | 100 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| 19 DEC | a | 1155 | 2.2 | 1 | 0 | 1 | 2 | 67 | - | - | 0 | 0 | - | 1 | 1 | 2 | 2 | 50 | - | 1 | 0 | 1 | 0 |
| | b | 2321 | 2.5 | 0 | 0 | 1 | 6 | 100 | 2 | 1 | 4 | 2 | 50 | 2 | - | 2 | 0 | 0 | 0 | 0 | 1 | 10 | 100 |

^{a/b} Time in 2400 hrs of Intake Sample

^c Intake temperature before tempering

^d Discharge - Intake Temperature

^e Number of live organisms observed

^f Total number of organisms observed

^g Total of dead observed in R-1 and R-2 divided by total organisms observed in R-1 and R-2

^h Immediate analysis; 28 Apr - 19 Dec analysis after 8-hr incubation period

- = Not applicable

NUMBER OF SYNCHAETA PECTINATA (ROTIFERA) OBSERVED IN VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE* | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | |
|------------------------|--|--------------------------------------|-----------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 14 APR ¹ | a 1130 | 5.1 | 14.0 | 0 | 0 | 2 | 1 | 100 | 4 | 1 | 6 | 2 | 38 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 2200 | 5.8 | 13.7 | 0 | 4 | 7 | 8 | 73 | 2 | 0 | 8 | 9 | 88 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| 28-29 APR | a 28 APR 1200 | 8.9 | 14.6 | 10 | 0 | 31 | 19 | 80 | 29 | 5 | 53 | 15 | 50 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 29 APR 0045 | 8.6 | 13.4 | 37 | 2 | 44 | 20 | 39 | 6 | 0 | 12 | 13 | 76 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| 12 MAY | a 1120 | 10.4 | 14.4 | 32 | 52 | 41 | 76 | 28 | 21 | 28 | 25 | 53 | 37 | 4 | 3 | 16 | 4 | 65 | 9 | 6 | 13 | 13 | 42 |
| | b 2400 | 9.2 | 14.5 | 49 | 24 | 64 | 26 | 19 | 27 | 12 | 38 | 22 | 35 | 2 | 6 | 11 | 15 | 69 | 10 | 8 | 18 | 16 | 47 |
| 26 MAY | a 1000 | 10.9 | 14.4 | 72 | 55 | 86 | 69 | 18 | 62 | 19 | 89 | 21 | 26 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2400 | 11.1 | 14.4 | 83 | 16 | 110 | 50 | 38 | 41 | 33 | 75 | 78 | 52 | 58 | 60 | 87 | 86 | 32 | 24 | 17 | 38 | 43 | 49 |
| 9 JUN | a 1130 | 11.7 | 12.4 | 18 | 14 | 23 | 15 | 16 | 3 | 14 | 7 | 16 | 26 | 1 | 0 | 9 | 5 | 93 | 4 | 27 | 7 | 37 | 30 |
| | b 2300 | 14.1 | 14.3 | 8 | 2 | 10 | 4 | 29 | 2 | 4 | 2 | 4 | 0 | 3 | 0 | 3 | 1 | 25 | - | 0 | 0 | 1 | 100 |
| 20 JUL | a 1200 | 19.9 | 14.2 | - | 1 | 0 | 1 | 0 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | 1 | 0 | 1 | 0 |
| | b 2305 | 20.3 | 15.1 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | 1 | - | 1 | 0 | 0 |
| 11 AUG | a 1140 | 19.2 | 15.6 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | 0 | 0 | 1 | 100 | - | - | 0 | 0 | - |
| | b 2315 | 19.9 | 14.5 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| 22,27 SEP | a 22 SEP 1205 | 18.4 | 14.8 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | b 27 SEP 2318 | 16.2 | 14.7 | - | 3 | 0 | 3 | 0 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| 6 OCT | a 1027 | 15.7 | 14.7 | - | - | 0 | 0 | - | - | 1 | 0 | 1 | 0 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | b 2142 | 16.0 | 14.4 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - |

* This species was not collected on the following dates: 23,28 Jun, 29 Jul, 25 Aug, 8 Sep

NUMBER OF SYNCHAETA PECTINATA (ROTIFERA) OBSERVED IN VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | |
|------------------------|--|--------------------------------------|-----------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 20 OCT | ^a 1110 | 12.1 | 13.6 | - | 2 | 0 | 3 | 33 | - | - | 0 | 0 | - | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | ^b 2358 | 12.0 | 13.5 | 2 | 3 | 6 | 3 | 44 | 3 | 1 | 3 | 1 | 0 | - | - | 0 | 0 | - | - | 0 | 0 | 3 | 100 |
| 20 OCT ^h | ^a 1425 | NA | NA | 2 | 4 | 3 | 4 | 14 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | ^b 2345 | 10.4 | 15.4 | - | 0 | 0 | 1 | 100 | - | 0 | 0 | 2 | 100 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| 3 NOV | ^a 1210 | 10.4 | 15.5 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | 0 | 0 | 3 | 100 | 6 | - | 6 | 0 | 0 |
| | ^b 2345 | 10.4 | 15.4 | - | 0 | 0 | 1 | 100 | - | 0 | 0 | 2 | 100 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| 17 NOV | ^a 1210 | 8.2 | 13.6 | - | - | 0 | 0 | - | 0 | 1 | 2 | 1 | 67 | - | 1 | 0 | 1 | 0 | - | - | 0 | 0 | - |
| | ^b 2254 | 7.8 | 15.0 | 2 | 6 | 6 | 8 | 43 | - | 0 | 0 | 3 | 100 | - | 2 | 0 | 2 | 0 | 2 | 1 | 3 | 3 | 50 |
| 1 DEC | ^a 1230 | 3.2 | 14.8 | - | 3 | 0 | 5 | 40 | 1 | 3 | 3 | 3 | 33 | - | 4 | 0 | 4 | 0 | 2 | 1 | 2 | 3 | 40 |
| | ^b 2308 | 3.5 | 14.9 | - | 0 | 0 | 3 | 100 | 2 | 2 | 2 | 3 | 20 | 0 | 0 | 1 | 3 | 100 | 0 | 0 | 3 | 2 | 100 |
| 19 DEC | ^a 1155 | 2.2 | 12.8 | 2 | 0 | 2 | 3 | 60 | - | 0 | 0 | 1 | 100 | - | - | 0 | 0 | - | 2 | 4 | 2 | 5 | 14 |
| | ^b 2321 | 2.5 | 13.8 | 2 | 0 | 3 | 5 | 75 | 4 | 0 | 4 | 1 | 20 | 1 | 6 | 2 | 10 | 42 | - | 1 | 0 | 5 | 80 |

a/b Time in 2400 hrs of Intake Sample
c Intake temperature before tempering
d Discharge - Intake Temperature
e Number of live organisms observed
f Total number of organisms observed

g Total of dead observed in R-1 and R-2 divided by total organisms observed in R-1 and R-2

h Sample taken from lake in vicinity of FitzPatrick Intake

i Immediate analysis; 28 Apr - 19 Dec analysis after 8-hr incubation period

- = Not applicable

NA = Not available

NUMBER OF TRICHOCECA MULTICRINIS (ROTIFERA) OBSERVED IN VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE * | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | Δ T ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | |
|--------------|--|--------------------------------------|------------------|-----------------------------|-----|------------------------------|-----|------------------------|-----------------------------|-----|------------------------------|-----|------------------------|-----------------------------|-----|------------------------------|-----|------------------------|-----------------------------|-----|------------------------------|-----|------------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | Σ DEAD ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | Σ DEAD ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | Σ DEAD ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | Σ DEAD ^g |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 12 MAY | ^a 1120 | 10.4 | 14.4 | - | - | 0 | 0 | - | 0 | - | 2 | 0 | 100 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | ^b 2400 | 9.2 | 14.5 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | 0 | 0 | 1 | 100 |
| 26 MAY | ^a 1000 | 10.9 | 14.4 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | ^b 2400 | 11.1 | 14.4 | 0 | - | 1 | 0 | 100 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| 9 JUN | ^a 1130 | 11.7 | 12.4 | - | 0 | 0 | 1 | 100 | 1 | - | 1 | 0 | 0 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | ^b 2300 | 14.1 | 14.3 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | 1 | 0 | 1 | 0 | 0 | - | 2 | 0 | 100 |
| 23,28 JUN | ^a 23 JUN 1100 | 17.4 | 15.5 | 0 | - | 1 | 0 | 100 | - | 0 | 0 | 1 | 100 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | ^b 28 JUN 2245 | 15.9 | 15.6 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| 20 JUL | ^a 1200 | 19.9 | 14.2 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | ^b 2305 | 20.3 | 15.1 | - | - | 0 | 0 | - | - | 0 | 0 | 1 | 100 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| 29 JUL | ^a 1200 | 19.8 | 14.0 | 0 | 3 | 8 | 4 | 75 | 1 | 0 | 5 | 5 | 90 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | ^b 2320 | 19.6 | 12.2 | 1 | 1 | 2 | 5 | 71 | - | 6 | 0 | 9 | 33 | - | 0 | 0 | 1 | 100 | 4 | 0 | 7 | 1 | 50 |
| 11 AUG | ^a 1140 | 19.2 | 15.6 | 0 | 6 | 4 | 15 | 68 | 0 | 5 | 6 | 10 | 69 | 1 | 0 | 7 | 9 | 94 | 3 | 1 | 9 | 8 | 76 |
| | ^b 2315 | 19.9 | 14.5 | 38 | 10 | 57 | 31 | 45 | 4 | 1 | 13 | 17 | 83 | 11 | 11 | 24 | 30 | 59 | 5 | 3 | 15 | 30 | 82 |
| 25 AUG | ^a 1145 | 21.8 | 15.7 | 9 | 4 | 15 | 22 | 65 | 0 | 1 | 17 | 10 | 96 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | ^b 2350 | 21.9 | 17.7 | 3 | 4 | 16 | 14 | 77 | 1 | 0 | 7 | 10 | 94 | 6 | 3 | 19 | 25 | 80 | 3 | 2 | 16 | 11 | 81 |
| 8 SEP | ^a 1130 | 19.7 | 15.9 | 11 | 24 | 25 | 37 | 44 | 1 | 2 | 3 | 11 | 79 | 5 | 0 | 14 | 10 | 79 | 4 | 4 | 8 | 16 | 67 |
| | ^b 2305 | 21.1 | 16.0 | 3 | 44 | 41 | 72 | 58 | 13 | 5 | 50 | 59 | 83 | 12 | 5 | 26 | 39 | 74 | 21 | 9 | 51 | 44 | 68 |

* This species was not collected on the following dates; 14 Apr, 28-29 Apr

NUMBER OF TRICHOCECA MULTICRINIS (ROTIFERA) OBSERVED IN VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | Δ T ^d | INTAKE | | | | | DISCHARGE | | | | | 3°SIMULATION | | | | | 2°SIMULATION | | | | |
|------------------------|--|--------------------------------------|------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 22, 27 SEP | a 22 SEP 1205 | 18.4 | 14.8 | 4 | 7 | 21 | 13 | 68 | 1 | 0 | 6 | 14 | 95 | 3 | 2 | 9 | 5 | 64 | 3 | 4 | 12 | 8 | 65 |
| | b 27 SEP 2318 | 16.2 | 14.7 | 6 | 19 | 24 | 46 | 64 | 0 | 6 | 16 | 27 | 86 | 5 | 17 | 28 | 30 | 62 | 12 | 6 | 40 | 28 | 74 |
| 6 OCT | a 1027 | 15.7 | 14.7 | 4 | 2 | 9 | 12 | 71 | 0 | 0 | 6 | 9 | 100 | 3 | 5 | 6 | 11 | 53 | 4 | 5 | 10 | 8 | 50 |
| | b 2142 | 16.0 | 14.4 | 8 | 7 | 17 | 15 | 53 | 2 | 2 | 5 | 6 | 64 | 0 | 0 | 10 | 7 | 100 | 0 | 7 | 6 | 18 | 71 |
| 20 OCT | a 1110 | 12.1 | 13.6 | 1 | 4 | 3 | 4 | 29 | 0 | 1 | 4 | 3 | 86 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2358 | 12.0 | 13.5 | 3 | - | 3 | 0 | 0 | 0 | 2 | 1 | 2 | 33 | 0 | 0 | 1 | 1 | 100 | 0 | 0 | 5 | 4 | 100 |
| 20 OCT ^h | a 1425 | NA | NA | 0 | 1 | 2 | 6 | 88 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 3 NOV | a 1210 | 10.4 | 15.5 | 1 | 1 | 1 | 1 | 0 | - | 0 | 0 | 1 | 100 | 0 | - | 1 | 0 | 100 | 0 | 0 | 2 | 2 | 100 |
| | b 2345 | 10.4 | 15.4 | 0 | - | 2 | 0 | 100 | - | - | 0 | 0 | - | 0 | - | 1 | 0 | 100 | 1 | 0 | 1 | 1 | 50 |
| 17 NOV | a 1210 | 8.2 | 13.6 | 2 | 1 | 2 | 1 | 0 | 0 | 0 | 2 | 2 | 100 | 1 | 1 | 3 | 2 | 60 | 1 | - | 1 | 0 | 0 |
| | b 2254 | 7.8 | 15.0 | 2 | 4 | 5 | 5 | 40 | 0 | 2 | 1 | 7 | 75 | 2 | 2 | 6 | 2 | 50 | 0 | 0 | 1 | 2 | 100 |
| 1 DEC | a 1230 | 3.2 | 14.8 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | 1 | 0 | 1 | 1 | 50 |
| | b 2308 | 3.5 | 14.9 | - | 0 | 0 | 1 | 100 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| 19 DEC | a 1155 | 2.2 | 12.8 | 0 | - | 1 | 0 | 100 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | 1 | 0 | 1 | 0 |
| | b 2321 | 2.5 | 13.8 | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - |

a/b Time in 2400 hrs of Intake Sample

c Intake temperature before tempering

d Discharge - Intake Temperature

e Number of live organisms observed

f Total number of organisms observed

g Total of dead observed in R-1 and R-2 divided by total organisms observed in R-1 and R-2

h Sample taken from lake in vicinity of FitzPatrick Intake

i 12 Nov - 19 Dec analysis after 8-hr incubation period

- Not applicable

NA = Not available

APPENDIX VIII B-5a

MORTALITY OF SELECTED SPECIES OF
CLADOCERA (LAKE)

NUMBER OF BOSMINA LONGIROSTRIS (CLADOCERA)
OBSERVED IN LAKE VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | 3° LAKE | | | | | 2° LAKE | | | | |
|---------------|--|--------------------------------------|-------------------------|-----------------------------|-----|------------------------------|------------------|-------------------|-----------------------------|-----|------------------------------|-----------------|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 14 APR | a | 1130 | 5.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2200 | 5.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 28-29 APR | a 28 APR | 1200 | 8.9 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 29 APR | 0045 | 8.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 12 MAY | a | 1120 | 10.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2400 | 9.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 26 MAY | a | 1000 | 10.9 | 2 | 2 | 2 | 2 | 0 | 2 | 4 | 2 | 4 | 0 |
| | b | 2400 | 11.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 9 JUN | a | 1130 | 11.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2300 | 14.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 23, 28 JUN | a 23 JUN | 1100 | 17.4 | 13 | 20 | 14 | 23 | 11 | 37 | 22 | 68 | 25 | 37 |
| | b 28 JUN | 2245 | 15.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 JUL | a | 1200 | 19.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2305 | 20.3 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 29 JUL | a | 1200 | 19.8 | 80 | 201 | 90 ^h | 225 ^h | 11 | 112 | 73 | 150 ^h | 88 ^h | 22 |
| | b | 2320 | 19.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 11 AUG | a | 1140 | 19.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2315 | 19.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 25 AUG | a | 1145 | 21.8 | 22 | 15 | 33 | 23 | 34 | 3 | 3 | 5 | 3 | 25 |
| | b | 2350 | 21.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

NUMBER OF BOSMINA LONGIROSTRIS (CLADOCERA)
OBSERVED IN LAKE VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | Δ T ^d | 3° LAKE | | | | | 2° LAKE | | | | | |
|---------------|--|--------------------------------------|------------------|-----------------------------|--------------|------------------------------|-----|--------------------------------|-----------------------------|--------------|------------------------------|-----|--------------------------------|---|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD MEAN ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD MEAN ^g | |
| | | | | R-1 | R-2 | R-1 | R-2 | | R-1 | R-2 | R-1 | R-2 | | |
| 8 SEP | a | 1130 | 19.7 | 15.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2305 | 21.1 | 16.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 22, 27 SEP | a | 22 SEP 1205 | 18.4 | 14.8 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 27 SEP 2318 | 16.2 | 14.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 6 OCT | a | 1027 | 15.7 | 14.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2142 | 16.0 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 OCT | a | 1110 | 12.1 | 13.6 | 47 | 66 | 47 | 67 | 1 | 19 | 31 | 23 | 32 | 9 |
| | b | 2358 | 12.0 | 13.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 3 NOV | a | 1210 | 10.4 | 15.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2345 | 10.4 | 15.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 17 NOV | a | 1210 | 8.2 | 13.6 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2254 | 7.8 | 15.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 1 DEC | a | 1230 | 3.2 | 14.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2308 | 3.5 | 14.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 19 DEC | a | 1155 | 2.2 | 12.8 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2321 | 2.5 | 13.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

a/b Time in 2400 hrs of Intake Sample

c Intake temperature before tempering

d Discharge - Intake Temperature

e Number of live organisms observed

f Total number of organisms observed

g Total of dead observed in R-1 and
R-2 divided by total organisms in R-1
and R-2

h Collections at sites 2° and 3°F lower
than the boil temperature (samples
were not taken in boil)

NA = Not available

APPENDIX VIIIB-5b

MORTALITY OF SELECTED SPECIES OF
COPEPODA: CYCLOPOIDA (LAKE)

NUMBER OF TROPOCYCLOPS PRASINUS MEXICANUS
(COPEPODA : CYCLOPOIDA) OBSERVED IN LAKE VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY - 1976

| DATE* | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | A T ^d | 3° LAKE | | | | | 2° LAKE | | | | |
|--------------|--|--------------------------------------|------------------|-----------------------------|-----|------------------------------|----------------|-------------------|-----------------------------|-----|------------------------------|----------------|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 14 APR | a 1130 | 5.1 | 14.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2200 | 5.8 | 13.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 12 MAY | a 1120 | 10.4 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2400 | 9.2 | 14.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 9 JUN | a 1130 | 11.7 | 12.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2300 | 14.1 | 14.3 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 23 28 JUN | a 23 JUN 1100 | 17.4 | 15.5 | 1 | 1 | 1 | 1 | 0 | - | 1 | 0 | 1 | 0 |
| | b 28 JUN 2245 | 15.9 | 15.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 JUL | a 1200 | 19.9 | 14.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2305 | 20.3 | 15.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 29 JUL | a 1200 | 19.8 | 14.0 | - | - | 0 ^h | 0 ^h | - | - | - | 0 ^h | 0 ^h | - |
| | b 2320 | 19.6 | 12.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 11 AUG | a 1140 | 19.2 | 15.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2315 | 19.9 | 14.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 25 AUG | a 1145 | 21.8 | 15.7 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | b 2350 | 21.9 | 17.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 8 SEP | a 1130 | 19.7 | 15.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2305 | 21.1 | 16.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

* This species was not collected on the following dates: 28-29 Apr, 26 May

NUMBER OF TROPOCYCLOPS PRASINUS MEXICANUS (COPEPODA : CYCLOPOIDA)
OBSERVED IN LAKE VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | Δ T ^d | 3° LAKE | | | | | 2° LAKE | | | | |
|--------------|--|--------------------------------------|------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 22,27 SEP | a 22 SEP | 18.4 | 14.8 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 27 SEP | 16.2 | 14.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 6 OCT | a 1027 | 15.7 | 14.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2142 | 16.0 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 OCT | a 1110 | 12.1 | 13.6 | 23 | 16 | 27 | 18 | 13 | - | 11 | 0 | 12 | 8 |
| | b 2358 | 12.0 | 13.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 3 NOV | a 1210 | 10.4 | 15.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2345 | 10.4 | 15.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 17 NOV | a 1210 | 8.2 | 13.6 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 2254 | 7.8 | 15.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 1 DEC | a 1230 | 3.2 | 14.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2308 | 3.5 | 14.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 19 DEC | a 1155 | 2.2 | 12.8 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 2321 | 2.5 | 13.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

a/b Time in 2400 hrs of Intake Sample

c Intake temperature before tempering

d Discharge - Intake Temperature

e Number of live organisms observed

f Total number of organisms observed

g Total of dead observed in R-1 and R-2 divided by total organisms in R-1 and R-2

h Collections at sites 2° and 3°F lower than the boil temperature (samples were not taken in boil)

- = Not applicable

NA = Not available

APPENDIX VIII B-5c

MORTALITY OF SELECTED SPECIES OF
ROTIFERA (LAKE)

NUMBER OF KERATELLA CRASSA (ROTIFERA)
OBSERVED IN LAKE VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | A T ^d | 3° LAKE | | | | | 2° LAKE | | | | |
|---------------|--|--------------------------------------|------------------|-----------------------------|-----|------------------------------|----------------|-------------------|-----------------------------|-----|------------------------------|-----------------|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 14 APR | a | 1130 | 5.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2200 | 5.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 28-29 APR | a | 28 APR 1200 | 8.9 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 29 APR 0045 | 8.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 12 MAY | a | 1120 | 10.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2400 | 9.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 26 MAY | a | 1000 | 10.9 | - | - | 0 | 0 | - | 2 | 0 | 2 | 4 | 67 |
| | b | 2400 | 11.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 9 JUN | a | 1130 | 11.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2300 | 14.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 23, 28 JUN | a | 23 JUN 1100 | 17.4 | 12 | 1 | 14 | 3 | 24 | 1 | 32 | 25 | 40 | 49 |
| | b | 28 JUN 2245 | 15.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 JUL | a | 1200 | 19.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2305 | 20.3 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 29 JUL | a | 1200 | 19.8 | 0 | 6 | 3 ^h | 8 ^h | 46 | 5 | 3 | 14 ^h | 11 ^h | 68 |
| | b | 2320 | 19.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 11 AUG | a | 1140 | 19.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2315 | 19.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 25 AUG | a | 1145 | 21.8 | 10 | 4 | 16 | 8 | 42 | 5 | 1 | 10 | 5 | 60 |
| | b | 2350 | 21.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

NUMBER OF KERATELLA CRASSA (ROTIFERA)
OBSERVED IN LAKE VIABILITY STUDIES (Continued).

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT^d | 3° LAKE | | | | | 2° LAKE | | | | |
|---------------|--|--------------------------------------|--------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 8 SEP | a | 1130 | 19.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2305 | 21.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 22, 27 SEP | a 22 SEP | 1205 | 18.4 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 27 SEP | 2318 | 16.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 6 OCT | a | 1027 | 15.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2142 | 16.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 OCT | a | 1110 | 12.1 | 2 | 2 | 4 | 3 | 43 | 3 | 4 | 6 | 5 | 36 |
| | b | 2358 | 12.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 3 NOV | a | 1210 | 10.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2345 | 10.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 17 NOV | a | 1210 | 8.2 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2254 | 7.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 1 DEC | a | 1230 | 3.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2308 | 3.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 19 DEC | a | 1155 | 2.2 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2321 | 2.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

a/b Time in 2400 hrs of Intake Sample
c Intake temperature before tempering
d Discharge - Intake Temperature
e Number of live organisms observed
f Total number of organisms observed
g Total of dead observed in R-1 and
R-2 divided by total organisms in R-1
and R-2

h Collections at sites 2° and 3°F lower
than the boil temperature (samples
were not taken in boil)

- = Not applicable
NA = Not available

NUMBER OF KERATELLA QUADRATA (ROTIFERA)
OBSERVED IN LAKE VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY - 1976

| DATE * | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | 3° LAKE | | | | | 2° LAKE | | | | | |
|---------------|--|--------------------------------------|-----------------|-----------------------------|--------------|------------------------------|-----|------------------------|-----------------------------|--------------|------------------------------|-----|------------------------|-----|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD ^g | |
| | | | | R-1 | R-2 | R-1 | R-2 | | R-1 | R-2 | R-1 | R-2 | | |
| 14 APR | a | 1130 | 5.1 | 14.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2200 | 5.8 | 13.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 28-29 APR | a | 28 APR 1200 | 8.9 | 14.6 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 29 APR 0045 | 8.6 | 13.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 12 MAY | a | 1120 | 10.4 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2400 | 9.2 | 14.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 26 MAY | a | 1000 | 10.9 | 14.4 | 38 | 40 | 126 | 99 | 65 | 52 | 42 | 93 | 135 | 59 |
| | b | 2400 | 11.1 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 9 JUN | a | 1130 | 11.7 | 12.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2300 | 14.1 | 14.3 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 23, 28 JUN | a | 23 JUN 1100 | 17.4 | 15.5 | 26 | 33 | 58 | 55 | 48 | 0 | 3 | 10 | 7 | 82 |
| | b | 28 JUN 2245 | 15.9 | 15.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 JUL | a | 1200 | 19.9 | 14.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2305 | 20.3 | 15.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 29 JUL | a | 1200 | 19.8 | 14.0 | - | - | 0h | 0h | - | 0 | 0 | 3h | 3h | 100 |
| | b | 2320 | 19.6 | 12.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 11 AUG. | a | 1140 | 19.2 | 15.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2315 | 19.9 | 14.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 25 AUG | a | 1145 | 21.8 | 15.7 | - | - | 0 | 0 | - | - | 1 | 0 | 2 | 50 |
| | b | 2350 | 21.9 | 17.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

* This species was not collected on the following date: 8 Sep

NUMBER OF KERATELLA QUADRATA (ROTIFERA)
OBSERVED IN LAKE VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | 3° LAKE | | | | | 2° LAKE | | | | |
|---------------|--|--------------------------------------|-------------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 22, 27 SEP | a 22 SEP 1205 | 18.4 | 14.8 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 27 SEP 2318 | 16.2 | 14.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 6 OCT | a 1027 | 15.7 | 14.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2142 | 16.0 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 OCT | a 1110 | 12.1 | 13.6 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | b 2358 | 12.0 | 13.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 3 NOV | a 1210 | 10.4 | 15.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2345 | 10.4 | 15.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 17 NOV | a 1210 | 8.2 | 13.6 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 2254 | 7.8 | 15.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 1 DEC | a 1230 | 3.2 | 14.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2308 | 3.5 | 14.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 19 DEC | a 1155 | 2.2 | 12.8 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 2321 | 2.5 | 13.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

a/b Time in 2400 hrs of Intake Sample

c Intake temperature before tempering

d Discharge - Intake Temperature

e Number of live organisms observed

f Total number of organisms observed

g Total of dead observed in R-1 and R-2 divided by total organisms in R-1 and R-2

h Collections at sites 2° and 3°F lower than the boil temperature (samples were not taken in 'boil')

- = Not applicable

NA = Not available

NUMBER OF POLYARTHRA DOLICHOPTERA (ROTIFERA)
OBSERVED IN LAKE VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | A T ^d | 3°LAKE | | | | | 2°LAKE | | | | |
|---------------|--|--------------------------------------|------------------|-----------------------------|-----|------------------------------|----------------|--------------------------------|-----------------------------|-----|------------------------------|----------------|--------------------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD MEAN ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD MEAN ^g |
| | | | | R-1 | R-2 | R-1 | R-2 | | R-1 | R-2 | R-1 | R-2 | |
| 14 APR | a 1130 | 5.1 | 14.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2200 | 5.8 | 13.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 28-29 APR | a 28 APR 1200 | 8.9 | 14.6 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 29 APR 0045 | 8.6 | 13.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 12 MAY | a 1120 | 10.4 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2400 | 9.2 | 14.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 26 MAY | a 1000 | 10.9 | 14.4 | 19 | 14 | 68 | 46 | 71 | 0 | 2 | 18 | 20 | 95 |
| | b 2400 | 11.1 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 9 JUN | a 1130 | 11.7 | 12.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2300 | 14.1 | 14.3 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 23, 28 JUN | a 23 JUN 1100 | 17.4 | 15.5 | 4 | 23 | 33 | 40 | 63 | 1 | 21 | 27 | 92 | 82 |
| | b 28 JUN 2245 | 15.9 | 15.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 JUL | a 1200 | 19.9 | 14.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2305 | 20.3 | 15.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 29 JUL | a 1200 | 19.8 | 14.0 | 2 | 0 | 3 ^h | 9 ^h | 83 | 1 | 2 | 1 ^h | 2 ^h | 0 |
| | b 2320 | 19.6 | 12.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 11 AUG | a 1140 | 19.2 | 15.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2315 | 19.9 | 14.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 25 AUG | a 1145 | 21.8 | 15.7 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | b 2350 | 21.9 | 17.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

NUMBER OF POLYARTHRA DOLICHOPTERA (ROTIFERA)
OBSERVED IN LAKE VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | Δ T ^d | 3° LAKE | | | | | 2° LAKE | | | | | |
|---------------|--|--------------------------------------|------------------|-----------------------------|--------------|------------------------------|-----|-----------|-----------------------------|--------------|------------------------------|-----|-----------|-----|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | |
| | | | | R-1 | R-2 | R-1 | R-2 | | MEAN ^g | R-1 | R-2 | R-1 | | R-2 |
| 8 SEP | a | 1130 | 19.7 | 15.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2305 | 21.1 | 16.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 22, 27 SEP | a 22 SEP | 1205 | 18.4 | 14.8 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 27 SEP | 2318 | 16.2 | 14.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 6 OCT | a | 1027 | 15.7 | 14.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2142 | 16.0 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 OCT | a | 1110 | 12.1 | 13.6 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | b | 2358 | 12.0 | 13.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 3 NOV | a | 1210 | 10.4 | 15.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2345 | 10.4 | 15.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 17 NOV | a | 1210 | 8.2 | 13.6 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2254 | 7.8 | 15.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 1 DEC | a | 1230 | 3.2 | 14.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2308 | 3.5 | 14.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 19 DEC | a | 1155 | 2.2 | 12.8 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2321 | 2.5 | 13.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

a/b Time in 2400 hrs of Intake Sample
c Intake temperature before tempering
d Discharge - Intake Temperature
e Number of live organisms observed
f Total number of organisms observed
g Total of dead observed in R-1 and R-2 divided by total organisms in R-1 and R-2

h Collections at sites 2° and 3°F lower than the boil temperature (samples were not taken in boil)

- = Not applicable
NA = Not available

NUMBER OF POLYARTHRA MAJOR (ROTIFERA)
OBSERVED IN LAKE VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY - 1976

| DATE * | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | Δ T ^d | 3° LAKE | | | | | 2° LAKE | | | | |
|---------------|--|--------------------------------------|------------------|-----------------------------|-----|------------------------------|----------------|---|-----------------------------|-----|------------------------------|----------------|---|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD ^g MEAN ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD ^g MEAN ^g |
| | | | | R-1 | R-2 | R-1 | R-2 | | R-1 | R-2 | R-1 | R-2 | |
| 26 MAY | a 1000 | 10.9 | 14.4 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | b 2400 | 11.1 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 9 JUN | a 1130 | 11.7 | 12.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2300 | 14.1 | 14.3 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 23, 28 JUN | a 23 JUN 1100 | 17.4 | 15.5 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | b 28 JUN 2245 | 15.9 | 15.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 JUL | a 1200 | 19.9 | 14.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2305 | 20.3 | 15.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 29 JUL | a 1200 | 19.8 | 14.0 | 0 | 0 | 2 ^h | 1 ^h | 100 | - | - | 0 ^h | 0 ^h | - |
| | b 2320 | 19.6 | 12.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 11 AUG | a 1140 | 19.2 | 15.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2315 | 19.9 | 14.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 25 AUG | a 1145 | 21.8 | 15.7 | 7 | 0 | 19 | 10 | 76 | 0 | 1 | 11 | 5 | 94 |
| | b 2350 | 21.9 | 17.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 8 SEP | a 1130 | 19.7 | 15.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2305 | 21.1 | 16.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 22, 27 SEP | a 22 SEP 1205 | 18.4 | 14.8 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 27 SEP 2318 | 16.2 | 14.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

* This species was not collected on the following dates: 14 Apr, 28-29 Apr, 12 May

NUMBER OF POLYARTHRA MAJOR (ROTIFERA)
OBSERVED IN LAKE VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | 3° LAKE | | | | | 2° LAKE | | | | | |
|-----------|--|--------------------------------------|-----------------|-----------------------------|--------------|------------------------------|-----|-----------|-----------------------------|--------------|------------------------------|-----|-----------|------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | |
| | | | | R-1 | R-2 | R-1 | R-2 | | MEAN ^g | R-1 | R-2 | R-1 | | R-2 |
| 6 OCT | a | 1027 | 15.7 | 14.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2142 | 16.0 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 OCT | a | 1110 | 12.1 | 13.6 | 0 | 1 | 1 | 9 | 90 | - | 0 | 0 | 4 | 100. |
| | b | 2358 | 12.0 | 13.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 3 NOV | a | 1210 | 10.4 | 15.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2345 | 10.4 | 15.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 17 NOV | a | 1210 | 8.2 | 13.6 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2254 | 7.8 | 15.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 1 DEC | a | 1230 | 3.2 | 14.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2308 | 3.5 | 14.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 19 DEC | a | 1155 | 2.2 | 12.8 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2321 | 2.5 | 13.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

a/b Time in 2400 hrs of Intake Sample
^c Intake temperature before tempering
^d Discharge - Intake Temperature
^e Number of live organisms observed
^f Total number of organisms observed
^g Total of dead observed in R-1 and R-2 divided by total organisms in R-1 and R-2

^h Collections at sites 2° and 3°F lower than the boil temperature (samples were not taken in boil)

- = Not applicable
 NA = Not available

NUMBER OF SYNCHAETA LACKOWITZIANA (ROTIFERA)
OBSERVED IN LAKE VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY - 1976

| DATE * | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | 3° LAKE | | | | | 2° LAKE | | | | |
|---------------|--|--------------------------------------|-----------------|-----------------------------|-----|------------------------------|----------------|--------------------------------|-----------------------------|-----|------------------------------|----------------|--------------------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD MEAN ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD MEAN ^g |
| | | | | R-1 | R-2 | R-1 | R-2 | | R-1 | R-2 | R-1 | R-2 | |
| 14 APR | a | 1130 | 5.1 | 14.0 | | | | | NOT REQUIRED | | | | |
| | b | 2200 | 5.8 | 13.7 | | | | | NOT REQUIRED | | | | |
| 28-29 APR | a 28 APR | 1200 | 8.9 | 14.6 | | | | | NO SAMPLE | | | | |
| | b 29 APR | 0045 | 8.6 | 13.4 | | | | | NOT REQUIRED | | | | |
| 12 MAY | a | 1120 | 10.4 | 14.4 | | | | | NOT REQUIRED | | | | |
| | b | 2400 | 9.2 | 14.5 | | | | | NOT REQUIRED | | | | |
| 26 MAY | a | 1000 | 10.9 | 20 | 25 | 33 | 30 | 29 | 27 | 5 | 38 | 10 | 33 |
| | b | 2400 | 11.1 | 14.4 | | | | | NOT REQUIRED | | | | |
| 9 JUN | a | 1130 | 11.7 | 12.4 | | | | | NOT REQUIRED | | | | |
| | b | 2300 | 14.1 | 14.3 | | | | | NOT REQUIRED | | | | |
| 23, 28 JUN | a 23 JUN | 1100 | 17.4 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | b 28 JUN | 2245 | 15.9 | 15.6 | | | | | NOT REQUIRED | | | | |
| 20 JUL | a | 1200 | 19.9 | 14.2 | | | | | NOT REQUIRED | | | | |
| | b | 2305 | 20.3 | 15.1 | | | | | NOT REQUIRED | | | | |
| 29 JUL | a | 1200 | 19.8 | - | 1 | 0 ^h | 1 ^h | 0 | - | - | 0 ^h | 0 ^h | - |
| | b | 2320 | 19.6 | 12.2 | | | | | NOT REQUIRED | | | | |
| 11 AUG | a | 1140 | 19.2 | 15.6 | | | | | NOT REQUIRED | | | | |
| | b | 2315 | 19.9 | 14.5 | | | | | NOT REQUIRED | | | | |
| 25 AUG | a | 1145 | 21.8 | - | - | 0 | 0 | - | - | 1 | 0 | 1 | 0 |
| | b | 2350 | 21.9 | 17.7 | | | | | NOT REQUIRED | | | | |

* This species was not collected on the following dates: 8 Sep, 20 Oct, 3 Nov

NUMBER OF SYNCHAETA LACKOWITZIANA (ROTIFERA)
OBSERVED IN LAKE VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | A T ^d | 3° LAKE | | | | | 2° LAKE | | | | |
|---------------|--|--------------------------------------|------------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 22, 27 SEP | a 22 SEP 1205 | 18.4 | 14.8 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 27 SEP 2318 | 16.2 | 14.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 6 OCT | a 1027 | 15.7 | 14.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2142 | 16.0 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 17 NOV | a 1210 | 8.2 | 13.6 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 2254 | 7.8 | 15.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 1 DEC | a 1230 | 3.2 | 14.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2308 | 3.5 | 14.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 19 DEC | a 1155 | 2.2 | 12.8 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 2321 | 2.5 | 13.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

a/b Time in 2400 hrs of Intake Sample
c Intake temperature before tempering
d Discharge - Intake Temperature
e Number of live organisms observed
f Total number of organisms observed
g Total of dead observed in R-1 and R-2 divided by total organisms in R-1 and R-2

h Collections at sites 2° and 3°F lower than the boil temperature (samples were not taken in boil)

NUMBER OF SYNCHAETA PECTINATA (ROTIFERA)
OBSERVED IN LAKE VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY - 1976

| DATE * | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | Δ T ^d | 3° LAKE | | | | | 2° LAKE | | | | | |
|--------------|--|--------------------------------------|------------------|-----------------------------|--------------|------------------------------|-----|-------------------|-----------------------------|--------------|------------------------------|-----|-------------------|----|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | |
| 14 APR | a | 1130 | 5.1 | 14.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2200 | 5.8 | 13.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 28-29 APR | a 28 APR 1200 | 8.9 | 14.6 | NO SAMPLE | | | | | NO SAMPLE | | | | | |
| | b 29 APR 0045 | 8.6 | 13.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | |
| 12 MAY | a | 1120 | 10.4 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2400 | 9.2 | 14.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 26 MAY | a | 1000 | 10.9 | 14.4 | 67 | 46 | 83 | 56 | 19 | 38 | 23 | 54 | 41 | 36 |
| | b | 2400 | 11.1 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 9 JUN | a | 1130 | 11.7 | 12.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2300 | 14.1 | 14.3 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 JUL | a | 1200 | 19.9 | 14.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2305 | 20.3 | 15.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 11 AUG | a | 1140 | 19.2 | 15.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2315 | 19.9 | 14.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 22,27 SEP | a 22 SEP 1205 | 18.4 | 14.8 | NO SAMPLE | | | | | NO SAMPLE | | | | | |
| | b 27 SEP 2318 | 16.2 | 14.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | | |
| 6 OCT | a | 1027 | 15.7 | 14.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2142 | 16.0 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

* This species was not collected on the following dates: 23,28 Jun, 29 Jul, 25 Aug, 8 Sep

NUMBER OF SYNCHAETA PECTINATA (ROTIFERA)
OBSERVED IN LAKE VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT^d | 3° LAKE | | | | | 2° LAKE | | | | | |
|-----------|--|--------------------------------------|--------------|-----------------------------|--------------|------------------------------|-----|-------------------|-----------------------------|--------------|------------------------------|-----|-------------------|---|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | |
| 20 OCT | a | 1110 | 12.1 | 13.6 | - | 3 | 0 | 3 | 0 | - | 4 | 0 | 4 | 0 |
| | b | 2358 | 12.0 | 13.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 3 NOV | a | 1210 | 10.4 | 15.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2345 | 10.4 | 15.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 17 NOV | a | 1210 | 8.2 | 13.6 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2254 | 7.8 | 15.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 1 DEC | a | 1230 | 3.2 | 14.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b | 2308 | 3.5 | 14.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 19 DEC | a | 1155 | 2.2 | 12.8 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b | 2321 | 2.5 | 13.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

a/b Time in 2400 hrs of Intake Sample
^c Intake temperature before tempering
^d Discharge - Intake Temperature
^e Number of live organisms observed
^f Total number of organisms observed
^g Total of dead observed in R-1 and
R-2 divided by total organisms in R-1
and R-2

- = Not applicable
NA = Not available

NUMBER OF TRICHOCECA MULTICRINIS (ROTIFERA)
OBSERVED IN LAKE VIABILITY STUDIES

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY - 1976

| DATE * | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | Δ T ^d | 3° LAKE | | | | | 2° LAKE | | | | |
|--------------|--|--------------------------------------|------------------|-----------------------------|-----|------------------------------|----------------|--------------------------------|-----------------------------|-----|------------------------------|----------------|--------------------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD MEAN ^g | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD MEAN ^g |
| | | | | R-1 | R-2 | R-1 | R-2 | | R-1 | R-2 | R-1 | R-2 | |
| 12 MAY | a 1120 | 10.4 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2400 | 9.2 | 14.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 26 MAY | a 1000 | 10.9 | 14.4 | - | - | 0 | 0 | - | - | - | 0 | 0 | - |
| | b 2400 | 11.1 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 9 JUN | a 1130 | 11.7 | 12.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2300 | 14.1 | 14.3 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 23,28 JUN | a 23 JUN 1100 | 17.4 | 15.5 | - | 1 | 0 | 1 | 0 | - | - | 0 | 0 | - |
| | b 28 JUN 2245 | 15.9 | 15.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 JUL | a 1200 | 19.9 | 14.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2305 | 20.3 | 15.1 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 29 JUL | a 1200 | 19.8 | 14.0 | - | 0 | 0 ^h | 4 ^h | 100 | 0 | - | 1 ^h | 0 ^h | 100 |
| | b 2320 | 19.6 | 12.2 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 11 AUG | a 1140 | 19.2 | 15.6 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2315 | 19.9 | 14.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 25 AUG | a 1145 | 21.8 | 15.7 | 2 | - | 3 | 0 | 33 | 2 | 3 | 2 | 3 | 0 |
| | b 2350 | 21.9 | 17.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 8 SEP | a 1130 | 19.7 | 15.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2305 | 21.1 | 16.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

* This species was not collected on the following dates: 14 Apr, 28-29 Apr

NUMBER OF TRICHOCECA MULTICRINIS (ROTIFERA)
OBSERVED IN LAKE VIABILITY STUDIES (Continued)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT VICINITY - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | 3° LAKE | | | | | 2° LAKE | | | | |
|---------------|--|--------------------------------------|-----------------|-----------------------------|-----|------------------------------|-----|-------------------|-----------------------------|-----|------------------------------|-----|-------------------|
| | | | | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD | NUMBER LIVE ^e | | TOTAL COLL'D ^f | | % DEAD |
| | | | | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g |
| 22, 27 SEP | a 22 SEP 1205 | 18.4 | 14.8 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 27 SEP 2318 | 16.2 | 14.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 6 OCT | a 1027 | 15.7 | 14.7 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2142 | 16.0 | 14.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 20 OCT | a 1110 | 12.1 | 13.6 | 1 | 2 | 1 | 3 | 25 | 0 | 1 | 4 | 3 | .86 |
| | b 2358 | 12.0 | 13.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 3 V | a 1210 | 10.4 | 15.5 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2345 | 10.4 | 15.4 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 17 NOV | a 1210 | 8.2 | 13.6 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 2254 | 7.8 | 15.0 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 1 DEC | a 1230 | 3.2 | 14.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| | b 2308 | 3.5 | 14.9 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |
| 19 DEC | a 1155 | 2.2 | 12.8 | NO SAMPLE | | | | | NO SAMPLE | | | | |
| | b 2321 | 2.5 | 13.8 | NOT REQUIRED | | | | | NOT REQUIRED | | | | |

a/b Time in 2400 hrs of Intake Sample

c Intake temperature before tempering

d Discharge - Intake Temperature

e Number of live organisms observed

f Total number of organisms observed

g Total of dead observed in R-1 and
R-2 divided by total organisms in R-1
and R-2

h Collections at sites 2° and 3° F lower
than the boil temperature (samples
were not taken in boil)

- = Not applicable

NA = Not available

APPENDIX VIIIC-1

ABUNDANCE* OF GAMMARUS FASCIATUS

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | SAMPLE DEPTH | 1100 hr | 1700 hr | 2300 hr | 0500 hr | MEAN |
|----------------|--------------|---------|---------|---------|---------|--------|
| 14 JAN | SURFACE | 6309 | 9936 | 11750 | 11128 | 9780.8 |
| | MID-DEPTH | 5428 | 6985 | 18661 | 7207 | 9570.3 |
| | MEAN | 5868.5 | 8460.5 | 15205.5 | 9167.5 | 9675.5 |
| 18 FEB | SURFACE | 333 | 374 | 736 | 518 | 490.3 |
| | MID-DEPTH | 290 | 760 | 926 | 394 | 592.5 |
| | MEAN | 311.5 | 567.0 | 831.0 | 456.0 | 541.4 |
| 17 MAR | SURFACE | 144 | 183 | 396 | 165 | 222.0 |
| | MID-DEPTH | 316 | 81 | 598 | 234 | 307.3 |
| | MEAN | 230.0 | 132.0 | 497.0 | 199.5 | 264.6 |
| 14 APR | SURFACE | 532 | 373 | 381 | 404 | 422.5 |
| | MID-DEPTH | 444 | 299 | 189 | 237 | 292.3 |
| | MEAN | 488.0 | 336.0 | 285.0 | 320.5 | 357.4 |
| 12 MAY | SURFACE | 58 | 109 | 83 | 195 | 111.3 |
| | MID-DEPTH | 161 | 179 | 313 | 126 | 194.8 |
| | MEAN | 109.5 | 144.0 | 198.0 | 160.5 | 153.0 |
| 16 JUN | SURFACE | 326 | 177 | 636 | 289 | 342.0 |
| | MID-DEPTH | 157 | 142 | 638 | 274 | 302.8 |
| | MEAN | 241.5 | 159.5 | 637.0 | 281.5 | 329.9 |
| 14 JUL | SURFACE | 77 | 39 | 340 | 0 | 114.0 |
| | MID-DEPTH | 87 | 79 | 1118 | 230 | 378.5 |
| | MEAN | 82.0 | 59.0 | 729.0 | 115.0 | 246.2 |
| 18 AUG | SURFACE | 104 | 166 | 925 | 344 | 384.8 |
| | MID-DEPTH | 163 | 143 | 930 | 243 | 369.8 |
| | MEAN | 133.5 | 154.5 | 927.5 | 293.5 | 377.2 |
| 8 SEP | SURFACE | 90 | 170 | 243 | 9 | 128.0 |
| | MID-DEPTH | 114 | 138 | 288 | 127 | 166.8 |
| | MEAN | 102.0 | 154.0 | 265.5 | 68.0 | 147.4 |
| 6 OCT | SURFACE | 291 | NR | 329 | NR | 310.0 |
| | MID-DEPTH | 199 | NR | 327 | NR | 263.0 |
| | MEAN | 245.0 | | 328.0 | | 286.5 |
| 3 NOV | SURFACE | 345 | NR | 287 | NR | 316.0 |
| | MID-DEPTH | 269 | NR | 302 | NR | 285.5 |
| | MEAN | 307.0 | | 294.5 | | 300.8 |
| 15 DEC | SURFACE | 253 | NR | 166 | NR | 209.5 |
| | MID-DEPTH | 515 | NR | 75 | NR | 295.0 |
| | MEAN | 384 | | 120.5 | | 252.2 |
| ANNUAL MEAN | SURFACE | 738.5 | 1280.8 | 1356.0 | 1450.2 | |
| | MID-DEPTH | 678.6 | 978.4 | 2030.4 | 1008.0 | |
| | MEAN | 708.6 | 1129.6 | 1693.2 | 1229.1 | |

*Number/1000 cu m.

Surface sample: 14 ft below water level; channel depth variable with lake level.

Mid-depth sample: 20 ft below water level; channel depth variable with lake level.

APPENDIX VI
MORTALITY OF GAMMARUS FASCIOLATUS FROM DAY/NIGHT COLLECTIONS

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE ^k | DAY NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | INTAKE | | | | DISCHARGE | | | | 3° SIMULATION ⁱ | | | | 2° SIMULATION ⁱ | | | | | | | | | |
|-------------------|---------------------------|-----------------------------------|-----------------|------------------|------------------|-------------------|------------------------------|-----------|-----|-----|------------------------------|----------------------------|-----|--------------|------------------------------|----------------------------|-----|------------------------|------------------------------|-----|-------------------|-----------------|-----------------|-----------------|-----------------|
| | | | | % DEAD | | | TOTAL COLL'D ^h | % DEAD | | | TOTAL COLL'D ^h | % DEAD ^j | | | TOTAL COLL'D ^h | % DEAD ^j | | | TOTAL COLL'D ^h | | | | | | |
| | | | | R-1 ^e | R-2 ^f | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | | |
| 28 APR | 1400 ^a | 9.1 | 14.5 | 0 | 27 | 25 | 3 | 52 | 19 | - | 19 | 94 | NS | NOT REQUIRED | | | | NO SAMPLE ^l | | | | | | | |
| | 2300 ^b | 8.2 | 13.9 | 0 | 3 | 2 | 3 | 38 | 38 | - | 38 | 134 | NS | NO SAMPLE | | | | NO SAMPLE | | | | | | | |
| 12 MAY | 1038 ^a | 10.2 | 14.0 | 100 | 0 | 22 | 2 | 7 | 9 | 16 | 12 | 34 | 25 | 34 | 12 | 31 | 52 | 9 | 8 | 12 | 9 | 16 | 9 | | |
| | 2325 ^b | 9.2 | 14.4 | 11 | 5 | 7 | 9 | 21 | 20 | 35 | 27 | 20 | 17 | -10 | 32 | 22 | 5 | 16 | 43 | 9 | 28 | 12 | 9 | | |
| 26 MAY | 1100 ^a | 9.6 | 15.8 | - | 13 | 12 | 0 | 8 | 14 | 33 | 20 | 14 | 6 | NOT REQUIRED | | | | 0 ^l | | | | - ^l | 0 ^l | 1 ^l | 0 ^l |
| | 2300 ^b | 9.8 | 15.6 | 0 | 0 | 0 | 2 | 19 | 33 | 22 | 27 | 6 | 9 | 31 | 10 | 9 | 4 | 5 | 66 | 100 | 83 | 4 | 4 | | |
| 9 JUN | 1100 ^a | 11.4 | 13.1 | 0 | 9 | 8 | 1 | 11 | 23 | 50 | 32 | 13 | 6 | NOT REQUIRED | | | | 0 ^l | | | | - ^l | 0 ^l | 3 ^l | 0 ^l |
| | 2300 ^b | 12.8 | 15.0 | - | 12 | 12 | 0 | 25 | 36 | 20 | 30 | 22 | 15 | NOT REQUIRED | | | | 0 ^l | | | | 10 ^l | 5 ^l | 36 ^l | 41 ^l |
| 23,28 JUN | 23 JUN ^a | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1100 ^a | 16.8 | 16.1 | 10 | 29 | 18 | 10 | 7 | 14 | 20 | 17 | 7 | 5 | NOT REQUIRED | | | | 70 ^l | | | | 0 ^l | 54 ^l | 10 ^l | 3 ^l |
| | 28 JUN ^b | 16.0 | 15.5 | 0 | 0 | 0 | 26 | 28 | 0 | 27 | 16 | 8 | 11 | NOT REQUIRED | | | | 2 ^l | | | | 0 ^l | 1 ^l | 40 ^l | 39 ^l |
| 20 JUL | 2245 ^b | 20.7 | 15.0 | - | 5 | 5 | 0 | 39 | 100 | - | 100 | 3 | 0 | -5 | -5 | -5 | 5 | 14 | -5 | -5 | -5 | 6 | 13 | | |
| 29 JUL | 2245 ^b | 19.7 | 11.9 | 0 | 0 | 0 | 26 | 108 | 46 | 80 | 57 | 56 | 25 | 6 | 0 | 1 | 16 | 62 | 0 | 0 | 0 | 4 | 23 | | |
| 11 AUG | 2245 ^b | 20.3 | 15.0 | 0 | 1 | .5 | 42 | 159 | 70 | 17 | 61 | 27 | 6 | -5 | -5 | -5 | 2 | 42 | -5 | 2 | 1 | 17 | 36 | | |
| 25 AUG | 2245 ^b | 21.5 | 16.2 | 1 | 0 | .4 | 113 | 120 | 19 | 83 | 44 | 47 | 30 | -4 | -4 | -4 | 39 | 69 | -4 | 3 | -4 | 39 | 31 | | |
| 8 SEP | 2247 ^b | 21.7 | 14.9 | - | 0 | 0 | 0 | 12 | 67 | 67 | 67 | 9 | 3 | 0 | 0 | 0 | 16 | 10 | 0 | 0 | 0 | 7 | 10 | | |
| 27 SEP | 2250 ^b | 16.2 | 14.8 | 0 | 0 | 0 | 23 | 16 | 40 | 27 | 33 | 10 | 11 | 0 | 0 | 0 | 25 | 22 | 0 | 0 | 0 | 20 | 12 | | |
| 20 OCT | 2230 ^b | 12.3 | 13.2 | 63 | 0 | 43 | 32 | 14 | 60 | 18 | 31 | 5 | 11 | 45 | -55 | -4 | 24 | 18 | -64 | -53 | -68 | 18 | 29 | | |
| 17 NOV | 2218 ^b | 8.6 | 12.8 | 0 | 0 | 0 | 13 | 10 | - | - | - | 0 | 0 | 0 | 0 | 0 | 8 | 10 | 0 | 0 | 0 | 15 | 13 | | |
| 19 DEC | 2255 ^b | 2.4 | 13.8 | 0 | 0 | 0 | 18 | 18 | 0 | 25 | 9 | 7 | 4 | 0 | 0 | 0 | 17 | 11 | 0 | 0 | 0 | 2 | 13 | | |

^{a/b} Time in 2400 hrs of Intake sample

^c Intake temperature before tempering

^d Discharge - Intake temperature

^e Intake forebay - 14 ft

^f Intake forebay - 20 ft

^g Mean % dead equal to the sum of dead in R-1 and R-2 divided by the sum of totals in R-1 and R-2

^h Actual number of organisms observed

ⁱ Organisms collected for simulation experiments from discharge or intake canal (28 Apr - 28 Jun and 20 Jul - 25 Aug, respectively)

^j Estimated mortality of initial collections prior to simulation removed in calculation of mortality due to simulation

^k As of 20 July, only night collection required in the sampling program

^l Lake collections

- = Not applicable, no organisms collected

Data Update

APPENDIX VIIID-1a
ABUNDANCE OF SELECTED SPECIES OF LARVAE

ABUNDANCE OF ALEWIFE LARVAE

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | SAMPLE DEPTH | 1100 HR | 1700 HR ^b | 2300 HR | 0500 HR ^b | MEAN |
|--------|--------------|---------|----------------------|---------|----------------------|--------|
| 12 MAY | SURFACE | 0 | 0 | 149 | 22 | 42.8 |
| | MID-DEPTH | 4 | 0 | 4 | 0 | 2.0 |
| | MEAN | 2.0 | 0 | 76.5 | 11.0 | 22.4 |
| 19 MAY | SURFACE | 0 | 48 | 0 | 4 | 13.0 |
| | MID-DEPTH | 0 | 0 | 5 | 0 | 1.3 |
| | MEAN | 0 | 24.0 | 2.5 | 2.0 | 7.2 |
| 26 MAY | SURFACE | 0 | 16 | 0 | 0 | 4.0 |
| | MID-DEPTH | 8 | 9 | 8 | 18 | 10.8 |
| | MEAN | 4.0 | 12.5 | 4.0 | 9.0 | 7.4 |
| 23 JUN | SURFACE | 0 | 0 | 0 | 0 | 0 |
| | MID-DEPTH | 13 | 0 | 10 | 26 | 12.3 |
| | MEAN | 6.5 | 0 | 5.0 | 13.0 | 6.2 |
| 30 JUN | SURFACE | 194 | 0 | 295 | 0 | 122.3 |
| | MID-DEPTH | 0 | 8 | 56 | 16 | 20.0 |
| | MEAN | 97.0 | 4.0 | 175.5 | 8.0 | 71.1 |
| 7 JUL | SURFACE | 0 | 0 | 10 | 12 | 5.5 |
| | MID-DEPTH | 0 | 4 | 0 | 93 | 24.3 |
| | MEAN | 0 | 2.0 | 5.0 | 52.5 | 14.9 |
| 14 JUL | SURFACE | 77 | 20 | 136 | 80 | 78.3 |
| | MID-DEPTH | 91 | 339 | 137 | 215 | 195.5 |
| | MEAN | 84.0 | 179.5 | 136.5 | 147.5 | 136.9 |
| 21 JUL | SURFACE | 30 | 15 | 23 | 11 | 19.8 |
| | MID-DEPTH | 36 | 0 | 20 | 21 | 19.3 |
| | MEAN | 33.0 | 7.5 | 21.5 | 16.0 | 19.5 |
| 28 JUL | SURFACE | 191 | 0 | 537 | 241 | 242.3 |
| | MID-DEPTH | 253 | 34 | 687 | 453 | 356.8 |
| | MEAN | 222.0 | 17.0 | 612.0 | 347.0 | 299.5 |
| 4 AUG | SURFACE | 1245 | 2374 | 5138 | 837 | 2398.5 |
| | MID-DEPTH | 1287 | 2909 | 5084 | 1316 | 2649.0 |
| | MEAN | 1266.0 | 2641.5 | 5111.0 | 1076.5 | 2523.8 |

| DATE | SAMPLE DEPTH | 1100 HR | 1700 HR ^b | 2300 HR | 0500 HR ^b | MEAN |
|-------------|--------------|---------|----------------------|---------|----------------------|-------|
| 11 AUG | SURFACE | 339 | 29 | 583 | 428 | 344.8 |
| | MID-DEPTH | 734 | 194 | 1258 | 647 | 708.3 |
| | MEAN | 536.5 | 111.5 | 920.5 | 537.5 | 526.5 |
| 18 AUG | SURFACE | 156 | 1564 | 405 | 383 | 627.0 |
| | MID-DEPTH | 115 | 1224 | 609 | 442 | 597.5 |
| | MEAN | 135.5 | 1394.0 | 507.0 | 412.5 | 612.2 |
| 25 AUG | SURFACE | 36 | 30 | 525 | 829 | 355.0 |
| | MID-DEPTH | 35 | 42 | 718 | 1288 | 520.8 |
| | MEAN | 35.5 | 36.0 | 621.5 | 1058.5 | 437.9 |
| 1 SEP | SURFACE | 3 | 4 | 26 | 40 | 18.3 |
| | MID-DEPTH | 9 | 0 | 95 | 77 | 45.3 |
| | MEAN | 6.0 | 2.0 | 60.5 | 58.5 | 31.8 |
| 8 SEP | SURFACE | 0 | 0 | 0 | 9 | 2.3 |
| | MID-DEPTH | 0 | 0 | 5 | 5 | 2.5 |
| | MEAN | 0 | 0 | 2.5 | 7.0 | 2.4 |
| 22 SEP | SURFACE | 0 | - | 12 | - | 6.0 |
| | MID-DEPTH | 0 | - | 24 | - | 12.0 |
| | MEAN | 0 | - | 18.0 | - | 9.0 |
| 6 OCT | SURFACE | 0 | - | 0 | - | 0 |
| | MID-DEPTH | 5 | - | 5 | - | 5 |
| | MEAN | 2.5 | - | 2.5 | - | 2.5 |
| 20 OCT | SURFACE | 0 | - | 0 | - | 0 |
| | MID-DEPTH | 0 | - | 6 | - | 3.0 |
| | MEAN | 0 | - | 3.0 | - | 1.5 |
| 3 NOV | SURFACE | 0 | - | 0 | - | 0 |
| | MID-DEPTH | 0 | - | 5 | - | 2.5 |
| | MEAN | 0 | - | 2.5 | - | 1.2 |
| 17 NOV | SURFACE | 0 | - | 11 | - | 5.5 |
| | MID-DEPTH | 0 | - | 54 | - | 27.0 |
| | MEAN | 0 | - | 32.5 | - | 16.2 |
| ANNUAL MEAN | SURFACE | 66.8 | 151.9 | 230.9 | 107.3 | |
| | MID-DEPTH | 76.2 | 176.4 | 258.5 | 171.0 | |
| | MEAN | 71.5 | 164.2 | 244.7 | 139.2 | |

None collected 7 Jan - 5 May, 2-16 Jun, and 1-15 Dec

^aNumber/1000 m³

^bNot required in sampling program as of 22 Sep

- = Not applicable

Surface sample: 14 ft below water level; channel depth variable with lake level.

Mid-depth sample: 20 ft below water level; channel depth variable with lake level.

Revised

ABUNDANCE^a OF RAINBOW SMELT LARVAE

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | SAMPLE DEPTH | 1100 HR | 1700 HR ^b | 2300 HR | 0500 HR ^b | MEAN |
|-----------|--------------|---------|----------------------|---------|----------------------|------|
| 14 APR | SURFACE | 0 | 0 | 12 | 0 | 3.0 |
| | MID-DEPTH | 0 | 0 | 0 | 0 | 0 |
| | MEAN | 0 | 0 | 6.0 | 0 | 1.5 |
| 12 MAY | SURFACE | 0 | 0 | 0 | 0 | 0 |
| | MID-DEPTH | 0 | 0 | 8 | 0 | 2.0 |
| | MEAN | 0 | 0 | 4.0 | 0 | 1.0 |
| 19 MAY | SURFACE | 0 | 48 | 0 | 0 | 12.0 |
| | MID-DEPTH | 0 | 0 | 0 | 0 | 0 |
| | MEAN | 0 | 24 | 0 | 0 | 6.0 |
| 26 MAY | SURFACE | 0 | 16 | 0 | 0 | 4.0 |
| | MID-DEPTH | 4 | 0 | 8 | 0 | 3.0 |
| | MEAN | 2.0 | 8.0 | 4.0 | 0 | 3.5 |
| 2 JUN | SURFACE | 0 | 0 | 10 | 32 | 10.5 |
| | MID-DEPTH | 0 | 4 | 4 | 0 | 2.0 |
| | MEAN | 0 | 2.0 | 7.0 | 16.0 | 6.2 |
| 9 JUN | SURFACE | 0 | 0 | 0 | 106 | 26.5 |
| | MID-DEPTH | 24 | 21 | 8 | 12 | 16.3 |
| | MEAN | 12.0 | 10.5 | 4.0 | 59.0 | 21.4 |
| 16 JUN | SURFACE | 0 | 0 | 27 | 0 | 6.8 |
| | MID-DEPTH | 0 | 0 | 0 | 10 | 2.5 |
| | MEAN | 0 | 0 | 13.5 | 5 | 4.6 |
| 7 JUL | SURFACE | 0 | 0 | 0 | 0 | 0 |
| | MID-DEPTH | 0 | 0 | 9 | 0 | 2.3 |
| | MEAN | 0 | 0 | 4.5 | 0 | 1.1 |

| DATE | SAMPLE DEPTH | 1100 HR | 1700 HR ^b | 2300 HR | 0500 HR ^b | MEAN |
|----------------|--------------|---------|----------------------|---------|----------------------|------|
| 14 JUL | SURFACE | 0 | 0 | 0 | 0 | 0 |
| | MID-DEPTH | 0 | 0 | 31 | 26 | 14.3 |
| | MEAN | 0 | 0 | 15.5 | 13.0 | 7.1 |
| 21 JUL | SURFACE | 0 | 0 | 0 | 0 | 0 |
| | MID-DEPTH | 0 | 0 | 10 | 5 | 3.8 |
| | MEAN | 0 | 0 | 5.0 | 2.5 | 1.9 |
| 11 AUG | SURFACE | 0 | 0 | 0 | 0 | 0 |
| | MID-DEPTH | 0 | 0 | 4 | 4 | 2.0 |
| | MEAN | 0 | 0 | 2 | 2 | 1.0 |
| 18 AUG | SURFACE | 0 | 0 | 5 | 0 | 1.3 |
| | MID-DEPTH | 0 | 0 | 0 | 4 | 1.0 |
| | MEAN | 0 | 0 | 2.5 | 2 | 1.1 |
| 1 SEP | SURFACE | 0 | 0 | 0 | 0 | 0 |
| | MID-DEPTH | 0 | 0 | 9 | 0 | 2.3 |
| | MEAN | 0 | 0 | 4.5 | 0 | 1.1 |
| 22 SEP | SURFACE | 0 | - | 0 | - | 0 |
| | MID-DEPTH | 0 | - | 5 | - | 2.5 |
| | MEAN | 0 | - | 2.5 | - | 1.2 |
| 1 DEC | SURFACE | 8 | - | 42 | - | 25.0 |
| | MID-DEPTH | 28 | - | 61 | - | 44.5 |
| | MEAN | 18.0 | - | 51.5 | - | 34.8 |
| 15 DEC | SURFACE | 9 | - | 0 | - | 4.5 |
| | MID-DEPTH | 0 | - | 6 | - | 3.0 |
| | MEAN | 4.5 | - | 3.0 | - | 3.8 |
| ANNUAL MEAN | SURFACE | 0.5 | 2.4 | 2.8 | 5.1 | |
| | MID-DEPTH | 1.6 | 0.9 | 4.8 | 2.3 | |
| | MEAN | 1.0 | 1.6 | 3.8 | 3.7 | |

None collected 7 Jan - 17 Mar, 28 Apr - 5 May, 23 - 30 Jun,
28 Jul - 4 Aug, 25 Aug, 8 Sep, and 6 Oct - 17 Nov

^a Number/1000 m³

^b Not required in sampling program as of 22 Sep

- = Not applicable

Surface sample: 14 ft below water level; channel depth variable with lake level.

Mid-depth sample: 20 ft below water level; channel depth variable with lake level.

Revised

ABUNDANCE^a OF YELLOW PERCH LARVAE

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | SAMPLE DEPTH | 1100 HR | 1700 HR ^b | 2300 HR | 0500 HR ^b | MEAN |
|----------------|--------------|---------|----------------------|---------|----------------------|------|
| 28 APR | SURFACE | 0 | 0 | 0 | 31 | 7.8 |
| | MID-DEPTH | 0 | 0 | 0 | 0 | 0 |
| | MEAN | 0 | 0 | 0 | 15.5 | 3.9 |
| 12 MAY | SURFACE | 0 | 0 | 0 | 0 | 0 |
| | MID-DEPTH | 4 | 0 | 0 | 0 | 1.0 |
| | MEAN | 2.0 | 0 | 0 | 0 | 0.5 |
| 19 MAY | SURFACE | 0 | 0 | 0 | 0 | 0 |
| | MID-DEPTH | 0 | 0 | 0 | 4 | 1.0 |
| | MEAN | 0 | 0 | 0 | 2.0 | 0.5 |
| ANNUAL MEAN | SURFACE | 0.0 | 0.0 | 0.0 | 1.1 | |
| | MID-DEPTH | 0.1 | 0.0 | 0.0 | 0.1 | |
| | MEAN | 0.1 | 0.0 | 0.0 | 0.6 | |

None collected₃ 7 Jan - 14 Apr, 5 May, 26 May - 15 Dec

^aNumber/1000 m

^bNot required in sampling program as of 22 Sep

Surface sample: 14 ft below water level; channel depth variable with lake level

Mid-depth sample: 20 ft below water level; channel depth variable with lake level

APPENDIX VIIID-1b
ABUNDANCE OF SELECTED SPECIES OF FISH EGGS

ABUNDANCE^a OF ALEWIFE EGGS

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | SAMPLE DEPTH | 1100 HR | 1700 HR ^b | 2300 HR | 0500 HR ^b | MEAN |
|----------------|--------------|---------|----------------------|---------|----------------------|---------|
| 16 JUN | SURFACE | 0 | 14 | 0 | 15 | 7.3 |
| | MID-DEPTH | 13 | 7 | 0 | 20 | 10.0 |
| | MEAN | 6.5 | 10.5 | 0.0 | 17.5 | 8.6 |
| 23 JUN | SURFACE | 445 | 533 | 4372 | 1975 | 1831.2 |
| | MID-DEPTH | 632 | 1299 | 12911 | 2315 | 4289.3 |
| | MEAN | 538.5 | 916.0 | 8641.5 | 2145.0 | 3060.2 |
| 30 JUN | SURFACE | 12515 | 1494 | 5167 | 11515 | 7672.8 |
| | MID-DEPTH | 5411 | 1532 | 7554 | 19268 | 8441.2 |
| | MEAN | 8963.0 | 1513.0 | 6360.5 | 15391.5 | 8057.0 |
| 7 JUL | SURFACE | 2098 | 620 | 59133 | 4129 | 16495.0 |
| | MID-DEPTH | 662 | 814 | 2054 | 8943 | 3118.3 |
| | MEAN | 1380.0 | 717.0 | 30593.5 | 6536.0 | 9806.6 |
| 14 JUL | SURFACE | 2197 | 1229 | 679 | 23090 | 6798.8 |
| | MID-DEPTH | 283 | 141 | 1533 | 1135 | 773.0 |
| | MEAN | 1240.0 | 685.0 | 1106.0 | 12112.5 | 3785.9 |
| 21 JUL | SURFACE | 1064 | 280 | 1007 | 1329 | 920.0 |
| | MID-DEPTH | 3072 | 2294 | 446 | 1988 | 1950.0 |
| | MEAN | 2068.0 | 1287.0 | 726.5 | 1658.5 | 1435.0 |
| 28 JUL | SURFACE | 64 | 25 | 46 | 186 | 80.3 |
| | MID-DEPTH | 34 | 17 | 32 | 237 | 80.0 |
| | MEAN | 49.0 | 21.0 | 39.0 | 211.5 | 80.1 |
| 4 AUG | SURFACE | 365 | 92 | 714 | 2404 | 893.8 |
| | MID-DEPTH | 336 | 157 | 568 | 2302 | 840.8 |
| | MEAN | 350.5 | 124.5 | 641 | 2353.0 | 867.3 |
| 11 AUG | SURFACE | 5 | 5 | 9 | 2112 | 532.8 |
| | MID-DEPTH | 4 | 0 | 0 | 2363 | 591.8 |
| | MEAN | 4.5 | 2.5 | 4.5 | 2237.5 | 562.2 |
| ANNUAL MEAN | SURFACE | 551.6 | 159.0 | 2092.0 | 1731.7 | |
| | MID-DEPTH | 307.3 | 231.9 | 738.2 | 1428.6 | |
| | MEAN | 429.4 | 195.4 | 1415.1 | 1580.1 | |

None collected, 7 Jan - 9 Jun, and 18 Aug - 15 Dec

^a Number/1000 m³

^b Not required in sampling program as of 22 Sep

Surface sample: 14 ft below water level; channel depth variable with lake level

Mid-depth sample: 20 ft below water level; channel depth variable with lake level

Revised

ABUNDANCE^a OF RAINBOW SMELT EGGS

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | SAMPLE DEPTH | 1100 HR | 1700 HR ^b | 2300 HR | 0500 HR ^b | MEAN |
|----------------|--------------|---------|----------------------|---------|----------------------|--------|
| 28 APR | SURFACE | 37 | 261 | 6171 | 185 | 1663.5 |
| | MID-DEPTH | 13 | 0 | 8 | 0 | 5.3 |
| | MEAN | 25.0 | 130.5 | 3089.5 | 92.5 | 834.4 |
| 5 MAY | SURFACE | 873 | 168 | 28 | 43 | 278.0 |
| | MID-DEPTH | 221 | 37 | 33 | 16 | 76.8 |
| | MEAN | 547.0 | 102.5 | 30.5 | 29.5 | 177.4 |
| 12 MAY | SURFACE | 0 | 144 | 17 | 130 | 72.8 |
| | MID-DEPTH | 4 | 12 | 0 | 17 | 8.3 |
| | MEAN | 2.0 | 78.0 | 8.5 | 73.5 | 40.5 |
| 26 MAY | SURFACE | 0 | 16 | 35 | 0 | 12.8 |
| | MID-DEPTH | 0 | 0 | 0 | 18 | 4.5 |
| | MEAN | 0 | 8.0 | 17.5 | 9.0 | 8.6 |
| 2 JUN | SURFACE | 0 | 0 | 0 | 0 | 0 |
| | MID-DEPTH | 8 | 4 | 0 | 0 | 3.0 |
| | MEAN | 4.0 | 2.0 | 0.0 | 0.0 | 1.5 |
| ANNUAL MEAN | SURFACE | 26.8 | 21.8 | 183.9 | 13.3 | |
| | MID-DEPTH | 7.2 | 2.0 | 1.2 | 1.9 | |
| | MEAN | 17.0 | 11.9 | 92.6 | 7.6 | |

None collected 7 Jan - 14 Apr, 19 May, and 9 Jun - 15 Dec

^a Number/1000 m³

^b Not required in sampling program as of 22 Sep

Surface sample: 14 ft below water level; channel depth variable with lake level.

Mid-depth sample: 20 ft below water level; channel depth variable with lake level.

APPENDIX VIIID-2a

MORTALITY OF LARVAL FISH: PRO-LARVAE

MORTALITY OF ALEWIFE (PRO-LARVA STAGE) FROM DAY/NIGHT COLLECTIONS

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | Δ T ^d | INTAKE | | | DISCHARGE | | | 3°SIMULATION ¹ | | | 2°SIMULATION ¹ | | | 3°/2° LAKE | | | | | | | | | | | |
|--------------|--|--------------------------------------|------------------|------------------|------------------|-------------------|------------------------------|--------|-----|---------------------------|------------------------------|--------|---------------------------|--------------|------------------------------|-------------------|----------------|----------------|------------------------------|-----|-------------------|----------------|----------------|----|---|----|----|
| | | | | % DEAD | | | TOTAL COLL'D ^h | % DEAD | | | TOTAL COLL'D ^h | % DEAD | | | TOTAL COLL'D ^h | % DEAD | | | TOTAL COLL'D ^h | | | | | | | | |
| | | | | R-1 ^e | R-2 ^f | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | | | | |
| 23,28 JUN | 23 JUN 1100 ^a | 16.8 | 16.1 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | NOT REQUIRED | | | NOT REQUIRED | | | 100 | - | 100 | 1 | 0 | | | |
| | 28 JUN 2300 ^b | 16.0 | 15.5 | 33 | - | 33 | 3 | 0 | - | - | - | 0 | 0 | NOT REQUIRED | | | NOT REQUIRED | | | - | 100 | 100 | 0 | 2 | | | |
| 20 JUL | 1045 ^a | 20.0 | 14.6 | - | 100 | 100 | 0 | 1 | - | - | - | 0 | 0 | NOT REQUIRED | | | NOT REQUIRED | | | 100 | - | 100 | 1 | 0 | | | |
| | 2245 ^b | 20.7 | 15.0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | NOT REQUIRED | | | NOT REQUIRED | | | - | - | - | 0 | 0 | | | |
| 29 JUL | 1045 ^a | 20.0 | 13.8 | - | 67 | 67 | 0 | 3 | - | - | - | 0 | 0 | NOT REQUIRED | | | NOT REQUIRED | | | 100 | - | 100 | 4 | 0 | | | |
| | 2245 ^b | 19.7 | 11.9 | - | 50 | 50 | 0 | 4 | - | - | - | 0 | 0 | - | 100 | 100 | 0 ^j | 3 ^j | - | 0 | 0 | 0 ^j | 1 ^j | 91 | - | 91 | 22 |
| 11 AUG | 1045 ^a | 19.4 | 15.2 | - | 100 | 100 | 0 | 1 | - | - | - | 0 | 0 | NOT REQUIRED | | | NOT REQUIRED | | | - | 100 | 100 | 0 | 1 | | | |
| | 2245 ^b | 20.3 | 15.0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | NOT REQUIRED | | | NOT REQUIRED | | | 100 | - | 100 | 1 | 0 | | | |

^{a/b} Time in 2400 hrs of Intake sample

^c Intake temperature before tempering

^d Discharge - Intake temperature

^e Intake forebay - 14 ft

^f Intake forebay - 20 ft

^g Mean % dead equal to the sum of dead in R-1 and R-2 divided by the sum of totals in R-1 and R-2

^h Actual number of organisms observed

ⁱ Organisms collected for simulation experiments from discharge for intake canal (28 Apr-28 Jun and 20 Jul-25 Aug, respectively)

^j Larvae collected in conjunction with gammarus viability study

Not Required = Not required in sampling program

- = Not applicable, no organisms collected

MORTALITY OF CARP (PRO-LARVA STAGE) FROM DAY/NIGHT COLLECTIONS

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | Δ T ^d | INTAKE | | | DISCHARGE | | | 3°SIMULATION ⁱ | | | 2°SIMULATION ⁱ | | | 3°/2° LAKE | | |
|-----------|--|--------------------------------------|------------------|------------------|------------------|-------------------|-----------|-----|-------------------|---------------------------|-----|-------------------|---------------------------|-----|-------------------|----------------|-----|-------------------|
| | | | | % DEAD | | | % DEAD | | | % DEAD | | | % DEAD | | | % DEAD | | |
| | | | | R-1 ^e | R-2 ^f | MEAN ^g | R-1 | R-2 | MEAN ^g | R-1 | R-2 | MEAN ^g | R-1 | R-2 | MEAN ^g | R-1 | R-2 | MEAN ^g |
| 29 JUL | ^a 1045 | 20.0 | 13.8 | - | - | - | 0 | 0 | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | - | - | - | 0 | 0 |
| | ^b 2245 | 19.7 | 11.9 | - | 0 | 0 | 0 | 1 | - | 0 | 0 | NOT REQUIRED | - | 0 | 0 | 0 ^j | - | 0 |

^{a/b} Time in 2400 hrs of Intake sample

^c Intake temperature before tempering

^d Discharge - Intake temperature

^e Intake forebay - 14 ft

^f Intake forebay - 20 ft

^g Mean % dead equal to the sum of dead in R-1 and R-2 divided by the sum of totals in R-1 and R-2

^h Actual number of organisms observed

ⁱ Organisms collected for simulation experiments from discharge or intake canal (28 Apr-28 Jun and 20 Jul-25 Aug, respectively)

^j Larvae collected in conjunction with Gammarus viability study

Not Required = Not required in sampling program

- = Not applicable, no organisms collected

MORTALITY OF JOHNNY DARTER (PRO-LARVA STAGE) FROM DAY/NIGHT COLLECTIONS

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | INTAKE | | | DISCHARGE | | | 3°SIMULATION ⁱ | | | 2°SIMULATION ⁱ | | | 3°/2° LAKE | | |
|---------------|--|--------------------------------------|-------------------------|------------------|------------------|-------------------|-----------|-----|-------------------|---------------------------|-----|-------------------|---------------------------|-----|-------------------|------------|-----|-------------------|
| | | | | % DEAD | | | % DEAD | | | % DEAD | | | % DEAD | | | % DEAD | | |
| | | | | R-1 ^e | R-2 ^f | MEAN ^g | R-1 | R-2 | MEAN ^g | R-1 | R-2 | MEAN ^g | R-1 | R-2 | MEAN ^g | R-1 | R-2 | MEAN ^g |
| 23, 28 JUN | 23 JUN 1100 ^a | 16.8 | 16.1 | - | - | - | 0 | 0 | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | - | - | 0 | 0 | - |
| | 28 JUN 2300 ^b | 16.0 | 15.5 | - | 0 | 0 | 0 | 2 | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | 50 | 100 | 67 | 2 | 1 |

a/b Time in 2400 hrs of Intake sample

c Intake temperature before tempering

d Discharge - Intake temperature

e Intake forebay - 14 ft

f Intake forebay - 20 ft

g Mean % dead equal to the sum of dead in R-1 and R-2 divided by the sum of totals in R-1 and R-2

h Actual number of organisms observed

i Organisms collected for simulation experiments from discharge or intake canal (28 Apr-28 Jun and 20 Jul-25 Aug, respectively)

Not Required = Not required in sampling program

- = Not applicable, no organisms collected

MORTALITY OF RAINBOW SMELT (PRO-LARVA STAGE) FROM DAY/NIGHT COLLECTIONS

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | Δ T ^d | INTAKE | | | DISCHARGE | | | 3°SIMULATION ⁱ | | | 2°SIMULATION ⁱ | | | 3°/2° LAKE | | | | | | | | |
|----------|--|--------------------------------------|------------------|--------|--------|-------------------|------------------------------|-----|-------------------|------------------------------|-----|-------------------|------------------------------|--------------|-------------------|------------------------------|--------------|-------------------|------------------------------|-----|-------------------|-----|-----|-------------------|
| | | | | | | | TOTAL COLL'D ^h | | | TOTAL COLL'D ^h | | | TOTAL COLL'D ^h | | | TOTAL COLL'D ^h | | | TOTAL COLL'D ^h | | | | | |
| | | | | % DEAD | % DEAD | MEAN ^e | R-1 | R-2 | MEAN ^e | R-1 | R-2 | MEAN ^e | R-1 | R-2 | MEAN ^e | R-1 | R-2 | MEAN ^e | R-1 | R-2 | MEAN ^e | R-1 | R-2 | MEAN ^e |
| 9 JUN | 1100 ^a | 11.4 | 13.1 | - | 0 | 0 | 0 | 1 | - | - | - | 0 | 0 | NOT REQUIRED | | | NOT REQUIRED | | | - | - | - | 0 | 0 |
| | 2300 ^b | 12.8 | 15.0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | NOT REQUIRED | | | NOT REQUIRED | | | - | - | - | 0 | 0 |

^{a/b} Time in 2400 hrs of Intake sample

^c Intake temperature before tempering

^d Discharge - Intake temperature

^e Intake forebay - 14 ft

^f Intake forebay - 20 ft

^g Mean % dead equal to the sum of dead in R-1 and R-2 divided by the sum of totals in R-1 and R-2

^h Actual number of organisms observed

ⁱ Organisms collected for simulation experiments from discharge or intake canal (28 Apr-28 Jun and 20 Jul-25 Aug, respectively)

Not Required = Not required in sampling program

- = Not applicable, no organisms collected

MORTALITY OF WHITE PERCH (PRO-LARVA STAGE) FROM DAY/NIGHT COLLECTIONS

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP (°C) ^c | Δ T ^d | INTAKE | | | | | | DISCHARGE | | | | | | 3° SIMULATION ⁱ | | | | | | 2° SIMULATION ⁱ | | | | | | 3°/2° LAKE ^j | | | | | |
|--------------|--|-------------------------------------|------------------|------------------|------------------|-------------------|------------------------------|-----|--|-----------|-----|-------------------|------------------------------|-----|--|----------------------------|-----|-------------------|------------------------------|-----|--|----------------------------|-----|-------------------|------------------------------|-----|---|-------------------------|-----|-------------------|------------------------------|-----|--|
| | | | | % DEAD | | | TOTAL COLL'D ^h | | | % DEAD | | | TOTAL COLL'D ^h | | | % DEAD | | | TOTAL COLL'D ^h | | | % DEAD | | | TOTAL COLL'D ^h | | | % DEAD | | | TOTAL COLL'D ^h | | |
| | | | | R-1 ^e | R-2 ^f | MEAN ^g | R-1 | R-2 | | R-1 | R-2 | MEAN ^g | R-1 | R-2 | | R-1 | R-2 | MEAN ^g | R-1 | R-2 | | R-1 | R-2 | MEAN ^g | R-1 | R-2 | | R-1 | R-2 | MEAN ^g | R-1 | R-2 | |
| 26 MAY | ^a 1100 | 9.6 | 15.8 | - | - | - | 0 | 0 | | - | - | - | 0 | 0 | | NOT REQUIRED | | | NOT REQUIRED | | | - | 0 | 0 | | 0 | 1 | | | | | | |
| | ^b 2300 | 9.8 | 15.6 | - | - | - | 0 | 0 | | - | - | - | 0 | 0 | | - | - | - | 0 | 0 | | - | - | - | 0 | 0 | | NOT. REQUIRED | | | | | |
| 9 JUN | ^a 1100 | 11.4 | 13.1 | - | 0 | 0 | 0 | 1 | | - | - | - | 0 | 0 | | NOT REQUIRED | | | NOT REQUIRED | | | - | 0 | 0 | | 0 | 1 | | | | | | |
| | ^b 2300 | 12.8 | 15.0 | - | - | - | 0 | 0 | | - | - | - | 0 | 0 | | NOT REQUIRED | | | NOT REQUIRED | | | - | - | - | | 0 | 0 | | | | | | |
| 23,28 JUN | 23 JUN ^a 1100 | 16.8 | 16.1 | - | - | - | 0 | 0 | | - | - | - | 0 | 0 | | NOT REQUIRED | | | NOT REQUIRED | | | 50 100 60 | | | 4 1 | | | | | | | | |
| | 28 JUN ^b 2300 | 16.0 | 15.5 | - | - | - | 0 | 0 | | - | - | - | 0 | 0 | | NOT REQUIRED | | | NOT REQUIRED | | | 0 - 0 | | | 1 0 | | | | | | | | |

^{a/b} Time in 2400 hrs of Intake sample

^c Intake temperature before tempering

^d Discharge - Intake temperature

^e Intake forebay - 14 ft

^f Intake forebay - 20 ft

^g Mean % dead equal to the sum of dead in R-1 and R-2 divided by the sum of totals in R-1 and R-2

^h Actual number of organisms observed

ⁱ Organisms collected for simulation experiments from discharge or intake canal (28 Apr-28 Jun and 20 Jul-25 Aug, respectively)

Not Required = Not required in sampling program

- = Not applicable, no organisms collected

MORTALITY OF TOTAL ICHTHYOPLANKTON (PRO-LARVA STAGE) FROM DAY/NIGHT COLLECTIONS

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. ^c (°C) | Δ T ^d | INTAKE | | | DISCHARGE | | | 3°SIMULATION ⁱ | | | 2°SIMULATION ⁱ | | | 3°/2° LAKE | | |
|---------------|--|--------------------------------------|------------------|------------------|------------------|-------------------|------------------|------------------|-------------------|---------------------------|------------------|-------------------|---------------------------|------------------|-------------------------------|------------------|-------------------------------|-------------------|
| | | | | % DEAD | | | % DEAD | | | % DEAD | | | % DEAD | | | % DEAD | | |
| | | | | R-1 ^e | R-2 ^f | MEAN ^g | R-1 ^e | R-2 ^f | MEAN ^g | R-1 ^e | R-2 ^f | MEAN ^g | R-1 ^e | R-2 ^f | MEAN ^g | R-1 ^e | R-2 ^f | MEAN ^g |
| 26 MAY | 1100 ^a | 9.6 | 15.8 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | - | 0 | 0 |
| | 2300 ^b | 9.8 | 15.6 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | 0 | 0 | NOT REQUIRED |
| 9 JUN | 1100 ^a | 11.4 | 13.1 | - | 0 | 0 | 0 | 2 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | - | 0 | 0 |
| | 2300 ^b | 12.8 | 15.0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | - | - | 0 |
| 23, 28 JUN | 23 JUN ^a | 16.8 | 16.1 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | 60 | 100 | 67 |
| | 28 JUN ^b | 16.0 | 15.5 | 33 | 0 | 20 | 3 | 2 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | 33 | 100 | 67 |
| 20 JUL | 1045 ^a | 20.0 | 14.6 | - | 100 | 100 | 0 | 1 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | 100 | - | 100 |
| | 2245 ^b | 20.7 | 15.0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | - | - | 0 |
| 29 JUL | 1045 ^a | 20.0 | 13.8 | - | 67 | 67 | 0 | 3 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | 100 | - | 100 |
| | 2245 ^b | 19.7 | 11.9 | - | 40 | 40 | 0 | 5 | - | - | - | 0 | 0 | - 100 100 | 0 ^j 3 ^j | - 0 0 | 0 ^j 2 ^j | 91 - 91 |
| 11 AUG | 1045 ^a | 19.4 | 15.2 | - | 100 | 100 | 0 | 1 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | - | 100 | 100 |
| | 2245 ^b | 20.3 | 15.0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | 100 | - | 100 |

a/b Time in 2400 hrs of Intake sample

c Intake temperature before tempering

d Discharge - Intake temperature

e Intake forebay - 14 ft

f Intake forebay - 20 ft

g Mean % dead equal to the sum of dead in R-1 and R-2 divided by the sum of totals in R-1 and R-2

h Actual number of organisms observed

i Organisms collected for simulation experiments from discharge or intake canal (28 Apr-28 Jun and 20 Jul-25 Aug, respectively)

j Larvae collected in conjunction with Gammarus viability study
Not Required = Not required in sampling program

- = Not applicable, no organisms collected

APPENDIX VIIID-2b

MORTALITY OF LARVAL FISH: POST-LARVAE

MORTALITY OF ALEWIFE (POST-LARVA STAGE) FROM DAY/NIGHT COLLECTIONS

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | Δ T ^d | INTAKE | | | DISCHARGE | | | 3° SIMULATION ¹ | | | 2° SIMULATION ¹ | | | 3°/2° LAKE | | |
|--------------|--|--------------------------------------|------------------|------------------|------------------|-------------------|-----------|-----|-------------------|----------------------------|-----|-------------------|----------------------------|--------------|---------------------------------|------------|-----|-------------------|
| | | | | % DEAD | | | % DEAD | | | % DEAD | | | % DEAD | | | % DEAD | | |
| | | | | R-1 ^e | R-2 ^f | MEAN ^g | R-1 | R-2 | MEAN ^g | R-1 | R-2 | MEAN ^g | R-1 | R-2 | MEAN ^g | R-1 | R-2 | MEAN ^g |
| 23,28 JUN | 23 JUN 1100 ^a | 16.8 | 16.1 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | 100 | - | 100 |
| | 28 JUN 2300 ^b | 16.0 | 15.5 | 100 | - | 100 | 1 | 0 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | - | - | - |
| 20 JUL | 1045 ^a | 20.0 | 14.6 | - | 100 | 100 | 0 | 1 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | - | 100 | 100 |
| | 2245 ^b | 20.7 | 15.0 | 100 | 100 | 100 | 1 | 3 | - | - | - | 0 | 0 | - 100 100 | 0 ^j 4 ^j | - | 0 | 0 |
| 29 JUL | 1045 ^a | 20.0 | 13.8 | 100 | 100 | 100 | 1 | 2 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | 100 | 100 | 100 |
| | 2245 ^b | 19.7 | 11.9 | 50 | 100 | 88 | 2 | 6 | - | - | - | 0 | 0 | 100 67 70 | 1 ^j 9 ^j | - | 0 | 0 |
| 11 AUG | 1045 ^a | 19.4 | 15.2 | 88 | 97 | 94 | 17 | 30 | - | 100 | 100 | 0 | 1 | NOT REQUIRED | NOT REQUIRED | 77 | 100 | 84 |
| | 2245 ^b | 20.3 | 15.0 | 100 | 89 | 91 | 9 | 47 | 80 | - | 80 | 5 | 0 | 100 100 100 | 16 ^j 35 ^j | 100 | 100 | 100 |
| 25 AUG | 1045 ^a | 21.8 | 15.4 | - | 100 | 100 | 0 | 1 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | 100 | - | 100 |
| | 2245 ^b | 21.5 | 16.2 | 100 | 100 | 100 | 23 | 31 | 100 | 100 | 100 | 1 | 1 | 100 100 100 | 60 ^j 94 ^j | 100 | 100 | 100 |
| 8 SEP | 1030 ^a | 19.9 | 15.5 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | 0 | 0 | - | 0 |
| | 2247 ^b | 21.7 | 14.9 | - | 100 | 100 | 0 | 1 | - | - | - | 0 | 0 | - 100 100 | 0 | 1 | - | 0 |
| 22,27 SEP | 1045 ^a | 18.7 | 14.3 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | 0 | 0 | - | 0 |
| | 2250 ^b | 16.2 | 14.8 | - | 0 | 0 | 0 | 1 | - | - | - | 0 | 0 | - | 0 | 0 | - | 0 |

^{a/b} Time in 2400 hrs of Intake sample

^c Intake temperature before tempering

^d Discharge - Intake temperature

^e Intake forebay - 14 ft

^f Intake forebay - 20 ft

^g Mean % dead equal to the sum of dead in R-1 and R-2 divided by the sum of totals in R-1 and R-2

^h Actual number of organisms observed

ⁱ Organisms collected for simulation experiments from discharge or intake canal (28 Apr-28 Jun and 20 Jul-25 Aug, respectively)

^j Larvae collected in conjunction with Gammarus viability study
Not Required = Not required in sampling program

- = Not applicable, no organisms collected

APPENDIX VIIIID-2b

MORTALITY OF AMERICAN BURBOT (POST-LARVA STAGE) FROM DAY/NIGHT COLLECTIONS

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. ^c (°C) | ΔT ^d | INTAKE | | | DISCHARGE | | | 3°SIMULATION ⁱ | | | 2°SIMULATION ⁱ | | | 3°/2° LAKE | | |
|-----------|--|--------------------------------------|-------------------------|------------------|------------------|-------------------|-----------|-----|-------------------|---------------------------|-----|-------------------|---------------------------|-----|-------------------|--------------|-----|-------------------|
| | | | | % DEAD | | | % DEAD | | | % DEAD | | | % DEAD | | | % DEAD | | |
| | | | | R-1 ^e | R-2 ^f | MEAN ^g | R-1 | R-2 | MEAN ^g | R-1 | R-2 | MEAN ^g | R-1 | R-2 | MEAN ^g | R-1 | R-2 | MEAN ^g |
| 28 APR | 1400 ^a | 9.1 | 14.5 | - | 0 | 0 | 0 | 5 | - | - | - | 0 NS | NOT REQUIRED | | | NOT REQUIRED | | |
| | 2300 ^b | 8.2 | 13.9 | - | - | - | 0 | 0 | - | - | - | 0 NS | NO SAMPLE | | | NO SAMPLE | | |

^{a/b} Time in 2400 hrs of Intake sample

^c Intake temperature before tempering

^d Discharge - Intake temperature

^e Intake forebay - 14 ft

^f Intake forebay - 20 ft

^g Mean % dead equal to the sum of dead in R-1 and R-2 divided by the sum of totals in R-1 and R-2

^h Actual number of organisms observed

ⁱ Organisms collected for simulation experiments from discharge or intake canal (28 Apr-28 Jun and 20 Jul-25 Aug, respectively)

Not Required = Not required in sampling program

NS = No sample

- = Not applicable, no organisms collected

REVISED (from Brown Trout:2/28/77 report)

MORTALITY OF JOHNNY DARTER (POST-LARVA STAGE) FROM DAY/NIGHT COLLECTIONS

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP ^c (°C) | ΔT^d | INTAKE | | | DISCHARGE | | | 3° SIMULATION ⁱ | | | 2° SIMULATION ⁱ | | | 3°/2° LAKE | | |
|--------|--|-------------------------------------|--------------|------------------|------------------|-------------------|-----------|-----|-------------------|----------------------------|-----|-------------------|-------------------------------|--------------|-------------------|------------|-----|-------------------|
| | | | | % DEAD | | | % DEAD | | | % DEAD | | | % DEAD | | | % DEAD | | |
| | | | | R-1 ^e | R-2 ^f | MEAN ^g | R-1 | R-2 | MEAN ^g | R-1 | R-2 | MEAN ^g | R-1 | R-2 | MEAN ^g | R-1 | R-2 | MEAN ^g |
| 20 JUL | ^a 1045 | 20.0 | 14.6 | - | - | - | 0 | 0 | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | - | - | - | 0 | 0 |
| | ^b 2245 | 20.7 | 15.0 | - | - | - | 0 | 0 | - | 0 | 0 | - 100 100 | 0 ^j 1 ^j | NOT REQUIRED | 100 | - 100 | 1 | 0 |
| 29 JUL | ^a 1045 | 20.0 | 13.8 | - | - | - | 0 | 0 | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | - | - | - | 0 | 0 |
| | ^b 2245 | 19.7 | 11.9 | - | - | - | 0 | 0 | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | 0 | - | 0 | 1 | 0 |

^{a/b} Time in 2400 hrs of Intake sample

^c Intake temperature before tempering

^d Discharge - Intake temperature

^e Intake forebay - 14 ft

^f Intake forebay - 20 ft

^g Mean % dead equal to the sum of dead in R-1 and R-2 divided by the sum of totals in R-1 and R-2

^h Actual number of organisms observed

ⁱ Organisms collected for simulation experiments from discharge or intake canal (28 Apr-28 Jun and 20 Jul-25 Aug, respectively)

^j Larvae collected in conjunction with Gammarus viability study

Not Required = Not required in sampling program

- = Not applicable, no organisms collected

MORTALITY OF MOTTLED SCULPIN (POST-LARVA STAGE) FROM DAY/NIGHT COLLECTIONS

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP ^c (°C) | Δ T ^d | INTAKE | | | DISCHARGE | | | 3° SIMULATION ⁱ | | | 2° SIMULATION ⁱ | | | 3°/2° LAKE | | |
|-----------|--|-------------------------------------|------------------|------------------|------------------|-------------------|-----------|-----|-------------------|----------------------------|-----|-------------------|----------------------------|--------------|-------------------|------------|-----|-------------------|
| | | | | % DEAD | | | % DEAD | | | % DEAD | | | % DEAD | | | % DEAD | | |
| | | | | R-1 ^e | R-2 ^f | MEAN ^g | R-1 | R-2 | MEAN ^g | R-1 | R-2 | MEAN ^g | R-1 | R-2 | MEAN ^g | R-1 | R-2 | MEAN ^g |
| 9 JUN | 1100 ^a | 11.4 | 13.1 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | - | - | - |
| | 2300 ^b | 12.8 | 15.0 | - | 0 | 0 | 0 | 1 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | - | - | - |
| 23,28 JUN | 23 JUN 1100 ^a | 16.8 | 16.1 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | - | - | - |
| | 28 JUN 2300 ^b | 16.0 | 15.5 | - | - | - | 0 | 0 | 100 | - | 100 | 1 | 0 | NOT REQUIRED | NOT REQUIRED | - | - | - |

^{a/b} Time in 2400 hrs of Intake sample

^c Intake temperature before tempering

^d Discharge - Intake temperature

^e Intake forebay - 14 ft

^f Intake forebay - 20 ft

^g Mean % dead equal to the sum of dead in R-1 and R-2 divided by the sum of totals in R-1 and R-2

^h Actual number of organisms observed

ⁱ Organisms collected for simulation experiments from discharge or intake canal (28 Apr-28 Jun and 20 Jul-25 Aug, respectively)

Not Required = Not required in sampling program

- = Not applicable, no organisms collected

MORTALITY OF RAINBOW SMELT (POST-LARVA STAGE) FROM DAY/NIGHT COLLECTIONS

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | Δ T ^d | INTAKE | | | DISCHARGE | | | 3° SIMULATION ⁱ | | | 2° SIMULATION ⁱ | | | 3°/2° LAKE | | |
|--------|--|--------------------------------------|------------------|------------------|------------------|-------------------|-----------|-----|-------------------|----------------------------|-----|-------------------|----------------------------|--------------|-------------------|-------------------|-------------------|-------------------|
| | | | | % DEAD | | | % DEAD | | | % DEAD | | | % DEAD | | | % DEAD | | |
| | | | | R-1 ^e | R-2 ^f | MEAN ^g | R-1 | R-2 | MEAN ^g | R-1 | R-2 | MEAN ^g | R-1 | R-2 | MEAN ^g | R-1 | R-2 | MEAN ^g |
| 9 JUN | 1100 ^a | 11.4 | 13.1 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | 100 | 100 | 100 |
| | 2300 ^b | 12.8 | 15.0 | - | 100 | 100 | 0 | 1 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | - | 100 | 100 |
| 20 JUL | 1045 ^a | 20.0 | 14.6 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | - | - | - |
| | 2245 ^b | 20.7 | 15.0 | - | 0 | 0 | 0 | 1 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | - | - | - |
| 11 AUG | 1045 ^a | 19.4 | 15.2 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | - | - | - |
| | 2245 ^b | 20.3 | 15.0 | - | 0 | 0 | 0 | 2 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | - | - | - |
| 25 AUG | 1045 ^a | 21.8 | 15.4 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | - | - | - |
| | 2245 ^b | 21.5 | 16.2 | 100 | - | 100 | 1 | 0 | - | - | - | 0 | 0 | NOT REQUIRED | 0 100 50 | ^j 1 | ^j 1 | - |

^{a/b} Time in 2400 hrs of Intake sample

^c Intake temperature before tempering

^d Discharge - Intake temperature

^e Intake forebay - 14 ft

^f Intake forebay - 20 ft

^g Mean % dead equal to the sum of dead in R-1 and R-2 divided by the sum of totals in R-1 and R-2

^h Actual number of organisms observed

ⁱ Organisms collected for simulation experiments from discharge or intake canal (28 Apr-28 Jun and 20 Jul-25 Aug, respectively)

^j Larvae collected in conjunction with Gammarus viability study

Not Required = Not required in sampling program

- = Not applicable, no organisms collected

MORTALITY OF WHITE PERCH (POST-LARVA STAGE) FROM DAY/NIGHT COLLECTIONS

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | INTAKE | | | DISCHARGE | | | 3° SIMULATION ⁱ | | | 2° SIMULATION ⁱ | | | 3°/2° LAKE | | |
|--------|--|--------------------------------------|-----------------|------------------|------------------|-------------------|------------------|------------------|-------------------|----------------------------|------------------|-------------------|----------------------------|------------------|-------------------|------------------|------------------|-------------------|
| | | | | % DEAD | | | % DEAD | | | % DEAD | | | % DEAD | | | % DEAD | | |
| | | | | R-1 ^e | R-2 ^e | MEAN ^g | R-1 ^e | R-2 ^e | MEAN ^g | R-1 ^e | R-2 ^e | MEAN ^g | R-1 ^e | R-2 ^e | MEAN ^g | R-1 ^e | R-2 ^e | MEAN ^g |
| 9 JUN | 1100 ^a | 11.4 | 13.1 | - | 0 | 0 | 0 | 1 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | - | - | - |
| | 2300 ^b | 12.8 | 15.0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | - | - | - |
| 29 JUL | 1045 ^a | 20.0 | 13.8 | 0 | - | 0 | 1 | 0 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | - | - | - |
| | 2245 ^b | 19.7 | 11.9 | - | 0 | 0 | 0 | 1 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | - | - | - |
| 11 AUG | 1045 ^a | 19.4 | 15.2 | - | 100 | 100 | 0 | 1 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | - | - | - |
| | 2245 ^b | 20.3 | 15.0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | NOT REQUIRED | - 100 100 | 0 ^j | 1 ^j | 0 |

a/b Time in 2400 hrs of Intake sample

c Intake temperature before tempering

d Discharge - Intake temperature

e Intake forebay - 14 ft

f Intake forebay - 20 ft

g Mean % dead equal to the sum of dead in R-1 and R-2 divided by the sum of totals in R-1 and R-2

h Actual number of organisms observed

i Organisms collected for simulation experiments from discharge or intake canal (28 Apr-28 Jun and 20 Jul-25 Aug, respectively)

j Larvae collected in conjunction with Gammarus viability study

Not Required = Not required in sampling program

- = Not applicable, no organisms collected

MORTALITY OF TOTAL ICHTHYOPHAGOUS (POST-LARVA STAGE) FROM DAY/NIGHT COLLECTIONS

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP ^c (°C) | ΔT ^d | INTAKE | | | DISCHARGE | | | 3° SIMULATION ⁱ | | | 2° SIMULATION ⁱ | | | 3°/2° LAKE | | |
|------------|--|-------------------------------------|-------------------------|------------------|------------------|-------------------|------------------|------------------|-------------------|----------------------------|------------------|-------------------|----------------------------|------------------|-------------------|------------------|------------------|-------------------|
| | | | | % DEAD | | | % DEAD | | | % DEAD | | | % DEAD | | | % DEAD | | |
| | | | | R-1 ^e | R-2 ^e | MEAN ^e | R-1 ^e | R-2 ^e | MEAN ^e | R-1 ^e | R-2 ^e | MEAN ^e | R-1 ^e | R-2 ^e | MEAN ^e | R-1 ^e | R-2 ^e | MEAN ^e |
| 28 APR | 1400 ^a | 9.1 | 14.5 | - | 0 | 0 | 0 | 5 | - | - | - | 0 | NS | NOT REQUIRED | NOT REQUIRED | NO SAMPLE | | |
| | 2300 ^b | 8.2 | 13.9 | - | - | - | 0 | 0 | - | - | - | 0 | NS | NO SAMPLE | NO SAMPLE | NOT REQUIRED | | |
| 9 JUN | 1100 ^a | 11.4 | 13.1 | - | 0 | 0 | 0 | 1 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | 100 | 100 | 100 |
| | 2300 ^b | 12.8 | 15.0 | - | 50 | 50 | 0 | 2 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | - | 100 | 100 |
| 23, 28 JUN | 23 JUN 1100 ^a | 16.8 | 16.1 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | 100 | - | 100 |
| | 28 JUN 2300 ^b | 16.0 | 15.5 | 100 | - | 100 | 1 | 0 | 100 | - | 100 | 1 | 0 | NOT REQUIRED | NOT REQUIRED | - | - | - |
| 20 JUL | 1045 ^a | 20.0 | 14.6 | - | 100 | 100 | 0 | 1 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | - | 100 | 100 |
| | 2245 ^b | 20.7 | 15.0 | 100 | 75 | 80 | 1 | 4 | - | - | - | 0 | 0 | - | 100 | 100 | 0 | 1 |
| 29 JUL | 1045 ^a | 20.0 | 13.8 | 50 | 100 | 75 | 2 | 2 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | 100 | 100 | 100 |
| | 2245 ^b | 19.7 | 11.9 | 50 | 86 | 78 | 2 | 7 | - | - | - | 0 | 0 | 100 | 67 | 70 | 1 | 2 |
| 11 AUG | 1045 ^a | 19.4 | 15.2 | 88 | 97 | 94 | 17 | 31 | - | 100 | 100 | 0 | 1 | NOT REQUIRED | NOT REQUIRED | 77 | 100 | 84 |
| | 2245 ^b | 20.3 | 15.0 | 100 | 86 | 88 | 9 | 49 | 80 | - | 80 | 5 | 0 | 100 | 100 | 100 | 95 | 97 |
| 25 AUG | 1045 ^a | 21.8 | 15.4 | - | 100 | 100 | 0 | 1 | - | - | - | 0 | 0 | NOT REQUIRED | NOT REQUIRED | 100 | - | 100 |
| | 2245 ^b | 21.5 | 16.2 | 100 | 100 | 100 | 24 | 31 | 100 | 100 | 100 | 1 | 1 | 100 | 100 | 100 | 60 | 94 |
| 8 SEP | 1030 ^a | 19.9 | 15.5 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 |
| | 2247 ^b | 21.7 | 14.9 | - | 100 | 100 | 0 | 1 | - | - | - | 0 | 0 | - | 100 | 100 | 0 | 1 |
| 22, 27 SEP | 1045 ^a | 18.7 | 14.3 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 |
| | 2250 ^b | 16.2 | 14.8 | - | 0 | 0 | 0 | 1 | - | - | - | 0 | 0 | - | 100 | 100 | 0 | 1 |

^{a/b} Time in 2400 hrs of Intake sample

^c Intake temperature before tempering

^d Discharge - Intake temperature

^e Intake forebay - 14 ft

^f Intake forebay - 20 ft

^g Mean % dead equal to the sum of dead in R-1 and R-2 divided by the sum of totals in R-1 and R-2

^h Actual number of organisms observed

ⁱ Organisms collected for simulation experiments from discharge or intake canal (28 Apr-28 Jun and 20 Jul-25 Aug, respectively)

^j Larvae collected in conjunction with Gammarus viability study

Not Required = Not required in sampling program

NS = No sample

- = Not applicable, no organisms collected

APPENDIX VIIID-2c
MORTALITY OF LARVAL FISH: JUVENILE

MORTALITY OF ALEWIFE (JUVENILE STAGE) FROM DAY/NIGHT COLLECTIONS

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | Δ T ^d | INTAKE | | | DISCHARGE | | | 3° SIMULATION ⁱ | | | 2° SIMULATION ⁱ | | | 3°/2° LAKE | | | | | | | |
|-----------|--|--------------------------------------|------------------|------------------|------------------|-------------------|------------------------------|----------------|--------------|----------------------------|------------------------------|--------|----------------------------|--------------|------------------------------|-------------------|--------------|-----|------------------------------|--------------|-----|---|---|
| | | | | % DEAD | | | TOTAL COLL'D ^h | % DEAD | | | TOTAL COLL'D ^h | % DEAD | | | TOTAL COLL'D ^h | % DEAD | | | TOTAL COLL'D ^h | | | | |
| | | | | R-1 ^e | R-2 ^f | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | R-1 | R-2 | MEAN ^g | R-1 | R-2 | MEAN ^g | R-1 | R-2 | | |
| 12 MAY | 1038 ^a | 10.2 | 14.0 | - | - | 0 | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | NO SAMPLE | | | | |
| | 2325 ^b | 9.2 | 14.4 | 0 | - | 0 | 1 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | NOT REQUIRED | | | | |
| 26 MAY | 1100 ^a | 9.6 | 15.8 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | NOT REQUIRED | | | NOT REQUIRED | | | - | 0 | 0 | 0 |
| | 2300 ^b | 9.8 | 15.6 | - | 0 | 0 | 0 | 1 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 |
| 17 NOV | 2218 ^a | 8.6 | 12.8 | 0 | 33 | 29 | 1 ^j | 6 ^j | NOT REQUIRED | | | 0 | 0 | 0 | 1 ^j | 1 ^j | NOT REQUIRED | | | NOT REQUIRED | | | |

a/b Time in 2400 hrs of Intake sample

c Intake temperature before tempering

d Discharge - Intake temperature

e Intake forebay - 14 ft

f Intake forebay - 20 ft

g Mean % dead equal to the sum of dead in R-1 and R-2 divided by the sum of totals in R-1 and R-2

h Actual number of organisms observed

i Organisms collected for simulation experiments from discharge or intake canal (28 Apr-28 Jun and 20 Jul-25 Aug, respectively)

j Larvae collected in conjunction with Gammarus viability study

Not Required = Not required in sampling program

- = Not applicable, no organisms collected

MORTALITY OF RAINBOW SMELT (JUVENILE STAGE) FROM DAY/NIGHT COLLECTIONS

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | Δ T ^d | INTAKE | | | DISCHARGE | | | 3° SIMULATION ⁱ | | | 2° SIMULATION ⁱ | | | 3°/2° LAKE | | |
|-----------|--|--------------------------------------|------------------|------------------|------------------|-------------------|-----------|-----|-------------------|----------------------------|--------------|-------------------|----------------------------|--------------|-------------------|------------|-----|-------------------|
| | | | | % DEAD | | | % DEAD | | | % DEAD | | | % DEAD | | | % DEAD | | |
| | | | | R-1 ^e | R-2 ^f | MEAN ^g | R-1 | R-2 | MEAN ^g | R-1 | R-2 | MEAN ^g | R-1 | R-2 | MEAN ^g | R-1 | R-2 | MEAN ^g |
| 20 JUL | 1045 ^a | 20.0 | 14.6 | - | - | - | 0 | 0 | - | 0 | NOT REQUIRED | | | NOT REQUIRED | | | - | 0 |
| | 2245 ^b | 20.7 | 15.0 | - | - | - | 0 | 0 | - | 0 | - | 100 | 0 ^j | NOT REQUIRED | | | - | 0 |

a/b Time in 2400 hrs of Intake sample

c Intake temperature before tempering

d Discharge - Intake temperature

e Intake forebay - 14 ft

f Intake forebay - 20 ft

g Mean % dead equal to the sum of dead in R-1 and R-2 divided by the sum of totals in R-1 and R-2

h Actual number of organisms observed

i Organisms collected for simulation experiments from discharge or intake canal (28 Apr-28 Jun and 20 Jul-25 Aug, respectively)

j Larvae collected in conjunction with Gammarus viability study

Not Required = Not required in sampling program

- = Not applicable, no organisms collected

MORTALITY OF TOTAL ICHTHYOPLANKTON (JUVENILE STAGE) FROM DAY/NIGHT COLLECTIONS

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - 1976

| DATE | DAY ^a NIGHT ^b | INTAKE TEMP. (°C) ^c | ΔT ^d | INTAKE | | | DISCHARGE | | | 3°SIMULATION ¹ | | | 2°SIMULATION ¹ | | | 3°/2° LAKE | | | | | | | | | |
|-----------|--|--------------------------------------|-----------------|------------------|------------------|-------------------|---------------------|----------------|-------------------|---------------------------|---------------------|-------------------|---------------------------|--------------|---------------------|----------------|--------------|-------------------|---------------------|--------------|-------------------|-----|-----|-------------------|---|
| | | | | % | | | TOTAL | % | | | TOTAL | % | | | TOTAL | % | | | TOTAL | | | | | | |
| | | | | DEAD | DEAD | DEAD | COLL'D ^h | DEAD | DEAD | DEAD | COLL'D ^h | DEAD | DEAD | DEAD | COLL'D ^h | DEAD | DEAD | DEAD | COLL'D ^h | | | | | | |
| | | | | R-1 ^e | R-2 ^f | MEAN ^g | R-1 | R-2 | MEAN ^g | R-1 | R-2 | MEAN ^g | R-1 | R-2 | MEAN ^g | R-1 | R-2 | MEAN ^g | R-1 | R-2 | MEAN ^g | R-1 | R-2 | MEAN ^g | |
| 12 MAY | 1038 ^a | 10.2 | 14.0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | NO SAMPLE | |
| | 2325 ^b | 9.2 | 14.4 | 0 | - | 0 | 1 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | NOT REQUIRED | |
| 26 MAY | 1100 ^a | 9.6 | 15.8 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | NOT REQUIRED | | | NOT REQUIRED | | | - | - | - | 0 | 0 | |
| | 2300 ^b | 9.8 | 15.6 | - | 0 | 0 | 0 | 1 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | NOT REQUIRED | |
| 20 JUL | 1045 ^a | 20.0 | 14.6 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | NOT REQUIRED | | | NOT REQUIRED | | | - | - | - | 0 | 0 | |
| | 2245 ^b | 20.7 | 15.0 | - | - | - | 0 | 0 | - | - | - | 0 | 0 | - | 100 | 100 | 0 | 1 | NOT REQUIRED | | | - | - | - | 0 |
| 17 NOV | 2218 ^a | 8.6 | 12.8 | 0 | 33 | 29 | 1 ^j | 6 ^j | NOT REQUIRED | | | 0 | 0 | 0 | 1 ^j | 1 ^j | NOT REQUIRED | | | NOT REQUIRED | | | | | |

^{a/b} Time in 2400 hrs of Intake sample

^c Intake temperature before tempering

^d Discharge - Intake temperature

^e Intake forebay - 14 ft

^f Intake forebay - 20 ft

^g Mean % dead equal to the sum of dead in R-1 and R-2 divided by the sum of totals in R-1 and R-2 -

^h Actual number of organisms observed

¹ Organisms collected for simulation experiments from discharge or intake canal (28 Apr-28 Jun and 20 Jul-25 Aug, respectively)

^j Larvae collected in conjunction with Gammarus viability study

Not Required = Not required in sampling program

- = Not applicable, no organisms collected

APPENDIX VIIIE-1a

ABUNDANCE^a OF ALEWIFE LARVAE

NINE MILE POINT NUCLEAR STATION UNIT 1 - 1976

| DATE | SAMPLE DEPTH | 1100 HR | 1700 HR | 2300 HR | 0500 HR | MEAN |
|----------------------------|--------------|---------|---------|---------|---------|-------|
| 30 JUN, 3 JUL | SURFACE | 15 | 9 | 9 | 0 | 8.2 |
| | MID-DEPTH | 0 | 0 | 0 | 0 | 0.0 |
| | MEAN | 7.5 | 4.5 | 4.5 | 0.0 | 4.1 |
| 7 JUL | SURFACE | 0 | 0 | 50 | 10 | 15.0 |
| | MID-DEPTH | 0 | 0 | 22 | 21 | 10.8 |
| | MEAN | 0.0 | 0.0 | 36.0 | 15.5 | 12.9 |
| 14 JUL | SURFACE | 21 | 15 | 31 | 124 | 47.8 |
| | MID-DEPTH | 10 | 35 | 21 | 171 | 59.3 |
| | MEAN | 15.5 | 25.0 | 26.0 | 147.5 | 53.5 |
| 21 JUL | SURFACE | 8 | 13 | 0 | 7 | 7.0 |
| | MID-DEPTH | 11 | 10 | 0 | 19 | 10.0 |
| | MEAN | 9.5 | 11.5 | 0.0 | 13.0 | 8.5 |
| 28 JUL | SURFACE | 30 | 7 | 0 | 14 | 12.8 |
| | MID-DEPTH | 17 | 0 | 0 | 47 | 16.0 |
| | MEAN | 23.5 | 3.5 | 0.0 | 30.5 | 14.4 |
| 4. AUG | SURFACE | 86 | 257 | 808 | 376 | 381.8 |
| | MID-DEPTH | 64 | 324 | 1225 | 707 | 580.8 |
| | MEAN | 75.0 | 290.5 | 1016.5 | 541.5 | 480.9 |
| 11 AUG | SURFACE | 30 | 27 | 161 | 261 | 119.8 |
| | MID-DEPTH | 0 | 9 | 180 | 249 | 109.5 |
| | MEAN | 15.0 | 18.0 | 170.5 | 255.0 | 114.6 |
| 18 AUG | SURFACE | 320 | 310 | 361 | 281 | 318.0 |
| | MID-DEPTH | 506 | 225 | 578 | 394 | 425.8 |
| | MEAN | 413.0 | 267.5 | 469.5 | 337.5 | 371.9 |
| 25 AUG | SURFACE | 28 | 0 | 96 | 301 | 106.3 |
| | MID-DEPTH | 68 | 22 | 341 | 225 | 164.0 |
| | MEAN | 48.0 | 11.0 | 218.5 | 263.0 | 135.1 |
| 1 SEP | SURFACE | 0 | 0 | 28 | 305 | 83.3 |
| | MID-DEPTH | 0 | 0 | 86 | 509 | 148.8 |
| | MEAN | 0.0 | 0.0 | 57.0 | 407.0 | 116.0 |
| 8 SEP | SURFACE | 0 | 0 | 0 | 11 | 2.8 |
| | MID-DEPTH | 0 | 0 | 8 | 13 | 5.3 |
| | MEAN | 0.0 | 0.0 | 4.0 | 12.0 | 4.0 |
| 22 SEP | SURFACE | 0 | 0 | 0 | 7 | 1.8 |
| | MID-DEPTH | 0 | 0 | 0 | 89 | 22.3 |
| | MEAN | 0.0 | 0.0 | 0.0 | 48.0 | 12.0 |
| 6 OCT | SURFACE | 8 | 0 | 0 | 0 | 2.0 |
| | MID-DEPTH | 0 | 0 | 0 | 0 | 0.0 |
| | MEAN | 4.0 | 0.0 | 0.0 | 0.0 | 1.0 |
| 20 OCT | SURFACE | 0 | 0 | 0 | 0 | 0.0 |
| | MID-DEPTH | 0 | 0 | 0 | 8 | 2.0 |
| | MEAN | 0.0 | 0.0 | 0.0 | 4.0 | 1.0 |
| GRAND MEAN ^b | SURFACE | 22.8 | 26.6 | 64.3 | 70.7 | |
| | MID-DEPTH | 28.2 | 26.0 | 102.5 | 102.2 | |
| | MEAN | 25.5 | 26.3 | 83.4 | 86.4 | |

None collected 14 Apr - 23 Jun

^a Number/1000 m³^b April - October sampling periodSurface sample: 2 ft below water level;
channel depth variable with lake levelMid-depth sample: 13 ft below water
level; channel depth variable with
lake level

APPENDIX VIII-1b

ABUNDANCE^a OF RAINBOW SMELT LARVAE

NINE MILE POINT NUCLEAR STATION UNIT 1 - 1976

| DATE | SAMPLE DEPTH | 1100 HR | 1700 HR | 2300 HR | 0500 HR | MEAN |
|----------------------------|--------------|---------|---------|---------|---------|------|
| 5 MAY | SURFACE | 0 | 0 | 20 | 0 | 5.0 |
| | MID-DEPTH | 7 | 0 | 11 | 11 | 7.3 |
| | MEAN | 3.5 | 0.0 | 15.5 | 5.5 | 6.1 |
| 19 MAY | SURFACE | 0 | 0 | 17 | 16 | 8.3 |
| | MID-DEPTH | 0 | 9 | 9 | 11 | 7.3 |
| | MEAN | 0.0 | 4.5 | 13.0 | 13.5 | 7.8 |
| 2 JUN | SURFACE | 11 | 0 | 8 | 0 | 4.8 |
| | MID-DEPTH | 19 | 0 | 0 | 10 | 7.3 |
| | MEAN | 15.0 | 0.0 | 4.0 | 5.0 | 6.0 |
| 9 JUN | SURFACE | 0 | 0 | 8 | 0 | 2.0 |
| | MID-DEPTH | 8 | 0 | 0 | 0 | 2.0 |
| | MEAN | 4.0 | 0.0 | 4.0 | 0.0 | 2.0 |
| 16 JUN | SURFACE | 0 | 0 | 0 | 0 | 0.0 |
| | MID-DEPTH | 0 | 9 | 0 | 0 | 2.3 |
| | MEAN | 0.0 | 4.5 | 0.0 | 0.0 | 1.1 |
| 7 JUL | SURFACE | 0 | 0 | 0 | 0 | 0.0 |
| | MID-DEPTH | 0 | 0 | 11 | 0 | 2.8 |
| | MEAN | 0.0 | 0.0 | 5.5 | 0.0 | 1.4 |
| 14 JUL | SURFACE | 0 | 0 | 8 | 0 | 2.0 |
| | MID-DEPTH | 0 | 17 | 7 | 0 | 6.0 |
| | MEAN | 0.0 | 8.5 | 7.5 | 0.0 | 4.0 |
| 4 AUG | SURFACE | 0 | 0 | 0 | 7 | 1.8 |
| | MID-DEPTH | 0 | 0 | 0 | 0 | 0.0 |
| | MEAN | 0.0 | 0.0 | 0.0 | 3.5 | 0.9 |
| 11 AUG | SURFACE | 0 | 0 | 7 | 7 | 3.5 |
| | MID-DEPTH | 0 | 0 | 9 | 0 | 2.3 |
| | MEAN | 0.0 | 0.0 | 8.0 | 3.5 | 2.9 |
| 18 AUG | SURFACE | 0 | 0 | 7 | 0 | 1.8 |
| | MID-DEPTH | 0 | 0 | 19 | 10 | 7.3 |
| | MEAN | 0.0 | 0.0 | 13.0 | 5.0 | 4.5 |
| 25 AUG | SURFACE | 0 | 0 | 22 | 0 | 5.5 |
| | MID-DEPTH | 0 | 0 | 141 | 0 | 35.3 |
| | MEAN | 0.0 | 0.0 | 81.5 | 0.0 | 20.4 |
| GRAND MEAN ^b | SURFACE | 0.5 | 0.0 | 4.0 | 1.2 | |
| | MID-DEPTH | 1.4 | 1.5 | 8.6 | 1.8 | |
| | MEAN | 0.9 | 0.8 | 6.5 | 1.5 | |

None collected 14-28 Apr, 12 May, 26 May, 23-30 Jun, 21-28 Jul, and
1 Sep-20 Oct

^aNumber/1000 m³

^bApril - October sampling period

Surface sample: 2 ft below water level; channel depth variable
with lake level

Mid-depth sample: 13 ft below water level; channel depth variable
with lake level

Revised

APPENDIX VIII E-1c

ABUNDANCE^a OF WHITE PERCH LARVAE

NINE MILE POINT NUCLEAR STATION UNIT 1 - 1976

| DATE | SAMPLE DEPTH | 1100 HR | 1700 HR | 2300 HR | 0500 HR | MEAN |
|----------------------------|--------------|---------|---------|---------|---------|------|
| 28 APR | SURFACE | 7 | 0 | 0 | 0 | 1.8 |
| | MID-DEPTH | 0 | 0 | 0 | 0 | 0.0 |
| | MEAN | 3.5 | 0.0 | 0.0 | 0.0 | 0.9 |
| 2 JUN | SURFACE | 0 | 0 | 0 | 0 | 0.0 |
| | MID-DEPTH | 19 | 0 | 0 | 0 | 4.8 |
| | MEAN | 9.5 | 0.0 | 0.0 | 0.0 | 2.4 |
| 16 JUN | SURFACE | 0 | 0 | 0 | 0 | 0.0 |
| | MID-DEPTH | 0 | 9 | 0 | 0 | 2.3 |
| | MEAN | 0.0 | 4.5 | 0.0 | 0.0 | 1.1 |
| 23 JUN | SURFACE | 8 | 0 | 0 | 0 | 2.0 |
| | MID-DEPTH | 0 | 0 | 0 | 0 | 0.0 |
| | MEAN | 4.0 | 0.0 | 0.0 | 0.0 | 1.0 |
| 30 JUN, 3 JUL | SURFACE | 8 | 0 | 0 | 0 | 2.0 |
| | MID-DEPTH | 0 | 0 | 0 | 0 | 0.0 |
| | MEAN | 4.0 | 0.0 | 0.0 | 0.0 | 1.0 |
| 14 JUL | SURFACE | 0 | 0 | 0 | 0 | 0.0 |
| | MID-DEPTH | 0 | 0 | 7 | 0 | 1.8 |
| | MEAN | 0.0 | 0.0 | 3.5 | 0.0 | 0.9 |
| 28 JUL | SURFACE | 0 | 0 | 0 | 0 | 0.0 |
| | MID-DEPTH | 0 | 0 | 8 | 0 | 2.0 |
| | MEAN | 0.0 | 0.0 | 4.0 | 0.0 | 1.0 |
| 4 AUG | SURFACE | 7 | 0 | 7 | 7 | 5.3 |
| | MID-DEPTH | 0 | 0 | 19 | 0 | 4.8 |
| | MEAN | 3.5 | 0.0 | 13.0 | 3.5 | 5.0 |
| 11 AUG | SURFACE | 0 | 7 | 20 | 0 | 6.8 |
| | MID-DEPTH | 0 | 0 | 0 | 0 | 0.0 |
| | MEAN | 0.0 | 3.5 | 10.0 | 0.0 | 3.4 |
| 18 AUG | SURFACE | 0 | 0 | 7 | 0 | 1.8 |
| | MID-DEPTH | 0 | 0 | 19 | 0 | 4.8 |
| | MEAN | 0.0 | 0.0 | 13.0 | 0.0 | 3.2 |
| GRAND MEAN ^b | SURFACE | 1.2 | 0.3 | 1.4 | 0.3 | |
| | MID-DEPTH | 0.8 | 0.4 | 2.2 | 0.0 | |
| | MEAN | 1.0 | 0.4 | 1.8 | 0.2 | |

None collected 14 Apr, 5-26 May, 9 Jun, 7 Jul, 21 Jul, and 25 Aug-20 Oct

^a Number/1000 m³^b April - October sampling period

Surface sample: 2 ft below water level; channel depth variable with lake level

Mid-depth sample: 13 ft below water level; channel depth variable with lake level

APPENDIX VIIIIE-1d

ABUNDANCE^a OF YELLOW PERCH LARVAE

NINE MILE POINT NUCLEAR STATION UNIT 1 - 1976

| DATE | SAMPLE DEPTH | 1100 HR | 1700 HR | 2300 HR | 0500 HR | MEAN |
|----------------------------|--------------|---------|---------|---------|---------|------|
| 28 APR | SURFACE | 7 | 0 | 0 | 12 | 4.8 |
| | MID-DEPTH | 0 | 0 | 21 | 0 | 5.3 |
| | MEAN | 3.5 | 0.0 | 10.5 | 6.0 | 5.0 |
| 5 MAY | SURFACE | 0 | 6 | 0 | 0 | 1.5 |
| | MID-DEPTH | 0 | 0 | 0 | 0 | 0.0 |
| | MEAN | 0.0 | 3.0 | 0.0 | 0.0 | 0.8 |
| 19 MAY | SURFACE | 0 | 0 | 0 | 16 | 4.0 |
| | MID-DEPTH | 0 | 0 | 26 | 0 | 6.5 |
| | MEAN | 0.0 | 0.0 | 13.0 | 8.0 | 5.2 |
| GRAND MEAN ^b | SURFACE | 0.3 | 0.2 | 0.0 | 1.2 | |
| | MID-DEPTH | 0.0 | 0.0 | 2.0 | 0.0 | |
| | MEAN | 0.2 | 0.1 | 1.0 | 0.6 | |

None collected 14 Apr, 12 May, and 26 May - 20 Oct

^aNumber/1000 m³

^bApril - October sampling period

Surface sample: 2 ft below water level; channel depth variable with lake level

Mid-depth sample: 13 ft below water level; channel depth variable with lake level

ABUNDANCE^a OF ALEWIFE EGGS

NINE MILE POINT NUCLEAR STATION UNIT 1 - 1976

| DATE | SAMPLE DEPTH | 1100 HR | 1700 HR | 2300 HR | 0500 HR | MEAN |
|----------------------------|--------------|---------|---------|---------|----------|---------|
| 2 JUN | SURFACE | 0 | 0 | 17 | 0 | 4.3 |
| | MID-DEPTH | 0 | 0 | 0 | 0 | 0.0 |
| | MEAN | 0.0 | 0.0 | 8.5 | 0.0 | 2.1 |
| 9 JUN | SURFACE | 24 | 0 | 0 | 0 | 6.0 |
| | MID-DEPTH | 0 | 0 | 0 | 0 | 0.0 |
| | MEAN | 12.0 | 0.0 | 0.0 | 0.0 | 3.0 |
| 16 JUN | SURFACE | 26 | 15 | 63 | 16 | 30.0 |
| | MID-DEPTH | 0 | 0 | 0 | 20 | 5.0 |
| | MEAN | 13.0 | 7.5 | 31.5 | 18.0 | 17.5 |
| 23 JUN | SURFACE | 522 | 622 | 3291 | 73 | 1127.0 |
| | MID-DEPTH | 315 | 1102 | 2039 | 247 | 925.8 |
| | MEAN | 418.5 | 862.0 | 2665.0 | 160.0 | 1026.4 |
| 30 JUN, 3 JUL | SURFACE | 402 | 2465 | 2693 | 5139 | 2674.8 |
| | MID-DEPTH | 4383 | 2363 | 3185 | 254669 | 66150.0 |
| | MEAN | 2392.5 | 2414.0 | 2939.0 | 129904.0 | 34412.4 |
| 7 JUL | SURFACE | 462 | 883 | 13912 | 2225 | 4370.5 |
| | MID-DEPTH | 232 | 796 | 10673 | 6187 | 4472.0 |
| | MEAN | 347.0 | 839.5 | 12292.5 | 4206.0 | 4421.2 |
| 14 JUL | SURFACE | 334 | 93 | 1963 | 973 | 840.8 |
| | MID-DEPTH | 514 | 35 | 1557 | 861 | 741.8 |
| | MEAN | 424.0 | 64.0 | 1760.0 | 917.0 | 791.2 |
| 21 JUL | SURFACE | 164 | 171 | 1937 | 1415 | 921.8 |
| | MID-DEPTH | 321 | 96 | 2275 | 4763 | 1863.8 |
| | MEAN | 242.5 | 133.5 | 2106.0 | 3089.0 | 1392.8 |
| 28 JUL | SURFACE | 8 | 14 | 14 | 995 | 257.8 |
| | MID-DEPTH | 17 | 16 | 0 | 2785 | 704.5 |
| | MEAN | 12.5 | 15.0 | 7.0 | 1890.0 | 481.1 |
| 4 AUG | SURFACE | 201 | 34 | 34 | 724 | 248.3 |
| | MID-DEPTH | 82 | 9 | 19 | 1056 | 291.5 |
| | MEAN | 141.5 | 21.5 | 26.5 | 890.0 | 269.9 |
| 11 AUG | SURFACE | 30 | 7 | 0 | 254 | 72.8 |
| | MID-DEPTH | 0 | 0 | 0 | 249 | 62.3 |
| | MEAN | 15.0 | 3.5 | 0.0 | 251.5 | 67.5 |
| GRAND MEAN ^b | SURFACE | 90.5 | 179.3 | 996.8 | 492.2 | |
| | MID-DEPTH | 244.3 | 184.0 | 822.8 | 11284.9 | |
| | MEAN | 167.4 | 181.6 | 909.8 | 5888.6 | |

None collected 14 Apr-26 May, and 18 Aug-20 Oct

^a Number/1000 m³

^b April - October sampling period

Surface sample: 2 ft below water level; channel depth variable with lake level

Mid-depth sample: 13 ft below water level; channel depth variable with lake level

APPENDIX VIIIIE-2b

ABUNDANCE^a OF RAINBOW SMELT EGGS

NINE MILE POINT NUCLEAR STATION UNIT 1 - 1976

| DATE | SAMPLE DEPTH | 1100 HR | 1700 HR | 2300 HR | 0500 HR | MEAN |
|----------------------------|--------------|---------|---------|---------|---------|-------|
| 28 APR | SURFACE | 14 | 38 | 0 | 56 | 27.0 |
| | MID-DEPTH | 827 | 0 | 31 | 195 | 263.3 |
| | MEAN | 420.5 | 19.0 | 15.5 | 125.5 | 145.1 |
| 5 MAY | SURFACE | 25 | 19 | 52 | 65 | 40.3 |
| | MID-DEPTH | 30 | 25 | 54 | 129 | 59.5 |
| | MEAN | 27.5 | 22.0 | 53.0 | 97.0 | 49.9 |
| 12 MAY | SURFACE | 76 | 51 | 14 | 20 | 40.3 |
| | MID-DEPTH | 20 | 0 | 11 | 10 | 10.3 |
| | MEAN | 48.0 | 25.5 | 12.5 | 15.0 | 25.3 |
| 19 MAY | SURFACE | 0 | 7 | 0 | 0 | 1.8 |
| | MID-DEPTH | 0 | 0 | 0 | 0 | 0.0 |
| | MEAN | 0.0 | 3.5 | 0.0 | 0.0 | 0.9 |
| 26 MAY | SURFACE | 14 | 7 | 0 | 15 | 9.0 |
| | MID-DEPTH | 0 | 0 | 0 | 0 | 0.0 |
| | MEAN | 7.0 | 3.5 | 0.0 | 7.5 | 4.5 |
| 2 JUN | SURFACE | 11 | 8 | 8 | 0 | 6.8 |
| | MID-DEPTH | 19 | 11 | 0 | 0 | 7.5 |
| | MEAN | 15.0 | 9.5 | 4.0 | 0.0 | 7.1 |
| 9 JUN | SURFACE | 0 | 47 | 101 | 0 | 37.0 |
| | MID-DEPTH | 64 | 8 | 84 | 0 | 39.0 |
| | MEAN | 32.0 | 27.5 | 92.5 | 0.0 | 38.0 |
| GRAND MEAN ^b | SURFACE | 5.8 | 7.4 | 7.3 | 6.5 | |
| | MID-DEPTH | 40.0 | 1.8 | 7.5 | 13.9 | |
| | MEAN | 22.9 | 4.6 | 7.4 | 10.2 | |

None collected 14 Apr, and 16 Jun-20 Oct

^a Number/1000 m³

^b April - October sampling period

Surface sample: 2 ft below water level; channel depth variable
with lake level

Mid-depth sample: 13 ft below water level; channel depth variable
with lake level

APPENDIX VIII-2c

ABUNDANCE^a OF WHITE PERCH EGGS

NINE MILE POINT NUCLEAR STATION UNIT 1 - 1976

| DATE | SAMPLE DEPTH | 1100 HR | 1700 HR | 2300 HR | 0500 HR | MEAN |
|----------------------------|--------------|---------|---------|---------|---------|-------|
| 5 MAY | SURFACE | 0 | 0 | 0 | 6 | 1.5 |
| | MID-DEPTH | 0 | 0 | 0 | 11 | 2.8 |
| | MEAN | 0.0 | 0.0 | 0.0 | 8.5 | 2.1 |
| 12 MAY | SURFACE | 0 | 41 | 35 | 0 | 19.0 |
| | MID-DEPTH | 5 | 17 | 53 | 10 | 21.3 |
| | MEAN | 2.5 | 29.0 | 44.0 | 5.0 | 20.1 |
| 19 MAY | SURFACE | 34 | 1228 | 93 | 23 | 344.5 |
| | MID-DEPTH | 51 | 1015 | 225 | 0 | 322.8 |
| | MEAN | 42.5 | 1121.5 | 159.0 | 11.5 | 333.6 |
| 26 MAY | SURFACE | 7 | 0 | 0 | 59 | 16.5 |
| | MID-DEPTH | 0 | 8 | 0 | 73 | 20.3 |
| | MEAN | 3.5 | 4.0 | 0.0 | 66.0 | 18.4 |
| 2 JUN | SURFACE | 0 | 0 | 0 | 0 | 0.0 |
| | MID-DEPTH | 134 | 22 | 0 | 10 | 41.5 |
| | MEAN | 67.0 | 11.0 | 0.0 | 5.0 | 20.8 |
| 9 JUN | SURFACE | 142 | 55 | 0 | 0 | 49.3 |
| | MID-DEPTH | 8 | 8 | 0 | 0 | 22.0 |
| | MEAN | 111.0 | 31.5 | 0.0 | 0.0 | 35.6 |
| GRAND MEAN ^b | SURFACE | 7.6 | 55.2 | 5.3 | 3.7 | |
| | MID-DEPTH | 11.2 | 44.6 | 11.6 | 4.3 | |
| | MEAN | 9.4 | 49.9 | 8.4 | 4.0 | |

None collected 14-28 Apr, and 16 Jun-20 Oct

^aNumber/1000 m³^bApril - October sampling periodSurface sample: 2 ft below water level; channel depth
variable with lake levelMid-depth sample: 13 ft below water level; channel depth
variable with lake level

APPENDIX VIII E-2d

ABUNDANCE^a OF YELLOW PERCH EGGS

NINE MILE POINT NUCLEAR STATION UNIT 1 - 1976

| DATE | SAMPLE DEPTH | 1100 HR | 1700 HR | 2300 HR | 0500 HR | MEAN |
|----------------------------|--------------|---------|---------|---------|---------|------|
| 12 MAY | SURFACE | 0 | 0 | 0 | 10 | 2.5 |
| | MID-DEPTH | 0 | 0 | 0 | 0 | 0.0 |
| | MEAN | 0.0 | 0.0 | 0.0 | 5.0 | 1.2 |
| 2 JUN | SURFACE | 0 | 0 | 0 | 0 | 0.0 |
| | MID-DEPTH | 0 | 0 | 0 | 10 | 2.5 |
| | MEAN | 0.0 | 0.0 | 0.0 | 5.0 | 1.2 |
| GRAND MEAN ^b | SURFACE | 0.0 | 0.0 | 0.0 | 0.4 | |
| | MID-DEPTH | 0.0 | 0.0 | 0.0 | 0.4 | |
| | MEAN | 0.0 | 0.0 | 0.0 | 0.4 | |

None collected 14 Apr - 5 May, 19-26 May, and 9 Jun - 20 Oct

^aNumber/1000 m³

^bApril - October sampling period

Surface sample: 2 ft below water level; channel depth variable with lake level

Mid-depth sample: 13 ft below water level; channel depth variable with lake level



CHAPTER IX

APPENDIX IXB-1a

LENGTH-FREQUENCY*OF SMALLMOUTH BASS

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - JANUARY - JUNE, 1976

| LENGTH INTERVAL (CM) | NUMBER OF FISH | | | | | | | | | | | |
|----------------------------|----------------|------|--------|------|--------|------|-------|------|--------|------|-------|------|
| | JAN | | FEB | | MAR | | APR | | MAY | | JUN | |
| | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT |
| .1- 1.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 1.1- 2.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 2.1- 3.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 3.1- 4.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 4.1- 5.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 5.1- 6.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 6.1- 7.0 | 0 | .0 | 2 | 13.3 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 7.1- 8.0 | 0 | .0 | 0 | .0 | 1 | 20.0 | 1 | 33.3 | 2 | 16.7 | 0 | .0 |
| 8.1- 9.0 | 1 | 12.5 | 0 | .0 | 2 | 40.0 | 0 | .0 | 1 | 8.3 | 0 | .0 |
| 9.1- 10.0 | 0 | .0 | 1 | 6.7 | 0 | .0 | 0 | .0 | 2 | 16.7 | 0 | .0 |
| 10.1- 11.0 | 0 | .0 | 1 | 6.7 | 0 | .0 | 0 | .0 | 1 | 8.3 | 0 | .0 |
| 11.1- 12.0 | 0 | .0 | 2 | 13.3 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 12.1- 13.0 | 0 | .0 | 1 | 6.7 | 0 | .0 | 1 | 33.3 | 1 | 8.3 | 1 | 7.1 |
| 13.1- 14.0 | 1 | 12.5 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 14.1- 15.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 15.1- 16.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 16.1- 17.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 17.1- 18.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 18.1- 19.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 19.1- 20.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 20.1- 21.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 21.1- 22.0 | 0 | .0 | 1 | 6.7 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 22.1- 23.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 7.1 |
| 23.1- 24.0 | 1 | 12.5 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 24.1- 25.0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 33.3 | 0 | .0 | 1 | 7.1 |
| 25.1- 26.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 26.1- 27.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 27.1- 28.0 | 1 | 12.5 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 7.1 |
| 28.1- 29.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 29.1- 30.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 7.1 |
| 30.1- 31.0 | 1 | 12.5 | 1 | 6.7 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 31.1- 32.0 | 0 | .0 | 1 | 6.7 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 7.1 |
| 32.1- 33.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 7.1 |
| 33.1- 34.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 7.1 |
| 34.1- 35.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 35.1- 36.0 | 0 | .0 | 1 | 6.7 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 7.1 |
| 36.1- 37.0 | 1 | 12.5 | 2 | 13.3 | 0 | .0 | 0 | .0 | 1 | 8.3 | 2 | 14.3 |
| 37.1- 38.0 | 1 | 12.5 | 1 | 6.7 | 0 | .0 | 0 | .0 | 2 | 16.7 | 1 | 7.1 |
| 38.1- 39.0 | 1 | 12.5 | 0 | .0 | 0 | .0 | 0 | .0 | 2 | 16.7 | 2 | 14.3 |
| 39.1- 40.0 | 0 | .0 | 1 | 6.7 | 2 | 40.0 | 0 | .0 | 0 | .0 | 0 | .0 |
| TOTAL COLLECTED | 9 | | 15 | | 5 | | 5 | | 32 | | 14 | |
| TOTAL ANALYZED | 8 | | 15 | | 5 | | 3 | | 12 | | 14 | |
| MEAN LENGTH | 27.1 | | 22.5 | | 20.5 | | 14.8 | | 21.2 | | 31.1 | |
| VARIANCE | 127.29 | | 171.75 | | 293.65 | | 75.62 | | 215.20 | | 53.59 | |

* Traveling screen collections on scheduled imp...nt days

LENGTH-FREQUENCY* OF SMALLMOUTH BASS

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - JULY - DECEMBER, 1976

| LENGTH INTERVAL (CM) | NUMBER OF FISH | | | | | | | | | | | |
|----------------------------|----------------|------|--------|------|-------|------|--------|------|------|------|--------|------|
| | JUL | | AUG | | SEP | | OCT | | NOV | | DEC | |
| | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT |
| .1- 1.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 1.1- 2.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 2.1- 3.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 3.1- 4.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 4.1- 5.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 5.1- 6.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 6.1- 7.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 7.1- 8.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 25.0 |
| 8.1- 9.0 | 1 | 11.1 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 9.1- 10.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 10.1- 11.0 | 2 | 22.2 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 11.1- 12.0 | 2 | 22.2 | 1 | 5.3 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 12.1- 13.0 | 0 | .0 | 6 | 31.6 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 13.1- 14.0 | 0 | .0 | 3 | 15.8 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 14.1- 15.0 | 0 | .0 | 0 | .0 | 0 | .0 | 2 | 50.0 | 0 | .0 | 0 | .0 |
| 15.1- 16.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 16.1- 17.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 17.1- 18.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 18.1- 19.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 19.1- 20.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 20.1- 21.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 21.1- 22.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 22.1- 23.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 23.1- 24.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 24.1- 25.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 25.1- 26.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 26.1- 27.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 27.1- 28.0 | 0 | .0 | 0 | .0 | 1 | 50.0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 28.1- 29.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 29.1- 30.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 30.1- 31.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 31.1- 32.0 | 0 | .0 | 1 | 5.3 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 32.1- 33.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 33.1- 34.0 | 0 | .0 | 1 | 5.3 | 0 | .0 | 0 | .0 | 1 | 33.3 | 0 | .0 |
| 34.1- 35.0 | 1 | 11.1 | 1 | 5.3 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 35.1- 36.0 | 1 | 11.1 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 25.0 |
| 36.1- 37.0 | 1 | 11.1 | 1 | 5.3 | 1 | 50.0 | 1 | 25.0 | 0 | .0 | 0 | .0 |
| 37.1- 38.0 | 0 | .0 | 3 | 15.8 | 0 | .0 | 0 | .0 | 2 | 66.7 | 0 | .0 |
| 38.1- 39.0 | 0 | .0 | 1 | 5.3 | 0 | .0 | 1 | 25.0 | 0 | .0 | 2 | 50.0 |
| 39.1- 40.0 | 1 | 11.1 | 1 | 5.3 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| TOTAL COLLECTED | 11 | | 21 | | 5 | | 4 | | 3 | | 4 | |
| TOTAL ANALYZED | 9 | | 19 | | 2 | | 4 | | 3 | | 4 | |
| MEAN LENGTH | 22.2 | | 24.0 | | 32.0 | | 25.9 | | 36.1 | | 30.1 | |
| VARIANCE | 193.85 | | 149.75 | | 46.08 | | 175.33 | | 5.81 | | 237.25 | |

* Traveling screen collections on scheduled impingement days

APPENDIX IXB-1b

LENGTH-FREQUENCY* OF THREESPINE STICKLEBACK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - JANUARY - JUNE, 1976

| LENGTH INTERVAL (CM) | NUMBER OF FISH | | | | | | | | | | | |
|----------------------------|----------------|------|-----|------|------|------|------|------|-------|------|-------|------|
| | JAN | | FEB | | MAR | | APR | | MAY | | JUN | |
| | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT |
| .1- 1.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 1.1- 2.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 2.1- 3.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | .0 | 0 | .0 |
| 3.1- 4.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 4.1- 5.0 | 1 | 14.3 | 2 | 25.0 | 30 | 4.8 | 27 | 2.1 | 52 | 1.7 | 15 | 1.6 |
| 5.1- 6.0 | 5 | 71.4 | 6 | 75.0 | 525 | 83.9 | 1101 | 83.8 | 2380 | 80.0 | 690 | 75.2 |
| 6.1- 7.0 | 1 | 14.3 | 0 | .0 | 70 | 11.2 | 185 | 14.1 | 540 | 18.1 | 212 | 23.1 |
| 7.1- 8.0 | 0 | .0 | 0 | .0 | 1 | .2 | 1 | .1 | 3 | .1 | 0 | .0 |
| TOTAL COLLECTED | 9 | | 8 | | 1112 | | 3774 | | 24653 | | 14910 | |
| TOTAL ANALYZED | 7 | | 8 | | 626 | | 1314 | | 2976 | | 917 | |
| MEAN LENGTH | 5.5 | | 5.4 | | 5.6 | | 5.7 | | 5.7 | | 5.8 | |
| VARIANCE | .21 | | .13 | | .15 | | .12 | | .13 | | .12 | |

* Traveling screen collections on scheduled impingement days

APPENDIX 1B-1b (Continued)

LENGTH-FREQUENCY* OF THREESpine STICKLEBACK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - JULY - DECEMBER, 1976

| LENGTH INTERVAL (CM) | NUMBER OF FISH | | | | | | | | | | | |
|----------------------------|----------------|------|-----|-------|-----|------|-----|------|-----|------|-----|------|
| | JUL | | AUG | | SEP | | OCT | | NOV | | DEC | |
| | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT |
| .1- 1.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 1.1- 2.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 2.1- 3.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 3.1- 4.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 2.4 | 1 | .5 |
| 4.1- 5.0 | 3 | .5 | 0 | .0 | 0 | .0 | 0 | .0 | 2 | 4.8 | 22 | 10.8 |
| 5.1- 6.0 | 442 | 67.4 | 0 | .0 | 0 | .0 | 4 | 80.0 | 20 | 47.6 | 100 | 49.0 |
| 6.1- 7.0 | 210 | 32.0 | 2 | 100.0 | 0 | .0 | 1 | 20.0 | 19 | 45.2 | 72 | 35.3 |
| 7.1- 8.0 | 1 | .2 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 9 | 4.4 |
| TOTAL COLLECTED | 5006 | | 2 | | 0 | | 7 | | 47 | | 210 | |
| TOTAL ANALYZED | 656 | | 2 | | 0 | | 5 | | 42 | | 204 | |
| MEAN LENGTH | 5.9 | | 6.5 | | | | 5.7 | | 5.9 | | 5.9 | |
| VARIANCE | .11 | | .13 | | | | .31 | | .40 | | .44 | |

*Traveling screen collections on scheduled impingement days

LENGTH-FREQUENCY* OF YELLOW PERCH

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - JANUARY - JUNE, 1976

| LENGTH INTERVAL (CM) | NUMBER OF FISH | | | | | | | | | | | |
|----------------------------|----------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
| | JAN | | FEB | | MAR | | APR | | MAY | | JUN | |
| | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT |
| .1- 1.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 1.1- 2.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 2.1- 3.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 3.1- 4.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 4.1- 5.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 5.1- 6.0 | 1 | 1.3 | 0 | .0 | 1 | 2.2 | 0 | .0 | 0 | .0 | 0 | .0 |
| 6.1- 7.0 | 3 | 3.8 | 0 | .0 | 3 | 6.5 | 6 | 7.7 | 21 | 13.5 | 11 | 21.2 |
| 7.1- 8.0 | 7 | 8.9 | 0 | .0 | 10 | 21.7 | 12 | 15.4 | 21 | 13.5 | 9 | 17.3 |
| 8.1- 9.0 | 13 | 16.5 | 1 | 50.0 | 4 | 8.7 | 4 | 5.1 | 9 | 5.8 | 5 | 9.6 |
| 9.1- 10.0 | 23 | 29.1 | 0 | .0 | 2 | 4.3 | 6 | 7.7 | 5 | 3.2 | 0 | .0 |
| 10.1- 11.0 | 7 | 8.9 | 0 | .0 | 4 | 8.7 | 8 | 10.3 | 17 | 10.9 | 6 | 11.5 |
| 11.1- 12.0 | 9 | 11.4 | 0 | .0 | 2 | 4.3 | 2 | 2.6 | 20 | 12.8 | 7 | 13.5 |
| 12.1- 13.0 | 0 | .0 | 0 | .0 | 0 | .0 | 2 | 2.6 | 9 | 5.8 | 0 | .0 |
| 13.1- 14.0 | 1 | 1.3 | 0 | .0 | 0 | .0 | 2 | 2.6 | 7 | 4.5 | 0 | .0 |
| 14.1- 15.0 | 0 | .0 | 0 | .0 | 1 | 2.2 | 1 | 1.3 | 4 | 2.6 | 0 | .0 |
| 15.1- 16.0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 1.3 | 3 | 1.9 | 2 | 3.8 |
| 16.1- 17.0 | 0 | .0 | 0 | .0 | 1 | 2.2 | 2 | 2.6 | 5 | 3.2 | 1 | 1.9 |
| 17.1- 18.0 | 1 | 1.3 | 0 | .0 | 0 | .0 | 2 | 2.6 | 5 | 3.2 | 0 | .0 |
| 18.1- 19.0 | 3 | 3.8 | 0 | .0 | 5 | 10.9 | 3 | 3.8 | 5 | 3.2 | 2 | 3.8 |
| 19.1- 20.0 | 2 | 2.5 | 0 | .0 | 0 | .0 | 3 | 3.8 | 6 | 3.8 | 2 | 3.8 |
| 20.1- 21.0 | 1 | 1.3 | 0 | .0 | 2 | 4.3 | 1 | 1.3 | 6 | 3.8 | 1 | 1.9 |
| 21.1- 22.0 | 1 | 1.3 | 0 | .0 | 1 | 2.2 | 6 | 7.7 | 0 | .0 | 2 | 3.8 |
| 22.1- 23.0 | 2 | 2.5 | 1 | 50.0 | 5 | 10.9 | 6 | 7.7 | 3 | 1.9 | 0 | .0 |
| 23.1- 24.0 | 2 | 2.5 | 0 | .0 | 0 | .0 | 4 | 5.1 | 1 | .6 | 1 | 1.9 |
| 24.1- 25.0 | 0 | .0 | 0 | .0 | 3 | 6.5 | 1 | 1.3 | 4 | 2.6 | 3 | 5.8 |
| 25.1- 26.0 | 1 | 1.3 | 0 | .0 | 1 | 2.2 | 3 | 3.8 | 1 | .6 | 0 | .0 |
| 26.1- 27.0 | 1 | 1.3 | 0 | .0 | 1 | 2.2 | 1 | 1.3 | 2 | 1.3 | 0 | .0 |
| 27.1- 28.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | .6 | 0 | .0 |
| 28.1- 29.0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 1.3 | 0 | .0 | 0 | .0 |
| 29.1- 30.0 | 1 | 1.3 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | .6 | 0 | .0 |
| 30.1- 31.0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 1.3 | 0 | .0 | 0 | .0 |
| TOTAL COLLECTED | 81 | | 2 | | 46 | | 179 | | 680 | | 57 | |
| TOTAL ANALYZED | 79 | | 2 | | 46 | | 78 | | 156 | | 52 | |
| MEAN LENGTH | 11.8 | | 15.8 | | 14.0 | | 14.9 | | 12.7 | | 11.8 | |
| VARIANCE | 28.17 | | 98.03 | | 47.30 | | 47.67 | | 30.32 | | 32.73 | |

* Traveling screen collections on scheduled impingement days

APPENDIX IXB (Continued)

LENGTH-FREQUENCY OF YELLOW PERCH

JAMES A. FITZPATRICK NUCLEAR POWER PLANT - JULY - DECEMBER, 1976

| LENGTH INTERVAL (CH) | JUL | | AUG | | SEP | | OCT | | NOV | | DEC | |
|----------------------------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
| | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT |
| .1- 1.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 1.1- 2.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 2.1- 3.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 3.1- 4.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 4.1- 5.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | .7 | 1 | .5 |
| 5.1- 6.0 | 0 | .0 | 0 | .0 | 1 | .7 | 0 | .0 | 2 | 1.4 | 0 | .0 |
| 6.1- 7.0 | 2 | 2.0 | 0 | .0 | 1 | .7 | 1 | 1.1 | 19 | 12.8 | 25 | 12.0 |
| 7.1- 8.0 | 6 | 6.0 | 0 | .0 | 0 | .0 | 1 | 1.1 | 13 | 8.8 | 18 | 8.7 |
| 8.1- 9.0 | 16 | 16.0 | 0 | .0 | 0 | .0 | 2 | 2.2 | 11 | 7.4 | 6 | 2.9 |
| 9.1- 10.0 | 13 | 13.0 | 5 | 6.3 | 1 | .7 | 0 | .0 | 1 | .7 | 5 | 2.4 |
| 10.1- 11.0 | 8 | 8.0 | 7 | 8.9 | 2 | 1.4 | 0 | .0 | 0 | .0 | 1 | .5 |
| 11.1- 12.0 | 5 | 5.0 | 8 | 10.1 | 9 | 6.4 | 2 | 2.2 | 12 | 8.1 | 12 | 5.8 |
| 12.1- 13.0 | 3 | 3.0 | 7 | 8.9 | 11 | 7.9 | 5 | 5.4 | 15 | 10.1 | 29 | 13.9 |
| 13.1- 14.0 | 2 | 2.0 | 6 | 7.6 | 16 | 11.4 | 24 | 25.8 | 22 | 14.9 | 41 | 19.7 |
| 14.1- 15.0 | 4 | 4.0 | 7 | 8.9 | 21 | 15.0 | 18 | 19.4 | 21 | 14.2 | 28 | 13.5 |
| 15.1- 16.0 | 2 | 2.0 | 5 | 6.3 | 14 | 10.0 | 13 | 14.0 | 13 | 8.8 | 21 | 10.1 |
| 16.1- 17.0 | 6 | 6.0 | 4 | 5.1 | 8 | 5.7 | 7 | 7.5 | 5 | 3.4 | 7 | 3.4 |
| 17.1- 18.0 | 2 | 2.0 | 6 | 7.6 | 10 | 7.1 | 6 | 6.5 | 3 | 2.0 | 4 | 1.9 |
| 18.1- 19.0 | 3 | 3.0 | 5 | 6.3 | 14 | 10.0 | 5 | 5.4 | 5 | 3.4 | 3 | 1.4 |
| 19.1- 20.0 | 3 | 3.0 | 1 | 1.3 | 9 | 6.4 | 1 | 1.1 | 2 | 1.4 | 1 | .5 |
| 20.1- 21.0 | 0 | .0 | 1 | 1.3 | 4 | 2.9 | 2 | 2.2 | 0 | .0 | 0 | .0 |
| 21.1- 22.0 | 8 | 8.0 | 5 | 6.3 | 6 | 4.3 | 1 | 1.1 | 2 | 1.4 | 1 | .5 |
| 22.1- 23.0 | 6 | 6.0 | 4 | 5.1 | 5 | 3.6 | 0 | .0 | 0 | .0 | 0 | .0 |
| 23.1- 24.0 | 5 | 5.0 | 2 | 2.5 | 3 | 2.1 | 0 | .0 | 0 | .0 | 3 | 1.4 |
| 24.1- 25.0 | 1 | 1.0 | 2 | 2.5 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | .5 |
| 25.1- 26.0 | 0 | .0 | 3 | 3.8 | 4 | 2.9 | 0 | .0 | 0 | .0 | 0 | .0 |
| 26.1- 27.0 | 0 | .0 | 0 | .0 | 0 | .0 | 2 | 2.2 | 1 | .7 | 0 | .0 |
| 27.1- 28.0 | 2 | 2.0 | 0 | .0 | 0 | .0 | 2 | 2.2 | 0 | .0 | 0 | .0 |
| 28.1- 29.0 | 0 | .0 | 0 | .0 | 1 | .7 | 0 | .0 | 0 | .0 | 1 | .5 |
| 29.1- 30.0 | 2 | 2.0 | 1 | 1.3 | 0 | .0 | 1 | 1.1 | 0 | .0 | 0 | .0 |
| 30.1- 31.0 | 1 | 1.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| TOTAL COLLECTED | 195 | | 84 | | 158 | | 95 | | 160 | | 212 | |
| TOTAL ANALYZED | 100 | | 79 | | 140 | | 93 | | 148 | | 208 | |
| MEAN LENGTH | 14.6 | | 16.0 | | 16.4 | | 15.5 | | 12.3 | | 12.6 | |
| VARIANCE | 40.40 | | 23.32 | | 15.16 | | 14.55 | | 16.30 | | 14.93 | |

*Traveling screen collections on scheduled impingement days

APPENDIX IXG-1a

LENGTH-FREQUENCY*OF SMALLMOUTH BASS

NINE MILE POINT NUCLEAR STATION UNIT 1 - JANUARY - JUNE, 1976

| LENGTH INTERVAL (CM) | JAN | | FEB | | MAR | | APR | | MAY | | JUN | |
|----------------------------|-------|------|------|------|--------|------|--------|------|------|------|--------|------|
| | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT |
| .1- 1.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 1.1- 2.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 2.1- 3.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 3.1- 4.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 4.1- 5.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 5.1- 6.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 6.1- 7.0 | 1 | 1.1 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 4.3 | 0 | .0 |
| 7.1- 8.0 | 0 | .0 | 0 | .0 | 1 | 5.9 | 0 | .0 | 1 | 4.3 | 0 | .0 |
| 8.1- 9.0 | 6 | 6.8 | 0 | .0 | 1 | 5.9 | 1 | 12.5 | 7 | 30.4 | 0 | .0 |
| 9.1- 10.0 | 20 | 22.7 | 0 | .0 | 4 | 23.5 | 1 | 12.5 | 4 | 17.4 | 0 | .0 |
| 10.1- 11.0 | 13 | 14.8 | 2 | 66.7 | 4 | 23.5 | 2 | 25.0 | 2 | 8.7 | 0 | .0 |
| 11.1- 12.0 | 20 | 22.7 | 0 | .0 | 2 | 11.8 | 0 | .0 | 6 | 26.1 | 1 | 33.3 |
| 12.1- 13.0 | 10 | 11.4 | 1 | 33.3 | 0 | .0 | 0 | .0 | 1 | 4.3 | 0 | .0 |
| 13.1- 14.0 | 3 | 3.4 | 0 | .0 | 0 | .0 | 1 | 12.5 | 0 | .0 | 0 | .0 |
| 14.1- 15.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 15.1- 16.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 16.1- 17.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 17.1- 18.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 18.1- 19.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 4.3 | 0 | .0 |
| 19.1- 20.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 20.1- 21.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 21.1- 22.0 | 3 | 3.4 | 0 | .0 | 1 | 5.9 | 0 | .0 | 0 | .0 | 0 | .0 |
| 22.1- 23.0 | 2 | 2.3 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 23.1- 24.0 | 1 | 1.1 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 24.1- 25.0 | 1 | 1.1 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 25.1- 26.0 | 1 | 1.1 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 26.1- 27.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 27.1- 28.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 28.1- 29.0 | 1 | 1.1 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 29.1- 30.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 30.1- 31.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 31.1- 32.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 32.1- 33.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 33.1- 34.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 34.1- 35.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 35.1- 36.0 | 0 | .0 | 0 | .0 | 2 | 11.8 | 0 | .0 | 0 | .0 | 0 | .0 |
| 36.1- 37.0 | 3 | 3.4 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 33.3 |
| 37.1- 38.0 | 2 | 2.3 | 0 | .0 | 2 | 11.8 | 0 | .0 | 0 | .0 | 1 | 33.3 |
| 38.1- 39.0 | 0 | .0 | 0 | .0 | 0 | .0 | 2 | 25.0 | 0 | .0 | 0 | .0 |
| 39.1- 40.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 40.1- 41.0 | 1 | 1.1 | 0 | .0 | 0 | .0 | 1 | 12.5 | 0 | .0 | 0 | .0 |
| 41.1- 42.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| TOTAL COLLECTED | 92 | | 5 | | 18 | | 11 | | 66 | | 5 | |
| TOTAL ANALYZED | 88 | | 3 | | 17 | | 8 | | 23 | | 3 | |
| MEAN LENGTH | 13.9 | | 10.8 | | 17.0 | | 21.2 | | 10.2 | | 28.4 | |
| VARIANCE | 59.17 | | 1.28 | | 131.65 | | 218.12 | | 5.63 | | 209.60 | |

*Traveling screen collections on scheduled impingement days

APPENDIX (Continued)
LENGTH-FREQUENCY OF SMALLMOUTH BASS

NINE MILE POINT NUCLEAR STATION UNIT 1 - JULY - DECEMBER, 1976

| LENGTH INTERVAL (CM) | JUL | | AUG | | SEP | | OCT | | NOV | | DEC | |
|----------------------------|--------|------|------|-------|--------|------|--------|------|--------|------|--------|------|
| | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT |
| 1.1- 1.3 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 1.1- 2.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 2.1- 3.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 3.1- 4.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 4.1- 5.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 5.1- 6.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 6.1- 7.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 7.1- 8.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 5.9 |
| 8.1- 9.0 | 2 | 40.0 | 0 | .0 | 1 | 11.1 | 0 | .0 | 0 | .0 | 0 | .0 |
| 9.1- 10.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 10.1- 11.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 11.1- 12.0 | 1 | 20.0 | 0 | .0 | 0 | .0 | 1 | 25.0 | 0 | .0 | 0 | .0 |
| 12.1- 13.0 | 1 | 20.0 | 0 | .0 | 1 | 11.1 | 0 | .0 | 0 | .0 | 0 | .0 |
| 13.1- 14.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 25.0 | 1 | 5.9 |
| 14.1- 15.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 2 | 11.8 |
| 15.1- 16.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 25.0 | 3 | 17.6 |
| 16.1- 17.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 25.0 | 0 | .0 |
| 17.1- 18.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 5.9 |
| 18.1- 19.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 19.1- 20.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 20.1- 21.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 21.1- 22.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 22.1- 23.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 23.1- 24.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 24.1- 25.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 5.9 |
| 25.1- 26.0 | 0 | .0 | 0 | .0 | 1 | 11.1 | 0 | .0 | 0 | .0 | 0 | .0 |
| 26.1- 27.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 27.1- 28.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 28.1- 29.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 29.1- 30.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 30.1- 31.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 31.1- 32.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 32.1- 33.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 33.1- 34.0 | 0 | .0 | 0 | .0 | 1 | 11.1 | 0 | .0 | 0 | .0 | 0 | .0 |
| 34.1- 35.0 | 0 | .0 | 1 | 100.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 35.1- 36.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 2 | 11.8 |
| 36.1- 37.0 | 0 | .0 | 0 | .0 | 0 | .0 | 2 | 50.0 | 1 | 25.0 | 3 | 17.6 |
| 37.1- 38.0 | 0 | .0 | 0 | .0 | 1 | 11.1 | 1 | 25.0 | 0 | .0 | 1 | 5.9 |
| 38.1- 39.0 | 0 | .0 | 0 | .0 | 3 | 33.3 | 0 | .0 | 0 | .0 | 2 | 11.8 |
| 39.1- 40.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 40.1- 41.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 41.1- 42.0 | 1 | 20.0 | 0 | .0 | 1 | 11.1 | 0 | .0 | 0 | .0 | 0 | .0 |
| TOTAL COLLECTED | 5 | | 1 | | 10 | | 4 | | 6 | | 19 | |
| TOTAL ANALYZED | 5 | | 1 | | 9 | | 4 | | 4 | | 17 | |
| MEAN LENGTH | 16.4 | | 34.2 | | 30.5 | | 30.5 | | 20.6 | | 25.5 | |
| VARIANCE | 195.41 | | | | 150.94 | | 159.27 | | 109.16 | | 131.35 | |

* Traveling screen collections on scheduled impingement days

APPENDIX IXC-1b

LENGTH-FREQUENCY* OF THREESPINE STICKLEBACK

NINE MILE POINT POINT NUCLEAR STATION UNIT 1 - JANUARY - JUNE, 1976

| LENGTH INTERVAL (CM) | NUMBER OF FISH | | | | | | | | | | | |
|----------------------------|----------------|------|-----|------|------|------|-------|------|-------|------|------|------|
| | JAN | | FEB | | MAR | | APR | | MAY | | JUN | |
| | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT |
| .1- 1.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 1.1- 2.0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | .1 | 2 | .0 | 0 | .0 |
| 2.1- 3.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | .0 | 0 | .0 |
| 3.1- 4.0 | 0 | .0 | 1 | .3 | 0 | .0 | 0 | .0 | 1 | .0 | 0 | .0 |
| 4.1- 5.0 | 13 | 15.9 | 17 | 5.2 | 59 | 3.7 | 50 | 3.1 | 90 | 1.9 | 26 | 1.1 |
| 5.1- 6.0 | 63 | 76.8 | 256 | 78.0 | 1299 | 82.6 | 1307 | 80.2 | 3492 | 75.5 | 1642 | 70.4 |
| 6.1- 7.0 | 5 | 6.1 | 53 | 16.2 | 210 | 13.3 | 270 | 16.6 | 1047 | 22.6 | 662 | 28.4 |
| 7.1- 8.0 | 1 | 1.2 | 1 | .3 | 6 | .4 | 1 | .1 | 1 | .0 | 2 | .1 |
| TOTAL COLLECTED | 86 | | 505 | | 3580 | | 10183 | | 72571 | | 3853 | |
| TOTAL ANALYZED | 82 | | 328 | | 1574 | | 1629 | | 4634 | | 2332 | |
| MEAN LENGTH | 5.5 | | 5.6 | | 5.6 | | 5.7 | | 5.8 | | 5.8 | |
| VARIANCE | .20 | | .20 | | .14 | | .14 | | .15 | | .13 | |

*Traveling screen collections on scheduled impingement days

APPENDIX IXC-1b (Continued)

LENGTH-FREQUENCY* OF THREESPINE STICKLEBACK

NINE MILE POINT POINT NUCLEAR STATION UNIT 1 - JULY - DECEMBER, 1976

| LENGTH INTERVAL (CM) | NUMBER OF FISH | | | | | | | | | | | |
|----------------------------|----------------|------|-----|------|-----|------|-----|------|-----|------|-----|------|
| | JUL | | AUG | | SEP | | OCT | | NOV | | DEC | |
| | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT |
| .1- 1.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 1.1- 2.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 2.1- 3.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 3.1- 4.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 4.1- 5.0 | 3 | .5 | 0 | .0 | 0 | .0 | 1 | 33.3 | 3 | 7.3 | 7 | 5.4 |
| 5.1- 6.0 | 338 | 56.2 | 1 | 50.0 | 0 | .0 | 2 | 66.7 | 24 | 58.5 | 62 | 48.1 |
| 6.1- 7.0 | 258 | 42.9 | 1 | 50.0 | 0 | .0 | 0 | .0 | 14 | 34.1 | 54 | 41.9 |
| 7.1- 8.0 | 2 | .3 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 6 | 4.7 |
| TOTAL COLLECTED | 2306 | | 3 | | 0 | | 3 | | 41 | | 129 | |
| TOTAL ANALYZED | 601 | | 2 | | 0 | | 3 | | 41 | | 129 | |
| MEAN LENGTH | 6.0 | | 6.1 | | | | 5.4 | | 5.9 | | 6.1 | |
| VARIANCE | .11 | | .34 | | | | .24 | | .30 | | .35 | |

*Traveling screen collections on scheduled impingement days

APPENDIX IXC-1c
LENGTH-FREQUENCY* OF YELLOW PERCH

NINE MILE POINT NUCLEAR STATION UNIT 1 - JANUARY - JUNE, 1976

| LENGTH INTERVAL (CM) | NUMBER OF FISH | | | | | | | | | | | |
|----------------------------|----------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
| | JAN | | FEB | | MAR | | APR | | MAY | | JUN | |
| | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT |
| .1- 1.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 1.1- 2.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 2.1- 3.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 3.1- 4.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 4.1- 5.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 5.1- 6.0 | 0 | .0 | 1 | 2.4 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 6.1- 7.0 | 1 | .8 | 0 | .0 | 2 | 4.1 | 10 | 14.7 | 6 | 10.2 | 2 | 5.1 |
| 7.1- 8.0 | 8 | 6.5 | 2 | 4.8 | 1 | 2.0 | 6 | 8.8 | 5 | 8.5 | 2 | 5.1 |
| 8.1- 9.0 | 32 | 26.0 | 2 | 4.8 | 3 | 6.1 | 1 | 1.5 | 6 | 10.2 | 0 | .0 |
| 9.1- 10.0 | 28 | 22.8 | 2 | 4.8 | 0 | .0 | 3 | 4.4 | 0 | .0 | 1 | 2.6 |
| 10.1- 11.0 | 19 | 15.4 | 6 | 14.3 | 2 | 4.1 | 7 | 10.3 | 9 | 15.3 | 2 | 5.1 |
| 11.1- 12.0 | 3 | 2.4 | 1 | 2.4 | 4 | 8.2 | 7 | 10.3 | 7 | 11.9 | 3 | 7.7 |
| 12.1- 13.0 | 3 | 2.4 | 1 | 2.4 | 2 | 4.1 | 0 | .0 | 2 | 3.4 | 1 | 2.6 |
| 13.1- 14.0 | 2 | 1.6 | 0 | .0 | 0 | .0 | 0 | .0 | 3 | 5.1 | 0 | .0 |
| 14.1- 15.0 | 0 | .0 | 0 | .0 | 1 | 2.0 | 0 | .0 | 2 | 3.4 | 2 | 5.1 |
| 15.1- 16.0 | 0 | .0 | 0 | .0 | 0 | .0 | 2 | 2.9 | 5 | 8.5 | 5 | 12.8 |
| 16.1- 17.0 | 3 | 2.4 | 0 | .0 | 3 | 6.1 | 2 | 2.9 | 2 | 3.4 | 0 | .0 |
| 17.1- 18.0 | 1 | .8 | 0 | .0 | 1 | 2.0 | 1 | 1.5 | 3 | 5.1 | 1 | 2.6 |
| 18.1- 19.0 | 4 | 3.3 | 2 | 4.8 | 3 | 6.1 | 3 | 4.4 | 0 | .0 | 4 | 10.3 |
| 19.1- 20.0 | 1 | .8 | 0 | .0 | 5 | 10.2 | 5 | 7.4 | 3 | 5.1 | 3 | 7.7 |
| 20.1- 21.0 | 2 | 1.6 | 0 | .0 | 3 | 6.1 | 5 | 7.4 | 0 | .0 | 4 | 10.3 |
| 21.1- 22.0 | 3 | 2.4 | 1 | 2.4 | 4 | 8.2 | 5 | 7.4 | 2 | 3.4 | 2 | 5.1 |
| 22.1- 23.0 | 5 | 4.1 | 5 | 11.9 | 4 | 8.2 | 3 | 4.4 | 1 | 1.7 | 2 | 5.1 |
| 23.1- 24.0 | 2 | 1.6 | 5 | 11.9 | 7 | 14.3 | 2 | 2.9 | 0 | .0 | 0 | .0 |
| 24.1- 25.0 | 5 | 4.1 | 8 | 19.0 | 1 | 2.0 | 2 | 2.9 | 0 | .0 | 2 | 5.1 |
| 25.1- 26.0 | 1 | .8 | 2 | 4.8 | 2 | 4.1 | 1 | 1.5 | 0 | .0 | 2 | 5.1 |
| 26.1- 27.0 | 0 | .0 | 2 | 4.8 | 0 | .0 | 2 | 2.9 | 0 | .0 | 1 | 2.6 |
| 27.1- 28.0 | 0 | .0 | 1 | 2.4 | 1 | 2.0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 28.1- 29.0 | 0 | .0 | 1 | 2.4 | 0 | .0 | 0 | .0 | 2 | 3.4 | 0 | .0 |
| 29.1- 30.0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 1.5 | 0 | .0 | 0 | .0 |
| 30.1- 31.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 31.1- 32.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | 1.7 | 0 | .0 |
| TOTAL COLLECTED | 123 | | 42 | | 49 | | 264 | | 405 | | 42 | |
| TOTAL ANALYZED | 123 | | 42 | | 49 | | 68 | | 59 | | 39 | |
| MEAN LENGTH | 12.1 | | 18.7 | | 18.0 | | 15.0 | | 13.2 | | 17.0 | |
| VARIANCE | 27.33 | | 52.06 | | 33.71 | | 45.55 | | 32.93 | | 32.25 | |

Traveling screen collections on scheduled impingement

LENGTH-FREQUENCY*OF YELLOW PERCH

NINE MILE POINT NUCLEAR STATION UNIT 1 - JULY - DECEMBER, 1976

| LENGTH INTERVAL (CM) | NUMBER OF FISH | | | | | | | | | | | |
|----------------------------|----------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
| | JUL | | AUG | | SEP | | OCT | | NOV | | DEC | |
| | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT | NO. | PCNT |
| .1- 1.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 1.1- 2.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 2.1- 3.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 3.1- 4.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 4.1- 5.0 | 0 | .0 | 1 | 2.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 5.1- 6.0 | 0 | .0 | 0 | .0 | 1 | 1.6 | 1 | 1.0 | 1 | .7 | 0 | .0 |
| 6.1- 7.0 | 0 | .0 | 0 | .0 | 0 | .0 | 2 | 1.9 | 19 | 12.4 | 12 | 6.5 |
| 7.1- 8.0 | 2 | 1.6 | 0 | .0 | 0 | .0 | 1 | 1.0 | 15 | 9.8 | 21 | 11.4 |
| 8.1- 9.0 | 9 | 7.0 | 0 | .0 | 0 | .0 | 1 | 1.0 | 3 | 2.0 | 9 | 4.9 |
| 9.1- 10.0 | 9 | 7.0 | 0 | .0 | 0 | .0 | 0 | .0 | 1 | .7 | 3 | 1.6 |
| 10.1- 11.0 | 11 | 8.5 | 0 | .0 | 0 | .0 | 1 | 1.0 | 0 | .0 | 3 | 1.6 |
| 11.1- 12.0 | 6 | 4.7 | 2 | 4.0 | 0 | .0 | 1 | 1.0 | 10 | 6.5 | 7 | 3.8 |
| 12.1- 13.0 | 7 | 5.4 | 2 | 4.0 | 1 | 1.6 | 7 | 6.8 | 24 | 15.7 | 21 | 11.4 |
| 13.1- 14.0 | 8 | 6.2 | 2 | 4.0 | 3 | 4.9 | 14 | 13.6 | 30 | 19.6 | 30 | 16.3 |
| 14.1- 15.0 | 5 | 3.9 | 6 | 12.0 | 6 | 9.8 | 11 | 10.7 | 23 | 15.0 | 25 | 13.6 |
| 15.1- 16.0 | 2 | 1.6 | 3 | 6.0 | 6 | 9.8 | 14 | 13.6 | 9 | 5.9 | 22 | 12.0 |
| 16.1- 17.0 | 2 | 1.6 | 7 | 14.0 | 7 | 11.5 | 12 | 11.7 | 9 | 5.9 | 6 | 3.3 |
| 17.1- 18.0 | 3 | 2.3 | 3 | 6.0 | 6 | 9.8 | 9 | 8.7 | 3 | 2.0 | 3 | 1.6 |
| 18.1- 19.0 | 9 | 7.0 | 5 | 10.0 | 9 | 14.8 | 8 | 7.8 | 0 | .0 | 4 | 2.2 |
| 19.1- 20.0 | 3 | 2.3 | 2 | 4.0 | 5 | 8.2 | 8 | 7.8 | 2 | 1.3 | 2 | 1.1 |
| 20.1- 21.0 | 8 | 6.2 | 3 | 6.0 | 3 | 4.9 | 4 | 3.9 | 2 | 1.3 | 2 | 1.1 |
| 21.1- 22.0 | 9 | 7.0 | 5 | 10.0 | 3 | 4.9 | 3 | 2.9 | 2 | 1.3 | 2 | 1.1 |
| 22.1- 23.0 | 10 | 7.8 | 2 | 4.0 | 5 | 8.2 | 0 | .0 | 0 | .0 | 4 | 2.2 |
| 23.1- 24.0 | 7 | 5.4 | 3 | 6.0 | 2 | 3.3 | 2 | 1.9 | 0 | .0 | 3 | 1.6 |
| 24.1- 25.0 | 6 | 4.7 | 2 | 4.0 | 1 | 1.6 | 3 | 2.9 | 0 | .0 | 2 | 1.1 |
| 25.1- 26.0 | 6 | 4.7 | 0 | .0 | 1 | 1.6 | 1 | 1.0 | 0 | .0 | 0 | .0 |
| 26.1- 27.0 | 2 | 1.6 | 1 | 2.0 | 2 | 3.3 | 0 | .0 | 0 | .0 | 1 | .5 |
| 27.1- 28.0 | 3 | 2.3 | 1 | 2.0 | 0 | .0 | 0 | .0 | 0 | .0 | 2 | 1.1 |
| 28.1- 29.0 | 1 | .8 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 29.1- 30.0 | 1 | .8 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 30.1- 31.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| 31.1- 32.0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 | 0 | .0 |
| TOTAL COLLECTED | 148 | | 54 | | 72 | | 107 | | 170 | | 184 | |
| TOTAL ANALYZED | 129 | | 50 | | 61 | | 103 | | 153 | | 184 | |
| MEAN LENGTH | 17.2 | | 18.0 | | 18.2 | | 16.3 | | 12.4 | | 13.4 | |
| VARIANCE | 37.07 | | 19.28 | | 13.82 | | 13.67 | | 12.77 | | 20.28 | |

* Traveling screen collections on scheduled impingement days

