

From: Strait, Kenneth A. <Kenneth.Strait@pseg.com>
Sent: Thursday, March 11, 2021 2:09 PM
To: incidental.take@noaa.gov; EndangeredSpecies Resource
Cc: jeanette.bowers@dep.nj.gov
Subject: [External_Sender] SALEM GENERATING STATION-INCIDENTAL TAKE OF STURGEON
Attachments: Sturgeon Incidental Take Report for 3102021.pdf; Sturgeon Incidental Take Report for 03102021 #2.pdf

Attached are the Incidental Take Reports and Data Collection Forms for two deceased sturgeon collected on 03/10/2021 from the Salem Generating Station during routine raking of the cooling water intake trash bars. Fin clips and the deceased specimens are being held for study pending direction from NOAA/NMFS. These incidental takes are authorized under Biological Opinion NER-2010-6581.

Thanks, and please let me know if you have any questions or need additional information.

Ken

Kenneth A. Strait

Manager-Biological Programs

PSEG Nuclear Environmental Affairs

P.O. Box 236, N33

Hancocks Bridge, NJ 08302 kenneth.strait@pseg.com

www.pseg.com/environment/estuary

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Subject: [External_Sender] SALEM GENERATING STATION-INCIDENTAL TAKE OF STURGEON
Sent Date: 3/11/2021 2:09:10 PM
Received Date: 3/11/2021 2:09:44 PM
From: Strait, Kenneth A.

Created By: Kenneth.Strait@pseg.com

Recipients:

"jeanette.bowers@dep.nj.gov" <jeanette.bowers@dep.nj.gov>

Tracking Status: None

"incidental.take@noaa.gov" <incidental.take@noaa.gov>

Tracking Status: None

"EndangeredSpecies Resource" <EndangeredSpecies.Resource@nrc.gov>

Tracking Status: None

Post Office: pseg.com

Files	Size	Date & Time
MESSAGE	1592	3/11/2021 2:09:44 PM
Sturgeon Incidental Take Report for 3102021.pdf	1154843	
Sturgeon Incidental Take Report for 03102021 #2.pdf	378710	

Options

Priority: Normal
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:

Appendix C, Part 2A (Sturgeon)

Photographs should be taken and the following information should be collected from all sturgeon (alive and dead). Please submit all necropsy results (including sex and stomach contents) to NMFS upon receipt. You must also complete and submit the "Sturgeon Data Collection Form"

Observer's full name: Alex Riehle (Environmental Consulting Services, Inc. [ECSI])

Reporter's full name: Alex Riehle

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station; Salem Circ-water trash basket

Date animal observed: 03/10/2021 Time animal observed: 12:00 PM

Date animal collected: 03/10/2021 Time animal collected: 09:30 AM

Environmental conditions at time of observation (i.e., tidal stage, weather):

Air temp. – 18.0 °C; Sal. – 6.0 ppt; Wind –SE; sky – clear; Wave – slight; tide- Ebb 2

If removed from intakes (trash racks or traveling screens):

Date and time of last inspection of screen: 03/10/2021; at 02:15 AM

Water temperature (°C) at site and time of observation: 5.0 °C

Number of pumps operating at time of observation: Unit 1: 6 circulators / Unit 2: 6 circulators

Average percent of power generating capacity achieved per unit at time of observation: Unit 1: 99.4% /Unit 2: 100.2%

Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 99.5% /Unit 2: 100.0%

STURGEON DATA COLLECTION FORM

For use in documenting sturgeon injury or mortality incidental to a federal action

OBSERVER'S CONTACT INFORMATION

Name: First **Alex** Last **Riehle**
Agency Affiliation **PSEG subcontractor** Email **Alexander.Riehle@pseg.com**
Address **100 South Cass Street, Middletown, DE 19709**
Area code/Phone number **(302) 378-9881** (Environmental Consulting Services, Inc.)

SEC 7 UNIQUE IDENTIFIER (PCTS
No. Assigned by NMFS)

DATE REPORTED:

Month 03 Day 10 Year 2021

DATE EXAMINED:

Month 03 Day 10 Year 2021

SPECIES: (check one)

- ☐ shortnose sturgeon
☒ Atlantic sturgeon
☐ Unidentified *Acipenser* species
Check "Unidentified" if uncertain. See reverse side of this form for aid in identification.

LOCATION FOUND: ☐ Offshore (Atlantic or Gulf beach) ☒ Inshore (bay, river, sound, inlet, etc)

River/Body of Water **Delaware River** City **Lower Alloways Creek** State **NJ**
Descriptive location (be specific) **Removed from Circulating Water Intake Structure (CWIS) trash collection basket during routine trash rack cleaning at the Salem Generating Station, PSEG Nuclear LLC.**

Latitude **39.460603°** (Dec. Degrees) Longitude **-75.536133°** (Dec. Degrees)

CARCASS CONDITION at time examined: (check one)

- ☐ 1 = Fresh dead
☐ 2 = Moderately decomposed
☐ 3 = Severely decomposed
☒ 4 = Dried carcass
☐ 5 = Skeletal, scutes & cartilage

SEX:

- ☒ Undetermined
☐ Female ☐ Male
How was sex determined?
☐ Necropsy
☐ Eggs/milt present when pressed
☐ Borescope

MEASUREMENTS:

Circle unit

Fork length **64.8 cm**
Total length **71.6 cm**
Length ☒ actual ☐ estimate
Mouth width (inside lips, see reverse side) **3.5 cm**
Interorbital width (see reverse side) **5.8 cm**
Weight ☒ actual ☐ estimate **1.2 kg**

TAGS PRESENT? Examined for external tags including fin clips? ☒ Yes ☐ No Scanned for PIT tags? ☒ Yes ☐ No

Tag #

Tag Type

Location of tag on carcass

No tag found

CARCASS DISPOSITION: (check one or more)

- ☐ 1 = Left where found
☐ 2 = Buried
☐ 3 = Collected for necropsy/salvage
☒ 4 = Frozen for later examination
☐ 5 = Other (describe).

Carcass Necropsied?

☐ Yes ☒ No

Date Necropsied: _____

Necropsy Lead: _____

PHOTODOCUMENTATION:

Photos/video taken? ☒ Yes ☐ No
Disposition of Photos/Video **PSEG Nuclear Environmental Affairs**

SAMPLES COLLECTED? ☒ Yes ☐ No

Sample

How preserved

Disposition (person, affiliation, use)

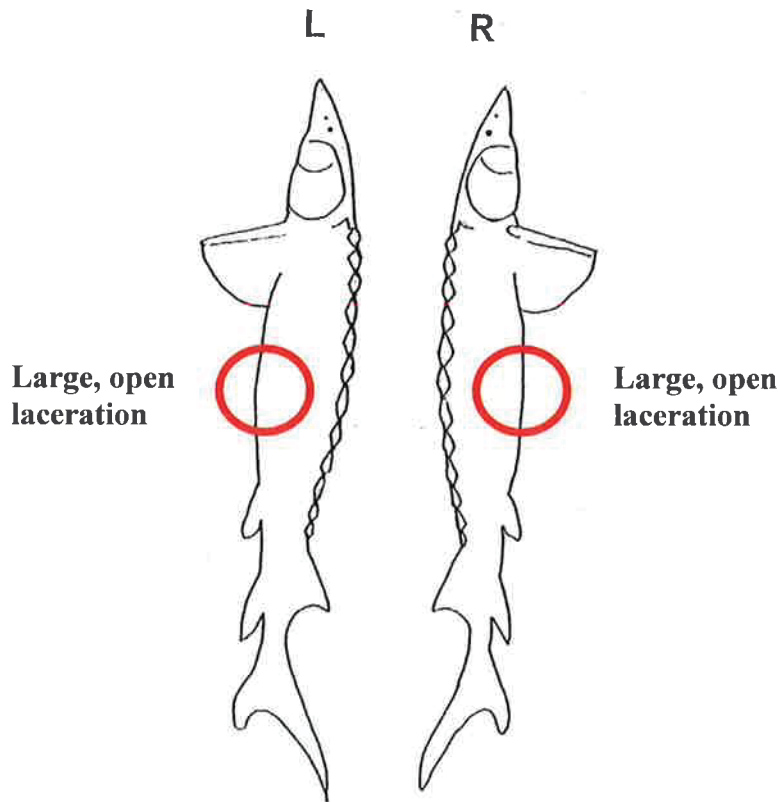
Pelvic fin clip

stored in non-denatured ethanol and refrigerated.

Held at the office of ECSI for aggregated shipment to designated laboratory.

Comments: A deceased and severely decomposed Atlantic sturgeon was collected from the Salem Circulating Water Intake Structure during routine trash rack cleaning on 03/10/21, at 09:30am. After positive identification was made by Environmental Consulting Services personnel, the specimen was measured, photographed, and inspected for tags. No evidence of external tags was found, and no existing PIT tags were indicated. A pelvic fin clip was also collected for future DNA analysis. Upon completion of processing, the specimen was placed on ice and prepared for transport back to the ECSI main office, where it will be stored under refrigeration, awaiting direction on further disposition. The fin clip sample has been stored in refrigeration and will be held for aggregated shipment to a designated laboratory.

Draw wounds, abnormalities, tag locations on diagram and briefly describe below



Describe any wounds / abnormalities (note tar or oil, gear or debris entanglement, propeller damage, etc.). **Please note if no wounds / abnormalities are found. Specimen was severely decomposed at the time of collection, as indicated by missing eyes, degraded dorsal, anal, and caudal fins, and exposed areas of bone on the head. A large, open ventral laceration exposing flesh and internal organs was located approximately mid-torso (refer to diagram above).**

Submit completed forms (within 24 hours of observation of fish): by e-mail to Incidental_Take@noaa.gov or by fax (978-281-9394). Questions can be directed to NMFS Protected Resources Division at 978-281-9328.

Data Access Policy: Upon written request, information submitted to National Marine Fisheries Service (NOAA Fisheries) on this form will be released to the requestor provided that the requestor credit the collector of the information and NOAA Fisheries. NOAA Fisheries will notify the collector that these data have been requested and the intent of their use.

Photographs



A dorsolateral view showing the size and condition of the deceased Atlantic sturgeon (*Acipenser oxyrinchus*), retrieved at approximately 09:30am on 03/10/2021 from the Salem Circulating Water Intake trash collection basket by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (03/10/2021).



A dorsolateral view of the right side of the specimen, showing evidence of severe decomposition, particularly in the area of the head and on all the major fins. An existing large, open laceration exposing flesh and internal organs, was located at approximately mid-torso on the carcass (03/10/2021).

Photographs



A close-up view of the ventral laceration described in the previous image (03/10/2021).



A close-up view of the head, showing the characteristic elongated rostrum, as well as evidence of the effects of prolonged decomposition (03/10/2021).

Appendix C, Part 2A (Sturgeon)

Photographs should be taken and the following information should be collected from all sturgeon (alive and dead). Please submit all necropsy results (including sex and stomach contents) to NMFS upon receipt. You must also complete and submit the "Sturgeon Data Collection Form"

Observer's full name: Beth Graham (Environmental Consulting Services, Inc. [ECSI])

Reporter's full name: Beth Graham

Species Identification : Shortnose sturgeon (Acipenser brevirostrum)

Site of Collection: PSEG Salem Generating Station; Salem Circ-water trash basket

Date animal observed: 03/10/2021 Time animal observed: 17:30 PM

Date animal collected: 03/10/2021 Time animal collected: 14:45 PM

Environmental conditions at time of observation (i.e., tidal stage, weather):

Air temp. – 18.0 °C; Sal. – 5.0 ppt; Wind –SE; sky – clear; Wave – slight; tide- FL1(89.5ft)

If removed from intakes (trash racks or traveling screens):

Date and time of last inspection of screen: 03/10/2021; at 10:08 AM

Water temperature (°C) at site and time of observation: 6.5 °C

Number of pumps operating at time of observation: Unit 1: 6 circulators / Unit 2: 6 circulators

Average percent of power generating capacity achieved per unit at time of observation: Unit 1: 99.6% /Unit 2: 98.2%

Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 99.5% /Unit 2: 99.7%

STURGEON DATA COLLECTION FORM

For use in documenting sturgeon injury or mortality incidental to a federal action

OBSERVER'S CONTACT INFORMATION

Name: First Beth Last Graham
Agency Affiliation PSEG subcontractor Email Beth.Graham@pseg.com
Address 100 South Cass Street, Middletown, DE 19709
Area code/Phone number (302) 378-9881 (Environmental Consulting Services, Inc.)

SEC 7 UNIQUE IDENTIFIER (PCTS
No. Assigned by NMFS)

DATE REPORTED:

Month 03 Day 10 Year 2021

DATE EXAMINED:

Month 03 Day 10 Year 2021

SPECIES: (check one)

- ☒ shortnose sturgeon
☐ Atlantic sturgeon
☐ Unidentified *Acipenser* species
Check "Unidentified" if uncertain. See reverse side of this form for aid in identification.

LOCATION FOUND: ☐ Offshore (Atlantic or Gulf beach) ☒ Inshore (bay, river, sound, inlet, etc)

River/Body of Water Delaware River City Lower Alloways Creek State NJ
Descriptive location (be specific) Removed from Circulating Water Intake Structure (CWIS) trash collection basket during routine trash rack cleaning at the Salem Generating Station, PSEG Nuclear LLC.

Latitude 39.460603° (Dec. Degrees) Longitude -75.536133° (Dec. Degrees)

CARCASS CONDITION at time examined: (check one)

- ☒ 1 = Fresh dead
☐ 2 = Moderately decomposed
☐ 3 = Severely decomposed
☐ 4 = Dried carcass
☐ 5 = Skeletal, scutes & cartilage

SEX:

- ☒ Undetermined
☐ Female ☐ Male
How was sex determined?
☐ Necropsy
☐ Eggs/milt present when pressed
☐ Borescope

MEASUREMENTS:

	Circle unit
Fork length	<u>61.0 cm</u>
Total length	<u>70.5 cm</u>
Length <input checked="" type="checkbox"/> actual <input type="checkbox"/> estimate	
Mouth width (inside lips, see reverse side)	<u>4.4 cm</u>
Interorbital width (see reverse side)	<u>5.7 cm</u>
Weight <input checked="" type="checkbox"/> actual <input type="checkbox"/> estimate	<u>1.0 kg</u>

TAGS PRESENT? Examined for external tags including fin clips? ☒ Yes ☐ No Scanned for PIT tags? ☒ Yes ☐ No

Tag #

Tag Type

Location of tag on carcass

No tag found

CARCASS DISPOSITION: (check one or more)

- ☐ 1 = Left where found
☐ 2 = Buried
☐ 3 = Collected for necropsy/salvage
☒ 4 = Frozen for later examination
☐ 5 = Other (describe).

Carcass Necropsied?

☐ Yes ☒ No

Date Necropsied: _____

Necropsy Lead: _____

PHOTODOCUMENTATION:

Photos/video taken? ☒ Yes ☐ No
Disposition of Photos/Video PSEG Nuclear Environmental Affairs

SAMPLES COLLECTED? ☒ Yes ☐ No

Sample

How preserved

Disposition (person, affiliation, use)

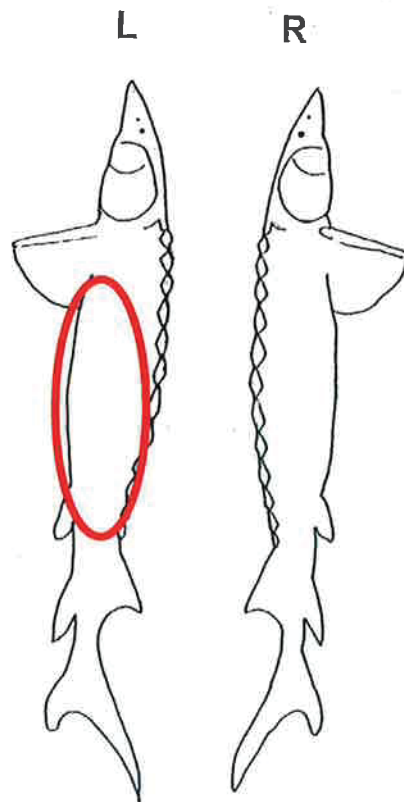
Pelvic fin clip

stored in non-denatured ethanol and refrigerated.

Held at the office of ECSI for aggregated shipment to designated laboratory.

Comments: A deceased shortnose sturgeon was collected from the Salem Circulating Water Intake Structure during routine trash rack cleaning on 03/10/21, at 14:45pm. After positive identification was made by Environmental Consulting Services personnel, the specimen was measured, photographed, and inspected for tags. No evidence of external tags was found, and no existing PIT tags were indicated. A pelvic fin clip was also collected for future DNA analysis. Upon completion of processing, the specimen was placed on ice and prepared for transport back to the ECSI main office, where it will be stored under refrigeration, awaiting direction on further disposition. The fin clip sample has been stored in refrigeration and will be held for aggregated shipment to a designated laboratory.

Draw wounds, abnormalities, tag locations on diagram and briefly describe below



Evidence of surface bruising and slight decomposition on left side of torso.

Describe any wounds / abnormalities (note tar or oil, gear or debris entanglement, propeller damage, etc.). **Please note if no wounds / abnormalities are found. Specimen was deceased at the time of collection, with evidence of surface bruising and slight decomposition observed on the left side of the torso. No additional wounds or damage was observed that would indicate a cause of death (refer to diagram above).**

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Photographs



A dorsolateral view showing the size and condition of the deceased shortnose sturgeon (*Acipenser brevirostrum*), retrieved at approximately 14:45pm on 03/10/2021 from the Salem Circulating Water Intake trash collection basket by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (03/10/2021).



A close-up view of the surface bruising and slight decomposition observed on the left side of the torso of the specimen (03/10/2021).

Photographs



A dorsal view of the specimen, showing the characteristic shortened rostrum (03/10/2021)



A ventral view of the head showing the shortened rostrum and the characteristic large mouth (03/10/2021)