

#### ***IV. BASIN TABLES***

Each basin is represented by three tables:  
Withdrawals, Diversions and Consumptive Uses  
Withdrawals by Source  
Basin Totals

*Lake Erie*  
*Lake Huron*  
*Lake Michigan*  
*Lake Ontario*  
*Lake Superior*  
*St. Lawrence River*

# BASIN REPORT- Lake Erie

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2000

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Indiana							
	Public Supply	45.19	0.00	6.83	45.13	0.00	6.82
	Domestic Supply	6.09	0.00	0.91	0.30	0.00	0.04
	Irrigation	1.00	0.00	0.90	0.81	0.00	0.72
	Livestock	0.98	0.00	0.79	0.00	0.00	0.00
	Industrial	10.74	0.00	0.64	10.45	0.00	0.63
	Fossil Fuel Power	0.27	0.00	0.01	0.27	0.00	0.01
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total	64.27	0.00	10.08	56.96	0.00	8.22
Michigan							
	Public Supply	580.67	0.00	72.59		0.00	
	Domestic Supply		0.00			0.00	
	Irrigation	17.59	0.00	15.83		0.00	
	Livestock		0.00			0.00	
	Industrial	342.29	0.00	34.23		0.00	
	Fossil Fuel Power	4106.48	0.00	49.28		0.00	
	Nuclear Power	47.34	0.00	0.90	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total	5094.37	0.00	172.83	0.00	0.00	0.00
New York							
	Public Supply	264.15	0.00	26.42		0.00	
	Domestic Supply	22.94	0.00	2.29	0.00	0.00	0.00
	Irrigation	0.08	0.00	0.07	0.08	0.00	0.07
	Livestock	4.30	0.00	3.87		0.00	
	Industrial	235.28	0.00	58.82	235.28	0.00	58.82
	Fossil Fuel Power	1160.30	0.00	23.21	1160.30	0.00	23.21
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	40386.00	0.00	0.00	40386.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total	42073.05	0.00	114.68	41781.66	0.00	82.10

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Ohio							
	Public Supply	596.62	0.29	89.49	592.80	0.29	88.92
	Domestic Supply	60.89	0.00	9.12	2.76	0.00	0.41
	Irrigation	15.47	0.00	13.92	11.36	0.00	10.22
	Livestock	14.51	0.00	11.61	1.21	0.00	0.97
	Industrial	210.07	0.00	21.00	208.80	0.00	20.87
	Fossil Fuel Power	2160.05	0.00	21.60	2160.05	0.00	21.60
	Nuclear Power	131.62	0.00	19.74	131.62	0.00	19.74
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	3.12	-9.88	0.00	2.90	0.00	0.00
	Total	3192.35	-9.59	186.48	3111.50	0.29	162.73
Ontario							
	Public Supply	93.89	0.00	14.08	92.84	0.00	13.92
	Domestic Supply	19.94	0.00	2.99	0.00	0.00	0.00
	Irrigation	31.85	0.00			0.00	
	Livestock	13.22	0.00			0.00	
	Industrial	180.45	0.00	11.37	0.00	0.00	0.00
	Fossil Fuel Power	463.20	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total	802.56	0.00	28.44	92.84	0.00	13.92
Pennsylvania							
	Public Supply	44.61	-0.86	4.46	44.05	0.00	4.41
	Domestic Supply	1.97	0.00	0.20	0.00	0.00	0.00
	Irrigation	0.35	0.00	0.32	0.33	0.00	0.30
	Livestock		0.00			0.00	
	Industrial	41.94	0.00	8.95	41.69	0.00	8.89
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total	88.87	-0.86	13.93	86.07	0.00	13.60
Grand Total:		51315.47	-10.45	526.44	45129.02	0.29	280.57

# BASIN REPORT- Lake Erie

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2000

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Indiana							
	Public Supply	0.00	36.35	8.84	0.00	36.35	8.78
	Domestic Supply	0.00	0.00	6.09	0.00	0.00	0.30
	Irrigation	0.00	0.29	0.71	0.00	0.17	0.64
	Livestock	0.00	0.00	0.98	0.00	0.00	0.00
	Industrial	0.00	5.04	5.70	0.00	5.01	5.44
	Fossil Fuel Power	0.00	0.00	0.27	0.00	0.00	0.27
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	TOTAL	0.00	41.68	22.59	0.00	41.53	15.43
Michigan							
	Public Supply	523.96	16.86	39.85			
	Domestic Supply						
	Irrigation	0.32	9.68	7.59			
	Livestock						
	Industrial	314.48	6.77	21.04			
	Fossil Fuel Power	4106.41	0.00	0.07			
	Nuclear Power	47.34	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other						
	TOTAL	4992.51	33.31	68.55	0.00	0.00	0.00
New York							
	Public Supply	184.58	72.12	7.45			
	Domestic Supply	12.33	0.00	10.61	0.00	0.00	0.00
	Irrigation	0.00	0.08	0.00	0.00	0.08	0.00
	Livestock	1.54	0.00	2.76			
	Industrial	233.95	0.96	0.37	233.95	0.96	0.37
	Fossil Fuel Power	1160.30	0.00	0.00	1160.30	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	40386.00	0.00	0.00	40386.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	TOTAL	41978.70	73.16	21.19	41780.25	1.04	0.37

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Ohio							
	Public Supply	430.54	129.81	36.27	430.32	129.69	32.79
	Domestic Supply	0.37	2.39	58.13	0.37	2.39	0.00
	Irrigation	0.18	10.28	5.01	0.00	8.27	3.09
	Livestock	0.00	2.94	11.57	0.00	0.79	0.42
	Industrial	39.52	126.04	44.51	39.52	125.65	43.63
	Fossil Fuel Power	2153.68	6.37	0.00	2153.68	6.37	0.00
	Nuclear Power	131.62	0.00	0.00	131.62	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.04	2.98	0.10	0.00	2.90	0.00
	TOTAL	2755.95	280.81	155.59	2755.51	276.06	79.93
Ontario							
	Public Supply	8.97	29.26	55.66	8.97	29.23	54.64
	Domestic Supply	0.00	0.00	19.94	0.00	0.00	0.00
	Irrigation	0.59	12.11	19.15			
	Livestock	0.02	0.89	12.31			
	Industrial	173.24	0.00	7.21	0.00	0.00	0.00
	Fossil Fuel Power	463.20	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other						
	TOTAL	646.02	42.26	114.27	8.97	29.23	54.64
Pennsylvania							
	Public Supply	40.80	1.77	2.04	40.80	1.74	1.51
	Domestic Supply	0.00	0.00	1.97	0.00	0.00	0.00
	Irrigation	0.00	0.29	0.06	0.00	0.27	0.06
	Livestock						
	Industrial	40.85	0.84	0.25	40.85	0.78	0.07
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other						
	TOTAL	81.65	2.90	4.32	81.65	2.78	1.64
Grand Total:		50454.83	474.12	386.51	44626.38	350.64	152.01

# BASIN REPORT- Lake Erie

Basin Total

Units: Mgal(US)/d

Year Of Data: 2000

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	1188.85	286.18	150.11	1625.13	0.00	-0.57	213.87
Domestic Supply	12.70	2.39	96.74	111.83	0.00	0.00	15.51
Irrigation	1.09	32.73	32.52	66.34	0.00	0.00	31.04
Livestock	1.56	3.83	27.62	33.01	0.00	0.00	16.27
Industrial	802.04	139.65	79.08	1020.77	0.00	0.00	135.01
Fossil Fuel Power	7883.59	6.37	0.34	7890.30	0.00	0.00	94.10
Nuclear Power	178.96	0.00	0.00	178.96	0.00	0.00	20.64
Hydroelectric Power	40386.00	0.00	0.00	40386.00	0.00	0.00	0.00
Other	0.04	2.98	0.10	3.12	5105.39	-9.88	0.00

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	480.09	197.00	97.72	774.81	0.00	0.29	114.07
Domestic Supply	0.37	2.39	0.30	3.06	0.00	0.00	0.45
Irrigation	0.00	8.79	3.79	12.58	0.00	0.00	11.31
Livestock	0.00	0.79	0.42	1.21	0.00	0.00	0.97
Industrial	314.32	132.40	49.51	496.22	0.00	0.00	89.21
Fossil Fuel Power	3313.98	6.37	0.27	3320.62	0.00	0.00	44.82
Nuclear Power	131.62	0.00	0.00	131.62	0.00	0.00	19.74
Hydroelectric Power	40386.00	0.00	0.00	40386.00	0.00	0.00	0.00
Other	0.00	2.90	0.00	2.90	5105.39	0.00	0.00

# BASIN REPORT- Lake Huron

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2000

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Michigan							
	Public Supply	255.46	0.00	31.93		0.00	
	Domestic Supply		0.00			0.00	
	Irrigation	22.03	0.00	19.83		0.00	
	Livestock		0.00			0.00	
	Industrial	37.96	0.00	3.80		0.00	
	Fossil Fuel Power	850.06	0.00	10.20		0.00	
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total	1165.51	0.00	65.76	0.00	0.00	0.00
Ontario							
	Public Supply	84.37	0.00	12.65	81.66	0.00	12.25
	Domestic Supply	10.61	0.00	1.59	0.00	0.00	0.00
	Irrigation	20.91	0.00			0.00	
	Livestock	12.41	0.00			0.00	
	Industrial	190.19	0.00	11.98	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	4697.20	0.00	42.28	0.00	0.00	0.00
	Hydroelectric Power	33608.07	0.00	0.00	0.00	0.00	0.00
	Other	47.97	0.00	0.00	47.97	0.00	0.00
	Total	38671.73	0.00	68.50	129.63	0.00	12.25
Grand Total:		39837.24	0.00	134.26	129.63	0.00	12.25

# BASIN REPORT- Lake Huron

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2000

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Michigan							
	Public Supply	223.01	0.75	31.70			
	Domestic Supply						
	Irrigation	2.33	8.38	11.32			
	Livestock						
	Industrial	20.95	15.19	1.82			
	Fossil Fuel Power	849.21	0.00	0.85			
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other						
	TOTAL	1095.50	24.32	45.69	0.00	0.00	0.00
Ontario							
	Public Supply	42.66	23.57	18.14	42.02	23.23	16.40
	Domestic Supply	0.00	0.00	10.61	0.00	0.00	0.00
	Irrigation	0.15	15.41	5.35			
	Livestock	2.93	3.07	6.41			
	Industrial	187.41	0.00	2.78	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	4697.20	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	20000.41	13607.66	0.00	0.00	0.00	0.00
	Other	0.00	47.97	0.00	0.00	47.97	0.00
	TOTAL	24930.76	13697.68	43.29	42.02	71.20	16.40
Grand Total:		26026.26	13722.00	88.98	42.02	71.20	16.40



# BASIN REPORT- Lake Huron

Basin Total

Units: Mgal(US)/d

Year Of Data: 2000

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	265.67	24.32	49.84	339.83	0.00	0.00	44.58
Domestic Supply	0.00	0.00	10.61	10.61	0.00	0.00	1.59
Irrigation	2.48	23.79	16.67	42.94	0.00	0.00	19.83
Livestock	2.93	3.07	6.41	12.41	0.00	0.00	
Industrial	208.36	15.19	4.60	228.15	0.00	0.00	15.78
Fossil Fuel Power	849.21	0.00	0.85	850.06	0.00	0.00	10.20
Nuclear Power	4697.20	0.00	0.00	4697.20	0.00	0.00	42.28
Hydroelectric Power	20000.41	13607.66	0.00	33608.07	0.00	0.00	0.00
Other	0.00	47.97	0.00	47.97	47.97	0.00	0.00

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	42.02	23.23	16.40	81.66	0.00	0.00	12.25
Domestic Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Irrigation					0.00	0.00	
Livestock					0.00	0.00	
Industrial	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	47.97	0.00	47.97	47.97	0.00	0.00

# BASIN REPORT- Lake Michigan

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2000

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Illinois							
	Public Supply	1095.80	1095.80	0.00	1095.80	1095.80	0.00
	Domestic Supply	4.38	0.00	0.44	4.38	0.00	0.44
	Irrigation	0.00	0.00	0.00	0.00	0.00	0.00
	Livestock	0.00	0.00	0.00	0.00	0.00	0.00
	Industrial	19.67	2.94	1.96	19.67	2.94	1.96
	Fossil Fuel Power	709.69	0.00	14.19	709.69	0.00	14.19
	Nuclear Power	21.60	0.00	0.43	21.60	0.00	0.43
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	308.78	308.78	0.00	308.78	308.78	0.00
	Total	2159.93	1407.53	17.02	2159.93	1407.53	17.02
Indiana							
	Public Supply	142.96	-2.24	21.45	142.66	0.00	21.40
	Domestic Supply	43.89	0.00	6.58	22.12	0.00	3.32
	Irrigation	26.06	0.00	23.46	25.44	0.00	22.89
	Livestock	5.09	0.00	4.07	2.88	0.00	2.31
	Industrial	1789.01	0.00	107.35	1788.49	0.00	107.31
	Fossil Fuel Power	1156.89	0.00	23.14	1156.89	0.00	23.14
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	2011.18	0.00	0.00	2011.18	0.00	0.00
	Other	0.18	0.00	0.03	0.09	0.00	0.01
	Total	5175.26	-2.24	186.08	5149.75	0.00	180.38
Michigan							
	Public Supply	293.42	0.00	36.68		0.00	
	Domestic Supply		0.00			0.00	
	Irrigation	161.54	0.00	145.39		0.00	
	Livestock		0.00			0.00	
	Industrial	292.74	0.00	29.28		0.00	
	Fossil Fuel Power	1169.01	0.00	14.02		0.00	
	Nuclear Power	1266.00	0.00	24.05	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total	3182.71	0.00	249.42	0.00	0.00	0.00

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Wisconsin							
	Public Supply	360.55	0.93	55.41	360.55	0.32	54.09
	Domestic Supply	32.31	0.00	4.85	0.00	0.00	0.00
	Irrigation	47.55	0.00	33.84	8.01	0.00	1.20
	Livestock	25.04	0.00	16.04	0.00	0.00	0.00
	Industrial	267.09	0.00	40.06	263.65	0.00	39.55
	Fossil Fuel Power	3907.87	0.00	38.92	3892.30	0.00	38.92
	Nuclear Power	1965.93	0.00	19.66	1965.80	0.00	19.66
	Hydroelectric Power	3421.89	0.00	0.00	3421.89	0.00	0.00
	Other		0.00			0.00	
	Total	10028.23	0.93	208.78	9912.20	0.32	153.42
Grand Total:		20546.13	1406.22	661.30	17221.88	1407.85	350.82

# BASIN REPORT- Lake Michigan

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2000

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Illinois							
	Public Supply	1095.80	0.00	0.00	1095.80	0.00	0.00
	Domestic Supply	0.00	0.00	4.38	0.00	0.00	4.38
	Irrigation	0.00	0.00	0.00	0.00	0.00	0.00
	Livestock	0.00	0.00	0.00	0.00	0.00	0.00
	Industrial	19.67	0.00	0.00	19.67	0.00	0.00
	Fossil Fuel Power	709.69	0.00	0.00	709.69	0.00	0.00
	Nuclear Power	21.60	0.00	0.00	21.60	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	308.78	0.00	0.00	308.78	0.00	0.00
	TOTAL	2155.55	0.00	4.38	2155.55	0.00	4.38
Indiana							
	Public Supply	95.12	0.00	47.84	95.12	0.00	47.54
	Domestic Supply	0.00	16.50	27.39	0.00	16.49	5.63
	Irrigation	0.00	6.93	19.13	0.00	6.62	18.82
	Livestock	0.00	1.36	3.73	0.00	1.36	1.52
	Industrial	1397.95	376.10	14.96	1397.95	376.08	14.46
	Fossil Fuel Power	1156.89	0.00	0.00	1156.89	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	2011.18	0.00	0.00	2011.18	0.00
	Other	0.00	0.05	0.13	0.00	0.05	0.04
	TOTAL	2649.96	2412.12	113.18	2649.96	2411.78	88.01
Michigan							
	Public Supply	124.81	2.93	165.68			
	Domestic Supply						
	Irrigation	1.44	50.89	109.21			
	Livestock						
	Industrial	113.27	93.40	86.07			
	Fossil Fuel Power	916.65	250.41	1.95			
	Nuclear Power	1266.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other						
	TOTAL	2422.17	397.63	362.91	0.00	0.00	0.00

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Wisconsin							
	Public Supply	256.01	25.09	79.45	256.01	25.09	79.45
	Domestic Supply	0.00	0.00	32.31	0.00	0.00	0.00
	Irrigation	0.00	0.00	47.55	0.00	0.00	8.01
	Livestock	0.00	1.84	23.20	0.00	0.00	0.00
	Industrial	1.61	227.64	37.84	1.61	224.20	37.84
	Fossil Fuel Power	3892.30	15.56	0.01	3876.74	15.56	0.00
	Nuclear Power	1965.80	0.00	0.13	1965.80	0.00	0.00
	Hydroelectric Power	0.00	3421.89	0.00	0.00	3421.89	0.00
	Other						
	TOTAL	6115.72	3692.02	220.49	6100.16	3686.74	125.30
Grand Total:		13343.40	6501.77	700.96	10905.67	6098.52	217.69

# BASIN REPORT- Lake Michigan

Basin Total

Units: Mgal(US)/d

Year Of Data: 2000

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	1571.74	28.02	292.97	1892.73	0.00	1094.49	113.54
Domestic Supply	0.00	16.50	64.08	80.58	0.00	0.00	11.87
Irrigation	1.44	57.82	175.89	235.15	0.00	0.00	202.69
Livestock	0.00	3.20	26.93	30.13	0.00	0.00	20.11
Industrial	1532.50	697.14	138.87	2368.51	0.00	2.94	178.65
Fossil Fuel Power	6675.53	265.97	1.96	6943.46	0.00	0.00	90.27
Nuclear Power	3253.40	0.00	0.13	3253.53	0.00	0.00	44.14
Hydroelectric Power	0.00	5433.07	0.00	5433.07	0.00	0.00	0.00
Other	308.78	0.05	0.13	308.96	0.00	308.78	0.03

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	1446.93	25.09	126.99	1599.01	0.00	1096.12	75.49
Domestic Supply	0.00	16.49	10.01	26.50	0.00	0.00	3.76
Irrigation	0.00	6.62	26.83	33.45	0.00	0.00	24.09
Livestock	0.00	1.36	1.52	2.88	0.00	0.00	2.31
Industrial	1419.23	600.28	52.30	2071.81	0.00	2.94	148.82
Fossil Fuel Power	5743.32	15.56	0.00	5758.88	0.00	0.00	76.25
Nuclear Power	1987.40	0.00	0.00	1987.40	0.00	0.00	20.09
Hydroelectric Power	0.00	5433.07	0.00	5433.07	0.00	0.00	0.00
Other	308.78	0.05	0.04	308.87	0.00	308.78	0.01

# BASIN REPORT- Lake Ontario

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2000

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
New York							
	Public Supply	412.91	9.62	49.94		9.62	
	Domestic Supply	93.41	0.00	9.34	31.52	0.00	3.15
	Irrigation	1.54	0.00	1.38	1.54	0.00	1.38
	Livestock	11.19	0.00	10.07		0.00	
	Industrial	87.79	0.00	21.95	87.79	0.00	21.95
	Fossil Fuel Power	861.19	0.00	17.23	861.19	0.00	17.23
	Nuclear Power	1350.21	0.00	67.51	1350.21	0.00	67.51
	Hydroelectric Power	80908.00	0.00	0.00	0.00	0.00	0.00
	Other	752.30	32.00	32.94	752.30	32.00	32.01
	Total	84478.54	41.62	210.36	3084.55	41.62	143.23
Ontario							
	Public Supply	465.93	0.00	69.89	464.62	0.00	69.69
	Domestic Supply	64.17	0.00	9.63	0.00	0.00	0.00
	Irrigation	17.73	0.00			0.00	
	Livestock	5.40	0.00			0.00	
	Industrial	229.64	0.00	14.47	0.00	0.00	0.00
	Fossil Fuel Power	708.95	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	5428.19	0.00	48.85	0.00	0.00	0.00
	Hydroelectric Power	41542.31	0.00	0.00	0.00	0.00	0.00
	Other	132.35	0.00	0.00	132.35	0.00	0.00
	Total	48594.67	0.00	142.84	596.97	0.00	69.69
Pennsylvania							
	Public Supply	0.09	0.00	0.01	0.00	0.00	0.00
	Domestic Supply	0.07	0.00	0.01	0.00	0.00	0.00
	Irrigation	0.00	0.00	0.00	0.00	0.00	0.00
	Livestock	0.00	0.00	0.00	0.00	0.00	0.00
	Industrial	0.00	0.00	0.00	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.17	0.00	0.02	0.00	0.00	0.00
Grand Total:		133073.38	41.62	353.21	3681.52	41.62	212.92

# BASIN REPORT- Lake Ontario

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2000

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
New York							
	Public Supply	196.24	178.40	38.27			
	Domestic Supply	21.10	31.52	40.79	0.00	31.52	0.00
	Irrigation	0.00	1.49	0.05	0.00	1.49	0.05
	Livestock	3.93	0.00	7.26			
	Industrial	40.32	38.36	9.11	40.32	38.36	9.11
	Fossil Fuel Power	452.29	408.90	0.00	452.29	408.90	0.00
	Nuclear Power	1350.21	0.00	0.00	1350.21	0.00	0.00
	Hydroelectric Power	0.00	80908.00	0.00	0.00	0.00	0.00
	Other	711.00	41.19	0.11	711.00	41.19	0.11
	TOTAL	2775.09	81607.86	95.59	2553.82	521.46	9.27
Ontario							
	Public Supply	401.52	52.86	11.56	401.47	52.68	10.47
	Domestic Supply	0.00	0.00	64.17	0.00	0.00	0.00
	Irrigation	1.08	9.53	7.12			
	Livestock	0.00	0.94	4.46			
	Industrial	218.17	0.00	11.46	0.00	0.00	0.00
	Fossil Fuel Power	708.95	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	5428.19	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	33861.04	7681.26	0.00	0.00	0.00	0.00
	Other	0.00	132.35	0.00	0.00	132.35	0.00
	TOTAL	40618.96	7876.94	98.77	401.47	185.03	10.47
Pennsylvania							
	Public Supply	0.00	0.00	0.09	0.00	0.00	0.00
	Domestic Supply	0.00	0.00	0.07	0.00	0.00	0.00
	Irrigation	0.00	0.00	0.00	0.00	0.00	0.00
	Livestock	0.00	0.00	0.00	0.00	0.00	0.00
	Industrial	0.00	0.00	0.00	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	TOTAL	0.00	0.00	0.17	0.00	0.00	0.00
Grand Total:		43394.05	89484.80	194.53	2955.29	706.49	19.74



# BASIN REPORT- Lake Ontario

Basin Total

Units: Mgal(US)/d

Year Of Data: 2000

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	597.76	231.26	49.92	878.93	0.00	9.62	119.84
Domestic Supply	21.10	31.52	105.03	157.65	0.00	0.00	18.97
Irrigation	1.08	11.02	7.17	19.27	0.00	0.00	1.38
Livestock	3.93	0.94	11.72	16.59	0.00	0.00	10.07
Industrial	258.49	38.36	20.57	317.43	0.00	0.00	36.42
Fossil Fuel Power	1161.24	408.90	0.00	1570.14	0.00	0.00	17.23
Nuclear Power	6778.40	0.00	0.00	6778.40	0.00	0.00	116.36
Hydroelectric Power	33861.04	88589.26	0.00	122450.31	0.00	0.00	0.00
Other	711.00	173.54	0.11	884.65	-4380.39	32.00	32.94

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	401.47	52.68	10.47	464.62	0.00	9.62	69.69
Domestic Supply	0.00	31.52	0.00	31.52	0.00	0.00	3.15
Irrigation	0.00	1.49	0.05	1.54	0.00	0.00	1.38
Livestock	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Industrial	40.32	38.36	9.11	87.79	0.00	0.00	21.95
Fossil Fuel Power	452.29	408.90	0.00	861.19	0.00	0.00	17.23
Nuclear Power	1350.21	0.00	0.00	1350.21	0.00	0.00	67.51
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	711.00	173.54	0.11	884.65	-4380.39	32.00	32.01

# BASIN REPORT- Lake Superior

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2000

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Michigan							
	Public Supply	13.75	0.00	1.72		0.00	
	Domestic Supply		0.00			0.00	
	Irrigation	0.26	0.00	0.24		0.00	
	Livestock		0.00			0.00	
	Industrial	25.23	0.00	2.53		0.00	
	Fossil Fuel Power	269.24	0.00	3.23		0.00	
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total	308.48	0.00	7.72	0.00	0.00	0.00
Minnesota							
	Public Supply	40.55	0.00	4.06	39.76	0.00	3.98
	Domestic Supply	0.79	0.00	0.08	0.73	0.00	0.07
	Irrigation	0.31	0.00	0.28	0.14	0.00	0.13
	Livestock	0.71	0.00	0.64	0.71	0.00	0.64
	Industrial	365.22	0.00	36.52	364.82	0.00	36.48
	Fossil Fuel Power	173.90	0.00	3.47	173.81	0.00	3.47
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	4094.12	0.00	0.00	4094.12	0.00	0.00
	Other	0.80	0.00	0.00	0.18	0.00	0.00
	Total	4676.39	0.00	45.06	4674.27	0.00	44.77
Ontario							
	Public Supply	45.77	0.00	6.87	45.58	0.00	6.84
	Domestic Supply	1.75	0.00	0.26	0.00	0.00	0.00
	Irrigation	0.37	0.00			0.00	
	Livestock	0.14	0.00			0.00	
	Industrial	162.12	0.00	10.21	0.00	0.00	0.00
	Fossil Fuel Power	295.52	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	38156.31	4007.75	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total	38661.99	4007.75	17.34	45.58	0.00	6.84

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Wisconsin							
	Public Supply	8.24	0.00	1.23	3.84	0.00	0.57
	Domestic Supply	2.23	0.00	0.33	0.00	0.00	0.00
	Irrigation		0.00			0.00	
	Livestock	3.65	0.00	2.94	0.00	0.00	0.00
	Industrial	0.17	0.00	0.02	0.00	0.00	0.00
	Fossil Fuel Power	12.74	0.00	0.13	12.74	0.00	0.13
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	209.44	0.00	0.00	209.44	0.00	0.00
	Other		0.00			0.00	
	Total	236.47	0.00	4.65	226.02	0.00	0.70
Grand Total:		43883.33	4007.75	74.77	4945.86	0.00	52.31

# BASIN REPORT- Lake Superior

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2000

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Michigan							
	Public Supply	3.95	0.00	9.80			
	Domestic Supply						
	Irrigation	0.01	0.10	0.15			
	Livestock						
	Industrial	24.88	0.00	0.35			
	Fossil Fuel Power	269.24	0.00	0.00			
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other						
	TOTAL	298.08	0.10	10.30	0.00	0.00	0.00
Minnesota							
	Public Supply	32.79	3.00	4.76	32.74	2.99	4.02
	Domestic Supply	0.56	0.22	0.01	0.54	0.19	0.00
	Irrigation	0.03	0.28	0.01	0.00	0.14	0.00
	Livestock	0.71	0.00	0.00	0.71	0.00	0.00
	Industrial	278.27	86.92	0.03	278.24	86.58	0.00
	Fossil Fuel Power	0.60	173.16	0.14	0.60	173.09	0.12
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	4094.12	0.00	0.00	4094.12	0.00
	Other	0.60	0.18	0.02	0.00	0.18	0.00
	TOTAL	313.56	4357.88	4.96	312.83	4357.30	4.15
Ontario							
	Public Supply	30.10	13.03	2.65	30.07	12.96	2.55
	Domestic Supply	0.00	0.00	1.75	0.00	0.00	0.00
	Irrigation	0.02	0.31	0.05			
	Livestock	0.00	0.14	0.00			
	Industrial	162.12	0.00	0.00	0.00	0.00	0.00
	Fossil Fuel Power	295.52	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	38156.31	0.00	0.00	0.00	0.00
	Other						
	TOTAL	487.76	38169.79	4.44	30.07	12.96	2.55

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Wisconsin							
	Public Supply	4.55	0.00	3.69	3.84	0.00	0.00
	Domestic Supply	0.00	0.00	2.23	0.00	0.00	0.00
	Irrigation						
	Livestock	0.00	0.02	3.63	0.00	0.00	0.00
	Industrial	0.00	0.13	0.04	0.00	0.00	0.00
	Fossil Fuel Power	12.74	0.00	0.00	12.74	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	209.44	0.00	0.00	209.44	0.00
	Other						
	TOTAL	17.29	209.59	9.59	16.58	209.44	0.00
Grand Total:		1116.68	42737.36	29.29	359.48	4579.69	6.69

# BASIN REPORT- Lake Superior

Basin Total

Units: Mgal(US)/d

Year Of Data: 2000

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	71.39	16.02	20.90	108.31	0.00	0.00	13.88
Domestic Supply	0.56	0.22	3.98	4.76	0.00	0.00	0.67
Irrigation	0.06	0.68	0.20	0.95	0.00	0.00	0.52
Livestock	0.71	0.16	3.63	4.50	0.00	0.00	3.58
Industrial	465.27	87.05	0.42	552.74	0.00	0.00	49.29
Fossil Fuel Power	578.10	173.16	0.14	751.40	0.00	0.00	6.83
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	42459.87	0.00	42459.87	0.00	4007.75	0.00
Other	0.60	0.18	0.02	0.80	0.00	0.00	0.00

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	66.65	15.95	6.57	89.18	0.00	0.00	11.39
Domestic Supply	0.54	0.19	0.00	0.73	0.00	0.00	0.07
Irrigation	0.00	0.14	0.00	0.14	0.00	0.00	0.13
Livestock	0.71	0.00	0.00	0.71	0.00	0.00	0.64
Industrial	278.24	86.58	0.00	364.82	0.00	0.00	36.48
Fossil Fuel Power	13.34	173.09	0.12	186.55	0.00	0.00	3.60
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	4303.56	0.00	4303.56	0.00	0.00	0.00
Other	0.00	0.18	0.00	0.18	0.00	0.00	0.00

# BASIN REPORT- St. Lawrence River

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2000

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
New York							
	Public Supply	42.87	0.00	4.28		0.00	
	Domestic Supply	15.24	0.00	1.53	0.57	0.00	0.06
	Irrigation	0.43	0.00	0.39	0.43	0.00	0.39
	Livestock	5.08	0.00	4.57		0.00	
	Industrial	19.00	0.00	4.75	19.00	0.00	4.75
	Fossil Fuel Power	0.10	0.00	0.00	0.10	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	175519.00	0.00	0.00	76827.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total	175601.72	0.00	15.52	76847.10	0.00	5.20
Ontario							
	Public Supply	73.03	0.00	10.96	72.08	0.00	10.82
	Domestic Supply	11.45	0.00	1.72	0.00	0.00	0.00
	Irrigation	2.35	0.00			0.00	
	Livestock	5.91	0.00			0.00	
	Industrial	160.81	0.00	10.13	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	76235.15	0.00	0.00	0.00	0.00	0.00
	Other	19.28	0.00	0.00	19.28	0.00	0.00
	Total	76507.99	0.00	22.80	91.37	0.00	10.82
Quebec							
	Public Supply	1100.01	0.00	109.90	1096.05	0.00	109.63
	Domestic Supply	71.59	0.00	7.13	48.61	0.00	4.76
	Irrigation	9.22	0.00	8.30		0.00	
	Livestock	19.10	0.00	15.28		0.00	
	Industrial	125.48	0.00	12.55	124.95	0.00	12.50
	Fossil Fuel Power	47.02	0.00	4.70	47.02	0.00	4.70
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	303895.85	0.00	0.00	303895.85	0.00	0.00
	Other		0.00			0.00	
	Total	305268.28	0.00	157.86	305212.48	0.00	131.58
Grand Total:		557377.98	0.00	196.18	382150.95	0.00	147.60

# BASIN REPORT- St. Lawrence River

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2000

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
New York							
	Public Supply	2.83	35.32	4.72			
	Domestic Supply	2.55	0.57	12.12	0.00	0.57	0.00
	Irrigation	0.00	0.43	0.00	0.00	0.43	0.00
	Livestock	1.77	0.00	3.31			
	Industrial	7.22	9.77	2.01	7.22	9.77	2.01
	Fossil Fuel Power	0.10	0.00	0.00	0.10	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	76827.00	98692.00	0.00	76827.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	TOTAL	76841.47	98738.09	22.16	76834.32	10.77	2.01
Ontario							
	Public Supply	10.64	58.84	3.56	10.64	58.52	2.93
	Domestic Supply	0.00	0.00	11.45	0.00	0.00	0.00
	Irrigation	0.01	2.04	0.30			
	Livestock	0.00	3.63	2.28			
	Industrial	159.76	0.00	1.05	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	76149.02	86.13	0.00	0.00	0.00	0.00
	Other	0.00	19.28	0.00	0.00	19.28	0.00
	TOTAL	76319.43	169.91	18.65	10.64	77.80	2.93
Quebec							
	Public Supply	602.84	497.17	0.00	602.58	493.47	0.00
	Domestic Supply	0.00	0.00	71.59	0.00	0.00	48.61
	Irrigation	0.00	0.00	9.22			
	Livestock	0.00	0.00	19.10			
	Industrial	0.00	125.48	0.00	0.00	124.95	0.00
	Fossil Fuel Power	39.10	7.93	0.00	39.10	7.93	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	170946.25	132949.60	0.00	170946.25	132949.60	0.00
	Other						
	TOTAL	171588.19	133580.18	99.91	171587.93	133575.95	48.61
Grand Total:		324749.09	232488.18	140.72	248432.89	133664.52	53.54



# BASIN REPORT- St. Lawrence River

Basin Total

Units: Mgal(US)/d

Year Of Data: 2000

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	616.31	591.33	8.28	1215.91	0.00	0.00	125.13
Domestic Supply	2.55	0.57	95.16	98.28	0.00	0.00	10.38
Irrigation	0.01	2.47	9.52	12.00	0.00	0.00	8.69
Livestock	1.77	3.63	24.69	30.09	0.00	0.00	19.85
Industrial	166.98	135.25	3.06	305.29	0.00	0.00	27.43
Fossil Fuel Power	39.20	7.93	0.00	47.12	0.00	0.00	4.70
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	323922.28	231727.72	0.00	555650.00	0.00	0.00	0.00
Other	0.00	19.28	0.00	19.28	0.00	0.00	0.00

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	613.22	551.99	2.93	1168.13	0.00	0.00	120.45
Domestic Supply	0.00	0.57	48.61	49.18	0.00	0.00	4.82
Irrigation	0.00	0.43	0.00	0.43	0.00	0.00	0.39
Livestock					0.00	0.00	
Industrial	7.22	134.72	2.01	143.95	0.00	0.00	17.25
Fossil Fuel Power	39.20	7.93	0.00	47.12	0.00	0.00	4.70
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	247773.25	132949.60	0.00	380722.85	0.00	0.00	0.00
Other	0.00	19.28	0.00	19.28	0.00	0.00	0.00

#### ***IV. BASIN TABLES***

Each basin is represented by three tables:  
Withdrawals, Diversions and Consumptive Uses  
Withdrawals by Source  
Basin Totals

Lake Erie  
Lake Huron  
Lake Michigan  
Lake Ontario  
Lake Superior  
St. Lawrence River

# BASIN REPORT- Lake Erie

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2001

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Indiana							
	Public Supply	44.18	0.00	6.63	44.10	0.00	6.62
	Domestic Supply	6.36	0.00	0.95	0.32	0.00	0.05
	Irrigation	1.07	0.00	0.96	0.87	0.00	0.78
	Livestock	0.97	0.00	0.78	0.00	0.00	0.00
	Industrial	8.79	0.00	0.53	8.62	0.00	0.52
	Fossil Fuel Power	0.27	0.00	0.01	0.27	0.00	0.01
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total	61.64	0.00	9.86	54.18	0.00	7.98
Michigan							
	Public Supply	613.24	0.00	76.66			
	Domestic Supply		0.00				
	Irrigation	22.54	0.00	20.28			
	Livestock		0.00				
	Industrial	354.35	0.00	35.43			
	Fossil Fuel Power	4098.56	0.00	49.18			
	Nuclear Power	51.61	0.00	0.98			
	Hydroelectric Power	0.00	0.00	0.00			
	Other		0.00				
	Total	5140.30	0.00	182.53			
New York							
	Public Supply	281.21	0.00	28.12		0.00	
	Domestic Supply	22.94	0.00	2.29	0.00	0.00	0.00
	Irrigation	0.31	0.00	0.28	0.31	0.00	0.28
	Livestock	4.30	0.00	3.87		0.00	
	Industrial	233.57	0.00	58.39	233.57	0.00	58.39
	Fossil Fuel Power	1074.96	0.00	21.50	1074.96	0.00	21.50
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	38407.00	0.00	0.00	38407.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total	40024.29	0.00	114.45	39715.84	0.00	80.17

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Ohio							
	Public Supply	597.28	0.32	89.59	593.69	0.32	89.05
	Domestic Supply	56.99	0.00	8.55	0.00	0.00	0.00
	Irrigation	18.52	0.00	16.75	11.92	0.00	10.74
	Livestock	12.46	0.00	9.97	0.75	0.00	0.60
	Industrial	198.97	0.00	19.90	197.96	0.00	19.80
	Fossil Fuel Power	2183.92	0.00	21.84	2183.86	0.00	21.84
	Nuclear Power	128.50	0.00	12.85	128.50	0.00	12.85
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	12.64	-9.61	0.00	12.23	-9.61	0.00
	Total	3209.28	-9.29	179.45	3128.91	-9.29	154.88
Ontario							
	Public Supply	93.89	0.00	14.08	92.84	0.00	13.92
	Domestic Supply	19.94	0.00	2.99	0.00	0.00	0.00
	Irrigation	31.85	0.00			0.00	
	Livestock	13.22	0.00			0.00	
	Industrial	180.45	0.00	11.37	0.00	0.00	0.00
	Fossil Fuel Power	463.20	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total	802.56	0.00	28.44	92.84	0.00	13.92
Pennsylvania							
	Public Supply	44.87	-0.96	4.49			
	Domestic Supply	2.50	0.00	0.25			
	Irrigation	0.31	0.00	0.31			
	Livestock						
	Industrial	30.65	0.00	5.31			
	Fossil Fuel Power	0.00	0.00	0.00			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total	78.34	-0.96	10.36	0.00	0.00	0.00
Grand Total:		49316.40	-10.25	525.09	42991.77	-9.29	256.95

# BASIN REPORT- Lake Erie

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2001

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Indiana	Public Supply	0.00	34.87	9.31	0.00	34.86	9.24
	Domestic Supply	0.00	0.00	6.36	0.00	0.00	0.32
	Irrigation	0.00	0.31	0.76	0.00	0.22	0.65
	Livestock	0.00	0.00	0.97	0.00	0.00	0.00
	Industrial	0.00	5.33	3.46	0.00	5.32	3.30
	Fossil Fuel Power	0.00	0.00	0.27	0.00	0.00	0.27
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	TOTAL	0.00	40.51	21.13	0.00	40.40	13.78

## Michigan

Public Supply	553.60	17.82	41.82			
Domestic Supply						
Irrigation	0.49	12.36	9.69			
Livestock						
Industrial	320.29	14.52	19.54			
Fossil Fuel Power	4098.47	0.00	0.09			
Nuclear Power	51.61	0.00	0.00			
Hydroelectric Power	0.00	0.00	0.00			
Other						
<b>TOTAL</b>	<b>5024.46</b>	<b>44.70</b>	<b>71.14</b>			

## New York

Public Supply	184.58	89.30	7.33			
Domestic Supply	12.33	0.00	10.61	0.00	0.00	0.00
Irrigation	0.16	0.15	0.00	0.16	0.15	0.00
Livestock	1.54	0.00	2.76			
Industrial	232.40	0.93	0.24	232.40	0.93	0.24
Fossil Fuel Power	1074.96	0.00	0.00	1074.96	0.00	0.00
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	38407.00	0.00	0.00	38407.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00
<b>TOTAL</b>	<b>39912.97</b>	<b>90.38</b>	<b>20.94</b>	<b>39714.52</b>	<b>1.08</b>	<b>0.24</b>

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Ohio							
	Public Supply	440.76	119.72	36.80	440.59	119.56	33.54
	Domestic Supply	0.00	0.00	56.99	0.00	0.00	0.00
	Irrigation	0.37	14.56	3.59	0.13	10.25	1.54
	Livestock	0.00	1.91	10.55	0.00	0.22	0.53
	Industrial	50.36	113.18	35.43	50.36	112.82	34.78
	Fossil Fuel Power	1512.97	670.89	0.06	1512.97	670.89	0.00
	Nuclear Power	128.50	0.00	0.00	128.50	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.82	9.10	2.72	0.82	9.00	2.41
	TOTAL	2133.78	929.36	146.14	2133.37	922.74	72.80
Ontario							
	Public Supply	8.97	29.26	55.66	8.97	29.23	54.64
	Domestic Supply	0.00	0.00	19.94	0.00	0.00	0.00
	Irrigation	0.59	12.11	19.15			
	Livestock	0.02	0.89	12.31			
	Industrial	173.24	0.00	7.21	0.00	0.00	0.00
	Fossil Fuel Power	463.20	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other						
	TOTAL	646.02	42.26	114.27	8.97	29.23	54.64
Pennsylvania							
	Public Supply	39.66	2.82	2.39			
	Domestic Supply	0.00	0.00	2.50			
	Irrigation	0.00	0.26	0.05			
	Livestock						
	Industrial	29.24	0.43	0.99			
	Fossil Fuel Power	0.00	0.00	0.00			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	TOTAL	68.90	3.51	5.93	0.00	0.00	0.00
Grand Total:		47786.14	1150.72	379.55	41856.86	993.45	141.46

# BASIN REPORT- Lake Erie

Basin Total

Units: Mgal(US)/d

Year Of Data: 2001

## Total Report - All Facilities

Category	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Public Supply	1227.57	293.80	153.31	1674.67	0.00	-0.64	219.57
Domestic Supply	12.33	0.00	96.40	108.73	0.00	0.00	15.03
Irrigation	1.61	39.75	33.25	74.61	0.00	0.00	38.58
Livestock	1.56	2.80	26.59	30.95	0.00	0.00	14.62
Industrial	805.54	134.39	66.86	1006.78	0.00	0.00	130.93
Fossil Fuel Power	7149.60	670.89	0.42	7820.91	0.00	0.00	92.53
Nuclear Power	180.11	0.00	0.00	180.11	0.00	0.00	13.83
Hydroelectric Power	38407.00	0.00	0.00	38407.00	0.00	0.00	0.00
Other	0.82	9.10	2.72	12.64	5105.39	-9.61	0.00

## Total Report - Principal Facilities

Category	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Public Supply	449.56	183.65	97.42	730.63	0.00	0.32	109.59
Domestic Supply	0.00	0.00	0.32	0.32	0.00	0.00	0.05
Irrigation	0.29	10.62	2.19	13.10	0.00	0.00	11.80
Livestock	0.00	0.22	0.53	0.75	0.00	0.00	0.60
Industrial	282.76	119.07	38.32	440.15	0.00	0.00	78.71
Fossil Fuel Power	2587.93	670.89	0.27	3259.09	0.00	0.00	43.35
Nuclear Power	128.50	0.00	0.00	128.50	0.00	0.00	12.85
Hydroelectric Power	38407.00	0.00	0.00	38407.00	0.00	0.00	0.00
Other	0.82	9.00	2.41	12.23	5105.39	-9.61	0.00

# BASIN REPORT- Lake Huron

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2001

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Michigan							
	Public Supply	258.98	0.00	32.37			
	Domestic Supply		0.00				
	Irrigation	34.45	0.00	31.01			
	Livestock		0.00				
	Industrial	28.99	0.00	2.90			
	Fossil Fuel Power	785.46	0.00	9.42			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other		0.00				
	Total	1107.88	0.00	75.70			
Ontario							
	Public Supply	84.37	0.00	12.65	81.66	0.00	12.25
	Domestic Supply	10.61	0.00	1.59	0.00	0.00	0.00
	Irrigation	20.91	0.00			0.00	
	Livestock	12.41	0.00			0.00	
	Industrial	190.19	0.00	11.98	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	4697.20	0.00	42.28	0.00	0.00	0.00
	Hydroelectric Power	33608.07	0.00	0.00	0.00	0.00	0.00
	Other	47.97	0.00	0.00	47.97	0.00	0.00
	Total	38671.73	0.00	68.50	129.63	0.00	12.25
Grand Total:		39779.61	0.00	144.20	129.63	0.00	12.25



# BASIN REPORT- Lake Huron

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2001

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Michigan							
	Public Supply	226.34	0.77	31.87			
	Domestic Supply						
	Irrigation	4.82	11.83	17.80			
	Livestock						
	Industrial	20.00	7.40	1.59			
	Fossil Fuel Power	784.42	0.00	1.04			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	TOTAL	1035.58	20.00	52.30			
Ontario							
	Public Supply	42.66	23.57	18.14	42.02	23.23	16.40
	Domestic Supply	0.00	0.00	10.61	0.00	0.00	0.00
	Irrigation	0.15	15.41	5.35			
	Livestock	2.93	3.07	6.41			
	Industrial	187.41	0.00	2.78	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	4697.20	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	20000.41	13607.66	0.00	0.00	0.00	0.00
	Other	0.00	47.97	0.00	0.00	47.97	0.00
	TOTAL	24930.76	13697.68	43.29	42.02	71.20	16.40
Grand Total:		25966.34	13717.68	95.59	42.02	71.20	16.40

# BASIN REPORT- Lake Huron

Basin Total

Units: Mgal(US)/d

Year Of Data: 2001

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	269.00	24.34	50.01	343.35	0.00	0.00	45.02
Domestic Supply	0.00	0.00	10.61	10.61	0.00	0.00	1.59
Irrigation	4.97	27.24	23.15	55.36	0.00	0.00	31.01
Livestock	2.93	3.07	6.41	12.41	0.00	0.00	
Industrial	207.41	7.40	4.37	219.18	0.00	0.00	14.88
Fossil Fuel Power	784.42	0.00	1.04	785.46	0.00	0.00	9.42
Nuclear Power	4697.20	0.00	0.00	4697.20	0.00	0.00	42.28
Hydroelectric Power	20000.41	13607.66	0.00	33608.07	0.00	0.00	0.00
Other	0.00	47.97	0.00	47.97	47.97	0.00	0.00

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	42.02	23.23	16.40	81.66	0.00	0.00	12.25
Domestic Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Irrigation					0.00	0.00	
Livestock					0.00	0.00	
Industrial	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	47.97	0.00	47.97	47.97	0.00	0.00

# BASIN REPORT- Lake Michigan

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2001

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Illinois							
	Public Supply	1088.08	1088.08	0.00	1088.08	1088.08	0.00
	Domestic Supply	4.39	4.38	0.00	4.39	4.38	0.00
	Irrigation		0.00				
	Livestock		0.00				
	Industrial	17.41	2.91	0.00	17.41	2.91	0.00
	Fossil Fuel Power	736.03	0.00	0.00	736.03	0.00	0.00
	Nuclear Power	31.70	0.00	0.00	31.70	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	220.80	220.80	0.00	220.80	220.80	0.00
	Total	2098.41	1316.17	0.00	2098.41	1316.17	0.00
Indiana							
	Public Supply	142.57	-2.22	21.39	142.24	0.00	21.34
	Domestic Supply	60.22	0.00	9.03	38.19	0.00	5.73
	Irrigation	26.00	0.00	23.39	25.22	0.00	22.70
	Livestock	4.89	0.00	3.92	2.74	0.00	2.19
	Industrial	1737.26	0.00	104.24	1736.71	0.00	104.20
	Fossil Fuel Power	1021.71	0.00	20.43	1021.71	0.00	20.43
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	2386.08	0.00	0.00	2386.08	0.00	0.00
	Other	0.18	0.00	0.02	0.04	0.00	0.00
	Total	5378.91	-2.22	182.42	5352.93	0.00	176.59
Michigan							
	Public Supply	306.57	0.00	38.32			
	Domestic Supply		0.00				
	Irrigation	185.90	0.00	167.32			
	Livestock		0.00				
	Industrial	229.19	0.00	22.92			
	Fossil Fuel Power	1215.54	0.00	14.59			
	Nuclear Power	2144.58	0.00	40.75			
	Hydroelectric Power	0.00	0.00	0.00			
	Other		0.00				
	Total	4081.78	0.00	283.90			

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Wisconsin							
	Public Supply	297.90	0.48	24.50			
	Domestic Supply	32.60	0.00	3.26			
	Irrigation	42.40	0.00	29.68			
	Livestock	32.30	0.00	29.07			
	Industrial	187.00	0.00	19.07			
	Fossil Fuel Power	1725.00	0.00	8.62			
	Nuclear Power	1195.00	0.00	5.97			
	Hydroelectric Power	0.00	0.00	0.00			
	Other		-0.64				
	Total	3512.20	-0.16	120.17			
Grand Total:		15071.30	1313.79	586.49	7451.34	1316.17	176.59

# BASIN REPORT- Lake Michigan

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2001

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Illinois							
	Public Supply	1088.08	0.00	0.00	1088.08	0.00	0.00
	Domestic Supply	4.38	0.00	0.01	4.38	0.00	0.01
	Irrigation						
	Livestock						
	Industrial	17.41	0.00	0.00	17.41	0.00	0.00
	Fossil Fuel Power	736.03	0.00	0.00	736.03	0.00	0.00
	Nuclear Power	31.70	0.00	0.00	31.70	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	220.80	0.00	0.00	220.80	0.00	0.00
	TOTAL	2098.40	0.00	0.01	2098.40	0.00	0.01
Indiana							
	Public Supply	94.98	0.00	47.59	94.98	0.00	47.26
	Domestic Supply	0.00	32.69	27.53	0.00	32.69	5.50
	Irrigation	0.00	6.74	19.26	0.00	6.41	18.81
	Livestock	0.00	1.41	3.48	0.00	1.41	1.33
	Industrial	1718.80	4.53	13.93	1718.79	4.52	13.40
	Fossil Fuel Power	1021.71	0.00	0.00	1021.71	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	2386.08	0.00	0.00	2386.08	0.00
	Other	0.00	0.03	0.15	0.00	0.00	0.04
	TOTAL	2835.49	2431.48	111.94	2835.48	2431.11	86.34
Michigan							
	Public Supply	133.92	0.58	172.07			
	Domestic Supply						
	Irrigation	2.15	55.51	128.24			
	Livestock						
	Industrial	70.85	80.30	78.04			
	Fossil Fuel Power	970.75	242.65	2.14			
	Nuclear Power	2144.58	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	TOTAL	3322.25	379.04	380.49			

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Wisconsin							
	Public Supply	219.50	25.60	52.80			
	Domestic Supply	0.00	0.00	32.60			
	Irrigation	0.00	0.00	42.40			
	Livestock	0.00	0.00	32.30			
	Industrial	187.00	0.00	0.00			
	Fossil Fuel Power	1725.00	0.00	0.00			
	Nuclear Power	1195.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	TOTAL	3326.50	25.60	160.10			
Grand Total:		11582.64	2836.12	652.54	4933.88	2431.11	86.35

# BASIN REPORT- Lake Michigan

Basin Total

Units: Mgal(US)/d

Year Of Data: 2001

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	1536.48	26.18	272.46	1835.12	0.00	1086.34	84.21
Domestic Supply	4.38	32.69	60.14	97.21	0.00	4.38	12.29
Irrigation	2.15	62.25	189.90	254.30	0.00	0.00	220.39
Livestock	0.00	1.41	35.78	37.19	0.00	0.00	32.99
Industrial	1994.06	84.83	91.97	2170.86	0.00	2.91	146.23
Fossil Fuel Power	4453.49	242.65	2.14	4698.28	0.00	0.00	43.64
Nuclear Power	3371.28	0.00	0.00	3371.28	0.00	0.00	46.72
Hydroelectric Power	0.00	2386.08	0.00	2386.08	0.00	0.00	0.00
Other	220.80	0.03	0.15	220.98	0.00	220.16	0.02

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	1183.06	0.00	47.26	1230.32	0.00	1088.08	21.34
Domestic Supply	4.38	32.69	5.51	42.58	0.00	4.38	5.73
Irrigation	0.00	6.41	18.81	25.22	0.00	0.00	22.70
Livestock	0.00	1.41	1.33	2.74	0.00	0.00	2.19
Industrial	1736.20	4.52	13.40	1754.12	0.00	2.91	104.20
Fossil Fuel Power	1757.74	0.00	0.00	1757.74	0.00	0.00	20.43
Nuclear Power	31.70	0.00	0.00	31.70	0.00	0.00	0.00
Hydroelectric Power	0.00	2386.08	0.00	2386.08	0.00	0.00	0.00
Other	220.80	0.00	0.04	220.84	0.00	220.80	0.00

# BASIN REPORT- Lake Ontario

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2001

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
New York							
	Public Supply	400.28	9.51	48.58		9.51	
	Domestic Supply	89.19	0.00	8.92	27.30	0.00	2.73
	Irrigation	5.24	0.00	4.71	5.24	0.00	4.71
	Livestock	11.19	0.00	10.07		0.00	
	Industrial	86.87	0.00	21.72	51.52	0.00	12.88
	Fossil Fuel Power	901.86	0.00	18.03	901.86	0.00	18.03
	Nuclear Power	1395.53	0.00	69.78	1395.53	0.00	69.78
	Hydroelectric Power	80908.00	0.00	0.00	0.00	0.00	0.00
	Other	753.05	32.00	33.00	753.05	32.00	33.00
	Total	84551.21	41.51	214.81	3134.50	41.51	141.13
Ontario							
	Public Supply	465.93	0.00	69.89	464.62	0.00	69.69
	Domestic Supply	64.17	0.00	9.63	0.00	0.00	0.00
	Irrigation	17.73	0.00			0.00	
	Livestock	5.40	0.00			0.00	
	Industrial	229.64	0.00	14.47	0.00	0.00	0.00
	Fossil Fuel Power	708.95	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	5428.19	0.00	48.85	0.00	0.00	0.00
	Hydroelectric Power	41542.31	0.00	0.00	0.00	0.00	0.00
	Other	132.35	0.00	0.00	132.35	0.00	0.00
	Total	48594.67	0.00	142.84	596.97	0.00	69.69
Pennsylvania							
	Public Supply	0.12	0.00	0.01			
	Domestic Supply	0.10	0.00	0.01			
	Irrigation	0.00	0.00	0.00			
	Livestock						
	Industrial	0.00	0.00	0.00			
	Fossil Fuel Power	0.00	0.00	0.00			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.23	0.00	0.02	0.00	0.00	0.00
Grand Total:		133146.11	41.51	357.67	3731.47	41.51	210.82



# BASIN REPORT- Lake Ontario

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2001

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
New York							
	Public Supply	193.21	169.05	38.02			
	Domestic Supply	21.10	27.30	40.79	0.00	27.30	0.00
	Irrigation	0.00	5.17	0.07	0.00	5.17	0.07
	Livestock	3.93	0.00	7.26			
	Industrial	36.99	40.57	9.31	36.99	12.76	1.77
	Fossil Fuel Power	508.23	393.63	0.00	508.23	393.63	0.00
	Nuclear Power	1395.53	0.00	0.00	1395.53	0.00	0.00
	Hydroelectric Power	0.00	80908.00	0.00	0.00	0.00	0.00
	Other	711.00	41.94	0.11	711.00	41.94	0.11
	TOTAL	2869.99	81585.66	95.56	2651.75	480.80	1.95
Ontario							
	Public Supply	401.52	52.86	11.56	401.47	52.68	10.47
	Domestic Supply	0.00	0.00	64.17	0.00	0.00	0.00
	Irrigation	1.08	9.53	7.12			
	Livestock	0.00	0.94	4.46			
	Industrial	218.17	0.00	11.46	0.00	0.00	0.00
	Fossil Fuel Power	708.95	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	5428.19	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	33861.04	7681.26	0.00	0.00	0.00	0.00
	Other	0.00	132.35	0.00	0.00	132.35	0.00
	TOTAL	40618.96	7876.94	98.77	401.47	185.03	10.47
Pennsylvania							
	Public Supply	0.00	0.00	0.12			
	Domestic Supply	0.00	0.00	0.10			
	Irrigation	0.00	0.00	0.00			
	Livestock						
	Industrial	0.00	0.00	0.00			
	Fossil Fuel Power	0.00	0.00	0.00			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	TOTAL	0.00	0.00	0.23	0.00	0.00	0.00
Grand Total:		43488.95	89462.60	194.56	3053.22	665.83	12.42

# BASIN REPORT- Lake Ontario

Basin Total

Units: Mgal(US)/d

Year Of Data: 2001

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	594.73	221.91	49.70	866.33	0.00	9.51	118.48
Domestic Supply	21.10	27.30	105.06	153.46	0.00	0.00	18.56
Irrigation	1.08	14.70	7.19	22.97	0.00	0.00	4.71
Livestock	3.93	0.94	11.72	16.59	0.00	0.00	10.07
Industrial	255.16	40.57	20.77	316.51	0.00	0.00	36.19
Fossil Fuel Power	1217.18	393.63	0.00	1610.81	0.00	0.00	18.03
Nuclear Power	6823.72	0.00	0.00	6823.72	0.00	0.00	118.63
Hydroelectric Power	33861.04	88589.26	0.00	122450.31	0.00	0.00	0.00
Other	711.00	174.29	0.11	885.40	-4380.39	32.00	33.00

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	401.47	52.68	10.47	464.62	0.00	9.51	69.69
Domestic Supply	0.00	27.30	0.00	27.30	0.00	0.00	2.73
Irrigation	0.00	5.17	0.07	5.24	0.00	0.00	4.71
Livestock					0.00	0.00	
Industrial	36.99	12.76	1.77	51.52	0.00	0.00	12.88
Fossil Fuel Power	508.23	393.63	0.00	901.86	0.00	0.00	18.03
Nuclear Power	1395.53	0.00	0.00	1395.53	0.00	0.00	69.78
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	711.00	174.29	0.11	885.40	-4380.39	32.00	33.00

# BASIN REPORT- Lake Superior

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2001

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Michigan							
	Public Supply	12.59	0.00	1.58			
	Domestic Supply		0.00				
	Irrigation	0.34	0.00	0.31			
	Livestock		0.00				
	Industrial	20.42	0.00	2.04			
	Fossil Fuel Power	269.19	0.00	3.23			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other		0.00				
	Total	302.54	0.00	7.16			
Minnesota							
	Public Supply	40.12	0.00	4.01	39.56	0.00	3.96
	Domestic Supply	1.33	0.00	0.14	1.12	0.00	0.11
	Irrigation	0.37	0.00	0.33	0.11	0.00	0.10
	Livestock	0.76	0.00	0.68	0.75	0.00	0.68
	Industrial	206.86	0.00	20.69	206.45	0.00	20.65
	Fossil Fuel Power	188.19	0.00	3.76	188.14	0.00	3.76
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	3420.98	0.00	0.00	3420.98	0.00	0.00
	Other	0.02	0.00	0.00	0.00	0.00	0.00
	Total	3858.63	0.00	29.61	3857.11	0.00	29.26
Ontario							
	Public Supply	45.77	0.00	6.87	45.58	0.00	6.84
	Domestic Supply	1.75	0.00	0.26	0.00	0.00	0.00
	Irrigation	0.37	0.00			0.00	
	Livestock	0.14	0.00			0.00	
	Industrial	162.12	0.00	10.21	0.00	0.00	0.00
	Fossil Fuel Power	295.52	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	38156.31	-4007.75	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total	38661.99	-4007.75	17.34	45.58	0.00	6.84

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Wisconsin							
	Public Supply	1.26	0.00	0.20			
	Domestic Supply	1.40	0.00	0.14			
	Irrigation	0.30	0.00	0.21			
	Livestock	8.30	0.00	7.47			
	Industrial		0.00				
	Fossil Fuel Power	38.00	0.00	0.19			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other		0.00				
	Total	49.26	0.00	8.21			
Grand Total:		42872.42	-4007.75	62.32	3902.69	0.00	36.10

# BASIN REPORT- Lake Superior

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2001

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Michigan							
	Public Supply	3.72	0.00	8.87			
	Domestic Supply						
	Irrigation	0.01	0.13	0.20			
	Livestock						
	Industrial	20.08	0.00	0.34			
	Fossil Fuel Power	269.19	0.00	0.00			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	TOTAL	293.00	0.13	9.41			
Minnesota							
	Public Supply	32.04	3.23	4.85	31.99	3.19	4.38
	Domestic Supply	0.97	0.35	0.01	0.94	0.18	0.00
	Irrigation	0.04	0.32	0.01	0.00	0.11	0.00
	Livestock	0.76	0.00	0.00	0.75	0.00	0.00
	Industrial	136.78	70.03	0.05	136.77	69.68	0.00
	Fossil Fuel Power	0.01	188.02	0.16	0.00	188.00	0.14
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	3420.98	0.00	0.00	3420.98	0.00
	Other	0.00	0.00	0.02	0.00	0.00	0.00
	TOTAL	170.60	3682.93	5.10	170.45	3682.14	4.52
Ontario							
	Public Supply	30.10	13.03	2.65	30.07	12.96	2.55
	Domestic Supply	0.00	0.00	1.75	0.00	0.00	0.00
	Irrigation	0.02	0.31	0.05			
	Livestock	0.00	0.14	0.00			
	Industrial	162.12	0.00	0.00	0.00	0.00	0.00
	Fossil Fuel Power	295.52	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	38156.31	0.00	0.00	0.00	0.00
	Other						
	TOTAL	487.76	38169.79	4.44	30.07	12.96	2.55

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Wisconsin							
	Public Supply	0.78	0.00	0.48			
	Domestic Supply	0.00	0.00	1.40			
	Irrigation	0.00	0.00	0.30			
	Livestock	0.00	0.00	8.30			
	Industrial						
	Fossil Fuel Power	38.00	0.00	0.00			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	TOTAL	38.78	0.00	10.48			
Grand Total:		990.14	41852.85	29.43	200.52	3695.10	7.07

# BASIN REPORT- Lake Superior

Basin Total

Units: Mgal(US)/d

Year Of Data: 2001

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	66.64	16.26	16.85	99.74	0.00	0.00	12.66
Domestic Supply	0.97	0.35	3.16	4.48	0.00	0.00	0.54
Irrigation	0.07	0.76	0.56	1.38	0.00	0.00	0.85
Livestock	0.76	0.14	8.30	9.20	0.00	0.00	8.15
Industrial	318.98	70.03	0.39	389.40	0.00	0.00	32.94
Fossil Fuel Power	602.72	188.02	0.16	790.90	0.00	0.00	7.18
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	41577.29	0.00	41577.29	0.00	-4007.75	0.00
Other	0.00	0.00	0.02	0.02	0.00	0.00	0.00

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	62.06	16.15	6.93	85.14	0.00	0.00	10.80
Domestic Supply	0.94	0.18	0.00	1.12	0.00	0.00	0.11
Irrigation	0.00	0.11	0.00	0.11	0.00	0.00	0.10
Livestock	0.75	0.00	0.00	0.75	0.00	0.00	0.68
Industrial	136.77	69.68	0.00	206.45	0.00	0.00	20.65
Fossil Fuel Power	0.00	188.00	0.14	188.14	0.00	0.00	3.76
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	3420.98	0.00	3420.98	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# BASIN REPORT- St. Lawrence River

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2001

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
New York							
	Public Supply	42.62	0.00	4.27		0.00	
	Domestic Supply	15.21	0.00	1.52	0.54	0.00	0.05
	Irrigation	0.10	0.00	0.09	0.10	0.00	0.09
	Livestock	5.08	0.00	4.57		0.00	
	Industrial	16.57	0.00	4.15	16.57	0.00	4.15
	Fossil Fuel Power	0.10	0.00	0.00	0.10	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	169687.00	0.00	0.00	70995.00	0.00	0.00
	Other	3.00	0.00	0.30	3.00	0.00	0.30
	Total	169769.68	0.00	14.90	71015.31	0.00	4.59
Ontario							
	Public Supply	73.03	0.00	10.96	72.08	0.00	10.82
	Domestic Supply	11.45	0.00	1.72	0.00	0.00	0.00
	Irrigation	2.35	0.00			0.00	
	Livestock	5.91	0.00			0.00	
	Industrial	160.81	0.00	10.13	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	76235.15	0.00	0.00	0.00	0.00	0.00
	Other	19.28	0.00	0.00	19.28	0.00	0.00
	Total	76507.99	0.00	22.80	91.37	0.00	10.82
Quebec							
	Public Supply	1100.01	0.00	109.90	1096.05	0.00	109.63
	Domestic Supply	71.59	0.00	7.13	48.61	0.00	4.76
	Irrigation	9.22	0.00	8.30		0.00	
	Livestock	19.10	0.00	15.28		0.00	
	Industrial	125.48	0.00	12.55	124.95	0.00	12.50
	Fossil Fuel Power	47.02	0.00	4.70	47.02	0.00	4.70
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	303895.85	0.00	0.00	303895.85	0.00	0.00
	Other		0.00			0.00	
	Total	305268.28	0.00	157.86	305212.48	0.00	131.58
Grand Total:		551545.94	0.00	195.56	376319.16	0.00	146.99



# BASIN REPORT- St. Lawrence River

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2001

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
New York							
	Public Supply	2.89	33.97	5.76			
	Domestic Supply	2.55	0.54	12.12	0.00	0.54	0.00
	Irrigation	0.00	0.10	0.00	0.00	0.10	0.00
	Livestock	1.77	0.00	3.31			
	Industrial	6.19	8.04	2.34	6.19	8.04	2.34
	Fossil Fuel Power	0.10	0.00	0.00	0.10	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	70995.00	98692.00	0.00	70995.00	0.00	0.00
	Other	0.00	3.00	0.00	0.00	3.00	0.00
	TOTAL	71008.50	98737.65	23.53	71001.29	11.68	2.34
Ontario							
	Public Supply	10.64	58.84	3.56	10.64	58.52	2.93
	Domestic Supply	0.00	0.00	11.45	0.00	0.00	0.00
	Irrigation	0.01	2.04	0.30			
	Livestock	0.00	3.63	2.28			
	Industrial	159.76	0.00	1.05	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	76149.02	86.13	0.00	0.00	0.00	0.00
	Other	0.00	19.28	0.00	0.00	19.28	0.00
	TOTAL	76319.43	169.91	18.65	10.64	77.80	2.93
Quebec							
	Public Supply	602.84	497.17	0.00	602.58	493.47	0.00
	Domestic Supply	0.00	0.00	71.59	0.00	0.00	48.61
	Irrigation	0.00	0.00	9.22			
	Livestock	0.00	0.00	19.10			
	Industrial	0.00	125.48	0.00	0.00	124.95	0.00
	Fossil Fuel Power	39.10	7.93	0.00	39.10	7.93	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	170946.25	132949.60	0.00	170946.25	132949.60	0.00
	Other						
	TOTAL	171588.19	133580.18	99.91	171587.93	133575.95	48.61
Grand Total:		318916.12	232487.74	142.09	242599.86	133665.43	53.87

# BASIN REPORT- St. Lawrence River

Basin Total

Units: Mgal(US)/d

Year Of Data: 2001

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	616.37	589.98	9.32	1215.66	0.00	0.00	125.12
Domestic Supply	2.55	0.54	95.16	98.25	0.00	0.00	10.37
Irrigation	0.01	2.14	9.52	11.67	0.00	0.00	8.39
Livestock	1.77	3.63	24.69	30.09	0.00	0.00	19.85
Industrial	165.95	133.52	3.39	302.86	0.00	0.00	26.83
Fossil Fuel Power	39.20	7.93	0.00	47.12	0.00	0.00	4.70
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	318090.28	231727.72	0.00	549818.00	0.00	0.00	0.00
Other	0.00	22.28	0.00	22.28	0.00	0.00	0.30

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	613.22	551.99	2.93	1168.13	0.00	0.00	120.45
Domestic Supply	0.00	0.54	48.61	49.15	0.00	0.00	4.81
Irrigation	0.00	0.10	0.00	0.10	0.00	0.00	0.09
Livestock					0.00	0.00	
Industrial	6.19	132.99	2.34	141.52	0.00	0.00	16.65
Fossil Fuel Power	39.20	7.93	0.00	47.12	0.00	0.00	4.70
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	241941.25	132949.60	0.00	374890.85	0.00	0.00	0.00
Other	0.00	22.28	0.00	22.28	0.00	0.00	0.30

#### ***IV. BASIN TABLES***

Each basin is represented by three tables:  
Withdrawals, Diversions and Consumptive Uses  
Withdrawals by Source  
Basin Totals

Lake Erie  
Lake Huron  
Lake Michigan  
Lake Ontario  
Lake Superior  
St. Lawrence River

# BASIN REPORT- Lake Erie

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2002

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Indiana							
	Public Supply	44.99	0.00	6.75	44.98	0.00	6.75
	Domestic Supply	6.18	0.00	0.93	0.28	0.00	0.04
	Irrigation	1.36	0.00	1.23	1.17	0.00	1.06
	Livestock	0.94	0.00	0.75	0.00	0.00	0.00
	Industrial	8.91	0.00	0.53	8.65	0.00	0.52
	Fossil Fuel Power	0.27	0.00	0.01	0.27	0.00	0.01
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total	62.65	0.00	10.20	55.35	0.00	8.38
Michigan							
	Public Supply	606.09	0.00	75.76			
	Domestic Supply						
	Irrigation	27.63	0.00	24.87			
	Livestock						
	Industrial	361.12	0.00	36.11			
	Fossil Fuel Power	4119.78	0.00	49.44			
	Nuclear Power	53.88	0.00	1.02			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	Total	5168.50	0.00	187.20			
New York							
	Public Supply	264.02	0.00	26.40		0.00	
	Domestic Supply	22.94	0.00	2.29	0.00	0.00	0.00
	Irrigation	0.33	0.00	0.29	0.33	0.00	0.29
	Livestock	4.30	0.00	3.87		0.00	
	Industrial	158.28	0.00	39.57	158.28	0.00	39.57
	Fossil Fuel Power	1023.56	0.00	20.47	1023.56	0.00	20.47
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	44522.00	0.00	0.00	44522.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total	45995.43	0.00	92.89	45704.17	0.00	60.33

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Ohio							
	Public Supply	590.60	0.32	88.59	586.12	0.32	87.92
	Domestic Supply	56.70	0.00	8.51	0.00	0.00	0.00
	Irrigation	20.49	0.00	18.45	10.52	0.00	9.47
	Livestock	12.38	0.00	9.90	0.60	0.00	0.48
	Industrial	156.62	0.00	15.66	155.42	0.00	15.54
	Fossil Fuel Power	2407.88	0.00	24.08	2407.83	0.00	24.08
	Nuclear Power	102.82	0.00	10.28	102.82	0.00	10.28
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	5.18	-11.35	0.00	4.94	-11.35	0.00
	Total	3352.67	-11.03	175.47	3268.25	-11.03	147.77
Ontario							
	Public Supply	93.89	0.00	14.08	92.84	0.00	13.92
	Domestic Supply	19.94	0.00	2.99	0.00	0.00	0.00
	Irrigation	31.85	0.00			0.00	
	Livestock	13.22	0.00			0.00	
	Industrial	180.45	0.00	11.37	0.00	0.00	0.00
	Fossil Fuel Power	463.20	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total	802.56	0.00	28.44	92.84	0.00	13.92
Pennsylvania							
	Public Supply	36.75	-0.85	3.67			
	Domestic Supply	2.50	0.00	0.25			
	Irrigation	0.31	0.00	0.31			
	Livestock						
	Industrial	30.65	0.00	5.31			
	Fossil Fuel Power	0.00	0.00	0.00			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Total	70.22	-0.85	9.55			
Grand Total:		55452.03	-11.88	503.75	49120.61	-11.03	230.40

# BASIN REPORT- Lake Erie

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2002

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Indiana	Public Supply	0.00	35.39	9.60	0.00	35.39	9.59
	Domestic Supply	0.00	0.00	6.18	0.00	0.00	0.28
	Irrigation	0.00	0.41	0.95	0.00	0.33	0.84
	Livestock	0.00	0.00	0.94	0.00	0.00	0.00
	Industrial	0.00	5.17	3.74	0.00	5.15	3.50
	Fossil Fuel Power	0.00	0.00	0.27	0.00	0.00	0.27
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	TOTAL	0.00	40.97	21.68	0.00	40.87	14.48

<b>Michigan</b>							
	Public Supply	540.14	17.87	48.08			
	Domestic Supply						
	Irrigation	0.80	15.29	11.54			
	Livestock						
	Industrial	327.14	14.21	19.77			
	Fossil Fuel Power	4119.69	0.00	0.09			
	Nuclear Power	53.88	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	<b>TOTAL</b>	<b>5041.65</b>	<b>47.37</b>	<b>79.48</b>			

<b>New York</b>							
	Public Supply	184.58	72.12	7.32			
	Domestic Supply	12.33	0.00	10.61	0.00	0.00	0.00
	Irrigation	0.17	0.16	0.00	0.17	0.16	0.00
	Livestock	1.54	0.00	2.76			
	Industrial	157.13	0.98	0.17	157.13	0.98	0.17
	Fossil Fuel Power	1023.56	0.00	0.00	1023.56	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	44522.00	0.00	0.00	44522.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	<b>TOTAL</b>	<b>45901.31</b>	<b>73.26</b>	<b>20.86</b>	<b>45702.86</b>	<b>1.14</b>	<b>0.17</b>

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Ohio							
	Public Supply	438.27	107.99	44.34	438.05	107.65	40.42
	Domestic Supply	0.00	0.00	56.70	0.00	0.00	0.00
	Irrigation	0.24	14.75	5.50	0.21	8.11	2.20
	Livestock	0.00	1.98	10.40	0.00	0.22	0.38
	Industrial	39.46	86.22	30.94	39.46	85.84	30.12
	Fossil Fuel Power	1705.68	702.15	0.05	1705.68	702.15	0.00
	Nuclear Power	102.82	0.00	0.00	102.82	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.80	4.08	0.30	0.80	4.03	0.11
	TOTAL	2287.27	917.17	148.23	2287.02	908.00	73.23
Ontario							
	Public Supply	8.97	29.26	55.66	8.97	29.23	54.64
	Domestic Supply	0.00	0.00	19.94	0.00	0.00	0.00
	Irrigation	0.59	12.11	19.15			
	Livestock	0.02	0.89	12.31			
	Industrial	173.24	0.00	7.21	0.00	0.00	0.00
	Fossil Fuel Power	463.20	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other						
	TOTAL	646.02	42.26	114.27	8.97	29.23	54.64
Pennsylvania							
	Public Supply	32.74	1.75	2.26			
	Domestic Supply	0.00	0.00	2.50			
	Irrigation	0.00	0.26	0.05			
	Livestock						
	Industrial	29.24	0.43	0.99			
	Fossil Fuel Power	0.00	0.00	0.00			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	TOTAL	61.99	2.44	5.80			
Grand Total:		53938.24	1123.47	390.32	47998.85	979.24	142.52

# BASIN REPORT- Lake Erie

Basin Total

Units: Mgal(US)/d

Year Of Data: 2002

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	1204.70	264.38	167.26	1636.34	0.00	-0.53	215.25
Domestic Supply	12.33	0.00	95.93	108.26	0.00	0.00	14.97
Irrigation	1.80	42.98	37.20	81.98	0.00	0.00	45.15
Livestock	1.56	2.87	26.41	30.84	0.00	0.00	14.52
Industrial	726.22	107.01	62.81	896.03	0.00	0.00	108.55
Fossil Fuel Power	7312.13	702.15	0.41	8014.69	0.00	0.00	94.00
Nuclear Power	156.70	0.00	0.00	156.70	0.00	0.00	11.30
Hydroelectric Power	44522.00	0.00	0.00	44522.00	0.00	0.00	0.00
Other	0.80	4.08	0.30	5.18	5105.39	-11.35	0.00

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	447.02	172.27	104.65	723.94	0.00	0.32	108.59
Domestic Supply	0.00	0.00	0.28	0.28	0.00	0.00	0.04
Irrigation	0.38	8.60	3.04	12.02	0.00	0.00	10.82
Livestock	0.00	0.22	0.38	0.60	0.00	0.00	0.48
Industrial	196.59	91.97	33.79	322.35	0.00	0.00	55.63
Fossil Fuel Power	2729.24	702.15	0.27	3431.66	0.00	0.00	44.56
Nuclear Power	102.82	0.00	0.00	102.82	0.00	0.00	10.28
Hydroelectric Power	44522.00	0.00	0.00	44522.00	0.00	0.00	0.00
Other	0.80	4.03	0.11	4.94	5105.39	-11.35	0.00



# BASIN REPORT- Lake Huron

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2002

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Michigan							
	Public Supply	265.95	0.00	33.24			
	Domestic Supply						
	Irrigation	43.88	0.00	39.49			
	Livestock						
	Industrial	48.16	0.00	4.82			
	Fossil Fuel Power	814.27	0.00	9.77			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	Total	1172.26	0.00	87.32			
Ontario							
	Public Supply	84.37	0.00	12.65	81.66	0.00	12.25
	Domestic Supply	10.61	0.00	1.59	0.00	0.00	0.00
	Irrigation	20.91	0.00			0.00	
	Livestock	12.41	0.00			0.00	
	Industrial	190.19	0.00	11.98	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	4697.20	0.00	42.28	0.00	0.00	0.00
	Hydroelectric Power	33608.07	0.00	0.00	0.00	0.00	0.00
	Other	47.97	0.00	0.00	47.97	0.00	0.00
	Total	38671.73	0.00	68.50	129.63	0.00	12.25
Grand Total:		39843.99	0.00	155.82	129.63	0.00	12.25

# BASIN REPORT- Lake Huron

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2002

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Michigan							
	Public Supply	232.73	0.71	32.51			
	Domestic Supply						
	Irrigation	6.34	14.96	22.58			
	Livestock						
	Industrial	36.36	10.02	1.78			
	Fossil Fuel Power	808.10	5.02	1.15			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	TOTAL	1083.53	30.71	58.02			
Ontario							
	Public Supply	42.66	23.57	18.14	42.02	23.23	16.40
	Domestic Supply	0.00	0.00	10.61	0.00	0.00	0.00
	Irrigation	0.15	15.41	5.35			
	Livestock	2.93	3.07	6.41			
	Industrial	187.41	0.00	2.78	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	4697.20	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	20000.41	13607.66	0.00	0.00	0.00	0.00
	Other	0.00	47.97	0.00	0.00	47.97	0.00
	TOTAL	24930.76	13697.68	43.29	42.02	71.20	16.40
Grand Total:		26014.29	13728.39	101.31	42.02	71.20	16.40

# BASIN REPORT- Lake Huron

Basin Total

Units: Mgal(US)/d

Year Of Data: 2002

## Total Report - All Facilities

Category	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Public Supply	275.39	24.28	50.65	350.32	0.00	0.00	45.89
Domestic Supply	0.00	0.00	10.61	10.61	0.00	0.00	1.59
Irrigation	6.49	30.37	27.93	64.79	0.00	0.00	39.49
Livestock	2.93	3.07	6.41	12.41	0.00	0.00	
Industrial	223.77	10.02	4.56	238.35	0.00	0.00	16.80
Fossil Fuel Power	808.10	5.02	1.15	814.27	0.00	0.00	9.77
Nuclear Power	4697.20	0.00	0.00	4697.20	0.00	0.00	42.28
Hydroelectric Power	20000.41	13607.66	0.00	33608.07	0.00	0.00	0.00
Other	0.00	47.97	0.00	47.97	47.97	0.00	0.00

## Total Report - Principal Facilities

Category	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Public Supply	42.02	23.23	16.40	81.66	0.00	0.00	12.25
Domestic Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Irrigation					0.00	0.00	
Livestock					0.00	0.00	
Industrial	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	47.97	0.00	47.97	47.97	0.00	0.00

# BASIN REPORT- Lake Michigan

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2002

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Illinois							
	Public Supply	1071.40	1071.40	0.00	1071.40	1071.40	0.00
	Domestic Supply	4.10	4.09	0.00	4.10	4.09	0.00
	Irrigation						
	Livestock						
	Industrial	12.84	0.02	0.00	12.84	0.02	0.00
	Fossil Fuel Power	698.57	0.00	0.00	698.57	0.00	0.00
	Nuclear Power	31.70	0.00	0.00	31.70	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	233.87	233.87	0.00	233.87	233.87	0.00
	Total	2052.47	1309.37	0.00	2052.47	1309.37	0.00
Indiana							
	Public Supply	151.56	-1.82	22.73	151.28	0.00	22.69
	Domestic Supply	44.44	0.00	6.67	22.42	0.00	3.36
	Irrigation	36.43	0.00	32.79	35.84	0.00	32.25
	Livestock	4.50	0.00	3.60	2.39	0.00	1.91
	Industrial	1654.48	0.00	99.27	1653.90	0.00	99.24
	Fossil Fuel Power	750.63	0.00	15.01	750.63	0.00	15.01
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	1920.58	0.00	0.00	1920.58	0.00	0.00
	Other	0.19	0.00	0.02	0.11	0.00	0.01
	Total	4562.81	-1.82	180.09	4537.15	0.00	174.47
Michigan							
	Public Supply	307.90	0.00	38.49			
	Domestic Supply						
	Irrigation	242.71	0.00	218.43			
	Livestock						
	Industrial	270.78	0.00	27.08			
	Fossil Fuel Power	1265.24	0.00	15.18			
	Nuclear Power	2251.80	0.00	42.78			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	Total	4338.43	0.00	341.96			

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Wisconsin							
	Public Supply	306.70	0.48	26.50			
	Domestic Supply	32.60	0.00	3.26			
	Irrigation	42.40	0.00	29.68			
	Livestock	32.30	0.00	29.07			
	Industrial	187.00	0.00	19.07			
	Fossil Fuel Power	1725.00	0.00	8.62			
	Nuclear Power	1195.00	0.00	5.97			
	Hydroelectric Power	0.00	0.00	0.00			
	Other		-0.64				
	Total	3521.00	-0.16	122.17			
Grand Total:		14474.71	1307.39	644.22	6589.62	1309.37	174.47

# BASIN REPORT- Lake Michigan

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2002

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Illinois							
	Public Supply	1071.40	0.00	0.00	1071.40	0.00	0.00
	Domestic Supply	4.09	0.00	0.01	4.09	0.00	0.01
	Irrigation						
	Livestock						
	Industrial	12.84	0.00	0.00	12.84	0.00	0.00
	Fossil Fuel Power	698.57	0.00	0.00	698.57	0.00	0.00
	Nuclear Power	31.70	0.00	0.00	31.70	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	233.87	0.00	0.00	233.87	0.00	0.00
	TOTAL	2052.46	0.00	0.01	2052.46	0.00	0.01
Indiana							
	Public Supply	100.33	0.00	51.23	100.33	0.00	50.95
	Domestic Supply	0.00	17.44	27.00	0.00	17.40	5.02
	Irrigation	0.00	8.26	28.17	0.00	8.01	27.83
	Livestock	0.00	0.99	3.51	0.00	0.99	1.40
	Industrial	1639.36	3.45	11.67	1639.34	3.44	11.12
	Fossil Fuel Power	750.63	0.00	0.00	750.63	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	1920.58	0.00	0.00	1920.58	0.00
	Other	0.00	0.03	0.16	0.00	0.03	0.08
	TOTAL	2490.32	1950.75	121.74	2490.30	1950.45	96.40
Michigan							
	Public Supply	132.60	0.51	174.79			
	Domestic Supply						
	Irrigation	2.56	72.86	167.29			
	Livestock						
	Industrial	124.23	76.17	70.38			
	Fossil Fuel Power	1019.58	243.25	2.41			
	Nuclear Power	2251.80	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	TOTAL	3530.77	392.79	414.87			

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Wisconsin							
	Public Supply	227.30	26.00	53.40			
	Domestic Supply	0.00	0.00	32.60			
	Irrigation	0.00	0.00	42.40			
	Livestock	0.00	0.00	32.30			
	Industrial	187.00	0.00	0.00			
	Fossil Fuel Power	1725.00	0.00	0.00			
	Nuclear Power	1195.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	TOTAL	3334.30	26.00	160.70			
Grand Total:		11407.85	2369.54	697.32	4542.76	1950.45	96.41

# BASIN REPORT- Lake Michigan

Basin Total

Units: Mgal(US)/d

Year Of Data: 2002

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	1531.63	26.51	279.42	1837.56	0.00	1070.06	87.72
Domestic Supply	4.09	17.44	59.61	81.14	0.00	4.09	9.93
Irrigation	2.56	81.12	237.86	321.54	0.00	0.00	280.90
Livestock	0.00	0.99	35.81	36.80	0.00	0.00	32.67
Industrial	1963.43	79.62	82.05	2125.10	0.00	0.02	145.42
Fossil Fuel Power	4193.78	243.25	2.41	4439.44	0.00	0.00	38.81
Nuclear Power	3478.50	0.00	0.00	3478.50	0.00	0.00	48.75
Hydroelectric Power	0.00	1920.58	0.00	1920.58	0.00	0.00	0.00
Other	233.87	0.03	0.16	234.06	0.00	233.23	0.02

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	1171.73	0.00	50.95	1222.68	0.00	1071.40	22.69
Domestic Supply	4.09	17.40	5.03	26.52	0.00	4.09	3.36
Irrigation	0.00	8.01	27.83	35.84	0.00	0.00	32.25
Livestock	0.00	0.99	1.40	2.39	0.00	0.00	1.91
Industrial	1652.18	3.44	11.12	1666.74	0.00	0.02	99.24
Fossil Fuel Power	1449.20	0.00	0.00	1449.20	0.00	0.00	15.01
Nuclear Power	31.70	0.00	0.00	31.70	0.00	0.00	0.00
Hydroelectric Power	0.00	1920.58	0.00	1920.58	0.00	0.00	0.00
Other	233.87	0.03	0.08	233.98	0.00	233.87	0.01



# BASIN REPORT- Lake Ontario

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2002

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
New York							
	Public Supply	390.67	9.29	47.43		9.29	
	Domestic Supply	91.21	0.00	9.12	29.32	0.00	2.93
	Irrigation	7.99	0.00	7.19	7.99	0.00	7.19
	Livestock	11.19	0.00	10.07		0.00	6.53
	Industrial	68.05	0.00	17.02	68.05	0.00	17.02
	Fossil Fuel Power	909.59	0.00	18.20	909.59	0.00	18.20
	Nuclear Power	1374.53	0.00	68.73	1374.53	0.00	68.73
	Hydroelectric Power	80908.00	0.00	0.00	0.00	0.00	0.00
	Other	749.53	32.00	32.65	749.53	32.00	32.65
	Total	84510.76	41.29	210.41	3139.01	41.29	153.25
Ontario							
	Public Supply	465.93	0.00	69.89	464.62	0.00	69.69
	Domestic Supply	64.17	0.00	9.63	0.00	0.00	0.00
	Irrigation	17.73	0.00			0.00	
	Livestock	5.40	0.00			0.00	
	Industrial	229.64	0.00	14.47	0.00	0.00	0.00
	Fossil Fuel Power	708.95	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	5428.19	0.00	48.85	0.00	0.00	0.00
	Hydroelectric Power	41542.31	0.00	0.00	0.00	0.00	0.00
	Other	132.35	0.00	0.00	132.35	0.00	0.00
	Total	48594.67	0.00	142.84	596.97	0.00	69.69
Pennsylvania							
	Public Supply	0.12	0.00	0.01			
	Domestic Supply	0.10	0.00	0.01			
	Irrigation	0.00	0.00	0.00			
	Livestock						
	Industrial	0.00	0.00	0.00			
	Fossil Fuel Power	0.00	0.00	0.00			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Total	0.22	0.00	0.02			
Grand Total:		133105.65	41.29	353.27	3735.98	41.29	222.94

# BASIN REPORT- Lake Ontario

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2002

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
New York							
	Public Supply	187.28	170.49	32.90			
	Domestic Supply	21.10	29.32	40.79	0.00	29.32	0.00
	Irrigation	0.00	7.90	0.09	0.00	7.90	0.09
	Livestock	3.93	0.00	7.26			
	Industrial	27.22	32.83	8.00	27.22	32.83	8.00
	Fossil Fuel Power	478.34	431.25	0.00	478.34	431.25	0.00
	Nuclear Power	1374.53	0.00	0.00	1374.53	0.00	0.00
	Hydroelectric Power	0.00	80908.00	0.00	0.00	0.00	0.00
	Other	711.00	38.42	0.11	711.00	38.42	0.11
	TOTAL	2803.40	81618.21	89.15	2591.09	539.72	8.20
Ontario							
	Public Supply	401.52	52.86	11.56	401.47	52.68	10.47
	Domestic Supply	0.00	0.00	64.17	0.00	0.00	0.00
	Irrigation	1.08	9.53	7.12			
	Livestock	0.00	0.94	4.46			
	Industrial	218.17	0.00	11.46	0.00	0.00	0.00
	Fossil Fuel Power	708.95	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	5428.19	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	33861.04	7681.26	0.00	0.00	0.00	0.00
	Other	0.00	132.35	0.00	0.00	132.35	0.00
	TOTAL	40618.96	7876.94	98.77	401.47	185.03	10.47
Pennsylvania							
	Public Supply	0.00	0.00	0.12			
	Domestic Supply	0.00	0.00	0.10			
	Irrigation	0.00	0.00	0.00			
	Livestock						
	Industrial	0.00	0.00	0.00			
	Fossil Fuel Power	0.00	0.00	0.00			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	TOTAL	0.00	0.00	0.22			
Grand Total:		43422.36	89495.15	188.14	2992.56	724.75	18.67

# BASIN REPORT- Lake Ontario

Basin Total

Units: Mgal(US)/d

Year Of Data: 2002

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	588.80	223.35	44.58	856.72	0.00	9.29	117.33
Domestic Supply	21.10	29.32	105.06	155.48	0.00	0.00	18.76
Irrigation	1.08	17.43	7.21	25.72	0.00	0.00	7.19
Livestock	3.93	0.94	11.72	16.59	0.00	0.00	10.07
Industrial	245.39	32.83	19.46	297.69	0.00	0.00	31.49
Fossil Fuel Power	1187.29	431.25	0.00	1618.54	0.00	0.00	18.20
Nuclear Power	6802.72	0.00	0.00	6802.72	0.00	0.00	117.58
Hydroelectric Power	33861.04	88589.26	0.00	122450.31	0.00	0.00	0.00
Other	711.00	170.77	0.11	881.88	-4380.39	32.00	32.65

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	401.47	52.68	10.47	464.62	0.00	9.29	69.69
Domestic Supply	0.00	29.32	0.00	29.32	0.00	0.00	2.93
Irrigation	0.00	7.90	0.09	7.99	0.00	0.00	7.19
Livestock					0.00	0.00	6.53
Industrial	27.22	32.83	8.00	68.05	0.00	0.00	17.02
Fossil Fuel Power	478.34	431.25	0.00	909.59	0.00	0.00	18.20
Nuclear Power	1374.53	0.00	0.00	1374.53	0.00	0.00	68.73
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	711.00	170.77	0.11	881.88	-4380.39	32.00	32.65

# BASIN REPORT- Lake Superior

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2002

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Michigan							
	Public Supply	9.31	0.00	2.16			
	Domestic Supply						
	Irrigation	0.49	0.00	0.44			
	Livestock						
	Industrial	14.11	0.00	1.41			
	Fossil Fuel Power	255.61	0.00	3.07			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	Total	279.52	0.00	7.08			
Minnesota							
	Public Supply	40.44	0.00	4.05	39.65	0.00	3.96
	Domestic Supply	1.38	0.00	0.14	1.20	0.00	0.12
	Irrigation	0.37	0.00	0.33	0.00	0.00	0.00
	Livestock	0.65	0.00	0.58	0.60	0.00	0.54
	Industrial	341.75	0.00	34.18	341.35	0.00	34.14
	Fossil Fuel Power	158.78	0.00	3.18	158.66	0.00	3.17
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	4443.88	0.00	0.00	4443.88	0.00	0.00
	Other	0.03	0.00	0.00	0.00	0.00	0.00
	Total	4987.26	0.00	42.45	4985.34	0.00	41.93
Ontario							
	Public Supply	45.77	0.00	6.87	45.58	0.00	6.84
	Domestic Supply	1.75	0.00	0.26	0.00	0.00	0.00
	Irrigation	0.37	0.00			0.00	
	Livestock	0.14	0.00			0.00	
	Industrial	162.12	0.00	10.21	0.00	0.00	0.00
	Fossil Fuel Power	295.52	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	38156.31	-4007.75	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total	38661.99	-4007.75	17.34	45.58	0.00	6.84

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Wisconsin							
	Public Supply	1.21	0.00	0.20			
	Domestic Supply	1.40	0.00	0.14			
	Irrigation	0.30	0.00	0.21			
	Livestock	8.30	0.00	7.47			
	Industrial		0.00				
	Fossil Fuel Power	38.00	0.00	0.19			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other		0.00				
	Total	49.21	0.00	8.21			
Grand Total:		43977.98	-4007.75	75.08	5030.91	0.00	48.77

# BASIN REPORT- Lake Superior

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2002

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Michigan							
	Public Supply	1.31	0.00	8.00			
	Domestic Supply						
	Irrigation	0.01	0.16	0.32			
	Livestock						
	Industrial	13.77	0.00	0.34			
	Fossil Fuel Power	255.61	0.00	0.00			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	TOTAL	270.70	0.16	8.66			
Minnesota							
	Public Supply	32.27	3.33	4.83	32.21	3.31	4.13
	Domestic Supply	0.97	0.40	0.01	0.94	0.26	0.00
	Irrigation	0.05	0.31	0.01	0.00	0.00	0.00
	Livestock	0.65	0.00	0.00	0.60	0.00	0.00
	Industrial	272.41	69.30	0.04	272.41	68.94	0.00
	Fossil Fuel Power	0.00	158.65	0.13	0.00	158.55	0.12
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	4443.88	0.00	0.00	4443.88	0.00
	Other	0.00	0.00	0.03	0.00	0.00	0.00
	TOTAL	306.35	4675.87	5.04	306.16	4674.93	4.25
Ontario							
	Public Supply	30.10	13.03	2.65	30.07	12.96	2.55
	Domestic Supply	0.00	0.00	1.75	0.00	0.00	0.00
	Irrigation	0.02	0.31	0.05			
	Livestock	0.00	0.14	0.00			
	Industrial	162.12	0.00	0.00	0.00	0.00	0.00
	Fossil Fuel Power	295.52	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	38156.31	0.00	0.00	0.00	0.00
	Other						
	TOTAL	487.76	38169.79	4.44	30.07	12.96	2.55

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Wisconsin							
	Public Supply	0.67	0.00	0.54			
	Domestic Supply	0.00	0.00	1.40			
	Irrigation	0.00	0.00	0.30			
	Livestock	0.00	0.00	8.30			
	Industrial						
	Fossil Fuel Power	38.00	0.00	0.00			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	TOTAL	38.67	0.00	10.54			
Grand Total:		1103.48	42845.82	28.69	336.23	4687.89	6.79

# BASIN REPORT- Lake Superior

Basin Total

Units: Mgal(US)/d

Year Of Data: 2002

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	64.35	16.36	16.02	96.73	0.00	0.00	13.27
Domestic Supply	0.97	0.40	3.16	4.52	0.00	0.00	0.54
Irrigation	0.08	0.78	0.67	1.53	0.00	0.00	0.98
Livestock	0.65	0.14	8.30	9.09	0.00	0.00	8.05
Industrial	448.30	69.30	0.38	517.98	0.00	0.00	45.80
Fossil Fuel Power	589.13	158.65	0.13	747.91	0.00	0.00	6.44
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	42600.19	0.00	42600.19	0.00	-4007.75	0.00
Other	0.00	0.00	0.03	0.03	0.00	0.00	0.00

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	62.28	16.26	6.68	85.22	0.00	0.00	10.80
Domestic Supply	0.94	0.26	0.00	1.20	0.00	0.00	0.12
Irrigation	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Livestock	0.60	0.00	0.00	0.60	0.00	0.00	0.54
Industrial	272.41	68.94	0.00	341.35	0.00	0.00	34.14
Fossil Fuel Power	0.00	158.55	0.12	158.66	0.00	0.00	3.17
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	4443.88	0.00	4443.88	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00



# BASIN REPORT- St. Lawrence River

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2002

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
New York							
	Public Supply	39.48	0.00	3.95		0.00	
	Domestic Supply	15.17	0.00	1.52	0.50	0.00	0.05
	Irrigation	0.27	0.00	0.24	0.27	0.00	0.24
	Livestock	5.08	0.00	4.57		0.00	
	Industrial	14.83	0.00	3.71	14.38	0.00	3.60
	Fossil Fuel Power	0.11	0.00	0.00	0.11	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	177548.00	0.00	0.00	78856.00	0.00	0.00
	Other	4.60	0.00	0.46	4.60	0.00	0.46
	Total	177627.54	0.00	14.45	78875.86	0.00	4.35
Ontario							
	Public Supply	73.03	0.00	10.96	72.08	0.00	10.82
	Domestic Supply	11.45	0.00	1.72	0.00	0.00	0.00
	Irrigation	2.35	0.00			0.00	
	Livestock	5.91	0.00			0.00	
	Industrial	160.81	0.00	10.13	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	76235.15	0.00	0.00	0.00	0.00	0.00
	Other	19.28	0.00	0.00	19.28	0.00	0.00
	Total	76507.99	0.00	22.80	91.37	0.00	10.82
Quebec							
	Public Supply	1100.01	0.00	109.90	1096.05	0.00	109.63
	Domestic Supply	71.59	0.00	7.13	48.61	0.00	4.76
	Irrigation	9.22	0.00	8.30		0.00	
	Livestock	19.10	0.00	15.28		0.00	
	Industrial	125.48	0.00	12.55	124.95	0.00	12.50
	Fossil Fuel Power	47.02	0.00	4.70	47.02	0.00	4.70
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	303895.85	0.00	0.00	303895.85	0.00	0.00
	Other		0.00			0.00	
	Total	305268.28	0.00	157.86	305212.48	0.00	131.58
Grand Total:		559403.80	0.00	195.11	384179.71	0.00	146.75

# BASIN REPORT- St. Lawrence River

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2002

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
New York							
	Public Supply	2.89	31.85	4.74			
	Domestic Supply	2.55	0.50	12.12	0.00	0.50	0.00
	Irrigation	0.00	0.27	0.00	0.00	0.27	0.00
	Livestock	1.77	0.00	3.31			
	Industrial	5.72	7.07	2.04	5.27	7.07	2.04
	Fossil Fuel Power	0.11	0.00	0.00	0.11	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	78856.00	98692.00	0.00	78856.00	0.00	0.00
	Other	0.00	4.60	0.00	0.00	4.60	0.00
	TOTAL	78869.04	98736.29	22.21	78861.38	12.44	2.04
Ontario							
	Public Supply	10.64	58.84	3.56	10.64	58.52	2.93
	Domestic Supply	0.00	0.00	11.45	0.00	0.00	0.00
	Irrigation	0.01	2.04	0.30			
	Livestock	0.00	3.63	2.28			
	Industrial	159.76	0.00	1.05	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	76149.02	86.13	0.00	0.00	0.00	0.00
	Other	0.00	19.28	0.00	0.00	19.28	0.00
	TOTAL	76319.43	169.91	18.65	10.64	77.80	2.93
Quebec							
	Public Supply	602.84	497.17	0.00	602.58	493.47	0.00
	Domestic Supply	0.00	0.00	71.59	0.00	0.00	48.61
	Irrigation	0.00	0.00	9.22			
	Livestock	0.00	0.00	19.10			
	Industrial	0.00	125.48	0.00	0.00	124.95	0.00
	Fossil Fuel Power	39.10	7.93	0.00	39.10	7.93	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	170946.25	132949.60	0.00	170946.25	132949.60	0.00
	Other						
	TOTAL	171588.19	133580.18	99.91	171587.93	133575.95	48.61
Grand Total:		326776.66	232486.38	140.77	250459.95	133666.19	53.57

# BASIN REPORT- St. Lawrence River

Basin Total

Units: Mgal(US)/d

Year Of Data: 2002

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	616.37	587.86	8.30	1212.52	0.00	0.00	124.80
Domestic Supply	2.55	0.50	95.16	98.21	0.00	0.00	10.37
Irrigation	0.01	2.31	9.52	11.84	0.00	0.00	8.54
Livestock	1.77	3.63	24.69	30.09	0.00	0.00	19.85
Industrial	165.48	132.55	3.09	301.12	0.00	0.00	26.39
Fossil Fuel Power	39.21	7.93	0.00	47.13	0.00	0.00	4.70
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	325951.28	231727.72	0.00	557679.00	0.00	0.00	0.00
Other	0.00	23.88	0.00	23.88	0.00	0.00	0.46

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	613.22	551.99	2.93	1168.13	0.00	0.00	120.45
Domestic Supply	0.00	0.50	48.61	49.11	0.00	0.00	4.81
Irrigation	0.00	0.27	0.00	0.27	0.00	0.00	0.24
Livestock					0.00	0.00	
Industrial	5.27	132.02	2.04	139.33	0.00	0.00	16.10
Fossil Fuel Power	39.21	7.93	0.00	47.13	0.00	0.00	4.70
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	249802.25	132949.60	0.00	382751.85	0.00	0.00	0.00
Other	0.00	23.88	0.00	23.88	0.00	0.00	0.46

ANNUAL REPORT  
of the  
*GREAT LAKES REGIONAL WATER USE  
DATABASE REPOSITORY*  
*REPRESENTING 2003 WATER USE DATA IN GALLONS*

*Prepared by*  
***The Great Lakes Commission***

October 4, 2006



## ***ACKNOWLEDGEMENTS***

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The Great Lakes Commission wishes to thank each of the jurisdictional representatives listed on page eight for applying their years of expertise toward the coalescing of the data for this report. Their attention to detail and commitment to accuracy, in addition to their combined familiarity with the subject matter, contribute greatly to the value of this project.

## ***FOREWARD***

The Great Lakes Regional Water Use Database partially fulfills the recommendation in the Great Lakes Charter of 1985 that calls for a uniform, consistent base of data of Great Lakes water withdrawals, diversions and consumptive uses. Water use data are submitted to the repository on an annual basis and reports are provided to assist the jurisdictions in Great Lakes-St. Lawrence River water resources planning and management. As specified by the Water Resources Management Committee in its 1987 report, *Managing the Waters of the Great Lakes Basin*, the database catalogs withdrawals by water use category, sub-basin, and jurisdiction.

The operation and use of this database represents one of several ongoing activities on behalf of the Great Lakes states and provinces to fulfill aspects of the Charter and Charter Annex of 2001. Continued state and provincial involvement in refining and expanding the database is necessary to ensure that the database can reinforce other potential future Charter and Charter Annex activities, such as improving consumptive use information, conducting trend analyses, developing uniform and consistent demand forecasting applications and promoting regional water conservation programs.

The database became operational in the summer of 1988 following a multi-year cooperative effort. Design and development involved input from many state, provincial, and federal agencies, with the U.S. Geological Survey providing much of the leadership.

The customized program was developed in 1987 by Acres International on the MS/DOS platform using a modified version of DbaseIII. With the rapid advancement of computer hardware and software and the evolving needs of the Great Lakes state and provincial water resources management programs, the old system soon became outdated. In July 1998, the Great Lakes Commission and Eastern Michigan University's Institute for Geospatial Research and Education (formerly the Center for Environmental Information Technology and Application) began work on the revised database. The new system was developed using Visual Basic for Applications, based on Microsoft Access®, and contains all of the functions of the old system (including data entry, a data check facility and report generation), in addition to new features such as a flexible data interface and automatic data checking.

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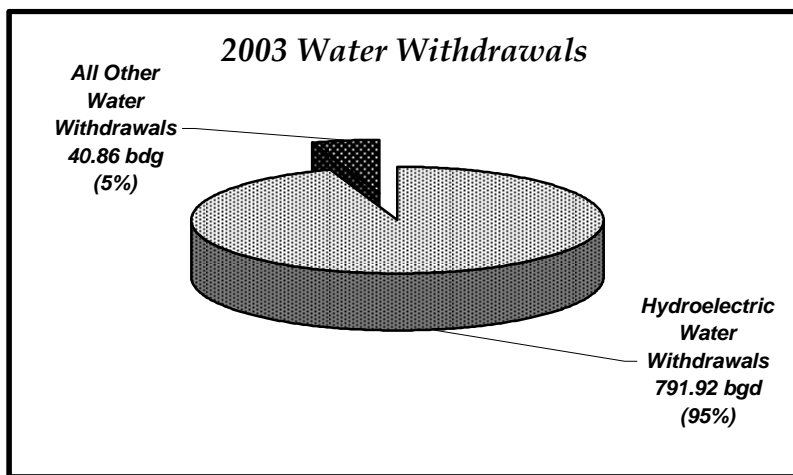
# ***I. GREAT LAKES BASIN OVERVIEW***

## **Introduction**

All data are submitted in one of two unit measures--millions of U.S. gallons per day (mgd) or millions of liters per day (mld)--and values are initially set to zero. Numeric values are required for all categories of use. A value of zero indicates either zero water use (under All Facilities) or water use which does not meet the Great Lakes Charter trigger level (under Principal Facilities).

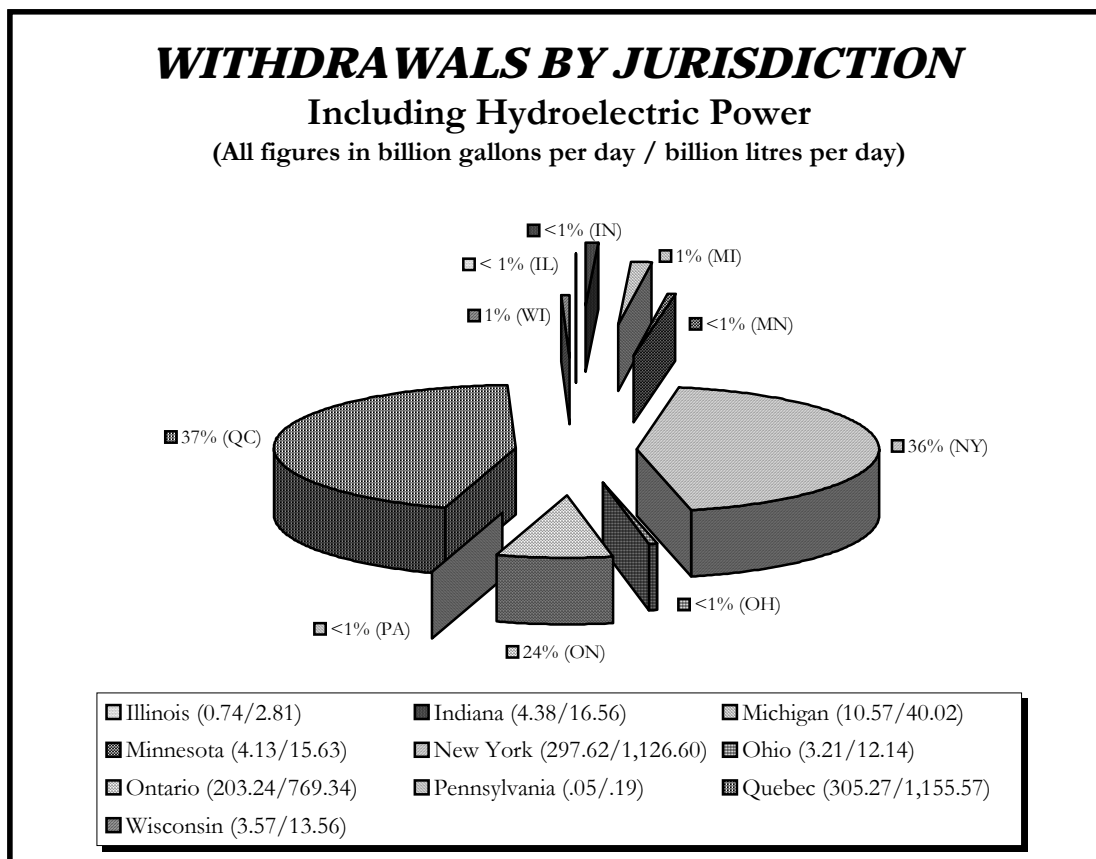
The quality of data for each entry is rated as a 1, 2 or 3 indicating the level of accuracy as 1) measured 2) partially measured or 3) estimated; and a 1 or 2 indicating the level of aggregation as 1) originating from site-specific sources or 2) from higher level aggregate sources such as county or census databases. Both measures of quality are based on percentages of total volume.

For this report, self-supply--hydroelectric (water used in the generation of electricity at plants where turbine generators are driven by falling water) is treated as a withdrawal, even though all water for this purpose is considered to be returned to the basin. As the following chart illustrates, this is the largest single category of withdrawal and represents 95% of the total amount of water “withdrawn” in 2003.



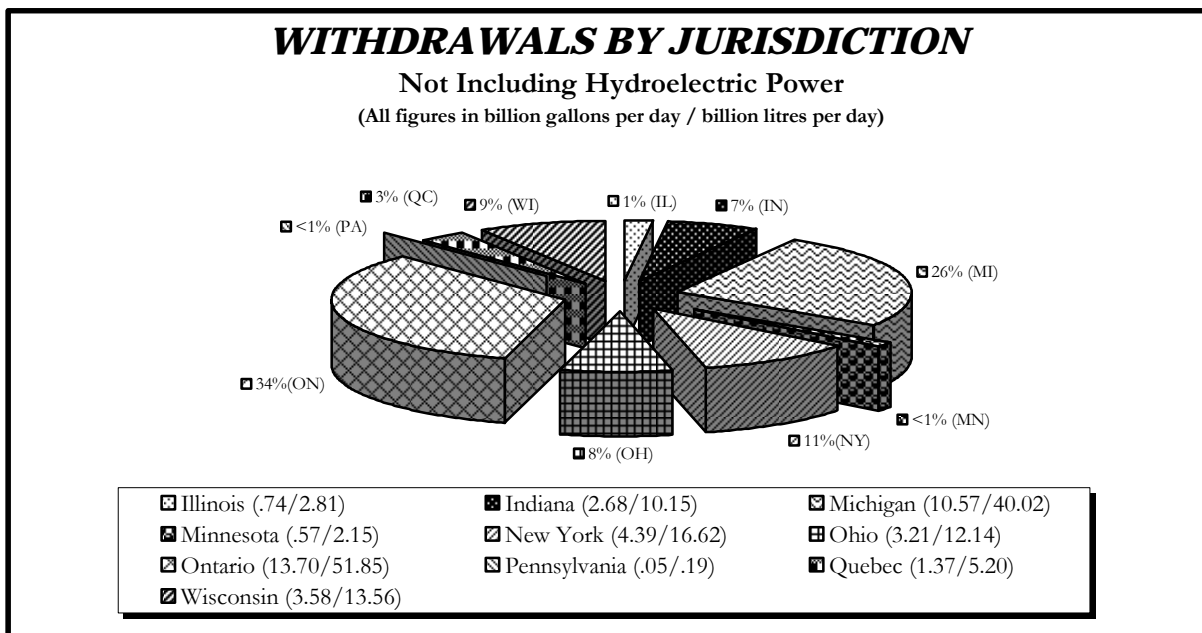
**Figure 1**

Each of the ten jurisdictions' water uses is represented in Figure 2 and Figure 3. Figure 2 includes self-supply – hydroelectric use. In total, water withdrawals for the year 2003 were approximately 833 billion gallons per day, or about 3,152 billion liters per day.



**Figure 2**

Figure 3 more accurately reflects the true water use within the basin, as it does not include self-supply – hydroelectric use. Water withdrawals for the eight remaining off-stream categories totaled 41 billion gallons per day, or 155 billion liters per day.



**Figure 3**

Pie charts showing individual jurisdictional water use, beginning with Illinois on page 14, are in million gallons per day and do not include hydroelectric use.

## Topics of Interest

### Diversions

Two types of diversions are reported by the water use database: interbasin (transfers that take place between the Great Lakes basin and another watershed) and intrabasin (transfers that take place between one of the Great Lakes watersheds and another); both types can be either incoming or outgoing.

Of the two types, interbasin diversions (transfers that take place between the Great Lakes basin and another watershed) have traditionally been of greater interest to water supply managers and the public. Interbasin diversions shown in the tables as a positive number (e.g. **without** a minus sign) indicate water leaving the Great Lakes basin; interbasin diversions shown in the tables as a negative number (e.g. **with** a minus sign) indicate water entering the Great Lakes basin.

For a history of Great Lakes water diversions and removals, please see *Great Lakes Diversions and Other Removals* by Frank Quinn and Jeff Edstrom, **Canadian Water Resources Journal**, 2000, vol. 25, #2. Copies of this article can be obtained through the CWRJ website at [www.cwra.org/publications](http://www.cwra.org/publications), or by calling 519/622-4764.

### Consumptive Use

Collecting and reporting accurate data for consumptive uses of Great Lakes water continues to be a major challenge for the Great Lakes jurisdictions. The states and provinces currently use a variety of methods to obtain consumptive use figures, including measurement and estimation at the facility level. However, the most common practice is to calculate consumptive use for each water use category by multiplying the withdrawn amount by an agreed-upon percentage (consumptive use coefficient). Figure 4 on the following page shows the consumptive use coefficients that were used for this report. For the resulting consumptive use quantities by jurisdiction, basin or water use category, please refer to the tables in chapters II through V. Total consumptive use in the basin for 2003 was calculated to be 1.91 bgd (7.24 bld).

For a more detailed overview, please see:

**Annotated Bibliography of Consumptive Use in the Great Lakes Region and Basin**  
([www.glc.org/wateruse/wrmdss/finalreport/pdf/CU\\_biblio.pdf](http://www.glc.org/wateruse/wrmdss/finalreport/pdf/CU_biblio.pdf))

**Measuring and Estimating Consumptive Use of Great Lakes Water**  
([www.glc.org/wateruse/wrmdss/finalreport/pdf/CU\\_briefing.pdf](http://www.glc.org/wateruse/wrmdss/finalreport/pdf/CU_briefing.pdf)).

## Consumptive Use Coefficients

<i><b>Water Use Category</b></i>	<b>ILLINOIS</b>	<b>INDIANA</b>	<b>MICHIGAN</b>	<b>MINNESOTA</b>	<b>NEW YORK</b>	<b>OHIO</b>	<b>ONTARIO</b>	<b>PENNSYLVANIA</b>	<b>QUEBEC</b>	<b>WISCONSIN</b>
Public Supply	10-15%	15%	10-15%	10-15%	10%	10-15%	15%	10%	10-15%	10-15%
Self-Supply Domestic	10-15%	15%	10-15%	10-15%	10%	10-15%	15%	10%	10-15%	10-15%
Self-Supply Irrigation	90%	90%	90%	90%	90%	90%	78%	90%	90%	70%
Self-Supply Livestock	80%	80%	80%	80%	90%	80%	80%	80%	80%	90%
Self-Supply Industrial	Varies by plant & SIC code	6%	10-15%	Varies by plant & SIC code	25%	10%; salt mining is 90%	Varies by plant & SIC code	Varies by plant & SIC code	10% for pulp & paper industry	10.2% for manufacturing & mining
Self-Supply Thermoelectric (Fossil Fuel)	Individually estimated based on the quantity of make-up water	2%	1-2% for plants using once-through cooling; individual analysis for wet cooling towers	2%	2%	Individually estimated based on the quantity of make-up water	.9% based on reports of increased local lake evaporation due to discharge of heated water to lakes	NA (Pennsylvania has no facilities in the basin)	10%; estimates obtained from USGS report	.5-1%
Self-Supply Thermoelectric (Nuclear)	Individually estimated based on the quantity of make-up water	NA (Indiana has no facilities in the basin)	1-2% for plants using once-through cooling; individual analysis for wet cooling towers	NA (Minnesota has no facilities in the basin)	5%	14% based on reports of increased local lake evaporation due to discharge of heated water to lakes	.9% based on reports of increased local lake evaporation due to discharge of heated water to lakes	NA (Pennsylvania has no facilities in the basin)	NA (Quebec has no facilities in the basin)	.5-1%
Hydroelectric	Coefficient for all states and provinces is 0%									
Self-Supply Other	0%	12%	Varies based on use	Varies based on use	Varies based on use	Varies based on use	Varies based on use	Varies based on use	Varies based on use	Varies based on use

**Figure 4**

## Definitions and Abbreviations

### General Definitions and Abbreviations

- ▶ **bgd:** billion gallons per day
- ▶ **bld:** billion liters per day
- ▶ **consumptive use:** that portion of water withdrawn or withheld from the Great Lakes basin and assumed to be lost or otherwise not returned to the Great Lakes basin due to evapotranspiration, incorporation into products, or other processes
- ▶ **Great Lakes surface water (GLSW):** the Great Lakes, their connecting channels (the St. Clair River, the Detroit River, the Niagara River and the St. Marys River), and the St. Lawrence River
- ▶ **groundwater (GW):** all subsurface water
- ▶ **interbasin diversion (positive):** water transferred from the Great Lakes basin into another watershed
- ▶ **interbasin diversion (negative):** water transferred from another watershed into the Great Lakes basin
- ▶ **intrabasin diversion (positive):** water transferred out of one Great Lakes watershed into another
- ▶ **intrabasin diversion (negative):** water transferred into one Great Lakes watershed from another
- ▶ **level of accuracy:** the quality of data based on percentage of total volume and rated as 1) measured; 2) partially measured or; 3) estimated,
- ▶ **level of aggregation:** the quality of data based on percentage of total volume and rated as 1) originating from site-specific sources or 2) originating from higher level aggregate sources, such as county or census databases
- ▶ **mgd:** million gallons per day
- ▶ **mld:** million liters per day
- ▶ **other surface water (OSW):** tributary streams, lakes, ponds, and reservoirs within the Great Lakes basin
- ▶ **principal facility:** facilities withdrawing in excess of the Great Lakes Charter uniform trigger level of 100,000 U.S. gallons/day (380,000 liters/day) average over a 30-day period. A principal facility is determined by the total withdrawal (or consumption) of all sources combined (Great Lakes surface water, other surface water, and groundwater) rather than a single source. The combined withdrawals (or consumption) of separate wells or operations undertaken by the same facility or company will be evaluated separately for the purpose of determining principal facility status unless those operations are covered under the same registration (or permit) or are physically contiguous. Principal facilities are a subset of all facilities in the database.
- ▶ **tgd:** trillion gallons per day
- ▶ **tld:** trillion liters per day
- ▶ **withdrawal amount:** water removed or taken from surface or groundwater (including hydroelectric use)

### Water Use Category Definitions

1. **Public Water Supply:** Water withdrawn for all uses by public and private water suppliers and delivered to users that do not supply their own water. (Water suppliers provide water for a variety of uses such as residential, commercial, industrial, and public water use.)
2. **Self-Supply Domestic: (residential, commercial, institutional):** Water used for normal household purposes. Also referred to as residential water use, this category includes water used for drinking, food preparation, bathing, washing clothes and dishes, flushing toilets, and watering lawns. Commercial uses include water used by motels, hotels, restaurants, office buildings and institutions, both civilian and military. This category also includes water for mobile homes, hospitals, schools, fire fighting, air conditioning and other similar uses not covered under a public supply. In addition, this category includes amusement and recreational water uses such as snowmaking and water slides. The coefficient for domestic per capita water use is 75 gallons a day (U.S.) unless otherwise indicated by the reporting state or province.
3. **Self-Supply Irrigation:** Water artificially applied on lands to assist in the growing of crops and pastures or in the maintenance of recreational lands, such as parks and golf courses.
4. **Self-Supply Livestock:** Water used by horses, cattle, sheep, goats, hogs, poultry, and other commercially important animals. Water used in fish hatchery operations are also included under this category.
5. **Self-Supply Industrial (manufacturing and mining):** Industrial water includes water used in the manufacture of metals, chemicals, paper, and allied products. Mining water use includes water used in the extraction or washing of minerals; for example solids, such as coal and ores, and liquids such as crude petroleum and natural gas. Water used in quarrying and milling is also included in the industrial category. Brine extraction from oil and gas operations is not included. Withdrawals and consumptive uses for industrial and mining purposes (including dewatering operations) recorded under another category (e.g., public supply) will not be recorded here. Water used in a closed cycle (recirculation) will not be reported as a withdrawal. Other situations should be evaluated on a case-by-case basis.
6. **Self-Supply Thermoelectric Power (fossil fuel plants):** Water used by plants fueled by fossil fuels such as coal, oil or natural gas. Withdrawals and consumptive uses already recorded under another category (e.g., public supply) will not be reported here.
7. **Self-Supply Thermoelectric Power (nuclear plants):** Water used by plants fueled by nuclear generation. Withdrawals and consumptive uses already recorded under another category (e.g., public supply) will not be reported here.
8. **Self-Supply Hydroelectric Power:** Water used to drive turbines that generate electric power. This category includes both “instream use” where water is used on a once-through basis and “offstream use” where water is recycled through pumped-storage systems. Neither use is considered a consumptive use.
9. **Self-Supply - Other:** Water used for purposes not reported in categories one through nine. Examples include, but are not limited to, withdrawals for fish/wildlife, environmental, recreation, navigation, and water quality purposes. Specifically, water used to maintain levels for navigation, for recreation, for fish and wildlife habitat creation and enhancement (excluding fish hatchery operations included under Category 5), for flow augmentation (or diversion), for sanitation, pollution confinement, and other water quality purposes and agricultural activities (services) other than those directly related to irrigation such as field drainage are included. Water used in temporary or immediate emergency situations (e.g., fighting forest or peat fires) is also reported here.



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## ***II. GREAT LAKES BASIN SUMMARY TABLES***

Water Use by Jurisdiction  
Water Use by Basin  
Water Use by Category

# SUMMARY REPORT - GREAT LAKES BASIN

Units: Mgal(US)/d

Year Of Data: 2003

## Water Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	741.70	0.00	0.01	741.70	0.00	1232.58	15.31
Indiana	2486.32	1758.92	130.40	4375.64	0.00	-1.72	179.49
Michigan	9463.16	574.32	534.75	10572.23	0.00	0.00	594.18
Minnesota	351.41	3772.66	5.47	4129.54	0.00	0.00	46.13
New York	117067.65	180415.45	132.82	297615.92	0.00	40.77	320.39
Ohio	2159.08	901.12	147.12	3207.32	0.00	-13.60	170.87
Ontario	143002.93	59956.58	279.43	203238.94	61.97	-4007.75	279.92
Pennsylvania	37.52	5.95	6.14	49.61	0.00	-0.81	7.61
Quebec	171588.19	133580.18	99.91	305268.28	0.00	0.00	157.86
Wisconsin	3371.28	24.70	186.03	3582.01	0.00	-0.24	140.98
<b>Total:</b>	<b>450269.24</b>	<b>380989.88</b>	<b>1522.08</b>	<b>832781.19</b>	<b>61.97</b>	<b>-2750.78</b>	<b>1912.74</b>

## Water Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	741.70	0.00	0.01	741.70	0.00	1232.58	15.31
Indiana	2486.28	1758.47	97.58	4342.33	0.00	0.00	171.77
Michigan					0.00	0.00	
Minnesota	351.13	3771.65	4.54	4127.32	0.00	0.00	44.68
New York	116649.61	539.05	10.07	117198.73	0.00	40.77	220.85
Ohio	2158.75	895.62	72.26	3126.63	0.00	-13.60	147.46
Ontario	493.17	376.22	87.00	956.38	61.97	0.00	113.52
Pennsylvania	37.51	5.62	1.79	44.91	0.00	-0.81	7.07
Quebec	171587.93	133575.95	48.61	305212.48	0.00	0.00	131.58
Wisconsin					0.00	0.00	
<b>Total:</b>	<b>294506.07</b>	<b>140922.58</b>	<b>321.84</b>	<b>435750.49</b>	<b>61.97</b>	<b>1258.93</b>	<b>852.24</b>

# SUMMARY REPORT - GREAT LAKES BASIN

Units: Mgal(US)/d

Year Of Data: 2003

## Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	1145.13	41942.74	30.87	43118.74	0.00	-4007.75	78.32
Lake Michigan	9822.82	2241.64	691.47	12755.92	0.00	1230.62	651.13
Lake Huron	25958.52	13731.15	94.10	39783.77	47.97	0.00	141.48
Lake Erie	49440.31	1105.33	376.11	50921.74	5816.39	-14.41	495.47
Lake Ontario	42645.22	89483.54	188.37	132317.13	-5802.39	40.77	351.51
St. Lawrence River	321257.25	232485.48	141.16	553883.88	0.00	0.00	194.83
<b>Total:</b>	<b>450269.24</b>	<b>380989.88</b>	<b>1522.08</b>	<b>832781.19</b>	<b>61.97</b>	<b>-2750.78</b>	<b>1912.74</b>

## Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	381.20	3784.61	7.09	4172.90	0.00	0.00	51.52
Lake Michigan	3227.98	1719.98	83.60	5031.55	0.00	1232.58	179.68
Lake Huron	42.02	71.20	16.40	129.63	47.97	0.00	12.25
Lake Erie	43698.53	970.30	142.85	44811.68	5816.39	-14.41	240.87
Lake Ontario	2215.32	711.86	18.12	2945.30	-5802.39	40.77	221.43
St. Lawrence River	244941.02	133664.63	53.78	378659.43	0.00	0.00	146.50
<b>Total:</b>	<b>294506.07</b>	<b>140922.58</b>	<b>321.84</b>	<b>435750.49</b>	<b>61.97</b>	<b>1258.93</b>	<b>852.24</b>

# SUMMARY REPORT - GREAT LAKES BASIN

Units: Mgal(US)/d

Year Of Data: 2003

## Water Use by Category - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	3257.15	1155.34	563.17	4975.67	0.00	1037.81	618.63
Domestic Supply	40.83	44.54	370.69	456.06	0.00	0.03	56.25
Irrigation	8.27	164.83	289.65	462.75	0.00	0.00	342.06
Livestock	10.89	14.01	115.46	140.37	0.00	0.00	88.79
Industrial	3805.82	451.07	177.73	4434.62	0.00	0.02	378.70
Fossil Fuel Power	13635.22	1572.75	4.48	15212.44	0.00	0.00	179.55
Nuclear Power	14928.60	0.00	0.00	14928.60	0.00	0.00	215.75
Hydroelectric Power	414581.73	377337.59	0.00	791919.31	0.00	-4007.75	0.00
Other	0.74	249.75	0.90	251.39	61.97	219.12	33.02
<b>Total:</b>	<b>450269.24</b>	<b>380989.88</b>	<b>1522.08</b>	<b>832781.19</b>	<b>61.97</b>	<b>-2750.78</b>	<b>1912.74</b>

## Water Use by Category - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	1685.50	831.87	178.68	2696.05	0.00	1039.13	345.13
Domestic Supply	4.80	44.35	54.52	103.67	0.00	0.03	11.30
Irrigation	0.26	22.92	18.69	41.87	0.00	0.00	37.68
Livestock	0.61	3.49	3.94	8.04	0.00	0.00	13.02
Industrial	2298.30	331.05	65.14	2694.49	0.00	0.02	238.62
Fossil Fuel Power	4458.01	1233.09	0.27	5691.37	0.00	0.00	95.15
Nuclear Power	1486.60	0.00	0.00	1486.60	0.00	0.00	78.34
Hydroelectric Power	284571.25	138206.22	0.00	422777.47	0.00	0.00	0.00
Other	0.74	249.59	0.60	250.93	61.97	219.76	33.01
<b>Total:</b>	<b>294506.07</b>	<b>140922.58</b>	<b>321.84</b>	<b>435750.49</b>	<b>61.97</b>	<b>1258.93</b>	<b>852.24</b>

### ***III. JURISDICTION TABLES AND ANALYSES***

Each jurisdictional summary includes a water use analysis and three tables:

Withdrawals, Diversions and Consumptive Uses

Withdrawals by Source

Jurisdiction Totals

Illinois

Indiana

Michigan

Minnesota

New York

Ohio

Ontario

Pennsylvania

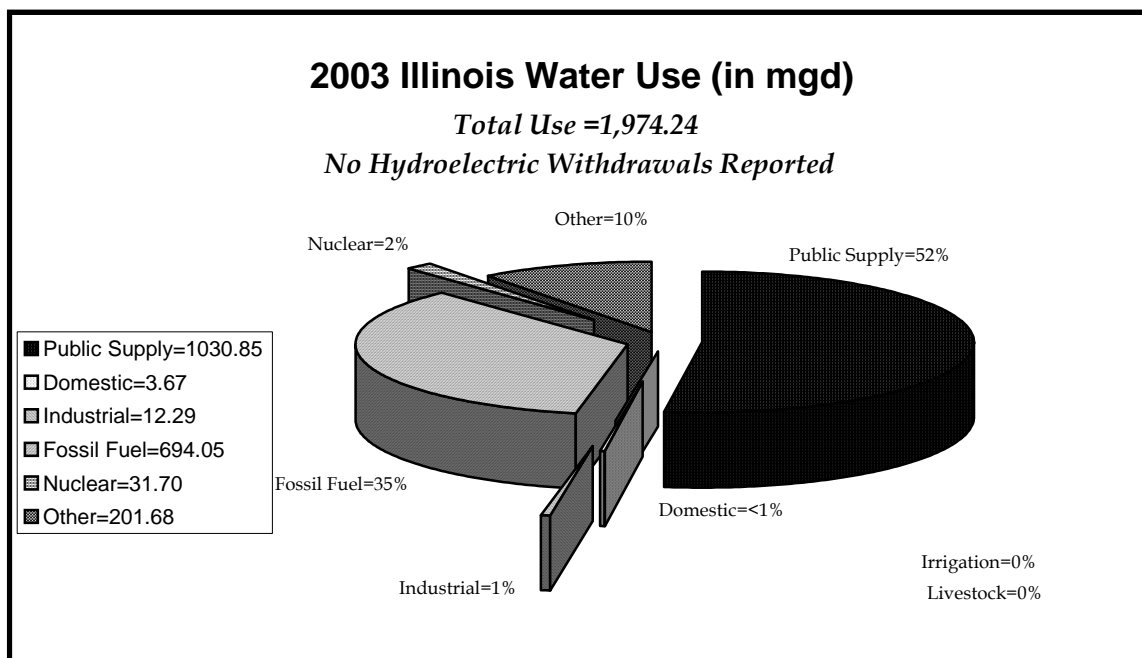
Quebec

Wisconsin

## Illinois

**Data Sources:** Water use data for Illinois was provided by the Department of Natural Resources--Office of Water Resources, and the State Water Survey. Please contact James Casey at 312/793-5947 or [jcasey@illinois.gov](mailto:jcasey@illinois.gov) with questions regarding Illinois' data.

**Withdrawals:** Illinois' water withdrawals from Lake Michigan in 2003 totaled 1,974.24 mgd, was comparable to usage in 2002.



**Figure 5**

**Consumptive Use:** Total consumptive use was calculated to be 15.31 mgd, with fossil fuel consuming the most at 13.88 mgd or 91%.

**Interbasin Diversions:** Total diversions from the Lake Michigan basin in 2003 were 1,232.58 mgd, a decrease of about 1% from the 2002 figure. Public water supply accounted for about 84% of these diversions. All diversions for Illinois are outgoing interbasin diversions—water transferred from the Chicago River in the Great Lakes basin to the Illinois River in the Mississippi River basin.

**Data Quality:** Illinois's withdrawal data for this report were 100% measured; the level of aggregation was 100% site-specific.

# JURISDICTION REPORT- Illinois

Withdrawals, Diversions Units: Mgal(US)/d  
and Consumptive Uses Year Of Data: 2003

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Lake Michigan							
	Public Supply	1030.85	1030.85	0.00	1030.85	1030.85	0.00
	Domestic Supply	3.67	0.03	0.37	3.67	0.03	0.37
	Irrigation		0.00		0.00	0.00	0.00
	Livestock		0.00		0.00	0.00	0.00
	Industrial	12.29	0.02	0.74	12.29	0.02	0.74
	Fossil Fuel Power	694.05	0.00	13.88	694.05	0.00	13.88
	Nuclear Power	31.70	0.00	0.32	31.70	0.00	0.32
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	201.68	201.68	0.00	201.68	201.68	0.00
	Total:	1974.24	1232.58	15.31	1974.24	1232.58	15.31
Grand Total:		1974.24	1232.58	15.31	1974.24	1232.58	15.31



# JURISDICTION REPORT - Illinois

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2003

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Michigan							
	Public Supply	0.00	0.00	0.00	0.00	0.00	0.00
	Domestic Supply	3.67	0.00	0.01	3.67	0.00	0.01
	Irrigation				0.00	0.00	0.00
	Livestock				0.00	0.00	0.00
	Industrial	12.29	0.00	0.00	12.29	0.00	0.00
	Fossil Fuel Power	694.05	0.00	0.00	694.05	0.00	0.00
	Nuclear Power	31.70	0.00	0.00	31.70	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total:	741.70	0.00	0.01	741.70	0.00	0.01
Grand Total:		741.70	0.00	0.01	741.70	0.00	0.01

# JURISDICTION REPORT- Illinois

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2003

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	0.00	0.00	0.00	0.00	0.00	1030.85	0.00
Domestic Supply	3.67	0.00	0.01	3.67	0.00	0.03	0.37
Irrigation					0.00	0.00	
Livestock					0.00	0.00	
Industrial	12.29	0.00	0.00	12.29	0.00	0.02	0.74
Fossil Fuel Power	694.05	0.00	0.00	694.05	0.00	0.00	13.88
Nuclear Power	31.70	0.00	0.00	31.70	0.00	0.00	0.32
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	201.68	0.00

## Total Report - Principal Facilities

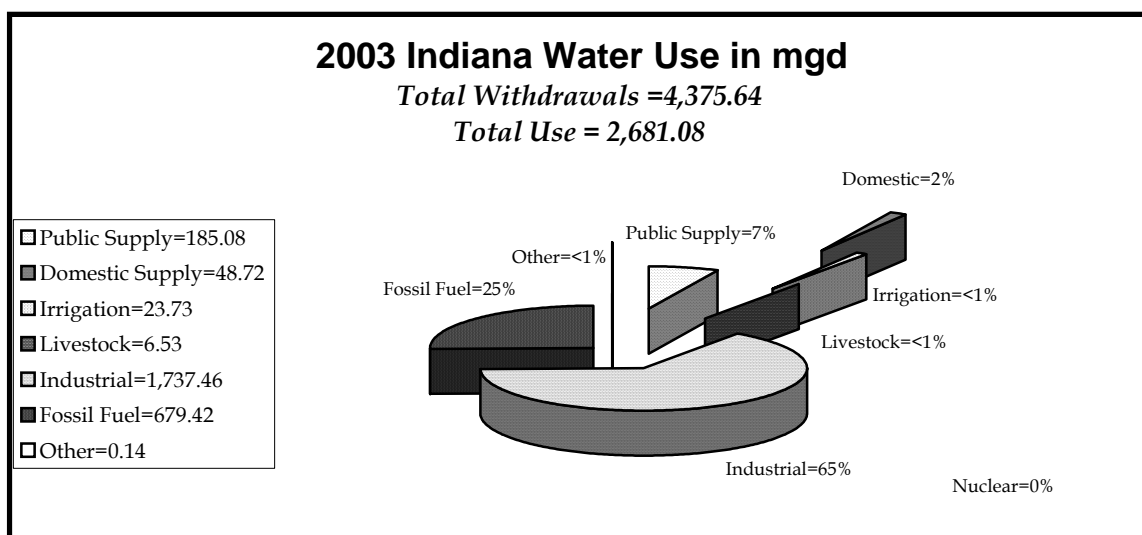
Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	0.00	0.00	0.00	0.00	0.00	1030.85	0.00
Domestic Supply	3.67	0.00	0.01	3.67	0.00	0.03	0.37
Irrigation	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Livestock	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Industrial	12.29	0.00	0.00	12.29	0.00	0.02	0.74
Fossil Fuel Power	694.05	0.00	0.00	694.05	0.00	0.00	13.88
Nuclear Power	31.70	0.00	0.00	31.70	0.00	0.00	0.32
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	201.68	0.00

## Indiana

**Data Sources:** The Indiana Department of Natural Resources—Division of Water compiled the 2003 data for the regional water use database for the Lake Erie and Lake Michigan basins. Please contact Ralph Spaeth at 317/234-1101 or [rspaeth@dnr.in.gov](mailto:rspaeth@dnr.in.gov) with questions regarding Indiana's data.

The Indiana Business Research Center at Indiana University provided population estimates for counties used in calculating self-supply domestic withdrawals. The Indiana Agricultural Statistics service at Purdue University provided livestock estimates by county. The local office of USGS Water Resources Division provided estimates of percent of population by county on domestic wells. Hydroelectric data are from the Department of Energy's Energy Information Administration website located at [www.eia.doe.gov/cneaf/electricity](http://www.eia.doe.gov/cneaf/electricity).

**Withdrawals:** In 2003, total use was 2,681.08 mgd, down from the 2002 figure of 2,704.82 mgd. Of this amount, 98% of the water used was from Lake Michigan. The total use excludes hydroelectric power from Lake Michigan which accounted for 1,694.56 mgd. The primary use of Lake Michigan water was industrial, at 1,728.31 mgd, or 66%. The primary use of Lake Erie water was public supply, at 42.67 mgd, or more than 71%.



**Figure 6**

**Consumptive Use:** The total consumptive use of water in Indiana's portion of the Great Lakes basin was 179.49 mgd, compared to 190.29 mgd in 2002. In the Lake Michigan basin, industrial was the largest consumptive use, at 61% (103.71 mgd of a total of 170.22 mgd) and in the Lake Erie basin public supply was the largest consumptive use, at 69% (6.40 mgd of a total of 9.27 mgd).

**Interbasin Diversions:** A diversion by the city of Valparaiso withdrew 1.72 mgd groundwater for public supply from the Kankakee River basin which is discharged as treated sewage into Salt Creek in the Lake Michigan basin.

**Data Quality:** Indiana's withdrawal data for this report were 4% measured, 55% partially measured, and 41% calculated or estimated; the level of aggregation was 99% site-specific and 1% aggregated.

# JURISDICTION REPORT- Indiana

Withdrawals, Diversions Units: Mgal(US)/d  
and Consumptive Uses Year Of Data: 2003

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Lake Michigan							
	Public Supply	142.41	-1.72	21.36	142.10	0.00	21.31
	Domestic Supply	42.59	0.00	6.39	20.54	0.00	3.08
	Irrigation	23.01	0.00	20.71	22.13	0.00	19.91
	Livestock	5.59	0.00	4.46	3.53	0.00	2.82
	Industrial	1728.31	0.00	103.71	1727.81	0.00	103.67
	Fossil Fuel Power	679.15	0.00	13.58	679.15	0.00	13.58
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	1694.56	0.00	0.00	1694.56	0.00	0.00
	Other	0.14	0.00	0.01	0.03	0.00	0.00
	Total:	4315.76	-1.72	170.22	4289.85	0.00	164.37
Lake Erie							
	Public Supply	42.67	0.00	6.40	42.53	0.00	6.37
	Domestic Supply	6.13	0.00	0.92	0.22	0.00	0.03
	Irrigation	0.72	0.00	0.64	0.51	0.00	0.45
	Livestock	0.94	0.00	0.75	0.00	0.00	0.00
	Industrial	9.15	0.00	0.55	8.95	0.00	0.54
	Fossil Fuel Power	0.27	0.00	0.01	0.27	0.00	0.01
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total:	59.88	0.00	9.27	52.48	0.00	7.40
Grand Total:		4375.64	-1.72	179.49	4342.33	0.00	171.77

# JURISDICTION REPORT- Indiana

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2003

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Michigan							
	Public Supply	96.88	0.00	45.53	96.88	0.00	45.22
	Domestic Supply	0.00	14.85	27.74	0.00	14.85	5.69
	Irrigation	0.00	5.32	17.69	0.00	4.98	17.15
	Livestock	0.00	1.17	4.42	0.00	1.17	2.36
	Industrial	1710.29	4.42	13.60	1710.25	4.42	13.14
	Fossil Fuel Power	679.15	0.00	0.00	679.15	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	1694.56	0.00	0.00	1694.56	0.00
	Other	0.00	0.02	0.12	0.00	0.00	0.03
	Total:	2486.32	1720.34	109.10	2486.28	1719.98	83.59
Lake Erie							
	Public Supply	0.00	33.23	9.44	0.00	33.23	9.30
	Domestic Supply	0.00	0.00	6.13	0.00	0.00	0.22
	Irrigation	0.00	0.20	0.52	0.00	0.13	0.38
	Livestock	0.00	0.00	0.94	0.00	0.00	0.00
	Industrial	0.00	5.15	4.00	0.00	5.13	3.82
	Fossil Fuel Power	0.00	0.00	0.27	0.00	0.00	0.27
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total:	0.00	38.58	21.30	0.00	38.49	13.99
Grand Total:		2486.32	1758.92	130.40	2486.28	1758.47	97.58

# JURISDICTION REPORT- Indiana

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2003

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	96.88	33.23	54.97	185.08	0.00	-1.72	27.76
Domestic Supply	0.00	14.85	33.87	48.72	0.00	0.00	7.31
Irrigation	0.00	5.52	18.21	23.73	0.00	0.00	21.35
Livestock	0.00	1.17	5.36	6.53	0.00	0.00	5.21
Industrial	1710.29	9.57	17.60	1737.46	0.00	0.00	104.26
Fossil Fuel Power	679.15	0.00	0.27	679.42	0.00	0.00	13.59
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	1694.56	0.00	1694.56	0.00	0.00	0.00
Other	0.00	0.02	0.12	0.14	0.00	0.00	0.01

## Total Report - Principal Facilities

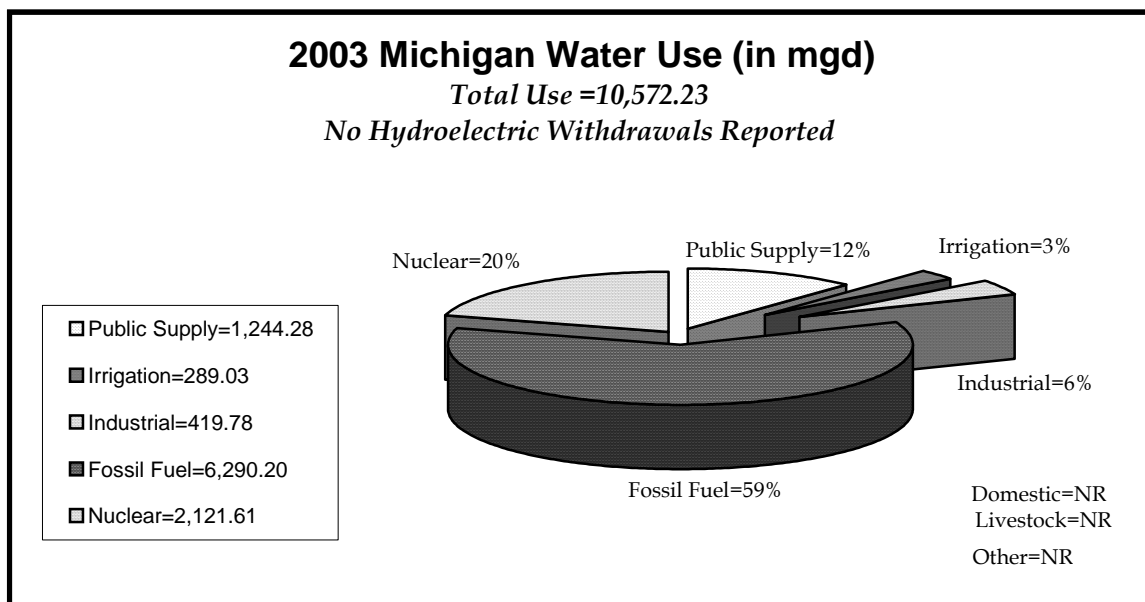
Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	96.88	33.23	54.52	184.63	0.00	0.00	27.68
Domestic Supply	0.00	14.85	5.91	20.76	0.00	0.00	3.11
Irrigation	0.00	5.11	17.53	22.64	0.00	0.00	20.36
Livestock	0.00	1.17	2.36	3.53	0.00	0.00	2.82
Industrial	1710.25	9.55	16.96	1736.76	0.00	0.00	104.21
Fossil Fuel Power	679.15	0.00	0.27	679.42	0.00	0.00	13.59
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	1694.56	0.00	1694.56	0.00	0.00	0.00
Other	0.00	0.00	0.03	0.03	0.00	0.00	0.00

## Michigan

**Data Sources:** The Michigan Department of Environmental Quality submitted 2003 water use data. All data are directly reported to the Michigan DEQ by the facilities within each category except irrigation, which is estimated and divided into agricultural and nonagricultural (golf course, park, etc.) irrigation. Agricultural irrigation is estimated using federal Agricultural Census data and a water use estimation model developed for Michigan. Nonagricultural irrigation facilities report directly to the DEQ. Please contact Andrew LeBaron at 517/241-1435 or lebarona@michigan.gov with questions regarding Michigan's data.

Because of the large number of facilities and limited staff resources, Michigan water usage cannot be separated by facility type. Michigan data are available at the state database at [www.michigan.gov/deq](http://www.michigan.gov/deq). Click on **Water, Great Lakes, Water Use, Levels & Diversion** and go to the **Michigan Water Use Reporting Program**.

**Withdrawals:** Water withdrawals for the Lake Superior, Lake Michigan, Lake Huron, and Lake Erie basins of Michigan were approximately 10,572.23 mgd, a decrease of between 3% and 4% from 2002. Of the four basins, the state of Michigan withdraws the most--about 47%--from Lake Erie (5,016.53 mgd) and the least--between 2% and 3%--from Lake Superior (275.20 mgd). Thermoelectric power-fossil fuel, at 59%, was the largest withdrawal category for the state of Michigan.



**Figure 7**

**Consumptive Use:** Consumptive uses in the Michigan portion of the Great Lakes basin were calculated to be approximately 594.18 mgd; irrigation was the largest single consumptive use (because the coefficient for irrigation is 90%) at 260.14 mgd, or about 44% of the total consumptive use.

**Interbasin Diversions:** None reported.

**Data Quality:** Michigan's withdrawal data for this report were 91% measured, 6% partially measured, and 3% calculated or estimated; the level of aggregation was 100% site-specific.

# JURISDICTION REPORT- Michigan

Withdrawals, Diversions Units: Mgal(US)/d  
and Consumptive Uses Year Of Data: 2003

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Lake Superior							
	Public Supply	12.86	0.00	1.60		0.00	
	Domestic Supply		0.00			0.00	
	Irrigation	0.58	0.00	0.52		0.00	
	Livestock		0.00			0.00	
	Industrial	12.32	0.00	1.23		0.00	
	Fossil Fuel Power	249.44	0.00	2.99		0.00	
	Nuclear Power	0.00	0.00	0.00		0.00	
	Hydroelectric Power	0.00	0.00	0.00		0.00	
	Other		0.00			0.00	
	Total:	275.20	0.00	6.34		0.00	
Lake Michigan							
	Public Supply	313.53	0.00	39.20		0.00	
	Domestic Supply		0.00			0.00	
	Irrigation	235.98	0.00	212.39		0.00	
	Livestock		0.00			0.00	
	Industrial	267.93	0.00	26.80		0.00	
	Fossil Fuel Power	1276.28	0.00	15.32		0.00	
	Nuclear Power	2074.74	0.00	39.42		0.00	
	Hydroelectric Power	0.00	0.00	0.00		0.00	
	Other		0.00			0.00	
	Total:	4168.46	0.00	333.13		0.00	
Lake Huron							
	Public Supply	267.07	0.00	33.39		0.00	
	Domestic Supply		0.00			0.00	
	Irrigation	29.22	0.00	26.30		0.00	
	Livestock		0.00			0.00	
	Industrial	39.83	0.00	3.98		0.00	
	Fossil Fuel Power	775.92	0.00	9.31		0.00	
	Nuclear Power	0.00	0.00	0.00		0.00	
	Hydroelectric Power	0.00	0.00	0.00		0.00	
	Other		0.00			0.00	
	Total:	1112.04	0.00	72.98		0.00	



Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Lake Erie							
	Public Supply	650.82	0.00	81.35		0.00	
	Domestic Supply		0.00			0.00	
	Irrigation	23.25	0.00	20.93		0.00	
	Livestock		0.00			0.00	
	Industrial	307.03	0.00	30.70		0.00	
	Fossil Fuel Power	3988.56	0.00	47.86		0.00	
	Nuclear Power	46.87	0.00	0.89		0.00	
	Hydroelectric Power	0.00	0.00	0.00		0.00	
	Other		0.00			0.00	
	Total:	5016.53	0.00	181.73		0.00	
Grand Total:		10572.23	0.00	594.18		0.00	

# JURISDICTION REPORT- Michigan

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2003

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Superior							
	Public Supply	3.39	0.00	9.47			
	Domestic Supply						
	Irrigation	0.01	0.29	0.28			
	Livestock						
	Industrial	11.84	0.00	0.48			
	Fossil Fuel Power	249.44	0.00	0.00			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	Total:	264.68	0.29	10.23			
Lake Michigan							
	Public Supply	143.27	0.53	169.73			
	Domestic Supply						
	Irrigation	2.13	74.05	159.80			
	Livestock						
	Industrial	104.85	88.27	74.81			
	Fossil Fuel Power	939.81	333.75	2.72			
	Nuclear Power	2074.74	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	Total:	3264.80	496.60	407.06			
Lake Huron							
	Public Supply	233.27	0.69	33.11			
	Domestic Supply						
	Irrigation	3.28	11.13	14.81			
	Livestock						
	Industrial	22.41	15.74	1.68			
	Fossil Fuel Power	768.80	5.91	1.21			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	Total:	1027.76	33.47	50.81			

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Erie							
	Public Supply	589.36	16.26	45.20			
	Domestic Supply						
	Irrigation	0.53	12.97	9.75			
	Livestock						
	Industrial	280.68	14.73	11.62			
	Fossil Fuel Power	3988.48	0.00	0.08			
	Nuclear Power	46.87	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	Total:	4905.92	43.96	66.65			
Grand Total:		9463.16	574.32	534.75			

# JURISDICTION REPORT- Michigan

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2003

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	969.29	17.48	257.51	1244.28	0.00	0.00	155.54
Domestic Supply					0.00	0.00	
Irrigation	5.95	98.44	184.64	289.03	0.00	0.00	260.14
Livestock					0.00	0.00	
Industrial	419.78	118.74	88.59	627.11	0.00	0.00	62.71
Fossil Fuel Power	5946.53	339.66	4.01	6290.20	0.00	0.00	75.48
Nuclear Power	2121.61	0.00	0.00	2121.61	0.00	0.00	40.31
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other					0.00	0.00	

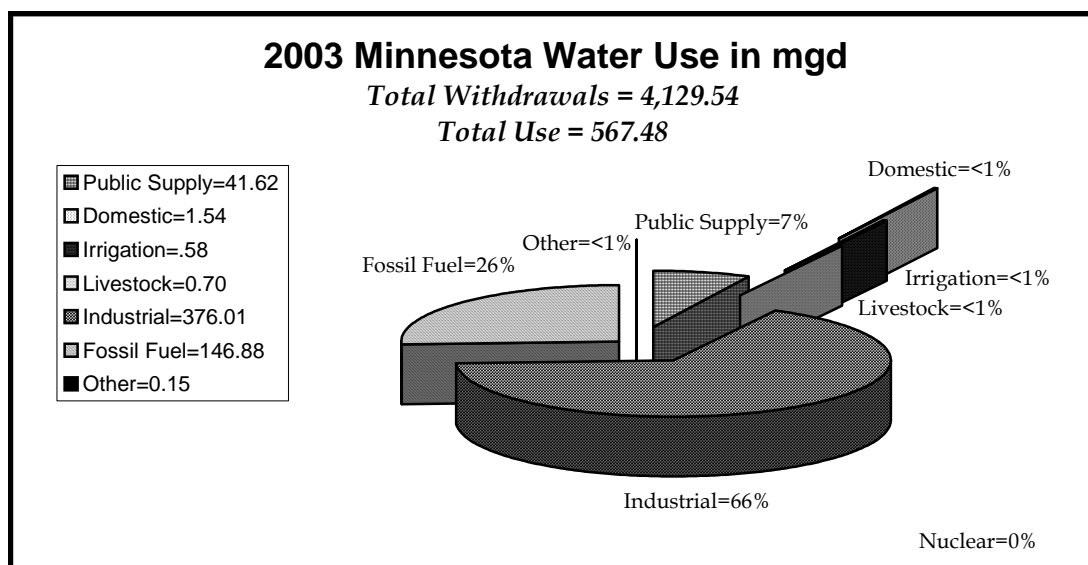
## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply					0.00	0.00	
Domestic Supply					0.00	0.00	
Irrigation					0.00	0.00	
Livestock					0.00	0.00	
Industrial					0.00	0.00	
Fossil Fuel Power					0.00	0.00	
Nuclear Power					0.00	0.00	
Hydroelectric Power					0.00	0.00	
Other					0.00	0.00	

## Minnesota

**Data Sources:** Water use data for Minnesota were provided by the Minnesota Department of Natural Resources, Division of Waters. Please contact Sean Hunt at 651/259-5679 or sean.hunt@dnr.state.mn.us with questions regarding Minnesota's data.

**Withdrawals:** Withdrawals from the Minnesota portion of the Lake Superior basin were 4,129.54 mgd, showing a decrease of 18% from 2002. Hydroelectric withdrawal which, at 3,562.06 mgd, accounted for over 86% of Minnesota's total water withdrawals in 2003, showed a decrease of 20% from 2002. Of the remainder (567.48 mgd), industrial use accounted for over half.



**Figure 8**

**Consumptive Use:** The largest consumptive use was calculated to be industrial, at 37.60 mgd, or 81% of total consumption. Public supply was the second largest consumptive use at 4.17 mgd, or 9% of Minnesota's total consumptive use.

**Interbasin Diversions:** None reported.

**Data Quality:** Minnesota's withdrawal data for this report were 100% measured; the level of aggregation was 100% site-specific.

# JURISDICTION REPORT- Minnesota

Withdrawals, Diversions Units: Mgal(US)/d  
and Consumptive Uses Year Of Data: 2003

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Lake Superior							
	Public Supply	41.62	0.00	4.17	40.97	0.00	3.41
	Domestic Supply	1.54	0.00	0.15	1.28	0.00	0.13
	Irrigation	0.58	0.00	0.53	0.10	0.00	0.09
	Livestock	0.70	0.00	0.63	0.61	0.00	0.55
	Industrial	376.01	0.00	37.60	375.54	0.00	37.56
	Fossil Fuel Power	146.88	0.00	3.05	146.76	0.00	2.94
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	3562.06	0.00	0.00	3562.06	0.00	0.00
	Other	0.15	0.00	0.00	0.00	0.00	0.00
	Total:	4129.54	0.00	46.13	4127.32	0.00	44.68
Grand Total:		4129.54	0.00	46.13	4127.32	0.00	44.68

# JURISDICTION REPORT- Minnesota

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2003

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Superior							
	Public Supply	33.37	3.15	5.10	33.31	3.12	4.54
	Domestic Supply	1.18	0.34	0.02	1.13	0.15	0.00
	Irrigation	0.08	0.37	0.13	0.00	0.10	0.00
	Livestock	0.70	0.00	0.00	0.61	0.00	0.00
	Industrial	316.08	59.91	0.02	316.08	59.46	0.00
	Fossil Fuel Power	0.00	146.76	0.12	0.00	146.76	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	3562.06	0.00	0.00	3562.06	0.00
	Other	0.00	0.07	0.08	0.00	0.00	0.00
	Total:	351.41	3772.66	5.47	351.13	3771.65	4.54
Grand Total:		351.41	3772.66	5.47	351.13	3771.65	4.54

# JURISDICTION REPORT- Minnesota

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2003

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	33.37	3.15	5.10	41.62	0.00	0.00	4.17
Domestic Supply	1.18	0.34	0.02	1.54	0.00	0.00	0.15
Irrigation	0.08	0.37	0.13	0.58	0.00	0.00	0.53
Livestock	0.70	0.00	0.00	0.70	0.00	0.00	0.63
Industrial	316.08	59.91	0.02	376.01	0.00	0.00	37.60
Fossil Fuel Power	0.00	146.76	0.12	146.88	0.00	0.00	3.05
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	3562.06	0.00	3562.06	0.00	0.00	0.00
Other	0.00	0.07	0.08	0.15	0.00	0.00	0.00

## Total Report - Principal Facilities

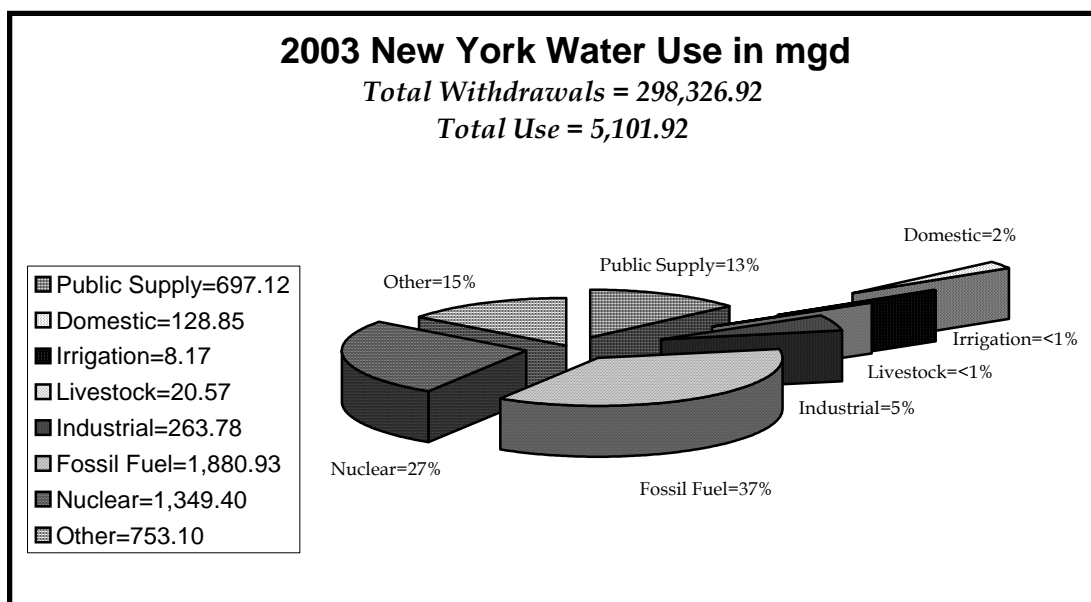
Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	33.31	3.12	4.54	40.97	0.00	0.00	3.41
Domestic Supply	1.13	0.15	0.00	1.28	0.00	0.00	0.13
Irrigation	0.00	0.10	0.00	0.10	0.00	0.00	0.09
Livestock	0.61	0.00	0.00	0.61	0.00	0.00	0.55
Industrial	316.08	59.46	0.00	375.54	0.00	0.00	37.56
Fossil Fuel Power	0.00	146.76	0.00	146.76	0.00	0.00	2.94
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	3562.06	0.00	3562.06	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00



## New York

**Data Sources:** Water use data collection in New York is performed by the Department of Environmental Conservation—Bureau of Water Resource Management. Please contact Michael Holt at 518/402-8099 or mdholt@gw.dec.state.ny.us with questions regarding New York's data.

**Withdrawals:** In 2003, New York withdrawals totaled 298,326.92 mgd. (Total use, not including hydroelectric power, was 5,101.92 in 2003 compared with 5,267.04 in 2002.) Hydroelectric power was by far the largest utilization of water in New York State at 293,225.00 mgd or 98% of total withdrawals; the St. Lawrence River accounted for 59% of hydroelectric withdrawals in New York. The next largest categories of use were fossil fuel and nuclear power.



**Figure 9**

**Consumptive Use:** New York reported total consumptive uses of 320.39 mgd. Lake Ontario comprised 208.65 mgd or 65%; Lake Erie comprised 97.57 mgd or 30%; the St. Lawrence River comprised 14.17 mgd or 5%. The largest categories of consumptive use were public supply at 24% and nuclear power at 21%.

**Interbasin Diversions:** Two outgoing interbasin diversions occur between the Lake Ontario basin and the Mohawk River basin. A withdrawal of 8.77 mgd from the Tagasoke Reservoir on the East Branch of Fish Creek (Lake Ontario basin) is made by the city of Rome for public water supply and emptied into the Mohawk River basin. The Forestport/Black River Canal (Lake Ontario basin) was decommissioned in the 1980s but still allows for residual flow of up to 32 mgd into the Mohawk River basin.

**Intrabasin Diversions:** The western section of the Erie Canal withdraws up to 711 mgd from the Niagara River during the navigation season (May through November) and returns it through tributaries of Lake Ontario, resulting in no net loss or gain to the basin.

**Data Quality:** New York's withdrawal data for this report were 100% partially measured; the level of aggregation was 100% aggregated.

# JURISDICTION REPORT- New York

Withdrawals, Diversions Units: Mgal(US)/d  
and Consumptive Uses Year Of Data: 2003

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Lake Erie							
	Public Supply	264.02	0.00	26.40		0.00	
	Domestic Supply	22.94	0.00	2.29	0.00	0.00	0.00
	Irrigation	0.59	0.00	0.53	0.59	0.00	0.53
	Livestock	4.30	0.00	3.87		0.00	
	Industrial	175.49	0.00	43.87	175.49	0.00	43.87
	Fossil Fuel Power	1030.74	0.00	20.61	1030.74	0.00	20.61
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	40288.00	0.00	0.00	40288.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total:	41786.08	0.00	97.57	41494.82	0.00	65.01
Lake Ontario							
	Public Supply	392.81	8.77	47.18		8.77	0.00
	Domestic Supply	90.70	0.00	9.07	28.81	0.00	2.88
	Irrigation	7.43	0.00	6.69	7.43	0.00	6.69
	Livestock	11.19	0.00	10.07		0.00	6.53
	Industrial	74.02	0.00	18.51	74.02	0.00	18.51
	Fossil Fuel Power	850.11	0.00	17.00	850.11	0.00	17.00
	Nuclear Power	1349.40	0.00	67.47	1349.40	0.00	67.47
	Hydroelectric Power	80908.00	0.00	0.00	0.00	0.00	0.00
	Other	38.56	32.00	32.66	38.56	32.00	32.66
	Total:	83722.22	40.77	208.65	2348.33	40.77	151.74
St. Lawrence River							
	Public Supply	40.29	0.00	4.03		0.00	
	Domestic Supply	15.21	0.00	1.52	0.54	0.00	0.05
	Irrigation	0.15	0.00	0.14	0.15	0.00	0.14
	Livestock	5.08	0.00	4.57		0.00	
	Industrial	14.27	0.00	3.56	14.27	0.00	3.56
	Fossil Fuel Power	0.08	0.00	0.00	0.08	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	172029.00	0.00	0.00	73337.00	0.00	0.00
	Other	3.54	0.00	0.35	3.54	0.00	0.35
	Total:	172107.62	0.00	14.17	73355.58	0.00	4.10
Grand Total:		297615.92	40.77	320.39	117198.73	40.77	220.85

# JURISDICTION REPORT- New York

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2003

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Erie							
	Public Supply	184.58	72.12	7.32			
	Domestic Supply	12.33	0.00	10.61	0.00	0.00	0.00
	Irrigation	0.13	0.46	0.00	0.13	0.46	0.00
	Livestock	1.54	0.00	2.76			
	Industrial	174.44	0.88	0.17	174.44	0.88	0.17
	Fossil Fuel Power	1030.74	0.00	0.00	1030.74	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	40288.00	0.00	0.00	40288.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total:	41691.76	73.46	20.86	41493.31	1.34	0.17
Lake Ontario							
	Public Supply	187.38	171.77	33.66			
	Domestic Supply	21.10	28.81	40.79	0.00	28.81	0.00
	Irrigation	0.00	7.33	0.10	0.00	7.33	0.10
	Livestock	3.93	0.00	7.26			
	Industrial	27.31	39.37	7.34	27.31	39.37	7.34
	Fossil Fuel Power	437.14	412.97	0.00	437.14	412.97	0.00
	Nuclear Power	1349.40	0.00	0.00	1349.40	0.00	0.00
	Hydroelectric Power	0.00	80908.00	0.00	0.00	0.00	0.00
	Other	0.00	38.35	0.21	0.00	38.35	0.21
	Total:	2026.26	81606.60	89.36	1813.85	526.83	7.65
St. Lawrence River							
	Public Supply	2.86	32.51	4.92			
	Domestic Supply	2.55	0.54	12.12	0.00	0.54	0.00
	Irrigation	0.00	0.15	0.00	0.00	0.15	0.00
	Livestock	1.77	0.00	3.31			
	Industrial	5.37	6.65	2.25	5.37	6.65	2.25
	Fossil Fuel Power	0.08	0.00	0.00	0.08	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	73337.00	98692.00	0.00	73337.00	0.00	0.00
	Other	0.00	3.54	0.00	0.00	3.54	0.00
	Total:	73349.63	98735.39	22.60	73342.45	10.88	2.25
Grand Total:		117067.65	180415.45	132.82	116649.61	539.05	10.07

# JURISDICTION REPORT- New York

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2003

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	374.82	276.40	45.90	697.12	0.00	8.77	77.61
Domestic Supply	35.98	29.35	63.52	128.85	0.00	0.00	12.88
Irrigation	0.13	7.94	0.10	8.17	0.00	0.00	7.36
Livestock	7.24	0.00	13.33	20.57	0.00	0.00	18.51
Industrial	207.12	46.90	9.76	263.78	0.00	0.00	65.94
Fossil Fuel Power	1467.96	412.97	0.00	1880.93	0.00	0.00	37.61
Nuclear Power	1349.40	0.00	0.00	1349.40	0.00	0.00	67.47
Hydroelectric Power	113625.00	179600.00	0.00	293225.00	0.00	0.00	0.00
Other	0.00	41.89	0.21	42.10	0.00	32.00	33.01

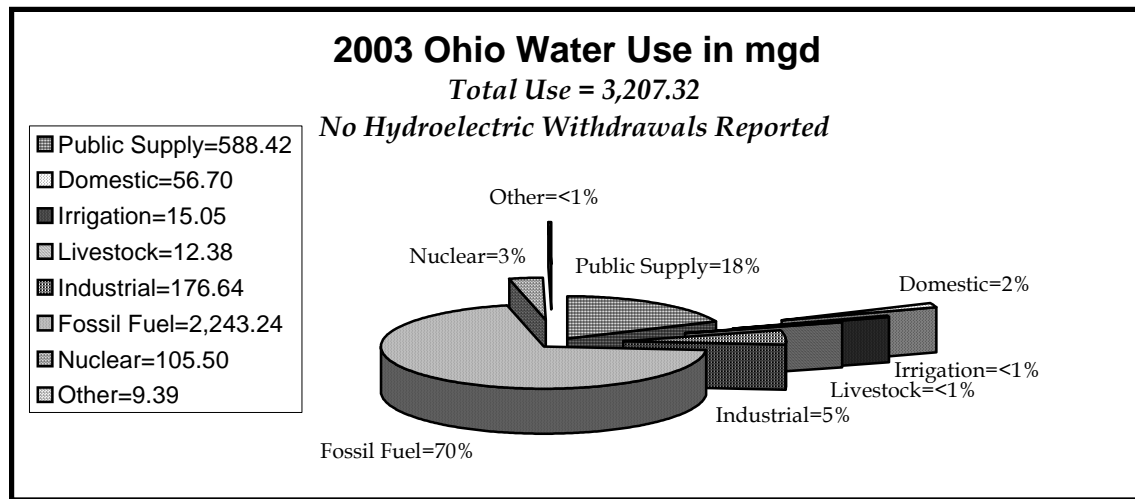
## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply					0.00	8.77	0.00
Domestic Supply	0.00	29.35	0.00	29.35	0.00	0.00	2.93
Irrigation	0.13	7.94	0.10	8.17	0.00	0.00	7.36
Livestock					0.00	0.00	6.53
Industrial	207.12	46.90	9.76	263.78	0.00	0.00	65.94
Fossil Fuel Power	1467.96	412.97	0.00	1880.93	0.00	0.00	37.61
Nuclear Power	1349.40	0.00	0.00	1349.40	0.00	0.00	67.47
Hydroelectric Power	113625.00	0.00	0.00	113625.00	0.00	0.00	0.00
Other	0.00	41.89	0.21	42.10	0.00	32.00	33.01

## Ohio

**Data Sources:** Water use data for Ohio are collected by the Ohio Department of Natural Resources-Division of Water, the Ohio Environmental Protection Agency, and the U.S. Geological Survey. Please contact Lenn Black at [leonard.black@dnr.state.oh.us](mailto:leonard.black@dnr.state.oh.us) or 614/265-6758 with questions regarding Ohio's data.

**Withdrawals:** Total withdrawals from the Ohio Lake Erie basin for 2003 were 3,207.32 mgd—down slightly from the 2002 figure of 3,352.67 mgd. As in 2002, thermoelectric-fossil fuel was by far the largest use of water at 2,243.24 mgd (70%); public supply was the second largest withdrawal at 588.42 mgd (18%).



**Figure 10**

**Consumptive Use:** Total consumptive uses were calculated to be 170.87 mgd. Public supply represents the largest consumptive use sector at 88.26 mgd and accounts for 52% of the total. The next three largest consumptive uses were thermoelectric-fossil fuel at 22.43 mgd, industrial facilities at 17.67 mgd and irrigation at 13.55 mgd.

**Interbasin Diversions:** Two Lake Erie basin public water systems provided drinking water to service areas outside the basin without return, resulting in total outgoing diversions of 0.32 mgd. Outflows from an Ohio & Erie Canal feeder lake resulted in a diversion into the Lake Erie basin of 13.92 mgd.

**Data Quality:** Ohio's withdrawal data for this report were 2% calculated or estimated, and 98% partially measured; the level of aggregation was 2% aggregated and 98% site-specific.

# JURISDICTION REPORT- Ohio

Withdrawals, Diversions Units: Mgal(US)/d  
and Consumptive Uses Year Of Data: 2003

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Lake Erie							
	Public Supply	588.42	0.32	88.26	582.50	0.32	87.38
	Domestic Supply	56.70	0.00	8.51	0.00	0.00	0.00
	Irrigation	15.05	0.00	13.55	10.07	0.00	9.06
	Livestock	12.38	0.00	9.90	0.60	0.00	0.48
	Industrial	176.64	0.00	17.67	175.58	0.00	17.56
	Fossil Fuel Power	2243.24	0.00	22.43	2243.19	0.00	22.43
	Nuclear Power	105.50	0.00	10.55	105.50	0.00	10.55
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	9.39	-13.92	0.00	9.19	-13.92	0.00
	Total:	3207.32	-13.60	170.87	3126.63	-13.60	147.46
Grand Total:		3207.32	-13.60	170.87	3126.63	-13.60	147.46

# JURISDICTION REPORT- Ohio

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2003

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Erie	Public Supply	427.88	122.94	37.60	427.65	122.81	32.04
	Domestic Supply	0.00	0.00	56.70	0.00	0.00	0.00
	Irrigation	0.23	12.15	2.67	0.13	8.88	1.06
	Livestock	0.00	1.98	10.40	0.00	0.22	0.38
	Industrial	46.97	90.46	39.21	46.97	90.19	38.42
	Fossil Fuel Power	1577.76	665.43	0.05	1577.76	665.43	0.00
	Nuclear Power	105.50	0.00	0.00	105.50	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.74	8.16	0.49	0.74	8.09	0.36
	Total:	2159.08	901.12	147.12	2158.75	895.62	72.26
Grand Total:	2159.08	901.12	147.12	2158.75	895.62	72.26	

# JURISDICTION REPORT- Ohio

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2003

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	427.88	122.94	37.60	588.42	0.00	0.32	88.26
Domestic Supply	0.00	0.00	56.70	56.70	0.00	0.00	8.51
Irrigation	0.23	12.15	2.67	15.05	0.00	0.00	13.55
Livestock	0.00	1.98	10.40	12.38	0.00	0.00	9.90
Industrial	46.97	90.46	39.21	176.64	0.00	0.00	17.67
Fossil Fuel Power	1577.76	665.43	0.05	2243.24	0.00	0.00	22.43
Nuclear Power	105.50	0.00	0.00	105.50	0.00	0.00	10.55
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.74	8.16	0.49	9.39	0.00	-13.92	0.00

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	427.65	122.81	32.04	582.50	0.00	0.32	87.38
Domestic Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Irrigation	0.13	8.88	1.06	10.07	0.00	0.00	9.06
Livestock	0.00	0.22	0.38	0.60	0.00	0.00	0.48
Industrial	46.97	90.19	38.42	175.58	0.00	0.00	17.56
Fossil Fuel Power	1577.76	665.43	0.00	2243.19	0.00	0.00	22.43
Nuclear Power	105.50	0.00	0.00	105.50	0.00	0.00	10.55
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.74	8.09	0.36	9.19	0.00	-13.92	0.00



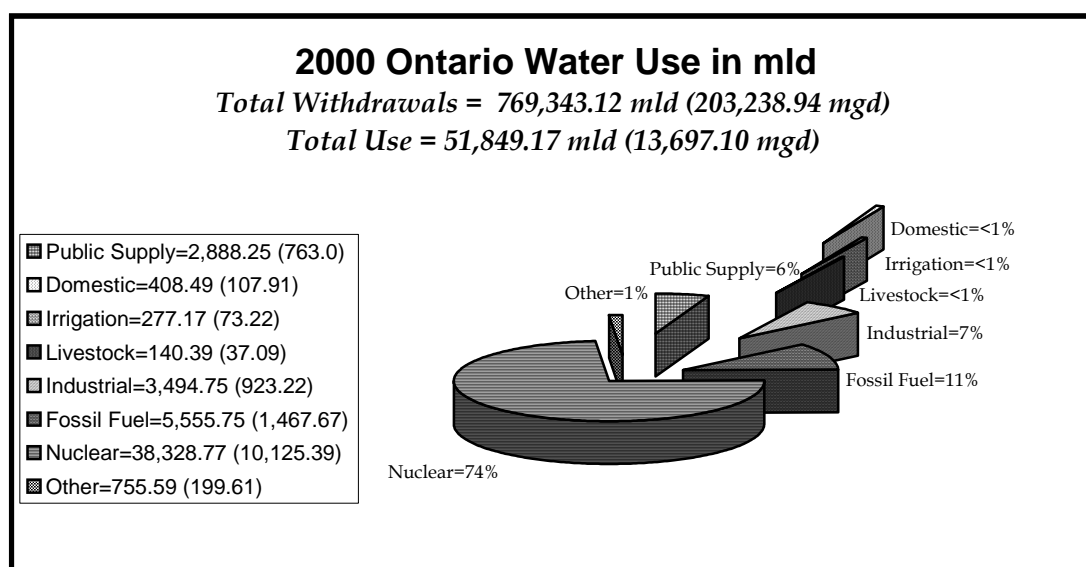
## Ontario

**Data Sources:** Water use data reporting for Ontario was coordinated by the Ontario Ministry of Natural Resources, Science and Information Branch. Calendar year 2000 data are used for this report because: 1) Ontario presently has no dedicated staff person available to work on this project and, 2) water use figures for 2003 are not believed to be greatly different than those for 2000. Please contact James Britton at 705/755-1870 or james.britton@mnr.gov.on.ca with questions regarding Ontario's data.

Data for the public supply sector were obtained from the Ministry of the Environment Interim Inspection System Reports. Domestic use figures were estimated with the use of Environment Canada's municipal water use database and Statistics Canada Population Census data. *Agricultural Water Use 1996* and *Agricultural Water Use 2001* were the sources for irrigation and livestock data. As no viable source of current data is available for industrial water use, the reported industrial data are from 1996. Data for the power sector categories were obtained through contact with individual operators and generation companies. Data for the "other" category were taken from the National Canal Survey.

Although this water withdrawal report accounts for the majority of water use within Ontario, data for a limited number of water users is not available. Therefore, this database does not represent all water use in the province.

**Withdrawals:** Total 2000 Great Lakes water uses for Ontario were approximately 769,343.12 mld, or 203,238.94 mgd. However, hydroelectric withdrawals represented more than 93% of the total, leaving total use at 51,849.17 mld (13,697.10 mgd). Thermoelectric—nuclear plant uses (not including hydropower) were the largest at 74% (38,328.77 mld, or 10,125.39 mgd).



**Figure 11**

**Consumptive Use:** Total consumptive uses were calculated to be 1,059.62 mld (279.92 mgd). Public supply represents the largest consumptive use sector at 433.24 mld (114.45 mgd) and accounts for 41% of the total. The next two largest consumptive uses were nuclear power and industrial use, at 344.96 mld (91.13 mgd) and 220.15 mld (58.16 mgd) respectively.

**Interbasin Diversions:** Ontario reported incoming interbasin diversions into the Lake Superior basin from the James Bay basin for hydroelectric purposes (the Ogoki and Long Lac projects) amounting for 15,170.99 mld (4,004.75 mgd).

**Intrabasin Diversions:** Intrabasin diversions occurred between Lakes Huron, Erie, and Ontario.

**Data Quality:** Ontario's withdrawal data for this report were 20% measured, 79% partially measured, and 1% calculated or estimated; the level of aggregation was 99% site-specific and less than 1% aggregated.

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# JURISDICTION REPORT- Ontario

Withdrawals, Diversions Units: Mgal(US)/d  
and Consumptive Uses Year Of Data: 2003

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Lake Superior							
	Public Supply	45.77	0.00	6.87	45.58	0.00	6.84
	Domestic Supply	1.75	0.00	0.26	0.00	0.00	0.00
	Irrigation	0.37	0.00			0.00	
	Livestock	0.14	0.00			0.00	
	Industrial	162.12	0.00	10.21	0.00	0.00	0.00
	Fossil Fuel Power	295.52	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	38156.31	-4007.75	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total:	38661.99	-4007.75	17.34	45.58	0.00	6.84
Lake Huron							
	Public Supply	84.37	0.00	12.65	81.66	0.00	12.25
	Domestic Supply	10.61	0.00	1.59	0.00	0.00	0.00
	Irrigation	20.91	0.00			0.00	
	Livestock	12.41	0.00			0.00	
	Industrial	190.19	0.00	11.98	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	4697.20	0.00	42.28	0.00	0.00	0.00
	Hydroelectric Power	33608.07	0.00	0.00	0.00	0.00	0.00
	Other	47.97	0.00	0.00	47.97	0.00	0.00
	Total:	38671.73	0.00	68.50	129.63	0.00	12.25
Lake Erie							
	Public Supply	93.89	0.00	14.08	92.84	0.00	13.92
	Domestic Supply	19.94	0.00	2.99	0.00	0.00	0.00
	Irrigation	31.85	0.00			0.00	
	Livestock	13.22	0.00			0.00	
	Industrial	180.45	0.00	11.37	0.00	0.00	0.00
	Fossil Fuel Power	463.20	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total:	802.56	0.00	28.44	92.84	0.00	13.92

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Lake Ontario							
	Public Supply	465.93	0.00	69.89	464.62	0.00	69.69
	Domestic Supply	64.17	0.00	9.63	0.00	0.00	0.00
	Irrigation	17.73	0.00			0.00	
	Livestock	5.40	0.00			0.00	
	Industrial	229.64	0.00	14.47	0.00	0.00	0.00
	Fossil Fuel Power	708.95	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	5428.19	0.00	48.85	0.00	0.00	0.00
	Hydroelectric Power	41542.31	0.00	0.00	0.00	0.00	0.00
	Other	132.35	0.00	0.00	132.35	0.00	0.00
	Total:	48594.67	0.00	142.84	596.97	0.00	69.69
St. Lawrence River							
	Public Supply	73.03	0.00	10.96	72.08	0.00	10.82
	Domestic Supply	11.45	0.00	1.72	0.00	0.00	0.00
	Irrigation	2.35	0.00			0.00	
	Livestock	5.91	0.00			0.00	
	Industrial	160.81	0.00	10.13	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	76235.15	0.00	0.00	0.00	0.00	0.00
	Other	19.28	0.00	0.00	19.28	0.00	0.00
	Total:	76507.99	0.00	22.80	91.37	0.00	10.82
Grand Total:		203238.94	-4007.75	279.92	956.38	0.00	113.52

# JURISDICTION REPORT- Ontario

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2003

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Superior							
	Public Supply	30.10	13.03	2.65	30.07	12.96	2.55
	Domestic Supply	0.00	0.00	1.75	0.00	0.00	0.00
	Irrigation	0.02	0.31	0.05			
	Livestock	0.00	0.14	0.00			
	Industrial	162.12	0.00	0.00	0.00	0.00	0.00
	Fossil Fuel Power	295.52	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	38156.31	0.00	0.00	0.00	0.00
	Other						
	Total:	487.76	38169.79	4.44	30.07	12.96	2.55
Lake Huron							
	Public Supply	42.66	23.57	18.14	42.02	23.23	16.40
	Domestic Supply	0.00	0.00	10.61	0.00	0.00	0.00
	Irrigation	0.15	15.41	5.35			
	Livestock	2.93	3.07	6.41			
	Industrial	187.41	0.00	2.78	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	4697.20	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	20000.41	13607.66	0.00	0.00	0.00	0.00
	Other	0.00	47.97	0.00	0.00	47.97	0.00
	Total:	24930.76	13697.68	43.29	42.02	71.20	16.40
Lake Erie							
	Public Supply	8.97	29.26	55.66	8.97	29.23	54.64
	Domestic Supply	0.00	0.00	19.94	0.00	0.00	0.00
	Irrigation	0.59	12.11	19.15			
	Livestock	0.02	0.89	12.31			
	Industrial	173.24	0.00	7.21	0.00	0.00	0.00
	Fossil Fuel Power	463.20	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other						
	Total:	646.02	42.26	114.27	8.97	29.23	54.64

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Ontario							
	Public Supply	401.52	52.86	11.56	401.47	52.68	10.47
	Domestic Supply	0.00	0.00	64.17	0.00	0.00	0.00
	Irrigation	1.08	9.53	7.12			
	Livestock	0.00	0.94	4.46			
	Industrial	218.17	0.00	11.46	0.00	0.00	0.00
	Fossil Fuel Power	708.95	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	5428.19	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	33861.04	7681.26	0.00	0.00	0.00	0.00
	Other	0.00	132.35	0.00	0.00	132.35	0.00
	Total:	40618.96	7876.94	98.77	401.47	185.03	10.47
St. Lawrence River							
	Public Supply	10.64	58.84	3.56	10.64	58.52	2.93
	Domestic Supply	0.00	0.00	11.45	0.00	0.00	0.00
	Irrigation	0.01	2.04	0.30			
	Livestock	0.00	3.63	2.28			
	Industrial	159.76	0.00	1.05	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	76149.02	86.13	0.00	0.00	0.00	0.00
	Other	0.00	19.28	0.00	0.00	19.28	0.00
	Total:	76319.43	169.91	18.65	10.64	77.80	2.93
Grand Total:		143002.93	59956.58	279.43	493.17	376.22	87.00

# JURISDICTION REPORT- Ontario

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2003

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	493.88	177.55	91.57	763.00	0.00	0.00	114.45
Domestic Supply	0.00	0.00	107.91	107.91	0.00	0.00	16.19
Irrigation	1.86	39.39	31.97	73.22	0.00	0.00	
Livestock	2.95	8.67	25.47	37.09	0.00	0.00	
Industrial	900.71	0.00	22.51	923.22	0.00	0.00	58.16
Fossil Fuel Power	1467.67	0.00	0.00	1467.67	0.00	0.00	0.00
Nuclear Power	10125.39	0.00	0.00	10125.39	0.00	0.00	91.13
Hydroelectric Power	130010.47	59531.37	0.00	189541.84	0.00	-4007.75	0.00
Other	0.00	199.61	0.00	199.61	61.97	0.00	0.00

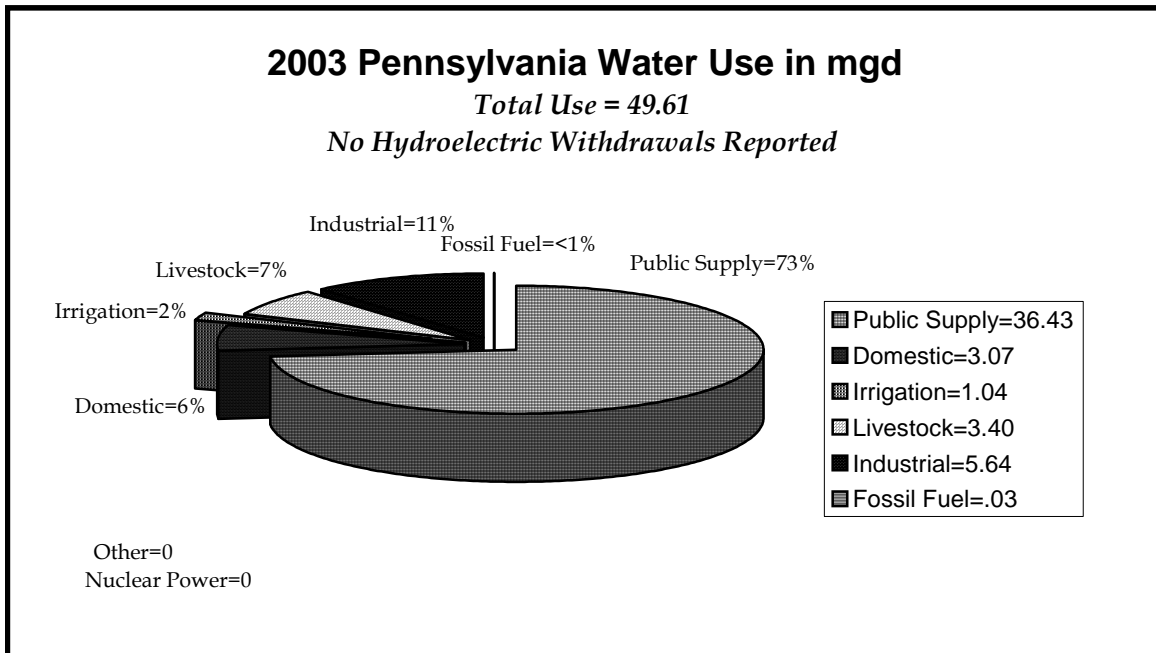
## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	493.17	176.61	87.00	756.78	0.00	0.00	113.52
Domestic Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Irrigation					0.00	0.00	
Livestock					0.00	0.00	
Industrial	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	199.61	0.00	199.61	61.97	0.00	0.00

## Pennsylvania

**Data Sources:** The Department of Environmental Protection – Bureau of Watershed Management submitted water use data for the Lake Erie and Lake Ontario basins of Pennsylvania. Please contact David Jostenski at 717/772-5659 or [djostenski@state.pa.us](mailto:djostenski@state.pa.us) with questions regarding Pennsylvania's data.

**Withdrawals:** Total withdrawals from Lake Erie and Lake Ontario were 49.61 mgd, with no hydroelectric withdrawals reported. Public supply at 36.43 mgd or 73% of the total, and industrial at 5.64 mgd or 11% of the total, constituted the primary uses of water. Nearly 100% of withdrawals were from the Lake Erie basin (49.38 mgd of 49.61 mgd).



**Figure 12**

**Consumptive Use:** Consumptive use totaled 7.61 mgd, down from the 2002 figure of 9.57 mgd. Lake Erie constituted almost 100% of the consumptive use reported.

**Interbasin Diversions:** There was an import of 0.81 mgd of water from the Allegheny River basin to the Lake Erie basin for public water supply purposes.

**Data Quality:** Pennsylvania's withdrawal data for this report were 27% calculated or estimated, 3% partially measured, and 70% measured; the level of aggregation was 100% site-specific.



# JURISDICTION REPORT- Pennsylvania

Withdrawals, Diversions Units: Mgal(US)/d  
and Consumptive Uses Year Of Data: 2003

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Lake Erie							
	Public Supply	36.36	-0.81	3.64	35.13	-0.81	3.51
	Domestic Supply	2.90	0.00	0.29		0.00	
	Irrigation	1.04	0.00	0.94	0.89	0.00	0.81
	Livestock	3.40	0.00	2.72	3.30	0.00	2.64
	Industrial	5.64	0.00		5.59	0.00	0.11
	Fossil Fuel Power	0.03	0.00	0.00		0.00	
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total:	49.38	-0.81	7.59	44.91	-0.81	7.07
Lake Ontario							
	Public Supply	0.07	0.00	0.01		0.00	
	Domestic Supply	0.17	0.00	0.02		0.00	
	Irrigation		0.00			0.00	
	Livestock		0.00			0.00	
	Industrial		0.00			0.00	
	Fossil Fuel Power		0.00			0.00	
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total:	0.24	0.00	0.02	0.00	0.00	0.00
Grand Total:		49.61	-0.81	7.61	44.91	-0.81	7.07

# JURISDICTION REPORT- Pennsylvania

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2003

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Erie							
	Public Supply	31.92	2.73	1.72	31.92	2.63	0.58
	Domestic Supply	0.00	0.00	2.90			
	Irrigation	0.02	1.02	0.01	0.00	0.89	0.00
	Livestock	0.00	2.20	1.20	0.00	2.10	1.20
	Industrial	5.59	0.01	0.04	5.59	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.03			
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other						
	Total:	37.52	5.95	5.91	37.51	5.62	1.79
Lake Ontario							
	Public Supply	0.00	0.00	0.07			
	Domestic Supply	0.00	0.00	0.17			
	Irrigation						
	Livestock						
	Industrial						
	Fossil Fuel Power						
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other						
	Total:	0.00	0.00	0.24	0.00	0.00	0.00
Grand Total:		37.52	5.95	6.14	37.51	5.62	1.79

# JURISDICTION REPORT- Pennsylvania

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2003

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	31.92	2.73	1.79	36.43	0.00	-0.81	3.64
Domestic Supply	0.00	0.00	3.07	3.07	0.00	0.00	0.31
Irrigation	0.02	1.02	0.01	1.04	0.00	0.00	0.94
Livestock	0.00	2.20	1.20	3.40	0.00	0.00	2.72
Industrial	5.59	0.01	0.04	5.64	0.00	0.00	
Fossil Fuel Power	0.00	0.00	0.03	0.03	0.00	0.00	0.00
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other					0.00	0.00	

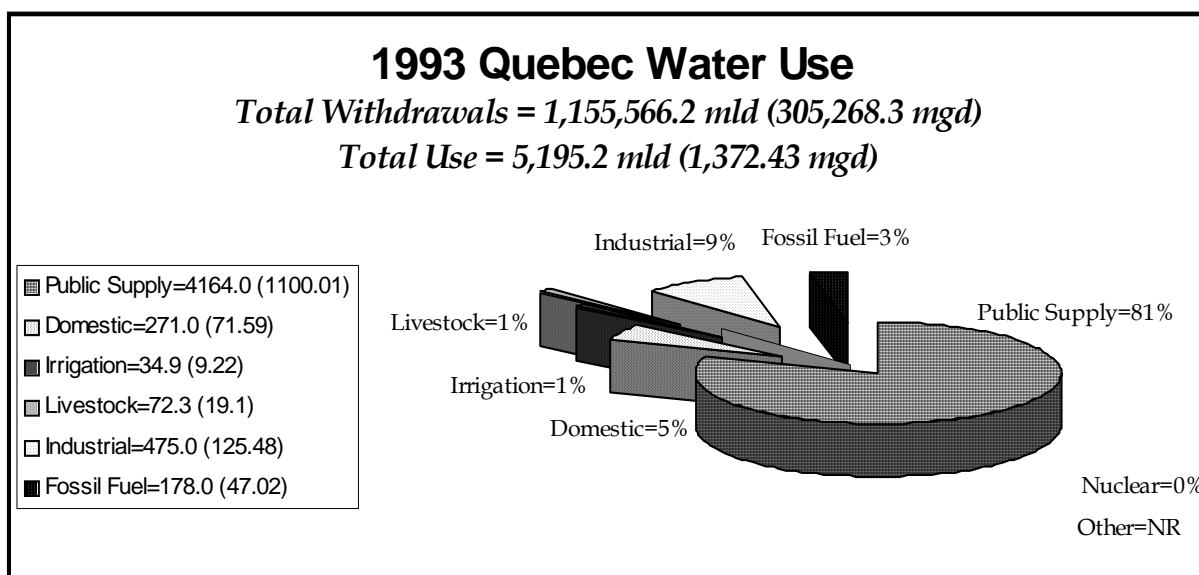
## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	31.92	2.63	0.58	35.13	0.00	-0.81	3.51
Domestic Supply					0.00	0.00	
Irrigation	0.00	0.89	0.00	0.89	0.00	0.00	0.81
Livestock	0.00	2.10	1.20	3.30	0.00	0.00	2.64
Industrial	5.59	0.00	0.00	5.59	0.00	0.00	0.11
Fossil Fuel Power					0.00	0.00	
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other					0.00	0.00	

## Québec

**Data Source:** Water use data was collected by the Ministère de l'Environnement—Centre d'expertise hydrique du Québec for this report. The centre collects water use data primarily to support hydrologic and hydraulic research, floodplain delineation and hydrometric network management. Data for 1993 are used for this report because: 1) a better tool for assessment is not yet in place and, 2) water use figures for 2003 are not believed to be greatly different than those for 1993. Please contact Lucie Bouchard at 418/521-3885 or lucie.bouchard@mddep.gouv.qc.ca with questions regarding Québec's data. See the following page for an update on the status of water quantity management in Québec.

**Withdrawals:** Total withdrawals from Québec's St. Lawrence River basin were approximately 1,155 bld (305 bgd). Nearly 100% of these uses were for hydroelectric power purposes.



**Figure 13**

**Consumptive Use:** Total consumptive use was 597.5 mld (157.9 mgd). Public supply accounted for 416 mld (109.9 mgd), or nearly 70% of the total consumptive use.

**Diversions:** None reported.

**Data Quality:** Québec's withdrawal data for this report were 99% measured, less than 1% partially measured, and less than 1% calculated or estimated; the level of aggregation was 100% aggregated.

Historically, water withdrawals have not been a source of great conflict in Québec; however, recent incidents such as construction of a bottled water facility and water shortage brought on by severe drought, have brought the problem to the forefront. Since the adoption of a new water policy by Québec's National Assembly in 2002, existing regulations have been amended to improve water management. One of the guiding principles is that users must be accountable for the utilization and degradation of water by means of a user-pays and polluter-pays approach. A new regulation that should be adopted in 2007 will support the development of economic incentives such as a user fee for water. This new regulation will enable collection of water withdrawal data and allow Québec to meet the requirements of the Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement.

Furthermore, the Water Resources Preservation Act of 1999 prohibits the transfer of water (both surface water and groundwater) out of Québec. Exception is made for the production of electric power; the marketing of water for human consumption if packaged in Québec in containers of 20 liters or less; the supply of potable water to establishments or dwellings situated in a bordering zone; the supply of vehicles (vessels, aircraft, etc.) with ballast or other requirements for operation of the vehicle, or to be used by the persons or animals being transported in the vehicle; or for emergency or humanitarian reasons on the ground.

(See <http://www.mddep.gouv.qc.ca/eau/politique/index-en.htm> for highlights and the complete text.)

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# JURISDICTION REPORT- Quebec

Withdrawals, Diversions Units: Mgal(US)/d  
and Consumptive Uses Year Of Data: 2003

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
St. Lawrence River							
	Public Supply	1100.01	0.00	109.90	1096.05	0.00	109.63
	Domestic Supply	71.59	0.00	7.13	48.61	0.00	4.76
	Irrigation	9.22	0.00	8.30		0.00	
	Livestock	19.10	0.00	15.28		0.00	
	Industrial	125.48	0.00	12.55	124.95	0.00	12.50
	Fossil Fuel Power	47.02	0.00	4.70	47.02	0.00	4.70
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	303895.85	0.00	0.00	303895.85	0.00	0.00
	Other		0.00			0.00	
	Total:	305268.28	0.00	157.86	305212.48	0.00	131.58
Grand Total:		305268.28	0.00	157.86	305212.48	0.00	131.58

# JURISDICTION REPORT- Quebec

Withdrawals by Source

Units: Mgal(US)/d  
Year Of Data: 2003

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
St. Lawrence River							
	Public Supply	602.84	497.17	0.00	602.58	493.47	0.00
	Domestic Supply	0.00	0.00	71.59	0.00	0.00	48.61
	Irrigation	0.00	0.00	9.22			
	Livestock	0.00	0.00	19.10			
	Industrial	0.00	125.48	0.00	0.00	124.95	0.00
	Fossil Fuel Power	39.10	7.93	0.00	39.10	7.93	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	170946.25	132949.60	0.00	170946.25	132949.60	0.00
	Other						
	Total:	171588.19	133580.18	99.91	171587.93	133575.95	48.61
Grand Total:		171588.19	133580.18	99.91	171587.93	133575.95	48.61

# JURISDICTION REPORT- Quebec

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2003

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	602.84	497.17	0.00	1100.01	0.00	0.00	109.90
Domestic Supply	0.00	0.00	71.59	71.59	0.00	0.00	7.13
Irrigation	0.00	0.00	9.22	9.22	0.00	0.00	8.30
Livestock	0.00	0.00	19.10	19.10	0.00	0.00	15.28
Industrial	0.00	125.48	0.00	125.48	0.00	0.00	12.55
Fossil Fuel Power	39.10	7.93	0.00	47.02	0.00	0.00	4.70
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	170946.25	132949.60	0.00	303895.85	0.00	0.00	0.00
Other					0.00	0.00	

## Total Report - Principal Facilities

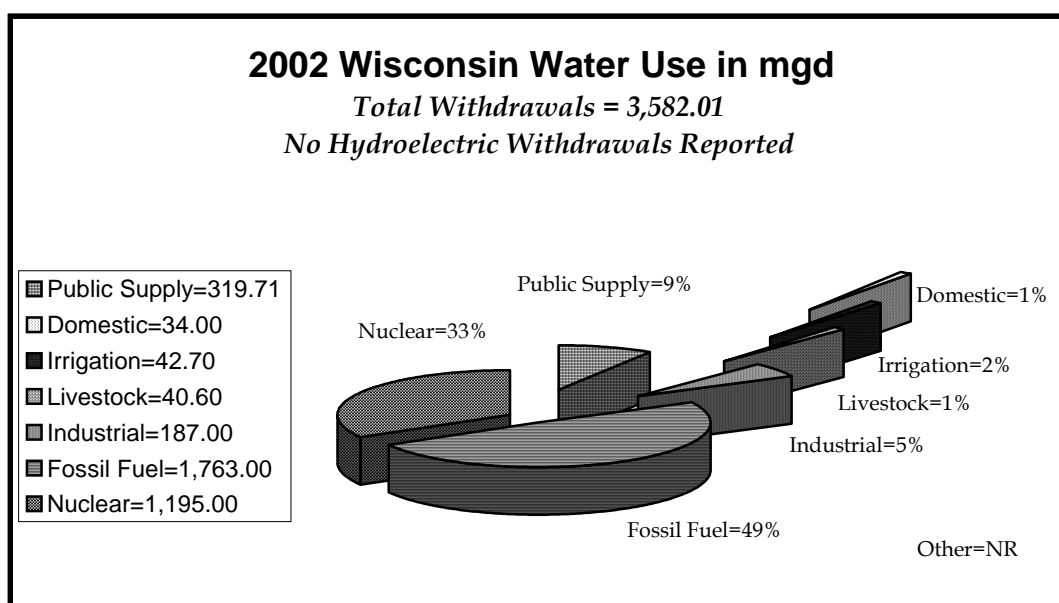
Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	602.58	493.47	0.00	1096.05	0.00	0.00	109.63
Domestic Supply	0.00	0.00	48.61	48.61	0.00	0.00	4.76
Irrigation					0.00	0.00	
Livestock					0.00	0.00	
Industrial	0.00	124.95	0.00	124.95	0.00	0.00	12.50
Fossil Fuel Power	39.10	7.93	0.00	47.02	0.00	0.00	4.70
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	170946.25	132949.60	0.00	303895.85	0.00	0.00	0.00
Other					0.00	0.00	



## Wisconsin

**Data Sources:** Wisconsin 2003 water use data for the Lake Michigan and Lake Superior basins were submitted by the Wisconsin Department of Natural Resources—Bureau of Water Resources Management. Due to staffing constraints, data from 2002 were used for 2003, with the exception of public supply figures, which are current. Please contact Shaili Pfeiffer at 608/267-7630 or [Shaili.Pfeiffer@wisconsin.gov](mailto:Shaili.Pfeiffer@wisconsin.gov) with questions regarding Wisconsin's data.

**Withdrawals:** Total withdrawals were 3,582.01 mgd: 3,530.00 mgd from Lake Michigan (98% of the total) and 52.01 mgd from Lake Superior. Water use in the Lake Michigan basin was primarily for fossil fuel (1,725.00 mgd) and nuclear power (1,195.00 mgd)—at 49% and 34% respectively. Of the Lake Superior uses, the largest single use was for fossil fuel at 38.00 mgd at 77%.



**Figure 14**

**Consumptive Use:** Consumptive uses from Wisconsin's portion of the basin were calculated to be 140.98 mgd. Of this amount, public supply at 26%, and livestock watering at 26% comprised the largest portion.

**Interbasin Diversions:** A withdrawal for public supply at Pleasant Prairie diverts 0.40 mgd from the Lake Michigan basin to the Mississippi River basin. A small diversion remains at the Portage Canal site, with 0.64 mgd flowing from the Wisconsin River (the Mississippi River basin) into the Fox River (the Lake Michigan basin).

**Data Quality:** Wisconsin's withdrawal data for this report were 91% calculated or estimated and 9% measured; the level of aggregation was 91% aggregated and 9% site-specific.

# JURISDICTION REPORT- Wisconsin

Withdrawals, Diversions Units: Mgal(US)/d  
and Consumptive Uses Year Of Data: 2003

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Lake Superior							
	Public Supply	4.01	0.00	0.50		0.00	
	Domestic Supply	1.40	0.00	0.14		0.00	
	Irrigation	0.30	0.00	0.21		0.00	
	Livestock	8.30	0.00	7.47		0.00	
	Industrial		0.00			0.00	
	Fossil Fuel Power	38.00	0.00	0.19		0.00	
	Nuclear Power	0.00	0.00	0.00		0.00	
	Hydroelectric Power	0.00	0.00	0.00		0.00	
	Other		0.00			0.00	
	Total:	52.01	0.00	8.51		0.00	
Lake Michigan							
	Public Supply	315.70	0.40	36.80		0.00	
	Domestic Supply	32.60	0.00	3.26		0.00	
	Irrigation	42.40	0.00	29.68		0.00	
	Livestock	32.30	0.00	29.07		0.00	
	Industrial	187.00	0.00	19.07		0.00	
	Fossil Fuel Power	1725.00	0.00	8.62		0.00	
	Nuclear Power	1195.00	0.00	5.97		0.00	
	Hydroelectric Power	0.00	0.00	0.00		0.00	
	Other		-0.64			0.00	
	Total:	3530.00	-0.24	132.47		0.00	
Grand Total:		3582.01	-0.24	140.98		0.00	

# JURISDICTION REPORT- Wisconsin

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2003

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Superior							
	Public Supply	3.28	0.00	0.73			
	Domestic Supply	0.00	0.00	1.40			
	Irrigation	0.00	0.00	0.30			
	Livestock	0.00	0.00	8.30			
	Industrial						
	Fossil Fuel Power	38.00	0.00	0.00			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	Total:	41.28	0.00	10.73			
Lake Michigan							
	Public Supply	223.00	24.70	68.00			
	Domestic Supply	0.00	0.00	32.60			
	Irrigation	0.00	0.00	42.40			
	Livestock	0.00	0.00	32.30			
	Industrial	187.00	0.00	0.00			
	Fossil Fuel Power	1725.00	0.00	0.00			
	Nuclear Power	1195.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	Total:	3330.00	24.70	175.30			
Grand Total:		3371.28	24.70	186.03			

# JURISDICTION REPORT- Wisconsin

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2003

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	226.28	24.70	68.73	319.71	0.00	0.40	37.30
Domestic Supply	0.00	0.00	34.00	34.00	0.00	0.00	3.40
Irrigation	0.00	0.00	42.70	42.70	0.00	0.00	29.89
Livestock	0.00	0.00	40.60	40.60	0.00	0.00	36.54
Industrial	187.00	0.00	0.00	187.00	0.00	0.00	19.07
Fossil Fuel Power	1763.00	0.00	0.00	1763.00	0.00	0.00	8.81
Nuclear Power	1195.00	0.00	0.00	1195.00	0.00	0.00	5.97
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other					0.00	-0.64	

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply					0.00	0.00	
Domestic Supply					0.00	0.00	
Irrigation					0.00	0.00	
Livestock					0.00	0.00	
Industrial					0.00	0.00	
Fossil Fuel Power					0.00	0.00	
Nuclear Power					0.00	0.00	
Hydroelectric Power					0.00	0.00	
Other					0.00	0.00	



#### ***IV. BASIN TABLES***

Each basin is represented by three tables:  
Withdrawals, Diversions and Consumptive Uses  
Withdrawals by Source  
Basin Totals

Lake Erie  
Lake Huron  
Lake Michigan  
Lake Ontario  
Lake Superior  
St. Lawrence River

# BASIN REPORT- Lake Erie

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2003

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Indiana							
	Public Supply	42.67	0.00	6.40	42.53	0.00	6.37
	Domestic Supply	6.13	0.00	0.92	0.22	0.00	0.03
	Irrigation	0.72	0.00	0.64	0.51	0.00	0.45
	Livestock	0.94	0.00	0.75	0.00	0.00	0.00
	Industrial	9.15	0.00	0.55	8.95	0.00	0.54
	Fossil Fuel Power	0.27	0.00	0.01	0.27	0.00	0.01
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total	59.88	0.00	9.27	52.48	0.00	7.40
Michigan							
	Public Supply	650.82	0.00	81.35		0.00	
	Domestic Supply		0.00			0.00	
	Irrigation	23.25	0.00	20.93		0.00	
	Livestock		0.00			0.00	
	Industrial	307.03	0.00	30.70		0.00	
	Fossil Fuel Power	3988.56	0.00	47.86		0.00	
	Nuclear Power	46.87	0.00	0.89		0.00	
	Hydroelectric Power	0.00	0.00	0.00		0.00	
	Other		0.00			0.00	
	Total	5016.53	0.00	181.73		0.00	
New York							
	Public Supply	264.02	0.00	26.40		0.00	
	Domestic Supply	22.94	0.00	2.29	0.00	0.00	0.00
	Irrigation	0.59	0.00	0.53	0.59	0.00	0.53
	Livestock	4.30	0.00	3.87		0.00	
	Industrial	175.49	0.00	43.87	175.49	0.00	43.87
	Fossil Fuel Power	1030.74	0.00	20.61	1030.74	0.00	20.61
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	40288.00	0.00	0.00	40288.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total	41786.08	0.00	97.57	41494.82	0.00	65.01

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Ohio							
	Public Supply	588.42	0.32	88.26	582.50	0.32	87.38
	Domestic Supply	56.70	0.00	8.51	0.00	0.00	0.00
	Irrigation	15.05	0.00	13.55	10.07	0.00	9.06
	Livestock	12.38	0.00	9.90	0.60	0.00	0.48
	Industrial	176.64	0.00	17.67	175.58	0.00	17.56
	Fossil Fuel Power	2243.24	0.00	22.43	2243.19	0.00	22.43
	Nuclear Power	105.50	0.00	10.55	105.50	0.00	10.55
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	9.39	-13.92	0.00	9.19	-13.92	0.00
	Total	3207.32	-13.60	170.87	3126.63	-13.60	147.46
Ontario							
	Public Supply	93.89	0.00	14.08	92.84	0.00	13.92
	Domestic Supply	19.94	0.00	2.99	0.00	0.00	0.00
	Irrigation	31.85	0.00			0.00	
	Livestock	13.22	0.00			0.00	
	Industrial	180.45	0.00	11.37	0.00	0.00	0.00
	Fossil Fuel Power	463.20	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total	802.56	0.00	28.44	92.84	0.00	13.92
Pennsylvania							
	Public Supply	36.36	-0.81	3.64	35.13	-0.81	3.51
	Domestic Supply	2.90	0.00	0.29		0.00	
	Irrigation	1.04	0.00	0.94	0.89	0.00	0.81
	Livestock	3.40	0.00	2.72	3.30	0.00	2.64
	Industrial	5.64	0.00		5.59	0.00	0.11
	Fossil Fuel Power	0.03	0.00	0.00		0.00	
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total	49.38	-0.81	7.59	44.91	-0.81	7.07
Grand Total:		50921.74	-14.41	495.47	44811.68	-14.41	240.87



# BASIN REPORT- Lake Erie

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2003

Jurisdiction	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Indiana							
	Public Supply	0.00	33.23	9.44	0.00	33.23	9.30
	Domestic Supply	0.00	0.00	6.13	0.00	0.00	0.22
	Irrigation	0.00	0.20	0.52	0.00	0.13	0.38
	Livestock	0.00	0.00	0.94	0.00	0.00	0.00
	Industrial	0.00	5.15	4.00	0.00	5.13	3.82
	Fossil Fuel Power	0.00	0.00	0.27	0.00	0.00	0.27
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	TOTAL	0.00	38.58	21.30	0.00	38.49	13.99

<b>Michigan</b>							
	Public Supply	589.36	16.26	45.20			
	Domestic Supply						
	Irrigation	0.53	12.97	9.75			
	Livestock						
	Industrial	280.68	14.73	11.62			
	Fossil Fuel Power	3988.48	0.00	0.08			
	Nuclear Power	46.87	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	<b>TOTAL</b>	<b>4905.92</b>	<b>43.96</b>	<b>66.65</b>			

<b>New York</b>							
	Public Supply	184.58	72.12	7.32			
	Domestic Supply	12.33	0.00	10.61	0.00	0.00	0.00
	Irrigation	0.13	0.46	0.00	0.13	0.46	0.00
	Livestock	1.54	0.00	2.76			
	Industrial	174.44	0.88	0.17	174.44	0.88	0.17
	Fossil Fuel Power	1030.74	0.00	0.00	1030.74	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	40288.00	0.00	0.00	40288.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	<b>TOTAL</b>	<b>41691.76</b>	<b>73.46</b>	<b>20.86</b>	<b>41493.31</b>	<b>1.34</b>	<b>0.17</b>

Jurisdiction	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Ohio							
	Public Supply	427.88	122.94	37.60	427.65	122.81	32.04
	Domestic Supply	0.00	0.00	56.70	0.00	0.00	0.00
	Irrigation	0.23	12.15	2.67	0.13	8.88	1.06
	Livestock	0.00	1.98	10.40	0.00	0.22	0.38
	Industrial	46.97	90.46	39.21	46.97	90.19	38.42
	Fossil Fuel Power	1577.76	665.43	0.05	1577.76	665.43	0.00
	Nuclear Power	105.50	0.00	0.00	105.50	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.74	8.16	0.49	0.74	8.09	0.36
	TOTAL	2159.08	901.12	147.12	2158.75	895.62	72.26
Ontario							
	Public Supply	8.97	29.26	55.66	8.97	29.23	54.64
	Domestic Supply	0.00	0.00	19.94	0.00	0.00	0.00
	Irrigation	0.59	12.11	19.15			
	Livestock	0.02	0.89	12.31			
	Industrial	173.24	0.00	7.21	0.00	0.00	0.00
	Fossil Fuel Power	463.20	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other						
	TOTAL	646.02	42.26	114.27	8.97	29.23	54.64
Pennsylvania							
	Public Supply	31.92	2.73	1.72	31.92	2.63	0.58
	Domestic Supply	0.00	0.00	2.90			
	Irrigation	0.02	1.02	0.01	0.00	0.89	0.00
	Livestock	0.00	2.20	1.20	0.00	2.10	1.20
	Industrial	5.59	0.01	0.04	5.59	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.03			
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other						
	TOTAL	37.52	5.95	5.91	37.51	5.62	1.79
Grand Total:		49440.31	1105.33	376.11	43698.53	970.30	142.85

# BASIN REPORT- Lake Erie

Basin Total

Units: Mgal(US)/d

Year Of Data: 2003

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	1242.70	276.54	156.94	1676.18	0.00	-0.49	220.13
Domestic Supply	12.33	0.00	96.28	108.61	0.00	0.00	15.00
Irrigation	1.50	38.91	32.10	72.51	0.00	0.00	36.59
Livestock	1.56	5.06	27.61	34.24	0.00	0.00	17.24
Industrial	680.92	111.23	62.25	854.40	0.00	0.00	104.16
Fossil Fuel Power	7060.18	665.43	0.43	7726.04	0.00	0.00	90.91
Nuclear Power	152.37	0.00	0.00	152.37	0.00	0.00	11.44
Hydroelectric Power	40288.00	0.00	0.00	40288.00	0.00	0.00	0.00
Other	0.74	8.16	0.49	9.39	5816.39	-13.92	0.00

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	468.53	187.90	96.57	752.99	0.00	-0.49	111.19
Domestic Supply	0.00	0.00	0.22	0.22	0.00	0.00	0.03
Irrigation	0.26	10.36	1.44	12.06	0.00	0.00	10.85
Livestock	0.00	2.32	1.58	3.90	0.00	0.00	3.12
Industrial	227.00	96.20	42.41	365.61	0.00	0.00	62.08
Fossil Fuel Power	2608.50	665.43	0.27	3274.20	0.00	0.00	43.05
Nuclear Power	105.50	0.00	0.00	105.50	0.00	0.00	10.55
Hydroelectric Power	40288.00	0.00	0.00	40288.00	0.00	0.00	0.00
Other	0.74	8.09	0.36	9.19	5816.39	-13.92	0.00

# BASIN REPORT- Lake Huron

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2003

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Michigan							
	Public Supply	267.07	0.00	33.39		0.00	
	Domestic Supply		0.00			0.00	
	Irrigation	29.22	0.00	26.30		0.00	
	Livestock		0.00			0.00	
	Industrial	39.83	0.00	3.98		0.00	
	Fossil Fuel Power	775.92	0.00	9.31		0.00	
	Nuclear Power	0.00	0.00	0.00		0.00	
	Hydroelectric Power	0.00	0.00	0.00		0.00	
	Other		0.00			0.00	
	Total	1112.04	0.00	72.98		0.00	
Ontario							
	Public Supply	84.37	0.00	12.65	81.66	0.00	12.25
	Domestic Supply	10.61	0.00	1.59	0.00	0.00	0.00
	Irrigation	20.91	0.00			0.00	
	Livestock	12.41	0.00			0.00	
	Industrial	190.19	0.00	11.98	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	4697.20	0.00	42.28	0.00	0.00	0.00
	Hydroelectric Power	33608.07	0.00	0.00	0.00	0.00	0.00
	Other	47.97	0.00	0.00	47.97	0.00	0.00
	Total	38671.73	0.00	68.50	129.63	0.00	12.25
Grand Total:		39783.77	0.00	141.48	129.63	0.00	12.25

# BASIN REPORT- Lake Huron

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2003

Jurisdiction	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Michigan							
	Public Supply	233.27	0.69	33.11			
	Domestic Supply						
	Irrigation	3.28	11.13	14.81			
	Livestock						
	Industrial	22.41	15.74	1.68			
	Fossil Fuel Power	768.80	5.91	1.21			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	TOTAL	1027.76	33.47	50.81			
Ontario							
	Public Supply	42.66	23.57	18.14	42.02	23.23	16.40
	Domestic Supply	0.00	0.00	10.61	0.00	0.00	0.00
	Irrigation	0.15	15.41	5.35			
	Livestock	2.93	3.07	6.41			
	Industrial	187.41	0.00	2.78	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	4697.20	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	20000.41	13607.66	0.00	0.00	0.00	0.00
	Other	0.00	47.97	0.00	0.00	47.97	0.00
	TOTAL	24930.76	13697.68	43.29	42.02	71.20	16.40
Grand Total:		25958.52	13731.15	94.10	42.02	71.20	16.40

# BASIN REPORT- Lake Huron

Basin Total

Units: Mgal(US)/d

Year Of Data: 2003

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	275.93	24.26	51.25	351.44	0.00	0.00	46.04
Domestic Supply	0.00	0.00	10.61	10.61	0.00	0.00	1.59
Irrigation	3.43	26.54	20.16	50.13	0.00	0.00	26.30
Livestock	2.93	3.07	6.41	12.41	0.00	0.00	
Industrial	209.82	15.74	4.46	230.02	0.00	0.00	15.96
Fossil Fuel Power	768.80	5.91	1.21	775.92	0.00	0.00	9.31
Nuclear Power	4697.20	0.00	0.00	4697.20	0.00	0.00	42.28
Hydroelectric Power	20000.41	13607.66	0.00	33608.07	0.00	0.00	0.00
Other	0.00	47.97	0.00	47.97	47.97	0.00	0.00

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	42.02	23.23	16.40	81.66	0.00	0.00	12.25
Domestic Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Irrigation					0.00	0.00	
Livestock					0.00	0.00	
Industrial	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	47.97	0.00	47.97	47.97	0.00	0.00

# BASIN REPORT- Lake Michigan

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2003

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Illinois							
	Public Supply	0.00	1030.85	0.00	0.00	1030.85	0.00
	Domestic Supply	3.67	0.03	0.37	3.67	0.03	0.37
	Irrigation		0.00		0.00	0.00	0.00
	Livestock		0.00		0.00	0.00	0.00
	Industrial	12.29	0.02	0.74	12.29	0.02	0.74
	Fossil Fuel Power	694.05	0.00	13.88	694.05	0.00	13.88
	Nuclear Power	31.70	0.00	0.32	31.70	0.00	0.32
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	201.68	0.00	0.00	201.68	0.00
	Total	741.70	1232.58	15.31	741.70	1232.58	15.31
Indiana							
	Public Supply	142.41	-1.72	21.36	142.10	0.00	21.31
	Domestic Supply	42.59	0.00	6.39	20.54	0.00	3.08
	Irrigation	23.01	0.00	20.71	22.13	0.00	19.91
	Livestock	5.59	0.00	4.46	3.53	0.00	2.82
	Industrial	1728.31	0.00	103.71	1727.81	0.00	103.67
	Fossil Fuel Power	679.15	0.00	13.58	679.15	0.00	13.58
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	1694.56	0.00	0.00	1694.56	0.00	0.00
	Other	0.14	0.00	0.01	0.03	0.00	0.00
	Total	4315.76	-1.72	170.22	4289.85	0.00	164.37
Michigan							
	Public Supply	313.53	0.00	39.20		0.00	
	Domestic Supply		0.00			0.00	
	Irrigation	235.98	0.00	212.39		0.00	
	Livestock		0.00			0.00	
	Industrial	267.93	0.00	26.80		0.00	
	Fossil Fuel Power	1276.28	0.00	15.32		0.00	
	Nuclear Power	2074.74	0.00	39.42		0.00	
	Hydroelectric Power	0.00	0.00	0.00		0.00	
	Other		0.00			0.00	
	Total	4168.46	0.00	333.13		0.00	

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Wisconsin							
	Public Supply	315.70	0.40	36.80		0.00	
	Domestic Supply	32.60	0.00	3.26		0.00	
	Irrigation	42.40	0.00	29.68		0.00	
	Livestock	32.30	0.00	29.07		0.00	
	Industrial	187.00	0.00	19.07		0.00	
	Fossil Fuel Power	1725.00	0.00	8.62		0.00	
	Nuclear Power	1195.00	0.00	5.97		0.00	
	Hydroelectric Power	0.00	0.00	0.00		0.00	
	Other		-0.64			0.00	
	Total	3530.00	-0.24	132.47		0.00	
Grand Total:		12755.92	1230.62	651.13	5031.55	1232.58	179.68



# BASIN REPORT- Lake Michigan

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2003

Jurisdiction	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Illinois							
	Public Supply	0.00	0.00	0.00	0.00	0.00	0.00
	Domestic Supply	3.67	0.00	0.01	3.67	0.00	0.01
	Irrigation				0.00	0.00	0.00
	Livestock				0.00	0.00	0.00
	Industrial	12.29	0.00	0.00	12.29	0.00	0.00
	Fossil Fuel Power	694.05	0.00	0.00	694.05	0.00	0.00
	Nuclear Power	31.70	0.00	0.00	31.70	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	TOTAL	741.70	0.00	0.01	741.70	0.00	0.01
Indiana							
	Public Supply	96.88	0.00	45.53	96.88	0.00	45.22
	Domestic Supply	0.00	14.85	27.74	0.00	14.85	5.69
	Irrigation	0.00	5.32	17.69	0.00	4.98	17.15
	Livestock	0.00	1.17	4.42	0.00	1.17	2.36
	Industrial	1710.29	4.42	13.60	1710.25	4.42	13.14
	Fossil Fuel Power	679.15	0.00	0.00	679.15	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	1694.56	0.00	0.00	1694.56	0.00
	Other	0.00	0.02	0.12	0.00	0.00	0.03
	TOTAL	2486.32	1720.34	109.10	2486.28	1719.98	83.59
Michigan							
	Public Supply	143.27	0.53	169.73			
	Domestic Supply						
	Irrigation	2.13	74.05	159.80			
	Livestock						
	Industrial	104.85	88.27	74.81			
	Fossil Fuel Power	939.81	333.75	2.72			
	Nuclear Power	2074.74	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	TOTAL	3264.80	496.60	407.06			

Jurisdiction	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Wisconsin	Public Supply	223.00	24.70	68.00			
	Domestic Supply	0.00	0.00	32.60			
	Irrigation	0.00	0.00	42.40			
	Livestock	0.00	0.00	32.30			
	Industrial	187.00	0.00	0.00			
	Fossil Fuel Power	1725.00	0.00	0.00			
	Nuclear Power	1195.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	TOTAL	3330.00	24.70	175.30			
Grand Total:	9822.82	2241.64	691.47	3227.98	1719.98	83.60	

# BASIN REPORT- Lake Michigan

Basin Total

Units: Mgal(US)/d

Year Of Data: 2003

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	463.15	25.23	283.26	771.64	0.00	1029.53	97.36
Domestic Supply	3.67	14.85	60.35	78.86	0.00	0.03	10.02
Irrigation	2.13	79.37	219.89	301.39	0.00	0.00	262.78
Livestock	0.00	1.17	36.72	37.89	0.00	0.00	33.53
Industrial	2014.43	92.69	88.41	2195.53	0.00	0.02	150.32
Fossil Fuel Power	4038.01	333.75	2.72	4374.48	0.00	0.00	51.40
Nuclear Power	3301.44	0.00	0.00	3301.44	0.00	0.00	45.71
Hydroelectric Power	0.00	1694.56	0.00	1694.56	0.00	0.00	0.00
Other	0.00	0.02	0.12	0.14	0.00	201.04	0.01

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	96.88	0.00	45.22	142.10	0.00	1030.85	21.31
Domestic Supply	3.67	14.85	5.70	24.21	0.00	0.03	3.45
Irrigation	0.00	4.98	17.15	22.13	0.00	0.00	19.91
Livestock	0.00	1.17	2.36	3.53	0.00	0.00	2.82
Industrial	1722.54	4.42	13.14	1740.10	0.00	0.02	104.41
Fossil Fuel Power	1373.20	0.00	0.00	1373.20	0.00	0.00	27.46
Nuclear Power	31.70	0.00	0.00	31.70	0.00	0.00	0.32
Hydroelectric Power	0.00	1694.56	0.00	1694.56	0.00	0.00	0.00
Other	0.00	0.00	0.03	0.03	0.00	201.68	0.00

# BASIN REPORT- Lake Ontario

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2003

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
New York							
	Public Supply	392.81	8.77	47.18		8.77	0.00
	Domestic Supply	90.70	0.00	9.07	28.81	0.00	2.88
	Irrigation	7.43	0.00	6.69	7.43	0.00	6.69
	Livestock	11.19	0.00	10.07		0.00	6.53
	Industrial	74.02	0.00	18.51	74.02	0.00	18.51
	Fossil Fuel Power	850.11	0.00	17.00	850.11	0.00	17.00
	Nuclear Power	1349.40	0.00	67.47	1349.40	0.00	67.47
	Hydroelectric Power	80908.00	0.00	0.00	0.00	0.00	0.00
	Other	38.56	32.00	32.66	38.56	32.00	32.66
	Total	83722.22	40.77	208.65	2348.33	40.77	151.74
Ontario							
	Public Supply	465.93	0.00	69.89	464.62	0.00	69.69
	Domestic Supply	64.17	0.00	9.63	0.00	0.00	0.00
	Irrigation	17.73	0.00			0.00	
	Livestock	5.40	0.00			0.00	
	Industrial	229.64	0.00	14.47	0.00	0.00	0.00
	Fossil Fuel Power	708.95	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	5428.19	0.00	48.85	0.00	0.00	0.00
	Hydroelectric Power	41542.31	0.00	0.00	0.00	0.00	0.00
	Other	132.35	0.00	0.00	132.35	0.00	0.00
	Total	48594.67	0.00	142.84	596.97	0.00	69.69
Pennsylvania							
	Public Supply	0.07	0.00	0.01		0.00	
	Domestic Supply	0.17	0.00	0.02		0.00	
	Irrigation		0.00			0.00	
	Livestock		0.00			0.00	
	Industrial		0.00			0.00	
	Fossil Fuel Power		0.00			0.00	
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total	0.24	0.00	0.02	0.00	0.00	0.00
Grand Total:		132317.13	40.77	351.51	2945.30	40.77	221.43

# BASIN REPORT- Lake Ontario

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2003

Jurisdiction	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
New York							
	Public Supply	187.38	171.77	33.66			
	Domestic Supply	21.10	28.81	40.79	0.00	28.81	0.00
	Irrigation	0.00	7.33	0.10	0.00	7.33	0.10
	Livestock	3.93	0.00	7.26			
	Industrial	27.31	39.37	7.34	27.31	39.37	7.34
	Fossil Fuel Power	437.14	412.97	0.00	437.14	412.97	0.00
	Nuclear Power	1349.40	0.00	0.00	1349.40	0.00	0.00
	Hydroelectric Power	0.00	80908.00	0.00	0.00	0.00	0.00
	Other	0.00	38.35	0.21	0.00	38.35	0.21
	TOTAL	2026.26	81606.60	89.36	1813.85	526.83	7.65
Ontario							
	Public Supply	401.52	52.86	11.56	401.47	52.68	10.47
	Domestic Supply	0.00	0.00	64.17	0.00	0.00	0.00
	Irrigation	1.08	9.53	7.12			
	Livestock	0.00	0.94	4.46			
	Industrial	218.17	0.00	11.46	0.00	0.00	0.00
	Fossil Fuel Power	708.95	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	5428.19	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	33861.04	7681.26	0.00	0.00	0.00	0.00
	Other	0.00	132.35	0.00	0.00	132.35	0.00
	TOTAL	40618.96	7876.94	98.77	401.47	185.03	10.47
Pennsylvania							
	Public Supply	0.00	0.00	0.07			
	Domestic Supply	0.00	0.00	0.17			
	Irrigation						
	Livestock						
	Industrial						
	Fossil Fuel Power						
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other						
	TOTAL	0.00	0.00	0.24	0.00	0.00	0.00
Grand Total:		42645.22	89483.54	188.37	2215.32	711.86	18.12

# BASIN REPORT- Lake Ontario

Basin Total

Units: Mgal(US)/d

Year Of Data: 2003

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	588.90	224.63	45.29	858.81	0.00	8.77	117.08
Domestic Supply	21.10	28.81	105.13	155.04	0.00	0.00	18.71
Irrigation	1.08	16.86	7.22	25.16	0.00	0.00	6.69
Livestock	3.93	0.94	11.72	16.59	0.00	0.00	10.07
Industrial	245.48	39.37	18.80	303.66	0.00	0.00	32.98
Fossil Fuel Power	1146.09	412.97	0.00	1559.06	0.00	0.00	17.00
Nuclear Power	6777.59	0.00	0.00	6777.59	0.00	0.00	116.32
Hydroelectric Power	33861.04	88589.26	0.00	122450.31	0.00	0.00	0.00
Other	0.00	170.70	0.21	170.91	-5802.39	32.00	32.66

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	401.47	52.68	10.47	464.62	0.00	8.77	69.69
Domestic Supply	0.00	28.81	0.00	28.81	0.00	0.00	2.88
Irrigation	0.00	7.33	0.10	7.43	0.00	0.00	6.69
Livestock					0.00	0.00	6.53
Industrial	27.31	39.37	7.34	74.02	0.00	0.00	18.51
Fossil Fuel Power	437.14	412.97	0.00	850.11	0.00	0.00	17.00
Nuclear Power	1349.40	0.00	0.00	1349.40	0.00	0.00	67.47
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	170.70	0.21	170.91	-5802.39	32.00	32.66

# BASIN REPORT- Lake Superior

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2003

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Michigan							
	Public Supply	12.86	0.00	1.60		0.00	
	Domestic Supply		0.00			0.00	
	Irrigation	0.58	0.00	0.52		0.00	
	Livestock		0.00			0.00	
	Industrial	12.32	0.00	1.23		0.00	
	Fossil Fuel Power	249.44	0.00	2.99		0.00	
	Nuclear Power	0.00	0.00	0.00		0.00	
	Hydroelectric Power	0.00	0.00	0.00		0.00	
	Other		0.00			0.00	
	Total	275.20	0.00	6.34		0.00	
Minnesota							
	Public Supply	41.62	0.00	4.17	40.97	0.00	3.41
	Domestic Supply	1.54	0.00	0.15	1.28	0.00	0.13
	Irrigation	0.58	0.00	0.53	0.10	0.00	0.09
	Livestock	0.70	0.00	0.63	0.61	0.00	0.55
	Industrial	376.01	0.00	37.60	375.54	0.00	37.56
	Fossil Fuel Power	146.88	0.00	3.05	146.76	0.00	2.94
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	3562.06	0.00	0.00	3562.06	0.00	0.00
	Other	0.15	0.00	0.00	0.00	0.00	0.00
	Total	4129.54	0.00	46.13	4127.32	0.00	44.68
Ontario							
	Public Supply	45.77	0.00	6.87	45.58	0.00	6.84
	Domestic Supply	1.75	0.00	0.26	0.00	0.00	0.00
	Irrigation	0.37	0.00			0.00	
	Livestock	0.14	0.00			0.00	
	Industrial	162.12	0.00	10.21	0.00	0.00	0.00
	Fossil Fuel Power	295.52	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	38156.31	-4007.75	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total	38661.99	-4007.75	17.34	45.58	0.00	6.84

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Wisconsin							
	Public Supply	4.01	0.00	0.50		0.00	
	Domestic Supply	1.40	0.00	0.14		0.00	
	Irrigation	0.30	0.00	0.21		0.00	
	Livestock	8.30	0.00	7.47		0.00	
	Industrial		0.00			0.00	
	Fossil Fuel Power	38.00	0.00	0.19		0.00	
	Nuclear Power	0.00	0.00	0.00		0.00	
	Hydroelectric Power	0.00	0.00	0.00		0.00	
	Other		0.00			0.00	
	Total	52.01	0.00	8.51		0.00	
Grand Total:		43118.74	-4007.75	78.32	4172.90	0.00	51.52



# BASIN REPORT- Lake Superior

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2003

Jurisdiction	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Michigan							
	Public Supply	3.39	0.00	9.47			
	Domestic Supply						
	Irrigation	0.01	0.29	0.28			
	Livestock						
	Industrial	11.84	0.00	0.48			
	Fossil Fuel Power	249.44	0.00	0.00			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	TOTAL	264.68	0.29	10.23			
Minnesota							
	Public Supply	33.37	3.15	5.10	33.31	3.12	4.54
	Domestic Supply	1.18	0.34	0.02	1.13	0.15	0.00
	Irrigation	0.08	0.37	0.13	0.00	0.10	0.00
	Livestock	0.70	0.00	0.00	0.61	0.00	0.00
	Industrial	316.08	59.91	0.02	316.08	59.46	0.00
	Fossil Fuel Power	0.00	146.76	0.12	0.00	146.76	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	3562.06	0.00	0.00	3562.06	0.00
	Other	0.00	0.07	0.08	0.00	0.00	0.00
	TOTAL	351.41	3772.66	5.47	351.13	3771.65	4.54
Ontario							
	Public Supply	30.10	13.03	2.65	30.07	12.96	2.55
	Domestic Supply	0.00	0.00	1.75	0.00	0.00	0.00
	Irrigation	0.02	0.31	0.05			
	Livestock	0.00	0.14	0.00			
	Industrial	162.12	0.00	0.00	0.00	0.00	0.00
	Fossil Fuel Power	295.52	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	38156.31	0.00	0.00	0.00	0.00
	Other						
	TOTAL	487.76	38169.79	4.44	30.07	12.96	2.55

Jurisdiction	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Wisconsin							
	Public Supply	3.28	0.00	0.73			
	Domestic Supply	0.00	0.00	1.40			
	Irrigation	0.00	0.00	0.30			
	Livestock	0.00	0.00	8.30			
	Industrial						
	Fossil Fuel Power	38.00	0.00	0.00			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	TOTAL	41.28	0.00	10.73			
Grand Total:		1145.13	41942.74	30.87	381.20	3784.61	7.09

# BASIN REPORT- Lake Superior

Basin Total

Units: Mgal(US)/d

Year Of Data: 2003

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	70.14	16.18	17.95	104.26	0.00	0.00	13.14
Domestic Supply	1.18	0.34	3.17	4.69	0.00	0.00	0.55
Irrigation	0.11	0.97	0.76	1.83	0.00	0.00	1.26
Livestock	0.70	0.14	8.30	9.14	0.00	0.00	8.10
Industrial	490.04	59.91	0.50	550.45	0.00	0.00	49.04
Fossil Fuel Power	582.96	146.76	0.12	729.84	0.00	0.00	6.23
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	41718.37	0.00	41718.37	0.00	-4007.75	0.00
Other	0.00	0.07	0.08	0.15	0.00	0.00	0.00

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	63.38	16.08	7.09	86.55	0.00	0.00	10.25
Domestic Supply	1.13	0.15	0.00	1.28	0.00	0.00	0.13
Irrigation	0.00	0.10	0.00	0.10	0.00	0.00	0.09
Livestock	0.61	0.00	0.00	0.61	0.00	0.00	0.55
Industrial	316.08	59.46	0.00	375.54	0.00	0.00	37.56
Fossil Fuel Power	0.00	146.76	0.00	146.76	0.00	0.00	2.94
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	3562.06	0.00	3562.06	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# BASIN REPORT- St. Lawrence River

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2003

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
New York							
	Public Supply	40.29	0.00	4.03		0.00	
	Domestic Supply	15.21	0.00	1.52	0.54	0.00	0.05
	Irrigation	0.15	0.00	0.14	0.15	0.00	0.14
	Livestock	5.08	0.00	4.57		0.00	
	Industrial	14.27	0.00	3.56	14.27	0.00	3.56
	Fossil Fuel Power	0.08	0.00	0.00	0.08	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	172029.00	0.00	0.00	73337.00	0.00	0.00
	Other	3.54	0.00	0.35	3.54	0.00	0.35
	Total	172107.62	0.00	14.17	73355.58	0.00	4.10
Ontario							
	Public Supply	73.03	0.00	10.96	72.08	0.00	10.82
	Domestic Supply	11.45	0.00	1.72	0.00	0.00	0.00
	Irrigation	2.35	0.00			0.00	
	Livestock	5.91	0.00			0.00	
	Industrial	160.81	0.00	10.13	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	76235.15	0.00	0.00	0.00	0.00	0.00
	Other	19.28	0.00	0.00	19.28	0.00	0.00
	Total	76507.99	0.00	22.80	91.37	0.00	10.82
Quebec							
	Public Supply	1100.01	0.00	109.90	1096.05	0.00	109.63
	Domestic Supply	71.59	0.00	7.13	48.61	0.00	4.76
	Irrigation	9.22	0.00	8.30		0.00	
	Livestock	19.10	0.00	15.28		0.00	
	Industrial	125.48	0.00	12.55	124.95	0.00	12.50
	Fossil Fuel Power	47.02	0.00	4.70	47.02	0.00	4.70
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	303895.85	0.00	0.00	303895.85	0.00	0.00
	Other		0.00			0.00	
	Total	305268.28	0.00	157.86	305212.48	0.00	131.58
Grand Total:		553883.88	0.00	194.83	378659.43	0.00	146.50

# BASIN REPORT- St. Lawrence River

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2003

Jurisdiction	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
New York							
	Public Supply	2.86	32.51	4.92			
	Domestic Supply	2.55	0.54	12.12	0.00	0.54	0.00
	Irrigation	0.00	0.15	0.00	0.00	0.15	0.00
	Livestock	1.77	0.00	3.31			
	Industrial	5.37	6.65	2.25	5.37	6.65	2.25
	Fossil Fuel Power	0.08	0.00	0.00	0.08	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	73337.00	98692.00	0.00	73337.00	0.00	0.00
	Other	0.00	3.54	0.00	0.00	3.54	0.00
	TOTAL	73349.63	98735.39	22.60	73342.45	10.88	2.25
Ontario							
	Public Supply	10.64	58.84	3.56	10.64	58.52	2.93
	Domestic Supply	0.00	0.00	11.45	0.00	0.00	0.00
	Irrigation	0.01	2.04	0.30			
	Livestock	0.00	3.63	2.28			
	Industrial	159.76	0.00	1.05	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	76149.02	86.13	0.00	0.00	0.00	0.00
	Other	0.00	19.28	0.00	0.00	19.28	0.00
	TOTAL	76319.43	169.91	18.65	10.64	77.80	2.93
Quebec							
	Public Supply	602.84	497.17	0.00	602.58	493.47	0.00
	Domestic Supply	0.00	0.00	71.59	0.00	0.00	48.61
	Irrigation	0.00	0.00	9.22			
	Livestock	0.00	0.00	19.10			
	Industrial	0.00	125.48	0.00	0.00	124.95	0.00
	Fossil Fuel Power	39.10	7.93	0.00	39.10	7.93	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	170946.25	132949.60	0.00	170946.25	132949.60	0.00
	Other						
	TOTAL	171588.19	133580.18	99.91	171587.93	133575.95	48.61
Grand Total:		321257.25	232485.48	141.16	244941.02	133664.63	53.78

# BASIN REPORT- St. Lawrence River

Basin Total

Units: Mgal(US)/d

Year Of Data: 2003

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	616.34	588.52	8.48	1213.33	0.00	0.00	124.88
Domestic Supply	2.55	0.54	95.16	98.25	0.00	0.00	10.37
Irrigation	0.01	2.19	9.52	11.72	0.00	0.00	8.44
Livestock	1.77	3.63	24.69	30.09	0.00	0.00	19.85
Industrial	165.13	132.13	3.30	300.56	0.00	0.00	26.24
Fossil Fuel Power	39.18	7.93	0.00	47.10	0.00	0.00	4.70
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	320432.28	231727.72	0.00	552160.00	0.00	0.00	0.00
Other	0.00	22.82	0.00	22.82	0.00	0.00	0.35

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	613.22	551.99	2.93	1168.13	0.00	0.00	120.45
Domestic Supply	0.00	0.54	48.61	49.15	0.00	0.00	4.81
Irrigation	0.00	0.15	0.00	0.15	0.00	0.00	0.14
Livestock					0.00	0.00	
Industrial	5.37	131.60	2.25	139.22	0.00	0.00	16.06
Fossil Fuel Power	39.18	7.93	0.00	47.10	0.00	0.00	4.70
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	244283.25	132949.60	0.00	377232.85	0.00	0.00	0.00
Other	0.00	22.82	0.00	22.82	0.00	0.00	0.35



## ***V. WATER USE CATEGORY TABLES***

Each water use category is represented by two tables:

Water Use by Jurisdiction

Water Use by Basin

Public Supply-Domestic & Industrial

Self Supply-Domestic

Self Supply – Irrigation

Self Supply-Livestock

Self Supply-Industrial

Self Supply-Thermoelectric Power, Fossil Fuel

Self Supply-Thermoelectric Power, Nuclear Power

Self Supply-Hydroelectric Power

Self Supply-Other



# WATER USE CATEGORY REPORT- Public Supply

Units: Mgal(US)/d

Year Of Data: 2003

## Water Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	0.00	0.00	0.00	0.00	0.00	1030.85	0.00
Indiana	96.88	33.23	54.97	185.08	0.00	-1.72	27.76
Michigan	969.29	17.48	257.51	1244.28	0.00	0.00	155.54
Minnesota	33.37	3.15	5.10	41.62	0.00	0.00	4.17
New York	374.82	276.40	45.90	697.12	0.00	8.77	77.61
Ohio	427.88	122.94	37.60	588.42	0.00	0.32	88.26
Ontario	493.88	177.55	91.57	763.00	0.00	0.00	114.45
Pennsylvania	31.92	2.73	1.79	36.43	0.00	-0.81	3.64
Quebec	602.84	497.17	0.00	1100.01	0.00	0.00	109.90
Wisconsin	226.28	24.70	68.73	319.71	0.00	0.40	37.30

## Water Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	0.00	0.00	0.00	0.00	0.00	1030.85	0.00
Indiana	96.88	33.23	54.52	184.63	0.00	0.00	27.68
Michigan					0.00	0.00	
Minnesota	33.31	3.12	4.54	40.97	0.00	0.00	3.41
New York					0.00	8.77	0.00
Ohio	427.65	122.81	32.04	582.50	0.00	0.32	87.38
Ontario	493.17	176.61	87.00	756.78	0.00	0.00	113.52
Pennsylvania	31.92	2.63	0.58	35.13	0.00	-0.81	3.51
Quebec	602.58	493.47	0.00	1096.05	0.00	0.00	109.63
Wisconsin					0.00	0.00	

# WATER USE CATEGORY REPORT- Public Supply

Units: Mgal(US)/d

Year Of Data: 2003

## Water Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	70.14	16.18	17.95	104.26	0.00	0.00	13.14
Lake Michigan	463.15	25.23	283.26	771.64	0.00	1029.53	97.36
Lake Huron	275.93	24.26	51.25	351.44	0.00	0.00	46.04
Lake Erie	1242.70	276.54	156.94	1676.18	0.00	-0.49	220.13
Lake Ontario	588.90	224.63	45.29	858.81	0.00	8.77	117.08
St. Lawrence River	616.34	588.52	8.48	1213.33	0.00	0.00	124.88

## Water Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	63.38	16.08	7.09	86.55	0.00	0.00	10.25
Lake Michigan	96.88	0.00	45.22	142.10	0.00	1030.85	21.31
Lake Huron	42.02	23.23	16.40	81.66	0.00	0.00	12.25
Lake Erie	468.53	187.90	96.57	752.99	0.00	-0.49	111.19
Lake Ontario	401.47	52.68	10.47	464.62	0.00	8.77	69.69
St. Lawrence River	613.22	551.99	2.93	1168.13	0.00	0.00	120.45

# WATER USE CATEGORY REPORT- Domestic Supply

Units: Mgal(US)/d

Year Of Data: 2003

## Water Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	3.67	0.00	0.01	3.67	0.00	0.03	0.37
Indiana	0.00	14.85	33.87	48.72	0.00	0.00	7.31
Michigan					0.00	0.00	
Minnesota	1.18	0.34	0.02	1.54	0.00	0.00	0.15
New York	35.98	29.35	63.52	128.85	0.00	0.00	12.88
Ohio	0.00	0.00	56.70	56.70	0.00	0.00	8.51
Ontario	0.00	0.00	107.91	107.91	0.00	0.00	16.19
Pennsylvania	0.00	0.00	3.07	3.07	0.00	0.00	0.31
Quebec	0.00	0.00	71.59	71.59	0.00	0.00	7.13
Wisconsin	0.00	0.00	34.00	34.00	0.00	0.00	3.40

## Water Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	3.67	0.00	0.01	3.67	0.00	0.03	0.37
Indiana	0.00	14.85	5.91	20.76	0.00	0.00	3.11
Michigan					0.00	0.00	
Minnesota	1.13	0.15	0.00	1.28	0.00	0.00	0.13
New York	0.00	29.35	0.00	29.35	0.00	0.00	2.93
Ohio	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania					0.00	0.00	
Quebec	0.00	0.00	48.61	48.61	0.00	0.00	4.76
Wisconsin					0.00	0.00	

# WATER USE CATEGORY REPORT- Domestic Supply

Units: Mgal(US)/d

Year Of Data: 2003

## Water Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	1.18	0.34	3.17	4.69	0.00	0.00	0.55
Lake Michigan	3.67	14.85	60.35	78.86	0.00	0.03	10.02
Lake Huron	0.00	0.00	10.61	10.61	0.00	0.00	1.59
Lake Erie	12.33	0.00	96.28	108.61	0.00	0.00	15.00
Lake Ontario	21.10	28.81	105.13	155.04	0.00	0.00	18.71
St. Lawrence River	2.55	0.54	95.16	98.25	0.00	0.00	10.37

## Water Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	1.13	0.15	0.00	1.28	0.00	0.00	0.13
Lake Michigan	3.67	14.85	5.70	24.21	0.00	0.03	3.45
Lake Huron	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Erie	0.00	0.00	0.22	0.22	0.00	0.00	0.03
Lake Ontario	0.00	28.81	0.00	28.81	0.00	0.00	2.88
St. Lawrence River	0.00	0.54	48.61	49.15	0.00	0.00	4.81

# WATER USE CATEGORY REPORT- Irrigation

Units: Mgal(US)/d

Year Of Data: 2003

## Water Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois					0.00	0.00	
Indiana	0.00	5.52	18.21	23.73	0.00	0.00	21.35
Michigan	5.95	98.44	184.64	289.03	0.00	0.00	260.14
Minnesota	0.08	0.37	0.13	0.58	0.00	0.00	0.53
New York	0.13	7.94	0.10	8.17	0.00	0.00	7.36
Ohio	0.23	12.15	2.67	15.05	0.00	0.00	13.55
Ontario	1.86	39.39	31.97	73.22	0.00	0.00	
Pennsylvania	0.02	1.02	0.01	1.04	0.00	0.00	0.94
Quebec	0.00	0.00	9.22	9.22	0.00	0.00	8.30
Wisconsin	0.00	0.00	42.70	42.70	0.00	0.00	29.89

## Water Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indiana	0.00	5.11	17.53	22.64	0.00	0.00	20.36
Michigan					0.00	0.00	
Minnesota	0.00	0.10	0.00	0.10	0.00	0.00	0.09
New York	0.13	7.94	0.10	8.17	0.00	0.00	7.36
Ohio	0.13	8.88	1.06	10.07	0.00	0.00	9.06
Ontario					0.00	0.00	
Pennsylvania	0.00	0.89	0.00	0.89	0.00	0.00	0.81
Quebec					0.00	0.00	
Wisconsin					0.00	0.00	

# WATER USE CATEGORY REPORT- Irrigation

Units: Mgal(US)/d

Year Of Data: 2003

## Water Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.11	0.97	0.76	1.83	0.00	0.00	1.26
Lake Michigan	2.13	79.37	219.89	301.39	0.00	0.00	262.78
Lake Huron	3.43	26.54	20.16	50.13	0.00	0.00	26.30
Lake Erie	1.50	38.91	32.10	72.51	0.00	0.00	36.59
Lake Ontario	1.08	16.86	7.22	25.16	0.00	0.00	6.69
St. Lawrence River	0.01	2.19	9.52	11.72	0.00	0.00	8.44

## Water Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	0.10	0.00	0.10	0.00	0.00	0.09
Lake Michigan	0.00	4.98	17.15	22.13	0.00	0.00	19.91
Lake Huron					0.00	0.00	
Lake Erie	0.26	10.36	1.44	12.06	0.00	0.00	10.85
Lake Ontario	0.00	7.33	0.10	7.43	0.00	0.00	6.69
St. Lawrence River	0.00	0.15	0.00	0.15	0.00	0.00	0.14

# WATER USE CATEGORY REPORT- Livestock

Units: Mgal(US)/d

Year Of Data: 2003

## Water Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois					0.00	0.00	
Indiana	0.00	1.17	5.36	6.53	0.00	0.00	5.21
Michigan					0.00	0.00	
Minnesota	0.70	0.00	0.00	0.70	0.00	0.00	0.63
New York	7.24	0.00	13.33	20.57	0.00	0.00	18.51
Ohio	0.00	1.98	10.40	12.38	0.00	0.00	9.90
Ontario	2.95	8.67	25.47	37.09	0.00	0.00	
Pennsylvania	0.00	2.20	1.20	3.40	0.00	0.00	2.72
Quebec	0.00	0.00	19.10	19.10	0.00	0.00	15.28
Wisconsin	0.00	0.00	40.60	40.60	0.00	0.00	36.54

## Water Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indiana	0.00	1.17	2.36	3.53	0.00	0.00	2.82
Michigan					0.00	0.00	
Minnesota	0.61	0.00	0.00	0.61	0.00	0.00	0.55
New York					0.00	0.00	6.53
Ohio	0.00	0.22	0.38	0.60	0.00	0.00	0.48
Ontario					0.00	0.00	
Pennsylvania	0.00	2.10	1.20	3.30	0.00	0.00	2.64
Quebec					0.00	0.00	
Wisconsin					0.00	0.00	

# WATER USE CATEGORY REPORT- Livestock

Units: Mgal(US)/d

Year Of Data: 2003

## Water Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.70	0.14	8.30	9.14	0.00	0.00	8.10
Lake Michigan	0.00	1.17	36.72	37.89	0.00	0.00	33.53
Lake Huron	2.93	3.07	6.41	12.41	0.00	0.00	
Lake Erie	1.56	5.06	27.61	34.24	0.00	0.00	17.24
Lake Ontario	3.93	0.94	11.72	16.59	0.00	0.00	10.07
St. Lawrence River	1.77	3.63	24.69	30.09	0.00	0.00	19.85

## Water Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.61	0.00	0.00	0.61	0.00	0.00	0.55
Lake Michigan	0.00	1.17	2.36	3.53	0.00	0.00	2.82
Lake Huron					0.00	0.00	
Lake Erie	0.00	2.32	1.58	3.90	0.00	0.00	3.12
Lake Ontario					0.00	0.00	6.53
St. Lawrence River					0.00	0.00	



# WATER USE CATEGORY REPORT- Industrial

Units: Mgal(US)/d

Year Of Data: 2003

## Water Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	12.29	0.00	0.00	12.29	0.00	0.02	0.74
Indiana	1710.29	9.57	17.60	1737.46	0.00	0.00	104.26
Michigan	419.78	118.74	88.59	627.11	0.00	0.00	62.71
Minnesota	316.08	59.91	0.02	376.01	0.00	0.00	37.60
New York	207.12	46.90	9.76	263.78	0.00	0.00	65.94
Ohio	46.97	90.46	39.21	176.64	0.00	0.00	17.67
Ontario	900.71	0.00	22.51	923.22	0.00	0.00	58.16
Pennsylvania	5.59	0.01	0.04	5.64	0.00	0.00	
Quebec	0.00	125.48	0.00	125.48	0.00	0.00	12.55
Wisconsin	187.00	0.00	0.00	187.00	0.00	0.00	19.07

## Water Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	12.29	0.00	0.00	12.29	0.00	0.02	0.74
Indiana	1710.25	9.55	16.96	1736.76	0.00	0.00	104.21
Michigan					0.00	0.00	
Minnesota	316.08	59.46	0.00	375.54	0.00	0.00	37.56
New York	207.12	46.90	9.76	263.78	0.00	0.00	65.94
Ohio	46.97	90.19	38.42	175.58	0.00	0.00	17.56
Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania	5.59	0.00	0.00	5.59	0.00	0.00	0.11
Quebec	0.00	124.95	0.00	124.95	0.00	0.00	12.50
Wisconsin					0.00	0.00	

# WATER USE CATEGORY REPORT- Industrial

Units: Mgal(US)/d

Year Of Data: 2003

## Water Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	490.04	59.91	0.50	550.45	0.00	0.00	49.04
Lake Michigan	2014.43	92.69	88.41	2195.53	0.00	0.02	150.32
Lake Huron	209.82	15.74	4.46	230.02	0.00	0.00	15.96
Lake Erie	680.92	111.23	62.25	854.40	0.00	0.00	104.16
Lake Ontario	245.48	39.37	18.80	303.66	0.00	0.00	32.98
St. Lawrence River	165.13	132.13	3.30	300.56	0.00	0.00	26.24

## Water Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	316.08	59.46	0.00	375.54	0.00	0.00	37.56
Lake Michigan	1722.54	4.42	13.14	1740.10	0.00	0.02	104.41
Lake Huron	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Erie	227.00	96.20	42.41	365.61	0.00	0.00	62.08
Lake Ontario	27.31	39.37	7.34	74.02	0.00	0.00	18.51
St. Lawrence River	5.37	131.60	2.25	139.22	0.00	0.00	16.06

# WATER USE CATEGORY REPORT- Fossil Fuel Power

Units: Mgal(US)/d

Year Of Data: 2003

## Water Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	694.05	0.00	0.00	694.05	0.00	0.00	13.88
Indiana	679.15	0.00	0.27	679.42	0.00	0.00	13.59
Michigan	5946.53	339.66	4.01	6290.20	0.00	0.00	75.48
Minnesota	0.00	146.76	0.12	146.88	0.00	0.00	3.05
New York	1467.96	412.97	0.00	1880.93	0.00	0.00	37.61
Ohio	1577.76	665.43	0.05	2243.24	0.00	0.00	22.43
Ontario	1467.67	0.00	0.00	1467.67	0.00	0.00	0.00
Pennsylvania	0.00	0.00	0.03	0.03	0.00	0.00	0.00
Quebec	39.10	7.93	0.00	47.02	0.00	0.00	4.70
Wisconsin	1763.00	0.00	0.00	1763.00	0.00	0.00	8.81

## Water Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	694.05	0.00	0.00	694.05	0.00	0.00	13.88
Indiana	679.15	0.00	0.27	679.42	0.00	0.00	13.59
Michigan					0.00	0.00	
Minnesota	0.00	146.76	0.00	146.76	0.00	0.00	2.94
New York	1467.96	412.97	0.00	1880.93	0.00	0.00	37.61
Ohio	1577.76	665.43	0.00	2243.19	0.00	0.00	22.43
Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania					0.00	0.00	
Quebec	39.10	7.93	0.00	47.02	0.00	0.00	4.70
Wisconsin					0.00	0.00	

# WATER USE CATEGORY REPORT- Fossil Fuel Power

Units: Mgal(US)/d

Year Of Data: 2003

## Water Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	582.96	146.76	0.12	729.84	0.00	0.00	6.23
Lake Michigan	4038.01	333.75	2.72	4374.48	0.00	0.00	51.40
Lake Huron	768.80	5.91	1.21	775.92	0.00	0.00	9.31
Lake Erie	7060.18	665.43	0.43	7726.04	0.00	0.00	90.91
Lake Ontario	1146.09	412.97	0.00	1559.06	0.00	0.00	17.00
St. Lawrence River	39.18	7.93	0.00	47.10	0.00	0.00	4.70

## Water Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	146.76	0.00	146.76	0.00	0.00	2.94
Lake Michigan	1373.20	0.00	0.00	1373.20	0.00	0.00	27.46
Lake Huron	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Erie	2608.50	665.43	0.27	3274.20	0.00	0.00	43.05
Lake Ontario	437.14	412.97	0.00	850.11	0.00	0.00	17.00
St. Lawrence River	39.18	7.93	0.00	47.10	0.00	0.00	4.70

# WATER USE CATEGORY REPORT- Nuclear Power

Units: Mgal(US)/d

Year Of Data: 2003

## Water Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	31.70	0.00	0.00	31.70	0.00	0.00	0.32
Indiana	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Michigan	2121.61	0.00	0.00	2121.61	0.00	0.00	40.31
Minnesota	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York	1349.40	0.00	0.00	1349.40	0.00	0.00	67.47
Ohio	105.50	0.00	0.00	105.50	0.00	0.00	10.55
Ontario	10125.39	0.00	0.00	10125.39	0.00	0.00	91.13
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quebec	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wisconsin	1195.00	0.00	0.00	1195.00	0.00	0.00	5.97

## Water Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	31.70	0.00	0.00	31.70	0.00	0.00	0.32
Indiana	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Michigan					0.00	0.00	
Minnesota	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York	1349.40	0.00	0.00	1349.40	0.00	0.00	67.47
Ohio	105.50	0.00	0.00	105.50	0.00	0.00	10.55
Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quebec	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wisconsin					0.00	0.00	

# WATER USE CATEGORY REPORT- Nuclear Power

Units: Mgal(US)/d

Year Of Data: 2003

## Water Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Michigan	3301.44	0.00	0.00	3301.44	0.00	0.00	45.71
Lake Huron	4697.20	0.00	0.00	4697.20	0.00	0.00	42.28
Lake Erie	152.37	0.00	0.00	152.37	0.00	0.00	11.44
Lake Ontario	6777.59	0.00	0.00	6777.59	0.00	0.00	116.32
St. Lawrence River	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## Water Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Michigan	31.70	0.00	0.00	31.70	0.00	0.00	0.32
Lake Huron	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Erie	105.50	0.00	0.00	105.50	0.00	0.00	10.55
Lake Ontario	1349.40	0.00	0.00	1349.40	0.00	0.00	67.47
St. Lawrence River	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# WATER USE CATEGORY REPORT- Hydroelectric Power

Units: Mgal(US)/d

Year Of Data: 2003

## Water Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indiana	0.00	1694.56	0.00	1694.56	0.00	0.00	0.00
Michigan	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Minnesota	0.00	3562.06	0.00	3562.06	0.00	0.00	0.00
New York	113625.00	179600.00	0.00	293225.00	0.00	0.00	0.00
Ohio	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ontario	130010.47	59531.37	0.00	189541.84	0.00	-4007.75	0.00
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quebec	170946.25	132949.60	0.00	303895.85	0.00	0.00	0.00
Wisconsin	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## Water Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indiana	0.00	1694.56	0.00	1694.56	0.00	0.00	0.00
Michigan					0.00	0.00	
Minnesota	0.00	3562.06	0.00	3562.06	0.00	0.00	0.00
New York	113625.00	0.00	0.00	113625.00	0.00	0.00	0.00
Ohio	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quebec	170946.25	132949.60	0.00	303895.85	0.00	0.00	0.00
Wisconsin					0.00	0.00	

# WATER USE CATEGORY REPORT- Hydroelectric Power

Units: Mgal(US)/d

Year Of Data: 2003

## Water Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	41718.37	0.00	41718.37	0.00	-4007.75	0.00
Lake Michigan	0.00	1694.56	0.00	1694.56	0.00	0.00	0.00
Lake Huron	20000.41	13607.66	0.00	33608.07	0.00	0.00	0.00
Lake Erie	40288.00	0.00	0.00	40288.00	0.00	0.00	0.00
Lake Ontario	33861.04	88589.26	0.00	122450.31	0.00	0.00	0.00
St. Lawrence River	320432.28	231727.72	0.00	552160.00	0.00	0.00	0.00

## Water Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	3562.06	0.00	3562.06	0.00	0.00	0.00
Lake Michigan	0.00	1694.56	0.00	1694.56	0.00	0.00	0.00
Lake Huron	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Erie	40288.00	0.00	0.00	40288.00	0.00	0.00	0.00
Lake Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Lawrence River	244283.25	132949.60	0.00	377232.85	0.00	0.00	0.00



# WATER USE CATEGORY REPORT- Other

Units: Mgal(US)/d

Year Of Data: 2003

## Water Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	0.00	0.00	0.00	0.00	0.00	201.68	0.00
Indiana	0.00	0.02	0.12	0.14	0.00	0.00	0.01
Michigan					0.00	0.00	
Minnesota	0.00	0.07	0.08	0.15	0.00	0.00	0.00
New York	0.00	41.89	0.21	42.10	0.00	32.00	33.01
Ohio	0.74	8.16	0.49	9.39	0.00	-13.92	0.00
Ontario	0.00	199.61	0.00	199.61	61.97	0.00	0.00
Pennsylvania					0.00	0.00	
Quebec					0.00	0.00	
Wisconsin					0.00	-0.64	

## Water Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	0.00	0.00	0.00	0.00	0.00	201.68	0.00
Indiana	0.00	0.00	0.03	0.03	0.00	0.00	0.00
Michigan					0.00	0.00	
Minnesota	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York	0.00	41.89	0.21	42.10	0.00	32.00	33.01
Ohio	0.74	8.09	0.36	9.19	0.00	-13.92	0.00
Ontario	0.00	199.61	0.00	199.61	61.97	0.00	0.00
Pennsylvania					0.00	0.00	
Quebec					0.00	0.00	
Wisconsin					0.00	0.00	

# WATER USE CATEGORY REPORT- Other

Units: Mgal(US)/d

Year Of Data: 2003

## Water Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	0.07	0.08	0.15	0.00	0.00	0.00
Lake Michigan	0.00	0.02	0.12	0.14	0.00	201.04	0.01
Lake Huron	0.00	47.97	0.00	47.97	47.97	0.00	0.00
Lake Erie	0.74	8.16	0.49	9.39	5816.39	-13.92	0.00
Lake Ontario	0.00	170.70	0.21	170.91	-5802.39	32.00	32.66
St. Lawrence River	0.00	22.82	0.00	22.82	0.00	0.00	0.35

## Water Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Michigan	0.00	0.00	0.03	0.03	0.00	201.68	0.00
Lake Huron	0.00	47.97	0.00	47.97	47.97	0.00	0.00
Lake Erie	0.74	8.09	0.36	9.19	5816.39	-13.92	0.00
Lake Ontario	0.00	170.70	0.21	170.91	-5802.39	32.00	32.66
St. Lawrence River	0.00	22.82	0.00	22.82	0.00	0.00	0.35

ANNUAL REPORT  
of the  
*GREAT LAKES REGIONAL WATER USE  
DATABASE REPOSITORY*  
*REPRESENTING 2004 WATER USE DATA IN GALLONS*

*Prepared by*  
***The Great Lakes Commission***

November 13, 2006



## ***ACKNOWLEDGEMENTS***

The primary author of this report is Marilyn Ratliff, working under contract to the Great Lakes Commission. Thomas R. Crane, Program Manager of Resource Management at the Great Lakes Commission, provided oversight and overall guidance.

The Great Lakes Commission wishes to thank each of the jurisdictional representatives listed on page eight for applying their years of expertise toward the coalescing of the data for this report. Their attention to detail and commitment to accuracy, in addition to their combined familiarity with the subject matter, contribute greatly to the value of this project.

## ***FOREWARD***

The Great Lakes Regional Water Use Database partially fulfills the recommendation in the Great Lakes Charter of 1985 that calls for a uniform, consistent base of data of Great Lakes water withdrawals, diversions and consumptive uses. Water use data are submitted to the repository on an annual basis and reports are provided to assist the jurisdictions in Great Lakes-St. Lawrence River water resources planning and management. As specified by the Water Resources Management Committee in its 1987 report, *Managing the Waters of the Great Lakes Basin*, the database catalogs withdrawals by water use category, sub-basin and jurisdiction.

The operation and use of this database represents one of several ongoing activities on behalf of the Great Lakes states and provinces to fulfill aspects of the Charter and Charter Annex of 2001. Continued state and provincial involvement in refining and expanding the database is necessary to ensure that the database can reinforce other potential future Charter and Charter Annex activities, such as improving consumptive use information, conducting trend analyses, developing uniform and consistent demand forecasting applications and promoting regional water conservation programs.

The database became operational in the summer of 1988 following a multi-year cooperative effort. Design and development involved input from many state, provincial, and federal agencies, with the U.S. Geological Survey providing much of the leadership.

The customized program was developed in 1987 by Acres International on the MS/DOS platform using a modified version of DbaseIII. With the rapid advancement of computer hardware and software and the evolving needs of the Great Lakes state and provincial water resources management programs, the old system soon became outdated. In July 1998, the Great Lakes Commission and Eastern Michigan University's Institute for Geospatial Research and Education (formerly the Center for Environmental Information Technology and Application) began work on the revised database. The new system was developed using Visual Basic for Applications, based on Microsoft Access®, and contains all of the functions of the old system (including data entry, a data check facility and report generation), in addition to new features such as a flexible data interface and automatic data checking.

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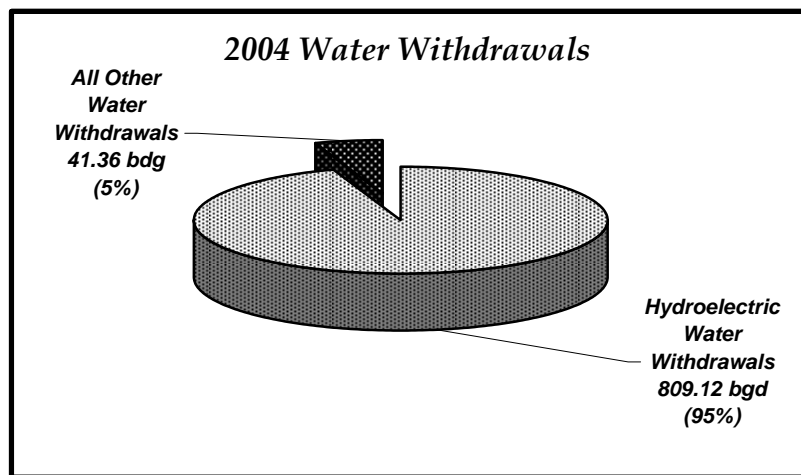
# ***I. GREAT LAKES BASIN OVERVIEW***

## **Introduction**

All data are submitted in one of two unit measures--millions of U.S. gallons per day (mgd) or millions of liters per day (mld)--and values are initially set to zero. Numeric values are required for all categories of use. A value of zero indicates either zero water use (under All Facilities) or water use which does not meet the Great Lakes Charter trigger level (under Principal Facilities).

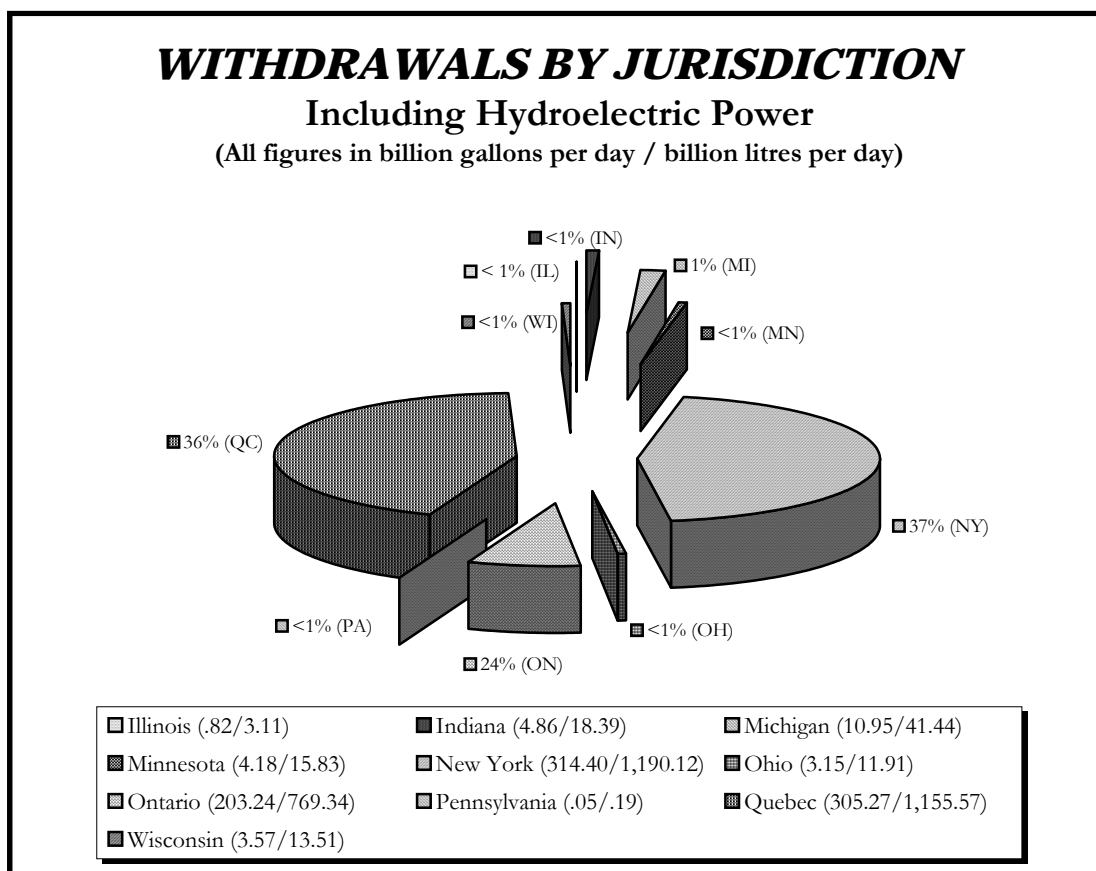
The quality of data for each entry is rated as a 1, 2 or 3 indicating the level of accuracy as 1) measured 2) partially measured or 3) estimated; and a 1 or 2 indicating the level of aggregation as 1) originating from site-specific sources or 2) from higher level aggregate sources such as county or census databases. Both measures of quality are based on percentages of total volume.

For this report, self-supply--hydroelectric (water used in the generation of electricity at plants where turbine generators are driven by falling water) is treated as a withdrawal, even though all water for this purpose is considered to be returned to the basin. As the following chart illustrates, this is the largest single category of withdrawal and represents 95% of the total amount of water “withdrawn” in 2004.



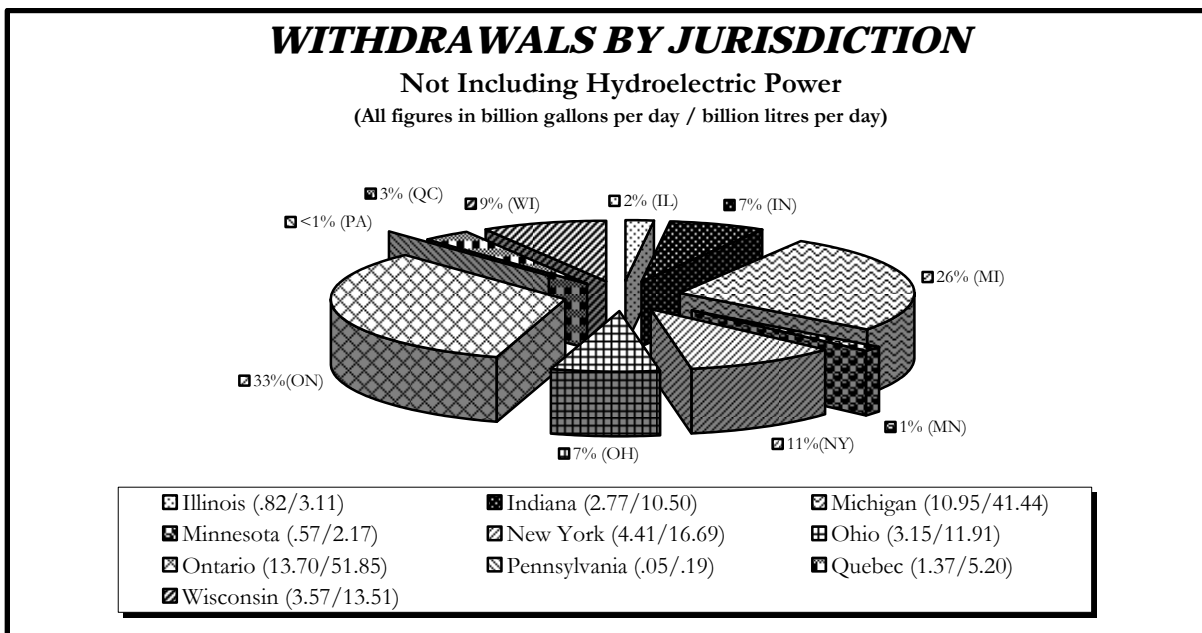
**Figure 1**

Each of the ten jurisdictions' water uses is represented in Figure 2 and Figure 3. Figure 2 includes self-supply – hydroelectric use. In total, water withdrawals for the year 2004 were approximately 850 billion gallons per day, or about 3,219 billion liters per day.



**Figure 2**

Figure 3 more accurately reflects the true water use within the basin, as it does not include self-supply – hydroelectric use. Water withdrawals for the eight remaining off-stream categories totaled 41 billion gallons per day, or 156 billion liters per day.



**Figure 3**

Pie charts showing individual jurisdictional water use, beginning with Illinois on page 14, are in million gallons per day and do not include hydroelectric use

## Topics of Interest

### Diversions

Two types of diversions are reported by the water use database: interbasin (transfers that take place between the Great Lakes basin and another watershed) and intrabasin (transfers that take place between one of the Great Lakes watersheds and another); both types can be either incoming or outgoing.

Of the two types, interbasin diversions (transfers that take place between the Great Lakes basin and another watershed) have traditionally been of greater interest to water supply managers and the public. Interbasin diversions shown in the tables as a positive number (e.g. **without** a minus sign) indicate water leaving the Great Lakes basin; interbasin diversions shown in the tables as a negative number (e.g. **with** a minus sign) indicate water entering the Great Lakes basin.

For a history of Great Lakes water diversions and removals, please see *Great Lakes Diversions and Other Removals* by Frank Quinn and Jeff Edstrom, **Canadian Water Resources Journal**, 2000, vol. 25, #2. Copies of this article can be obtained through the CWRJ website at [www.cwra.org/publications](http://www.cwra.org/publications), or by calling 519/622-4764.

### Consumptive Use

Collecting and reporting accurate data for consumptive uses of Great Lakes water continues to be a major challenge for the Great Lakes jurisdictions. The states and provinces currently use a variety of methods to obtain consumptive use figures, including measurement and estimation at the facility level. However, the most common practice is to calculate consumptive use for each water use category by multiplying the withdrawn amount by an agreed-upon percentage (consumptive use coefficient). Figure 4 on the following page shows the consumptive use coefficients that were used for this report. For the resulting consumptive use quantities by jurisdiction, basin or water use category, please refer to the tables in chapters II through V. Total consumptive use in the basin for 2004 was calculated to be 1.90 bgd (7.20 bld).

For a more detailed overview, please see:

**Annotated Bibliography of Consumptive Use in the Great Lakes Region and Basin**  
([www.glc.org/wateruse/wrmdss/finalreport/pdf/CU\\_biblio.pdf](http://www.glc.org/wateruse/wrmdss/finalreport/pdf/CU_biblio.pdf))

**Measuring and Estimating Consumptive Use of Great Lakes Water**  
([www.glc.org/wateruse/wrmdss/finalreport/pdf/CU\\_briefing.pdf](http://www.glc.org/wateruse/wrmdss/finalreport/pdf/CU_briefing.pdf)).

## Consumptive Use Coefficients

<i><b>Water Use Category</b></i>	<b>ILLINOIS</b>	<b>INDIANA</b>	<b>MICHIGAN</b>	<b>MINNESOTA</b>	<b>NEW YORK</b>	<b>OHIO</b>	<b>ONTARIO</b>	<b>PENNSYLVANIA</b>	<b>QUEBEC</b>	<b>WISCONSIN</b>
Public Supply	10-15%	15%	10-15%	10-15%	10%	10-15%	15%	10%	10-15%	10-15%
Self-Supply Domestic	10-15%	15%	10-15%	10-15%	10%	10-15%	15%	10%	10-15%	10-15%
Self-Supply Irrigation	90%	90%	90%	90%	90%	90%	78%	90%	90%	70%
Self-Supply Livestock	80%	80%	80%	80%	90%	80%	80%	80%	80%	90%
Self-Supply Industrial	Varies by plant & SIC code	6%	10-15%	Varies by plant & SIC code	25%	10%; salt mining is 90%	Varies by plant & SIC code	Varies by plant & SIC code	10% for pulp & paper industry	10.2% for manufacturing & mining
Self-Supply Thermoelectric (Fossil Fuel)	Individually estimated based on the quantity of make-up water	2%	1-2% for plants using once-through cooling; individual analysis for wet cooling towers	2%	2%	Individually estimated based on the quantity of make-up water	.9% based on reports of increased local lake evaporation due to discharge of heated water to lakes	NA (Pennsylvania has no facilities in the basin)	10%; estimates obtained from USGS report	.5-1%
Self-Supply Thermoelectric (Nuclear)	Individually estimated based on the quantity of make-up water	NA (Indiana has no facilities in the basin)	1-2% for plants using once-through cooling; individual analysis for wet cooling towers	NA (Minnesota has no facilities in the basin)	5%	14% based on reports of increased local lake evaporation due to discharge of heated water to lakes	.9% based on reports of increased local lake evaporation due to discharge of heated water to lakes	NA (Pennsylvania has no facilities in the basin)	NA (Quebec has no facilities in the basin)	.5-1%
Hydroelectric	Coefficient for all states and provinces is 0%									
Self-Supply Other	0%	12%	Varies based on use	Varies based on use	Varies based on use	Varies based on use	Varies based on use	Varies based on use	Varies based on use	Varies based on use

**Figure 4**

## Definitions and Abbreviations

### General Definitions and Abbreviations

- ▶ **bgd:** billion gallons per day
- ▶ **bld:** billion liters per day
- ▶ **consumptive use:** that portion of water withdrawn or withheld from the Great Lakes basin and assumed to be lost or otherwise not returned to the Great Lakes basin due to evapotranspiration, incorporation into products, or other processes
- ▶ **Great Lakes surface water (GLSW):** the Great Lakes, their connecting channels (the St. Clair River, the Detroit River, the Niagara River and the St. Marys River), and the St. Lawrence River
- ▶ **groundwater (GW):** all subsurface water
- ▶ **interbasin diversion (positive):** water transferred from the Great Lakes basin into another watershed
- ▶ **interbasin diversion (negative):** water transferred from another watershed into the Great Lakes basin
- ▶ **intrabasin diversion (positive):** water transferred out of one Great Lakes watershed into another
- ▶ **intrabasin diversion (negative):** water transferred into one Great Lakes watershed from another
- ▶ **level of accuracy:** the quality of data based on percentage of total volume and rated as 1) measured; 2) partially measured or; 3) estimated,
- ▶ **level of aggregation:** the quality of data based on percentage of total volume and rated as 1) originating from site-specific sources or 2) originating from higher level aggregate sources, such as county or census databases
- ▶ **mgd:** million gallons per day
- ▶ **mld:** million liters per day
- ▶ **other surface water (OSW):** tributary streams, lakes, ponds, and reservoirs within the Great Lakes basin
- ▶ **principal facility:** facilities withdrawing in excess of the Great Lakes Charter uniform trigger level of 100,000 U.S. gallons/day (380,000 liters/day) average over a 30-day period. A principal facility is determined by the total withdrawal (or consumption) of all sources combined (Great Lakes surface water, other surface water, and groundwater) rather than a single source. The combined withdrawals (or consumption) of separate wells or operations undertaken by the same facility or company will be evaluated separately for the purpose of determining principal facility status unless those operations are covered under the same registration (or permit) or are physically contiguous. Principal facilities are a subset of all facilities in the database.
- ▶ **tgd:** trillion gallons per day
- ▶ **tld:** trillion liters per day
- ▶ **withdrawal amount:** water removed or taken from surface or groundwater (including hydroelectric use)

### Water Use Category Definitions

1. **Public Water Supply:** Water withdrawn for all uses by public and private water suppliers and delivered to users that do not supply their own water. (Water suppliers provide water for a variety of uses such as residential, commercial, industrial, and public water use.)
2. **Self-Supply Domestic: (residential, commercial, institutional):** Water used for normal household purposes. Also referred to as residential water use, this category includes water used for drinking, food preparation, bathing, washing clothes and dishes, flushing toilets, and watering lawns. Commercial uses include water used by motels, hotels, restaurants, office buildings and institutions, both civilian and military. This category also includes water for mobile homes, hospitals, schools, fire fighting, air conditioning and other similar uses not covered under a public supply. In addition, this category includes amusement and recreational water uses such as snowmaking and water slides. The coefficient for domestic per capita water use is 75 gallons a day (U.S.) unless otherwise indicated by the reporting state or province.
3. **Self-Supply Irrigation:** Water artificially applied on lands to assist in the growing of crops and pastures or in the maintenance of recreational lands, such as parks and golf courses.
4. **Self-Supply Livestock:** Water used by horses, cattle, sheep, goats, hogs, poultry, and other commercially important animals. Water used in fish hatchery operations are also included under this category.
5. **Self-Supply Industrial (manufacturing and mining):** Industrial water includes water used in the manufacture of metals, chemicals, paper, and allied products. Mining water use includes water used in the extraction or washing of minerals; for example solids, such as coal and ores, and liquids such as crude petroleum and natural gas. Water used in quarrying and milling is also included in the industrial category. Brine extraction from oil and gas operations is not included. Withdrawals and consumptive uses for industrial and mining purposes (including dewatering operations) recorded under another category (e.g., public supply) will not be recorded here. Water used in a closed cycle (recirculation) will not be reported as a withdrawal. Other situations should be evaluated on a case-by-case basis.
6. **Self-Supply Thermoelectric Power (fossil fuel plants):** Water used by plants fueled by fossil fuels such as coal, oil or natural gas. Withdrawals and consumptive uses already recorded under another category (e.g., public supply) will not be reported here.
7. **Self-Supply Thermoelectric Power (nuclear plants):** Water used by plants fueled by nuclear generation. Withdrawals and consumptive uses already recorded under another category (e.g., public supply) will not be reported here.
8. **Self-Supply Hydroelectric Power:** Water used to drive turbines that generate electric power. This category includes both “instream use” where water is used on a once-through basis and “offstream use” where water is recycled through pumped-storage systems. Neither use is considered a consumptive use.
9. **Self-Supply - Other:** Water used for purposes not reported in categories one through nine. Examples include, but are not limited to, withdrawals for fish/wildlife, environmental, recreation, navigation, and water quality purposes. Specifically, water used to maintain levels for navigation, for recreation, for fish and wildlife habitat creation and enhancement (excluding fish hatchery operations included under Category 5), for flow augmentation (or diversion), for sanitation, pollution confinement, and other water quality purposes and agricultural activities (services) other than those directly related to irrigation such as field drainage are included. Water used in temporary or immediate emergency situations (e.g., fighting forest or peat fires) is also reported here.

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## ***II. GREAT LAKES BASIN SUMMARY TABLES***

Water Use by Jurisdiction  
Water Use by Basin  
Water Use by Category

# SUMMARY REPORT - GREAT LAKES BASIN

Units: Bgal(US)/d

Year Of Data: 2004

## Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	0.82	0.00	0.00	0.82	0.00	1.22	0.02
Indiana	2.59	2.15	0.12	4.86	0.00	0.00	0.18
Michigan	9.71	0.71	0.53	10.95	0.00	0.00	0.59
Minnesota	0.32	3.86	0.01	4.18	0.00	0.00	0.04
New York	133.91	180.35	0.13	314.40	0.00	0.04	0.32
Ohio	2.09	0.91	0.14	3.15	0.00	-0.01	0.17
Ontario	143.00	59.96	0.28	203.24	0.06	-4.01	0.28
Pennsylvania	0.04	0.01	0.01	0.05	0.00	0.00	0.01
Quebec	171.59	133.58	0.10	305.27	0.00	0.00	0.16
Wisconsin	3.36	0.02	0.18	3.57	0.00	0.00	0.14
<b>Total:</b>	<b>467.43</b>	<b>381.54</b>	<b>1.51</b>	<b>850.48</b>	<b>0.06</b>	<b>-2.76</b>	<b>1.90</b>

## Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	0.82	0.00	0.00	0.82	0.00	1.22	0.02
Indiana	2.59	2.14	0.09	4.82	0.00	0.00	0.17
Michigan					0.00	0.00	
Minnesota	0.32	3.85	0.00	4.18	0.00	0.00	0.04
New York	133.49	0.48	0.01	133.98	0.00	0.04	0.22
Ohio	2.09	0.91	0.07	3.06	0.00	-0.01	0.15
Ontario	0.49	0.38	0.09	0.96	0.06	0.00	0.11
Pennsylvania	0.04	0.01	0.00	0.04	0.00	0.00	0.01
Quebec	171.59	133.58	0.05	305.21	0.00	0.00	0.13
Wisconsin					0.00	0.00	
<b>Total:</b>	<b>311.43</b>	<b>141.34</b>	<b>0.31</b>	<b>453.08</b>	<b>0.06</b>	<b>1.25</b>	<b>0.85</b>

# SUMMARY REPORT - GREAT LAKES BASIN

Units: Bgal(US)/d  
Year Of Data: 2004

## Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	1.14	42.03	0.03	43.19	0.00	-4.01	0.08
Lake Michigan	10.19	2.61	0.69	13.49	0.00	1.22	0.65
Lake Huron	25.95	13.73	0.09	39.76	0.05	0.00	0.14
Lake Erie	56.54	1.27	0.37	58.18	5.82	-0.01	0.49
Lake Ontario	42.68	89.42	0.19	132.29	-5.80	0.04	0.35
St. Lawrence River	330.94	232.49	0.14	563.56	0.00	0.00	0.19
<b>Total:</b>	<b>467.43</b>	<b>381.54</b>	<b>1.51</b>	<b>850.48</b>	<b>0.06</b>	<b>-2.76</b>	<b>1.90</b>

## Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.35	3.87	0.01	4.23	0.00	0.00	0.05
Lake Michigan	3.41	2.11	0.08	5.59	0.00	1.22	0.18
Lake Huron	0.04	0.07	0.02	0.13	0.05	0.00	0.01
Lake Erie	50.76	0.98	0.14	51.88	5.82	-0.01	0.24
Lake Ontario	2.25	0.65	0.02	2.92	-5.80	0.04	0.22
St. Lawrence River	254.62	133.66	0.05	388.34	0.00	0.00	0.15
<b>Total:</b>	<b>311.43</b>	<b>141.34</b>	<b>0.31</b>	<b>453.08</b>	<b>0.06</b>	<b>1.25</b>	<b>0.85</b>

# SUMMARY REPORT - GREAT LAKES BASIN

Units: Bgal(US)/d

Year Of Data: 2004

## Water Use by Category - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	3.14	1.14	0.55	4.83	0.00	1.01	0.60
Domestic Supply	0.04	0.04	0.37	0.46	0.00	0.00	0.06
Irrigation	0.01	0.16	0.29	0.46	0.00	0.00	0.34
Livestock	0.01	0.01	0.11	0.14	0.00	0.00	0.09
Industrial	3.82	0.46	0.17	4.45	0.00	0.00	0.38
Fossil Fuel Power	13.82	1.70	0.00	15.52	0.00	0.00	0.18
Nuclear Power	15.25	0.00	0.00	15.25	0.00	0.00	0.23
Hydroelectric Power	431.34	377.77	0.00	809.12	0.00	-4.01	0.00
Other	0.00	0.25	0.00	0.25	0.06	0.24	0.03
<b>Total:</b>	<b>467.43</b>	<b>381.54</b>	<b>1.51</b>	<b>850.48</b>	<b>0.06</b>	<b>-2.76</b>	<b>1.90</b>

## Water Use by Category - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	1.67	0.82	0.18	2.66	0.00	1.01	0.34
Domestic Supply	0.00	0.04	0.06	0.10	0.00	0.00	0.01
Irrigation	0.00	0.02	0.02	0.03	0.00	0.00	0.03
Livestock	0.00	0.00	0.00	0.01	0.00	0.00	0.01
Industrial	2.30	0.34	0.06	2.70	0.00	0.00	0.24
Fossil Fuel Power	4.55	1.23	0.00	5.78	0.00	0.00	0.10
Nuclear Power	1.56	0.00	0.00	1.56	0.00	0.00	0.08
Hydroelectric Power	301.33	138.64	0.00	439.97	0.00	0.00	0.00
Other	0.00	0.25	0.00	0.25	0.06	0.24	0.03
<b>Total:</b>	<b>311.43</b>	<b>141.34</b>	<b>0.31</b>	<b>453.08</b>	<b>0.06</b>	<b>1.25</b>	<b>0.85</b>

### ***III. JURISDICTION TABLES AND ANALYSES***

Each jurisdictional summary includes a water use analysis and three tables:

Withdrawals, Diversions and Consumptive Uses

Withdrawals by Source

Jurisdiction Totals

Illinois

Indiana

Michigan

Minnesota

New York

Ohio

Ontario

Pennsylvania

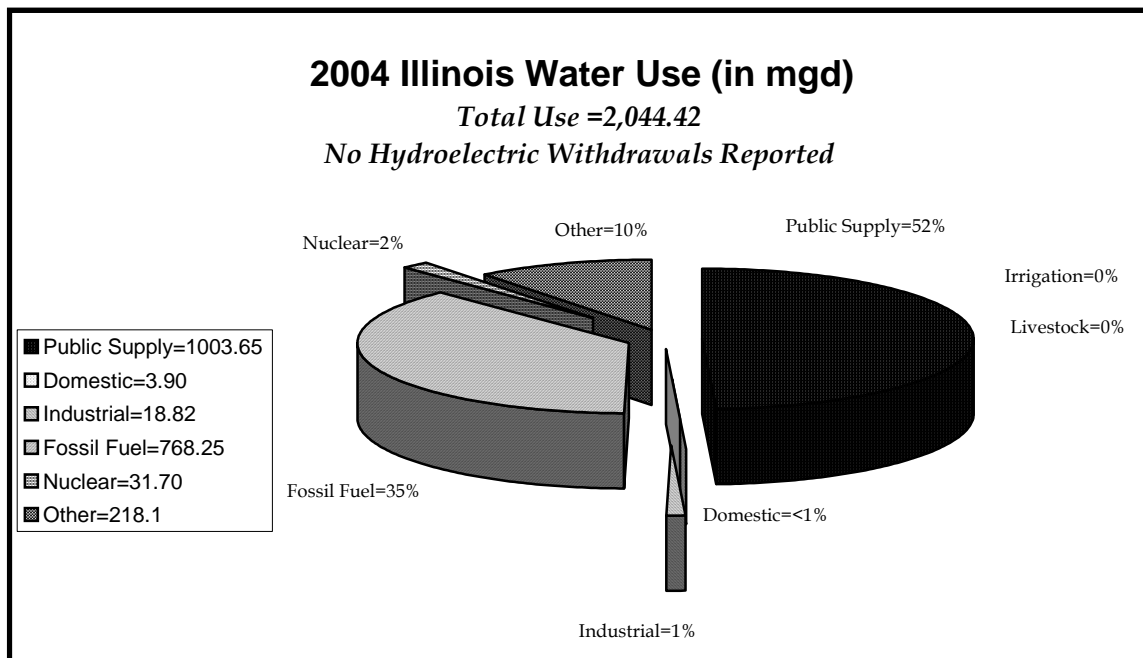
Quebec

Wisconsin

## Illinois

**Data Sources:** Water use data for Illinois was provided by the Department of Natural Resources--Office of Water Resources, and the State Water Survey. Please contact James Casey at 312/793-5947 or [jcasey@illinois.gov](mailto:jcasey@illinois.gov) with questions regarding Illinois' data.

**Withdrawals:** Illinois' water withdrawals from Lake Michigan in 2004 totaled 2,044.42 mgd which was comparable to usage in 2003.



**Figure 5**

**Consumptive Use:** Total consumptive use was calculated to be 17.20 mgd, with fossil fuel consuming the most at 15.37 mgd or 89%.

**Interbasin Diversions:** Total diversions from the Lake Michigan basin in 2004 were 1,221.81 mgd, a decrease of about less than 1% from the 2003 figure. Public water supply accounted for about 82% of these diversions. All diversions for Illinois are outgoing interbasin diversions—water transferred from the Chicago River in the Great Lakes basin to the Illinois River in the Mississippi River basin.

**Data Quality:** Illinois's withdrawal data for this report were 100% measured; the level of aggregation was 100% site-specific.

# JURISDICTION REPORT- Illinois

Withdrawals, Diversions Units: Mgal(US)/d  
and Consumptive Uses Year Of Data: 2004

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Lake Michigan							
	Public Supply	1003.65	1003.65	0.00	1003.65	1003.65	0.00
	Domestic Supply	3.90	0.04	0.39	3.90	0.04	0.39
	Irrigation		0.00		0.00	0.00	
	Livestock		0.00		0.00	0.00	
	Industrial	18.82	0.02	1.13	18.82	0.00	1.13
	Fossil Fuel Power	768.25	0.00	15.37	768.25	0.00	15.37
	Nuclear Power	31.70	0.00	0.32	31.70	0.00	0.32
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	218.10	218.10	0.00	218.10	218.10	0.00
	Total:	2044.42	1221.81	17.20	2044.42	1221.79	17.20
Grand Total:		2044.42	1221.81	17.20	2022.42	1221.79	17.20

# JURISDICTION REPORT - Illinois

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2004

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Michigan	Public Supply	0.00	0.00	0.00	0.00	0.00	0.00
	Domestic Supply	3.87	0.00	0.02	3.87	0.00	0.02
	Irrigation				0.00	0.00	0.00
	Livestock				0.00	0.00	0.00
	Industrial	18.82	0.00	0.00	18.82	0.00	0.00
	Fossil Fuel Power	768.25	0.00	0.00	768.25	0.00	0.00
	Nuclear Power	31.70	0.00	0.00	31.70	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total:	822.64	0.00	0.02	822.64	0.00	0.02
	Grand Total:	822.64	0.00	0.02	822.64	0.00	0.02



# JURISDICTION REPORT - Illinois

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2004

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	0.00	0.00	0.00	0.00	0.00	1003.65	0.00
Domestic Supply	3.87	0.00	0.02	3.90	0.00	0.04	0.39
Irrigation					0.00	0.00	
Livestock					0.00	0.00	
Industrial	18.82	0.00	0.00	18.82	0.00	0.02	1.13
Fossil Fuel Power	768.25	0.00	0.00	768.25	0.00	0.00	15.37
Nuclear Power	31.70	0.00	0.00	31.70	0.00	0.00	0.32
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	218.10	0.00

## Total Report - Principal Facilities

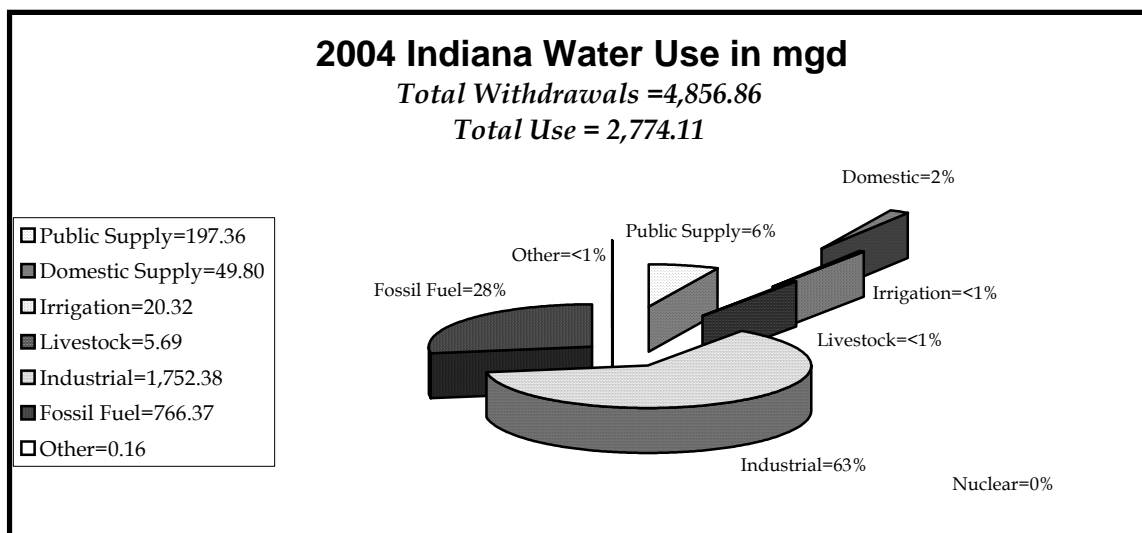
Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	0.00	0.00	0.00	0.00	0.00	1003.65	0.00
Domestic Supply	3.87	0.00	0.02	3.90	0.00	0.04	0.39
Irrigation	0.00	0.00	0.00	0.00	0.00	0.00	
Livestock	0.00	0.00	0.00	0.00	0.00	0.00	
Industrial	18.82	0.00	0.00	18.82	0.00	0.00	1.13
Fossil Fuel Power	768.25	0.00	0.00	768.25	0.00	0.00	15.37
Nuclear Power	31.70	0.00	0.00	31.70	0.00	0.00	0.32
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	218.10	0.00

## Indiana

**Data Sources:** The Indiana Department of Natural Resources—Division of Water compiled the 2004 data for the regional water use database for the Lake Erie and Lake Michigan basins.

The Indiana Business Research Center at Indiana University provided population estimates for counties used in calculating self-supply domestic withdrawals. The Indiana Agricultural Statistics service at Purdue University provided livestock estimates by county. The local office of USGS Water Resources Division provided estimates of percent of population by county on domestic wells. Hydroelectric data are from the Department of Energy's Energy Information Administration website located at [www.eia.doe.gov/cneaf/electricity](http://www.eia.doe.gov/cneaf/electricity). Please contact Ralph Spaeth at 317/234-1101 or [rspaeth@dnr.in.gov](mailto:rspaeth@dnr.in.gov) with questions regarding Indiana's data.

**Withdrawals:** In 2004, total use was 2,774.11 mgd, down from the 2003 figure of 2,681.08 mgd. Of this amount, 98% of the water used was from Lake Michigan. The total use excludes hydroelectric power from Lake Michigan which accounted for 2082.75 mgd. The primary use of Lake Michigan water was industrial, at 1,742.87 mgd, or 63%. The primary use of Lake Erie water was public supply, at 42.10 mgd, or more than 70%.



**Figure 6**

**Consumptive Use:** The total consumptive use of water in Indiana's portion of the Great Lakes basin was 177.71 mgd, compared to 179.49 mgd in 2003. In the Lake Michigan basin, industrial was the largest consumptive use, at 62% (104.57 mgd of a total of 168.31 mgd) and in the Lake Erie basin public supply was the largest consumptive use, at 67% (6.31 mgd of a total of 9.40 mgd).

**Interbasin Diversions:** A diversion by the city of Valparaiso withdrew 0.81 mgd groundwater for public supply from the Kankakee River basin which is discharged as treated sewage into Salt Creek in the Lake Michigan basin.

**Data Quality:** Indiana's withdrawal data for this report were 4% measured, 52% partially measured, and 44% calculated or estimated; the level of aggregation was 99% site-specific and 1% aggregated.

# JURISDICTION REPORT- Indiana

Withdrawals, Diversions Units: Mgal(US)/d  
and Consumptive Uses Year Of Data: 2004

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Lake Michigan							
	Public Supply	137.29	-0.81	20.59	136.91	0.00	20.53
	Domestic Supply	43.56	0.00	6.54	21.29	0.00	3.20
	Irrigation	19.40	0.00	17.46	18.04	0.00	16.24
	Livestock	4.76	0.00	3.81	2.71	0.00	2.17
	Industrial	1742.87	0.00	104.57	1742.34	0.00	104.54
	Fossil Fuel Power	766.10	0.00	15.32	766.10	0.00	15.32
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	2082.75	0.00	0.00	2082.75	0.00	0.00
	Other	0.16	0.00	0.02	0.09	0.00	0.01
	Total:	4796.89	-0.81	168.31	4770.23	0.00	162.01
Lake Erie							
	Public Supply	42.10	0.00	6.31	42.03	0.00	6.30
	Domestic Supply	6.24	0.00	0.94	0.33	0.00	0.05
	Irrigation	0.92	0.00	0.83	0.64	0.00	0.58
	Livestock	0.93	0.00	0.74	0.00	0.00	0.00
	Industrial	9.51	0.00	0.57	9.34	0.00	0.56
	Fossil Fuel Power	0.27	0.00	0.01	0.27	0.00	0.01
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total:	59.97	0.00	9.40	52.61	0.00	7.50
Grand Total:		4856.86	-0.81	177.71	4822.84	0.00	169.51

# JURISDICTION REPORT- Indiana

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2004

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Michigan							
	Public Supply	92.49	0.00	44.80	92.49	0.00	44.42
	Domestic Supply	0.00	13.86	29.70	0.00	13.85	7.44
	Irrigation	0.00	4.34	15.06	0.00	3.88	14.16
	Livestock	0.00	1.36	3.40	0.00	1.36	1.35
	Industrial	1728.97	4.91	8.99	1728.94	4.90	8.50
	Fossil Fuel Power	766.10	0.00	0.00	766.10	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	2082.75	0.00	0.00	2082.75	0.00
	Other	0.00	0.03	0.13	0.00	0.03	0.06
	Total:	2587.56	2107.25	102.08	2587.53	2106.77	75.93
Lake Erie							
	Public Supply	0.00	32.60	9.50	0.00	32.60	9.43
	Domestic Supply	0.00	0.00	6.24	0.00	0.00	0.33
	Irrigation	0.00	0.31	0.61	0.00	0.19	0.45
	Livestock	0.00	0.00	0.93	0.00	0.00	0.00
	Industrial	0.00	4.86	4.65	0.00	4.86	4.48
	Fossil Fuel Power	0.00	0.00	0.27	0.00	0.00	0.27
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total:	0.00	37.77	22.20	0.00	37.65	14.96
Grand Total:		2587.56	2145.02	124.28	2587.53	2144.42	90.89

# JURISDICTION REPORT- Indiana

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2004

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	92.49	32.60	54.30	179.39	0.00	-0.81	26.90
Domestic Supply	0.00	13.86	35.94	49.80	0.00	0.00	7.48
Irrigation	0.00	4.65	15.67	20.32	0.00	0.00	18.29
Livestock	0.00	1.36	4.33	5.69	0.00	0.00	4.55
Industrial	1728.97	9.77	13.64	1752.38	0.00	0.00	105.14
Fossil Fuel Power	766.10	0.00	0.27	766.37	0.00	0.00	15.33
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	2082.75	0.00	2082.75	0.00	0.00	0.00
Other	0.00	0.03	0.13	0.16	0.00	0.00	0.02

## Total Report - Principal Facilities

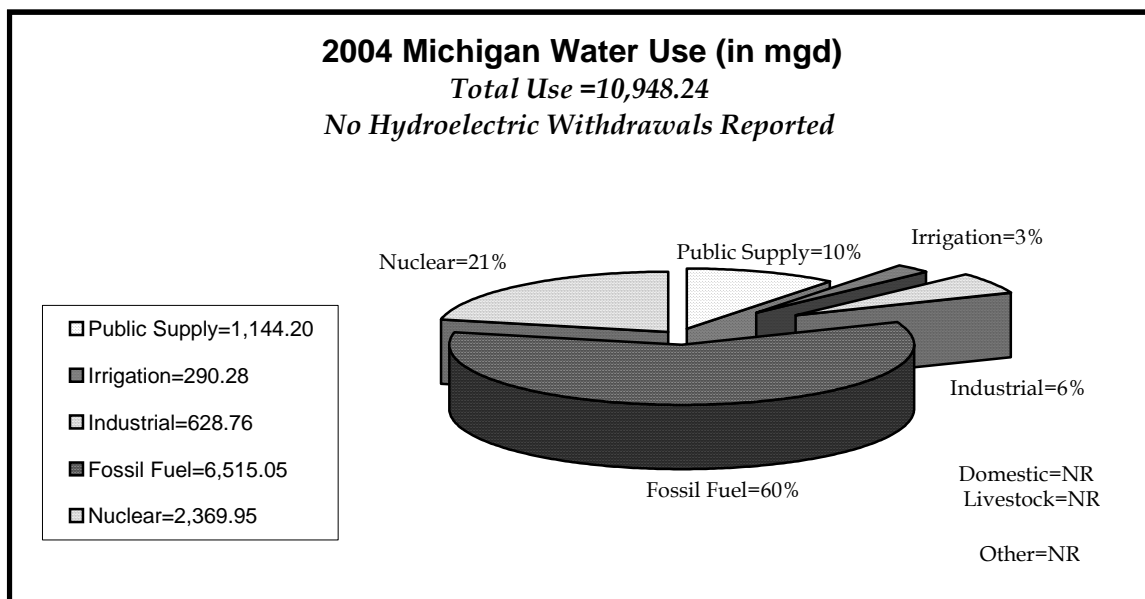
Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	92.49	32.60	53.85	178.94	0.00	0.00	26.83
Domestic Supply	0.00	13.85	7.77	21.62	0.00	0.00	3.25
Irrigation	0.00	4.07	14.61	18.68	0.00	0.00	16.82
Livestock	0.00	1.36	1.35	2.71	0.00	0.00	2.17
Industrial	1728.94	9.76	12.98	1751.68	0.00	0.00	105.10
Fossil Fuel Power	766.10	0.00	0.27	766.37	0.00	0.00	15.33
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	2082.75	0.00	2082.75	0.00	0.00	0.00
Other	0.00	0.03	0.06	0.09	0.00	0.00	0.01

## Michigan

**Data Sources:** The Michigan Department of Environmental Quality submitted water use data for 2004. All data are directly reported to the Michigan DEQ by the facilities within each category except irrigation, which is estimated and divided into agricultural and nonagricultural (golf course, park, etc.) irrigation. Agricultural irrigation is estimated using federal Agricultural Census data and a water use estimation model developed for Michigan. Nonagricultural irrigation facilities report directly to the DEQ. Please contact Andrew LeBaron at 517/241-1435 or lebarona@michigan.gov with questions regarding Michigan's data.

Because of the large number of facilities and limited staff resources, Michigan water usage cannot be separated by facility type. Michigan data are available at the state database at [www.michigan.gov/deq](http://www.michigan.gov/deq). Click on **Water, Great Lakes, Water Use, Levels & Diversion** and go to the **Michigan Water Use Reporting Program**.

**Withdrawals:** Water withdrawals for the Lake Superior, Lake Michigan, Lake Huron, and Lake Erie basins of Michigan were approximately 10,948.24 mgd, a decrease of between 3% and 4% from 2003. Of the four basins, the state of Michigan withdraws the most--about 47%--from Lake Erie (5210.31 mgd) and the least--between 2% and 3%--from Lake Superior (295.98 mgd). Thermoelectric power-fossil fuel, at 60%, was the largest withdrawal category for the state of Michigan.



**Figure 7**

**Consumptive Use:** Consumptive uses in the Michigan portion of the Great Lakes basin were calculated to be approximately 590.41 mgd; irrigation was the largest single consumptive use (because the coefficient for irrigation is 90%) at 261.27 mgd, or about 44% of the total consumptive use.

**Interbasin Diversions:** None reported.

**Data Quality:** Michigan's withdrawal data for this report were 91% measured, 6% partially measured, and 3% calculated or estimated; the level of aggregation was 100% site-specific.

# JURISDICTION REPORT- Michigan

Withdrawals, Diversions Units: Mgal(US)/d  
and Consumptive Uses Year Of Data: 2004

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Lake Superior							
	Public Supply	11.90	0.00	1.49		0.00	
	Domestic Supply		0.00			0.00	
	Irrigation	0.52	0.00	0.47		0.00	
	Livestock		0.00			0.00	
	Industrial	13.20	0.00	1.32		0.00	
	Fossil Fuel Power	270.36	0.00	3.24		0.00	
	Nuclear Power	0.00	0.00	0.00		0.00	
	Hydroelectric Power	0.00	0.00	0.00		0.00	
	Other		0.00			0.00	
	Total:	295.98	0.00	6.52		0.00	
Lake Michigan							
	Public Supply	308.59	0.00	38.58		0.00	
	Domestic Supply		0.00			0.00	
	Irrigation	241.43	0.00	217.29		0.00	
	Livestock		0.00			0.00	
	Industrial	268.58	0.00	26.87		0.00	
	Fossil Fuel Power	1214.95	0.00	14.57		0.00	
	Nuclear Power	2317.20	0.00	44.03		0.00	
	Hydroelectric Power	0.00	0.00	0.00		0.00	
	Other		0.00			0.00	
	Total:	4350.75	0.00	341.34		0.00	
Lake Huron							
	Public Supply	301.72	0.00	37.72		0.00	
	Domestic Supply		0.00			0.00	
	Irrigation	25.86	0.00	23.28		0.00	
	Livestock		0.00			0.00	
	Industrial	34.71	0.00	3.48		0.00	
	Fossil Fuel Power	728.91	0.00	8.74		0.00	
	Nuclear Power	0.00	0.00	0.00		0.00	
	Hydroelectric Power	0.00	0.00	0.00		0.00	
	Other		0.00			0.00	
	Total:	1091.20	0.00	73.22		0.00	

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Lake Erie							
	Public Supply	521.99	0.00	65.26		0.00	
	Domestic Supply		0.00			0.00	
	Irrigation	22.47	0.00	20.23		0.00	
	Livestock		0.00			0.00	
	Industrial	312.27	0.00	31.23		0.00	
	Fossil Fuel Power	4300.83	0.00	51.61		0.00	
	Nuclear Power	52.75	0.00	1.00		0.00	
	Hydroelectric Power	0.00	0.00	0.00		0.00	
	Other		0.00			0.00	
	Total:	5210.31	0.00	169.33		0.00	
Grand Total:		10948.24	0.00	590.41		0.00	



# JURISDICTION REPORT- Michigan

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2004

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Superior							
	Public Supply	3.77	0.00	8.13			
	Domestic Supply						
	Irrigation	0.01	0.27	0.24			
	Livestock						
	Industrial	12.73	0.00	0.47			
	Fossil Fuel Power	270.36	0.00	0.00			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	Total:	286.87	0.27	8.84			
Lake Michigan							
	Public Supply	137.40	0.51	170.68			
	Domestic Supply						
	Irrigation	1.79	75.85	163.79			
	Livestock						
	Industrial	107.26	88.25	73.07			
	Fossil Fuel Power	896.01	316.13	2.81			
	Nuclear Power	2317.20	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	Total:	3459.66	480.74	410.35			
Lake Huron							
	Public Supply	272.53	0.66	28.53			
	Domestic Supply						
	Irrigation	2.73	9.68	13.45			
	Livestock						
	Industrial	19.55	13.18	1.98			
	Fossil Fuel Power	722.43	5.26	1.22			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	Total:	1017.24	28.78	45.18			

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Erie							
	Public Supply	465.48	16.60	39.91			
	Domestic Supply						
	Irrigation	0.43	12.54	9.50			
	Livestock						
	Industrial	287.06	11.63	13.58			
	Fossil Fuel Power	4145.47	155.28	0.08			
	Nuclear Power	52.75	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	Total:	4951.19	196.05	63.07			
Grand Total:		9714.96	705.84	527.44			

# JURISDICTION REPORT- Michigan

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2004

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	879.18	17.77	247.25	1144.20	0.00	0.00	143.05
Domestic Supply					0.00	0.00	
Irrigation	4.96	98.34	186.98	290.28	0.00	0.00	261.27
Livestock					0.00	0.00	
Industrial	426.60	113.06	89.10	628.76	0.00	0.00	62.90
Fossil Fuel Power	6034.27	476.67	4.11	6515.05	0.00	0.00	78.16
Nuclear Power	2369.95	0.00	0.00	2369.95	0.00	0.00	45.03
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other					0.00	0.00	

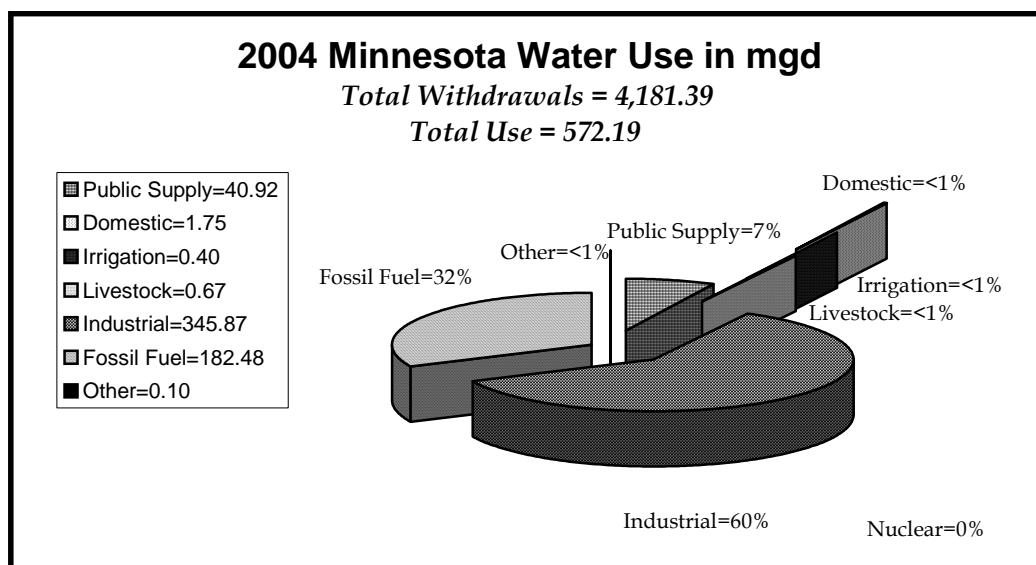
## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply					0.00	0.00	
Domestic Supply					0.00	0.00	
Irrigation					0.00	0.00	
Livestock					0.00	0.00	
Industrial					0.00	0.00	
Fossil Fuel Power					0.00	0.00	
Nuclear Power					0.00	0.00	
Hydroelectric Power					0.00	0.00	
Other					0.00	0.00	

## Minnesota

**Data Sources:** Water use data for Minnesota were provided by the Minnesota Department of Natural Resources, Division of Waters. Please contact Sean Hunt at 651/259-5679 or sean.hunt@dnr.state.mn.us with questions regarding Minnesota's data.

**Withdrawals:** Withdrawals from the Minnesota portion of the Lake Superior basin were 4,181.39 mgd, showing a decrease of 1% from 2003. Hydroelectric withdrawal which, at 3,609.20 mgd, accounted for over 86% of Minnesota's total water withdrawals in 2004, also showed an increase of just over 1% from 2003. Of the remainder (572.19 mgd), industrial use accounted for over half.



**Figure 8**

**Consumptive Use:** The largest consumptive use was calculated to be industrial, at 34.59 mgd, or 79% of total consumption. Public supply was the second largest consumptive use at 4.09 mgd, or 4% of Minnesota's total consumptive use.

**Interbasin Diversions:** None reported.

**Data Quality:** Minnesota's withdrawal data for this report were 100% measured; the level of aggregation was 100% site-specific.

# JURISDICTION REPORT- Minnesota

Withdrawals, Diversions Units: Mgal(US)/d  
and Consumptive Uses Year Of Data: 2004

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Lake Superior							
	Public Supply	40.92	0.00	4.09	40.25	0.00	4.03
	Domestic Supply	1.75	0.00	0.18	1.55	0.00	0.16
	Irrigation	0.40	0.00	0.36	0.13	0.00	0.12
	Livestock	0.67	0.00	0.60	0.62	0.00	0.55
	Industrial	345.87	0.00	34.59	345.51	0.00	34.56
	Fossil Fuel Power	182.48	0.00	3.65	182.37	0.00	3.65
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	3609.20	0.00	0.00	3609.20	0.00	0.00
	Other	0.10	0.00	0.00	0.00	0.00	0.00
	Total:	4181.39	0.00	43.47	4179.63	0.00	43.06
Grand Total:		4181.39	0.00	43.47	4179.63	0.00	43.06

# JURISDICTION REPORT- Minnesota

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2004

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Superior							
	Public Supply	33.02	2.92	4.98	32.97	2.89	4.40
	Domestic Supply	0.96	0.77	0.02	0.92	0.63	0.00
	Irrigation	0.03	0.36	0.01	0.00	0.13	0.00
	Livestock	0.67	0.00	0.00	0.62	0.00	0.00
	Industrial	286.26	59.59	0.02	286.25	59.26	0.00
	Fossil Fuel Power	0.00	182.36	0.12	0.00	182.27	0.10
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	3609.20	0.00	0.00	3609.20	0.00
	Other	0.00	0.00	0.10	0.00	0.00	0.00
	Total:	320.94	3855.20	5.25	320.75	3854.38	4.50
Grand Total:		320.94	3855.20	5.25	320.75	3854.38	4.50

# JURISDICTION REPORT- Minnesota

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2004

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	33.02	2.92	4.98	40.92	0.00	0.00	4.09
Domestic Supply	0.96	0.77	0.02	1.75	0.00	0.00	0.18
Irrigation	0.03	0.36	0.01	0.40	0.00	0.00	0.36
Livestock	0.67	0.00	0.00	0.67	0.00	0.00	0.60
Industrial	286.26	59.59	0.02	345.87	0.00	0.00	34.59
Fossil Fuel Power	0.00	182.36	0.12	182.48	0.00	0.00	3.65
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	3609.20	0.00	3609.20	0.00	0.00	0.00
Other	0.00	0.00	0.10	0.10	0.00	0.00	0.00

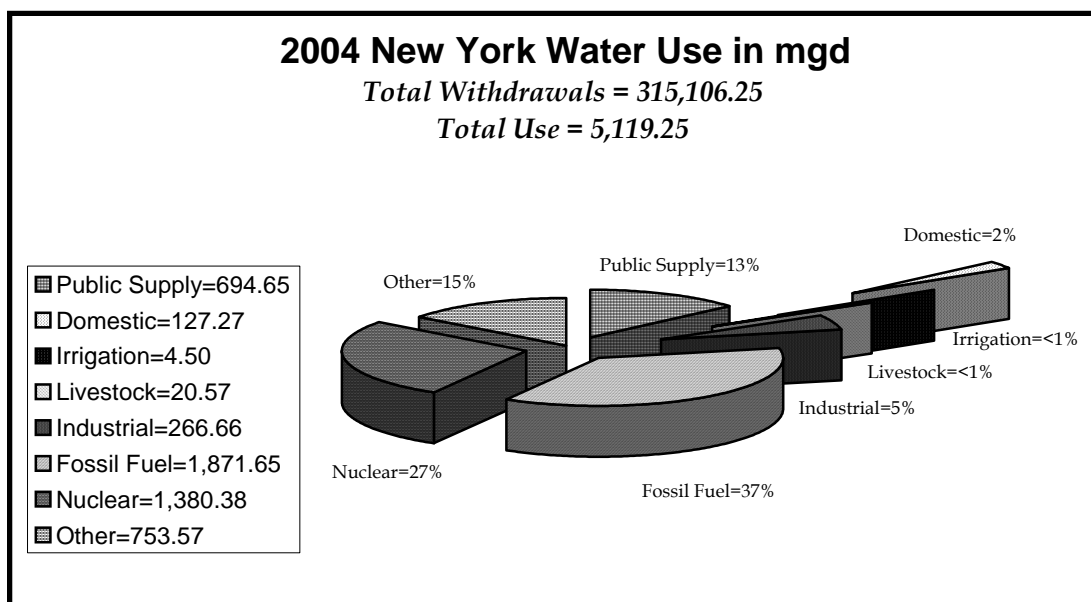
## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	32.97	2.89	4.40	40.25	0.00	0.00	4.03
Domestic Supply	0.92	0.63	0.00	1.55	0.00	0.00	0.16
Irrigation	0.00	0.13	0.00	0.13	0.00	0.00	0.12
Livestock	0.62	0.00	0.00	0.62	0.00	0.00	0.55
Industrial	286.25	59.26	0.00	345.51	0.00	0.00	34.56
Fossil Fuel Power	0.00	182.27	0.10	182.37	0.00	0.00	3.65
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	3609.20	0.00	3609.20	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## New York

**Data Sources:** Water use data collection in New York is performed by the Department of Environmental Conservation—Bureau of Water Resource Management. Please contact Michael Holt at 518/402-8099 or mdholt@gw.dec.state.ny.us with questions regarding New York's data.

**Withdrawals:** In 2004, New York withdrawals totaled 315,106.25 mgd. (Total use, not including hydroelectric power, was 5,119.25 in 2004 compared with 5,101.92 in 2003.) Hydroelectric power was by far the largest utilization of water in New York State at 309,987.00 mgd or 98% of total withdrawals; the St. Lawrence River accounted for 58% of hydroelectric withdrawals in New York. The next largest categories of use were fossil fuel and nuclear power.



**Figure 9**

**Consumptive Use:** New York reported total consumptive uses of 319.60 mgd. Lake Ontario comprised 205.78 mgd or 65%; Lake Erie comprised 99.78 mgd or 31%; the St. Lawrence River comprised 14.04 mgd or 4%. The largest categories of consumptive use were public supply at 24% and nuclear power at 21%.

**Interbasin Diversions:** Two outgoing interbasin diversions occur between the Lake Ontario basin and the Mohawk River basin. A withdrawal of 9.59 mgd from the Tagasoke Reservoir on the East Branch of Fish Creek (Lake Ontario basin) is made by the city of Rome for public water supply and emptied into the Mohawk River basin. The Forestport/Black River Canal (Lake Ontario basin) was decommissioned in the 1980s but still allows for residual flow of up to 32 mgd into the Mohawk River basin.

**Intrabasin Diversions:** The western section of the Erie Canal withdraws up to 711 mgd from the Niagara River during the navigation season (May through November) and returns it through tributaries of Lake Ontario, resulting in no net loss or gain to the basin.

**Data Quality:** New York's withdrawal data for this report were 100% partially measured; the level of aggregation was 100% aggregated.



# JURISDICTION REPORT- New York

Withdrawals, Diversions Units: Mgal(US)/d  
and Consumptive Uses Year Of Data: 2004

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Lake Erie							
	Public Supply	264.02	0.00	26.40		0.00	
	Domestic Supply	22.94	0.00	2.29	0.00	0.00	0.00
	Irrigation	0.86	0.00	0.78	0.86	0.00	0.78
	Livestock	4.30	0.00	3.87		0.00	
	Industrial	179.96	0.00	45.00	179.96	0.00	45.00
	Fossil Fuel Power	1072.17	0.00	21.44	1072.17	0.00	20.47
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	47372.00	0.00	0.00	47372.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total:	48916.25	0.00	99.78	48624.99	0.00	66.25
Lake Ontario							
	Public Supply	390.71	9.59	47.70		9.59	0.00
	Domestic Supply	89.08	0.00	8.91	27.19	0.00	2.72
	Irrigation	3.59	0.00	3.24	3.59	0.00	3.24
	Livestock	11.19	0.00	10.07		0.00	6.53
	Industrial	72.71	0.00	18.18	72.71	0.00	18.18
	Fossil Fuel Power	799.37	0.00	15.99	799.37	0.00	15.99
	Nuclear Power	1380.38	0.00	69.02	1380.38	0.00	69.02
	Hydroelectric Power	80908.00	0.00	0.00	0.00	0.00	0.00
	Other	38.69	32.00	32.67	38.69	32.00	32.67
	Total:	83693.72	41.59	205.78	2321.93	41.59	148.35
St. Lawrence River							
	Public Supply	39.92	0.00	4.00		0.00	
	Domestic Supply	15.25	0.00	1.53	0.58	0.00	0.06
	Irrigation	0.05	0.00	0.04	0.05	0.00	0.04
	Livestock	5.08	0.00	4.57		0.00	
	Industrial	13.99	0.00	3.51	13.99	0.00	3.51
	Fossil Fuel Power	0.11	0.00	0.00	0.11	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	181707.00	0.00	0.00	83015.00	0.00	0.00
	Other	3.88	0.00	0.39	3.88	0.00	0.39
	Total:	181785.28	0.00	14.04	83033.61	0.00	4.00
Grand Total:		314395.25	41.59	319.60	133980.53	41.59	218.60

# JURISDICTION REPORT- New York

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2004

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Erie							
	Public Supply	184.58	72.12	7.32			
	Domestic Supply	12.33	0.00	10.61	0.00	0.00	0.00
	Irrigation	0.14	0.72	0.00	0.14	0.72	0.00
	Livestock	1.54	0.00	2.76			
	Industrial	178.83	1.10	0.03	178.83	1.10	0.03
	Fossil Fuel Power	1072.17	0.00	0.00	1072.17	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	47372.00	0.00	0.00	47372.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total:	48821.59	73.94	20.72	48623.14	1.82	0.03
Lake Ontario							
	Public Supply	187.28	170.51	32.92			
	Domestic Supply	21.10	27.19	40.79	0.00	27.19	0.00
	Irrigation	0.00	3.44	0.15	0.00	3.44	0.15
	Livestock	3.93	0.00	7.26			
	Industrial	26.16	36.78	9.77	26.16	36.78	9.77
	Fossil Fuel Power	439.99	359.38	0.00	439.99	359.38	0.00
	Nuclear Power	1380.38	0.00	0.00	1380.38	0.00	0.00
	Hydroelectric Power	0.00	80908.00	0.00	0.00	0.00	0.00
	Other	0.00	38.43	0.26	0.00	38.43	0.26
	Total:	2058.84	81543.73	91.15	1846.53	465.22	10.18
St. Lawrence River							
	Public Supply	2.80	32.47	4.65			
	Domestic Supply	2.55	0.58	12.12	0.00	0.58	0.00
	Irrigation	0.00	0.05	0.00	0.00	0.05	0.00
	Livestock	1.77	0.00	3.31			
	Industrial	5.26	6.54	2.19	5.26	6.54	2.19
	Fossil Fuel Power	0.11	0.00	0.00	0.11	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	83015.00	98692.00	0.00	83015.00	0.00	0.00
	Other	0.00	3.88	0.00	0.00	3.88	0.00
	Total:	83027.49	98735.52	22.27	83020.37	11.05	2.19
Grand Total:		133907.92	180353.19	134.14	133490.04	478.09	12.40

# JURISDICTION REPORT- New York

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2004

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	374.66	275.10	44.89	694.65	0.00	9.59	78.10
Domestic Supply	35.98	27.77	63.52	127.27	0.00	0.00	12.73
Irrigation	0.14	4.21	0.15	4.50	0.00	0.00	4.06
Livestock	7.24	0.00	13.33	20.57	0.00	0.00	18.51
Industrial	210.25	44.42	11.99	266.66	0.00	0.00	66.69
Fossil Fuel Power	1512.27	359.38	0.00	1871.65	0.00	0.00	37.43
Nuclear Power	1380.38	0.00	0.00	1380.38	0.00	0.00	69.02
Hydroelectric Power	130387.00	179600.00	0.00	309987.00	0.00	0.00	0.00
Other	0.00	42.31	0.26	42.57	0.00	32.00	33.06

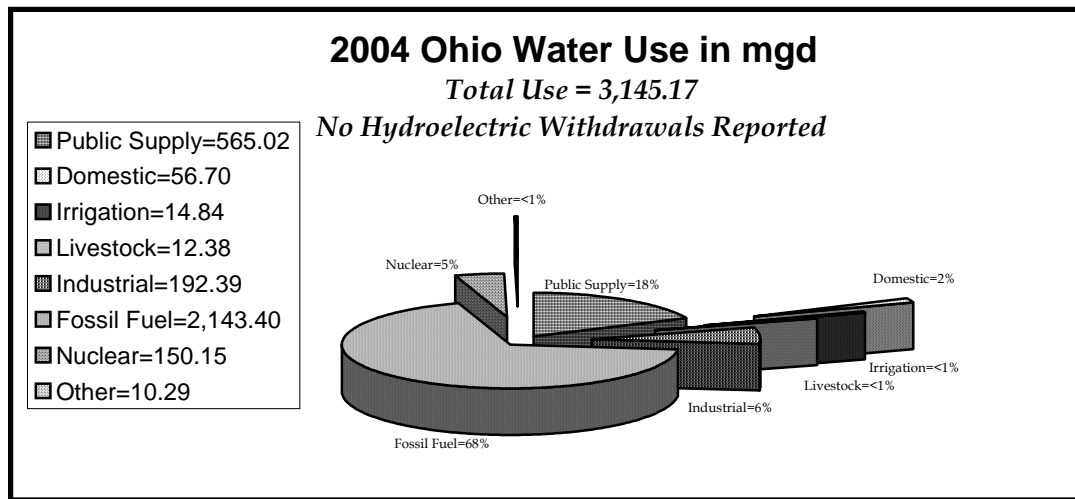
## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply					0.00	9.59	0.00
Domestic Supply	0.00	27.77	0.00	27.77	0.00	0.00	2.78
Irrigation	0.14	4.21	0.15	4.50	0.00	0.00	4.06
Livestock					0.00	0.00	6.53
Industrial	210.25	44.42	11.99	266.66	0.00	0.00	66.69
Fossil Fuel Power	1512.27	359.38	0.00	1871.65	0.00	0.00	36.46
Nuclear Power	1380.38	0.00	0.00	1380.38	0.00	0.00	69.02
Hydroelectric Power	130387.00	0.00	0.00	130387.00	0.00	0.00	0.00
Other	0.00	42.31	0.26	42.57	0.00	32.00	33.06

## Ohio

**Data Sources:** Water use data for Ohio are collected by the Ohio Department of Natural Resources-Division of Water, the Ohio Environmental Protection Agency, and the U.S. Geological Survey. Please contact Lenn Black at [leonard.black@dnr.state.oh.us](mailto:leonard.black@dnr.state.oh.us) or 614/265-6758 with questions regarding Ohio's data.

**Withdrawals:** Total withdrawals from the Ohio Lake Erie basin for 2004 were 3,145.17 mgd—down slightly from the 2003 figure of 3,207.32 mgd. As in 2003, thermoelectric-fossil fuel was by far the largest use of water at 2,143.40 mgd (68%); public supply was the second largest withdrawal at 565.02 mgd (18%).



**Figure 10**

**Consumptive Use:** Total consumptive uses were calculated to be 172.22 mgd. Public supply represents the largest consumptive use sector at 84.76 mgd and accounts for 49% of the total. The next three largest consumptive uses were thermoelectric-fossil fuel at 21.43 mgd, industrial facilities at 19.24 mgd and irrigation at 15.02 mgd.

**Interbasin Diversions:** Two Lake Erie basin public water systems provided drinking water to service areas outside the basin without return, resulting in total outgoing diversions of 0.32 mgd. Outflows from an Ohio & Erie Canal feeder lake resulted in a diversion into the Lake Erie basin of 10.10 mgd.

**Data Quality:** Ohio's withdrawal data for this report were 2% calculated or estimated, and 98% partially measured; the level of aggregation was 2% aggregated and 98% site-specific.

# JURISDICTION REPORT- Ohio

Withdrawals, Diversions Units: Mgal(US)/d  
and Consumptive Uses Year Of Data: 2004

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Lake Erie							
	Public Supply	565.02	0.32	84.76	558.60	0.32	83.79
	Domestic Supply	56.70	0.00	8.51	0.00	0.00	0.00
	Irrigation	14.84	0.00	13.36	9.74	0.00	8.78
	Livestock	12.38	0.00	9.90	0.60	0.00	0.48
	Industrial	192.39	0.00	19.24	191.45	0.00	19.15
	Fossil Fuel Power	2143.40	0.00	21.43	2143.34	0.00	21.43
	Nuclear Power	150.15	0.00	15.02	150.15	0.00	15.02
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	10.29	-10.10	0.00	10.00	-10.10	0.00
	Total:	3145.17	-9.78	172.22	3063.88	-9.78	148.65
Grand Total:		3145.17	-9.78	172.22	3063.88	-9.78	148.65

# JURISDICTION REPORT- Ohio

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2004

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Erie	Public Supply	416.98	109.92	38.12	416.85	109.54	32.21
	Domestic Supply	0.00	0.00	56.70	0.00	0.00	0.00
	Irrigation	0.24	11.71	2.89	0.13	8.40	1.21
	Livestock	0.00	1.98	10.40	0.00	0.22	0.38
	Industrial	53.59	103.26	35.54	53.59	102.91	34.95
	Fossil Fuel Power	1467.14	676.21	0.05	1467.13	676.21	0.00
	Nuclear Power	150.15	0.00	0.00	150.15	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.68	9.11	0.50	0.64	9.00	0.36
	Total:	2088.78	912.19	144.20	2088.49	906.28	69.11
Grand Total:	2088.78	912.19	144.20	2088.49	906.28	69.11	

# JURISDICTION REPORT- Ohio

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2004

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	416.98	109.92	38.12	565.02	0.00	0.32	84.76
Domestic Supply	0.00	0.00	56.70	56.70	0.00	0.00	8.51
Irrigation	0.24	11.71	2.89	14.84	0.00	0.00	13.36
Livestock	0.00	1.98	10.40	12.38	0.00	0.00	9.90
Industrial	53.59	103.26	35.54	192.39	0.00	0.00	19.24
Fossil Fuel Power	1467.14	676.21	0.05	2143.40	0.00	0.00	21.43
Nuclear Power	150.15	0.00	0.00	150.15	0.00	0.00	15.02
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.68	9.11	0.50	10.29	0.00	-10.10	0.00

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	416.85	109.54	32.21	558.60	0.00	0.32	83.79
Domestic Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Irrigation	0.13	8.40	1.21	9.74	0.00	0.00	8.78
Livestock	0.00	0.22	0.38	0.60	0.00	0.00	0.48
Industrial	53.59	102.91	34.95	191.45	0.00	0.00	19.15
Fossil Fuel Power	1467.13	676.21	0.00	2143.34	0.00	0.00	21.43
Nuclear Power	150.15	0.00	0.00	150.15	0.00	0.00	15.02
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.64	9.00	0.36	10.00	0.00	-10.10	0.00

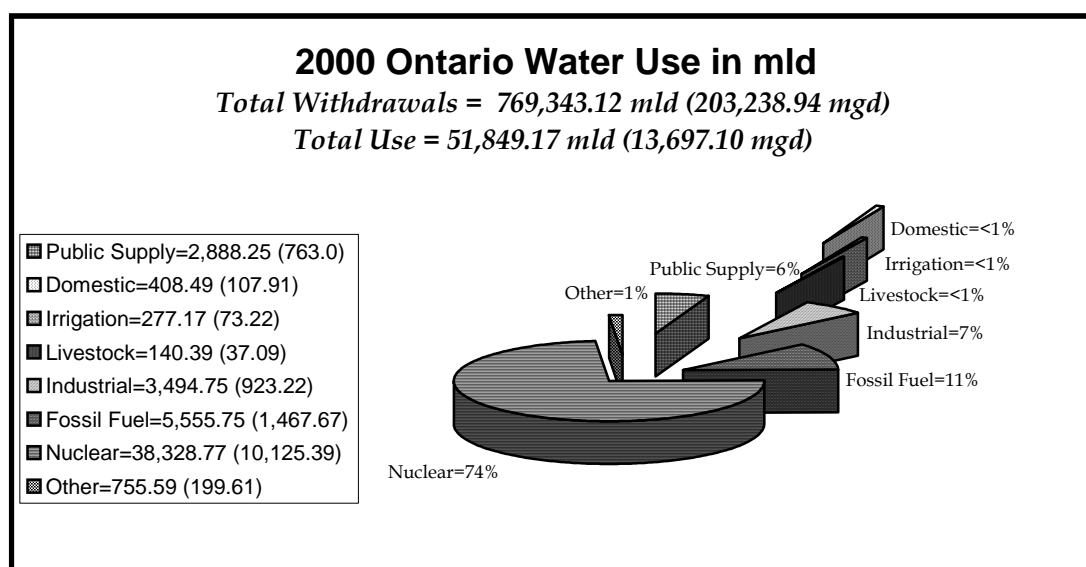
## Ontario

**Data Sources:** Water use data reporting for Ontario was coordinated by the Ontario Ministry of Natural Resources, Science and Information Branch. Calendar year 2000 data are used for this report because: 1) Ontario presently has no staff person available to work on this project and, 2) water use figures for 2003 are not believed to be greatly different than those for 2000. Please contact James Britton at 705/755-1870 or james.britton@mnr.gov.on.ca with questions regarding Ontario's data.

Data for the public supply sector were obtained from the Ministry of the Environment Interim Inspection System Reports. Domestic use figures were estimated with the use of Environment Canada's municipal water use database and Statistics Canada Population Census data. *Agricultural Water Use 1996* and *Agricultural Water Use 2001* were the sources for irrigation and livestock data. As no viable source of current data is available for industrial water use, the reported industrial data are from 1996. Data for the power sector categories were obtained through contact with individual operators and generation companies. Data for the "other" category were taken from the National Canal Survey.

Although this water withdrawal report accounts for the majority of water use within Ontario, data for a limited number of water users is not available, therefore this database does not represent all water use in the province.

**Withdrawals:** Total 2000 Great Lakes water uses for Ontario were approximately 769,343.12 mld, or 203,238.94 mgd. However, hydroelectric withdrawals represented more than 93% of the total, leaving total use at 51,849.17 mld (13,697.10 mgd). Thermoelectric—nuclear plant uses (not including hydropower) were the largest at 74% (38,328.77 mld, or 10,125.39 mgd).



**Figure 11**

**Consumptive Use:** Total consumptive uses were calculated to be 1,059.62 mld (279.92 mgd). Public supply represents the largest consumptive use sector at 433.24 mld (114.45 mgd) and accounts for 41% of the total. The next two largest consumptive uses were nuclear power and industrial use, at 344.96 mld (91.13 mgd) and 220.15 mld (58.16 mgd) respectively.

**Interbasin Diversions:** Ontario reported incoming interbasin diversions into the Lake Superior basin from the James Bay basin for hydroelectric purposes (the Ogoki and Long Lac projects) amounting to 15,170.99 mld (4,004.75 mgd).



**Intrabasin Diversions:** Intrabasin diversions occurred between lakes Huron, Erie and Ontario.

**Data Quality:** Ontario's withdrawal data for this report were 20% measured, 79% partially measured, and 1% calculated or estimated; the level of aggregation was 99% site-specific and less than 1% aggregated.

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# JURISDICTION REPORT- Ontario

Withdrawals, Diversions Units: Mgal(US)/d  
and Consumptive Uses Year Of Data: 2004

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Lake Superior							
	Public Supply	45.77	0.00	6.87	45.58	0.00	6.84
	Domestic Supply	1.75	0.00	0.26	0.00	0.00	0.00
	Irrigation	0.37	0.00			0.00	
	Livestock	0.14	0.00			0.00	
	Industrial	162.12	0.00	10.21	0.00	0.00	0.00
	Fossil Fuel Power	295.52	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	38156.31	-4007.75	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total:	38661.99	-4007.75	17.34	45.58	0.00	6.84
Lake Huron							
	Public Supply	84.37	0.00	12.65	81.66	0.00	12.25
	Domestic Supply	10.61	0.00	1.59	0.00	0.00	0.00
	Irrigation	20.91	0.00			0.00	
	Livestock	12.41	0.00			0.00	
	Industrial	190.19	0.00	11.98	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	4697.20	0.00	42.28	0.00	0.00	0.00
	Hydroelectric Power	33608.07	0.00	0.00	0.00	0.00	0.00
	Other	47.97	0.00	0.00	47.97	0.00	0.00
	Total:	38671.73	0.00	68.50	129.63	0.00	12.25
Lake Erie							
	Public Supply	93.89	0.00	14.08	92.84	0.00	13.92
	Domestic Supply	19.94	0.00	2.99	0.00	0.00	0.00
	Irrigation	31.85	0.00			0.00	
	Livestock	13.22	0.00			0.00	
	Industrial	180.45	0.00	11.37	0.00	0.00	0.00
	Fossil Fuel Power	463.20	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total:	802.56	0.00	28.44	92.84	0.00	13.92

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Lake Ontario							
	Public Supply	465.93	0.00	69.89	464.62	0.00	69.69
	Domestic Supply	64.17	0.00	9.63	0.00	0.00	0.00
	Irrigation	17.73	0.00			0.00	
	Livestock	5.40	0.00			0.00	
	Industrial	229.64	0.00	14.47	0.00	0.00	0.00
	Fossil Fuel Power	708.95	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	5428.19	0.00	48.85	0.00	0.00	0.00
	Hydroelectric Power	41542.31	0.00	0.00	0.00	0.00	0.00
	Other	132.35	0.00	0.00	132.35	0.00	0.00
	Total:	48594.67	0.00	142.84	596.97	0.00	69.69
St. Lawrence River							
	Public Supply	73.03	0.00	10.96	72.08	0.00	10.82
	Domestic Supply	11.45	0.00	1.72	0.00	0.00	0.00
	Irrigation	2.35	0.00			0.00	
	Livestock	5.91	0.00			0.00	
	Industrial	160.81	0.00	10.13	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	76235.15	0.00	0.00	0.00	0.00	0.00
	Other	19.28	0.00	0.00	19.28	0.00	0.00
	Total:	76507.99	0.00	22.80	91.37	0.00	10.82
Grand Total:		203238.94	-4007.75	279.92	956.38	0.00	113.52

# JURISDICTION REPORT- Ontario

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2004

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Superior							
	Public Supply	30.10	13.03	2.65	30.07	12.96	2.55
	Domestic Supply	0.00	0.00	1.75	0.00	0.00	0.00
	Irrigation	0.02	0.31	0.05			
	Livestock	0.00	0.14	0.00			
	Industrial	162.12	0.00	0.00	0.00	0.00	0.00
	Fossil Fuel Power	295.52	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	38156.31	0.00	0.00	0.00	0.00
	Other						
	Total:	487.76	38169.79	4.44	30.07	12.96	2.55
Lake Huron							
	Public Supply	42.66	23.57	18.14	42.02	23.23	16.40
	Domestic Supply	0.00	0.00	10.61	0.00	0.00	0.00
	Irrigation	0.15	15.41	5.35			
	Livestock	2.93	3.07	6.41			
	Industrial	187.41	0.00	2.78	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	4697.20	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	20000.41	13607.66	0.00	0.00	0.00	0.00
	Other	0.00	47.97	0.00	0.00	47.97	0.00
	Total:	24930.76	13697.68	43.29	42.02	71.20	16.40
Lake Erie							
	Public Supply	8.97	29.26	55.66	8.97	29.23	54.64
	Domestic Supply	0.00	0.00	19.94	0.00	0.00	0.00
	Irrigation	0.59	12.11	19.15			
	Livestock	0.02	0.89	12.31			
	Industrial	173.24	0.00	7.21	0.00	0.00	0.00
	Fossil Fuel Power	463.20	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other						
	Total:	646.02	42.26	114.27	8.97	29.23	54.64

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Ontario							
	Public Supply	401.52	52.86	11.56	401.47	52.68	10.47
	Domestic Supply	0.00	0.00	64.17	0.00	0.00	0.00
	Irrigation	1.08	9.53	7.12			
	Livestock	0.00	0.94	4.46			
	Industrial	218.17	0.00	11.46	0.00	0.00	0.00
	Fossil Fuel Power	708.95	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	5428.19	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	33861.04	7681.26	0.00	0.00	0.00	0.00
	Other	0.00	132.35	0.00	0.00	132.35	0.00
	Total:	40618.96	7876.94	98.77	401.47	185.03	10.47
St. Lawrence River							
	Public Supply	10.64	58.84	3.56	10.64	58.52	2.93
	Domestic Supply	0.00	0.00	11.45	0.00	0.00	0.00
	Irrigation	0.01	2.04	0.30			
	Livestock	0.00	3.63	2.28			
	Industrial	159.76	0.00	1.05	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	76149.02	86.13	0.00	0.00	0.00	0.00
	Other	0.00	19.28	0.00	0.00	19.28	0.00
	Total:	76319.43	169.91	18.65	10.64	77.80	2.93
Grand Total:		143002.93	59956.58	279.43	493.17	376.22	87.00

# JURISDICTION REPORT- Ontario

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2004

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	493.88	177.55	91.57	763.00	0.00	0.00	114.45
Domestic Supply	0.00	0.00	107.91	107.91	0.00	0.00	16.19
Irrigation	1.86	39.39	31.97	73.22	0.00	0.00	
Livestock	2.95	8.67	25.47	37.09	0.00	0.00	
Industrial	900.71	0.00	22.51	923.22	0.00	0.00	58.16
Fossil Fuel Power	1467.67	0.00	0.00	1467.67	0.00	0.00	0.00
Nuclear Power	10125.39	0.00	0.00	10125.39	0.00	0.00	91.13
Hydroelectric Power	130010.47	59531.37	0.00	189541.84	0.00	-4007.75	0.00
Other	0.00	199.61	0.00	199.61	61.97	0.00	0.00

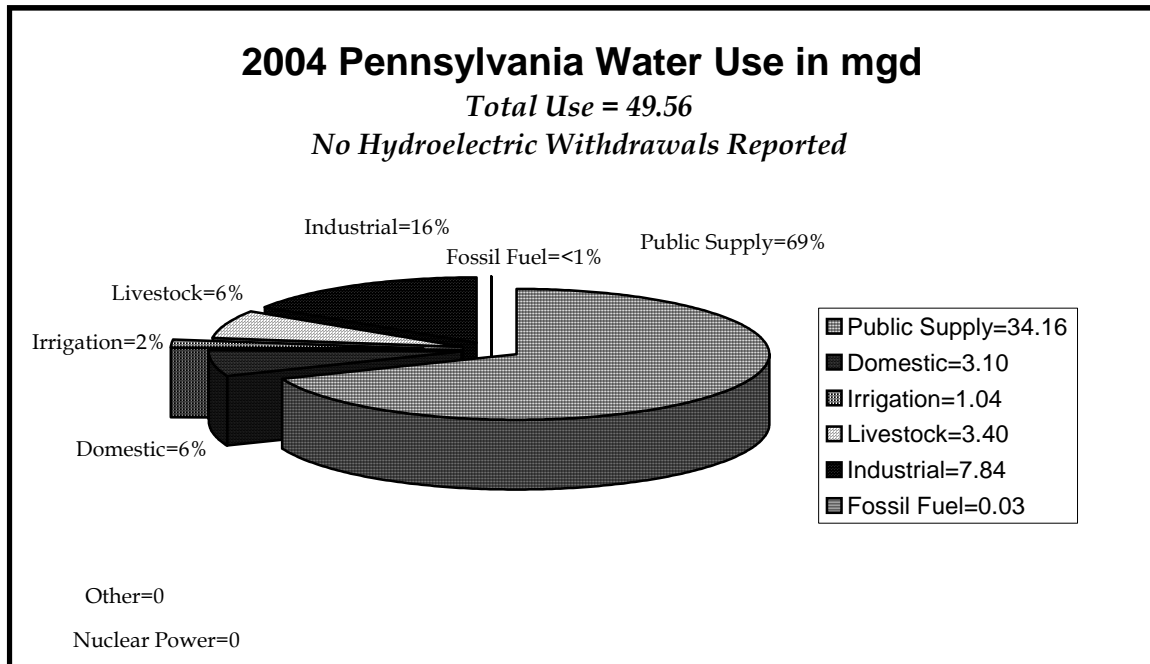
## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	493.17	176.61	87.00	756.78	0.00	0.00	113.52
Domestic Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Irrigation					0.00	0.00	
Livestock					0.00	0.00	
Industrial	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	199.61	0.00	199.61	61.97	0.00	0.00

## Pennsylvania

**Data Sources:** The Department of Environmental Protection – Bureau of Watershed Management submitted water use data for the Lake Erie and Lake Ontario basins of Pennsylvania. Please contact David Jostenski at 717/772-5659 or djostenski@state.pa.us with questions regarding Pennsylvania's data.

**Withdrawals:** Total withdrawals from Lake Erie and Lake Ontario were 49.56 mgd, with no hydroelectric withdrawals reported. Public supply at 34.16 mgd or 69%, and industrial at 7.84 mgd or 16%, constituted the primary uses of water. Nearly 100% of withdrawals were from the Lake Erie basin (49.33 mgd of 49.56 mgd).



**Figure 12**

**Consumptive Use:** Consumptive use totaled 7.39 mgd, down from the 2003 figure of 7.61 mgd. Lake Erie constituted almost 100% of the consumptive use reported.

**Interbasin Diversions:** There was an import of 1.73 mgd of water from the Allegheny River basin to the Lake Erie basin for public water supply purposes.

**Data Quality:** Pennsylvania's withdrawal data for this report were 31% calculated or estimated, 9% partially measured, and 60% measured; the level of aggregation was 6% aggregated and 94% site-specific.

# JURISDICTION REPORT- Pennsylvania

Withdrawals, Diversions Units: Mgal(US)/d  
and Consumptive Uses Year Of Data: 2004

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Lake Erie							
	Public Supply	34.10	-1.73	3.41	32.72	-1.73	3.27
	Domestic Supply	2.93	0.00	0.29		0.00	
	Irrigation	1.04	0.00	0.94	0.89	0.00	0.80
	Livestock	3.40	0.00	2.72	3.30	0.00	2.64
	Industrial	7.84	0.00		5.59	0.00	0.11
	Fossil Fuel Power	0.03	0.00	0.00		0.00	
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total:	49.33	-1.73	7.36	42.50	-1.73	6.83
Lake Ontario							
	Public Supply	0.06	0.00	0.01		0.00	
	Domestic Supply	0.17	0.00	0.02	0.00	0.00	0.00
	Irrigation		0.00			0.00	
	Livestock		0.00			0.00	
	Industrial		0.00			0.00	
	Fossil Fuel Power		0.00			0.00	
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total:	0.23	0.00	0.02	0.00	0.00	0.00
Grand Total:		49.56	-1.73	7.39	42.50	-1.73	6.83



# JURISDICTION REPORT- Pennsylvania

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2004

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Erie							
	Public Supply	29.82	2.49	1.79	29.82	2.31	0.59
	Domestic Supply	0.00	0.00	2.93			
	Irrigation	0.02	1.02	0.01	0.00	0.89	0.00
	Livestock	0.00	2.20	1.20	0.00	2.10	1.20
	Industrial	5.59	2.20	0.04	5.59	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.03			
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other						
	Total:	35.42	7.91	6.00	35.41	5.31	1.79
Lake Ontario							
	Public Supply	0.00	0.00	0.06			
	Domestic Supply	0.00	0.00	0.17	0.00	0.00	0.00
	Irrigation						
	Livestock						
	Industrial						
	Fossil Fuel Power						
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other						
	Total:	0.00	0.00	0.23	0.00	0.00	0.00
Grand Total:		35.42	7.91	6.23	35.41	5.31	1.79

# JURISDICTION REPORT- Pennsylvania

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2004

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	29.82	2.49	1.85	34.16	0.00	-1.73	3.42
Domestic Supply	0.00	0.00	3.10	3.10	0.00	0.00	0.31
Irrigation	0.02	1.02	0.01	1.04	0.00	0.00	0.94
Livestock	0.00	2.20	1.20	3.40	0.00	0.00	2.72
Industrial	5.59	2.20	0.04	7.84	0.00	0.00	
Fossil Fuel Power	0.00	0.00	0.03	0.03	0.00	0.00	0.00
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other					0.00	0.00	

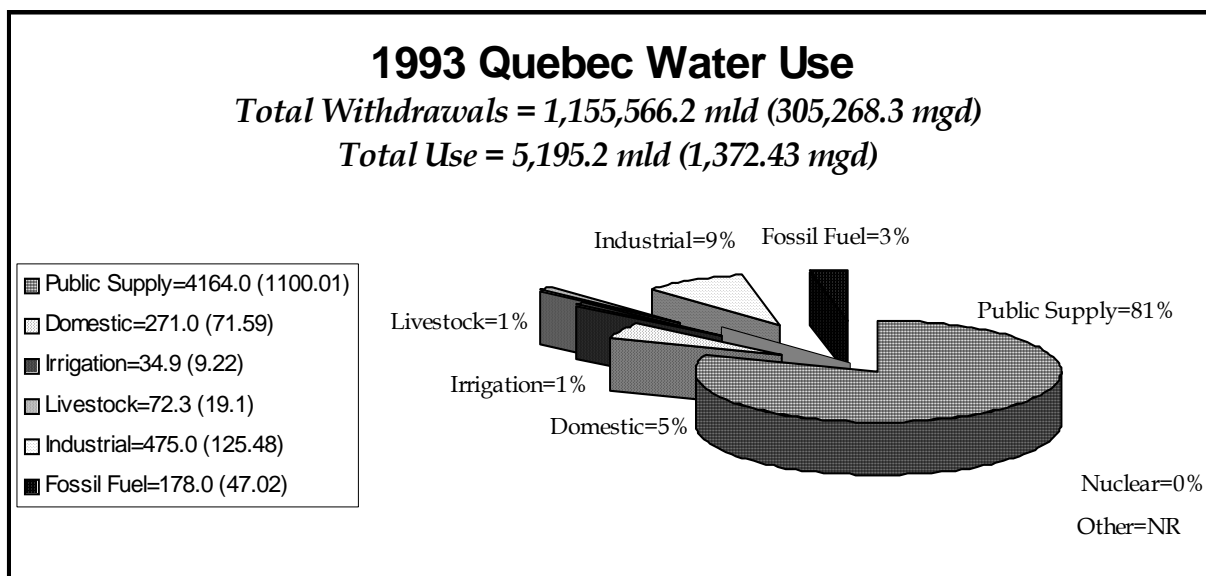
## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	29.82	2.31	0.59	32.72	0.00	-1.73	3.27
Domestic Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Irrigation	0.00	0.89	0.00	0.89	0.00	0.00	0.80
Livestock	0.00	2.10	1.20	3.30	0.00	0.00	2.64
Industrial	5.59	0.00	0.00	5.59	0.00	0.00	0.11
Fossil Fuel Power					0.00	0.00	
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other					0.00	0.00	

## Québec

**Data Source:** Water use data was collected by the Ministère de l'Environnement—Centre d'expertise hydrique du Québec for this report. The centre collects water use data primarily to support hydrologic and hydraulic research, floodplain delineation and hydrometric network management. Data for 1993 are used for this report because 1) a better tool for assessment is not yet in place and, 2) water use figures for 2004 are not believed to be greatly different than those for 1993. Please contact Lucie Bouchard at 418/521-3885 or lucie.bouchard@mddep.gouv.qc.ca with questions regarding Québec's data. See the following page for an update on the status of water quantity management in Québec.

**Withdrawals:** Total withdrawals from Québec's St. Lawrence River basin were approximately 1,155 bld (305 bgd). Nearly 100% of these uses were for hydroelectric power purposes.



**Figure 13**

**Consumptive Use:** Total consumptive use was 597.5 mld (157.9 mgd). Public supply accounted for 416 mld (109.9 mgd), or nearly 70% of the total consumptive use.

**Diversions:** None reported.

**Data Quality:** Québec's withdrawal data for this report were 99% measured, less than 1% partially measured, and less than 1% calculated or estimated; the level of aggregation was 100% aggregated.

Historically, water withdrawals have not been a source of great conflict in Québec; however, recent incidents such as construction of a bottled water facility and water shortage brought on by severe drought, have brought the problem to the forefront. Since the adoption of a new water policy by Québec's National Assembly in 2002, existing regulations have been amended to improve water management. One of the guiding principles is that users must be accountable for the utilization and degradation of water by means of a user-pays and polluter-pays approach. A new regulation that should be adopted in 2007 will support the development of economic incentives such as a user fee for water. This new regulation will enable collection of water withdrawal data and allow Québec to meet the requirements of the Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement.

Furthermore, the Water Resources Preservation Act of 1999 prohibits the transfer of water (both surface water and groundwater) out of Québec. Exception is made for the production of electric power; the marketing of water for human consumption if packaged in Québec in containers of 20 litres or less; the supply of potable water to establishments or dwellings situated in a bordering zone; the supply of vehicles (vessels, aircraft, etc.) with ballast or other requirements for operation of the vehicle, or to be used by the persons or animals being transported in the vehicle; or for emergency or humanitarian reasons on the ground.

(See <http://www.mddep.gouv.qc.ca/eau/politique/index-en.htm> for highlights and the complete text.)

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# JURISDICTION REPORT- Quebec

Withdrawals, Diversions Units: Mgal(US)/d  
and Consumptive Uses Year Of Data: 2004

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
St. Lawrence River							
	Public Supply	1100.01	0.00	109.90	1096.05	0.00	109.63
	Domestic Supply	71.59	0.00	7.13	48.61	0.00	4.76
	Irrigation	9.22	0.00	8.30		0.00	
	Livestock	19.10	0.00	15.28		0.00	
	Industrial	125.48	0.00	12.55	124.95	0.00	12.50
	Fossil Fuel Power	47.02	0.00	4.70	47.02	0.00	4.70
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	303895.85	0.00	0.00	303895.85	0.00	0.00
	Other		0.00			0.00	
	Total:	305268.28	0.00	157.86	305212.48	0.00	131.58
Grand Total:		305268.28	0.00	157.86	305212.48	0.00	131.58

# JURISDICTION REPORT- Quebec

Withdrawals by Source

Units: Mgal(US)/d  
Year Of Data: 2004

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
St. Lawrence River	Public Supply	602.84	497.17	0.00	602.58	493.47	0.00
	Domestic Supply	0.00	0.00	71.59	0.00	0.00	48.61
	Irrigation	0.00	0.00	9.22			
	Livestock	0.00	0.00	19.10			
	Industrial	0.00	125.48	0.00	0.00	124.95	0.00
	Fossil Fuel Power	39.10	7.93	0.00	39.10	7.93	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	170946.25	132949.60	0.00	170946.25	132949.60	0.00
	Other						
	Total:	171588.19	133580.18	99.91	171587.93	133575.95	48.61
Grand Total:	171588.19	133580.18	99.91	171587.93	133575.95	48.61	

# JURISDICTION REPORT- Quebec

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2004

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	602.84	497.17	0.00	1100.01	0.00	0.00	109.90
Domestic Supply	0.00	0.00	71.59	71.59	0.00	0.00	7.13
Irrigation	0.00	0.00	9.22	9.22	0.00	0.00	8.30
Livestock	0.00	0.00	19.10	19.10	0.00	0.00	15.28
Industrial	0.00	125.48	0.00	125.48	0.00	0.00	12.55
Fossil Fuel Power	39.10	7.93	0.00	47.02	0.00	0.00	4.70
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	170946.25	132949.60	0.00	303895.85	0.00	0.00	0.00
Other					0.00	0.00	

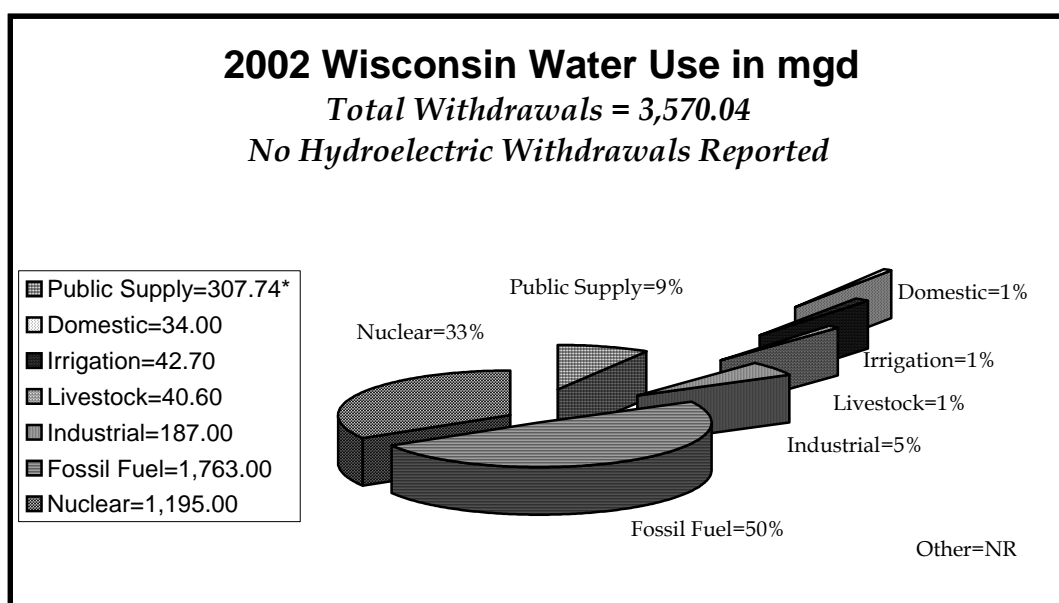
## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	602.58	493.47	0.00	1096.05	0.00	0.00	109.63
Domestic Supply	0.00	0.00	48.61	48.61	0.00	0.00	4.76
Irrigation					0.00	0.00	
Livestock					0.00	0.00	
Industrial	0.00	124.95	0.00	124.95	0.00	0.00	12.50
Fossil Fuel Power	39.10	7.93	0.00	47.02	0.00	0.00	4.70
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	170946.25	132949.60	0.00	303895.85	0.00	0.00	0.00
Other					0.00	0.00	

## Wisconsin

**Data Sources:** Wisconsin 2004 water use data for the Lake Michigan and Lake Superior basins were submitted by the Wisconsin Department of Natural Resources—Bureau of Water Resources Management. Due to staffing constraints, data from 2002 were used for 2004, with the exception of public supply figures, which are current. Please contact Shaili Pfeiffer at 608/267-7630 or Shaili.Pfeiffer@wisconsin.gov with questions regarding Wisconsin's data.

**Withdrawals:** Total withdrawals were 3,570.04 mgd: 3,518.30 mgd from Lake Michigan (98% of the total) and 51.74 mgd from Lake Superior. Water use in the Lake Michigan basin was primarily for fossil fuel (1,725.00 mgd) and nuclear power (1,195.00 mgd)—at 49% and 34% respectively. Of the Lake Superior uses, the largest single use was for fossil fuel at 38.00 mgd at 73%.



\* Public Supply data are from calendar year 2004.

**Figure 14**

**Consumptive Use:** Consumptive uses from Wisconsin's portion of the basin were calculated to be 136.08 mgd. Of this amount, public supply at 27%, and livestock watering at 24% comprised the largest portion.

**Interbasin Diversions:** A withdrawal for public supply at Pleasant Prairie diverts 0.40 mgd from the Lake Michigan basin to the Mississippi River basin. A small diversion remains at the Portage Canal site, with 0.64 mgd flowing from the Wisconsin River (the Mississippi River basin) into the Fox River (the Lake Michigan basin).

**Data Quality:** Wisconsin's withdrawal data for this report were 91% calculated or estimated and 9% measured; the level of aggregation was 91% aggregated and 9% site-specific.



# JURISDICTION REPORT- Wisconsin

Withdrawals, Diversions Units: Mgal(US)/d  
and Consumptive Uses Year Of Data: 2004

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Lake Superior							
	Public Supply	3.74	0.00	0.50		0.00	
	Domestic Supply	1.40	0.00	0.14		0.00	
	Irrigation	0.30	0.00	0.21		0.00	
	Livestock	8.30	0.00	7.47		0.00	
	Industrial		0.00			0.00	
	Fossil Fuel Power	38.00	0.00	0.19		0.00	
	Nuclear Power	0.00	0.00	0.00		0.00	
	Hydroelectric Power	0.00	0.00	0.00		0.00	
	Other		0.00			0.00	
	Total:	51.74	0.00	8.51		0.00	
Lake Michigan							
	Public Supply	304.00	0.40	31.90		0.00	
	Domestic Supply	32.60	0.00	3.26		0.00	
	Irrigation	42.40	0.00	29.68		0.00	
	Livestock	32.30	0.00	29.07		0.00	
	Industrial	187.00	0.00	19.07		0.00	
	Fossil Fuel Power	1725.00	0.00	8.62		0.00	
	Nuclear Power	1195.00	0.00	5.97		0.00	
	Hydroelectric Power	0.00	0.00	0.00		0.00	
	Other		-0.64			0.00	
	Total:	3518.30	-0.24	127.57		0.00	
Grand Total:		3570.04	-0.24	136.08		0.00	

# JURISDICTION REPORT- Wisconsin

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2004

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Superior							
	Public Supply	3.06	0.00	0.68			
	Domestic Supply	0.00	0.00	1.40			
	Irrigation	0.00	0.00	0.30			
	Livestock	0.00	0.00	8.30			
	Industrial						
	Fossil Fuel Power	38.00	0.00	0.00			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	Total:	41.06	0.00	10.68			
Lake Michigan							
	Public Supply	213.00	24.10	66.90			
	Domestic Supply	0.00	0.00	32.60			
	Irrigation	0.00	0.00	42.40			
	Livestock	0.00	0.00	32.30			
	Industrial	187.00	0.00	0.00			
	Fossil Fuel Power	1725.00	0.00	0.00			
	Nuclear Power	1195.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	Total:	3320.00	24.10	174.20			
Grand Total:		3361.06	24.10	184.88			

# JURISDICTION REPORT- Wisconsin

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2004

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	216.06	24.10	67.58	307.74	0.00	0.40	32.40
Domestic Supply	0.00	0.00	34.00	34.00	0.00	0.00	3.40
Irrigation	0.00	0.00	42.70	42.70	0.00	0.00	29.89
Livestock	0.00	0.00	40.60	40.60	0.00	0.00	36.54
Industrial	187.00	0.00	0.00	187.00	0.00	0.00	19.07
Fossil Fuel Power	1763.00	0.00	0.00	1763.00	0.00	0.00	8.81
Nuclear Power	1195.00	0.00	0.00	1195.00	0.00	0.00	5.97
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other					0.00	-0.64	

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply					0.00	0.00	
Domestic Supply					0.00	0.00	
Irrigation					0.00	0.00	
Livestock					0.00	0.00	
Industrial					0.00	0.00	
Fossil Fuel Power					0.00	0.00	
Nuclear Power					0.00	0.00	
Hydroelectric Power					0.00	0.00	
Other					0.00	0.00	



#### ***IV. BASIN TABLES***

Each basin is represented by three tables:  
Withdrawals, Diversions and Consumptive Uses  
Withdrawals by Source  
Basin Totals

Lake Erie  
Lake Huron  
Lake Michigan  
Lake Ontario  
Lake Superior  
St. Lawrence River

# BASIN REPORT- Lake Erie

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2004

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Indiana							
	Public Supply	42.10	0.00	6.31	42.03	0.00	6.30
	Domestic Supply	6.24	0.00	0.94	0.33	0.00	0.05
	Irrigation	0.92	0.00	0.83	0.64	0.00	0.58
	Livestock	0.93	0.00	0.74	0.00	0.00	0.00
	Industrial	9.51	0.00	0.57	9.34	0.00	0.56
	Fossil Fuel Power	0.27	0.00	0.01	0.27	0.00	0.01
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total	59.97	0.00	9.40	52.61	0.00	7.50
Michigan							
	Public Supply	521.99	0.00	65.26		0.00	
	Domestic Supply		0.00			0.00	
	Irrigation	22.47	0.00	20.23		0.00	
	Livestock		0.00			0.00	
	Industrial	312.27	0.00	31.23		0.00	
	Fossil Fuel Power	4300.83	0.00	51.61		0.00	
	Nuclear Power	52.75	0.00	1.00		0.00	
	Hydroelectric Power	0.00	0.00	0.00		0.00	
	Other		0.00			0.00	
	Total	5210.31	0.00	169.33		0.00	
New York							
	Public Supply	264.02	0.00	26.40		0.00	
	Domestic Supply	22.94	0.00	2.29	0.00	0.00	0.00
	Irrigation	0.86	0.00	0.78	0.86	0.00	0.78
	Livestock	4.30	0.00	3.87		0.00	
	Industrial	179.96	0.00	45.00	179.96	0.00	45.00
	Fossil Fuel Power	1072.17	0.00	21.44	1072.17	0.00	20.47
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	47372.00	0.00	0.00	47372.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total	48916.25	0.00	99.78	48624.99	0.00	66.25

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Ohio							
	Public Supply	565.02	0.32	84.76	558.60	0.32	83.79
	Domestic Supply	56.70	0.00	8.51	0.00	0.00	0.00
	Irrigation	14.84	0.00	13.36	9.74	0.00	8.78
	Livestock	12.38	0.00	9.90	0.60	0.00	0.48
	Industrial	192.39	0.00	19.24	191.45	0.00	19.15
	Fossil Fuel Power	2143.40	0.00	21.43	2143.34	0.00	21.43
	Nuclear Power	150.15	0.00	15.02	150.15	0.00	15.02
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	10.29	-10.10	0.00	10.00	-10.10	0.00
	Total	3145.17	-9.78	172.22	3063.88	-9.78	148.65
Ontario							
	Public Supply	93.89	0.00	14.08	92.84	0.00	13.92
	Domestic Supply	19.94	0.00	2.99	0.00	0.00	0.00
	Irrigation	31.85	0.00			0.00	
	Livestock	13.22	0.00			0.00	
	Industrial	180.45	0.00	11.37	0.00	0.00	0.00
	Fossil Fuel Power	463.20	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total	802.56	0.00	28.44	92.84	0.00	13.92
Pennsylvania							
	Public Supply	34.10	-1.73	3.41	32.72	-1.73	3.27
	Domestic Supply	2.93	0.00	0.29		0.00	
	Irrigation	1.04	0.00	0.94	0.89	0.00	0.80
	Livestock	3.40	0.00	2.72	3.30	0.00	2.64
	Industrial	7.84	0.00		5.59	0.00	0.11
	Fossil Fuel Power	0.03	0.00	0.00		0.00	
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total	49.33	-1.73	7.36	42.50	-1.73	6.83
Grand Total:		58183.59	-11.51	486.53	51876.82	-11.51	243.15

# BASIN REPORT- Lake Erie

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2004

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Indiana							
	Public Supply	0.00	32.60	9.50	0.00	32.60	9.43
	Domestic Supply	0.00	0.00	6.24	0.00	0.00	0.33
	Irrigation	0.00	0.31	0.61	0.00	0.19	0.45
	Livestock	0.00	0.00	0.93	0.00	0.00	0.00
	Industrial	0.00	4.86	4.65	0.00	4.86	4.48
	Fossil Fuel Power	0.00	0.00	0.27	0.00	0.00	0.27
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	TOTAL	0.00	37.77	22.20	0.00	37.65	14.96

<b>Michigan</b>							
	Public Supply	465.48	16.60	39.91			
	Domestic Supply						
	Irrigation	0.43	12.54	9.50			
	Livestock						
	Industrial	287.06	11.63	13.58			
	Fossil Fuel Power	4145.47	155.28	0.08			
	Nuclear Power	52.75	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	<b>TOTAL</b>	<b>4951.19</b>	<b>196.05</b>	<b>63.07</b>			

<b>New York</b>							
	Public Supply	184.58	72.12	7.32			
	Domestic Supply	12.33	0.00	10.61	0.00	0.00	0.00
	Irrigation	0.14	0.72	0.00	0.14	0.72	0.00
	Livestock	1.54	0.00	2.76			
	Industrial	178.83	1.10	0.03	178.83	1.10	0.03
	Fossil Fuel Power	1072.17	0.00	0.00	1072.17	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	47372.00	0.00	0.00	47372.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	<b>TOTAL</b>	<b>48821.59</b>	<b>73.94</b>	<b>20.72</b>	<b>48623.14</b>	<b>1.82</b>	<b>0.03</b>



Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Ohio							
	Public Supply	416.98	109.92	38.12	416.85	109.54	32.21
	Domestic Supply	0.00	0.00	56.70	0.00	0.00	0.00
	Irrigation	0.24	11.71	2.89	0.13	8.40	1.21
	Livestock	0.00	1.98	10.40	0.00	0.22	0.38
	Industrial	53.59	103.26	35.54	53.59	102.91	34.95
	Fossil Fuel Power	1467.14	676.21	0.05	1467.13	676.21	0.00
	Nuclear Power	150.15	0.00	0.00	150.15	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.68	9.11	0.50	0.64	9.00	0.36
	TOTAL	2088.78	912.19	144.20	2088.49	906.28	69.11
Ontario							
	Public Supply	8.97	29.26	55.66	8.97	29.23	54.64
	Domestic Supply	0.00	0.00	19.94	0.00	0.00	0.00
	Irrigation	0.59	12.11	19.15			
	Livestock	0.02	0.89	12.31			
	Industrial	173.24	0.00	7.21	0.00	0.00	0.00
	Fossil Fuel Power	463.20	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other						
	TOTAL	646.02	42.26	114.27	8.97	29.23	54.64
Pennsylvania							
	Public Supply	29.82	2.49	1.79	29.82	2.31	0.59
	Domestic Supply	0.00	0.00	2.93			
	Irrigation	0.02	1.02	0.01	0.00	0.89	0.00
	Livestock	0.00	2.20	1.20	0.00	2.10	1.20
	Industrial	5.59	2.20	0.04	5.59	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.03			
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other						
	TOTAL	35.42	7.91	6.00	35.41	5.31	1.79
Grand Total:		56543.01	1270.12	370.46	50756.00	980.28	140.53

# BASIN REPORT- Lake Erie

Basin Total

Units: Mgal(US)/d

Year Of Data: 2004

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	1105.82	263.00	152.30	1521.12	0.00	-1.41	200.22
Domestic Supply	12.33	0.00	96.41	108.74	0.00	0.00	15.02
Irrigation	1.42	38.41	32.16	71.99	0.00	0.00	36.14
Livestock	1.56	5.06	27.60	34.23	0.00	0.00	17.23
Industrial	698.31	123.05	61.05	882.42	0.00	0.00	107.41
Fossil Fuel Power	7147.98	831.49	0.43	7979.90	0.00	0.00	94.49
Nuclear Power	202.90	0.00	0.00	202.90	0.00	0.00	16.02
Hydroelectric Power	47372.00	0.00	0.00	47372.00	0.00	0.00	0.00
Other	0.68	9.11	0.50	10.29	5816.39	-10.10	0.00

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	455.63	173.68	96.87	726.18	0.00	-1.41	107.29
Domestic Supply	0.00	0.00	0.33	0.33	0.00	0.00	0.05
Irrigation	0.27	10.20	1.66	12.13	0.00	0.00	10.94
Livestock	0.00	2.32	1.58	3.90	0.00	0.00	3.12
Industrial	238.01	108.87	39.46	386.34	0.00	0.00	64.82
Fossil Fuel Power	2539.30	676.21	0.27	3215.78	0.00	0.00	41.91
Nuclear Power	150.15	0.00	0.00	150.15	0.00	0.00	15.02
Hydroelectric Power	47372.00	0.00	0.00	47372.00	0.00	0.00	0.00
Other	0.64	9.00	0.36	10.00	5816.39	-10.10	0.00

# BASIN REPORT- Lake Huron

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2004

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Michigan							
	Public Supply	301.72	0.00	37.72		0.00	
	Domestic Supply		0.00			0.00	
	Irrigation	25.86	0.00	23.28		0.00	
	Livestock		0.00			0.00	
	Industrial	34.71	0.00	3.48		0.00	
	Fossil Fuel Power	728.91	0.00	8.74		0.00	
	Nuclear Power	0.00	0.00	0.00		0.00	
	Hydroelectric Power	0.00	0.00	0.00		0.00	
	Other		0.00			0.00	
	Total	1091.20	0.00	73.22		0.00	
Ontario							
	Public Supply	84.37	0.00	12.65	81.66	0.00	12.25
	Domestic Supply	10.61	0.00	1.59	0.00	0.00	0.00
	Irrigation	20.91	0.00			0.00	
	Livestock	12.41	0.00			0.00	
	Industrial	190.19	0.00	11.98	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	4697.20	0.00	42.28	0.00	0.00	0.00
	Hydroelectric Power	33608.07	0.00	0.00	0.00	0.00	0.00
	Other	47.97	0.00	0.00	47.97	0.00	0.00
	Total	38671.73	0.00	68.50	129.63	0.00	12.25
Grand Total:		39762.93	0.00	141.72	129.63	0.00	12.25

# BASIN REPORT- Lake Huron

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2004

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Michigan							
	Public Supply	272.53	0.66	28.53			
	Domestic Supply						
	Irrigation	2.73	9.68	13.45			
	Livestock						
	Industrial	19.55	13.18	1.98			
	Fossil Fuel Power	722.43	5.26	1.22			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	TOTAL	1017.24	28.78	45.18			
Ontario							
	Public Supply	42.66	23.57	18.14	42.02	23.23	16.40
	Domestic Supply	0.00	0.00	10.61	0.00	0.00	0.00
	Irrigation	0.15	15.41	5.35			
	Livestock	2.93	3.07	6.41			
	Industrial	187.41	0.00	2.78	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	4697.20	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	20000.41	13607.66	0.00	0.00	0.00	0.00
	Other	0.00	47.97	0.00	0.00	47.97	0.00
	TOTAL	24930.76	13697.68	43.29	42.02	71.20	16.40
Grand Total:		25948.00	13726.46	88.47	42.02	71.20	16.40

# BASIN REPORT- Lake Huron

Basin Total

Units: Mgal(US)/d

Year Of Data: 2004

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	315.19	24.23	46.67	386.09	0.00	0.00	50.37
Domestic Supply	0.00	0.00	10.61	10.61	0.00	0.00	1.59
Irrigation	2.88	25.09	18.80	46.77	0.00	0.00	23.28
Livestock	2.93	3.07	6.41	12.41	0.00	0.00	
Industrial	206.96	13.18	4.76	224.90	0.00	0.00	15.46
Fossil Fuel Power	722.43	5.26	1.22	728.91	0.00	0.00	8.74
Nuclear Power	4697.20	0.00	0.00	4697.20	0.00	0.00	42.28
Hydroelectric Power	20000.41	13607.66	0.00	33608.07	0.00	0.00	0.00
Other	0.00	47.97	0.00	47.97	47.97	0.00	0.00

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	42.02	23.23	16.40	81.66	0.00	0.00	12.25
Domestic Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Irrigation					0.00	0.00	
Livestock					0.00	0.00	
Industrial	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	47.97	0.00	47.97	47.97	0.00	0.00

# BASIN REPORT- Lake Michigan

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2004

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Illinois							
	Public Supply	0.00	1003.65	0.00	0.00	1003.65	0.00
	Domestic Supply	3.90	0.04	0.39	3.90	0.04	0.39
	Irrigation		0.00		0.00	0.00	
	Livestock		0.00		0.00	0.00	
	Industrial	18.82	0.02	1.13	18.82	0.00	1.13
	Fossil Fuel Power	768.25	0.00	15.37	768.25	0.00	15.37
	Nuclear Power	31.70	0.00	0.32	31.70	0.00	0.32
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	218.10	0.00	0.00	218.10	0.00
	Total	822.67	1221.81	17.20	822.67	1221.79	17.20
Indiana							
	Public Supply	137.29	-0.81	20.59	136.91	0.00	20.53
	Domestic Supply	43.56	0.00	6.54	21.29	0.00	3.20
	Irrigation	19.40	0.00	17.46	18.04	0.00	16.24
	Livestock	4.76	0.00	3.81	2.71	0.00	2.17
	Industrial	1742.87	0.00	104.57	1742.34	0.00	104.54
	Fossil Fuel Power	766.10	0.00	15.32	766.10	0.00	15.32
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	2082.75	0.00	0.00	2082.75	0.00	0.00
	Other	0.16	0.00	0.02	0.09	0.00	0.01
	Total	4796.89	-0.81	168.31	4770.23	0.00	162.01
Michigan							
	Public Supply	308.59	0.00	38.58		0.00	
	Domestic Supply		0.00			0.00	
	Irrigation	241.43	0.00	217.29		0.00	
	Livestock		0.00			0.00	
	Industrial	268.58	0.00	26.87		0.00	
	Fossil Fuel Power	1214.95	0.00	14.57		0.00	
	Nuclear Power	2317.20	0.00	44.03		0.00	
	Hydroelectric Power	0.00	0.00	0.00		0.00	
	Other		0.00			0.00	
	Total	4350.75	0.00	341.34		0.00	

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Wisconsin							
	Public Supply	304.00	0.40	31.90		0.00	
	Domestic Supply	32.60	0.00	3.26		0.00	
	Irrigation	42.40	0.00	29.68		0.00	
	Livestock	32.30	0.00	29.07		0.00	
	Industrial	187.00	0.00	19.07		0.00	
	Fossil Fuel Power	1725.00	0.00	8.62		0.00	
	Nuclear Power	1195.00	0.00	5.97		0.00	
	Hydroelectric Power	0.00	0.00	0.00		0.00	
	Other		-0.64			0.00	
	Total	3518.30	-0.24	127.57		0.00	
Grand Total:		13488.61	1220.76	654.42	5592.90	1221.79	179.21

# BASIN REPORT- Lake Michigan

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2004

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Illinois							
	Public Supply	0.00	0.00	0.00	0.00	0.00	0.00
	Domestic Supply	3.87	0.00	0.02	3.87	0.00	0.02
	Irrigation				0.00	0.00	0.00
	Livestock				0.00	0.00	0.00
	Industrial	18.82	0.00	0.00	18.82	0.00	0.00
	Fossil Fuel Power	768.25	0.00	0.00	768.25	0.00	0.00
	Nuclear Power	31.70	0.00	0.00	31.70	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	TOTAL	822.64	0.00	0.02	822.64	0.00	0.02
Indiana							
	Public Supply	92.49	0.00	44.80	92.49	0.00	44.42
	Domestic Supply	0.00	13.86	29.70	0.00	13.85	7.44
	Irrigation	0.00	4.34	15.06	0.00	3.88	14.16
	Livestock	0.00	1.36	3.40	0.00	1.36	1.35
	Industrial	1728.97	4.91	8.99	1728.94	4.90	8.50
	Fossil Fuel Power	766.10	0.00	0.00	766.10	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	2082.75	0.00	0.00	2082.75	0.00
	Other	0.00	0.03	0.13	0.00	0.03	0.06
	TOTAL	2587.56	2107.25	102.08	2587.53	2106.77	75.93
Michigan							
	Public Supply	137.40	0.51	170.68			
	Domestic Supply						
	Irrigation	1.79	75.85	163.79			
	Livestock						
	Industrial	107.26	88.25	73.07			
	Fossil Fuel Power	896.01	316.13	2.81			
	Nuclear Power	2317.20	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	TOTAL	3459.66	480.74	410.35			



Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Wisconsin							
	Public Supply	213.00	24.10	66.90			
	Domestic Supply	0.00	0.00	32.60			
	Irrigation	0.00	0.00	42.40			
	Livestock	0.00	0.00	32.30			
	Industrial	187.00	0.00	0.00			
	Fossil Fuel Power	1725.00	0.00	0.00			
	Nuclear Power	1195.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	TOTAL	3320.00	24.10	174.20			
Grand Total:							
		10189.86	2612.09	686.65	3410.17	2106.77	75.95

# BASIN REPORT- Lake Michigan

Basin Total

Units: Mgal(US)/d

Year Of Data: 2004

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	442.89	24.61	282.38	749.88	0.00	1003.24	91.07
Domestic Supply	3.87	13.86	62.32	80.06	0.00	0.04	10.19
Irrigation	1.79	80.19	221.25	303.23	0.00	0.00	264.43
Livestock	0.00	1.36	35.70	37.06	0.00	0.00	32.88
Industrial	2042.05	93.16	82.06	2217.27	0.00	0.02	151.64
Fossil Fuel Power	4155.36	316.13	2.81	4474.30	0.00	0.00	53.88
Nuclear Power	3543.90	0.00	0.00	3543.90	0.00	0.00	50.32
Hydroelectric Power	0.00	2082.75	0.00	2082.75	0.00	0.00	0.00
Other	0.00	0.03	0.13	0.16	0.00	217.46	0.02

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	92.49	0.00	44.42	136.91	0.00	1003.65	20.53
Domestic Supply	3.87	13.85	7.46	25.19	0.00	0.04	3.59
Irrigation	0.00	3.88	14.16	18.04	0.00	0.00	16.24
Livestock	0.00	1.36	1.35	2.71	0.00	0.00	2.17
Industrial	1747.76	4.90	8.50	1761.16	0.00	0.00	105.67
Fossil Fuel Power	1534.35	0.00	0.00	1534.35	0.00	0.00	30.69
Nuclear Power	31.70	0.00	0.00	31.70	0.00	0.00	0.32
Hydroelectric Power	0.00	2082.75	0.00	2082.75	0.00	0.00	0.00
Other	0.00	0.03	0.06	0.09	0.00	218.10	0.01

# BASIN REPORT- Lake Ontario

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2004

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
New York							
	Public Supply	390.71	9.59	47.70		9.59	0.00
	Domestic Supply	89.08	0.00	8.91	27.19	0.00	2.72
	Irrigation	3.59	0.00	3.24	3.59	0.00	3.24
	Livestock	11.19	0.00	10.07		0.00	6.53
	Industrial	72.71	0.00	18.18	72.71	0.00	18.18
	Fossil Fuel Power	799.37	0.00	15.99	799.37	0.00	15.99
	Nuclear Power	1380.38	0.00	69.02	1380.38	0.00	69.02
	Hydroelectric Power	80908.00	0.00	0.00	0.00	0.00	0.00
	Other	38.69	32.00	32.67	38.69	32.00	32.67
	Total	83693.72	41.59	205.78	2321.93	41.59	148.35
Ontario							
	Public Supply	465.93	0.00	69.89	464.62	0.00	69.69
	Domestic Supply	64.17	0.00	9.63	0.00	0.00	0.00
	Irrigation	17.73	0.00			0.00	
	Livestock	5.40	0.00			0.00	
	Industrial	229.64	0.00	14.47	0.00	0.00	0.00
	Fossil Fuel Power	708.95	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	5428.19	0.00	48.85	0.00	0.00	0.00
	Hydroelectric Power	41542.31	0.00	0.00	0.00	0.00	0.00
	Other	132.35	0.00	0.00	132.35	0.00	0.00
	Total	48594.67	0.00	142.84	596.97	0.00	69.69
Pennsylvania							
	Public Supply	0.06	0.00	0.01		0.00	
	Domestic Supply	0.17	0.00	0.02	0.00	0.00	0.00
	Irrigation		0.00			0.00	
	Livestock		0.00			0.00	
	Industrial		0.00			0.00	
	Fossil Fuel Power		0.00			0.00	
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total	0.23	0.00	0.02	0.00	0.00	0.00
Grand Total:		132288.62	41.59	348.64	2918.90	41.59	218.04

# BASIN REPORT- Lake Ontario

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2004

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
New York							
	Public Supply	187.28	170.51	32.92			
	Domestic Supply	21.10	27.19	40.79	0.00	27.19	0.00
	Irrigation	0.00	3.44	0.15	0.00	3.44	0.15
	Livestock	3.93	0.00	7.26			
	Industrial	26.16	36.78	9.77	26.16	36.78	9.77
	Fossil Fuel Power	439.99	359.38	0.00	439.99	359.38	0.00
	Nuclear Power	1380.38	0.00	0.00	1380.38	0.00	0.00
	Hydroelectric Power	0.00	80908.00	0.00	0.00	0.00	0.00
	Other	0.00	38.43	0.26	0.00	38.43	0.26
	TOTAL	2058.84	81543.73	91.15	1846.53	465.22	10.18
Ontario							
	Public Supply	401.52	52.86	11.56	401.47	52.68	10.47
	Domestic Supply	0.00	0.00	64.17	0.00	0.00	0.00
	Irrigation	1.08	9.53	7.12			
	Livestock	0.00	0.94	4.46			
	Industrial	218.17	0.00	11.46	0.00	0.00	0.00
	Fossil Fuel Power	708.95	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	5428.19	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	33861.04	7681.26	0.00	0.00	0.00	0.00
	Other	0.00	132.35	0.00	0.00	132.35	0.00
	TOTAL	40618.96	7876.94	98.77	401.47	185.03	10.47
Pennsylvania							
	Public Supply	0.00	0.00	0.06			
	Domestic Supply	0.00	0.00	0.17	0.00	0.00	0.00
	Irrigation						
	Livestock						
	Industrial						
	Fossil Fuel Power						
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other						
	TOTAL	0.00	0.00	0.23	0.00	0.00	0.00
Grand Total:		42677.80	89420.67	190.15	2248.00	650.25	20.65

# BASIN REPORT- Lake Ontario

Basin Total

Units: Mgal(US)/d

Year Of Data: 2004

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	588.80	223.37	44.54	856.70	0.00	9.59	117.60
Domestic Supply	21.10	27.19	105.13	153.42	0.00	0.00	18.55
Irrigation	1.08	12.97	7.27	21.32	0.00	0.00	3.24
Livestock	3.93	0.94	11.72	16.59	0.00	0.00	10.07
Industrial	244.33	36.78	21.23	302.35	0.00	0.00	32.65
Fossil Fuel Power	1148.94	359.38	0.00	1508.32	0.00	0.00	15.99
Nuclear Power	6808.57	0.00	0.00	6808.57	0.00	0.00	117.87
Hydroelectric Power	33861.04	88589.26	0.00	122450.31	0.00	0.00	0.00
Other	0.00	170.78	0.26	171.04	-5802.39	32.00	32.67

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	401.47	52.68	10.47	464.62	0.00	9.59	69.69
Domestic Supply	0.00	27.19	0.00	27.19	0.00	0.00	2.72
Irrigation	0.00	3.44	0.15	3.59	0.00	0.00	3.24
Livestock					0.00	0.00	6.53
Industrial	26.16	36.78	9.77	72.71	0.00	0.00	18.18
Fossil Fuel Power	439.99	359.38	0.00	799.37	0.00	0.00	15.99
Nuclear Power	1380.38	0.00	0.00	1380.38	0.00	0.00	69.02
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	170.78	0.26	171.04	-5802.39	32.00	32.67

# BASIN REPORT- Lake Superior

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2004

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Michigan							
	Public Supply	11.90	0.00	1.49		0.00	
	Domestic Supply		0.00			0.00	
	Irrigation	0.52	0.00	0.47		0.00	
	Livestock		0.00			0.00	
	Industrial	13.20	0.00	1.32		0.00	
	Fossil Fuel Power	270.36	0.00	3.24		0.00	
	Nuclear Power	0.00	0.00	0.00		0.00	
	Hydroelectric Power	0.00	0.00	0.00		0.00	
	Other		0.00			0.00	
	Total	295.98	0.00	6.52		0.00	
Minnesota							
	Public Supply	40.92	0.00	4.09	40.25	0.00	4.03
	Domestic Supply	1.75	0.00	0.18	1.55	0.00	0.16
	Irrigation	0.40	0.00	0.36	0.13	0.00	0.12
	Livestock	0.67	0.00	0.60	0.62	0.00	0.55
	Industrial	345.87	0.00	34.59	345.51	0.00	34.56
	Fossil Fuel Power	182.48	0.00	3.65	182.37	0.00	3.65
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	3609.20	0.00	0.00	3609.20	0.00	0.00
	Other	0.10	0.00	0.00	0.00	0.00	0.00
	Total	4181.39	0.00	43.47	4179.63	0.00	43.06
Ontario							
	Public Supply	45.77	0.00	6.87	45.58	0.00	6.84
	Domestic Supply	1.75	0.00	0.26	0.00	0.00	0.00
	Irrigation	0.37	0.00			0.00	
	Livestock	0.14	0.00			0.00	
	Industrial	162.12	0.00	10.21	0.00	0.00	0.00
	Fossil Fuel Power	295.52	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	38156.31	-4007.75	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total	38661.99	-4007.75	17.34	45.58	0.00	6.84

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
Wisconsin							
	Public Supply	3.74	0.00	0.50		0.00	
	Domestic Supply	1.40	0.00	0.14		0.00	
	Irrigation	0.30	0.00	0.21		0.00	
	Livestock	8.30	0.00	7.47		0.00	
	Industrial		0.00			0.00	
	Fossil Fuel Power	38.00	0.00	0.19		0.00	
	Nuclear Power	0.00	0.00	0.00		0.00	
	Hydroelectric Power	0.00	0.00	0.00		0.00	
	Other		0.00			0.00	
	Total	51.74	0.00	8.51		0.00	
Grand Total:		43191.10	-4007.75	75.84	4225.20	0.00	49.90

# BASIN REPORT- Lake Superior

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2004

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Michigan							
	Public Supply	3.77	0.00	8.13			
	Domestic Supply						
	Irrigation	0.01	0.27	0.24			
	Livestock						
	Industrial	12.73	0.00	0.47			
	Fossil Fuel Power	270.36	0.00	0.00			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	TOTAL	286.87	0.27	8.84			
Minnesota							
	Public Supply	33.02	2.92	4.98	32.97	2.89	4.40
	Domestic Supply	0.96	0.77	0.02	0.92	0.63	0.00
	Irrigation	0.03	0.36	0.01	0.00	0.13	0.00
	Livestock	0.67	0.00	0.00	0.62	0.00	0.00
	Industrial	286.26	59.59	0.02	286.25	59.26	0.00
	Fossil Fuel Power	0.00	182.36	0.12	0.00	182.27	0.10
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	3609.20	0.00	0.00	3609.20	0.00
	Other	0.00	0.00	0.10	0.00	0.00	0.00
	TOTAL	320.94	3855.20	5.25	320.75	3854.38	4.50
Ontario							
	Public Supply	30.10	13.03	2.65	30.07	12.96	2.55
	Domestic Supply	0.00	0.00	1.75	0.00	0.00	0.00
	Irrigation	0.02	0.31	0.05			
	Livestock	0.00	0.14	0.00			
	Industrial	162.12	0.00	0.00	0.00	0.00	0.00
	Fossil Fuel Power	295.52	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	38156.31	0.00	0.00	0.00	0.00
	Other						
	TOTAL	487.76	38169.79	4.44	30.07	12.96	2.55



Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Wisconsin							
	Public Supply	3.06	0.00	0.68			
	Domestic Supply	0.00	0.00	1.40			
	Irrigation	0.00	0.00	0.30			
	Livestock	0.00	0.00	8.30			
	Industrial						
	Fossil Fuel Power	38.00	0.00	0.00			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	TOTAL	41.06	0.00	10.68			
Grand Total:		1136.63	42025.26	29.22	350.82	3867.33	7.05

# BASIN REPORT- Lake Superior

Basin Total

Units: Mgal(US)/d

Year Of Data: 2004

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	69.95	15.95	16.44	102.33	0.00	0.00	12.95
Domestic Supply	0.96	0.77	3.17	4.90	0.00	0.00	0.58
Irrigation	0.06	0.94	0.60	1.59	0.00	0.00	1.04
Livestock	0.67	0.14	8.30	9.11	0.00	0.00	8.07
Industrial	461.11	59.59	0.49	521.19	0.00	0.00	46.12
Fossil Fuel Power	603.88	182.36	0.12	786.36	0.00	0.00	7.08
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	41765.51	0.00	41765.51	0.00	-4007.75	0.00
Other	0.00	0.00	0.10	0.10	0.00	0.00	0.00

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	63.03	15.84	6.94	85.82	0.00	0.00	10.87
Domestic Supply	0.92	0.63	0.00	1.55	0.00	0.00	0.16
Irrigation	0.00	0.13	0.00	0.13	0.00	0.00	0.12
Livestock	0.62	0.00	0.00	0.62	0.00	0.00	0.55
Industrial	286.25	59.26	0.00	345.51	0.00	0.00	34.56
Fossil Fuel Power	0.00	182.27	0.10	182.37	0.00	0.00	3.65
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	3609.20	0.00	3609.20	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# BASIN REPORT- St. Lawrence River

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2004

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Interbasin Diver.	Consum.	Withdr.	Interbasin Diver.	Consum.
New York							
	Public Supply	39.92	0.00	4.00		0.00	
	Domestic Supply	15.25	0.00	1.53	0.58	0.00	0.06
	Irrigation	0.05	0.00	0.04	0.05	0.00	0.04
	Livestock	5.08	0.00	4.57		0.00	
	Industrial	13.99	0.00	3.51	13.99	0.00	3.51
	Fossil Fuel Power	0.11	0.00	0.00	0.11	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	181707.00	0.00	0.00	83015.00	0.00	0.00
	Other	3.88	0.00	0.39	3.88	0.00	0.39
	Total	181785.28	0.00	14.04	83033.61	0.00	4.00
Ontario							
	Public Supply	73.03	0.00	10.96	72.08	0.00	10.82
	Domestic Supply	11.45	0.00	1.72	0.00	0.00	0.00
	Irrigation	2.35	0.00			0.00	
	Livestock	5.91	0.00			0.00	
	Industrial	160.81	0.00	10.13	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	76235.15	0.00	0.00	0.00	0.00	0.00
	Other	19.28	0.00	0.00	19.28	0.00	0.00
	Total	76507.99	0.00	22.80	91.37	0.00	10.82
Quebec							
	Public Supply	1100.01	0.00	109.90	1096.05	0.00	109.63
	Domestic Supply	71.59	0.00	7.13	48.61	0.00	4.76
	Irrigation	9.22	0.00	8.30		0.00	
	Livestock	19.10	0.00	15.28		0.00	
	Industrial	125.48	0.00	12.55	124.95	0.00	12.50
	Fossil Fuel Power	47.02	0.00	4.70	47.02	0.00	4.70
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	303895.85	0.00	0.00	303895.85	0.00	0.00
	Other		0.00			0.00	
	Total	305268.28	0.00	157.86	305212.48	0.00	131.58
Grand Total:		563561.54	0.00	194.70	388337.46	0.00	146.40

# BASIN REPORT- St. Lawrence River

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2004

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
New York							
	Public Supply	2.80	32.47	4.65			
	Domestic Supply	2.55	0.58	12.12	0.00	0.58	0.00
	Irrigation	0.00	0.05	0.00	0.00	0.05	0.00
	Livestock	1.77	0.00	3.31			
	Industrial	5.26	6.54	2.19	5.26	6.54	2.19
	Fossil Fuel Power	0.11	0.00	0.00	0.11	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	83015.00	98692.00	0.00	83015.00	0.00	0.00
	Other	0.00	3.88	0.00	0.00	3.88	0.00
	TOTAL	83027.49	98735.52	22.27	83020.37	11.05	2.19
Ontario							
	Public Supply	10.64	58.84	3.56	10.64	58.52	2.93
	Domestic Supply	0.00	0.00	11.45	0.00	0.00	0.00
	Irrigation	0.01	2.04	0.30			
	Livestock	0.00	3.63	2.28			
	Industrial	159.76	0.00	1.05	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	76149.02	86.13	0.00	0.00	0.00	0.00
	Other	0.00	19.28	0.00	0.00	19.28	0.00
	TOTAL	76319.43	169.91	18.65	10.64	77.80	2.93
Quebec							
	Public Supply	602.84	497.17	0.00	602.58	493.47	0.00
	Domestic Supply	0.00	0.00	71.59	0.00	0.00	48.61
	Irrigation	0.00	0.00	9.22			
	Livestock	0.00	0.00	19.10			
	Industrial	0.00	125.48	0.00	0.00	124.95	0.00
	Fossil Fuel Power	39.10	7.93	0.00	39.10	7.93	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	170946.25	132949.60	0.00	170946.25	132949.60	0.00
	Other						
	TOTAL	171588.19	133580.18	99.91	171587.93	133575.95	48.61
Grand Total:		330935.11	232485.61	140.83	254618.94	133664.80	53.72

# BASIN REPORT- St. Lawrence River

Basin Total

Units: Mgal(US)/d

Year Of Data: 2004

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	616.28	588.48	8.21	1212.96	0.00	0.00	124.85
Domestic Supply	2.55	0.58	95.16	98.29	0.00	0.00	10.38
Irrigation	0.01	2.09	9.52	11.62	0.00	0.00	8.34
Livestock	1.77	3.63	24.69	30.09	0.00	0.00	19.85
Industrial	165.02	132.02	3.24	300.28	0.00	0.00	26.19
Fossil Fuel Power	39.21	7.93	0.00	47.13	0.00	0.00	4.70
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	330110.28	231727.72	0.00	561838.00	0.00	0.00	0.00
Other	0.00	23.16	0.00	23.16	0.00	0.00	0.39

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	613.22	551.99	2.93	1168.13	0.00	0.00	120.45
Domestic Supply	0.00	0.58	48.61	49.19	0.00	0.00	4.82
Irrigation	0.00	0.05	0.00	0.05	0.00	0.00	0.04
Livestock					0.00	0.00	
Industrial	5.26	131.49	2.19	138.94	0.00	0.00	16.01
Fossil Fuel Power	39.21	7.93	0.00	47.13	0.00	0.00	4.70
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	253961.25	132949.60	0.00	386910.85	0.00	0.00	0.00
Other	0.00	23.16	0.00	23.16	0.00	0.00	0.39



## ***V. WATER USE CATEGORY TABLES***

Each water use category is represented by two tables:

Water Use by Jurisdiction

Water Use by Basin

Public Supply-Domestic & Industrial

Self Supply-Domestic

Self Supply – Irrigation

Self Supply-Livestock

Self Supply-Industrial

Self Supply-Thermoelectric Power, Fossil Fuel

Self Supply-Thermoelectric Power, Nuclear Power

Self Supply-Hydroelectric Power

Self Supply-Other

# WATER-USE CATEGORY REPORT - Public Supply

Units: Mgal(US)/d

Year Of Data: 2004

## Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	0.00	0.00	0.00	0.00	0.00	1003.65	0.00
Indiana	92.49	32.60	54.30	179.39	0.00	-0.81	26.90
Michigan	879.18	17.77	247.25	1144.20	0.00	0.00	143.05
Minnesota	33.02	2.92	4.98	40.92	0.00	0.00	4.09
New York	374.66	275.10	44.89	694.65	0.00	9.59	78.10
Ohio	416.98	109.92	38.12	565.02	0.00	0.32	84.76
Ontario	493.88	177.55	91.57	763.00	0.00	0.00	114.45
Pennsylvania	29.82	2.49	1.85	34.16	0.00	-1.73	3.42
Quebec	602.84	497.17	0.00	1100.01	0.00	0.00	109.90
Wisconsin	216.06	24.10	67.58	307.74	0.00	0.40	32.40

## Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	0.00	0.00	0.00	0.00	0.00	1003.65	0.00
Indiana	92.49	32.60	53.85	178.94	0.00	0.00	26.83
Michigan					0.00	0.00	
Minnesota	32.97	2.89	4.40	40.25	0.00	0.00	4.03
New York					0.00	9.59	0.00
Ohio	416.85	109.54	32.21	558.60	0.00	0.32	83.79
Ontario	493.17	176.61	87.00	756.78	0.00	0.00	113.52
Pennsylvania	29.82	2.31	0.59	32.72	0.00	-1.73	3.27
Quebec	602.58	493.47	0.00	1096.05	0.00	0.00	109.63
Wisconsin					0.00	0.00	



# WATER-USE CATEGORY REPORT- Public Supply

Units: Mgal(US)/d

Year Of Data: 2004

## Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	69.95	15.95	16.44	102.33	0.00	0.00	12.95
Lake Michigan	442.89	24.61	282.38	749.88	0.00	1003.24	91.07
Lake Huron	315.19	24.23	46.67	386.09	0.00	0.00	50.37
Lake Erie	1105.82	263.00	152.30	1521.12	0.00	-1.41	200.22
Lake Ontario	588.80	223.37	44.54	856.70	0.00	9.59	117.60
St. Lawrence River	616.28	588.48	8.21	1212.96	0.00	0.00	124.85

## Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	63.03	15.84	6.94	85.82	0.00	0.00	10.87
Lake Michigan	92.49	0.00	44.42	136.91	0.00	1003.65	20.53
Lake Huron	42.02	23.23	16.40	81.66	0.00	0.00	12.25
Lake Erie	455.63	173.68	96.87	726.18	0.00	-1.41	107.29
Lake Ontario	401.47	52.68	10.47	464.62	0.00	9.59	69.69
St. Lawrence River	613.22	551.99	2.93	1168.13	0.00	0.00	120.45

# WATER-USE CATEGORY REPORT- Domestic Supply

Units: Mgal(US)/d

Year Of Data: 2004

## Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	3.87	0.00	0.02	3.90	0.00	0.04	0.39
Indiana	0.00	13.86	35.94	49.80	0.00	0.00	7.48
Michigan					0.00	0.00	
Minnesota	0.96	0.77	0.02	1.75	0.00	0.00	0.18
New York	35.98	27.77	63.52	127.27	0.00	0.00	12.73
Ohio	0.00	0.00	56.70	56.70	0.00	0.00	8.51
Ontario	0.00	0.00	107.91	107.91	0.00	0.00	16.19
Pennsylvania	0.00	0.00	3.10	3.10	0.00	0.00	0.31
Quebec	0.00	0.00	71.59	71.59	0.00	0.00	7.13
Wisconsin	0.00	0.00	34.00	34.00	0.00	0.00	3.40

## Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	3.87	0.00	0.02	3.90	0.00	0.04	0.39
Indiana	0.00	13.85	7.77	21.62	0.00	0.00	3.25
Michigan					0.00	0.00	
Minnesota	0.92	0.63	0.00	1.55	0.00	0.00	0.16
New York	0.00	27.77	0.00	27.77	0.00	0.00	2.78
Ohio	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quebec	0.00	0.00	48.61	48.61	0.00	0.00	4.76
Wisconsin					0.00	0.00	

# WATER-USE CATEGORY REPORT- Domestic Supply

Units: Mgal(US)/d

Year Of Data: 2004

## Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.96	0.77	3.17	4.90	0.00	0.00	0.58
Lake Michigan	3.87	13.86	62.32	80.06	0.00	0.04	10.19
Lake Huron	0.00	0.00	10.61	10.61	0.00	0.00	1.59
Lake Erie	12.33	0.00	96.41	108.74	0.00	0.00	15.02
Lake Ontario	21.10	27.19	105.13	153.42	0.00	0.00	18.55
St. Lawrence River	2.55	0.58	95.16	98.29	0.00	0.00	10.38

## Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.92	0.63	0.00	1.55	0.00	0.00	0.16
Lake Michigan	3.87	13.85	7.46	25.19	0.00	0.04	3.59
Lake Huron	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Erie	0.00	0.00	0.33	0.33	0.00	0.00	0.05
Lake Ontario	0.00	27.19	0.00	27.19	0.00	0.00	2.72
St. Lawrence River	0.00	0.58	48.61	49.19	0.00	0.00	4.82

# WATER-USE CATEGORY REPORT- Irrigation

Units: Mgal(US)/d

Year Of Data: 2004

## Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois					0.00	0.00	
Indiana	0.00	4.65	15.67	20.32	0.00	0.00	18.29
Michigan	4.96	98.34	186.98	290.28	0.00	0.00	261.27
Minnesota	0.03	0.36	0.01	0.40	0.00	0.00	0.36
New York	0.14	4.21	0.15	4.50	0.00	0.00	4.06
Ohio	0.24	11.71	2.89	14.84	0.00	0.00	13.36
Ontario	1.86	39.39	31.97	73.22	0.00	0.00	
Pennsylvania	0.02	1.02	0.01	1.04	0.00	0.00	0.94
Quebec	0.00	0.00	9.22	9.22	0.00	0.00	8.30
Wisconsin	0.00	0.00	42.70	42.70	0.00	0.00	29.89

## Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	0.00	0.00	0.00	0.00	0.00	0.00	
Indiana	0.00	4.07	14.61	18.68	0.00	0.00	16.82
Michigan					0.00	0.00	
Minnesota	0.00	0.13	0.00	0.13	0.00	0.00	0.12
New York	0.14	4.21	0.15	4.50	0.00	0.00	4.06
Ohio	0.13	8.40	1.21	9.74	0.00	0.00	8.78
Ontario					0.00	0.00	
Pennsylvania	0.00	0.89	0.00	0.89	0.00	0.00	0.80
Quebec					0.00	0.00	
Wisconsin					0.00	0.00	

# WATER-USE CATEGORY REPORT- Irrigation

Units: Mgal(US)/d

Year Of Data: 2004

## Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.06	0.94	0.60	1.59	0.00	0.00	1.04
Lake Michigan	1.79	80.19	221.25	303.23	0.00	0.00	264.43
Lake Huron	2.88	25.09	18.80	46.77	0.00	0.00	23.28
Lake Erie	1.42	38.41	32.16	71.99	0.00	0.00	36.14
Lake Ontario	1.08	12.97	7.27	21.32	0.00	0.00	3.24
St. Lawrence River	0.01	2.09	9.52	11.62	0.00	0.00	8.34

## Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	0.13	0.00	0.13	0.00	0.00	0.12
Lake Michigan	0.00	3.88	14.16	18.04	0.00	0.00	16.24
Lake Huron					0.00	0.00	
Lake Erie	0.27	10.20	1.66	12.13	0.00	0.00	10.94
Lake Ontario	0.00	3.44	0.15	3.59	0.00	0.00	3.24
St. Lawrence River	0.00	0.05	0.00	0.05	0.00	0.00	0.04

# WATER-USE CATEGORY REPORT- Livestock

Units: Mgal(US)/d

Year Of Data: 2004

## Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois					0.00	0.00	
Indiana	0.00	1.36	4.33	5.69	0.00	0.00	4.55
Michigan					0.00	0.00	
Minnesota	0.67	0.00	0.00	0.67	0.00	0.00	0.60
New York	7.24	0.00	13.33	20.57	0.00	0.00	18.51
Ohio	0.00	1.98	10.40	12.38	0.00	0.00	9.90
Ontario	2.95	8.67	25.47	37.09	0.00	0.00	
Pennsylvania	0.00	2.20	1.20	3.40	0.00	0.00	2.72
Quebec	0.00	0.00	19.10	19.10	0.00	0.00	15.28
Wisconsin	0.00	0.00	40.60	40.60	0.00	0.00	36.54

## Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	0.00	0.00	0.00	0.00	0.00	0.00	
Indiana	0.00	1.36	1.35	2.71	0.00	0.00	2.17
Michigan					0.00	0.00	
Minnesota	0.62	0.00	0.00	0.62	0.00	0.00	0.55
New York					0.00	0.00	6.53
Ohio	0.00	0.22	0.38	0.60	0.00	0.00	0.48
Ontario					0.00	0.00	
Pennsylvania	0.00	2.10	1.20	3.30	0.00	0.00	2.64
Quebec					0.00	0.00	
Wisconsin					0.00	0.00	

# WATER-USE CATEGORY REPORT- Livestock

Units: Mgal(US)/d

Year Of Data: 2004

## Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.67	0.14	8.30	9.11	0.00	0.00	8.07
Lake Michigan	0.00	1.36	35.70	37.06	0.00	0.00	32.88
Lake Huron	2.93	3.07	6.41	12.41	0.00	0.00	
Lake Erie	1.56	5.06	27.60	34.23	0.00	0.00	17.23
Lake Ontario	3.93	0.94	11.72	16.59	0.00	0.00	10.07
St. Lawrence River	1.77	3.63	24.69	30.09	0.00	0.00	19.85

## Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.62	0.00	0.00	0.62	0.00	0.00	0.55
Lake Michigan	0.00	1.36	1.35	2.71	0.00	0.00	2.17
Lake Huron					0.00	0.00	
Lake Erie	0.00	2.32	1.58	3.90	0.00	0.00	3.12
Lake Ontario					0.00	0.00	6.53
St. Lawrence River					0.00	0.00	

# WATER-USE CATEGORY REPORT- Industrial

Units: Mgal(US)/d

Year Of Data: 2004

## Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	18.82	0.00	0.00	18.82	0.00	0.02	1.13
Indiana	1728.97	9.77	13.64	1752.38	0.00	0.00	105.14
Michigan	426.60	113.06	89.10	628.76	0.00	0.00	62.90
Minnesota	286.26	59.59	0.02	345.87	0.00	0.00	34.59
New York	210.25	44.42	11.99	266.66	0.00	0.00	66.69
Ohio	53.59	103.26	35.54	192.39	0.00	0.00	19.24
Ontario	900.71	0.00	22.51	923.22	0.00	0.00	58.16
Pennsylvania	5.59	2.20	0.04	7.84	0.00	0.00	
Quebec	0.00	125.48	0.00	125.48	0.00	0.00	12.55
Wisconsin	187.00	0.00	0.00	187.00	0.00	0.00	19.07

## Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	18.82	0.00	0.00	18.82	0.00	0.00	1.13
Indiana	1728.94	9.76	12.98	1751.68	0.00	0.00	105.10
Michigan					0.00	0.00	
Minnesota	286.25	59.26	0.00	345.51	0.00	0.00	34.56
New York	210.25	44.42	11.99	266.66	0.00	0.00	66.69
Ohio	53.59	102.91	34.95	191.45	0.00	0.00	19.15
Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania	5.59	0.00	0.00	5.59	0.00	0.00	0.11
Quebec	0.00	124.95	0.00	124.95	0.00	0.00	12.50
Wisconsin					0.00	0.00	



# WATER-USE CATEGORY REPORT- Industrial

Units: Mgal(US)/d

Year Of Data: 2004

## Water-Use by Basin - All Facilities

Basin	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Lake Superior	461.11	59.59	0.49	521.19	0.00	0.00	46.12
Lake Michigan	2042.05	93.16	82.06	2217.27	0.00	0.02	151.64
Lake Huron	206.96	13.18	4.76	224.90	0.00	0.00	15.46
Lake Erie	698.31	123.05	61.05	882.42	0.00	0.00	107.41
Lake Ontario	244.33	36.78	21.23	302.35	0.00	0.00	32.65
St. Lawrence River	165.02	132.02	3.24	300.28	0.00	0.00	26.19

## Water-Use by Basin - Principal Facilities

Basin	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Lake Superior	286.25	59.26	0.00	345.51	0.00	0.00	34.56
Lake Michigan	1747.76	4.90	8.50	1761.16	0.00	0.00	105.67
Lake Huron	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Erie	238.01	108.87	39.46	386.34	0.00	0.00	64.82
Lake Ontario	26.16	36.78	9.77	72.71	0.00	0.00	18.18
St. Lawrence River	5.26	131.49	2.19	138.94	0.00	0.00	16.01

# WATER-USE CATEGORY REPORT- Fossil Fuel Power

Units: Mgal(US)/d

Year Of Data: 2004

## Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	768.25	0.00	0.00	768.25	0.00	0.00	15.37
Indiana	766.10	0.00	0.27	766.37	0.00	0.00	15.33
Michigan	6034.27	476.67	4.11	6515.05	0.00	0.00	78.16
Minnesota	0.00	182.36	0.12	182.48	0.00	0.00	3.65
New York	1512.27	359.38	0.00	1871.65	0.00	0.00	37.43
Ohio	1467.14	676.21	0.05	2143.40	0.00	0.00	21.43
Ontario	1467.67	0.00	0.00	1467.67	0.00	0.00	0.00
Pennsylvania	0.00	0.00	0.03	0.03	0.00	0.00	0.00
Quebec	39.10	7.93	0.00	47.02	0.00	0.00	4.70
Wisconsin	1763.00	0.00	0.00	1763.00	0.00	0.00	8.81

## Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	768.25	0.00	0.00	768.25	0.00	0.00	15.37
Indiana	766.10	0.00	0.27	766.37	0.00	0.00	15.33
Michigan					0.00	0.00	
Minnesota	0.00	182.27	0.10	182.37	0.00	0.00	3.65
New York	1512.27	359.38	0.00	1871.65	0.00	0.00	36.46
Ohio	1467.13	676.21	0.00	2143.34	0.00	0.00	21.43
Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania					0.00	0.00	
Quebec	39.10	7.93	0.00	47.02	0.00	0.00	4.70
Wisconsin					0.00	0.00	

# WATER-USE CATEGORY REPORT- Fossil Fuel Power

Units: Mgal(US)/d

Year Of Data: 2004

## Water-Use by Basin - All Facilities

Basin	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Lake Superior	603.88	182.36	0.12	786.36	0.00	0.00	7.08
Lake Michigan	4155.36	316.13	2.81	4474.30	0.00	0.00	53.88
Lake Huron	722.43	5.26	1.22	728.91	0.00	0.00	8.74
Lake Erie	7147.98	831.49	0.43	7979.90	0.00	0.00	94.49
Lake Ontario	1148.94	359.38	0.00	1508.32	0.00	0.00	15.99
St. Lawrence River	39.21	7.93	0.00	47.13	0.00	0.00	4.70

## Water-Use by Basin - Principal Facilities

Basin	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Lake Superior	0.00	182.27	0.10	182.37	0.00	0.00	3.65
Lake Michigan	1534.35	0.00	0.00	1534.35	0.00	0.00	30.69
Lake Huron	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Erie	2539.30	676.21	0.27	3215.78	0.00	0.00	41.91
Lake Ontario	439.99	359.38	0.00	799.37	0.00	0.00	15.99
St. Lawrence River	39.21	7.93	0.00	47.13	0.00	0.00	4.70

# WATER-USE CATEGORY REPORT- Nuclear Power

Units: Mgal(US)/d

Year Of Data: 2004

## Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	31.70	0.00	0.00	31.70	0.00	0.00	0.32
Indiana	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Michigan	2369.95	0.00	0.00	2369.95	0.00	0.00	45.03
Minnesota	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York	1380.38	0.00	0.00	1380.38	0.00	0.00	69.02
Ohio	150.15	0.00	0.00	150.15	0.00	0.00	15.02
Ontario	10125.39	0.00	0.00	10125.39	0.00	0.00	91.13
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quebec	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wisconsin	1195.00	0.00	0.00	1195.00	0.00	0.00	5.97

## Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	31.70	0.00	0.00	31.70	0.00	0.00	0.32
Indiana	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Michigan					0.00	0.00	
Minnesota	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York	1380.38	0.00	0.00	1380.38	0.00	0.00	69.02
Ohio	150.15	0.00	0.00	150.15	0.00	0.00	15.02
Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quebec	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wisconsin					0.00	0.00	

# WATER-USE CATEGORY REPORT- Nuclear Power

Units: Mgal(US)/d

Year Of Data: 2004

## Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Michigan	3543.90	0.00	0.00	3543.90	0.00	0.00	50.32
Lake Huron	4697.20	0.00	0.00	4697.20	0.00	0.00	42.28
Lake Erie	202.90	0.00	0.00	202.90	0.00	0.00	16.02
Lake Ontario	6808.57	0.00	0.00	6808.57	0.00	0.00	117.87
St. Lawrence River	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Michigan	31.70	0.00	0.00	31.70	0.00	0.00	0.32
Lake Huron	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Erie	150.15	0.00	0.00	150.15	0.00	0.00	15.02
Lake Ontario	1380.38	0.00	0.00	1380.38	0.00	0.00	69.02
St. Lawrence River	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# WATER-USE CATEGORY REPORT- Hydroelectric Power

Units: Mgal(US)/d

Year Of Data: 2004

## Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indiana	0.00	2082.75	0.00	2082.75	0.00	0.00	0.00
Michigan	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Minnesota	0.00	3609.20	0.00	3609.20	0.00	0.00	0.00
New York	130387.00	179600.00	0.00	309987.00	0.00	0.00	0.00
Ohio	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ontario	130010.47	59531.37	0.00	189541.84	0.00	-4007.75	0.00
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quebec	170946.25	132949.60	0.00	303895.85	0.00	0.00	0.00
Wisconsin	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indiana	0.00	2082.75	0.00	2082.75	0.00	0.00	0.00
Michigan					0.00	0.00	
Minnesota	0.00	3609.20	0.00	3609.20	0.00	0.00	0.00
New York	130387.00	0.00	0.00	130387.00	0.00	0.00	0.00
Ohio	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quebec	170946.25	132949.60	0.00	303895.85	0.00	0.00	0.00
Wisconsin					0.00	0.00	

# WATER-USE CATEGORY REPORT- Hydroelectric Power

Units: Mgal(US)/d

Year Of Data: 2004

## Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	41765.51	0.00	41765.51	0.00	-4007.75	0.00
Lake Michigan	0.00	2082.75	0.00	2082.75	0.00	0.00	0.00
Lake Huron	20000.41	13607.66	0.00	33608.07	0.00	0.00	0.00
Lake Erie	47372.00	0.00	0.00	47372.00	0.00	0.00	0.00
Lake Ontario	33861.04	88589.26	0.00	122450.31	0.00	0.00	0.00
St. Lawrence River	330110.28	231727.72	0.00	561838.00	0.00	0.00	0.00

## Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	3609.20	0.00	3609.20	0.00	0.00	0.00
Lake Michigan	0.00	2082.75	0.00	2082.75	0.00	0.00	0.00
Lake Huron	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Erie	47372.00	0.00	0.00	47372.00	0.00	0.00	0.00
Lake Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Lawrence River	253961.25	132949.60	0.00	386910.85	0.00	0.00	0.00

# WATER-USE CATEGORY REPORT- Other

Units: Mgal(US)/d

Year Of Data: 2004

## Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	0.00	0.00	0.00	0.00	0.00	218.10	0.00
Indiana	0.00	0.03	0.13	0.16	0.00	0.00	0.02
Michigan					0.00	0.00	
Minnesota	0.00	0.00	0.10	0.10	0.00	0.00	0.00
New York	0.00	42.31	0.26	42.57	0.00	32.00	33.06
Ohio	0.68	9.11	0.50	10.29	0.00	-10.10	0.00
Ontario	0.00	199.61	0.00	199.61	61.97	0.00	0.00
Pennsylvania					0.00	0.00	
Quebec					0.00	0.00	
Wisconsin					0.00	-0.64	

## Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	0.00	0.00	0.00	0.00	0.00	218.10	0.00
Indiana	0.00	0.03	0.06	0.09	0.00	0.00	0.01
Michigan					0.00	0.00	
Minnesota	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York	0.00	42.31	0.26	42.57	0.00	32.00	33.06
Ohio	0.64	9.00	0.36	10.00	0.00	-10.10	0.00
Ontario	0.00	199.61	0.00	199.61	61.97	0.00	0.00
Pennsylvania					0.00	0.00	
Quebec					0.00	0.00	
Wisconsin					0.00	0.00	



# WATER-USE CATEGORY REPORT- Other

Units: Mgal(US)/d

Year Of Data: 2004

## Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	0.00	0.10	0.10	0.00	0.00	0.00
Lake Michigan	0.00	0.03	0.13	0.16	0.00	217.46	0.02
Lake Huron	0.00	47.97	0.00	47.97	47.97	0.00	0.00
Lake Erie	0.68	9.11	0.50	10.29	5816.39	-10.10	0.00
Lake Ontario	0.00	170.78	0.26	171.04	-5802.39	32.00	32.67
St. Lawrence River	0.00	23.16	0.00	23.16	0.00	0.00	0.39

## Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Michigan	0.00	0.03	0.06	0.09	0.00	218.10	0.01
Lake Huron	0.00	47.97	0.00	47.97	47.97	0.00	0.00
Lake Erie	0.64	9.00	0.36	10.00	5816.39	-10.10	0.00
Lake Ontario	0.00	170.78	0.26	171.04	-5802.39	32.00	32.67
St. Lawrence River	0.00	23.16	0.00	23.16	0.00	0.00	0.39

ANNUAL REPORT  
of the  
*GREAT LAKES REGIONAL WATER USE  
DATABASE REPOSITORY*  
*REPRESENTING 2005 WATER USE DATA IN GALLONS*

*Prepared by*  
**The Great Lakes Commission**

September 18, 2009



## ***ACKNOWLEDGEMENTS***

The Great Lakes Commission wishes to thank each of the jurisdictional representatives listed on page eight for their work in collecting and transmitting the data for this report. The members' attention to detail and commitment to accuracy, and the collective familiarity with the subject matter, are all invaluable contributions to this project.

## ***FOREWARD***

The Great Lakes Regional Water Use Database was established by the Great Lakes states and provinces in response to the recommendation of the Great Lakes Charter of 1985 that calls for a uniform, consistent base of data of Great Lakes water withdrawals, diversions and consumptive uses. Beginning in 1987, water use data have been submitted to the repository on an annual basis and reports provided to assist the jurisdictions in Great Lakes-St. Lawrence River water resources planning and management. As specified by the Water Resources Management Committee in its 1987 report, *Managing the Waters of the Great Lakes Basin*, the database catalogs withdrawals by water use category, sub-basin and jurisdiction.

The database became operational in the summer of 1988 following a multi-year cooperative effort. Design and development involved input from many state, provincial, and federal agencies, with the U.S. Geological Survey providing much of the leadership.

The original customized program was developed in 1987 by Acres International on the MS/DOS platform using a modified version of DbaseIII. With the rapid advancement of computer hardware and software and the evolving needs of the Great Lakes state and provincial water resources management programs, that system soon became outdated. In July 1998, the Great Lakes Commission and Eastern Michigan University's Institute for Geospatial Research and Education (formerly the Center for Environmental Information Technology and Application) began work on a revised database which is used for this report. The system was developed using Visual Basic for Applications, based on Microsoft Access®, and contains all of the functions of the old system (including data entry, a data check facility and report generation), in addition to new features such as a flexible data interface and automatic data checking.

A Great Lakes Regional Water Use Database to provide comparable water use information on withdrawals, diversions and consumptive use is also called for under Article 4 of the Great Lakes—St. Lawrence River Basin Water Resources Compact and Article 301 of the Great Lakes—St. Lawrence River Basin Sustainable Water Resources Agreement approved by the states and provinces in 2008. Under the Compact and Agreement, the parties (states and provinces) are required to report water use information to the regional database repository and aggregated information will be made available to the public on an annual basis.

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# ***I. GREAT LAKES BASIN OVERVIEW***

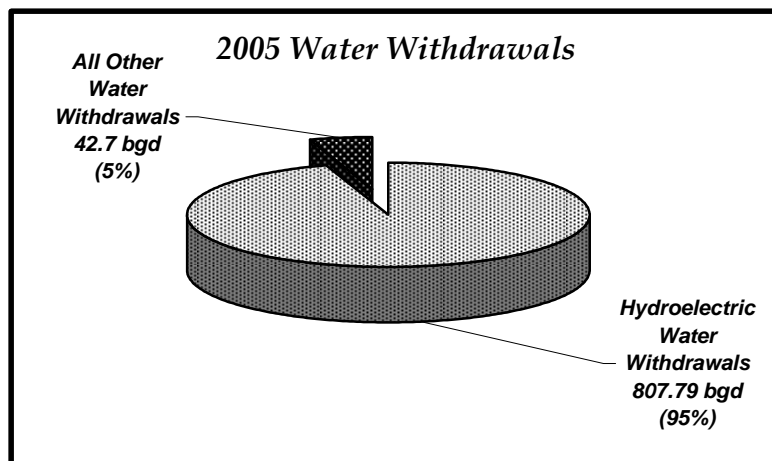
## **Introduction**

On an annual basis, the Great Lakes Commission - the repository for the Great Lakes – St. Lawrence River Water Use Database - sends an e-mail request for the pervious year’s water use data in the fall to states and provinces. All data are submitted to the repository in a Microsoft Excel or Access format then compiled into a single Microsoft Access database.

All data are in one of two unit measures—millions of U.S. gallons per day (mgd) or millions of liters per day (mld)—and values are initially set to zero. Numeric values are required for all categories of use. A value of zero indicates either zero water use (under All Facilities) or water use which does not meet the Great Lakes Charter trigger level (under Principal Facilities). Definitions and abbreviations of terms used in this report can be found on page 6.

The quality of data for each entry is rated as a 1, 2 or 3 indicating the level of accuracy as 1) measured 2) partially measured or 3) estimated; and a 1 or 2 indicating the level of aggregation as 1) originating from site-specific sources or 2) from higher level aggregate sources such as county or census databases. Both measures of quality are based on percentages of total volume.

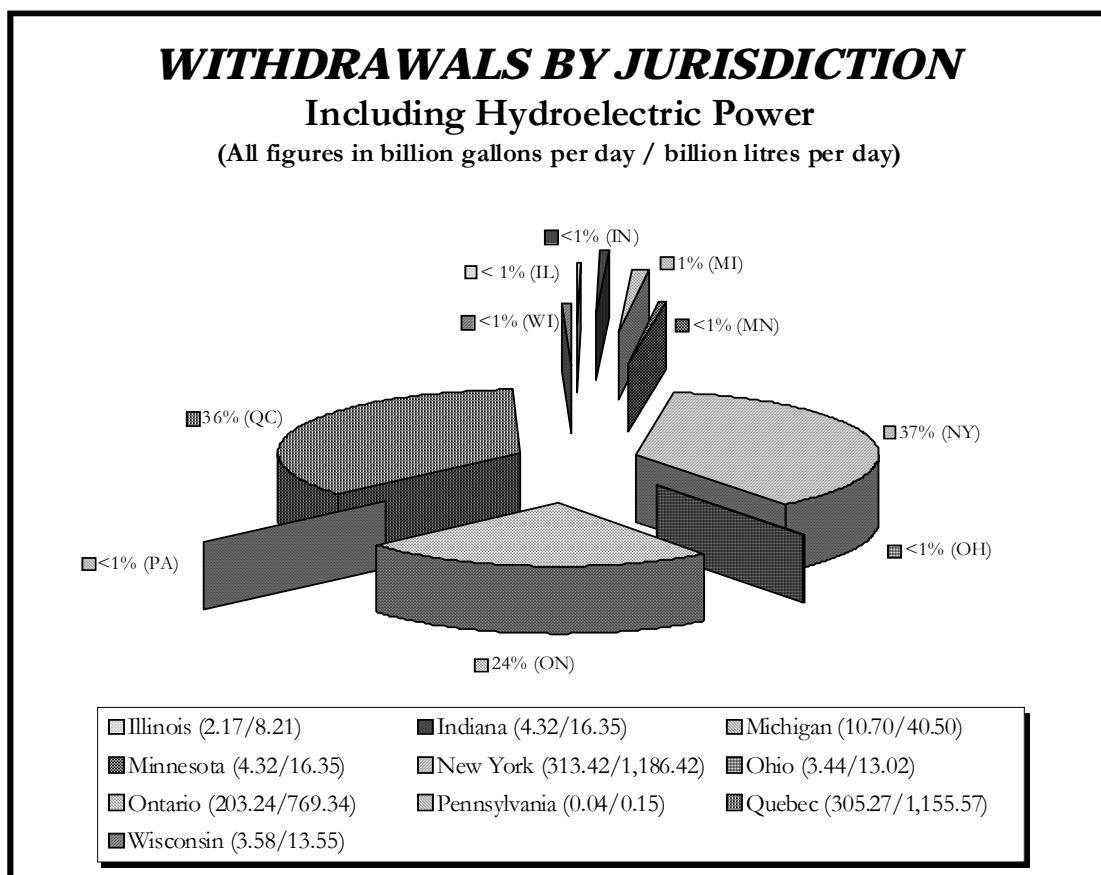
For this report, self-supply--hydroelectric (water used in the generation of electricity at plants where turbine generators are driven by falling water) is treated as a withdrawal, even though all water for this purpose is considered to be returned to the basin. Under the 2009 draft water use information reporting protocols that will guide implementation of the new water use information commitments set forth in the Great Lakes-St. Lawrence River Water Resources Compact and Agreement, hydroelectric will *not* be considered a “withdrawal”, but rather a “use.” In future reports, it will be not aggregated as total withdrawals, but rather aggregated separately as a use. As the following chart illustrates, this is the largest single category of withdrawal and represents 95 percent of the total amount of water “withdrawn” in 2005.



**Figure 1**

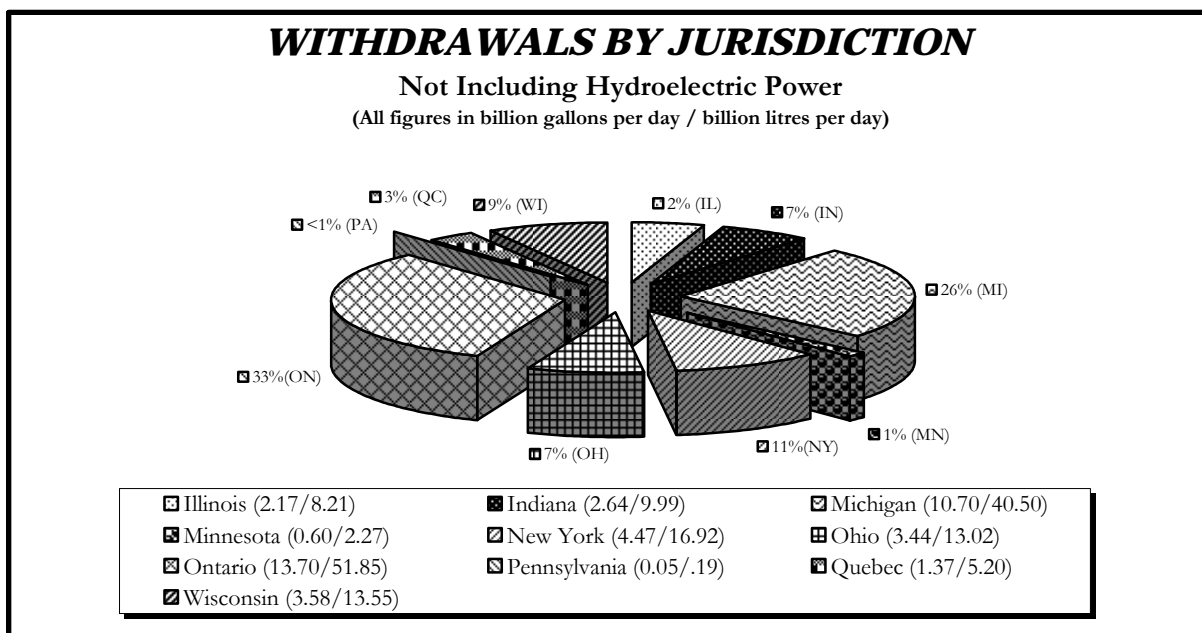


Each of the ten jurisdictions' water uses is represented in Figure 2 and Figure 3. Figure 2 includes self-supply – hydroelectric use. In total, water withdrawals for the year 2005 were approximately 850.49 billion gallons per day, or about 3,219.45 billion liters per day.



**Figure 2**

Figure 3 more accurately reflects the true water use within the basin, as it does not include self-supply – hydroelectric use. Water withdrawals for the eight remaining off-stream categories totaled 42.7 billion gallons per day, or 156 billion liters per day.



**Figure 3**

Pie charts showing individual jurisdictional water use, beginning with Illinois on page 14, are in million gallons per day and do not include hydroelectric use

## Topics of Interest

### Diversions

Two types of diversions are reported by the water use database: interbasin (transfers that take place between the Great Lakes basin and another watershed) and intrabasin (transfers that take place between one of the Great Lakes watersheds and another); both types can be either incoming or outgoing.

Of the two types, interbasin diversions (transfers that take place between the Great Lakes basin and another watershed) have traditionally been of greater interest to water supply managers and the public. Interbasin diversions shown in the tables as a positive number (e.g. **without** a minus sign) indicate water leaving the Great Lakes basin; interbasin diversions shown in the tables as a negative number (e.g. **with** a minus sign) indicate water entering the Great Lakes basin.

For a history of Great Lakes water diversions and removals, please see *Great Lakes Diversions and Other Removals* by Frank Quinn and Jeff Edstrom, **Canadian Water Resources Journal**, 2000, vol. 25, #2. Copies of this article can be obtained through the CWRJ website at [www.cwra.org/publications](http://www.cwra.org/publications), or by calling 519/622-4764.

### Consumptive Use

Collecting and reporting accurate data for consumptive uses of Great Lakes water continues to be a major challenge for the Great Lakes jurisdictions. The states and provinces currently use a variety of methods to obtain consumptive use figures, including measurement and estimation at the facility level. However, the most common practice is to calculate consumptive use for each water use category by multiplying the withdrawn amount by an agreed-upon percentage (consumptive use coefficient). Figure 4 on the following page shows the consumptive use coefficients that were used for this report. For the resulting consumptive use quantities by jurisdiction, basin or water use category, please refer to the tables in chapters II through V. Total consumptive use in the basin for 2005 was calculated to be 1.83 bgd (6.93 bld).

For a more detailed overview, please see:

**Annotated Bibliography of Consumptive Use in the Great Lakes Region and Basin**  
([www.glc.org/wateruse/wrmdss/finalreport/pdf/CU\\_biblio.pdf](http://www.glc.org/wateruse/wrmdss/finalreport/pdf/CU_biblio.pdf))

**Measuring and Estimating Consumptive Use of Great Lakes Water**  
([www.glc.org/wateruse/wrmdss/finalreport/pdf/CU\\_briefing.pdf](http://www.glc.org/wateruse/wrmdss/finalreport/pdf/CU_briefing.pdf)).

## Consumptive Use Coefficients

<i><b>Water Use Category</b></i>	<b>ILLINOIS</b>	<b>INDIANA</b>	<b>MICHIGAN</b>	<b>MINNESOTA</b>	<b>NEW YORK</b>	<b>OHIO</b>	<b>ONTARIO</b>	<b>PENNSYLVANIA</b>	<b>QUEBEC</b>	<b>WISCONSIN</b>
Public Supply	10-15%	15%	10-15%	10-15%	10%	10-15%	15%	10%	10-15%	10-15%
Self-Supply Domestic	10-15%	15%	10-15%	10-15%	10%	10-15%	15%	10%	10-15%	10-15%
Self-Supply Irrigation	90%	90%	90%	90%	90%	90%	78%	90%	90%	70%
Self-Supply Livestock	80%	80%	80%	80%	90%	80%	80%	80%	80%	90%
Self-Supply Industrial	Varies by plant & SIC code	6%	10-15%	Varies by plant & SIC code	25%	10%; salt mining is 90%	Varies by plant & SIC code	Varies by plant & SIC code	10% for pulp & paper industry	10.2% for manufacturing & mining
Self-Supply Thermoelectric (Fossil Fuel)	Individually estimated based on the quantity of make-up water	2%	1-2% for plants using once-through cooling; individual analysis for wet cooling towers	2%	2%	Individually estimated based on the quantity of make-up water	.9% based on reports of increased local lake evaporation due to discharge of heated water to lakes	NA (Pennsylvania has no facilities in the basin)	10%; estimates obtained from USGS report	.5-1%
Self-Supply Thermoelectric (Nuclear)	Individually estimated based on the quantity of make-up water	NA (Indiana has no facilities in the basin)	1-2% for plants using once-through cooling; individual analysis for wet cooling towers	NA (Minnesota has no facilities in the basin)	5%	14% based on reports of increased local lake evaporation due to discharge of heated water to lakes	.9% based on reports of increased local lake evaporation due to discharge of heated water to lakes	NA (Pennsylvania has no facilities in the basin)	NA (Quebec has no facilities in the basin)	.5-1%
Hydroelectric	Coefficient for all states and provinces is 0%									
Self-Supply Other	0%	12%	Varies based on use	Varies based on use	Varies based on use	Varies based on use	Varies based on use	Varies based on use	Varies based on use	Varies based on use

**Figure 4**

## Definitions and Abbreviations

### General Definitions and Abbreviations

- ▶ **bgd:** billion gallons per day
- ▶ **bld:** billion liters per day
- ▶ **consumptive use:** that portion of water withdrawn or withheld from the Great Lakes basin and assumed to be lost or otherwise not returned to the Great Lakes basin due to evapotranspiration, incorporation into products, or other processes
- ▶ **Great Lakes surface water (GLSW):** the Great Lakes, their connecting channels (the St. Clair River, the Detroit River, the Niagara River and the St. Marys River), and the St. Lawrence River
- ▶ **groundwater (GW):** all subsurface water
- ▶ **interbasin diversion (positive):** water transferred from the Great Lakes basin into another watershed
- ▶ **interbasin diversion (negative):** water transferred from another watershed into the Great Lakes basin
- ▶ **intrabasin diversion (positive):** water transferred out of one Great Lakes watershed into another
- ▶ **intrabasin diversion (negative):** water transferred into one Great Lakes watershed from another
- ▶ **level of accuracy:** the quality of data based on percentage of total volume and rated as 1) measured; 2) partially measured or; 3) estimated,
- ▶ **level of aggregation:** the quality of data based on percentage of total volume and rated as 1) originating from site-specific sources or 2) originating from higher level aggregate sources, such as county or census databases
- ▶ **mgd:** million gallons per day
- ▶ **mld:** million liters per day
- ▶ **other surface water (OSW):** tributary streams, lakes, ponds, and reservoirs within the Great Lakes basin
- ▶ **principal facility:** facilities withdrawing in excess of the Great Lakes Charter uniform trigger level of 100,000 U.S. gallons/day (380,000 liters/day) average over a 30-day period. A principal facility is determined by the total withdrawal (or consumption) of all sources combined (Great Lakes surface water, other surface water, and groundwater) rather than a single source. The combined withdrawals (or consumption) of separate wells or operations undertaken by the same facility or company will be evaluated separately for the purpose of determining principal facility status unless those operations are covered under the same registration (or permit) or are physically contiguous. Principal facilities are a subset of all facilities in the database.
- ▶ **tgd:** trillion gallons per day
- ▶ **tld:** trillion liters per day
- ▶ **withdrawal amount:** water removed or taken from surface or groundwater (including hydroelectric use<sup>1</sup>)

---

<sup>1</sup> Under the draft water use information reporting protocols that will guide the implementation of the new water use information commitments set forth in the Great Lakes-St. Lawrence River Water Resources Compact and Agreement, hydroelectric will not be considered a “withdrawal”, but rather a “use.”

### Water Use Category Definitions<sup>2</sup>

1. **Public Water Supply:** Water withdrawn for all uses by public and private water suppliers and delivered to users that do not supply their own water. (Water suppliers provide water for a variety of uses such as residential, commercial, industrial, and public water use.)
2. **Self-Supply Domestic: (residential, commercial, institutional):** Water used for normal household purposes. Also referred to as residential water use, this category includes water used for drinking, food preparation, bathing, washing clothes and dishes, flushing toilets, and watering lawns. Commercial uses include water used by motels, hotels, restaurants, office buildings and institutions, both civilian and military. This category also includes water for mobile homes, hospitals, schools, fire fighting, air conditioning and other similar uses not covered under a public supply. In addition, this category includes amusement and recreational water uses such as snowmaking and water slides. The coefficient for domestic per capita water use is 75 gallons a day (U.S.) unless otherwise indicated by the reporting state or province.
3. **Self-Supply Irrigation:** Water artificially applied on lands to assist in the growing of crops and pastures or in the maintenance of recreational lands, such as parks and golf courses.
4. **Self-Supply Livestock:** Water used by horses, cattle, sheep, goats, hogs, poultry, and other commercially important animals. Water used in fish hatchery operations are also included under this category.
5. **Self-Supply Industrial (manufacturing and mining):** Industrial water includes water used in the manufacture of metals, chemicals, paper, and allied products. Mining water use includes water used in the extraction or washing of minerals; for example solids, such as coal and ores, and liquids such as crude petroleum and natural gas. Water used in quarrying and milling is also included in the industrial category. Brine extraction from oil and gas operations is not included. Withdrawals and consumptive uses for industrial and mining purposes (including dewatering operations) recorded under another category (e.g., public supply) will not be recorded here. Water used in a closed cycle (recirculation) will not be reported as a withdrawal. Other situations should be evaluated on a case-by-case basis.
6. **Self-Supply Thermoelectric Power (fossil fuel plants):** Water used by plants fueled by fossil fuels such as coal, oil or natural gas. Withdrawals and consumptive uses already recorded under another category (e.g., public supply) will not be reported here.
7. **Self-Supply Thermoelectric Power (nuclear plants):** Water used by plants fueled by nuclear generation. Withdrawals and consumptive uses already recorded under another category (e.g., public supply) will not be reported here.
8. **Self-Supply Hydroelectric Power:** Water used to drive turbines that generate electric power. This category includes both “instream use” where water is used on a once-through basis and “offstream use” where water is recycled through pumped-storage systems. Neither use is considered a consumptive use.
9. **Self-Supply - Other:** Water used for purposes not reported in categories one through nine. Examples include, but are not limited to, withdrawals for fish/wildlife, environmental, recreation, navigation, and water quality purposes. Specifically, water used to maintain levels for navigation, for recreation, for fish and wildlife habitat creation and enhancement (excluding fish hatchery operations included under Category 5), for flow augmentation (or diversion), for sanitation, pollution confinement, and other water quality purposes and agricultural activities (services) other than those directly related to irrigation such as field drainage are included. Water used in temporary or immediate emergency situations (e.g., fighting forest or peat fires) is also reported here.

---

<sup>2</sup> These definitions are used to implement the water use information commitments set forth in the Great Lakes Charter of 1985. Slight modifications to these water use category definitions will occur to implement the new water use information commitments set forth in the Great Lakes-St. Lawrence River Water Resources Compact and Agreement. These modifications will be realized when the regional database is updated in the near future.

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## ***II. GREAT LAKES BASIN SUMMARY TABLES***

Water Use by Jurisdiction  
Water Use by Basin  
Water Use by Category



# SUMMARY REPORT - GREAT LAKES BASIN

Units: Bgal(US)/d

Year Of Data: 2005

## Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	2.17	0.00	0.00	2.17	0.00	1.33	0.00
Indiana	2.43	1.75	0.14	4.32	0.00	0.00	0.19
Michigan	9.54	0.67	0.49	10.70	0.00	0.00	0.54
Minnesota	0.38	3.93	0.01	4.32	0.00	0.00	0.05
New York	132.95	180.34	0.14	313.42	0.00	0.04	0.31
Ohio	2.18	1.09	0.16	3.44	0.00	-0.01	0.19
Ontario	143.00	59.96	0.28	203.24	0.06	-4.01	0.28
Pennsylvania	0.04	0.00	0.00	0.04	0.00	0.00	0.01
Quebec	171.59	133.58	0.10	305.27	0.00	0.00	0.16
Wisconsin	3.36	0.02	0.19	3.58	0.00	0.00	0.12
<b>Total:</b>	<b>467.63</b>	<b>381.35</b>	<b>1.51</b>	<b>850.49</b>	<b>0.06</b>	<b>-2.64</b>	<b>1.83</b>

## Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	2.17	0.00	0.00	2.17	0.00	1.33	0.00
Indiana	2.43	1.75	0.11	4.29	0.00	0.00	0.18
Michigan							
Minnesota	0.38	3.93	0.01	4.31	0.00	0.00	0.04
New York	132.53	0.43	0.01	132.98	0.00	0.04	0.18
Ohio	2.18	1.09	0.09	3.36	0.00	-0.01	0.17
Ontario	0.49	0.38	0.09	0.96	0.06	0.00	0.11
Pennsylvania	0.04	0.00	0.00	0.04	0.00	0.00	0.01
Quebec	171.59	133.58	0.05	305.21	0.00	0.00	0.13
Wisconsin							
<b>Total:</b>	<b>311.80</b>	<b>141.16</b>	<b>0.36</b>	<b>453.32</b>	<b>0.06</b>	<b>1.36</b>	<b>0.83</b>

# SUMMARY REPORT - GREAT LAKES BASIN

Units: Bgal(US)/d

Year Of Data: 2005

## Water-Use by Basin - All Facilities

Basin	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Lake Superior	1.19	42.10	0.03	43.33	0.00	-4.01	0.08
Lake Michigan	11.64	2.18	0.67	14.49	0.00	1.33	0.60
Lake Huron	25.59	13.72	0.09	39.39	0.05	0.00	0.12
Lake Erie	56.97	1.45	0.39	58.81	5.82	-0.01	0.50
Lake Ontario	42.76	89.41	0.19	132.35	-5.80	0.04	0.34
St. Lawrence River	329.49	232.49	0.14	562.12	0.00	0.00	0.20
<b>Total:</b>	<b>467.63</b>	<b>381.35</b>	<b>1.51</b>	<b>850.49</b>	<b>0.06</b>	<b>-2.64</b>	<b>1.83</b>

## Water-Use by Basin - Principal Facilities

Basin	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Lake Superior	0.41	3.94	0.01	4.36	0.00	0.00	0.05
Lake Michigan	4.60	1.71	0.09	6.40	0.00	1.33	0.17
Lake Huron	0.04	0.07	0.02	0.13	0.05	0.00	0.01
Lake Erie	51.25	1.16	0.16	52.58	5.82	-0.01	0.26
Lake Ontario	2.33	0.61	0.02	2.95	-5.80	0.04	0.19
St. Lawrence River	253.18	133.67	0.05	386.90	0.00	0.00	0.15
<b>Total:</b>	<b>311.80</b>	<b>141.16</b>	<b>0.36</b>	<b>453.32</b>	<b>0.06</b>	<b>1.36</b>	<b>0.83</b>

# SUMMARY REPORT - GREAT LAKES BASIN

Units: Bgal(US)/d

Year Of Data: 2005

## Water-Use by Category - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	4.17	1.13	0.56	5.87	0.00	1.09	0.58
Domestic Supply	0.07	0.05	0.37	0.49	0.00	0.00	0.05
Irrigation	0.01	0.15	0.28	0.44	0.00	0.00	0.34
Livestock	0.01	0.01	0.11	0.14	0.00	0.00	0.09
Industrial	3.63	0.58	0.18	4.39	0.00	0.00	0.36
Fossil Fuel Power	13.92	1.69	0.00	15.62	0.00	0.00	0.16
Nuclear Power	15.26	0.00	0.00	15.26	0.00	0.00	0.21
Hydroelectric Power	430.31	377.48	0.00	807.79	0.00	-4.01	0.00
Other	0.25	0.25	0.00	0.50	0.06	0.27	0.04
<b>Total:</b>	<b>467.63</b>	<b>381.35</b>	<b>1.51</b>	<b>850.49</b>	<b>0.06</b>	<b>-2.64</b>	<b>1.83</b>

## Water-Use by Category - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	2.76	0.81	0.19	3.77	0.00	1.09	0.34
Domestic Supply	0.03	0.05	0.06	0.14	0.00	0.00	0.01
Irrigation	0.00	0.03	0.03	0.06	0.00	0.00	0.05
Livestock	0.00	0.00	0.00	0.01	0.00	0.00	0.01
Industrial	2.17	0.47	0.08	2.71	0.00	0.00	0.24
Fossil Fuel Power	4.81	1.23	0.00	6.04	0.00	0.00	0.09
Nuclear Power	1.48	0.00	0.00	1.48	0.00	0.00	0.08
Hydroelectric Power	300.30	138.35	0.00	438.65	0.00	0.00	0.00
Other	0.25	0.21	0.00	0.47	0.06	0.27	0.00
<b>Total:</b>	<b>311.80</b>	<b>141.16</b>	<b>0.36</b>	<b>453.32</b>	<b>0.06</b>	<b>1.36</b>	<b>0.83</b>

### ***III. JURISDICTION TABLES AND ANALYSES***

Each jurisdictional summary includes a water use analysis and three tables:

Withdrawals, Diversions and Consumptive Uses

Withdrawals by Source

Jurisdiction Totals

Illinois

Indiana

Michigan

Minnesota

New York

Ohio

Ontario

Pennsylvania

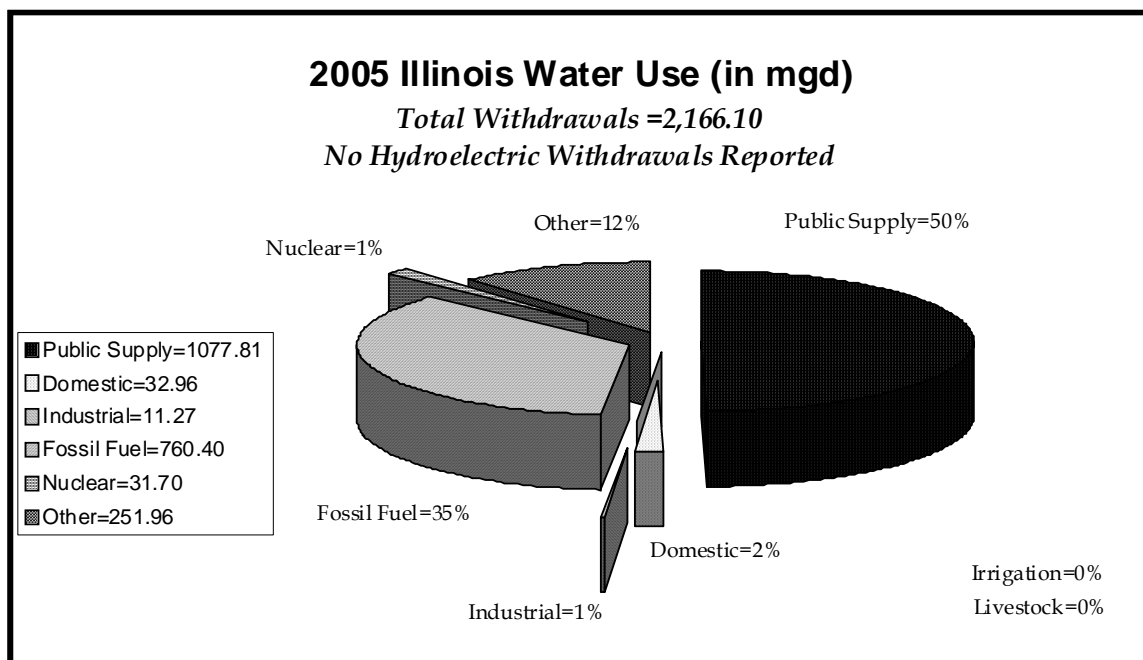
Quebec

Wisconsin

## Illinois

**Data Sources:** Water use data for Illinois were provided by the Department of Natural Resources--Office of Water Resources, and the Illinois State Water Survey. Please contact James Casey at 312/793-5947 or [jcasey@illinois.gov](mailto:jcasey@illinois.gov) with specific questions regarding Illinois' data.

**Withdrawals:** Illinois' water withdrawals from Lake Michigan in 2005 totaled 2,166.1 mgd – a 6 percent increase in water usage from 2004 (2,044.42 mgd).



**Figure 5**

**Consumptive Use:** No consumptive use information was reported.

**Interbasin Diversions:** Total diversions from the Lake Michigan basin in 2005 were 1332.46 mgd, an increase of 9 percent from the 2004 figure (1,221.81 mgd). Public water supply accounted for about 81 percent of these diversions. All diversions for Illinois are outgoing interbasin diversions—water transferred from the Chicago River in the Great Lakes basin to the Illinois River in the Mississippi River basin.

**Data Quality:** Illinois' withdrawal data for this report were 100% measured; the level of aggregation was 100% site-specific.

# JURISDICTION REPORT- Illinois

Withdrawals, Diversions Units: Mgal(US)/d  
and Consumptive Uses Year Of Data: 2005

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Michigan							
	Public Supply	1077.81	1077.81	0.00	1077.81	1077.81	0.00
	Domestic Supply	32.96	2.67	0.00	32.96	2.67	0.00
	Irrigation		0.00		0.00	0.00	
	Livestock		0.00		0.00	0.00	
	Industrial	11.27	0.02	0.00	11.27	0.02	0.00
	Fossil Fuel Power	760.40	0.00	0.00	760.40	0.00	0.00
	Nuclear Power	31.70	0.00	0.00	31.70	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	251.96	251.96	0.00	251.96	251.96	0.00
	Total:	2166.09	1332.46	0.00	2166.09	1332.46	0.00
Grand Total:		2166.09	1332.46	0.00	2166.09	1332.46	0.00

# JURISDICTION REPORT- Illinois

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2005

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Michigan							
	Public Supply	1077.81	0.00	0.00	1077.81	0.00	0.00
	Domestic Supply	32.94	0.00	0.01	32.94	0.00	0.01
	Irrigation				0.00	0.00	0.00
	Livestock				0.00	0.00	0.00
	Industrial	11.27	0.00	0.00	11.27	0.00	0.00
	Fossil Fuel Power	760.40	0.00	0.00	760.40	0.00	0.00
	Nuclear Power	31.70	0.00	0.00	31.70	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	251.96	0.00	0.00	251.96	0.00	0.00
	Total:	2166.08	0.00	0.01	2166.08	0.00	0.01
Grand Total:		2166.08	0.00	0.01	2166.08	0.00	0.01

# JURISDICTION REPORT- Illinois

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2005

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	1077.81	0.00	0.00	1077.81	0.00	1077.81	0.00
Domestic Supply	32.94	0.00	0.01	32.96	0.00	2.67	0.00
Irrigation					0.00	0.00	
Livestock					0.00	0.00	
Industrial	11.27	0.00	0.00	11.27	0.00	0.02	0.00
Fossil Fuel Power	760.40	0.00	0.00	760.40	0.00	0.00	0.00
Nuclear Power	31.70	0.00	0.00	31.70	0.00	0.00	0.00
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	251.96	0.00	0.00	251.96	0.00	251.96	0.00

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	1077.81	0.00	0.00	1077.81	0.00	1077.81	0.00
Domestic Supply	32.94	0.00	0.01	32.96	0.00	2.67	0.00
Irrigation	0.00	0.00	0.00	0.00	0.00	0.00	
Livestock	0.00	0.00	0.00	0.00	0.00	0.00	
Industrial	11.27	0.00	0.00	11.27	0.00	0.02	0.00
Fossil Fuel Power	760.40	0.00	0.00	760.40	0.00	0.00	0.00
Nuclear Power	31.70	0.00	0.00	31.70	0.00	0.00	0.00
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	251.96	0.00	0.00	251.96	0.00	251.96	0.00

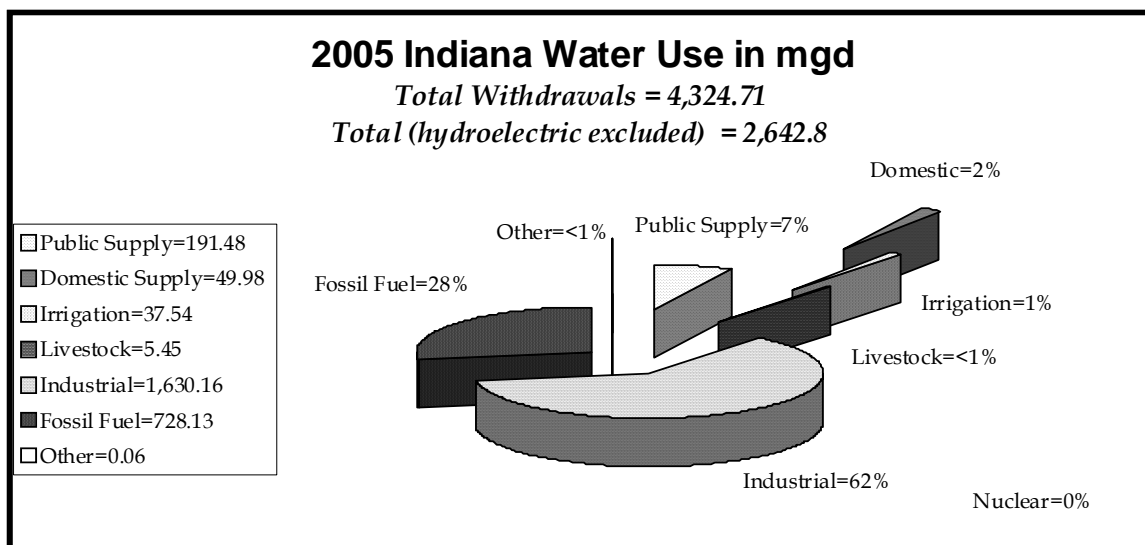


## Indiana

**Data Sources:** The Indiana Department of Natural Resources—Division of Water compiled the 2005 water use data for the Indiana Lake Erie and Lake Michigan basins.

The Indiana Business Research Center at Indiana University provided population estimates for counties used in calculating self-supply domestic withdrawals. The Indiana Agricultural Statistics service at Purdue University provided livestock estimates by county. The local office of USGS Water Resources Division provided estimates of percent of population by county on domestic wells. Hydroelectric water use data are from the Department of Energy's Energy Information Administration website located at [www.eia.doe.gov/cneaf/electricity](http://www.eia.doe.gov/cneaf/electricity). Please contact Ralph Spaeth at 317/234-1101 or [rspaeth@dnr.in.gov](mailto:rspaeth@dnr.in.gov) with questions regarding Indiana's data.

**Withdrawals:** In 2005, total use was 4,324.71 mgd, down by 11 percent from the 2004 figure of 4,856.86 mgd. Of this amount, 98.5 percent of the water used was from the Lake Michigan basin. The total withdrawal excludes hydroelectric power from Lake Michigan which accounted for 1681.91 mgd. The primary use of Lake Michigan water was industrial, at 1,620.63 mgd, or 61 percent. The primary use of Lake Erie water was public supply, at 44.29 mgd, or more than 70 percent.



**Figure 6**

**Consumptive Use:** The total consumptive use of water in Indiana's portion of the Great Lakes basin was 179.00 mgd, compared to 177.71 mgd in 2004. In the Lake Michigan basin, industrial water use category was the largest consumptive use, at 57 percent (97.20 mgd of a total of 170.60 mgd) and in the Lake Erie basin public supply was the largest consumptive use, at 79 percent (6.64 mgd of a total of 8.40 mgd).

**Interbasin Diversions:** A diversion by the city of Valparaiso withdrew 4.02 mgd groundwater for public supply from the Kankakee River basin which is discharged as treated sewage into Salt Creek which is in the Lake Michigan basin. A diversion from the Lake Erie Basin for public supply uses is 6.65 mgd.

**Data Quality:** Indiana's withdrawal data for this report were 4 percent measured, 55 percent partially measured, and 41 percent calculated or estimated; the level of aggregation was 99 percent site-specific and 1 percent aggregated.

# JURISDICTION REPORT- Indiana

Withdrawals, Diversions Units: Mgal(US)/d  
and Consumptive Uses Year Of Data: 2005

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Michigan							
	Public Supply	147.19	-4.02	22.08	146.91	0.00	22.04
	Domestic Supply	43.57	0.00	6.53	21.29	0.00	3.19
	Irrigation	36.04	0.00	32.44	35.22	0.00	31.70
	Livestock	4.52	0.00	3.61	2.39	0.00	1.91
	Industrial	1620.63	0.00	97.23	1620.08	0.00	97.20
	Fossil Fuel Power	727.86	0.00	14.56	727.86	0.00	14.56
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	1681.91	0.00	0.00	1681.91	0.00	0.00
	Other	0.06	0.00	0.01	0.00	0.00	0.00
	Total:	4261.78	-4.02	176.46	4235.66	0.00	170.60
Lake Erie							
	Public Supply	44.29	6.65	6.64	44.24	0.00	6.64
	Domestic Supply	6.41	0.00	0.96	0.45	0.00	0.07
	Irrigation	1.50	0.00	1.36	1.24	0.00	1.12
	Livestock	0.93	0.00	0.75	0.00	0.00	0.00
	Industrial	9.53	0.00	0.58	9.34	0.00	0.56
	Fossil Fuel Power	0.27	0.00	0.01	0.27	0.00	0.01
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total:	62.93	6.65	10.30	55.54	0.00	8.40
Grand Total:		4324.71	2.63	186.76	4291.20	0.00	179.00

# JURISDICTION REPORT- Indiana

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2005

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Michigan							
	Public Supply	96.87	0.00	50.32	96.87	0.00	50.04
	Domestic Supply	0.00	13.88	29.69	0.00	13.87	7.42
	Irrigation	0.00	6.71	29.33	0.00	6.42	28.80
	Livestock	0.00	1.14	3.38	0.00	1.14	1.25
	Industrial	1608.91	4.31	7.41	1608.89	4.31	6.88
	Fossil Fuel Power	727.86	0.00	0.00	727.86	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	1681.91	0.00	0.00	1681.91	0.00
	Other	0.00	0.01	0.05	0.00	0.00	0.00
	Total:	2433.64	1707.96	120.18	2433.62	1707.65	94.39
Lake Erie							
	Public Supply	0.00	33.27	11.02	0.00	33.27	10.97
	Domestic Supply	0.00	0.00	6.41	0.00	0.00	0.45
	Irrigation	0.00	0.45	1.05	0.00	0.29	0.95
	Livestock	0.00	0.00	0.93	0.00	0.00	0.00
	Industrial	0.00	4.94	4.59	0.00	4.94	4.40
	Fossil Fuel Power	0.00	0.00	0.27	0.00	0.00	0.27
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total:	0.00	38.66	24.27	0.00	38.50	17.04
Grand Total:		2433.64	1746.62	144.45	2433.62	1746.15	111.43

# JURISDICTION REPORT- Indiana

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2005

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	96.87	33.27	61.34	191.48	0.00	2.63	28.72
Domestic Supply	0.00	13.88	36.10	49.98	0.00	0.00	7.49
Irrigation	0.00	7.16	30.38	37.54	0.00	0.00	33.80
Livestock	0.00	1.14	4.31	5.45	0.00	0.00	4.36
Industrial	1608.91	9.25	12.00	1630.16	0.00	0.00	97.81
Fossil Fuel Power	727.86	0.00	0.27	728.13	0.00	0.00	14.57
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	1681.91	0.00	1681.91	0.00	0.00	0.00
Other	0.00	0.01	0.05	0.06	0.00	0.00	0.01

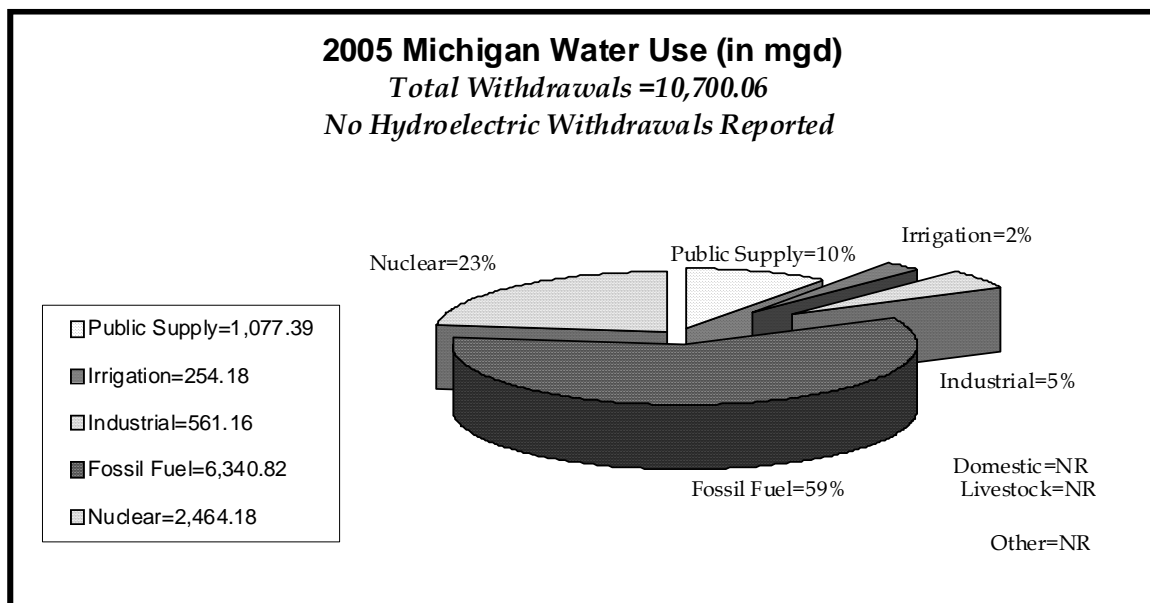
## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	96.87	33.27	61.01	191.15	0.00	0.00	28.68
Domestic Supply	0.00	13.87	7.87	21.74	0.00	0.00	3.26
Irrigation	0.00	6.71	29.75	36.46	0.00	0.00	32.82
Livestock	0.00	1.14	1.25	2.39	0.00	0.00	1.91
Industrial	1608.89	9.25	11.28	1629.42	0.00	0.00	97.76
Fossil Fuel Power	727.86	0.00	0.27	728.13	0.00	0.00	14.57
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	1681.91	0.00	1681.91	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## Michigan

**Data Sources:** The Michigan Department of Environmental Quality (DEQ) submitted water use data for 2005. All data are directly reported to the Michigan DEQ by the facilities within each category except irrigation, which is estimated and divided into agricultural and nonagricultural irrigation uses (e.g., golf course, parks, etc.). Agricultural irrigation is estimated using federal Agricultural Census data and a water use estimation model developed for Michigan. Nonagricultural irrigation facilities report directly to the DEQ. Please contact Andrew LeBaron at 517/241-1435 or lebarona@michigan.gov with questions regarding Michigan's water use data.

**Withdrawals:** Water withdrawals for the Lake Superior, Lake Michigan, Lake Huron, and Lake Erie basins of Michigan were approximately 10,700.06 mgd, a decrease of between 2.3 percent from 2004. Of the four basins, the state of Michigan withdraws the most—about 48 percent—from Lake Erie (5,150.06 mgd) and the least—about 3 percent— from Lake Superior (295.66 mgd). Thermoelectric power-fossil fuel, at 60 percent, was the largest withdrawal category for the state of Michigan.



**Figure 7**

**Consumptive Use:** Consumptive uses in the Michigan portion of the Great Lakes basin were calculated to be approximately 542.74 mgd; irrigation was the largest single consumptive use at 228.77 mgd, or about 42 percent of the total consumptive use.

**Interbasin Diversions:** None reported.

**Data Quality:** Michigan's withdrawal data for this report were 92 percent measured, 8 percent calculated or estimated; the level of aggregation was 98 percent site-specific and 2 percent aggregated.

# JURISDICTION REPORT- Michigan

Withdrawals, Diversions and Consumptive Uses Units: Mgal(US)/d  
Year Of Data: 2005

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Superior							
	Public Supply	11.61	0.00	1.45			
	Domestic Supply		0.00				
	Irrigation	0.28	0.00	0.26			
	Livestock		0.00				
	Industrial	13.63	0.00	1.36			
	Fossil Fuel Power	270.13	0.00	3.24			
	Nuclear Power		0.00				
	Hydroelectric Power		0.00				
	Other		0.00				
	Total:	295.66	0.00	6.31			
Lake Michigan							
	Public Supply	302.91	0.00	37.86			
	Domestic Supply	1.99	0.00	0.25			
	Irrigation	201.69	0.00	181.52			
	Livestock		0.00				
	Industrial	355.34	0.00	35.53			
	Fossil Fuel Power	1256.92	0.00	15.08			
	Nuclear Power	2412.79	0.00	45.84			
	Hydroelectric Power		0.00				
	Other		0.00				
	Total:	4531.65	0.00	316.10			
Lake Huron							
	Public Supply	125.43	0.00	15.68			
	Domestic Supply	0.02	0.00	0.00			
	Irrigation	28.04	0.00	25.23			
	Livestock		0.00				
	Industrial	26.27	0.00	2.63			
	Fossil Fuel Power	542.82	0.00	6.51			
	Nuclear Power		0.00				
	Hydroelectric Power		0.00				
	Other	0.12	0.00	0.00			
	Total:	722.70	0.00	50.06			

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Erie							
	Public Supply	637.44	0.00	79.68			
	Domestic Supply	0.19	0.00	0.02			
	Irrigation	24.17	0.00	21.75			
	Livestock		0.00				
	Industrial	165.91	0.00	16.59			
	Fossil Fuel Power	4270.95	0.00	51.25			
	Nuclear Power	51.39	0.00	0.98			
	Hydroelectric Power		0.00				
	Other		0.00				
	Total:	5150.06	0.00	170.28			
Grand Total:		10700.06	0.00	542.74			

# JURISDICTION REPORT- Michigan

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2005

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Superior							
	Public Supply	3.86	0.00	7.75			
	Domestic Supply						
	Irrigation	0.01	0.15	0.13			
	Livestock						
	Industrial	13.51	0.00	0.13			
	Fossil Fuel Power	270.13	0.00	0.00			
	Nuclear Power						
	Hydroelectric Power						
	Other						
	Total:	287.51	0.15	8.00			
Lake Michigan							
	Public Supply	136.88	0.47	165.56			
	Domestic Supply	0.04	0.13	1.82			
	Irrigation	2.10	62.80	136.80			
	Livestock						
	Industrial	198.20	97.87	59.28			
	Fossil Fuel Power	963.77	290.28	2.87			
	Nuclear Power	2412.79	0.00	0.00			
	Hydroelectric Power						
	Other						
	Total:	3713.77	451.55	366.32			
Lake Huron							
	Public Supply	94.34	0.67	30.42			
	Domestic Supply	0.00	0.00	0.02			
	Irrigation	3.35	9.75	14.94			
	Livestock						
	Industrial	21.16	2.07	3.04			
	Fossil Fuel Power	536.88	4.84	1.09			
	Nuclear Power						
	Hydroelectric Power						
	Other	0.00	0.00	0.12			
	Total:	655.74	17.33	49.64			



Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Erie							
	Public Supply	580.58	16.06	40.81			
	Domestic Supply	0.00	0.00	0.19			
	Irrigation	0.54	13.11	10.52			
	Livestock						
	Industrial	141.51	11.55	12.85			
	Fossil Fuel Power	4108.73	162.10	0.12			
	Nuclear Power	51.39	0.00	0.00			
	Hydroelectric Power						
	Other						
	Total:	4882.74	202.82	64.49			
Grand Total:		9539.76	671.85	488.45			

# JURISDICTION REPORT- Michigan

Jurisdiction Totals

Units: Mgal(US)/d  
Year Of Data: 2005

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	815.66	17.19	244.54	1077.39	0.00	0.00	134.67
Domestic Supply	0.04	0.13	2.04	2.21	0.00	0.00	0.28
Irrigation	6.00	85.81	162.38	254.18	0.00	0.00	228.77
Livestock					0.00	0.00	
Industrial	374.37	111.50	75.29	561.16	0.00	0.00	56.12
Fossil Fuel Power	5879.51	457.23	4.09	6340.82	0.00	0.00	76.09
Nuclear Power	2464.18	0.00	0.00	2464.18	0.00	0.00	46.82
Hydroelectric Power					0.00	0.00	
Other	0.00	0.00	0.12	0.12	0.00	0.00	0.00

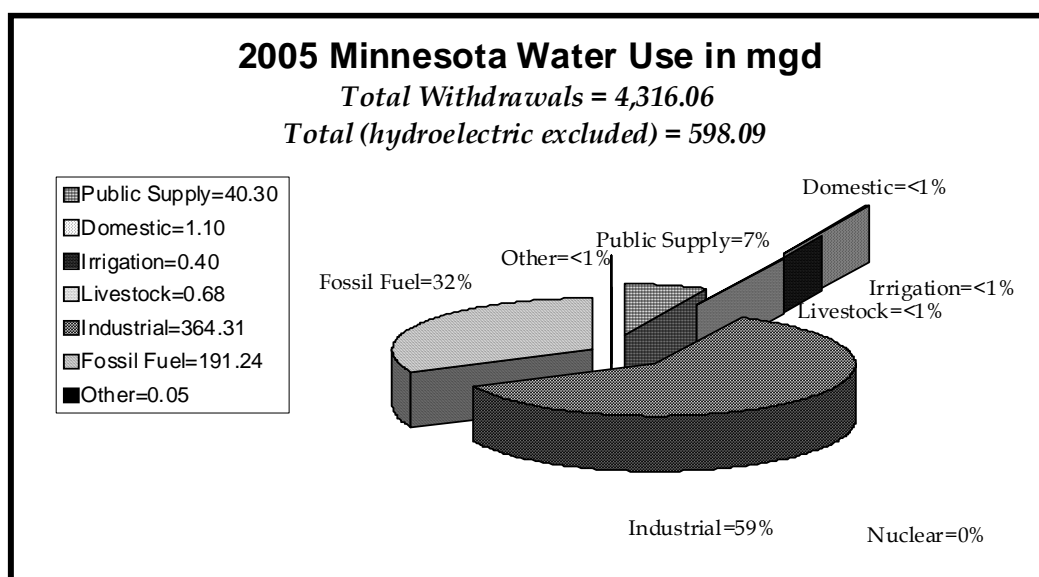
## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply							
Domestic Supply							
Irrigation							
Livestock							
Industrial							
Fossil Fuel Power							
Nuclear Power							
Hydroelectric Power							
Other							

## Minnesota

**Data Sources:** Water use data for Minnesota were provided by the Minnesota Department of Natural Resources, Division of Waters. Please contact Sean Hunt at 651/259-5679 or sean.hunt@dnr.state.mn.us with specific questions regarding Minnesota's water use data.

**Withdrawals:** Total water use from the Minnesota portion of the Lake Superior basin were 4,316.06 mgd, an increase of 3 percent from 2004. Water used for hydroelectric power generation purposes (3,717.98 mgd), accounted for over 86 percent of Minnesota's total water use in 2005. This was an increase of just over 3 percent from 2004. Of the remainder (598.08 mgd), industrial use accounted for over half.



**Figure 8**

**Consumptive Use:** The largest consumptive use was calculated to be industrial, at 36.43 mgd, or 80 percent of total consumption. Public supply was the second largest consumptive use at 4.03 mgd, or 9 percent of Minnesota's total consumptive use.

**Interbasin Diversions:** None reported.

**Data Quality:** Minnesota's withdrawal data for this report were 100% measured; the level of aggregation was 100% site-specific.

# JURISDICTION REPORT- Minnesota

Withdrawals, Diversions and Consumptive Uses Units: Mgal(US)/d  
Year Of Data: 2005

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Superior							
	Public Supply	40.30	0.00	4.03	39.39	0.00	3.94
	Domestic Supply	1.10	0.00	0.11	1.06	0.00	0.10
	Irrigation	0.40	0.00	0.37	0.12	0.00	0.11
	Livestock	0.68	0.00	0.61	0.62	0.00	0.56
	Industrial	364.31	0.00	36.43	363.99	0.00	36.40
	Fossil Fuel Power	191.24	0.00	3.81	190.23	0.00	3.81
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	3717.98	0.00	0.00	3717.98	0.00	0.00
	Other	0.05	0.00	0.00	0.00	0.00	0.00
	Total:	4316.06	0.00	45.36	4313.39	0.00	44.92
Grand Total:		4316.06	0.00	45.36	4313.39	0.00	44.92

# JURISDICTION REPORT- Minnesota

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2005

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Superior	Public Supply	32.32	1.99	5.99	32.27	1.31	5.81
	Domestic Supply	0.68	0.41	0.01	0.65	0.41	0.00
	Irrigation	0.04	0.35	0.01	0.00	0.12	0.00
	Livestock	0.68	0.00	0.00	0.62	0.00	0.00
	Industrial	298.70	65.58	0.03	298.67	65.32	0.00
	Fossil Fuel Power	44.30	146.83	0.11	44.29	145.94	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	3717.98	0.00	0.00	3717.98	0.00
	Other	0.00	0.00	0.05	0.00	0.00	0.00
	Total:	376.72	3933.14	6.20	376.50	3931.08	5.81
Grand Total:		376.72	3933.14	6.20	376.50	3931.08	5.81

# JURISDICTION REPORT- Minnesota

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2005

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	32.32	1.99	5.99	40.30	0.00	0.00	4.03
Domestic Supply	0.68	0.41	0.01	1.10	0.00	0.00	0.11
Irrigation	0.04	0.35	0.01	0.40	0.00	0.00	0.37
Livestock	0.68	0.00	0.00	0.68	0.00	0.00	0.61
Industrial	298.70	65.58	0.03	364.31	0.00	0.00	36.43
Fossil Fuel Power	44.30	146.83	0.11	191.24	0.00	0.00	3.81
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	3717.98	0.00	3717.98	0.00	0.00	0.00
Other	0.00	0.00	0.05	0.05	0.00	0.00	0.00

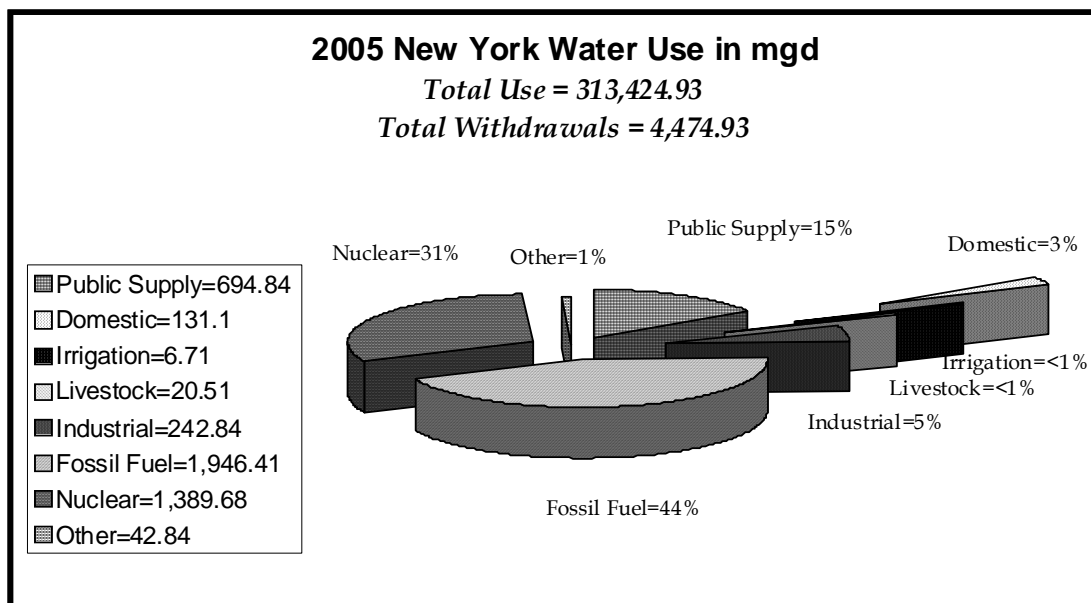
## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	32.27	1.31	5.81	39.39	0.00	0.00	3.94
Domestic Supply	0.65	0.41	0.00	1.06	0.00	0.00	0.10
Irrigation	0.00	0.12	0.00	0.12	0.00	0.00	0.11
Livestock	0.62	0.00	0.00	0.62	0.00	0.00	0.56
Industrial	298.67	65.32	0.00	363.99	0.00	0.00	36.40
Fossil Fuel Power	44.29	145.94	0.00	190.23	0.00	0.00	3.81
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	3717.98	0.00	3717.98	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## New York

**Data Sources:** Water use data collection in New York is performed by the Department of Environmental Conservation—Bureau of Water Resource Management. Please contact Michael Holt at 518/402-8099 or [mdholt@gw.dec.state.ny.us](mailto:mdholt@gw.dec.state.ny.us) with questions regarding New York's water use data.

**Withdrawals:** In 2005, New York's total water use was 313,424.93 mgd. Total withdrawals, not including hydroelectric power, were 4,474.93 mgd, compared with 5,199.25 in 2004. Hydroelectric power uses of 308,950 mgd represented 98.6 percent of total withdrawals in New York far exceeding other uses. The next largest categories of use were fossil fuel and nuclear power.



**Figure 9**

**Consumptive Use:** New York reported total consumptive uses of 309.40 mgd. Lake Ontario comprised 200.46 mgd or 65 percent; Lake Erie comprised 94.30 mgd or 30 percent; the St. Lawrence River comprised 14.64 mgd or 5 percent. The largest categories of consumptive use were public supply (69.49 mgd) and nuclear power (69.48 mgd), both uses are about at 45 percent of total consumptive use.

**Interbasin Diversions:** Two outgoing interbasin diversions occur between the Lake Ontario basin and the Mohawk River basin. A withdrawal of 9.59 mgd from the Tagasoke Reservoir on the East Branch of Fish Creek (Lake Ontario basin) is made by the city of Rome for public water supply and emptied into the Mohawk River basin. The Forestport/Black River Canal (Lake Ontario basin) was decommissioned in the 1980s but still allows for residual flow of up to 32 mgd into the Mohawk River basin.

**Intrabasin Diversions:** The western section of the Erie Canal withdraws up to 711 mgd from the Niagara River during the navigation season (May through November) and returns it through tributaries of Lake Ontario, resulting in no net loss or gain to the basin.

**Data Quality:** New York's withdrawal data for this report were 100 percent partially measured; the level of aggregation was 100 percent aggregated.

# JURISDICTION REPORT- New York

Withdrawals, Diversions and Consumptive Uses Units: Mgal(US)/d  
Year Of Data: 2005

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Erie							
	Public Supply	264.02	0.00	26.40		0.00	
	Domestic Supply	22.94	0.00	2.29	0.00	0.00	0.00
	Irrigation	0.31	0.00	0.28	0.31	0.00	0.28
	Livestock	4.24	0.00	3.82		0.00	
	Industrial	158.58	0.00	39.65	157.48	0.00	39.38
	Fossil Fuel Power	1093.00	0.00	21.86	1093.00	0.00	21.86
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	47777.00	0.00	0.00	47777.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total:	49320.09	0.00	94.30	49027.79	0.00	61.52
Lake Ontario							
	Public Supply	390.07	9.59	39.01		9.59	0.00
	Domestic Supply	92.92	0.00	9.29	31.03	0.00	3.10
	Irrigation	6.29	0.00	5.66	6.29	0.00	5.66
	Livestock	11.19	0.00	10.07		0.00	6.53
	Industrial	68.69	0.00	17.18	68.69	0.00	17.18
	Fossil Fuel Power	853.35	0.00	17.07	853.35	0.00	17.07
	Nuclear Power	1389.68	0.00	69.48	1389.68	0.00	69.48
	Hydroelectric Power	80908.00	0.00	0.00	0.00	0.00	0.00
	Other	38.68	32.00	32.70	6.68	32.00	0.03
	Total:	83758.87	41.59	200.46	2355.72	41.59	119.05
St. Lawrence River							
	Public Supply	40.75	0.00	4.08		0.00	
	Domestic Supply	15.24	0.00	1.53	0.57	0.00	0.06
	Irrigation	0.11	0.00	0.10	0.11	0.00	0.04
	Livestock	5.08	0.00	4.57		0.00	
	Industrial	15.57	0.00	3.94	15.57	0.00	3.90
	Fossil Fuel Power	0.06	0.00	0.00	0.06	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	180265.00	0.00	0.00	81573.00	0.00	0.00
	Other	4.16	0.00	0.42	4.16	0.00	0.42
	Total:	180345.97	0.00	14.64	81593.47	0.00	4.42
Grand Total:		313424.93	41.59	309.40	132976.98	41.59	184.99



# JURISDICTION REPORT- New York

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2005

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Erie							
	Public Supply	184.58	72.12	7.32			
	Domestic Supply	12.33	0.00	10.61	0.00	0.00	0.00
	Irrigation	0.16	0.15	0.00	0.16	0.15	0.00
	Livestock	1.51	0.00	2.73			
	Industrial	156.50	2.05	0.03	156.50	0.95	0.03
	Fossil Fuel Power	1093.00	0.00	0.00	1093.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	47777.00	0.00	0.00	47777.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total:	49225.08	74.32	20.69	49026.66	1.10	0.03
Lake Ontario							
	Public Supply	187.28	170.51	32.28			
	Domestic Supply	21.10	31.03	40.79	0.00	31.03	0.00
	Irrigation	0.00	6.17	0.12	0.00	6.17	0.12
	Livestock	3.93	0.00	7.26			
	Industrial	24.90	33.52	10.27	24.90	33.52	10.27
	Fossil Fuel Power	509.77	343.58	0.00	509.77	343.58	0.00
	Nuclear Power	1389.68	0.00	0.00	1389.68	0.00	0.00
	Hydroelectric Power	0.00	80908.00	0.00	0.00	0.00	0.00
	Other	0.00	38.43	0.25	0.00	6.43	0.25
	Total:	2136.66	81531.24	90.97	1924.35	420.73	10.64
St. Lawrence River							
	Public Supply	2.80	32.47	5.48			
	Domestic Supply	2.55	0.57	12.12	0.00	0.57	0.00
	Irrigation	0.00	0.11	0.00	0.00	0.11	0.00
	Livestock	1.77	0.00	3.31			
	Industrial	5.58	7.02	2.97	5.58	7.02	2.97
	Fossil Fuel Power	0.06	0.00	0.00	0.06	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	81573.00	98692.00	0.00	81573.00	0.00	0.00
	Other	0.00	4.16	0.00	0.00	4.16	0.00
	Total:	81585.76	98736.33	23.88	81578.64	11.86	2.97
Grand Total:		132947.50	180341.89	135.54	132529.65	433.69	13.64

# JURISDICTION REPORT- New York

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2005

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	374.66	275.10	45.08	694.84	0.00	9.59	69.49
Domestic Supply	35.98	31.60	63.52	131.10	0.00	0.00	13.11
Irrigation	0.16	6.43	0.12	6.71	0.00	0.00	6.04
Livestock	7.21	0.00	13.30	20.51	0.00	0.00	18.46
Industrial	186.98	42.59	13.27	242.84	0.00	0.00	60.77
Fossil Fuel Power	1602.83	343.58	0.00	1946.41	0.00	0.00	38.93
Nuclear Power	1389.68	0.00	0.00	1389.68	0.00	0.00	69.48
Hydroelectric Power	129350.00	179600.00	0.00	308950.00	0.00	0.00	0.00
Other	0.00	42.59	0.25	42.84	0.00	32.00	33.12

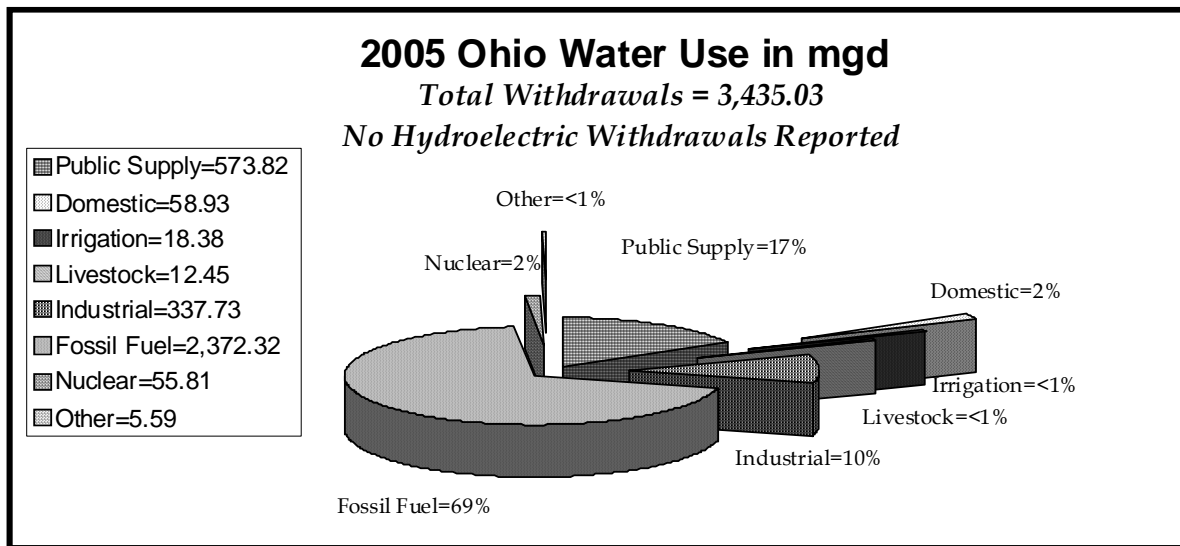
## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply					0.00	9.59	0.00
Domestic Supply	0.00	31.60	0.00	31.60	0.00	0.00	3.16
Irrigation	0.16	6.43	0.12	6.71	0.00	0.00	5.98
Livestock					0.00	0.00	6.53
Industrial	186.98	41.49	13.27	241.74	0.00	0.00	60.46
Fossil Fuel Power	1602.83	343.58	0.00	1946.41	0.00	0.00	38.93
Nuclear Power	1389.68	0.00	0.00	1389.68	0.00	0.00	69.48
Hydroelectric Power	129350.00	0.00	0.00	129350.00	0.00	0.00	0.00
Other	0.00	10.59	0.25	10.84	0.00	32.00	0.45

## Ohio

**Data Sources:** Water use data for Ohio are collected by the Ohio Department of Natural Resources-Division of Water, the Ohio Environmental Protection Agency, and the U.S. Geological Survey. Please contact Lenn Black at [leonard.black@dnr.state.oh.us](mailto:leonard.black@dnr.state.oh.us) or 614/265-6758 with questions regarding Ohio's water use data.

**Withdrawals:** Total withdrawals from the Ohio Lake Erie basin for 2005 were 3,435.03 mgd—an increase of 9 percent from the 2004 figure of 3,145.17 mgd. Thermoelectric-fossil fuel was by far the largest use of water at 2,372.32 mgd (69%); public supply was the second largest withdrawal at 573.82 mgd (17%).



**Figure 10**

**Consumptive Use:** Total consumptive uses were calculated to be 186.98 mgd. Public supply represents the largest consumptive use sector at 86.08 mgd and accounts for 46 percent of the total. The next three largest consumptive uses were industrial facilities at 33.77 mgd, thermoelectric - fossil fuel at 23.73 mgd and irrigation at 16.54 mgd.

**Interbasin Diversions:** Two Lake Erie basin public water systems provided drinking water to service areas outside the basin without return, resulting in total outgoing diversions of 0.32 mgd. Outflows from an Ohio & Erie Canal feeder lake resulted in a diversion into the Lake Erie basin of 11.52 mgd.

**Data Quality:** Ohio's withdrawal data for this report were 2 percent calculated or estimated, and 98 percent partially measured; the level of aggregation was 2 percent aggregated and 98 percent site-specific.

# JURISDICTION REPORT- Ohio

Withdrawals, Diversions Units: Mgal(US)/d  
and Consumptive Uses Year Of Data: 2005

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Erie							
	Public Supply	573.82	0.32	86.08	570.13	0.32	85.53
	Domestic Supply	58.93	0.00	8.84	0.37	0.00	0.06
	Irrigation	18.38	0.00	16.54	16.57	0.00	14.92
	Livestock	12.45	0.00	9.96	0.67	0.00	0.54
	Industrial	337.73	0.00	33.77	337.07	0.00	33.71
	Fossil Fuel Power	2372.32	0.00	23.73	2372.31	0.00	23.73
	Nuclear Power	55.81	0.00	5.58	55.81	0.00	5.58
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	5.59	-11.52	2.48	5.45	-11.52	2.37
	Total:	3435.03	-11.20	186.98	3358.38	-11.20	166.44
Grand Total:		3435.03	-11.20	186.98	3358.38	-11.20	166.44

# JURISDICTION REPORT- Ohio

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2005

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Erie	Public Supply	428.84	108.45	36.53	428.84	108.12	33.17
	Domestic Supply	0.37	0.07	58.49	0.37	0.00	0.00
	Irrigation	0.24	14.38	3.76	0.23	13.24	3.10
	Livestock	0.00	1.76	10.69	0.00	0.00	0.67
	Industrial	57.49	227.60	52.64	57.49	227.46	52.12
	Fossil Fuel Power	1635.79	736.53	0.00	1635.78	736.53	0.00
	Nuclear Power	55.81	0.00	0.00	55.81	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.46	4.68	0.45	0.46	4.63	0.36
	Total:	2179.00	1093.47	162.56	2178.98	1089.98	89.42
Grand Total:		2179.00	1093.47	162.56	2178.98	1089.98	89.42

# JURISDICTION REPORT- Ohio

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2005

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	428.84	108.45	36.53	573.82	0.00	0.32	86.08
Domestic Supply	0.37	0.07	58.49	58.93	0.00	0.00	8.84
Irrigation	0.24	14.38	3.76	18.38	0.00	0.00	16.54
Livestock	0.00	1.76	10.69	12.45	0.00	0.00	9.96
Industrial	57.49	227.60	52.64	337.73	0.00	0.00	33.77
Fossil Fuel Power	1635.79	736.53	0.00	2372.32	0.00	0.00	23.73
Nuclear Power	55.81	0.00	0.00	55.81	0.00	0.00	5.58
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.46	4.68	0.45	5.59	0.00	-11.52	2.48

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	428.84	108.12	33.17	570.13	0.00	0.32	85.53
Domestic Supply	0.37	0.00	0.00	0.37	0.00	0.00	0.06
Irrigation	0.23	13.24	3.10	16.57	0.00	0.00	14.92
Livestock	0.00	0.00	0.67	0.67	0.00	0.00	0.54
Industrial	57.49	227.46	52.12	337.07	0.00	0.00	33.71
Fossil Fuel Power	1635.78	736.53	0.00	2372.31	0.00	0.00	23.73
Nuclear Power	55.81	0.00	0.00	55.81	0.00	0.00	5.58
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.46	4.63	0.36	5.45	0.00	-11.52	2.37

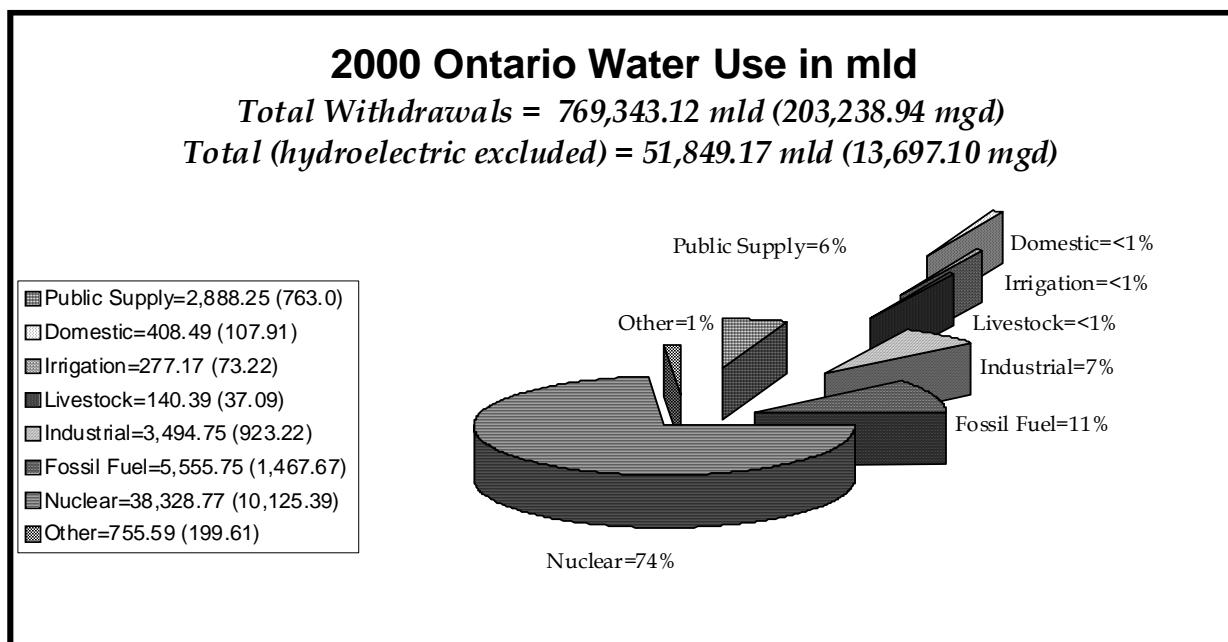
## Ontario

**Data Sources:** Water use data reporting for Ontario was coordinated by the Ontario Ministry of Natural Resources, Science and Information Branch. Calendar year 2000 data are used for this report because: 1) water use estimates for 2005 are not anticipated to be greatly different than those reported for 2000 assuming a similar data collection and assessment approach, and 2) the provincial government has phased-in new regulatory reporting requirements for permitted water takers with the requirements being fully implemented in 2008. Water use information from the new reporting program will represent a significant enhancement in estimating the reported overall water use in the province. Permit holders are now required to collect and record data on the volume of water taken daily and report the data on an annual basis. Please contact Jonathan Staples at Jonathan.Staples@ontario.ca, Ontario Ministry of Natural Resources, with questions regarding Ontario's water use data.

Data for the public supply sector were obtained from the Ministry of the Environment Interim Inspection System Reports. Domestic use figures were estimated with the use of Environment Canada's municipal water use database and Statistics Canada Population Census data. *Agricultural Water Use 1996* and *Agricultural Water Use 2001* were the sources for irrigation and livestock data. As no viable source of current data is available for industrial water use, the reported industrial data are from 1996. Data for the power sector categories were obtained through contact with individual operators and generation companies. Data for the "other" category were taken from the National Canal Survey.

Although this water withdrawal report accounts for the majority of water use within Ontario, data for a limited number of water users is not available, therefore this database does not represent all water use in the province.

**Withdrawals:** The reported 2005 Great Lakes water uses for Ontario (using 2000 surrogate data) were approximately 769,343.12 mld, or 203,238.94 mgd. However, hydroelectric withdrawals represented more than 93 percent of the total, leaving total use at 51,849.17 mld (13,697.10 mgd). Thermoelectric—nuclear plant uses (not including hydropower) were the largest at 74 percent (38,328.77 mld, or 10,125.39 mgd).



**Figure 11**

**Consumptive Use:** Total consumptive uses were calculated to be 1,059.62 mld (279.92 mgd). Public supply represents the largest consumptive use sector at 433.24 mld (114.45 mgd) and accounts for 41 percent of the total. The next two largest consumptive uses were nuclear power and industrial use, at 344.96 mld (91.13 mgd) and 220.15 mld (58.16 mgd) respectively.

**Interbasin Diversions:** Ontario reported incoming interbasin diversions into the Lake Superior basin from the James Bay basin for hydroelectric purposes (the Ogoki and Long Lac projects) amounting to 15,170.99 mld (4,004.75 mgd).

**Intrabasin Diversions:** Intrabasin diversions occurred between lakes Huron, Erie and Ontario.

**Data Quality:** Ontario's withdrawal data for this report were 20 percent measured, 79 percent partially measured, and 1 percent calculated or estimated; the level of aggregation was 99 percent site-specific and less than 1 percent aggregated.



# JURISDICTION REPORT- Ontario

Withdrawals, Diversions and Consumptive Uses Units: Mgal(US)/d  
Year Of Data: 2005

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Superior							
	Public Supply	45.77	0.00	6.87	45.58	0.00	6.84
	Domestic Supply	1.75	0.00	0.26	0.00	0.00	0.00
	Irrigation	0.37	0.00			0.00	
	Livestock	0.14	0.00			0.00	
	Industrial	162.12	0.00	10.21	0.00	0.00	0.00
	Fossil Fuel Power	295.52	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	38156.31	-4007.75	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total:	38661.99	-4007.75	17.34	45.58	0.00	6.84
Lake Huron							
	Public Supply	84.37	0.00	12.65	81.66	0.00	12.25
	Domestic Supply	10.61	0.00	1.59	0.00	0.00	0.00
	Irrigation	20.91	0.00			0.00	
	Livestock	12.41	0.00			0.00	
	Industrial	190.19	0.00	11.98	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	4697.20	0.00	42.28	0.00	0.00	0.00
	Hydroelectric Power	33608.07	0.00	0.00	0.00	0.00	0.00
	Other	47.97	0.00	0.00	47.97	0.00	0.00
	Total:	38671.73	0.00	68.50	129.63	0.00	12.25
Lake Erie							
	Public Supply	93.89	0.00	14.08	92.84	0.00	13.92
	Domestic Supply	19.94	0.00	2.99	0.00	0.00	0.00
	Irrigation	31.85	0.00			0.00	
	Livestock	13.22	0.00			0.00	
	Industrial	180.45	0.00	11.37	0.00	0.00	0.00
	Fossil Fuel Power	463.20	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total:	802.56	0.00	28.44	92.84	0.00	13.92

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Ontario							
	Public Supply	465.93	0.00	69.89	464.62	0.00	69.69
	Domestic Supply	64.17	0.00	9.63	0.00	0.00	0.00
	Irrigation	17.73	0.00			0.00	
	Livestock	5.40	0.00			0.00	
	Industrial	229.64	0.00	14.47	0.00	0.00	0.00
	Fossil Fuel Power	708.95	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	5428.19	0.00	48.85	0.00	0.00	0.00
	Hydroelectric Power	41542.31	0.00	0.00	0.00	0.00	0.00
	Other	132.35	0.00	0.00	132.35	0.00	0.00
	Total:	48594.67	0.00	142.84	596.97	0.00	69.69
St. Lawrence River							
	Public Supply	73.03	0.00	10.96	72.08	0.00	10.82
	Domestic Supply	11.45	0.00	1.72	0.00	0.00	0.00
	Irrigation	2.35	0.00			0.00	
	Livestock	5.91	0.00			0.00	
	Industrial	160.81	0.00	10.13	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	76235.15	0.00	0.00	0.00	0.00	0.00
	Other	19.28	0.00	0.00	19.28	0.00	0.00
	Total:	76507.99	0.00	22.80	91.37	0.00	10.82
Grand Total:		203238.94	-4007.75	279.92	956.38	0.00	113.52

# JURISDICTION REPORT- Ontario

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2005

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Superior							
	Public Supply	30.10	13.03	2.65	30.07	12.96	2.55
	Domestic Supply	0.00	0.00	1.75	0.00	0.00	0.00
	Irrigation	0.02	0.31	0.05			
	Livestock	0.00	0.14	0.00			
	Industrial	162.12	0.00	0.00	0.00	0.00	0.00
	Fossil Fuel Power	295.52	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	38156.31	0.00	0.00	0.00	0.00
	Other						
	Total:	487.76	38169.79	4.44	30.07	12.96	2.55
Lake Huron							
	Public Supply	42.66	23.57	18.14	42.02	23.23	16.40
	Domestic Supply	0.00	0.00	10.61	0.00	0.00	0.00
	Irrigation	0.15	15.41	5.35			
	Livestock	2.93	3.07	6.41			
	Industrial	187.41	0.00	2.78	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	4697.20	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	20000.41	13607.66	0.00	0.00	0.00	0.00
	Other	0.00	47.97	0.00	0.00	47.97	0.00
	Total:	24930.76	13697.68	43.29	42.02	71.20	16.40
Lake Erie							
	Public Supply	8.97	29.26	55.66	8.97	29.23	54.64
	Domestic Supply	0.00	0.00	19.94	0.00	0.00	0.00
	Irrigation	0.59	12.11	19.15			
	Livestock	0.02	0.89	12.31			
	Industrial	173.24	0.00	7.21	0.00	0.00	0.00
	Fossil Fuel Power	463.20	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other						
	Total:	646.02	42.26	114.27	8.97	29.23	54.64

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Ontario							
	Public Supply	401.52	52.86	11.56	401.47	52.68	10.47
	Domestic Supply	0.00	0.00	64.17	0.00	0.00	0.00
	Irrigation	1.08	9.53	7.12			
	Livestock	0.00	0.94	4.46			
	Industrial	218.17	0.00	11.46	0.00	0.00	0.00
	Fossil Fuel Power	708.95	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	5428.19	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	33861.04	7681.26	0.00	0.00	0.00	0.00
	Other	0.00	132.35	0.00	0.00	132.35	0.00
	Total:	40618.96	7876.94	98.77	401.47	185.03	10.47
St. Lawrence River							
	Public Supply	10.64	58.84	3.56	10.64	58.52	2.93
	Domestic Supply	0.00	0.00	11.45	0.00	0.00	0.00
	Irrigation	0.01	2.04	0.30			
	Livestock	0.00	3.63	2.28			
	Industrial	159.76	0.00	1.05	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	76149.02	86.13	0.00	0.00	0.00	0.00
	Other	0.00	19.28	0.00	0.00	19.28	0.00
	Total:	76319.43	169.91	18.65	10.64	77.80	2.93
Grand Total:		143002.93	59956.58	279.43	493.17	376.22	87.00

# JURISDICTION REPORT- Ontario

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2005

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	493.88	177.55	91.57	763.00	0.00	0.00	114.45
Domestic Supply	0.00	0.00	107.91	107.91	0.00	0.00	16.19
Irrigation	1.86	39.39	31.97	73.22	0.00	0.00	
Livestock	2.95	8.67	25.47	37.09	0.00	0.00	
Industrial	900.71	0.00	22.51	923.22	0.00	0.00	58.16
Fossil Fuel Power	1467.67	0.00	0.00	1467.67	0.00	0.00	0.00
Nuclear Power	10125.39	0.00	0.00	10125.39	0.00	0.00	91.13
Hydroelectric Power	130010.47	59531.37	0.00	189541.84	0.00	-4007.75	0.00
Other	0.00	199.61	0.00	199.61	61.97	0.00	0.00

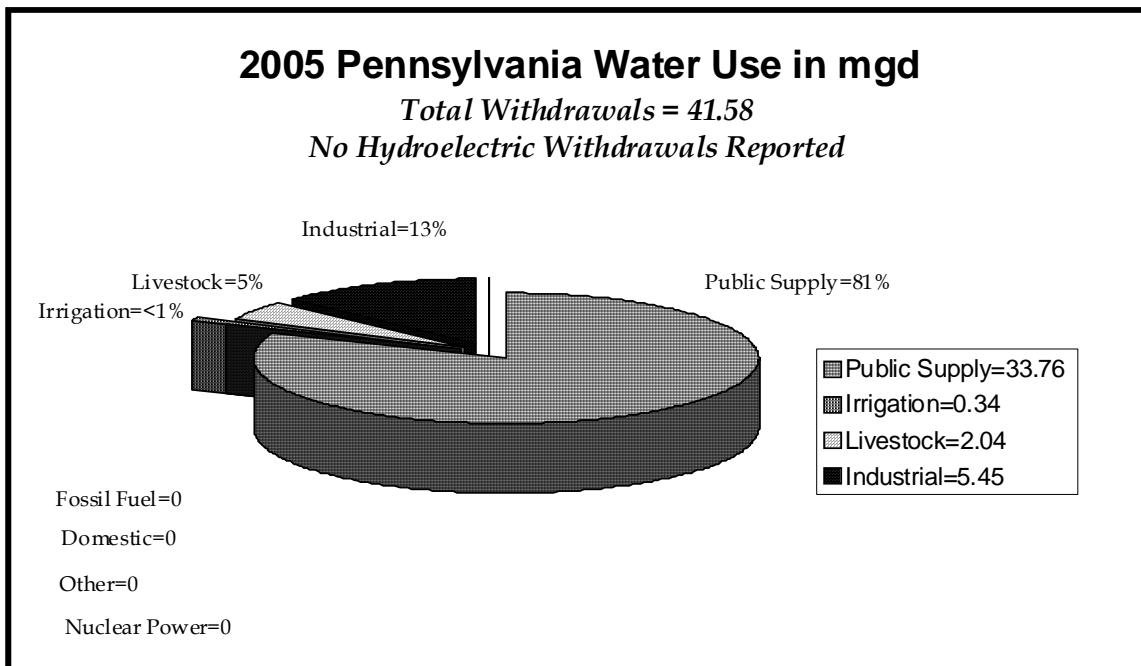
## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	493.17	176.61	87.00	756.78	0.00	0.00	113.52
Domestic Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Irrigation					0.00	0.00	
Livestock					0.00	0.00	
Industrial	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	199.61	0.00	199.61	61.97	0.00	0.00

## Pennsylvania

**Data Sources:** The Department of Environmental Protection – Bureau of Watershed Management submitted water use data for the Lake Erie and Lake Ontario basins of Pennsylvania. Please contact David Jostenski at 717/772-5659 or [djostenski@state.pa.us](mailto:djostenski@state.pa.us) with questions regarding Pennsylvania's water use data.

**Withdrawals:** Total withdrawals from Lake Erie were 41.58 mgd, with no hydroelectric withdrawals reported. Public supply at 33.76 mgd or 81 percent, and industrial at 5.54 mgd or 13 percent, constituted the primary uses of water.



**Figure 12**

**Consumptive Use:** Consumptive use totaled 5.43 mgd, down by 27 percent from the 2004 figure of 7.39 mgd.

**Interbasin Diversions:** There was an import of 1.73 mgd of water from the Allegheny River basin to the Lake Erie basin for public water supply purposes.

**Data Quality:** Pennsylvania's withdrawal data for this report were 15 percent calculated or estimated, 6 percent partially measured, and 79 percent measured; the level of aggregation was 6 percent aggregated and 94 percent site-specific.

# JURISDICTION REPORT- Pennsylvania

Withdrawals, Diversions Units: Mgal(US)/d  
and Consumptive Uses Year Of Data: 2005

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Erie							
	Public Supply	33.76	0.00	3.38	33.76	0.00	3.38
	Domestic Supply	0.00	0.00		0.00	0.00	0.00
	Irrigation	0.34	0.00	0.30	0.34	0.00	0.30
	Livestock	2.04	0.00	1.63	2.04	0.00	1.63
	Industrial	5.45	0.00	0.12	5.45	0.00	0.12
	Fossil Fuel Power		0.00		0.00	0.00	0.00
	Nuclear Power	0.00	0.00		0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00		0.00	0.00	0.00
	Other		0.00		0.00	0.00	0.00
	Total:	41.58	0.00	5.43	41.58	0.00	5.43
Lake Ontario							
	Public Supply		0.00			0.00	
	Domestic Supply		0.00			0.00	
	Irrigation		0.00			0.00	
	Livestock		0.00			0.00	
	Industrial		0.00			0.00	
	Fossil Fuel Power		0.00			0.00	
	Nuclear Power		0.00			0.00	
	Hydroelectric Power		0.00			0.00	
	Other		0.00			0.00	
	Total:		0.00			0.00	
Grand Total:		41.58	0.00	5.43	41.58	0.00	5.43

# JURISDICTION REPORT- Pennsylvania

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2005

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Erie							
	Public Supply	31.21	0.97	1.58	31.21	0.97	1.58
	Domestic Supply	0.00	0.00	0.00	0.00	0.00	0.00
	Irrigation	0.00	0.34	0.00	0.00	0.34	0.00
	Livestock	0.00	0.84	1.20	0.00	0.84	1.20
	Industrial	5.29	0.16	0.00	5.29	0.16	0.00
	Fossil Fuel Power				0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other				0.00	0.00	0.00
	Total:	36.50	2.31	2.77	36.50	2.31	2.77
Lake Ontario							
	Public Supply						
	Domestic Supply						
	Irrigation						
	Livestock						
	Industrial						
	Fossil Fuel Power						
	Nuclear Power						
	Hydroelectric Power						
	Other						
	Total:						
Grand Total:		36.50	2.31	2.77	36.50	2.31	2.77



# JURISDICTION REPORT- Pennsylvania

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2005

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	31.21	0.97	1.58	33.76	0.00	0.00	3.38
Domestic Supply	0.00	0.00	0.00	0.00	0.00	0.00	
Irrigation	0.00	0.34	0.00	0.34	0.00	0.00	0.30
Livestock	0.00	0.84	1.20	2.04	0.00	0.00	1.63
Industrial	5.29	0.16	0.00	5.45	0.00	0.00	0.12
Fossil Fuel Power					0.00	0.00	
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	
Other					0.00	0.00	

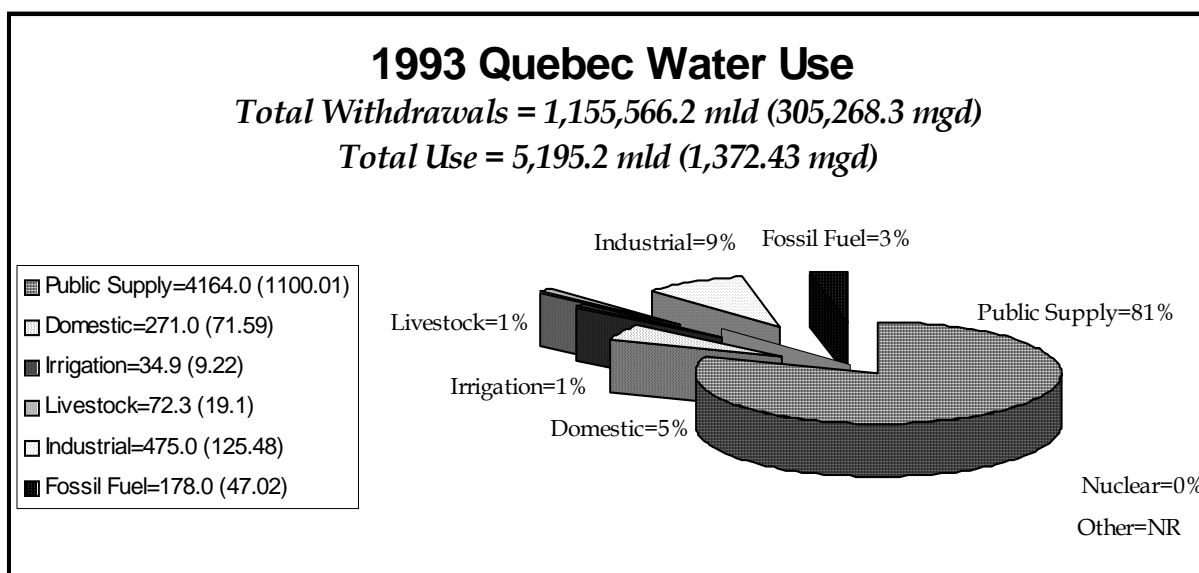
## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	31.21	0.97	1.58	33.76	0.00	0.00	3.38
Domestic Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Irrigation	0.00	0.34	0.00	0.34	0.00	0.00	0.30
Livestock	0.00	0.84	1.20	2.04	0.00	0.00	1.63
Industrial	5.29	0.16	0.00	5.45	0.00	0.00	0.12
Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## Québec

**Data Source:** Water use data was provided by the Ministère du Développement durable, de l'Environnement et des Parcs—Centre d'expertise hydrique du Québec for this report. The Centre has compiled water use data primarily to support hydrologic and hydraulic research, floodplain delineation and hydrometric network management. Data from 1993 is being used for this report until a proposed regulation to support collection of water withdrawal data is adopted. The adoption of the regulation is expected in the fall of 2009. Please contact Julie Cyr at 418/521-3885 #7076 or Julie.cyr@mddep.gouv.qc.ca with questions regarding Québec's data. See the following page for an update on the status of water quantity management in Québec.

**Withdrawals:** Total use from Québec's St. Lawrence River basin was approximately 1,155 bld (305 bgd). Nearly 100 percent of these uses were for hydroelectric power purposes.



**Figure 13**

**Consumptive Use:** Total consumptive use was 597.5 mld (157.9 mgd). Public supply accounted for 416 mld (109.9 mgd), or nearly 70 percent of the total consumptive use.

**Diversions:** None reported.

**Data Quality:** Québec's withdrawal data for this report were 99 percent measured, less than 1 percent partially measured, and less than 1 percent calculated or estimated; the level of aggregation was 100 percent aggregated.

Historically, water withdrawals have not been a source of great conflict in Québec; however, water shortage caused by severe drought and increasing demands for water withdrawal have brought the problem to the forefront. Since the adoption of a Water Policy by Québec's National Assembly in 2002, existing regulations have been amended to improve water management. One of the guiding principles is that users must be accountable for the utilization and degradation of water by means of a user-pays and polluter-pays approach. In June 2009, Québec adopted *an Act to affirm the collective nature of water resources and provide for increased water resource protection*. This new legislation will enable Québec to implement the Agreement on its territory and to fulfill its commitments. Under this act, regulations support the collection of water withdrawal data. It will also allow Québec to meet the requirements of Article 301 of the Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement.

(See [http://www.mddep.gouv.qc.ca/eau/protection/index\\_en.htm](http://www.mddep.gouv.qc.ca/eau/protection/index_en.htm) for highlights and the complete text.)

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# JURISDICTION REPORT- Quebec

Withdrawals, Diversions and Consumptive Uses Units: Mgal(US)/d  
Year Of Data: 2005

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
St. Lawrence River							
	Public Supply	1100.01	0.00	109.90	1096.05	0.00	109.63
	Domestic Supply	71.59	0.00	7.13	48.61	0.00	4.76
	Irrigation	9.22	0.00	8.30		0.00	
	Livestock	19.10	0.00	15.28		0.00	
	Industrial	125.48	0.00	12.55	124.95	0.00	12.50
	Fossil Fuel Power	47.02	0.00	4.70	47.02	0.00	4.70
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	303895.85	0.00	0.00	303895.85	0.00	0.00
	Other		0.00			0.00	
	Total:	305268.28	0.00	157.86	305212.48	0.00	131.58
Grand Total:		305268.28	0.00	157.86	305212.48	0.00	131.58

# JURISDICTION REPORT- Quebec

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2005

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
St. Lawrence River	Public Supply	602.84	497.17	0.00	602.58	493.47	0.00
	Domestic Supply	0.00	0.00	71.59	0.00	0.00	48.61
	Irrigation	0.00	0.00	9.22			
	Livestock	0.00	0.00	19.10			
	Industrial	0.00	125.48	0.00	0.00	124.95	0.00
	Fossil Fuel Power	39.10	7.93	0.00	39.10	7.93	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	170946.25	132949.60	0.00	170946.25	132949.60	0.00
	Other						
	Total:	171588.19	133580.18	99.91	171587.93	133575.95	48.61
Grand Total:	171588.19	133580.18	99.91	171587.93	133575.95	48.61	

# JURISDICTION REPORT- Quebec

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2005

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	602.84	497.17	0.00	1100.01	0.00	0.00	109.90
Domestic Supply	0.00	0.00	71.59	71.59	0.00	0.00	7.13
Irrigation	0.00	0.00	9.22	9.22	0.00	0.00	8.30
Livestock	0.00	0.00	19.10	19.10	0.00	0.00	15.28
Industrial	0.00	125.48	0.00	125.48	0.00	0.00	12.55
Fossil Fuel Power	39.10	7.93	0.00	47.02	0.00	0.00	4.70
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	170946.25	132949.60	0.00	303895.85	0.00	0.00	0.00
Other					0.00	0.00	

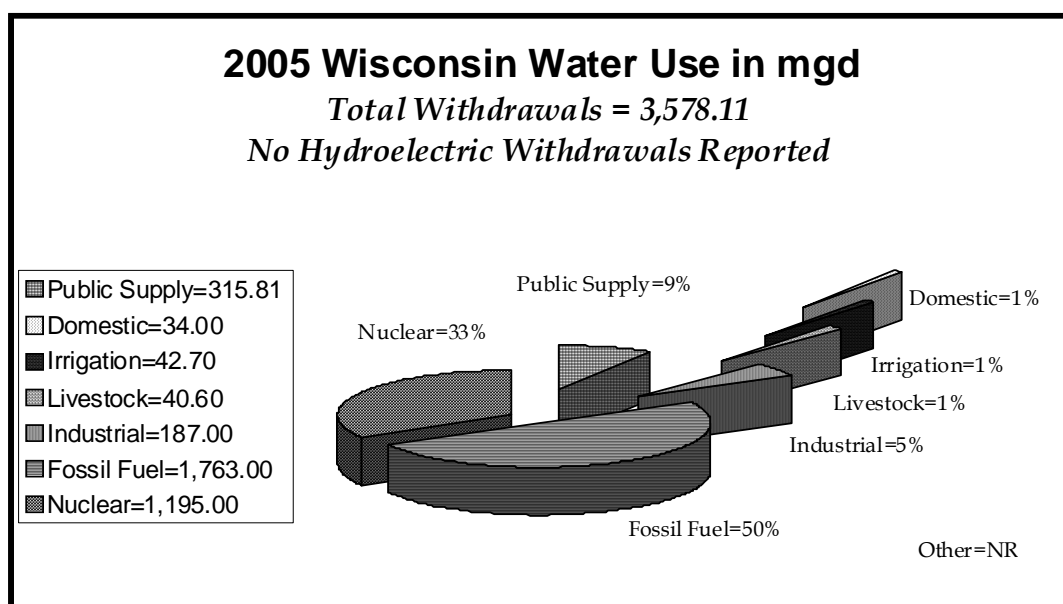
## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	602.58	493.47	0.00	1096.05	0.00	0.00	109.63
Domestic Supply	0.00	0.00	48.61	48.61	0.00	0.00	4.76
Irrigation					0.00	0.00	
Livestock					0.00	0.00	
Industrial	0.00	124.95	0.00	124.95	0.00	0.00	12.50
Fossil Fuel Power	39.10	7.93	0.00	47.02	0.00	0.00	4.70
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	170946.25	132949.60	0.00	303895.85	0.00	0.00	0.00
Other					0.00	0.00	

## Wisconsin

**Data Sources:** Wisconsin 2005 water use data for the Lake Michigan and Lake Superior basins were submitted by the Wisconsin Department of Natural Resources—Bureau of Water Resources Management. Contact Shaili Pfeiffer at 608/267-7630 or Shaili.Pfeiffer@wisconsin.gov with questions regarding Wisconsin's water use data.

**Withdrawals:** Total withdrawals were 3,578.11 mgd: 3,525.70 mgd from Lake Michigan (98.5% of the total) and 52.41 mgd from Lake Superior. Water use in the Lake Michigan basin was primarily for fossil fuel (1,725.00 mgd) and nuclear power (1,195.00 mgd)—at 49 percent and 34 percent respectively. Of the Lake Superior uses, the largest single use was for fossil fuel at 38.00 mgd at 73 percent.



**Figure 14**

**Consumptive Use:** Consumptive uses from Wisconsin's portion of the basin were calculated to be 134.04 mgd.

**Interbasin Diversions:** A withdrawal for public supply at Pleasant Prairie diverts 0.40 mgd from the Lake Michigan basin to the Mississippi River basin. A small diversion remains at the Portage Canal site, with 0.64 mgd flowing from the Wisconsin River (the Mississippi River basin) into the Fox River (the Lake Michigan basin).

**Data Quality:** Wisconsin's withdrawal data for this report were 91 percent calculated or estimated and 9 percent measured; the level of aggregation was 91 percent aggregated and 9 percent site-specific.

# JURISDICTION REPORT- Wisconsin

Withdrawals, Diversions and Consumptive Uses Units: Mgal(US)/d  
Year Of Data: 2005

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Superior							
	Public Supply	4.41	0.00	0.45			
	Domestic Supply	1.40	0.00	0.14			
	Irrigation	0.30	0.00	0.21			
	Livestock	8.30	0.00	7.47			
	Industrial		0.00				
	Fossil Fuel Power	38.00	0.00	0.19			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other		0.00				
	Total:	52.41	0.00	8.46			
Lake Michigan							
	Public Supply	311.40	0.40	33.70			
	Domestic Supply	32.60	0.00	3.26			
	Irrigation	42.40	0.00	29.68			
	Livestock	32.30	0.00	29.07			
	Industrial	187.00	0.00	19.07			
	Fossil Fuel Power	1725.00	0.00	8.62			
	Nuclear Power	1195.00	0.00	5.97			
	Hydroelectric Power	0.00	0.00	0.00			
	Other		-0.64				
	Total:	3525.70	-0.24	129.37			
Grand Total:		3578.11	-0.24	137.83			



# JURISDICTION REPORT- Wisconsin

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2005

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Superior							
	Public Supply	3.80	0.00	0.61			
	Domestic Supply	0.00	0.00	1.40			
	Irrigation	0.00	0.00	0.30			
	Livestock	0.00	0.00	8.30			
	Industrial						
	Fossil Fuel Power	38.00	0.00	0.00			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	Total:	41.80	0.00	10.61			
Lake Michigan							
	Public Supply	215.00	22.00	74.40			
	Domestic Supply	0.00	0.00	32.60			
	Irrigation	0.00	0.00	42.40			
	Livestock	0.00	0.00	32.30			
	Industrial	187.00	0.00	0.00			
	Fossil Fuel Power	1725.00	0.00	0.00			
	Nuclear Power	1195.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	Total:	3322.00	22.00	181.70			
Grand Total:		3363.80	22.00	192.31			

# JURISDICTION REPORT- Wisconsin

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2005

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	218.80	22.00	75.01	315.81	0.00	0.40	34.15
Domestic Supply	0.00	0.00	34.00	34.00	0.00	0.00	3.40
Irrigation	0.00	0.00	42.70	42.70	0.00	0.00	29.89
Livestock	0.00	0.00	40.60	40.60	0.00	0.00	36.54
Industrial	187.00	0.00	0.00	187.00	0.00	0.00	19.07
Fossil Fuel Power	1763.00	0.00	0.00	1763.00	0.00	0.00	8.81
Nuclear Power	1195.00	0.00	0.00	1195.00	0.00	0.00	5.97
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other					0.00	-0.64	

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply							
Domestic Supply							
Irrigation							
Livestock							
Industrial							
Fossil Fuel Power							
Nuclear Power							
Hydroelectric Power							
Other							



#### ***IV. BASIN TABLES***

Each basin is represented by three tables:  
Withdrawals, Diversions and Consumptive Uses  
Withdrawals by Source  
Basin Totals

Lake Erie  
Lake Huron  
Lake Michigan  
Lake Ontario  
Lake Superior  
St. Lawrence River

# BASIN REPORT- Lake Erie

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2005

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Indiana							
	Public Supply	44.29	4.99	6.64	44.24	0.00	6.64
	Domestic Supply	6.41	0.00	0.96	0.45	0.00	0.07
	Irrigation	1.50	0.00	1.36	1.24	0.00	1.12
	Livestock	0.93	0.00	0.75	0.00	0.00	0.00
	Industrial	9.53	0.00	0.58	9.34	0.00	0.56
	Fossil Fuel Power	0.27	0.00	0.01	0.27	0.00	0.01
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total	62.93	4.99	10.30	55.54	0.00	8.40
Michigan							
	Public Supply	637.44	0.00	79.68			
	Domestic Supply	0.19	0.00	0.02			
	Irrigation	24.17	0.00	21.75			
	Livestock		0.00				
	Industrial	165.91	0.00	16.59			
	Fossil Fuel Power	4270.95	0.00	51.25			
	Nuclear Power	51.39	0.00	0.98			
	Hydroelectric Power		0.00				
	Other		0.00				
	Total	5150.06	0.00	170.28			
New York							
	Public Supply	264.02	0.00	26.40		0.00	
	Domestic Supply	22.94	0.00	2.29	0.00	0.00	0.00
	Irrigation	0.31	0.00	0.28	0.31	0.00	0.28
	Livestock	4.24	0.00	3.82		0.00	
	Industrial	158.58	0.00	39.65	157.48	0.00	39.38
	Fossil Fuel Power	1093.00	0.00	21.86	1093.00	0.00	21.86
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	47777.00	0.00	0.00	47777.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total	49320.09	0.00	94.30	49027.79	0.00	61.52

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Ohio							
	Public Supply	573.82	0.32	86.08	570.13	0.32	85.53
	Domestic Supply	58.93	0.00	8.84	0.37	0.00	0.06
	Irrigation	18.38	0.00	16.54	16.57	0.00	14.92
	Livestock	12.45	0.00	9.96	0.67	0.00	0.54
	Industrial	337.73	0.00	33.77	337.07	0.00	33.71
	Fossil Fuel Power	2372.32	0.00	23.73	2372.31	0.00	23.73
	Nuclear Power	55.81	0.00	5.58	55.81	0.00	5.58
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	5.59	-11.52	2.48	5.45	-11.52	2.37
	Total	3435.03	-11.20	186.98	3358.38	-11.20	166.44
Ontario							
	Public Supply	93.89	0.00	14.08	92.84	0.00	13.92
	Domestic Supply	19.94	0.00	2.99	0.00	0.00	0.00
	Irrigation	31.85	0.00			0.00	
	Livestock	13.22	0.00			0.00	
	Industrial	180.45	0.00	11.37	0.00	0.00	0.00
	Fossil Fuel Power	463.20	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total	802.56	0.00	28.44	92.84	0.00	13.92
Pennsylvania							
	Public Supply	33.76	0.00	3.38	33.76	0.00	3.38
	Domestic Supply	0.00	0.00		0.00	0.00	0.00
	Irrigation	0.34	0.00	0.30	0.34	0.00	0.30
	Livestock	2.04	0.00	1.63	2.04	0.00	1.63
	Industrial	5.45	0.00	0.12	5.45	0.00	0.12
	Fossil Fuel Power		0.00		0.00	0.00	0.00
	Nuclear Power	0.00	0.00		0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00		0.00	0.00	0.00
	Other		0.00		0.00	0.00	0.00
	Total	41.58	0.00	5.43	41.58	0.00	5.43
Grand Total:		58812.25	-6.21	495.73	52576.13	-11.20	255.72

# BASIN REPORT- Lake Erie

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2005

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Indiana							
	Public Supply	0.00	33.27	11.02	0.00	33.27	10.97
	Domestic Supply	0.00	0.00	6.41	0.00	0.00	0.45
	Irrigation	0.00	0.45	1.05	0.00	0.29	0.95
	Livestock	0.00	0.00	0.93	0.00	0.00	0.00
	Industrial	0.00	4.94	4.59	0.00	4.94	4.40
	Fossil Fuel Power	0.00	0.00	0.27	0.00	0.00	0.27
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	TOTAL	0.00	38.66	24.27	0.00	38.50	17.04

<b>Michigan</b>							
	Public Supply	580.58	16.06	40.81			
	Domestic Supply	0.00	0.00	0.19			
	Irrigation	0.54	13.11	10.52			
	Livestock						
	Industrial	141.51	11.55	12.85			
	Fossil Fuel Power	4108.73	162.10	0.12			
	Nuclear Power	51.39	0.00	0.00			
	Hydroelectric Power						
	Other						
	<b>TOTAL</b>	<b>4882.74</b>	<b>202.82</b>	<b>64.49</b>			

<b>New York</b>							
	Public Supply	184.58	72.12	7.32			
	Domestic Supply	12.33	0.00	10.61	0.00	0.00	0.00
	Irrigation	0.16	0.15	0.00	0.16	0.15	0.00
	Livestock	1.51	0.00	2.73			
	Industrial	156.50	2.05	0.03	156.50	0.95	0.03
	Fossil Fuel Power	1093.00	0.00	0.00	1093.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	47777.00	0.00	0.00	47777.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	<b>TOTAL</b>	<b>49225.08</b>	<b>74.32</b>	<b>20.69</b>	<b>49026.66</b>	<b>1.10</b>	<b>0.03</b>

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Ohio							
	Public Supply	428.84	108.45	36.53	428.84	108.12	33.17
	Domestic Supply	0.37	0.07	58.49	0.37	0.00	0.00
	Irrigation	0.24	14.38	3.76	0.23	13.24	3.10
	Livestock	0.00	1.76	10.69	0.00	0.00	0.67
	Industrial	57.49	227.60	52.64	57.49	227.46	52.12
	Fossil Fuel Power	1635.79	736.53	0.00	1635.78	736.53	0.00
	Nuclear Power	55.81	0.00	0.00	55.81	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.46	4.68	0.45	0.46	4.63	0.36
	TOTAL	2179.00	1093.47	162.56	2178.98	1089.98	89.42
Ontario							
	Public Supply	8.97	29.26	55.66	8.97	29.23	54.64
	Domestic Supply	0.00	0.00	19.94	0.00	0.00	0.00
	Irrigation	0.59	12.11	19.15			
	Livestock	0.02	0.89	12.31			
	Industrial	173.24	0.00	7.21	0.00	0.00	0.00
	Fossil Fuel Power	463.20	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other						
	TOTAL	646.02	42.26	114.27	8.97	29.23	54.64
Pennsylvania							
	Public Supply	31.21	0.97	1.58	31.21	0.97	1.58
	Domestic Supply	0.00	0.00	0.00	0.00	0.00	0.00
	Irrigation	0.00	0.34	0.00	0.00	0.34	0.00
	Livestock	0.00	0.84	1.20	0.00	0.84	1.20
	Industrial	5.29	0.16	0.00	5.29	0.16	0.00
	Fossil Fuel Power				0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other				0.00	0.00	0.00
	TOTAL	36.50	2.31	2.77	36.50	2.31	2.77
Grand Total:		56969.35	1453.84	389.06	51251.11	1161.11	163.91



# BASIN REPORT- Lake Erie

Basin Totals

Units: Mgal(US)/d

Year Of Data: 2005

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	1234.17	260.13	152.92	1647.22	0.00	5.31	216.26
Domestic Supply	12.70	0.07	95.64	108.41	0.00	0.00	15.10
Irrigation	1.53	40.54	34.48	76.55	0.00	0.00	40.24
Livestock	1.53	3.49	27.86	32.88	0.00	0.00	16.16
Industrial	534.03	246.30	77.32	857.65	0.00	0.00	102.08
Fossil Fuel Power	7300.72	898.63	0.39	8199.75	0.00	0.00	96.85
Nuclear Power	107.20	0.00	0.00	107.20	0.00	0.00	6.56
Hydroelectric Power	47777.00	0.00	0.00	47777.00	0.00	0.00	0.00
Other	0.46	4.68	0.45	5.59	5816.39	-11.52	2.48

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	469.02	171.59	100.36	740.96	0.00	0.32	109.47
Domestic Supply	0.37	0.00	0.45	0.82	0.00	0.00	0.13
Irrigation	0.39	14.02	4.05	18.46	0.00	0.00	16.62
Livestock	0.00	0.84	1.87	2.71	0.00	0.00	2.17
Industrial	219.28	233.51	56.55	509.34	0.00	0.00	73.77
Fossil Fuel Power	2728.78	736.53	0.27	3465.58	0.00	0.00	45.60
Nuclear Power	55.81	0.00	0.00	55.81	0.00	0.00	5.58
Hydroelectric Power	47777.00	0.00	0.00	47777.00	0.00	0.00	0.00
Other	0.46	4.63	0.36	5.45	5816.39	-11.52	2.37

# BASIN REPORT- Lake Huron

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2005

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Michigan							
	Public Supply	125.43	0.00	15.68			
	Domestic Supply	0.02	0.00	0.00			
	Irrigation	28.04	0.00	25.23			
	Livestock		0.00				
	Industrial	26.27	0.00	2.63			
	Fossil Fuel Power	542.82	0.00	6.51			
	Nuclear Power		0.00				
	Hydroelectric Power		0.00				
	Other	0.12	0.00	0.00			
	Total	722.70	0.00	50.06			
Ontario							
	Public Supply	84.37	0.00	12.65	81.66	0.00	12.25
	Domestic Supply	10.61	0.00	1.59	0.00	0.00	0.00
	Irrigation	20.91	0.00			0.00	
	Livestock	12.41	0.00			0.00	
	Industrial	190.19	0.00	11.98	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	4697.20	0.00	42.28	0.00	0.00	0.00
	Hydroelectric Power	33608.07	0.00	0.00	0.00	0.00	0.00
	Other	47.97	0.00	0.00	47.97	0.00	0.00
	Total	38671.73	0.00	68.50	129.63	0.00	12.25
Grand Total:		39394.43	0.00	118.56	129.63	0.00	12.25

# BASIN REPORT- Lake Huron

Units: Mgal(US)/d  
 Withdrawals by Source  
 Year Of Data: 2005

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Michigan							
	Public Supply	94.34	0.67	30.42			
	Domestic Supply	0.00	0.00	0.02			
	Irrigation	3.35	9.75	14.94			
	Livestock						
	Industrial	21.16	2.07	3.04			
	Fossil Fuel Power	536.88	4.84	1.09			
	Nuclear Power						
	Hydroelectric Power						
	Other	0.00	0.00	0.12			
	TOTAL	655.74	17.33	49.64			
Ontario							
	Public Supply	42.66	23.57	18.14	42.02	23.23	16.40
	Domestic Supply	0.00	0.00	10.61	0.00	0.00	0.00
	Irrigation	0.15	15.41	5.35			
	Livestock	2.93	3.07	6.41			
	Industrial	187.41	0.00	2.78	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	4697.20	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	20000.41	13607.66	0.00	0.00	0.00	0.00
	Other	0.00	47.97	0.00	0.00	47.97	0.00
	TOTAL	24930.76	13697.68	43.29	42.02	71.20	16.40
Grand Total:		25586.49	13715.01	92.93	42.02	71.20	16.40

# BASIN REPORT- Lake Huron

Basin Totals

Units: Mgal(US)/d

Year Of Data: 2005

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	137.01	24.23	48.57	209.80	0.00	0.00	28.33
Domestic Supply	0.00	0.00	10.63	10.63	0.00	0.00	1.59
Irrigation	3.50	25.16	20.29	48.95	0.00	0.00	25.23
Livestock	2.93	3.07	6.41	12.41	0.00	0.00	
Industrial	208.57	2.07	5.82	216.46	0.00	0.00	14.61
Fossil Fuel Power	536.88	4.84	1.09	542.82	0.00	0.00	6.51
Nuclear Power	4697.20	0.00	0.00	4697.20	0.00	0.00	42.28
Hydroelectric Power	20000.41	13607.66	0.00	33608.07	0.00	0.00	0.00
Other	0.00	47.97	0.12	48.09	47.97	0.00	0.00

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	42.02	23.23	16.40	81.66	0.00	0.00	12.25
Domestic Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Irrigation					0.00	0.00	
Livestock					0.00	0.00	
Industrial	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	47.97	0.00	47.97	47.97	0.00	0.00

# BASIN REPORT- Lake Michigan

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2005

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Illinois							
	Public Supply	1077.81	1077.81	0.00	1077.81	1077.81	0.00
	Domestic Supply	32.96	2.67	0.00	32.96	2.67	0.00
	Irrigation		0.00		0.00	0.00	
	Livestock		0.00		0.00	0.00	
	Industrial	11.27	0.02	0.00	11.27	0.02	0.00
	Fossil Fuel Power	760.40	0.00	0.00	760.40	0.00	0.00
	Nuclear Power	31.70	0.00	0.00	31.70	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	251.96	251.96	0.00	251.96	251.96	0.00
	Total	2166.09	1332.46	0.00	2166.09	1332.46	0.00
Indiana							
	Public Supply	147.19	-4.02	22.08	146.91	0.00	22.04
	Domestic Supply	43.57	0.00	6.53	21.29	0.00	3.19
	Irrigation	36.04	0.00	32.44	35.22	0.00	31.70
	Livestock	4.52	0.00	3.61	2.39	0.00	1.91
	Industrial	1620.63	0.00	97.23	1620.08	0.00	97.20
	Fossil Fuel Power	727.86	0.00	14.56	727.86	0.00	14.56
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	1681.91	0.00	0.00	1681.91	0.00	0.00
	Other	0.06	0.00	0.01	0.00	0.00	0.00
	Total	4261.78	-4.02	176.46	4235.66	0.00	170.60
Michigan							
	Public Supply	302.91	0.00				
	Domestic Supply	1.99	0.00				
	Irrigation	201.69	0.00				
	Livestock		0.00				
	Industrial	355.34	0.00				
	Fossil Fuel Power	1256.92	0.00				
	Nuclear Power	2412.79	0.00				
	Hydroelectric Power		0.00				
	Other		0.00				
	Total	4531.65	0.00				

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Wisconsin							
	Public Supply	311.40	0.40	33.70			
	Domestic Supply	32.60	0.00	3.26			
	Irrigation	42.40	0.00	42.40			
	Livestock	32.30	0.00	32.30			
	Industrial	187.00	0.00	19.07			
	Fossil Fuel Power	1725.00	0.00	8.62			
	Nuclear Power	1195.00	0.00	5.97			
	Hydroelectric Power	0.00	0.00	0.00			
	Other		-0.64				
	Total	3525.70	-0.24	145.32			
Grand Total:		14485.22	1328.20	321.78	6401.75	1332.46	170.60

# BASIN REPORT- Lake Michigan

Units: Mgal(US)/d  
 Withdrawals by Source  
 Year Of Data: 2005

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Illinois							
	Public Supply	1077.81	0.00	0.00	1077.81	0.00	0.00
	Domestic Supply	32.94	0.00	0.01	32.94	0.00	0.01
	Irrigation				0.00	0.00	0.00
	Livestock				0.00	0.00	0.00
	Industrial	11.27	0.00	0.00	11.27	0.00	0.00
	Fossil Fuel Power	760.40	0.00	0.00	760.40	0.00	0.00
	Nuclear Power	31.70	0.00	0.00	31.70	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	251.96	0.00	0.00	251.96	0.00	0.00
	TOTAL	2166.08	0.00	0.01	2166.08	0.00	0.01
Indiana							
	Public Supply	96.87	0.00	50.32	96.87	0.00	50.04
	Domestic Supply	0.00	13.88	29.69	0.00	13.87	7.42
	Irrigation	0.00	6.71	29.33	0.00	6.42	28.80
	Livestock	0.00	1.14	3.38	0.00	1.14	1.25
	Industrial	1608.91	4.31	7.41	1608.89	4.31	6.88
	Fossil Fuel Power	727.86	0.00	0.00	727.86	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	1681.91	0.00	0.00	1681.91	0.00
	Other	0.00	0.01	0.05	0.00	0.00	0.00
	TOTAL	2433.64	1707.96	120.18	2433.62	1707.65	94.39
Michigan							
	Public Supply	136.88	0.47	165.56			
	Domestic Supply	0.04	0.13	1.82			
	Irrigation	2.10	62.80	136.80			
	Livestock						
	Industrial	198.20	97.87	59.28			
	Fossil Fuel Power	963.77	290.28	2.87			
	Nuclear Power	2412.79	0.00	0.00			
	Hydroelectric Power						
	Other						
	TOTAL	3713.77	451.55	366.32			

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Wisconsin							
	Public Supply	215.00	22.00	74.40			
	Domestic Supply	0.00	0.00	32.60			
	Irrigation	0.00	0.00	42.40			
	Livestock	0.00	0.00	32.30			
	Industrial	187.00	0.00	0.00			
	Fossil Fuel Power	1725.00	0.00	0.00			
	Nuclear Power	1195.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	TOTAL	3322.00	22.00	181.70			
Grand Total:		11635.49	2181.51	668.22	4599.70	1707.65	94.40



# BASIN REPORT- Lake Michigan

Basin Totals

Units: Mgal(US)/d

Year Of Data: 2005

## Total Report - All Facilities

Category	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Public Supply	1526.56	22.47	290.28	1839.31	0.00	1074.19	55.78
Domestic Supply	32.99	14.01	64.13	111.12	0.00	2.67	9.79
Irrigation	2.10	69.51	208.53	280.13	0.00	0.00	74.84
Livestock	0.00	1.14	35.68	36.82	0.00	0.00	35.91
Industrial	2005.37	102.18	66.69	2174.24	0.00	0.02	116.30
Fossil Fuel Power	4177.02	290.28	2.87	4470.18	0.00	0.00	23.18
Nuclear Power	3639.49	0.00	0.00	3639.49	0.00	0.00	5.97
Hydroelectric Power	0.00	1681.91	0.00	1681.91	0.00	0.00	0.00
Other	251.96	0.01	0.05	252.02	0.00	251.32	0.01

## Total Report - Principal Facilities

Category	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Public Supply	1174.68	0.00	50.04	1224.72	0.00	1077.81	22.04
Domestic Supply	32.94	13.87	7.43	54.25	0.00	2.67	3.19
Irrigation	0.00	6.42	28.80	35.22	0.00	0.00	31.70
Livestock	0.00	1.14	1.25	2.39	0.00	0.00	1.91
Industrial	1620.16	4.31	6.88	1631.35	0.00	0.02	97.20
Fossil Fuel Power	1488.26	0.00	0.00	1488.26	0.00	0.00	14.56
Nuclear Power	31.70	0.00	0.00	31.70	0.00	0.00	0.00
Hydroelectric Power	0.00	1681.91	0.00	1681.91	0.00	0.00	0.00
Other	251.96	0.00	0.00	251.96	0.00	251.96	0.00

# BASIN REPORT- Lake Ontario

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2005

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
New York							
	Public Supply	390.07	9.59	39.01		9.59	0.00
	Domestic Supply	92.92	0.00	9.29	31.03	0.00	3.10
	Irrigation	6.29	0.00	5.66	6.29	0.00	5.66
	Livestock	11.19	0.00	10.07		0.00	6.53
	Industrial	68.69	0.00	17.18	68.69	0.00	17.18
	Fossil Fuel Power	853.35	0.00	17.07	853.35	0.00	17.07
	Nuclear Power	1389.68	0.00	69.48	1389.68	0.00	69.48
	Hydroelectric Power	80908.00	0.00	0.00	0.00	0.00	0.00
	Other	38.68	32.00	32.70	6.68	32.00	0.03
	Total	83758.87	41.59	200.46	2355.72	41.59	119.05
Ontario							
	Public Supply	465.93	0.00	69.89	464.62	0.00	69.69
	Domestic Supply	64.17	0.00	9.63	0.00	0.00	0.00
	Irrigation	17.73	0.00			0.00	
	Livestock	5.40	0.00			0.00	
	Industrial	229.64	0.00	14.47	0.00	0.00	0.00
	Fossil Fuel Power	708.95	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	5428.19	0.00	48.85	0.00	0.00	0.00
	Hydroelectric Power	41542.31	0.00	0.00	0.00	0.00	0.00
	Other	132.35	0.00	0.00	132.35	0.00	0.00
	Total	48594.67	0.00	142.84	596.97	0.00	69.69
Pennsylvania							
	Public Supply		0.00			0.00	
	Domestic Supply		0.00			0.00	
	Irrigation		0.00			0.00	
	Livestock		0.00			0.00	
	Industrial		0.00			0.00	
	Fossil Fuel Power		0.00			0.00	
	Nuclear Power		0.00			0.00	
	Hydroelectric Power		0.00			0.00	
	Other		0.00			0.00	
	Total		0.00			0.00	
Grand Total:		132353.54	41.59	343.30	2952.69	41.59	188.74

# BASIN REPORT- Lake Ontario

Units: Mgal(US)/d  
 Withdrawals by Source  
 Year Of Data: 2005

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
New York							
	Public Supply	187.28	170.51	32.28			
	Domestic Supply	21.10	31.03	40.79	0.00	31.03	0.00
	Irrigation	0.00	6.17	0.12	0.00	6.17	0.12
	Livestock	3.93	0.00	7.26			
	Industrial	24.90	33.52	10.27	24.90	33.52	10.27
	Fossil Fuel Power	509.77	343.58	0.00	509.77	343.58	0.00
	Nuclear Power	1389.68	0.00	0.00	1389.68	0.00	0.00
	Hydroelectric Power	0.00	80908.00	0.00	0.00	0.00	0.00
	Other	0.00	38.43	0.25	0.00	6.43	0.25
	TOTAL	2136.66	81531.24	90.97	1924.35	420.73	10.64
Ontario							
	Public Supply	401.52	52.86	11.56	401.47	52.68	10.47
	Domestic Supply	0.00	0.00	64.17	0.00	0.00	0.00
	Irrigation	1.08	9.53	7.12			
	Livestock	0.00	0.94	4.46			
	Industrial	218.17	0.00	11.46	0.00	0.00	0.00
	Fossil Fuel Power	708.95	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	5428.19	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	33861.04	7681.26	0.00	0.00	0.00	0.00
	Other	0.00	132.35	0.00	0.00	132.35	0.00
	TOTAL	40618.96	7876.94	98.77	401.47	185.03	10.47
Pennsylvania							
	Public Supply						
	Domestic Supply						
	Irrigation						
	Livestock						
	Industrial						
	Fossil Fuel Power						
	Nuclear Power						
	Hydroelectric Power						
	Other						
	TOTAL						
Grand Total:		42755.62	89408.18	189.74	2325.82	605.76	21.11

# BASIN REPORT- Lake Ontario

Basin Totals

Units: Mgal(US)/d

Year Of Data: 2005

## Total Report - All Facilities

Category	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Public Supply	588.80	223.37	43.84	856.00	0.00	9.59	108.90
Domestic Supply	21.10	31.03	104.96	157.09	0.00	0.00	18.92
Irrigation	1.08	15.70	7.24	24.02	0.00	0.00	5.66
Livestock	3.93	0.94	11.72	16.59	0.00	0.00	10.07
Industrial	243.07	33.52	21.73	298.33	0.00	0.00	31.65
Fossil Fuel Power	1218.72	343.58	0.00	1562.30	0.00	0.00	17.07
Nuclear Power	6817.87	0.00	0.00	6817.87	0.00	0.00	118.33
Hydroelectric Power	33861.04	88589.26	0.00	122450.31	0.00	0.00	0.00
Other	0.00	170.78	0.25	171.03	-5802.39	32.00	32.70

## Total Report - Principal Facilities

Category	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Public Supply	401.47	52.68	10.47	464.62	0.00	9.59	69.69
Domestic Supply	0.00	31.03	0.00	31.03	0.00	0.00	3.10
Irrigation	0.00	6.17	0.12	6.29	0.00	0.00	5.66
Livestock					0.00	0.00	6.53
Industrial	24.90	33.52	10.27	68.69	0.00	0.00	17.18
Fossil Fuel Power	509.77	343.58	0.00	853.35	0.00	0.00	17.07
Nuclear Power	1389.68	0.00	0.00	1389.68	0.00	0.00	69.48
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	138.78	0.25	139.03	-5802.39	32.00	0.03

# BASIN REPORT- Lake Superior

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2005

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Michigan							
	Public Supply	11.61	0.00				
	Domestic Supply		0.00				
	Irrigation	0.28	0.00				
	Livestock		0.00				
	Industrial	13.63	0.00				
	Fossil Fuel Power	270.13	0.00				
	Nuclear Power		0.00				
	Hydroelectric Power		0.00				
	Other		0.00				
	Total	295.66	0.00				
Minnesota							
	Public Supply	40.30	0.00	4.03	39.39	0.00	3.94
	Domestic Supply	1.10	0.00	0.11	1.06	0.00	0.10
	Irrigation	0.40	0.00	0.37	0.12	0.00	0.11
	Livestock	0.68	0.00	0.61	0.62	0.00	0.56
	Industrial	364.31	0.00	36.43	363.99	0.00	36.40
	Fossil Fuel Power	191.24	0.00	3.81	190.23	0.00	3.81
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	3717.98	0.00	0.00	3717.98	0.00	0.00
	Other	0.05	0.00	0.00	0.00	0.00	0.00
	Total	4316.06	0.00	45.36	4313.39	0.00	44.92
Ontario							
	Public Supply	45.77	0.00	6.87	45.58	0.00	6.84
	Domestic Supply	1.75	0.00	0.26	0.00	0.00	0.00
	Irrigation	0.37	0.00			0.00	
	Livestock	0.14	0.00			0.00	
	Industrial	162.12	0.00	10.21	0.00	0.00	0.00
	Fossil Fuel Power	295.52	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	38156.31	-4007.75	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total	38661.99	-4007.75	17.34	45.58	0.00	6.84

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Wisconsin							
	Public Supply	4.41	0.00	0.45			
	Domestic Supply	1.40	0.00	0.14			
	Irrigation	0.30	0.00	0.30			
	Livestock	8.30	0.00	8.30			
	Industrial		0.00				
	Fossil Fuel Power	38.00	0.00	0.19			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other		0.00				
	Total	52.41	0.00	9.38			
Grand Total:		43326.12	-4007.75	72.08	4358.97	0.00	51.76

# BASIN REPORT- Lake Superior

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2005

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Michigan							
	Public Supply	3.86	0.00	7.75			
	Domestic Supply						
	Irrigation	0.01	0.15	0.13			
	Livestock						
	Industrial	13.51	0.00	0.13			
	Fossil Fuel Power	270.13	0.00	0.00			
	Nuclear Power						
	Hydroelectric Power						
	Other						
	TOTAL	287.51	0.15	8.00			
Minnesota							
	Public Supply	32.32	1.99	5.99	32.27	1.31	5.81
	Domestic Supply	0.68	0.41	0.01	0.65	0.41	0.00
	Irrigation	0.04	0.35	0.01	0.00	0.12	0.00
	Livestock	0.68	0.00	0.00	0.62	0.00	0.00
	Industrial	298.70	65.58	0.03	298.67	65.32	0.00
	Fossil Fuel Power	44.30	146.83	0.11	44.29	145.94	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	3717.98	0.00	0.00	3717.98	0.00
	Other	0.00	0.00	0.05	0.00	0.00	0.00
	TOTAL	376.72	3933.14	6.20	376.50	3931.08	5.81
Ontario							
	Public Supply	30.10	13.03	2.65	30.07	12.96	2.55
	Domestic Supply	0.00	0.00	1.75	0.00	0.00	0.00
	Irrigation	0.02	0.31	0.05			
	Livestock	0.00	0.14	0.00			
	Industrial	162.12	0.00	0.00	0.00	0.00	0.00
	Fossil Fuel Power	295.52	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	38156.31	0.00	0.00	0.00	0.00
	Other						
	TOTAL	487.76	38169.79	4.44	30.07	12.96	2.55

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Wisconsin	Public Supply	3.80	0.00	0.61			
	Domestic Supply	0.00	0.00	1.40			
	Irrigation	0.00	0.00	0.30			
	Livestock	0.00	0.00	8.30			
	Industrial						
	Fossil Fuel Power	38.00	0.00	0.00			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	TOTAL	41.80	0.00	10.61			
Grand Total:	1193.79	42103.08	29.26	406.57	3944.04	8.36	



# BASIN REPORT- Lake Superior

Basin Totals

Units: Mgal(US)/d

Year Of Data: 2005

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	70.08	15.02	17.00	102.09	0.00	0.00	11.35
Domestic Supply	0.68	0.41	3.16	4.25	0.00	0.00	0.51
Irrigation	0.07	0.80	0.48	1.36	0.00	0.00	0.67
Livestock	0.68	0.14	8.30	9.12	0.00	0.00	8.91
Industrial	474.33	65.58	0.16	540.07	0.00	0.00	46.64
Fossil Fuel Power	647.95	146.83	0.11	794.89	0.00	0.00	4.00
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	41874.29	0.00	41874.29	0.00	-4007.75	0.00
Other	0.00	0.00	0.05	0.05	0.00	0.00	0.00

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	62.34	14.27	8.36	84.97	0.00	0.00	10.78
Domestic Supply	0.65	0.41	0.00	1.06	0.00	0.00	0.10
Irrigation	0.00	0.12	0.00	0.12	0.00	0.00	0.11
Livestock	0.62	0.00	0.00	0.62	0.00	0.00	0.56
Industrial	298.67	65.32	0.00	363.99	0.00	0.00	36.40
Fossil Fuel Power	44.29	145.94	0.00	190.23	0.00	0.00	3.81
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	3717.98	0.00	3717.98	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# BASIN REPORT- St. Lawrence River

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2005

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
New York							
	Public Supply	40.75	0.00	4.08		0.00	
	Domestic Supply	15.24	0.00	1.53	0.57	0.00	0.06
	Irrigation	0.11	0.00	0.10	0.11	0.00	0.04
	Livestock	5.08	0.00	4.57		0.00	
	Industrial	15.57	0.00	3.94	15.57	0.00	3.90
	Fossil Fuel Power	0.06	0.00	0.00	0.06	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	180265.00	0.00	0.00	81573.00	0.00	0.00
	Other	4.16	0.00	0.42	4.16	0.00	0.42
	Total	180345.97	0.00	14.64	81593.47	0.00	4.42
Ontario							
	Public Supply	73.03	0.00	10.96	72.08	0.00	10.82
	Domestic Supply	11.45	0.00	1.72	0.00	0.00	0.00
	Irrigation	2.35	0.00			0.00	
	Livestock	5.91	0.00			0.00	
	Industrial	160.81	0.00	10.13	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	76235.15	0.00	0.00	0.00	0.00	0.00
	Other	19.28	0.00	0.00	19.28	0.00	0.00
	Total	76507.99	0.00	22.80	91.37	0.00	10.82
Quebec							
	Public Supply	1100.01	0.00	109.90	1096.05	0.00	109.63
	Domestic Supply	71.59	0.00	7.13	48.61	0.00	4.76
	Irrigation	9.22	0.00	8.30		0.00	
	Livestock	19.10	0.00	15.28		0.00	
	Industrial	125.48	0.00	12.55	124.95	0.00	12.50
	Fossil Fuel Power	47.02	0.00	4.70	47.02	0.00	4.70
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	303895.85	0.00	0.00	303895.85	0.00	0.00
	Other		0.00			0.00	
	Total	305268.28	0.00	157.86	305212.48	0.00	131.58
Grand Total:		562122.23	0.00	195.30	386897.32	0.00	146.82

# BASIN REPORT- St. Lawrence River

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2005

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
New York							
	Public Supply	2.80	32.47	5.48			
	Domestic Supply	2.55	0.57	12.12	0.00	0.57	0.00
	Irrigation	0.00	0.11	0.00	0.00	0.11	0.00
	Livestock	1.77	0.00	3.31			
	Industrial	5.58	7.02	2.97	5.58	7.02	2.97
	Fossil Fuel Power	0.06	0.00	0.00	0.06	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	81573.00	98692.00	0.00	81573.00	0.00	0.00
	Other	0.00	4.16	0.00	0.00	4.16	0.00
	TOTAL	81585.76	98736.33	23.88	81578.64	11.86	2.97
Ontario							
	Public Supply	10.64	58.84	3.56	10.64	58.52	2.93
	Domestic Supply	0.00	0.00	11.45	0.00	0.00	0.00
	Irrigation	0.01	2.04	0.30			
	Livestock	0.00	3.63	2.28			
	Industrial	159.76	0.00	1.05	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	76149.02	86.13	0.00	0.00	0.00	0.00
	Other	0.00	19.28	0.00	0.00	19.28	0.00
	TOTAL	76319.43	169.91	18.65	10.64	77.80	2.93
Quebec							
	Public Supply	602.84	497.17	0.00	602.58	493.47	0.00
	Domestic Supply	0.00	0.00	71.59	0.00	0.00	48.61
	Irrigation	0.00	0.00	9.22			
	Livestock	0.00	0.00	19.10			
	Industrial	0.00	125.48	0.00	0.00	124.95	0.00
	Fossil Fuel Power	39.10	7.93	0.00	39.10	7.93	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	170946.25	132949.60	0.00	170946.25	132949.60	0.00
	Other						
	TOTAL	171588.19	133580.18	99.91	171587.93	133575.95	48.61
Grand Total:		329493.38	232486.42	142.44	253177.21	133665.61	54.50

# BASIN REPORT- St. Lawrence River

Basin Totals

Units: Mgal(US)/d

Year Of Data: 2005

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	616.28	588.48	9.04	1213.79	0.00	0.00	124.93
Domestic Supply	2.55	0.57	95.16	98.28	0.00	0.00	10.38
Irrigation	0.01	2.15	9.52	11.68	0.00	0.00	8.40
Livestock	1.77	3.63	24.69	30.09	0.00	0.00	19.85
Industrial	165.34	132.50	4.02	301.86	0.00	0.00	26.62
Fossil Fuel Power	39.16	7.93	0.00	47.08	0.00	0.00	4.70
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	328668.28	231727.72	0.00	560396.00	0.00	0.00	0.00
Other	0.00	23.44	0.00	23.44	0.00	0.00	0.42

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	613.22	551.99	2.93	1168.13	0.00	0.00	120.45
Domestic Supply	0.00	0.57	48.61	49.18	0.00	0.00	4.82
Irrigation	0.00	0.11	0.00	0.11	0.00	0.00	0.04
Livestock					0.00	0.00	
Industrial	5.58	131.97	2.97	140.52	0.00	0.00	16.40
Fossil Fuel Power	39.16	7.93	0.00	47.08	0.00	0.00	4.70
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	252519.25	132949.60	0.00	385468.85	0.00	0.00	0.00
Other	0.00	23.44	0.00	23.44	0.00	0.00	0.42



## ***V. WATER USE CATEGORY TABLES***

Each water use category is represented by two tables:

Water Use by Jurisdiction

Water Use by Basin

Public Supply-Domestic & Industrial

Self Supply-Domestic

Self Supply – Irrigation

Self Supply-Livestock

Self Supply-Industrial

Self Supply-Thermoelectric Power, Fossil Fuel

Self Supply-Thermoelectric Power, Nuclear Power

Self Supply-Hydroelectric Power

Self Supply-Other

# WATER-USE CATEGORY REPORT- Public Supply

Units: Mgal(US)/d

Year Of Data: 2005

## Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	1077.81	0.00	0.00	1077.81	0.00	1077.81	0.00
Indiana	96.87	33.27	61.34	191.48	0.00	0.97	28.72
Michigan	815.66	17.19	244.54	1077.39	0.00	0.00	134.67
Minnesota	32.32	1.99	5.99	40.30	0.00	0.00	4.03
New York	374.66	275.10	45.08	694.84	0.00	9.59	69.49
Ohio	428.84	108.45	36.53	573.82	0.00	0.32	86.08
Ontario	493.88	177.55	91.57	763.00	0.00	0.00	114.45
Pennsylvania	31.21	0.97	1.58	33.76	0.00	0.00	3.38
Quebec	602.84	497.17	0.00	1100.01	0.00	0.00	109.90
Wisconsin	218.80	22.00	75.01	315.81	0.00	0.40	34.15

## Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	1077.81	0.00	0.00	1077.81	0.00	1077.81	0.00
Indiana	96.87	33.27	61.01	191.15	0.00	0.00	28.68
Michigan							
Minnesota	32.27	1.31	5.81	39.39	0.00	0.00	3.94
New York					0.00	9.59	0.00
Ohio	428.84	108.12	33.17	570.13	0.00	0.32	85.53
Ontario	493.17	176.61	87.00	756.78	0.00	0.00	113.52
Pennsylvania	31.21	0.97	1.58	33.76	0.00	0.00	3.38
Quebec	602.58	493.47	0.00	1096.05	0.00	0.00	109.63
Wisconsin							

# WATER-USE CATEGORY REPORT- Public Supply

Units: Mgal(US)/d

Year Of Data: 2005

## Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	70.08	15.02	17.00	102.09	0.00	0.00	12.80
Lake Michigan	1526.56	22.47	290.28	1839.31	0.00	1074.19	93.64
Lake Huron	137.01	24.23	48.57	209.80	0.00	0.00	28.33
Lake Erie	1234.17	260.13	152.92	1647.22	0.00	5.31	216.26
Lake Ontario	588.80	223.37	43.84	856.00	0.00	9.59	108.90
St. Lawrence River	616.28	588.48	9.04	1213.79	0.00	0.00	124.93

## Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	62.34	14.27	8.36	84.97	0.00	0.00	10.78
Lake Michigan	1174.68	0.00	50.04	1224.72	0.00	1077.81	22.04
Lake Huron	42.02	23.23	16.40	81.66	0.00	0.00	12.25
Lake Erie	469.02	171.59	100.36	740.96	0.00	0.32	109.47
Lake Ontario	401.47	52.68	10.47	464.62	0.00	9.59	69.69
St. Lawrence River	613.22	551.99	2.93	1168.13	0.00	0.00	120.45



# WATER-USE CATEGORY REPORT- Domestic Supply

Units: Mgal(US)/d

Year Of Data: 2005

## Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	32.94	0.00	0.01	32.96	0.00	2.67	0.00
Indiana	0.00	13.88	36.10	49.98	0.00	0.00	7.49
Michigan	0.04	0.13	2.04	2.21	0.00	0.00	
Minnesota	0.68	0.41	0.01	1.10	0.00	0.00	0.11
New York	35.98	31.60	63.52	131.10	0.00	0.00	13.11
Ohio	0.37	0.07	58.49	58.93	0.00	0.00	8.84
Ontario	0.00	0.00	107.91	107.91	0.00	0.00	16.19
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	
Quebec	0.00	0.00	71.59	71.59	0.00	0.00	7.13
Wisconsin	0.00	0.00	34.00	34.00	0.00	0.00	3.40

## Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	32.94	0.00	0.01	32.96	0.00	2.67	0.00
Indiana	0.00	13.87	7.87	21.74	0.00	0.00	3.26
Michigan							
Minnesota	0.65	0.41	0.00	1.06	0.00	0.00	0.10
New York	0.00	31.60	0.00	31.60	0.00	0.00	3.16
Ohio	0.37	0.00	0.00	0.37	0.00	0.00	0.06
Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quebec	0.00	0.00	48.61	48.61	0.00	0.00	4.76
Wisconsin							

# WATER-USE CATEGORY REPORT- Domestic Supply

Units: Mgal(US)/d

Year Of Data: 2005

## Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.68	0.41	3.16	4.25	0.00	0.00	0.51
Lake Michigan	32.99	14.01	64.13	111.12	0.00	2.67	9.79
Lake Huron	0.00	0.00	10.63	10.63	0.00	0.00	1.59
Lake Erie	12.70	0.07	95.64	108.41	0.00	0.00	15.08
Lake Ontario	21.10	31.03	104.96	157.09	0.00	0.00	18.92
St. Lawrence River	2.55	0.57	95.16	98.28	0.00	0.00	10.38

## Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.65	0.41	0.00	1.06	0.00	0.00	0.10
Lake Michigan	32.94	13.87	7.43	54.25	0.00	2.67	3.19
Lake Huron	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Erie	0.37	0.00	0.45	0.82	0.00	0.00	0.13
Lake Ontario	0.00	31.03	0.00	31.03	0.00	0.00	3.10
St. Lawrence River	0.00	0.57	48.61	49.18	0.00	0.00	4.82

# WATER-USE CATEGORY REPORT- Irrigation

Units: Mgal(US)/d

Year Of Data: 2005

## Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois					0.00	0.00	
Indiana	0.00	7.16	30.38	37.54	0.00	0.00	33.80
Michigan	6.00	85.81	162.38	254.18	0.00	0.00	228.77
Minnesota	0.04	0.35	0.01	0.40	0.00	0.00	0.37
New York	0.16	6.43	0.12	6.71	0.00	0.00	6.04
Ohio	0.24	14.38	3.76	18.38	0.00	0.00	16.54
Ontario	1.86	39.39	31.97	73.22	0.00	0.00	
Pennsylvania	0.00	0.34	0.00	0.34	0.00	0.00	0.30
Quebec	0.00	0.00	9.22	9.22	0.00	0.00	8.30
Wisconsin	0.00	0.00	42.70	42.70	0.00	0.00	42.70

## Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	0.00	0.00	0.00	0.00	0.00	0.00	
Indiana	0.00	6.71	29.75	36.46	0.00	0.00	32.82
Michigan							
Minnesota	0.00	0.12	0.00	0.12	0.00	0.00	0.11
New York	0.16	6.43	0.12	6.71	0.00	0.00	5.98
Ohio	0.23	13.24	3.10	16.57	0.00	0.00	14.92
Ontario					0.00	0.00	
Pennsylvania	0.00	0.34	0.00	0.34	0.00	0.00	0.30
Quebec					0.00	0.00	
Wisconsin							

# WATER-USE CATEGORY REPORT- Irrigation

Units: Mgal(US)/d

Year Of Data: 2005

## Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.07	0.80	0.48	1.36	0.00	0.00	0.93
Lake Michigan	2.10	69.51	208.53	280.13	0.00	0.00	256.36
Lake Huron	3.50	25.16	20.29	48.95	0.00	0.00	25.23
Lake Erie	1.53	40.54	34.48	76.55	0.00	0.00	40.24
Lake Ontario	1.08	15.70	7.24	24.02	0.00	0.00	5.66
St. Lawrence River	0.01	2.15	9.52	11.68	0.00	0.00	8.40

## Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	0.12	0.00	0.12	0.00	0.00	0.11
Lake Michigan	0.00	6.42	28.80	35.22	0.00	0.00	31.70
Lake Huron					0.00	0.00	
Lake Erie	0.39	14.02	4.05	18.46	0.00	0.00	16.62
Lake Ontario	0.00	6.17	0.12	6.29	0.00	0.00	5.66
St. Lawrence River	0.00	0.11	0.00	0.11	0.00	0.00	0.04

# WATER-USE CATEGORY REPORT- Livestock

Units: Mgal(US)/d

Year Of Data: 2005

## Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois					0.00	0.00	
Indiana	0.00	1.14	4.31	5.45	0.00	0.00	4.36
Michigan					0.00	0.00	
Minnesota	0.68	0.00	0.00	0.68	0.00	0.00	0.61
New York	7.21	0.00	13.30	20.51	0.00	0.00	18.46
Ohio	0.00	1.76	10.69	12.45	0.00	0.00	9.96
Ontario	2.95	8.67	25.47	37.09	0.00	0.00	
Pennsylvania	0.00	0.84	1.20	2.04	0.00	0.00	1.63
Quebec	0.00	0.00	19.10	19.10	0.00	0.00	15.28
Wisconsin	0.00	0.00	40.60	40.60	0.00	0.00	40.60

## Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	0.00	0.00	0.00	0.00	0.00	0.00	
Indiana	0.00	1.14	1.25	2.39	0.00	0.00	1.91
Michigan							
Minnesota	0.62	0.00	0.00	0.62	0.00	0.00	0.56
New York					0.00	0.00	6.53
Ohio	0.00	0.00	0.67	0.67	0.00	0.00	0.54
Ontario					0.00	0.00	
Pennsylvania	0.00	0.84	1.20	2.04	0.00	0.00	1.63
Quebec					0.00	0.00	
Wisconsin							

# WATER-USE CATEGORY REPORT- Livestock

Units: Mgal(US)/d

Year Of Data: 2005

## Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.68	0.14	8.30	9.12	0.00	0.00	8.91
Lake Michigan	0.00	1.14	35.68	36.82	0.00	0.00	35.91
Lake Huron	2.93	3.07	6.41	12.41	0.00	0.00	
Lake Erie	1.53	3.49	27.86	32.88	0.00	0.00	16.16
Lake Ontario	3.93	0.94	11.72	16.59	0.00	0.00	10.07
St. Lawrence River	1.77	3.63	24.69	30.09	0.00	0.00	19.85

## Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.62	0.00	0.00	0.62	0.00	0.00	0.56
Lake Michigan	0.00	1.14	1.25	2.39	0.00	0.00	1.91
Lake Huron					0.00	0.00	
Lake Erie	0.00	0.84	1.87	2.71	0.00	0.00	2.17
Lake Ontario					0.00	0.00	6.53
St. Lawrence River					0.00	0.00	

# WATER-USE CATEGORY REPORT- Industrial

Units: Mgal(US)/d

Year Of Data: 2005

## Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	11.27	0.00	0.00	11.27	0.00	0.02	0.00
Indiana	1608.91	9.25	12.00	1630.16	0.00	0.00	97.81
Michigan	374.37	111.50	75.29	561.16	0.00	0.00	
Minnesota	298.70	65.58	0.03	364.31	0.00	0.00	36.43
New York	186.98	42.59	13.27	242.84	0.00	0.00	60.77
Ohio	57.49	227.60	52.64	337.73	0.00	0.00	33.77
Ontario	900.71	0.00	22.51	923.22	0.00	0.00	58.16
Pennsylvania	5.29	0.16	0.00	5.45	0.00	0.00	0.12
Quebec	0.00	125.48	0.00	125.48	0.00	0.00	12.55
Wisconsin	187.00	0.00	0.00	187.00	0.00	0.00	19.07

## Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	11.27	0.00	0.00	11.27	0.00	0.02	0.00
Indiana	1608.89	9.25	11.28	1629.42	0.00	0.00	97.76
Michigan							
Minnesota	298.67	65.32	0.00	363.99	0.00	0.00	36.40
New York	186.98	41.49	13.27	241.74	0.00	0.00	60.46
Ohio	57.49	227.46	52.12	337.07	0.00	0.00	33.71
Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania	5.29	0.16	0.00	5.45	0.00	0.00	0.12
Quebec	0.00	124.95	0.00	124.95	0.00	0.00	12.50
Wisconsin							

# WATER-USE CATEGORY REPORT- Industrial

Units: Mgal(US)/d

Year Of Data: 2005

## Water-Use by Basin - All Facilities

Basin	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Lake Superior	474.33	65.58	0.16	540.07	0.00	0.00	46.64
Lake Michigan	2005.37	102.18	66.69	2174.24	0.00	0.02	116.30
Lake Huron	208.57	2.07	5.82	216.46	0.00	0.00	11.98
Lake Erie	534.03	246.30	77.32	857.65	0.00	0.00	85.49
Lake Ontario	243.07	33.52	21.73	298.33	0.00	0.00	31.65
St. Lawrence River	165.34	132.50	4.02	301.86	0.00	0.00	26.62

## Water-Use by Basin - Principal Facilities

Basin	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Lake Superior	298.67	65.32	0.00	363.99	0.00	0.00	36.40
Lake Michigan	1620.16	4.31	6.88	1631.35	0.00	0.02	97.20
Lake Huron	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Erie	219.28	233.51	56.55	509.34	0.00	0.00	73.77
Lake Ontario	24.90	33.52	10.27	68.69	0.00	0.00	17.18
St. Lawrence River	5.58	131.97	2.97	140.52	0.00	0.00	16.40



# WATER-USE CATEGORY REPORT- Fossil Fuel Power

Units: Mgal(US)/d

Year Of Data: 2005

## Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	760.40	0.00	0.00	760.40	0.00	0.00	0.00
Indiana	727.86	0.00	0.27	728.13	0.00	0.00	14.57
Michigan	5879.51	457.23	4.09	6340.82	0.00	0.00	
Minnesota	44.30	146.83	0.11	191.24	0.00	0.00	3.81
New York	1602.83	343.58	0.00	1946.41	0.00	0.00	38.93
Ohio	1635.79	736.53	0.00	2372.32	0.00	0.00	23.73
Ontario	1467.67	0.00	0.00	1467.67	0.00	0.00	0.00
Pennsylvania					0.00	0.00	
Quebec	39.10	7.93	0.00	47.02	0.00	0.00	4.70
Wisconsin	1763.00	0.00	0.00	1763.00	0.00	0.00	8.81

## Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	760.40	0.00	0.00	760.40	0.00	0.00	0.00
Indiana	727.86	0.00	0.27	728.13	0.00	0.00	14.57
Michigan							
Minnesota	44.29	145.94	0.00	190.23	0.00	0.00	3.81
New York	1602.83	343.58	0.00	1946.41	0.00	0.00	38.93
Ohio	1635.78	736.53	0.00	2372.31	0.00	0.00	23.73
Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quebec	39.10	7.93	0.00	47.02	0.00	0.00	4.70
Wisconsin							

# WATER-USE CATEGORY REPORT- Fossil Fuel Power

Units: Mgal(US)/d

Year Of Data: 2005

## Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	647.95	146.83	0.11	794.89	0.00	0.00	4.00
Lake Michigan	4177.02	290.28	2.87	4470.18	0.00	0.00	23.18
Lake Huron	536.88	4.84	1.09	542.82	0.00	0.00	0.00
Lake Erie	7300.72	898.63	0.39	8199.75	0.00	0.00	45.60
Lake Ontario	1218.72	343.58	0.00	1562.30	0.00	0.00	17.07
St. Lawrence River	39.16	7.93	0.00	47.08	0.00	0.00	4.70

## Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	44.29	145.94	0.00	190.23	0.00	0.00	3.81
Lake Michigan	1488.26	0.00	0.00	1488.26	0.00	0.00	14.56
Lake Huron	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Erie	2728.78	736.53	0.27	3465.58	0.00	0.00	45.60
Lake Ontario	509.77	343.58	0.00	853.35	0.00	0.00	17.07
St. Lawrence River	39.16	7.93	0.00	47.08	0.00	0.00	4.70

# WATER-USE CATEGORY REPORT- Nuclear Power

Units: Mgal(US)/d

Year Of Data: 2005

## Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	31.70	0.00	0.00	31.70	0.00	0.00	0.00
Indiana	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Michigan	2464.18	0.00	0.00	2464.18	0.00	0.00	
Minnesota	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York	1389.68	0.00	0.00	1389.68	0.00	0.00	69.48
Ohio	55.81	0.00	0.00	55.81	0.00	0.00	5.58
Ontario	10125.39	0.00	0.00	10125.39	0.00	0.00	91.13
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	
Quebec	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wisconsin	1195.00	0.00	0.00	1195.00	0.00	0.00	5.97

## Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	31.70	0.00	0.00	31.70	0.00	0.00	0.00
Indiana	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Michigan							
Minnesota	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York	1389.68	0.00	0.00	1389.68	0.00	0.00	69.48
Ohio	55.81	0.00	0.00	55.81	0.00	0.00	5.58
Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quebec	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wisconsin							

# WATER-USE CATEGORY REPORT- Nuclear Power

Units: Mgal(US)/d

Year Of Data: 2005

## Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Michigan	3639.49	0.00	0.00	3639.49	0.00	0.00	5.97
Lake Huron	4697.20	0.00	0.00	4697.20	0.00	0.00	42.28
Lake Erie	107.20	0.00	0.00	107.20	0.00	0.00	5.58
Lake Ontario	6817.87	0.00	0.00	6817.87	0.00	0.00	118.33
St. Lawrence River	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Michigan	31.70	0.00	0.00	31.70	0.00	0.00	0.00
Lake Huron	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Erie	55.81	0.00	0.00	55.81	0.00	0.00	5.58
Lake Ontario	1389.68	0.00	0.00	1389.68	0.00	0.00	69.48
St. Lawrence River	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# WATER-USE CATEGORY REPORT- Hydroelectric Power

Units: Mgal(US)/d

Year Of Data: 2005

## Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indiana	0.00	1681.91	0.00	1681.91	0.00	0.00	0.00
Michigan					0.00	0.00	
Minnesota	0.00	3717.98	0.00	3717.98	0.00	0.00	0.00
New York	129350.00	179600.00	0.00	308950.00	0.00	0.00	0.00
Ohio	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ontario	130010.47	59531.37	0.00	189541.84	0.00	-4007.75	0.00
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	
Quebec	170946.25	132949.60	0.00	303895.85	0.00	0.00	0.00
Wisconsin	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indiana	0.00	1681.91	0.00	1681.91	0.00	0.00	0.00
Michigan							
Minnesota	0.00	3717.98	0.00	3717.98	0.00	0.00	0.00
New York	129350.00	0.00	0.00	129350.00	0.00	0.00	0.00
Ohio	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quebec	170946.25	132949.60	0.00	303895.85	0.00	0.00	0.00
Wisconsin							

# WATER-USE CATEGORY REPORT- Hydroelectric Power

Units: Mgal(US)/d

Year Of Data: 2005

## Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	41874.29	0.00	41874.29	0.00	-4007.75	0.00
Lake Michigan	0.00	1681.91	0.00	1681.91	0.00	0.00	0.00
Lake Huron	20000.41	13607.66	0.00	33608.07	0.00	0.00	0.00
Lake Erie	47777.00	0.00	0.00	47777.00	0.00	0.00	0.00
Lake Ontario	33861.04	88589.26	0.00	122450.31	0.00	0.00	0.00
St. Lawrence River	328668.28	231727.72	0.00	560396.00	0.00	0.00	0.00

## Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	3717.98	0.00	3717.98	0.00	0.00	0.00
Lake Michigan	0.00	1681.91	0.00	1681.91	0.00	0.00	0.00
Lake Huron	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Erie	47777.00	0.00	0.00	47777.00	0.00	0.00	0.00
Lake Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Lawrence River	252519.25	132949.60	0.00	385468.85	0.00	0.00	0.00

# WATER-USE CATEGORY REPORT- Other

Units: Mgal(US)/d

Year Of Data: 2005

## Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	251.96	0.00	0.00	251.96	0.00	251.96	0.00
Indiana	0.00	0.01	0.05	0.06	0.00	0.00	0.01
Michigan	0.00	0.00	0.12	0.12	0.00	0.00	
Minnesota	0.00	0.00	0.05	0.05	0.00	0.00	0.00
New York	0.00	42.59	0.25	42.84	0.00	32.00	33.12
Ohio	0.46	4.68	0.45	5.59	0.00	-11.52	2.48
Ontario	0.00	199.61	0.00	199.61	61.97	0.00	0.00
Pennsylvania					0.00	0.00	
Quebec					0.00	0.00	
Wisconsin					0.00	-0.64	

## Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	251.96	0.00	0.00	251.96	0.00	251.96	0.00
Indiana	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Michigan							
Minnesota	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York	0.00	10.59	0.25	10.84	0.00	32.00	0.45
Ohio	0.46	4.63	0.36	5.45	0.00	-11.52	2.37
Ontario	0.00	199.61	0.00	199.61	61.97	0.00	0.00
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quebec					0.00	0.00	
Wisconsin							

# WATER-USE CATEGORY REPORT- Other

Units: Mgal(US)/d

Year Of Data: 2005

## Water-Use by Basin - All Facilities

Basin	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Lake Superior	0.00	0.00	0.05	0.05	0.00	0.00	0.00
Lake Michigan	251.96	0.01	0.05	252.02	0.00	251.32	0.01
Lake Huron	0.00	47.97	0.12	48.09	47.97	0.00	0.00
Lake Erie	0.46	4.68	0.45	5.59	5816.39	-11.52	2.48
Lake Ontario	0.00	170.78	0.25	171.03	-5802.39	32.00	32.70
St. Lawrence River	0.00	23.44	0.00	23.44	0.00	0.00	0.42

## Water-Use by Basin - Principal Facilities

Basin	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Lake Superior	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Michigan	251.96	0.00	0.00	251.96	0.00	251.96	0.00
Lake Huron	0.00	47.97	0.00	47.97	47.97	0.00	0.00
Lake Erie	0.46	4.63	0.36	5.45	5816.39	-11.52	2.37
Lake Ontario	0.00	138.78	0.25	139.03	-5802.39	32.00	0.03
St. Lawrence River	0.00	23.44	0.00	23.44	0.00	0.00	0.42



# **ANNUAL REPORT**

of the

## ***GREAT LAKES REGIONAL WATER USE DATABASE REPOSITORY***

***REPRESENTING 2006 WATER USE DATA IN GALLONS***

*Prepared by*

***The Great Lakes Commission***

October 7, 2009



## ***ACKNOWLEDGEMENTS***

The Great Lakes Commission wishes to thank each of the jurisdictional representatives listed on page eight for their work in collecting and transmitting the data for this report. The members' attention to detail and commitment to accuracy, and the collective familiarity with the subject matter, are all invaluable contributions to this project.

## ***FOREWARD***

The Great Lakes Regional Water Use Database was established by the Great Lakes states and provinces in response to the recommendation of the Great Lakes Charter of 1985 that calls for a uniform, consistent base of data of Great Lakes water withdrawals, diversions and consumptive uses. Beginning in 1987, water use data have been submitted to the repository on an annual basis and reports provided to assist the jurisdictions in Great Lakes-St. Lawrence River water resources planning and management. As specified by the Water Resources Management Committee in its 1987 report, *Managing the Waters of the Great Lakes Basin*, the database catalogs withdrawals by water use category, sub-basin and jurisdiction.

The database became operational in the summer of 1988 following a multi-year cooperative effort. Design and development involved input from many state, provincial, and federal agencies, with the U.S. Geological Survey providing much of the leadership.

The original customized program was developed in 1987 by Acres International on the MS/DOS platform using a modified version of DbaseIII. With the rapid advancement of computer hardware and software and the evolving needs of the Great Lakes state and provincial water resources management programs, that system soon became outdated. In July 1998, the Great Lakes Commission and Eastern Michigan University's Institute for Geospatial Research and Education (formerly the Center for Environmental Information Technology and Application) began work on a revised database which is used for this report. The system was developed using Visual Basic for Applications, based on Microsoft Access®, and contains all of the functions of the old system (including data entry, a data check facility and report generation), in addition to new features such as a flexible data interface and automatic data checking.

A Great Lakes Regional Water Use Database to provide comparable water use information on withdrawals, diversions and consumptive use is also called for under Article 4 of the Great Lakes—St. Lawrence River Basin Water Resources Compact and Article 301 of the Great Lakes—St. Lawrence River Basin Sustainable Water Resources Agreement approved by the states and provinces in 2008. Under the Compact and Agreement, the parties (states and provinces) are required to report water use information to the regional database repository and aggregated information will be made available to the public on an annual basis.

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# ***I. GREAT LAKES BASIN OVERVIEW***

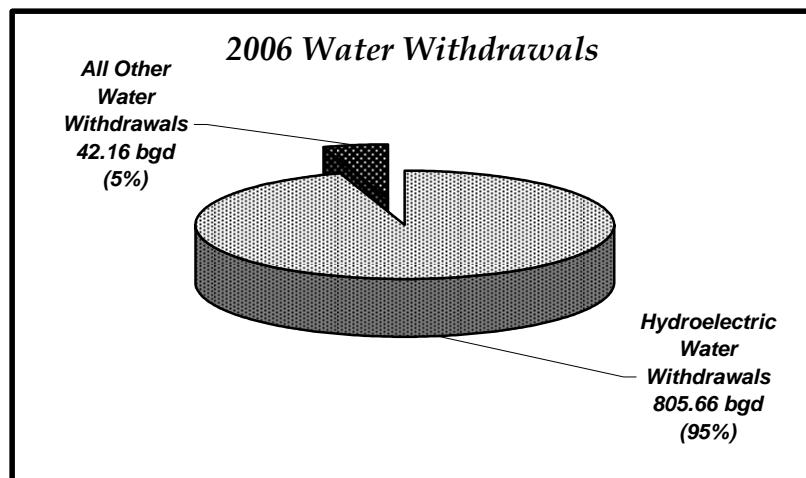
## **Introduction**

On an annual basis, the Great Lakes Commission - the repository for the Great Lakes – St. Lawrence River Water Use Database - sends an e-mail request for the pervious year's water use data in the fall to states and provinces. All data are submitted to the repository in a Microsoft Excel or Access format then compiled into a single Microsoft Access database.

All data are in one of two unit measures—millions of U.S. gallons per day (mgd) or millions of liters per day (mld)—and values are initially set to zero. Numeric values are required for all categories of use. A value of zero indicates either zero water use (under All Facilities) or water use which does not meet the Great Lakes Charter trigger level (under Principal Facilities). Definitions and abbreviations of terms used in this report can be found on page 6.

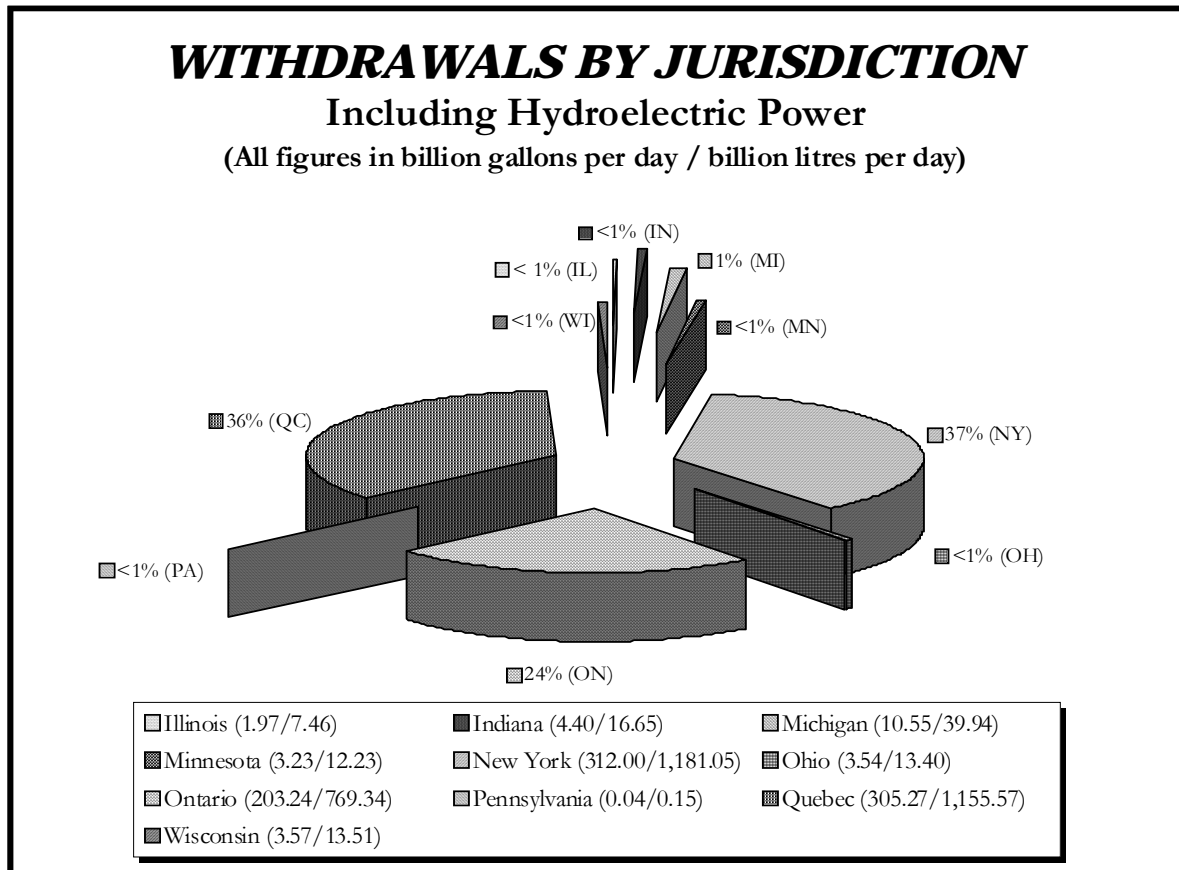
The quality of data for each entry is rated as a 1, 2 or 3 indicating the level of accuracy as 1) measured 2) partially measured or 3) estimated; and a 1 or 2 indicating the level of aggregation as 1) originating from site-specific sources or 2) from higher level aggregate sources such as county or census databases. Both measures of quality are based on percentages of total volume.

For this report, self-supply--hydroelectric (water used in the generation of electricity at plants where turbine generators are driven by falling water) is treated as a withdrawal, even though all water for this purpose is considered to be returned to the basin. Under the 2009 draft water use information reporting protocols that will guide implementation of the new water use information commitments set forth in the Great Lakes-St. Lawrence River Water Resources Compact and Agreement, hydroelectric will *not* be considered a “withdrawal”, but rather a “use.” In future reports, it will be not aggregated as total withdrawals, but rather aggregated separately as a use. As the following chart illustrates, this is the largest single category of withdrawal and represents 95 percent of the total amount of water “withdrawn” in 2006.



**Figure 1**

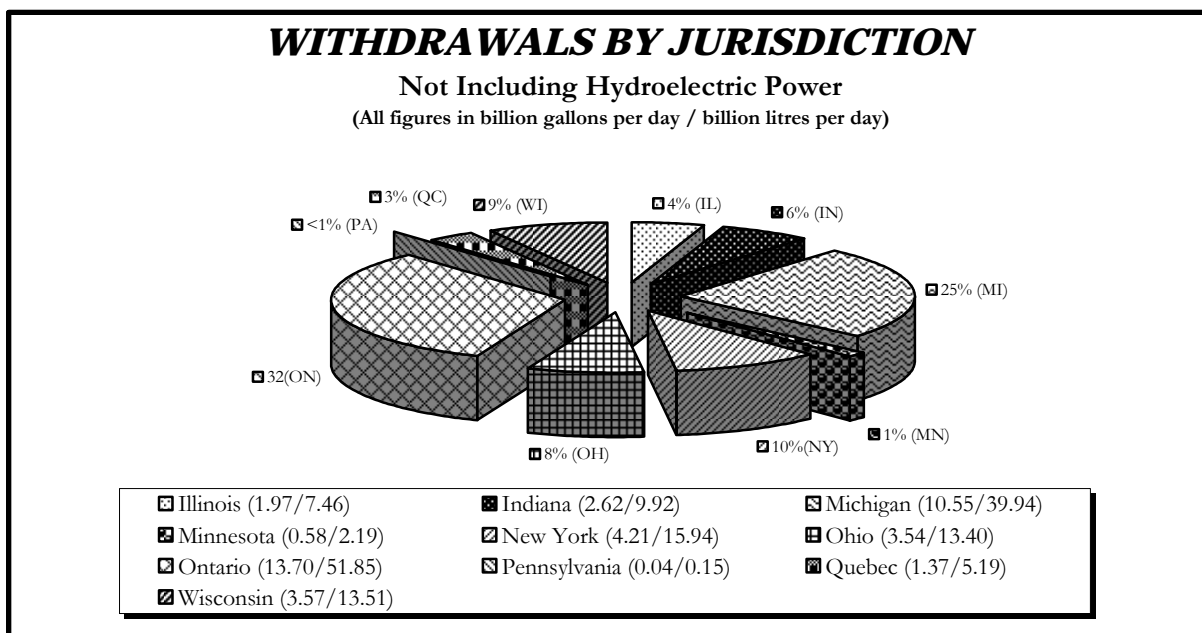
Each of the ten jurisdictions' water uses is represented in Figure 2 and Figure 3. Figure 2 includes self-supply – hydroelectric use. In total, water withdrawals for the year 2006 were approximately 847.82 billion gallons per day, or about 3,219.45 billion liters per day.



**Figure 2**



Figure 3 more accurately reflects the true water use within the basin, as it does not include self-supply – hydroelectric use. Water withdrawals for the eight remaining off-stream categories totaled 42.7 billion gallons per day, or 156 billion liters per day.



**Figure 3**

Pie charts showing individual jurisdictional water use, beginning with Illinois on page 14, are in million gallons per day and do not include hydroelectric use

## Topics of Interest

### Diversions

Two types of diversions are reported by the water use database: interbasin (transfers that take place between the Great Lakes basin and another watershed) and intrabasin (transfers that take place between one of the Great Lakes watersheds and another); both types can be either incoming or outgoing.

Of the two types, interbasin diversions (transfers that take place between the Great Lakes basin and another watershed) have traditionally been of greater interest to water supply managers and the public. Interbasin diversions shown in the tables as a positive number (e.g. **without** a minus sign) indicate water leaving the Great Lakes basin; interbasin diversions shown in the tables as a negative number (e.g. **with** a minus sign) indicate water entering the Great Lakes basin.

For a history of Great Lakes water diversions and removals, please see *Great Lakes Diversions and Other Removals* by Frank Quinn and Jeff Edstrom, **Canadian Water Resources Journal**, 2000, vol. 25, #2. Copies of this article can be obtained through the CWRJ website at [www.cwra.org/publications](http://www.cwra.org/publications), or by calling 519/622-4764.

### Consumptive Use

Collecting and reporting accurate data for consumptive uses of Great Lakes water continues to be a major challenge for the Great Lakes jurisdictions. The states and provinces currently use a variety of methods to obtain consumptive use figures, including measurement and estimation at the facility level. However, the most common practice is to calculate consumptive use for each water use category by multiplying the withdrawn amount by an agreed-upon percentage (consumptive use coefficient). Figure 4 on the following page shows the consumptive use coefficients that were used for this report. For the resulting consumptive use quantities by jurisdiction, basin or water use category, please refer to the tables in chapters II through V. Total consumptive use in the basin for 2006 was calculated to be 1.83 bgd (6.93 bld).

For a more detailed overview, please see:

**Annotated Bibliography of Consumptive Use in the Great Lakes Region and Basin**  
([www.glc.org/wateruse/wrmdss/finalreport/pdf/CU\\_biblio.pdf](http://www.glc.org/wateruse/wrmdss/finalreport/pdf/CU_biblio.pdf))

**Measuring and Estimating Consumptive Use of Great Lakes Water**  
([www.glc.org/wateruse/wrmdss/finalreport/pdf/CU\\_briefing.pdf](http://www.glc.org/wateruse/wrmdss/finalreport/pdf/CU_briefing.pdf)).

## Consumptive Use Coefficients

<i><b>Water Use Category</b></i>	<b>ILLINOIS</b>	<b>INDIANA</b>	<b>MICHIGAN</b>	<b>MINNESOTA</b>	<b>NEW YORK</b>	<b>OHIO</b>	<b>ONTARIO</b>	<b>PENNSYLVANIA</b>	<b>QUEBEC</b>	<b>WISCONSIN</b>
Public Supply	10-15%	15%	10-15%	10-15%	10%	10-15%	15%	10%	10-15%	10-15%
Self-Supply Domestic	10-15%	15%	10-15%	10-15%	10%	10-15%	15%	10%	10-15%	10-15%
Self-Supply Irrigation	90%	90%	90%	90%	90%	90%	78%	90%	90%	70%
Self-Supply Livestock	80%	80%	80%	80%	90%	80%	80%	80%	80%	90%
Self-Supply Industrial	Varies by plant & SIC code	6%	10-15%	Varies by plant & SIC code	25%	10%; salt mining is 90%	Varies by plant & SIC code	Varies by plant & SIC code	10% for pulp & paper industry	10.2% for manufacturing & mining
Self-Supply Thermoelectric (Fossil Fuel)	Individually estimated based on the quantity of make-up water	2%	1-2% for plants using once-through cooling; individual analysis for wet cooling towers	2%	2%	Individually estimated based on the quantity of make-up water	.9% based on reports of increased local lake evaporation due to discharge of heated water to lakes	NA (Pennsylvania has no facilities in the basin)	10%; estimates obtained from USGS report	.5-1%
Self-Supply Thermoelectric (Nuclear)	Individually estimated based on the quantity of make-up water	NA (Indiana has no facilities in the basin)	1-2% for plants using once-through cooling; individual analysis for wet cooling towers	NA (Minnesota has no facilities in the basin)	5%	14% based on reports of increased local lake evaporation due to discharge of heated water to lakes	.9% based on reports of increased local lake evaporation due to discharge of heated water to lakes	NA (Pennsylvania has no facilities in the basin)	NA (Quebec has no facilities in the basin)	.5-1%
Hydroelectric	Coefficient for all states and provinces is 0%									
Self-Supply Other	0%	12%	Varies based on use	Varies based on use	Varies based on use	Varies based on use	Varies based on use	Varies based on use	Varies based on use	Varies based on use

**Figure 4**

## Definitions and Abbreviations

### *General Definitions and Abbreviations*

- < **bgd**: billion gallons per day
- < **bld**: billion liters per day
- < **consumptive use**: that portion of water withdrawn or withheld from the Great Lakes basin and assumed to be lost or otherwise not returned to the Great Lakes basin due to evapotranspiration, incorporation into products, or other processes
- < **Great Lakes surface water (GLSW)**: the Great Lakes, their connecting channels (the St. Clair River, the Detroit River, the Niagara River and the St. Marys River), and the St. Lawrence River
- < **groundwater (GW)**: all subsurface water
- < **interbasin diversion (positive)**: water transferred from the Great Lakes basin into another watershed
- < **interbasin diversion (negative)**: water transferred from another watershed into the Great Lakes basin
- < **intrabasin diversion (positive)**: water transferred out of one Great Lakes watershed into another
- < **intrabasin diversion (negative)**: water transferred into one Great Lakes watershed from another
- < **level of accuracy**: the quality of data based on percentage of total volume and rated as 1) measured; 2) partially measured or: 3) estimated,
- < **level of aggregation**: the quality of data based on percentage of total volume and rated as 1) originating from site-specific sources or 2) originating from higher level aggregate sources, such as county or census databases
- < **mgd**: million gallons per day
- < **mld**: million liters per day
- < **other surface water (OSW)**: tributary streams, lakes, ponds, and reservoirs within the Great Lakes basin
- < **principal facility**: facilities withdrawing in excess of the Great Lakes Charter uniform trigger level of 100,000 U.S. gallons/day (380,000 liters/day) average over a 30-day period. A principal facility is determined by the total withdrawal (or consumption) of all sources combined (Great Lakes surface water, other surface water, and groundwater) rather than a single source. The combined withdrawals (or consumption) of separate wells or operations undertaken by the same facility or company will be evaluated separately for the purpose of determining principal facility status unless those operations are covered under the same registration (or permit) or are physically contiguous. Principal facilities are a subset of all facilities in the database.
- < **tgd**: trillion gallons per day
- < **tld**: trillion liters per day
- < **withdrawal amount**: water removed or taken from surface or groundwater (including hydroelectric use<sup>1</sup>)

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<sup>1</sup> Under the draft water use information reporting protocols that will guide the implementation of the new water use information commitments set forth in the Great Lakes-St. Lawrence River Water Resources Compact and Agreement, hydroelectric will not be considered a “withdrawal”, but rather a “use.”

### **Water Use Category Definitions<sup>2</sup>**

1. **Public Water Supply:** Water withdrawn for all uses by public and private water suppliers and delivered to users that do not supply their own water. (Water suppliers provide water for a variety of uses such as residential, commercial, industrial, and public water use.)
2. **Self-Supply Domestic: (residential, commercial, institutional):** Water used for normal household purposes. Also referred to as residential water use, this category includes water used for drinking, food preparation, bathing, washing clothes and dishes, flushing toilets, and watering lawns. Commercial uses include water used by motels, hotels, restaurants, office buildings and institutions, both civilian and military. This category also includes water for mobile homes, hospitals, schools, fire fighting, air conditioning and other similar uses not covered under a public supply. In addition, this category includes amusement and recreational water uses such as snowmaking and water slides. The coefficient for domestic per capita water use is 75 gallons a day (U.S.) unless otherwise indicated by the reporting state or province.
3. **Self-Supply Irrigation:** Water artificially applied on lands to assist in the growing of crops and pastures or in the maintenance of recreational lands, such as parks and golf courses.
4. **Self-Supply Livestock:** Water used by horses, cattle, sheep, goats, hogs, poultry, and other commercially important animals. Water used in fish hatchery operations are also included under this category.
5. **Self-Supply Industrial (manufacturing and mining):** Industrial water includes water used in the manufacture of metals, chemicals, paper, and allied products. Mining water use includes water used in the extraction or washing of minerals; for example solids, such as coal and ores, and liquids such as crude petroleum and natural gas. Water used in quarrying and milling is also included in the industrial category. Brine extraction from oil and gas operations is not included. Withdrawals and consumptive uses for industrial and mining purposes (including dewatering operations) recorded under another category (e.g., public supply) will not be recorded here. Water used in a closed cycle (recirculation) will not be reported as a withdrawal. Other situations should be evaluated on a case-by-case basis.
6. **Self-Supply Thermoelectric Power (fossil fuel plants):** Water used by plants fueled by fossil fuels such as coal, oil or natural gas. Withdrawals and consumptive uses already recorded under another category (e.g., public supply) will not be reported here.
7. **Self-Supply Thermoelectric Power (nuclear plants):** Water used by plants fueled by nuclear generation. Withdrawals and consumptive uses already recorded under another category (e.g., public supply) will not be reported here.
8. **Self-Supply Hydroelectric Power:** Water used to drive turbines that generate electric power. This category includes both Ainstream use@ where water is used on a once-through basis and Aoffstream use@ where water is recycled through pumped-storage systems. Neither use is considered a consumptive use.
9. **Self-Supply - Other:** Water used for purposes not reported in categories one through nine. Examples include, but are not limited to, withdrawals for fish/wildlife, environmental, recreation, navigation, and water quality purposes. Specifically, water used to maintain levels for navigation, for recreation, for fish and wildlife habitat creation and enhancement (excluding fish hatchery operations included under Category 5), for flow augmentation (or diversion), for sanitation, pollution confinement, and other water quality purposes and agricultural activities (services) other than those directly related to irrigation such as field drainage are included. Water used in temporary or immediate emergency situations (e.g., fighting forest or peat fires) is also reported here.

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<sup>2</sup> These definitions are used to implement the water use information commitments set forth in the Great Lakes Charter of 1985. Slight modifications to these water use category definitions will occur to implement the new water use information commitments set forth in the Great Lakes-St. Lawrence River Water Resources Compact and Agreement. These modifications will be realized when the regional database is updated in the near future.

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## ***II. GREAT LAKES BASIN SUMMARY TABLES***

**Water Use by Jurisdiction**

**Water Use by Basin**

**Water Use by Category**

# SUMMARY REPORT - GREAT LAKES BASIN

Units: Bgal(US)/d

Year Of Data: 2006

## Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	1.98	0.00	0.00	1.98	0.00	1.21	0.00
Indiana	2.43	1.85	0.13	4.40	0.00	0.00	0.17
Michigan	8.51	1.46	0.58	10.55	0.00	0.00	0.55
Minnesota	0.38	2.85	0.01	3.23	0.00	0.00	0.05
New York	131.49	180.38	0.13	312.00	0.00	0.04	0.30
Ohio	2.31	1.06	0.17	3.54	0.00	-0.01	0.19
Ontario	143.00	59.96	0.28	203.24	0.06	-4.01	0.28
Pennsylvania	0.03	0.00	0.00	0.04	0.00	0.00	0.00
Quebec	171.59	133.58	0.10	305.27	0.00	0.00	0.16
Wisconsin	3.36	0.02	0.19	3.57	0.00	0.00	0.15
<b>Total:</b>	<b>465.08</b>	<b>381.16</b>	<b>1.58</b>	<b>847.82</b>	<b>0.06</b>	<b>-2.75</b>	<b>1., )</b>

## Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	1.98	0.00	0.00	1.98	0.00	1.21	0.00
Indiana	2.43	1.84	0.09	4.37	0.00	0.00	0.16
Michigan							
Minnesota	0.38	2.85	0.01	3.23	0.00	0.00	0.04
New York	131.07	0.47	0.01	131.56	0.00	0.04	0.18
Ohio	2.31	1.06	0.09	3.46	0.00	-0.01	0.16
Ontario	0.49	0.38	0.09	0.96	0.06	0.00	0.11
Pennsylvania	0.03	0.00	0.00	0.04	0.00	0.00	0.00
Quebec	171.59	133.58	0.05	305.21	0.00	0.00	0.13
Wisconsin							
<b>Total:</b>	<b>310.28</b>	<b>140.18</b>	<b>0.34</b>	<b>450.80</b>	<b>0.06</b>	<b>1.25</b>	<b>0.80</b>



# SUMMARY REPORT - GREAT LAKES BASIN

Units: Bgal(US)/d

Year Of Data: 2006

## Water-Use by Basin - All Facilities

Basin	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Lake Superior	1.19	41.02	0.03	42.24	0.00	-4.01	0.08
Lake Michigan	10.99	2.52	0.70	14.21	0.00	1.21	0.63
Lake Huron	25.22	14.31	0.12	39.64	0.05	0.00	0.13
Lake Erie	56.02	1.38	0.41	57.81	5.82	0.00	0.48
Lake Ontario	42.71	89.45	0.19	132.35	-5.80	0.04	0.34
St. Lawrence River	328.95	232.49	0.14	561.57	0.00	0.00	0.19
<b>Total:</b>	<b>465.08</b>	<b>381.16</b>	<b>1.58</b>	<b>847.82</b>	<b>0.06</b>	<b>-2.75</b>	<b>1., (</b>

## Water-Use by Basin - Principal Facilities

Basin	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Lake Superior	0.41	2.86	0.01	3.28	0.00	0.00	0.05
Lake Michigan	4.41	1.81	0.08	6.29	0.00	1.21	0.16
Lake Huron	0.04	0.07	0.02	0.13	0.05	0.00	0.01
Lake Erie	50.52	1.12	0.16	51.81	5.82	-0.01	0.25
Lake Ontario	2.28	0.65	0.02	2.95	-5.80	0.04	0.19
St. Lawrence River	252.63	133.67	0.05	386.35	0.00	0.00	0.15
<b>Total:</b>	<b>310.28</b>	<b>140.18</b>	<b>0.34</b>	<b>450.80</b>	<b>0.06</b>	<b>1.25</b>	<b>0.80</b>

# SUMMARY REPORT - GREAT LAKES BASIN

Units: Bgal(US)/d

Year Of Data: 2006

## Water-Use by Category - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	4.05	1.13	0.55	5.73	0.00	1.00	0.57
Domestic Supply	0.06	0.05	0.37	0.49	0.00	0.01	0.05
Irrigation	0.01	0.14	0.27	0.42	0.00	0.00	0.32
Livestock	0.01	0.01	0.11	0.14	0.00	0.00	0.09
Industrial	3.66	0.63	0.23	4.52	0.00	0.00	0.39
Fossil Fuel Power	12.78	2.43	0.05	15.26	0.00	0.00	0.17
Nuclear Power	15.13	0.00	0.00	15.13	0.00	0.00	0.22
Hydroelectric Power	429.15	376.51	0.00	805.66	0.00	-4.01	0.00
Other	0.22	0.24	0.00	0.47	0.06	0.24	0.03
<b>Total:</b>	<b>465.08</b>	<b>381.16</b>	<b>1.58</b>	<b>847.82</b>	<b>0.06</b>	<b>-2.75</b>	<b>1.84</b>

## Water-Use by Category - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	2.64	0.81	0.18	3.64	0.00	1.00	0.34
Domestic Supply	0.03	0.05	0.06	0.13	0.00	0.00	0.01
Irrigation	0.00	0.02	0.02	0.04	0.00	0.00	0.03
Livestock	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Industrial	2.22	0.42	0.08	2.72	0.00	0.00	0.24
Fossil Fuel Power	4.45	1.28	0.00	5.73	0.00	0.00	0.08
Nuclear Power	1.58	0.00	0.00	1.58	0.00	0.00	0.09
Hydroelectric Power	299.14	137.38	0.00	436.52	0.00	0.00	0.00
Other	0.22	0.21	0.00	0.44	0.06	0.24	0.00
<b>Total:</b>	<b>310.28</b>	<b>140.18</b>	<b>0.34</b>	<b>450.80</b>	<b>0.06</b>	<b>1.25</b>	<b>0.80</b>

### ***III. JURISDICTION TABLES AND ANALYSES***

Each jurisdictional summary includes a water use analysis and three tables:

Withdrawals, Diversions and Consumptive Uses

Withdrawals by Source

Jurisdiction Totals

**Illinois**

**Indiana**

**Michigan**

**Minnesota**

**New York**

**Ohio**

**Ontario**

**Pennsylvania**

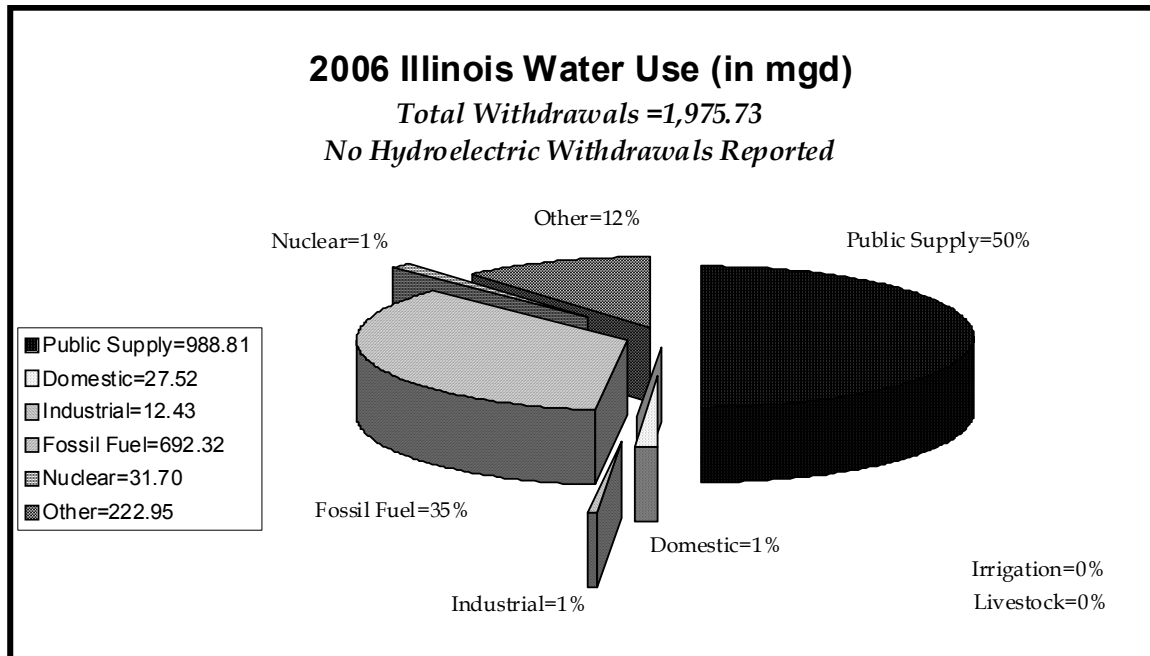
**Quebec**

**Wisconsin**

## Illinois

**Data Sources:** Water use data for Illinois were provided by the Department of Natural Resources--Office of Water Resources, and the Illinois State Water Survey. Please contact James Casey at 312/793-5947 or [jcasey@illinois.gov](mailto:jcasey@illinois.gov) with specific questions regarding Illinois' data.

**Withdrawals:** Illinois' water withdrawals from Lake Michigan in 2006 totaled 1,975.73 mgd – nearly a 9 percent decrease in water usage from 2005 (2,166.1 mgd).



**Figure 5**

**Consumptive Use:** No consumptive use information was reported.

**Interbasin Diversions:** Total diversions from the Lake Michigan basin in 2006 were 1,214.27 mgd, a decrease of nearly 9 percent from the 2005 figure (1332.46 mgd). Public water supply accounted for about 81 percent of these diversions. All diversions for Illinois are outgoing interbasin diversions—water transferred from the Chicago River in the Great Lakes basin to the Illinois River in the Mississippi River basin.

**Data Quality:** Illinois's withdrawal data for this report were 100 percent measured; the level of aggregation was 100 percent site-specific.

# JURISDICTION REPORT- Illinois

Withdrawals, Diversions Units: Mgal(US)/d  
and Consumptive Uses Year Of Data: 2006

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Michigan	Public Supply	988.81	988.81	0.00	988.81	988.81	0.00
	Domestic Supply	27.52	2.50	0.00	27.52	2.50	0.00
	Irrigation		0.00		0.00	0.00	
	Livestock		0.00		0.00	0.00	
	Industrial	12.43	0.01	0.00	12.43	0.01	0.00
	Fossil Fuel Power	692.32	0.00	0.00	692.32	0.00	0.00
	Nuclear Power	31.70	0.00	0.00	31.70	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	222.95	222.95	0.00	222.95	222.95	0.00
	Total:	1975.73	1214.27	0.00	1975.73	1214.27	0.00
Grand Total:		1975.73	1214.27	0.00	1975.73	1214.27	0.00

# JURISDICTION REPORT- Illinois

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2006

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Michigan	Public Supply	988.81	0.00	0.00	988.81	0.00	0.00
	Domestic Supply	27.51	0.00	0.01	27.51	0.00	0.01
	Irrigation				0.00	0.00	0.00
	Livestock				0.00	0.00	0.00
	Industrial	12.43	0.00	0.00	12.43	0.00	0.00
	Fossil Fuel Power	692.32	0.00	0.00	692.32	0.00	0.00
	Nuclear Power	31.70	0.00	0.00	31.70	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	222.95	0.00	0.00	222.95	0.00	0.00
	Total:	1975.71	0.00	0.01	1975.71	0.00	0.01
	Grand Total:	1975.71	0.00	0.01	1975.71	0.00	0.01

# JURISDICTION REPORT- Illinois

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2006

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	988.81	0.00	0.00	988.81	0.00	988.81	0.00
Domestic Supply	27.51	0.00	0.01	27.52	0.00	2.50	0.00
Irrigation					0.00	0.00	
Livestock					0.00	0.00	
Industrial	12.43	0.00	0.00	12.43	0.00	0.01	0.00
Fossil Fuel Power	692.32	0.00	0.00	692.32	0.00	0.00	0.00
Nuclear Power	31.70	0.00	0.00	31.70	0.00	0.00	0.00
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	222.95	0.00	0.00	222.95	0.00	222.95	0.00

## Total Report - Principal Facilities

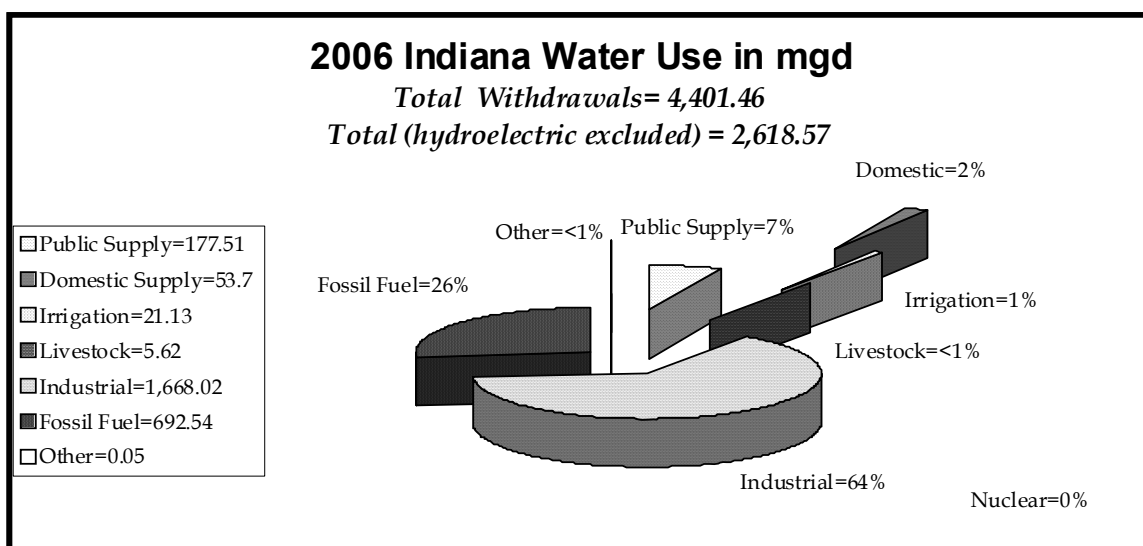
Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	988.81	0.00	0.00	988.81	0.00	988.81	0.00
Domestic Supply	27.51	0.00	0.01	27.52	0.00	2.50	0.00
Irrigation	0.00	0.00	0.00	0.00	0.00	0.00	
Livestock	0.00	0.00	0.00	0.00	0.00	0.00	
Industrial	12.43	0.00	0.00	12.43	0.00	0.01	0.00
Fossil Fuel Power	692.32	0.00	0.00	692.32	0.00	0.00	0.00
Nuclear Power	31.70	0.00	0.00	31.70	0.00	0.00	0.00
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	222.95	0.00	0.00	222.95	0.00	222.95	0.00

## Indiana

**Data Sources:** The Indiana Department of Natural Resources—Division of Water compiled the 2006 water use data for the Indiana Lake Erie and Lake Michigan basins.

The Indiana Business Research Center at Indiana University provided population estimates for counties used in calculating self-supply domestic withdrawals. The Indiana Agricultural Statistics service at Purdue University provided livestock estimates by county. The local office of USGS Water Resources Division provided estimates of percent of population by county on domestic wells. Hydroelectric water use data are from the Department of Energy's Energy Information Administration website located at [www.eia.doe.gov/cneaf/electricity](http://www.eia.doe.gov/cneaf/electricity). Please contact Ralph Spaeth at 317/234-1101 or [rspaeth@dnr.in.gov](mailto:rspaeth@dnr.in.gov) with questions regarding Indiana's data.

**Withdrawals:** In 2006, total use was 4,401.46 mgd, an increase of nearly 2 percent from the 2005 figure of 4,324.71 mgd. Of this amount, 98.7 percent of the water used was from the Lake Michigan basin. The total withdrawal excludes hydroelectric power from Lake Michigan which accounted for 1,782.89 mgd. The primary use of Lake Michigan water was industrial, at 1,658.80 mgd, or 65 percent. The primary use of Lake Erie water was public supply, at 40.61 mgd, or almost 70 percent.



**Figure 6**

**Consumptive Use:** The total consumptive use of water in Indiana's portion of the Great Lakes basin was 164.17 mgd, compared to 179.00 mgd in 2005. In the Lake Michigan basin, industrial water use category was the largest consumptive use, at 63 percent (99.49 mgd of a total of 156.75 mgd) and in the Lake Erie basin public supply was the largest consumptive use, at 72 percent (6.07 mgd of a total of 7.42 mgd).

**Interbasin Diversions:** A diversion by the city of Valparaiso withdrew 2.72 mgd groundwater for public supply from the Kankakee River basin which is discharged as treated sewage into Salt Creek which is in the Lake Michigan basin. A diversion from the Lake Erie Basin for public supply uses is 6.26 mgd.

**Data Quality:** Indiana's withdrawal data for this report were 4 percent measured, 54 percent partially measured, and 42 percent calculated or estimated; the level of aggregation was 99 percent site-specific and 1 percent aggregated.



# JURISDICTION REPORT- Indiana

Withdrawals, Diversions Units: Mgal(US)/d  
and Consumptive Uses Year Of Data: 2006

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Michigan							
	Public Supply	136.90	-2.72	20.53	136.49	0.00	20.47
	Domestic Supply	47.33	0.00	7.10	24.87	0.00	3.74
	Irrigation	20.08	0.00	18.07	19.05	0.00	17.15
	Livestock	4.67	0.00	3.74	2.56	0.00	2.05
	Industrial	1658.80	0.00	99.53	1658.19	0.00	99.49
	Fossil Fuel Power	692.27	0.00	13.85	692.27	0.00	13.85
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	1782.89	0.00	0.00	1782.89	0.00	0.00
	Other	0.05	0.00	0.01	0.00	0.00	0.00
	Total:	4342.99	-2.72	162.83	4316.32	0.00	156.75
Lake Erie							
	Public Supply	40.61	6.26	6.09	40.43	0.00	6.07
	Domestic Supply	6.37	0.00	0.96	0.39	0.00	0.06
	Irrigation	1.05	0.00	0.95	0.82	0.00	0.73
	Livestock	0.95	0.00	0.76	0.00	0.00	0.00
	Industrial	9.22	0.00	0.56	9.05	0.00	0.55
	Fossil Fuel Power	0.27	0.00	0.01	0.27	0.00	0.01
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total:	58.47	6.26	9.33	50.96	0.00	7.42
Grand Total:		4401.46	3.54	172.16	4367.28	0.00	164.17

# JURISDICTION REPORT- Indiana

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2006

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Michigan							
	Public Supply	89.62	0.00	47.28	89.62	0.00	46.87
	Domestic Supply	0.00	17.78	29.55	0.00	17.77	7.10
	Irrigation	0.00	4.08	16.00	0.00	3.69	15.36
	Livestock	0.00	1.25	3.42	0.00	1.25	1.31
	Industrial	1648.11	3.90	6.79	1648.07	3.87	6.25
	Fossil Fuel Power	692.27	0.00	0.00	692.27	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	1782.89	0.00	0.00	1782.89	0.00
	Other	0.00	0.00	0.05	0.00	0.00	0.00
	Total:	2430.00	1809.90	103.09	2429.96	1809.47	76.89
Lake Erie							
	Public Supply	0.00	31.32	9.29	0.00	31.32	9.11
	Domestic Supply	0.00	0.00	6.37	0.00	0.00	0.39
	Irrigation	0.00	0.28	0.77	0.00	0.16	0.66
	Livestock	0.00	0.00	0.95	0.00	0.00	0.00
	Industrial	0.00	3.61	5.61	0.00	3.61	5.44
	Fossil Fuel Power	0.00	0.00	0.27	0.00	0.00	0.27
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total:	0.00	35.21	23.26	0.00	35.09	15.87
Grand Total:		2430.00	1845.11	126.35	2429.96	1844.56	92.76

# JURISDICTION REPORT- Indiana

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2006

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	89.62	31.32	56.57	177.51	0.00	3.54	26.62
Domestic Supply	0.00	17.78	35.92	53.70	0.00	0.00	8.06
Irrigation	0.00	4.36	16.77	21.13	0.00	0.00	19.02
Livestock	0.00	1.25	4.37	5.62	0.00	0.00	4.50
Industrial	1648.11	7.51	12.40	1668.02	0.00	0.00	100.09
Fossil Fuel Power	692.27	0.00	0.27	692.54	0.00	0.00	13.86
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	1782.89	0.00	1782.89	0.00	0.00	0.00
Other	0.00	0.00	0.05	0.05	0.00	0.00	0.01

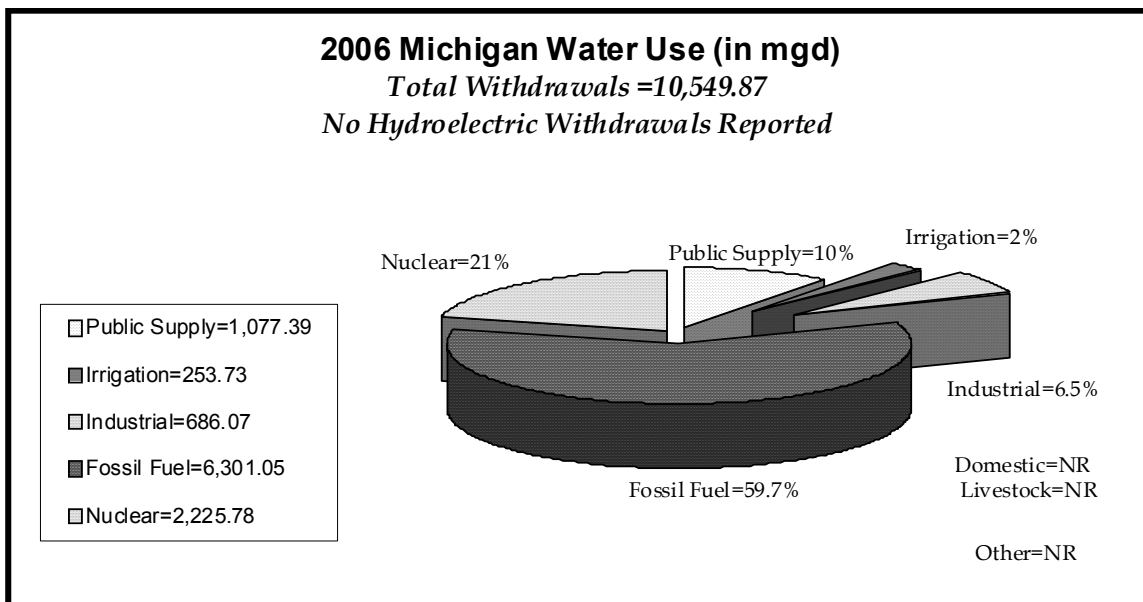
## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	89.62	31.32	55.98	176.92	0.00	0.00	26.54
Domestic Supply	0.00	17.77	7.49	25.26	0.00	0.00	3.80
Irrigation	0.00	3.85	16.02	19.87	0.00	0.00	17.88
Livestock	0.00	1.25	1.31	2.56	0.00	0.00	2.05
Industrial	1648.07	7.48	11.69	1667.24	0.00	0.00	100.04
Fossil Fuel Power	692.27	0.00	0.27	692.54	0.00	0.00	13.86
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	1782.89	0.00	1782.89	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## Michigan

**Data Sources:** The Michigan Department of Environmental Quality (DEQ) submitted water use data for 2006. All data are directly reported to the Michigan DEQ by the facilities within each category except irrigation, which is estimated and divided into agricultural and nonagricultural irrigation. Agricultural irrigation uses (golf course, park, etc.) is estimated using federal Agricultural Census data and a water use estimation model developed for Michigan. Nonagricultural irrigation facilities report directly to the DEQ. Please contact Andrew LeBaron at 517/241-1435 or lebarona@michigan.gov with questions regarding Michigan's water use data.

**Withdrawals:** Water withdrawals for the Lake Superior, Lake Michigan, Lake Huron, and Lake Erie basins of Michigan were approximately 10,549.87 mgd, a decrease of between 1.4 percent from 2004 (10,700.06 mgd). Of the four basins, the state of Michigan withdraws the most about 46.6 percent from Lake Erie (5,150.06 mgd) and the least—about 3 percent from Lake Superior (294.65 mgd). Thermoelectric power-fossil fuel, at 60 percent, was the largest withdrawal category for the state of Michigan.



**Figure 7**

**Consumptive Use:** Consumptive uses in the Michigan portion of the Great Lakes basin were calculated to be approximately 549.97 mgd; irrigation was the largest single consumptive use at 228.36 mgd, or about 42 percent of the total consumptive use.

**Interbasin Diversions:** None reported.

**Data Quality:** Michigan's withdrawal data for this report were 91 percent partially measured, 2 percent calculated or estimated; the level of aggregation was 98 percent site-specific and 2 percent aggregated.

# JURISDICTION REPORT- Michigan

Withdrawals, Diversions and Consumptive Uses Units: Mgal(US)/d  
Year Of Data: 2006

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Superior							
	Public Supply	11.61	0.00	1.45			
	Domestic Supply		0.00				
	Irrigation	0.35	0.00	0.32			
	Livestock		0.00				
	Industrial	12.58	0.00	1.26			
	Fossil Fuel Power	270.10	0.00	3.24			
	Nuclear Power		0.00				
	Hydroelectric Power		0.00				
	Other		0.00				
	Total:	294.65	0.00	6.27			
Lake Michigan							
	Public Supply	302.91	0.00	37.86			
	Domestic Supply	3.29	0.00	0.41			
	Irrigation	203.88	0.00	183.49			
	Livestock		0.00				
	Industrial	511.29	0.00	51.13			
	Fossil Fuel Power	1168.83	0.00	14.03			
	Nuclear Power	2176.72	0.00	41.36			
	Hydroelectric Power		0.00				
	Other	2.24	0.00	0.00			
	Total:	4369.17	0.00	328.28			
Lake Huron							
	Public Supply	125.43	0.00	15.68			
	Domestic Supply	0.01	0.00	0.00			
	Irrigation	27.47	0.00	24.72			
	Livestock		0.00				
	Industrial	77.94	0.00	7.79			
	Fossil Fuel Power	741.15	0.00	8.89			
	Nuclear Power		0.00				
	Hydroelectric Power		0.00				
	Other	0.15	0.00	0.00			
	Total:	972.15	0.00	57.09			

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Erie							
	Public Supply	637.44	0.00	79.68			
	Domestic Supply	0.17	0.00	0.02			
	Irrigation	22.03	0.00	19.83			
	Livestock		0.00				
	Industrial	84.25	0.00	8.43			
	Fossil Fuel Power	4120.96	0.00	49.45			
	Nuclear Power	49.06	0.00	0.93			
	Hydroelectric Power		0.00				
	Other		0.00				
	Total:	4913.91	0.00	158.34			
Grand Total:		10549.87	0.00	549.97			

# JURISDICTION REPORT- Michigan

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2006

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Superior							
	Public Supply	3.86	0.00	7.75			
	Domestic Supply						
	Irrigation	0.00	0.11	0.24			
	Livestock						
	Industrial	12.44	0.00	0.14			
	Fossil Fuel Power	270.10	0.00	0.00			
	Nuclear Power						
	Hydroelectric Power						
	Other						
	Total:	286.41	0.11	8.13			
Lake Michigan							
	Public Supply	136.88	0.47	165.56			
	Domestic Supply	0.00	1.26	2.03			
	Irrigation	1.99	62.51	139.38			
	Livestock						
	Industrial	297.89	148.60	64.80			
	Fossil Fuel Power	651.94	471.44	45.45			
	Nuclear Power	2176.72	0.00	0.00			
	Hydroelectric Power						
	Other	0.00	0.00	2.24			
	Total:	3265.42	684.28	419.46			
Lake Huron							
	Public Supply	94.34	0.67	30.42			
	Domestic Supply	0.00	0.00	0.01			
	Irrigation	3.35	9.37	14.75			
	Livestock						
	Industrial	13.89	38.46	25.60			
	Fossil Fuel Power	174.51	565.40	1.24			
	Nuclear Power						
	Hydroelectric Power						
	Other	0.00	0.00	0.15			
	Total:	286.09	613.90	72.16			

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Erie							
	Public Supply	580.58	16.06	40.81			
	Domestic Supply	0.00	0.00	0.17			
	Irrigation	0.44	11.99	9.61			
	Livestock						
	Industrial	33.55	20.84	29.86			
	Fossil Fuel Power	4006.42	114.44	0.11			
	Nuclear Power	49.06	0.00	0.00			
	Hydroelectric Power						
	Other						
	Total:	4670.04	163.32	80.55			
Grand Total:		8507.97	1461.60	580.30			



# JURISDICTION REPORT- Michigan

Jurisdiction Totals

Units: Mgal(US)/d  
Year Of Data: 2006

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	815.66	17.19	244.54	1077.39	0.00	0.00	134.67
Domestic Supply	0.00	1.26	2.20	3.46	0.00	0.00	0.43
Irrigation	5.79	83.98	163.97	253.73	0.00	0.00	228.36
Livestock					0.00	0.00	
Industrial	357.77	207.90	120.40	686.07	0.00	0.00	68.61
Fossil Fuel Power	5102.98	1151.27	46.80	6301.05	0.00	0.00	75.61
Nuclear Power	2225.78	0.00	0.00	2225.78	0.00	0.00	42.29
Hydroelectric Power					0.00	0.00	
Other	0.00	0.00	2.39	2.39	0.00	0.00	0.00

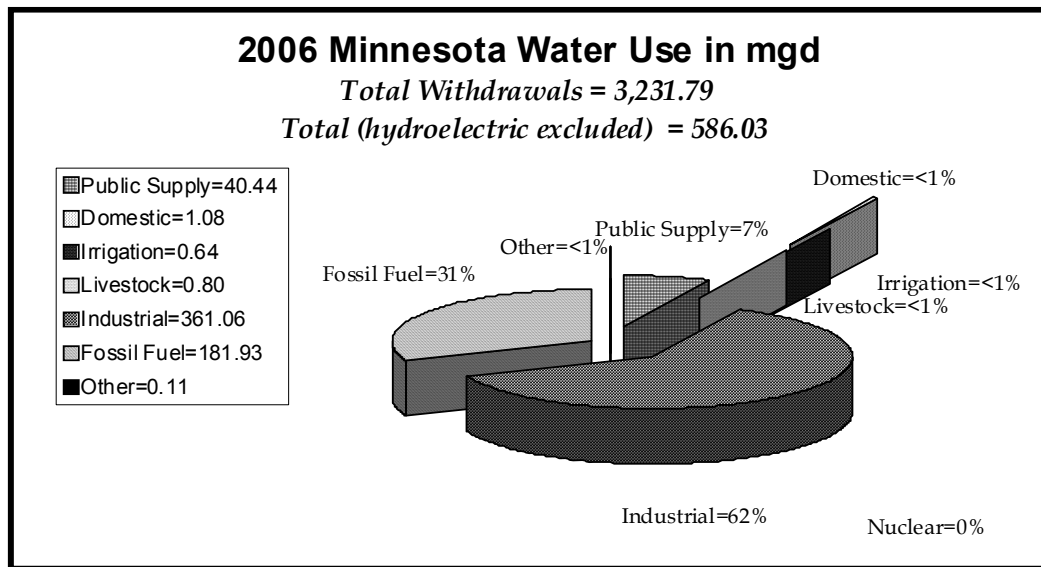
## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply							
Domestic Supply							
Irrigation							
Livestock							
Industrial							
Fossil Fuel Power							
Nuclear Power							
Hydroelectric Power							
Other							

## Minnesota

**Data Sources:** Water use data for Minnesota were provided by the Minnesota Department of Natural Resources, Division of Waters. Please contact Sean Hunt at 651/259-5679 or [sean.hunt@dnr.state.mn.us](mailto:sean.hunt@dnr.state.mn.us) with specific questions regarding Minnesota's water use data.

**Withdrawals:** Total water use from the Minnesota portion of the Lake Superior basin were 3,231.79 mgd, an decrease of 25 percent from 2005 (4,316.06 mgd). This decrease can be attributed to the decrease in hydroelectric power generation. Water used for hydroelectric power generation purposes (2,645.73 mgd), accounted for nearly 82 percent of Minnesota's total water use in 2006. This was an increase of just over 3 percent from 2005 (3,717.98 mgd). Of the remainder (586.03mgd), industrial use accounted for 62 percent.



**Figure 8**

**Consumptive Use:** The largest consumptive use was calculated to be industrial, at 36.10 mgd, or 80 percent of total consumption (45.17 mgd). Public supply was the second largest consumptive use at 4.05 mgd, or 9 percent of Minnesota's total consumptive use.

**Interbasin Diversions:** None reported.

**Data Quality:** Minnesota's withdrawal data for this report were 100% measured; the level of aggregation was 100% site-specific.

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# JURISDICTION REPORT- Minnesota

Withdrawals, Diversions and Consumptive Uses Units: Mgal(US)/d  
Year Of Data: 2006

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Superior							
	Public Supply	40.44	0.00	4.05	40.13	0.00	4.02
	Domestic Supply	1.08	0.00	0.10	1.03	0.00	0.10
	Irrigation	0.64	0.00	0.57	0.25	0.00	0.22
	Livestock	0.80	0.00	0.72	0.75	0.00	0.67
	Industrial	361.06	0.00	36.10	360.73	0.00	36.07
	Fossil Fuel Power	181.93	0.00	3.63	181.91	0.00	3.63
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	2645.73	0.00	0.00	2645.73	0.00	0.00
	Other	0.11	0.00	0.00	0.00	0.00	0.00
	Total:	3231.79	0.00	45.17	3230.53	0.00	44.71
Grand Total:		3231.79	0.00	45.17	3230.53	0.00	44.71

# JURISDICTION REPORT- Minnesota

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2006

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Superior	Public Supply	32.26	2.09	6.09	32.20	2.06	5.87
	Domestic Supply	0.73	0.34	0.01	0.69	0.34	0.00
	Irrigation	0.09	0.48	0.07	0.00	0.25	0.00
	Livestock	0.80	0.00	0.00	0.75	0.00	0.00
	Industrial	297.71	63.32	0.03	297.64	63.09	0.00
	Fossil Fuel Power	46.22	135.58	0.13	46.21	135.58	0.12
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	2645.73	0.00	0.00	2645.73	0.00
	Other	0.00	0.00	0.11	0.00	0.00	0.00
	Total:	377.81	2847.54	6.44	377.49	2847.05	5.99
Grand Total:		377.81	2847.54	6.44	377.49	2847.05	5.99

# JURISDICTION REPORT- Minnesota

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2006

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	32.26	2.09	6.09	40.44	0.00	0.00	4.05
Domestic Supply	0.73	0.34	0.01	1.08	0.00	0.00	0.10
Irrigation	0.09	0.48	0.07	0.64	0.00	0.00	0.57
Livestock	0.80	0.00	0.00	0.80	0.00	0.00	0.72
Industrial	297.71	63.32	0.03	361.06	0.00	0.00	36.10
Fossil Fuel Power	46.22	135.58	0.13	181.93	0.00	0.00	3.63
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	2645.73	0.00	2645.73	0.00	0.00	0.00
Other	0.00	0.00	0.11	0.11	0.00	0.00	0.00

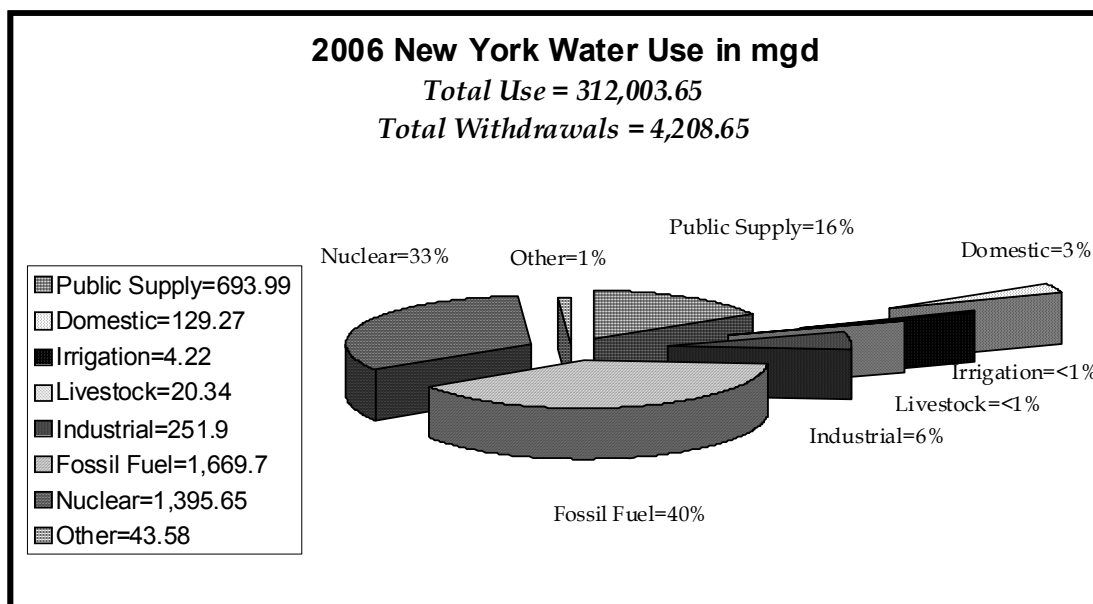
## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	32.20	2.06	5.87	40.13	0.00	0.00	4.02
Domestic Supply	0.69	0.34	0.00	1.03	0.00	0.00	0.10
Irrigation	0.00	0.25	0.00	0.25	0.00	0.00	0.22
Livestock	0.75	0.00	0.00	0.75	0.00	0.00	0.67
Industrial	297.64	63.09	0.00	360.73	0.00	0.00	36.07
Fossil Fuel Power	46.21	135.58	0.12	181.91	0.00	0.00	3.63
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	2645.73	0.00	2645.73	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## New York

**Data Sources:** Water use data collection in New York is performed by the Department of Environmental Conservation—Bureau of Water Resource Management. Please contact Michael Holt at 518/402-8099 or [mdholt@gw.dec.state.ny.us](mailto:mdholt@gw.dec.state.ny.us) with questions regarding New York's data.

**Withdrawals:** In 2006, New York's total water use was 312,003.65 mgd. Total withdrawals, not including hydroelectric power, were 4,208.65 mgd, compared with 4,474.93 in 2005. Hydroelectric power uses of 307,765 mgd represented 98.6 percent of total withdrawals in New York far exceeding other uses; the St. Lawrence River accounted for 58 percent of hydroelectric withdrawals in New York. The next largest categories of use were fossil fuel and nuclear power.



**Figure 9**

**Consumptive Use:** New York reported total consumptive uses of 303.78 mgd. Lake Ontario comprised 197.50 mgd or 65 percent; Lake Erie comprised 92.05 mgd or 30 percent; the St. Lawrence River comprised 14.23 mgd or 5 percent. The largest categories of consumptive use were public supply (69.41 mgd) and nuclear power (69.78 mgd), both uses are about at 46 percent of total consumptive use.

**Interbasin Diversions:** Two outgoing interbasin diversions occur between the Lake Ontario basin and the Mohawk River basin. A withdrawal of 9.59 mgd from the Tagasoke Reservoir on the East Branch of Fish Creek (Lake Ontario basin) is made by the city of Rome for public water supply and emptied into the Mohawk River basin. The Forestport/Black River Canal (Lake Ontario basin) was decommissioned in the 1980s but still allows for residual flow of up to 32 mgd into the Mohawk River basin.

**Intrabasin Diversions:** The western section of the Erie Canal withdraws up to 711 mgd from the Niagara River during the navigation season (May through November) and returns it through tributaries of Lake Ontario, resulting in no net loss or gain to the basin.

**Data Quality:** New York's withdrawal data for this report were 100 percent partially measured; the level of aggregation was 100 percent aggregated.

# JURISDICTION REPORT- New York

Withdrawals, Diversions and Consumptive Uses Units: Mgal(US)/d  
Year Of Data: 2006

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Erie							
	Public Supply	264.03	0.00	26.40		0.00	
	Domestic Supply	22.94	0.00	2.29	0.00	0.00	0.00
	Irrigation	0.30	0.00	0.27	0.30	0.00	0.27
	Livestock	4.24	0.00	3.82		0.00	
	Industrial	171.21	0.00	42.81	170.26	0.00	42.57
	Fossil Fuel Power	822.85	0.00	16.46	822.85	0.00	16.46
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	47168.00	0.00	0.00	47168.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total:	48453.57	0.00	92.05	48161.41	0.00	59.30
Lake Ontario							
	Public Supply	390.27	9.59	39.03		9.59	0.00
	Domestic Supply	91.17	0.00	9.12	29.28	0.00	2.93
	Irrigation	3.92	0.00	3.53	3.92	0.00	3.53
	Livestock	11.03	0.00	9.92		0.00	6.45
	Industrial	65.68	0.00	16.42	65.68	0.00	16.42
	Fossil Fuel Power	846.83	0.00	16.93	846.83	0.00	16.93
	Nuclear Power	1395.65	0.00	69.78	1395.65	0.00	69.78
	Hydroelectric Power	80908.00	0.00	0.00	0.00	0.00	0.00
	Other	39.44	32.00	32.77	7.44	32.00	0.01
	Total:	83751.99	41.59	197.50	2348.80	41.59	116.05
St. Lawrence River							
	Public Supply	39.69	0.00	3.98		0.00	
	Domestic Supply	15.16	0.00	1.52	0.49	0.00	0.05
	Irrigation	0.00	0.00	0.00	0.00	0.00	0.00
	Livestock	5.07	0.00	4.56		0.00	
	Industrial	15.01	0.00	3.76	15.01	0.00	3.76
	Fossil Fuel Power	0.02	0.00	0.00	0.02	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	179719.00	0.00	0.00	81027.00	0.00	0.00
	Other	4.14	0.00	0.41	4.14	0.00	0.41
	Total:	179798.09	0.00	14.23	81046.66	0.00	4.22
Grand Total:		312003.65	41.59	303.78	131556.87	41.59	179.57

# JURISDICTION REPORT- New York

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2006

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Erie							
	Public Supply	184.58	72.12	7.33			
	Domestic Supply	12.33	0.00	10.61	0.00	0.00	0.00
	Irrigation	0.23	0.07	0.00	0.23	0.07	0.00
	Livestock	1.51	0.00	2.73			
	Industrial	170.22	0.95	0.04	170.22	0.00	0.04
	Fossil Fuel Power	822.85	0.00	0.00	822.85	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	47168.00	0.00	0.00	47168.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total:	48359.72	73.14	20.71	48161.30	0.07	0.04
Lake Ontario							
	Public Supply	187.28	170.51	32.48			
	Domestic Supply	21.10	29.28	40.79	0.00	29.28	0.00
	Irrigation	0.00	3.75	0.17	0.00	3.75	0.17
	Livestock	3.86	0.00	7.17			
	Industrial	21.88	33.99	9.81	21.88	33.99	9.81
	Fossil Fuel Power	458.12	388.71	0.00	458.12	388.71	0.00
	Nuclear Power	1395.65	0.00	0.00	1395.65	0.00	0.00
	Hydroelectric Power	0.00	80908.00	0.00	0.00	0.00	0.00
	Other	0.00	39.33	0.11	0.00	7.33	0.11
	Total:	2087.89	81573.57	90.53	1875.65	463.06	10.09
St. Lawrence River							
	Public Supply	2.86	32.47	4.36			
	Domestic Supply	2.55	0.49	12.12	0.00	0.49	0.00
	Irrigation	0.00	0.00	0.00	0.00	0.00	0.00
	Livestock	1.77	0.00	3.30			
	Industrial	4.90	6.92	3.19	4.90	6.92	3.19
	Fossil Fuel Power	0.02	0.00	0.00	0.02	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	81027.00	98692.00	0.00	81027.00	0.00	0.00
	Other	0.00	4.14	0.00	0.00	4.14	0.00
	Total:	81039.10	98736.02	22.97	81031.92	11.55	3.19
Grand Total:		131486.71	180382.73	134.21	131068.87	474.68	13.32



# JURISDICTION REPORT- New York

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2006

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	374.72	275.10	44.17	693.99	0.00	9.59	69.41
Domestic Supply	35.98	29.77	63.52	129.27	0.00	0.00	12.93
Irrigation	0.23	3.82	0.17	4.22	0.00	0.00	3.80
Livestock	7.14	0.00	13.20	20.34	0.00	0.00	18.30
Industrial	197.00	41.86	13.04	251.90	0.00	0.00	62.99
Fossil Fuel Power	1280.99	388.71	0.00	1669.70	0.00	0.00	33.39
Nuclear Power	1395.65	0.00	0.00	1395.65	0.00	0.00	69.78
Hydroelectric Power	128195.00	179600.00	0.00	307795.00	0.00	0.00	0.00
Other	0.00	43.47	0.11	43.58	0.00	32.00	33.18

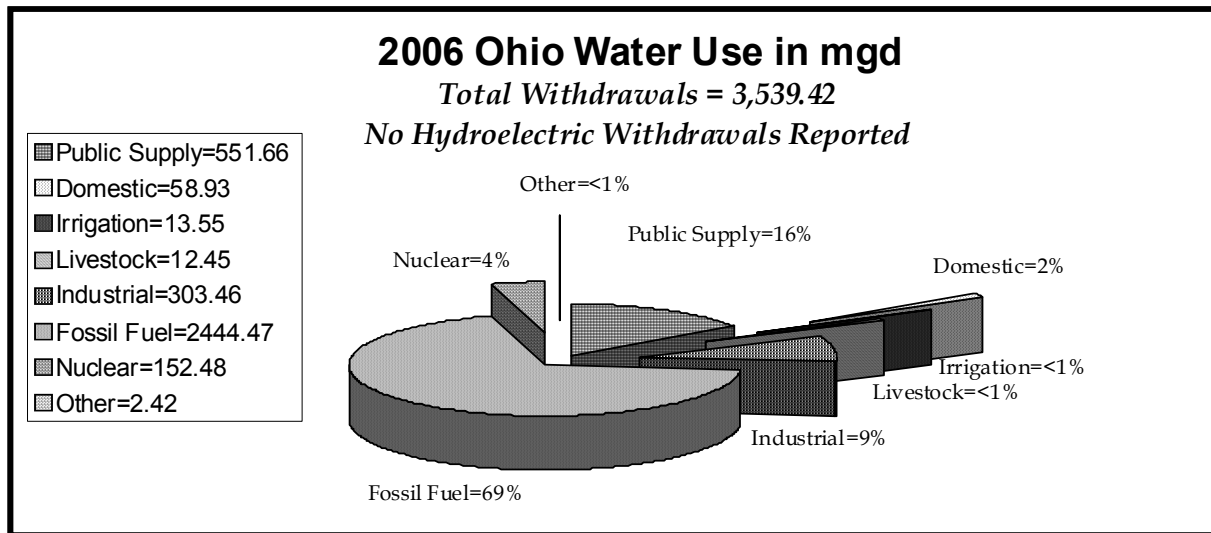
## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply					0.00	9.59	0.00
Domestic Supply	0.00	29.77	0.00	29.77	0.00	0.00	2.98
Irrigation	0.23	3.82	0.17	4.22	0.00	0.00	3.80
Livestock					0.00	0.00	6.45
Industrial	197.00	40.91	13.04	250.95	0.00	0.00	62.75
Fossil Fuel Power	1280.99	388.71	0.00	1669.70	0.00	0.00	33.39
Nuclear Power	1395.65	0.00	0.00	1395.65	0.00	0.00	69.78
Hydroelectric Power	128195.00	0.00	0.00	128195.00	0.00	0.00	0.00
Other	0.00	11.47	0.11	11.58	0.00	32.00	0.42

## Ohio

**Data Sources:** Water use data for Ohio are collected by the Ohio Department of Natural Resources-Division of Water, the Ohio Environmental Protection Agency, and the U.S. Geological Survey. Please contact Lenn Black at [leonard.black@dnr.state.oh.us](mailto:leonard.black@dnr.state.oh.us) or 614/265-6758 with questions regarding Ohio's water use data.

**Withdrawals:** Total withdrawals from the Ohio Lake Erie basin for 2006 were 3,539.42 mgd. Thermoelectric-fossil fuel was by far the largest use of water at 2,444.47 mgd (69%); public supply was the second largest withdrawal at 551.66 mgd (16%).



**Figure 10**

**Consumptive Use:** Total consumptive uses were calculated to be 185.16 mgd. Public supply represents the largest consumptive use sector at 82.76 mgd and accounts for 45 percent of the total. The next three largest consumptive uses were industrial facilities at 30.35 mgd, thermoelectric - fossil fuel at 24.45 mgd and irrigation at 12.19 mgd.

**Interbasin Diversions:** Two Lake Erie basin public water systems provided drinking water to service areas outside the basin without return, resulting in total outgoing diversions of 0.32 mgd. Outflows from an Ohio & Erie Canal feeder lake resulted in a diversion into the Lake Erie basin of 9.97 mgd.

**Data Quality:** Ohio's withdrawal data for this report were 2 percent calculated or estimated, and 98 percent partially measured; the level of aggregation was 2 percent aggregated and 98 percent site-specific.

# JURISDICTION REPORT- Ohio

Withdrawals, Diversions Units: Mgal(US)/d  
and Consumptive Uses Year Of Data: 2006

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Erie							
	Public Supply	551.66	0.32	82.76	547.97	0.32	82.19
	Domestic Supply	58.93	0.00	8.84	0.37	0.00	0.06
	Irrigation	13.55	0.00	12.19	11.77	0.00	10.60
	Livestock	12.45	0.00	9.96	0.96	0.00	0.77
	Industrial	303.46	0.00	30.35	302.93	0.00	30.30
	Fossil Fuel Power	2444.47	0.00	24.45	2444.46	0.00	24.45
	Nuclear Power	152.48	0.00	15.25	152.48	0.00	15.25
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	2.42	-9.97	1.36	2.25	-9.97	1.36
	Total:	3539.42	-9.65	185.16	3463.19	-9.65	164.98
Grand Total:		3539.42	-9.65	185.16	3463.19	-9.65	164.98

# JURISDICTION REPORT- Ohio

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2006

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Erie	Public Supply	408.95	108.83	33.88	408.95	108.50	30.52
	Domestic Supply	0.37	0.07	58.49	0.37	0.00	0.00
	Irrigation	0.26	11.00	2.29	0.24	9.92	1.61
	Livestock	0.00	1.76	10.69	0.00	0.00	0.96
	Industrial	56.38	187.88	59.20	56.38	187.67	58.88
	Fossil Fuel Power	1694.90	749.57	0.00	1694.89	749.57	0.00
	Nuclear Power	152.48	0.00	0.00	152.48	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.27	1.42	0.73	0.27	1.42	0.56
	Total:	2313.61	1060.53	165.28	2313.58	1057.08	92.53
Grand Total:		2313.61	1060.53	165.28	2313.58	1057.08	92.53

# JURISDICTION REPORT- Ohio

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2006

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	408.95	108.83	33.88	551.66	0.00	0.32	82.76
Domestic Supply	0.37	0.07	58.49	58.93	0.00	0.00	8.84
Irrigation	0.26	11.00	2.29	13.55	0.00	0.00	12.19
Livestock	0.00	1.76	10.69	12.45	0.00	0.00	9.96
Industrial	56.38	187.88	59.20	303.46	0.00	0.00	30.35
Fossil Fuel Power	1694.90	749.57	0.00	2444.47	0.00	0.00	24.45
Nuclear Power	152.48	0.00	0.00	152.48	0.00	0.00	15.25
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.27	1.42	0.73	2.42	0.00	-9.97	1.36

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	408.95	108.50	30.52	547.97	0.00	0.32	82.19
Domestic Supply	0.37	0.00	0.00	0.37	0.00	0.00	0.06
Irrigation	0.24	9.92	1.61	11.77	0.00	0.00	10.60
Livestock	0.00	0.00	0.96	0.96	0.00	0.00	0.77
Industrial	56.38	187.67	58.88	302.93	0.00	0.00	30.30
Fossil Fuel Power	1694.89	749.57	0.00	2444.46	0.00	0.00	24.45
Nuclear Power	152.48	0.00	0.00	152.48	0.00	0.00	15.25
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.27	1.42	0.56	2.25	0.00	-9.97	1.36

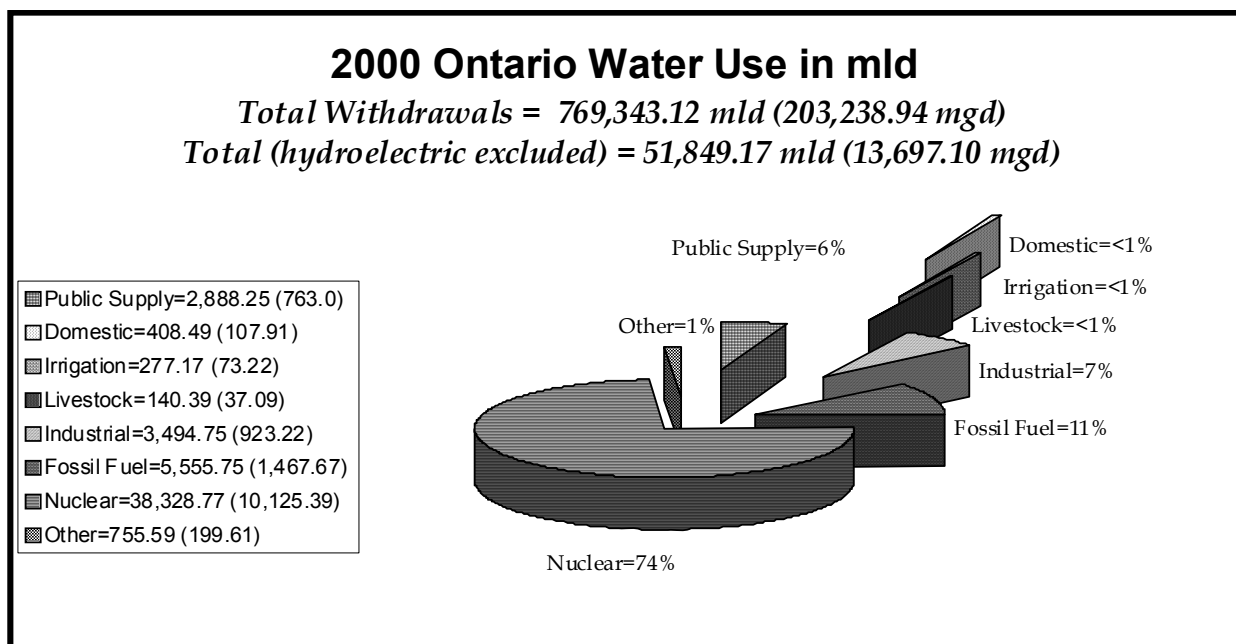
## Ontario

**Data Sources:** Water use data reporting for Ontario was coordinated by the Ontario Ministry of Natural Resources, Science and Information Branch. Calendar year 2000 data are used for this report because: 1) water use estimates for 2006 are not anticipated to be greatly different than those reported for 2000 assuming a similar data collection and assessment approach, and 2) the provincial government has phased-in new regulatory reporting requirements for permitted water takers with the requirements being fully implemented in 2008. Water use information from the new reporting program will represent a significant enhancement in estimating the reported overall water use in the province. Permit holders are now required to collect and record data on the volume of water taken daily and report the data on an annual basis. Please contact Jonathan Staples at [Jonathan.Staples@ontario.ca](mailto:Jonathan.Staples@ontario.ca), Ontario Ministry of Natural Resources with questions regarding Ontario's water use data.

Data for the public supply sector were obtained from the Ministry of the Environment Interim Inspection System Reports. Domestic use figures were estimated with the use of Environment Canada's municipal water use database and Statistics Canada Population Census data. *Agricultural Water Use 1996* and *Agricultural Water Use 2001* were the sources for irrigation and livestock data. As no viable source of current data is available for industrial water use, the reported industrial data are from 1996. Data for the power sector categories were obtained through contact with individual operators and generation companies. Data for the "other" category were taken from the National Canal Survey.

Although this water withdrawal report accounts for the majority of water use within Ontario, data for a limited number of water users is not available, therefore this database does not represent all water use in the province.

**Withdrawals:** The reported 2005, Great Lakes water uses for Ontario (using 2000 surrogate data) were approximately 769,343.12 mld, or 203,238.94 mgd. However, hydroelectric withdrawals represented more than 93 percent of the total, leaving total use at 51,849.17 mld (13,697.10 mgd). Thermoelectric—nuclear plant uses (not including hydropower) were the largest at 74 percent (38,328.77 mld, or 10,125.39 mgd).



**Figure 11**

**Consumptive Use:** Total consumptive uses were calculated to be 1,059.62 mld (279.92 mgd). Public supply represents the largest consumptive use sector at 433.24 mld (114.45 mgd) and accounts for 41% of the total. The next two largest consumptive uses were nuclear power and industrial use, at 344.96 mld (91.13 mgd) and 220.15 mld (58.16 mgd) respectively.

**Interbasin Diversions:** Ontario reported incoming interbasin diversions into the Lake Superior basin from the James Bay basin for hydroelectric purposes (the Ogoki and Long Lac projects) amounting to 15,170.99 mld (4,004.75 mgd).

**Intrabasin Diversions:** Intrabasin diversions occurred between lakes Huron, Erie and Ontario.

**Data Quality:** Ontario's withdrawal data for this report were 20 percent measured, 79 percent partially measured, and 1 percent calculated or estimated; the level of aggregation was 99 percent site-specific and less than 1 percent aggregated.

# JURISDICTION REPORT- Ontario

Withdrawals, Diversions and Consumptive Uses Units: Mgal(US)/d  
Year Of Data: 2006

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Superior							
	Public Supply	45.77	0.00	6.87	45.58	0.00	6.84
	Domestic Supply	1.75	0.00	0.26	0.00	0.00	0.00
	Irrigation	0.37	0.00			0.00	
	Livestock	0.14	0.00			0.00	
	Industrial	162.12	0.00	10.21	0.00	0.00	0.00
	Fossil Fuel Power	295.52	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	38156.31	-4007.75	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total:	38661.99	-4007.75	17.34	45.58	0.00	6.84
Lake Huron							
	Public Supply	84.37	0.00	12.65	81.66	0.00	12.25
	Domestic Supply	10.61	0.00	1.59	0.00	0.00	0.00
	Irrigation	20.91	0.00			0.00	
	Livestock	12.41	0.00			0.00	
	Industrial	190.19	0.00	11.98	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	4697.20	0.00	42.28	0.00	0.00	0.00
	Hydroelectric Power	33608.07	0.00	0.00	0.00	0.00	0.00
	Other	47.97	0.00	0.00	47.97	0.00	0.00
	Total:	38671.73	0.00	68.50	129.63	0.00	12.25
Lake Erie							
	Public Supply	93.89	0.00	14.08	92.84	0.00	13.92
	Domestic Supply	19.94	0.00	2.99	0.00	0.00	0.00
	Irrigation	31.85	0.00			0.00	
	Livestock	13.22	0.00			0.00	
	Industrial	180.45	0.00	11.37	0.00	0.00	0.00
	Fossil Fuel Power	463.20	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total:	802.56	0.00	28.44	92.84	0.00	13.92



Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Ontario							
	Public Supply	465.93	0.00	69.89	464.62	0.00	69.69
	Domestic Supply	64.17	0.00	9.63	0.00	0.00	0.00
	Irrigation	17.73	0.00			0.00	
	Livestock	5.40	0.00			0.00	
	Industrial	229.64	0.00	14.47	0.00	0.00	0.00
	Fossil Fuel Power	708.95	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	5428.19	0.00	48.85	0.00	0.00	0.00
	Hydroelectric Power	41542.31	0.00	0.00	0.00	0.00	0.00
	Other	132.35	0.00	0.00	132.35	0.00	0.00
	Total:	48594.67	0.00	142.84	596.97	0.00	69.69
St. Lawrence River							
	Public Supply	73.03	0.00	10.96	72.08	0.00	10.82
	Domestic Supply	11.45	0.00	1.72	0.00	0.00	0.00
	Irrigation	2.35	0.00			0.00	
	Livestock	5.91	0.00			0.00	
	Industrial	160.81	0.00	10.13	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	76235.15	0.00	0.00	0.00	0.00	0.00
	Other	19.28	0.00	0.00	19.28	0.00	0.00
	Total:	76507.99	0.00	22.80	91.37	0.00	10.82
Grand Total:		203238.94	-4007.75	279.92	956.38	0.00	113.52

# JURISDICTION REPORT- Ontario

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2006

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Superior							
	Public Supply	30.10	13.03	2.65	30.07	12.96	2.55
	Domestic Supply	0.00	0.00	1.75	0.00	0.00	0.00
	Irrigation	0.02	0.31	0.05			
	Livestock	0.00	0.14	0.00			
	Industrial	162.12	0.00	0.00	0.00	0.00	0.00
	Fossil Fuel Power	295.52	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	38156.31	0.00	0.00	0.00	0.00
	Other						
	Total:	487.76	38169.79	4.44	30.07	12.96	2.55
Lake Huron							
	Public Supply	42.66	23.57	18.14	42.02	23.23	16.40
	Domestic Supply	0.00	0.00	10.61	0.00	0.00	0.00
	Irrigation	0.15	15.41	5.35			
	Livestock	2.93	3.07	6.41			
	Industrial	187.41	0.00	2.78	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	4697.20	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	20000.41	13607.66	0.00	0.00	0.00	0.00
	Other	0.00	47.97	0.00	0.00	47.97	0.00
	Total:	24930.76	13697.68	43.29	42.02	71.20	16.40
Lake Erie							
	Public Supply	8.97	29.26	55.66	8.97	29.23	54.64
	Domestic Supply	0.00	0.00	19.94	0.00	0.00	0.00
	Irrigation	0.59	12.11	19.15			
	Livestock	0.02	0.89	12.31			
	Industrial	173.24	0.00	7.21	0.00	0.00	0.00
	Fossil Fuel Power	463.20	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other						
	Total:	646.02	42.26	114.27	8.97	29.23	54.64

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Ontario							
	Public Supply	401.52	52.86	11.56	401.47	52.68	10.47
	Domestic Supply	0.00	0.00	64.17	0.00	0.00	0.00
	Irrigation	1.08	9.53	7.12			
	Livestock	0.00	0.94	4.46			
	Industrial	218.17	0.00	11.46	0.00	0.00	0.00
	Fossil Fuel Power	708.95	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	5428.19	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	33861.04	7681.26	0.00	0.00	0.00	0.00
	Other	0.00	132.35	0.00	0.00	132.35	0.00
	Total:	40618.96	7876.94	98.77	401.47	185.03	10.47
St. Lawrence River							
	Public Supply	10.64	58.84	3.56	10.64	58.52	2.93
	Domestic Supply	0.00	0.00	11.45	0.00	0.00	0.00
	Irrigation	0.01	2.04	0.30			
	Livestock	0.00	3.63	2.28			
	Industrial	159.76	0.00	1.05	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	76149.02	86.13	0.00	0.00	0.00	0.00
	Other	0.00	19.28	0.00	0.00	19.28	0.00
	Total:	76319.43	169.91	18.65	10.64	77.80	2.93
Grand Total:		143002.93	59956.58	279.43	493.17	376.22	87.00

# JURISDICTION REPORT- Ontario

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2006

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	493.88	177.55	91.57	763.00	0.00	0.00	114.45
Domestic Supply	0.00	0.00	107.91	107.91	0.00	0.00	16.19
Irrigation	1.86	39.39	31.97	73.22	0.00	0.00	
Livestock	2.95	8.67	25.47	37.09	0.00	0.00	
Industrial	900.71	0.00	22.51	923.22	0.00	0.00	58.16
Fossil Fuel Power	1467.67	0.00	0.00	1467.67	0.00	0.00	0.00
Nuclear Power	10125.39	0.00	0.00	10125.39	0.00	0.00	91.13
Hydroelectric Power	130010.47	59531.37	0.00	189541.84	0.00	-4007.75	0.00
Other	0.00	199.61	0.00	199.61	61.97	0.00	0.00

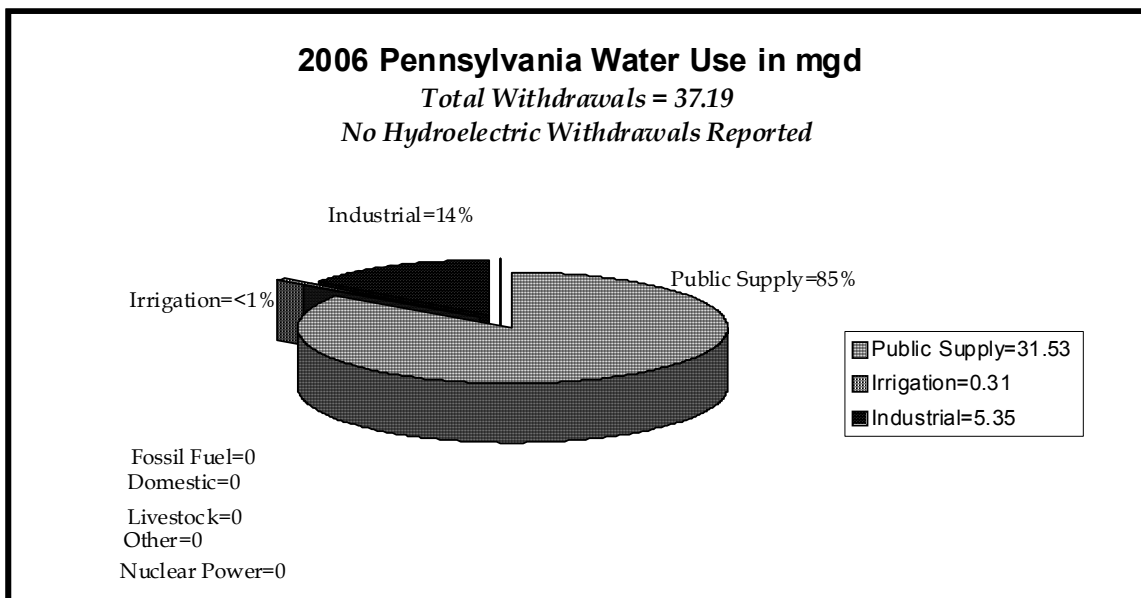
## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	493.17	176.61	87.00	756.78	0.00	0.00	113.52
Domestic Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Irrigation					0.00	0.00	
Livestock					0.00	0.00	
Industrial	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	199.61	0.00	199.61	61.97	0.00	0.00

## Pennsylvania

**Data Sources:** The Department of Environmental Protection – Bureau of Watershed Management submitted water use data for the Lake Erie and Lake Ontario basins of Pennsylvania. Please contact David Jostenski at 717/772-5659 or [djostenski@state.pa.us](mailto:djostenski@state.pa.us) with questions regarding Pennsylvania's water use data.

**Withdrawals:** Total withdrawals from Lake Erie were 37.19 mgd, with no hydroelectric withdrawals reported. Public supply at 31.53 mgd or 85 percent, and industrial at 5.35 mgd or 14 percent, constituted the primary uses of water.



**Figure 12**

**Consumptive Use:** Consumptive use totaled 3.43 mgd, down by 37 percent from the 2005 figure of 5.43 mgd.

**Interbasin Diversions:** There was an import of 1.73 mgd of water from the Allegheny River basin to the Lake Erie basin for public water supply purposes.

**Data Quality:** Pennsylvania's withdrawal data for this report were 19 percent calculated or estimated, 6 percent partially measured, and 75 percent measured; the level of aggregation was 100 percent site-specific

# JURISDICTION REPORT- Pennsylvania

Withdrawals, Diversions and Consumptive Uses Units: Mgal(US)/d  
Year Of Data: 2006

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Erie							
	Public Supply	31.53	0.00	3.15	31.53	0.00	3.15
	Domestic Supply	0.00	0.00		0.00	0.00	0.00
	Irrigation	0.31	0.00	0.28	0.31	0.00	0.28
	Livestock		0.00		0.00	0.00	0.00
	Industrial	5.34	0.00		5.34	0.00	0.00
	Fossil Fuel Power		0.00		0.00	0.00	0.00
	Nuclear Power	0.00	0.00		0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00		0.00	0.00	0.00
	Other		0.00		0.00	0.00	0.00
	Total:	37.19	0.00	3.43	37.19	0.00	3.43
Lake Ontario							
	Public Supply		0.00			0.00	
	Domestic Supply		0.00			0.00	
	Irrigation		0.00			0.00	
	Livestock		0.00			0.00	
	Industrial		0.00			0.00	
	Fossil Fuel Power		0.00			0.00	
	Nuclear Power		0.00			0.00	
	Hydroelectric Power		0.00			0.00	
	Other		0.00			0.00	
	Total:		0.00			0.00	
Grand Total:		37.19	0.00	3.43	37.19	0.00	3.43

# JURISDICTION REPORT- Pennsylvania

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2006

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Erie							
	Public Supply	29.41	0.64	1.49	29.41	0.64	1.49
	Domestic Supply	0.00	0.00	0.00	0.00	0.00	0.00
	Irrigation	0.00	0.31	0.00	0.00	0.31	0.00
	Livestock				0.00	0.00	0.00
	Industrial	5.34	0.00	0.00	5.34	0.00	0.00
	Fossil Fuel Power				0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other				0.00	0.00	0.00
	Total:	34.75	0.94	1.49	34.75	0.94	1.49
Lake Ontario							
	Public Supply						
	Domestic Supply						
	Irrigation						
	Livestock						
	Industrial						
	Fossil Fuel Power						
	Nuclear Power						
	Hydroelectric Power						
	Other						
	Total:						
Grand Total:		34.75	0.94	1.49	34.75	0.94	1.49

# JURISDICTION REPORT- Pennsylvania

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2006

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	29.41	0.64	1.49	31.53	0.00	0.00	3.15
Domestic Supply	0.00	0.00	0.00	0.00	0.00	0.00	
Irrigation	0.00	0.31	0.00	0.31	0.00	0.00	0.28
Livestock					0.00	0.00	
Industrial	5.34	0.00	0.00	5.34	0.00	0.00	
Fossil Fuel Power					0.00	0.00	
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	
Other					0.00	0.00	

## Total Report - Principal Facilities

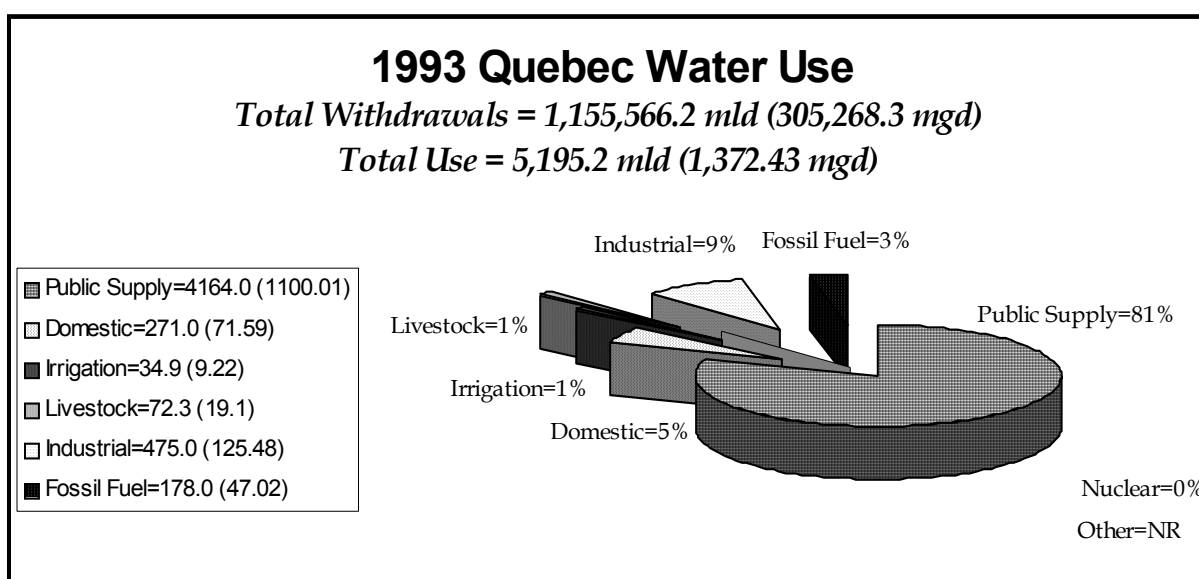
Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	29.41	0.64	1.49	31.53	0.00	0.00	3.15
Domestic Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Irrigation	0.00	0.31	0.00	0.31	0.00	0.00	0.28
Livestock	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Industrial	5.34	0.00	0.00	5.34	0.00	0.00	0.00
Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00



## Québec

**Data Source:** Water use data was provided by the Ministère du Développement durable, de l'Environnement et des Parcs—Centre d'expertise hydrique du Québec for this report. The Centre has compiled water use data primarily to support hydrologic and hydraulic research, floodplain delineation and hydrometric network management. Data from 1993 is being used for this report until a proposed regulation to support collection of water withdrawal data is adopted. The adoption of the regulation is expected in the fall of 2009. Please contact Julie Cyr at 418/521-3885 #7076 or Julie.cyr@mddep.gouv.qc.ca with questions regarding Québec's data. See the following page for an update on the status of water quantity management in Québec.

**Withdrawals:** Total use from Québec's St. Lawrence River basin was approximately 1,155 bld (305 bgd). Nearly 100 percent of these uses were for hydroelectric power purposes.



**Figure 13**

**Consumptive Use:** Total consumptive use was 597.5 mld (157.9 mgd). Public supply accounted for 416 mld (109.9 mgd), or nearly 70 percent of the total consumptive use.

**Diversions:** Diversions are currently being inventoried.

**Data Quality:** Québec's withdrawal data for this report were 99 percent measured. 1 percent was partially measured, calculated or estimated. The level of aggregation was 100 percent aggregated.

Historically, water withdrawals have not been a source of great conflict in Québec; however, water shortage caused by severe drought and increasing demands for water withdrawal have brought the problem to the forefront. Since the adoption of a Water Policy by Québec's National Assembly in 2002, existing regulations have been amended to improve water management. One of the guiding principles is that users must be accountable for the utilization and degradation of water by means of a user-pays and polluter-pays approach. In June 2009, Québec adopted *an Act to affirm the collective nature of water resources and provide for increased water resource protection*. This new legislation will enable Québec to implement the Agreement on its territory and to fulfill its commitments. Under this act, regulations support the collection of water withdrawal data. It will also allow Québec to meet the requirements of Article 301 of the Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement.

(See [http://www.mddep.gouv.qc.ca/eau/protection/index\\_en.htm](http://www.mddep.gouv.qc.ca/eau/protection/index_en.htm) for highlights and the complete text.)

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# JURISDICTION REPORT- Quebec

Withdrawals, Diversions and Consumptive Uses Units: Mgal(US)/d  
Year Of Data: 2006

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
St. Lawrence River							
	Public Supply	1100.01	0.00	109.90	1096.05	0.00	109.63
	Domestic Supply	71.59	0.00	7.13	48.61	0.00	4.76
	Irrigation	9.22	0.00	8.30		0.00	
	Livestock	19.10	0.00	15.28		0.00	
	Industrial	125.48	0.00	12.55	124.95	0.00	12.50
	Fossil Fuel Power	47.02	0.00	4.70	47.02	0.00	4.70
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	303895.85	0.00	0.00	303895.85	0.00	0.00
	Other		0.00			0.00	
	Total:	305268.28	0.00	157.86	305212.48	0.00	131.58
Grand Total:		305268.28	0.00	157.86	305212.48	0.00	131.58

# JURISDICTION REPORT- Quebec

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2006

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
St. Lawrence River	Public Supply	602.84	497.17	0.00	602.58	493.47	0.00
	Domestic Supply	0.00	0.00	71.59	0.00	0.00	48.61
	Irrigation	0.00	0.00	9.22			
	Livestock	0.00	0.00	19.10			
	Industrial	0.00	125.48	0.00	0.00	124.95	0.00
	Fossil Fuel Power	39.10	7.93	0.00	39.10	7.93	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	170946.25	132949.60	0.00	170946.25	132949.60	0.00
	Other						
	Total:	171588.19	133580.18	99.91	171587.93	133575.95	48.61
Grand Total:	171588.19	133580.18	99.91	171587.93	133575.95	48.61	

# JURISDICTION REPORT- Quebec

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2006

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	602.84	497.17	0.00	1100.01	0.00	0.00	109.90
Domestic Supply	0.00	0.00	71.59	71.59	0.00	0.00	7.13
Irrigation	0.00	0.00	9.22	9.22	0.00	0.00	8.30
Livestock	0.00	0.00	19.10	19.10	0.00	0.00	15.28
Industrial	0.00	125.48	0.00	125.48	0.00	0.00	12.55
Fossil Fuel Power	39.10	7.93	0.00	47.02	0.00	0.00	4.70
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	170946.25	132949.60	0.00	303895.85	0.00	0.00	0.00
Other					0.00	0.00	

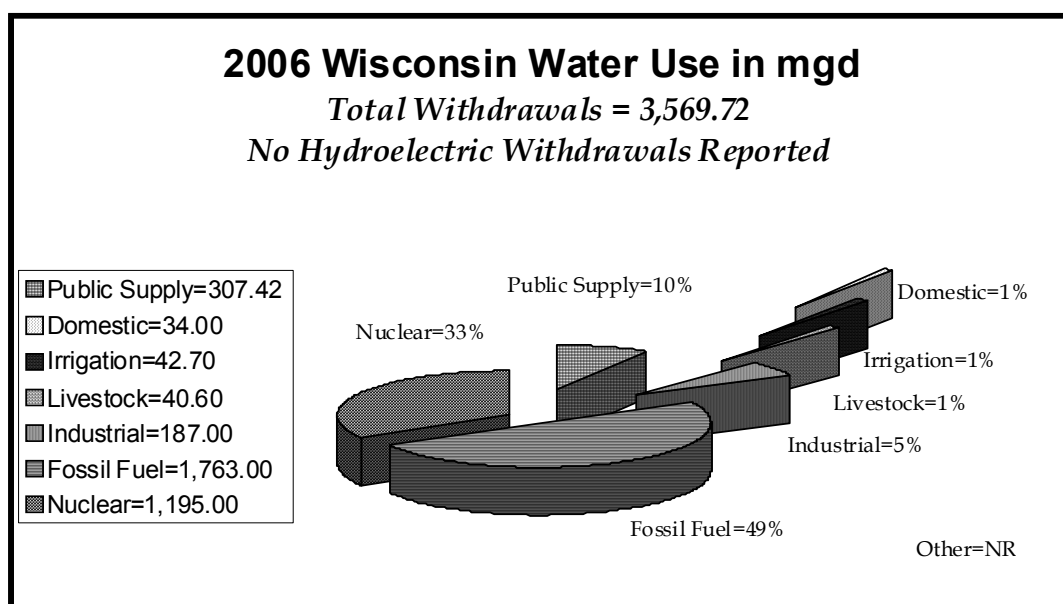
## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	602.58	493.47	0.00	1096.05	0.00	0.00	109.63
Domestic Supply	0.00	0.00	48.61	48.61	0.00	0.00	4.76
Irrigation					0.00	0.00	
Livestock					0.00	0.00	
Industrial	0.00	124.95	0.00	124.95	0.00	0.00	12.50
Fossil Fuel Power	39.10	7.93	0.00	47.02	0.00	0.00	4.70
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	170946.25	132949.60	0.00	303895.85	0.00	0.00	0.00
Other					0.00	0.00	

## Wisconsin

**Data Sources:** Wisconsin 2006 water use data for the Lake Michigan and Lake Superior basins were submitted by the Wisconsin Department of Natural Resources—Bureau of Water Resources Management. Contact Shaili Pfeiffer at 608/267-7630 or [Shaili.Pfeiffer@wisconsin.gov](mailto:Shaili.Pfeiffer@wisconsin.gov) with questions regarding Wisconsin's water use data.

**Withdrawals:** Total withdrawals were 3,569.72 mgd: 3,517.30 mgd from Lake Michigan (98.5% of the total) and 52.42 mgd from Lake Superior. Water use in the Lake Michigan basin was primarily for fossil fuel (1,725.00 mgd) and nuclear power (1,195.00 mgd)—at 49 percent and 34 percent respectively. Of the Lake Superior uses, the largest single use was for fossil fuel at 38.00 mgd at 72.5 percent.



**Figure 14**

**Consumptive Use:** Consumptive uses from Wisconsin's portion of the basin were calculated to be 134.04 mgd.

**Interbasin Diversions:** A withdrawal for public supply at Pleasant Prairie diverts 0.40 mgd from the Lake Michigan basin to the Mississippi River basin. A small diversion remains at the Portage Canal site, with 0.64 mgd flowing from the Wisconsin River (the Mississippi River basin) into the Fox River (the Lake Michigan basin).

**Data Quality:** Wisconsin's withdrawal data for this report were 91 percent calculated or estimated and 9 percent measured; the level of aggregation was 91 percent aggregated and 9 percent site-specific.

# JURISDICTION REPORT- Wisconsin

Withdrawals, Diversions Units: Mgal(US)/d  
and Consumptive Uses Year Of Data: 2006

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Superior							
	Public Supply	4.42	0.00	0.32			
	Domestic Supply	1.40	0.00	0.14			
	Irrigation	0.30	0.00	0.21			
	Livestock	8.30	0.00	7.47			
	Industrial		0.00				
	Fossil Fuel Power	38.00	0.00	0.19			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other		0.00				
	Total:	52.42	0.00	8.33			
Lake Michigan							
	Public Supply	303.00	0.40	33.30			
	Domestic Supply	32.60	3.26	0.00			
	Irrigation	42.40	0.00	29.68			
	Livestock	32.30	0.00	29.07			
	Industrial	187.00	0.00	19.07			
	Fossil Fuel Power	1725.00	0.00	8.62			
	Nuclear Power	1195.00	0.00	5.97			
	Hydroelectric Power	0.00	0.00	0.00			
	Other		-0.64				
	Total:	3517.30	3.02	125.71			
Grand Total:		3569.72	3.02	134.04			

# JURISDICTION REPORT- Wisconsin

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2006

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Superior							
	Public Supply	3.86	0.00	0.56			
	Domestic Supply	0.00	0.00	1.40			
	Irrigation	0.00	0.00	0.30			
	Livestock	0.00	0.00	8.30			
	Industrial						
	Fossil Fuel Power	38.00	0.00	0.00			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	Total:	41.86	0.00	10.56			
Lake Michigan							
	Public Supply	210.00	23.00	70.00			
	Domestic Supply	0.00	0.00	32.60			
	Irrigation	0.00	0.00	42.40			
	Livestock	0.00	0.00	32.30			
	Industrial	187.00	0.00	0.00			
	Fossil Fuel Power	1725.00	0.00	0.00			
	Nuclear Power	1195.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	Total:	3317.00	23.00	177.30			
Grand Total:		3358.86	23.00	187.86			



# JURISDICTION REPORT- Wisconsin

Jurisdiction Totals

Units: Mgal(US)/d  
Year Of Data: 2006

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	213.86	23.00	70.56	307.42	0.00	0.40	33.62
Domestic Supply	0.00	0.00	34.00	34.00	0.00	3.26	0.14
Irrigation	0.00	0.00	42.70	42.70	0.00	0.00	29.89
Livestock	0.00	0.00	40.60	40.60	0.00	0.00	36.54
Industrial	187.00	0.00	0.00	187.00	0.00	0.00	19.07
Fossil Fuel Power	1763.00	0.00	0.00	1763.00	0.00	0.00	8.81
Nuclear Power	1195.00	0.00	0.00	1195.00	0.00	0.00	5.97
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other					0.00	-0.64	

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply							
Domestic Supply							
Irrigation							
Livestock							
Industrial							
Fossil Fuel Power							
Nuclear Power							
Hydroelectric Power							
Other							



#### ***IV. BASIN TABLES***

Each basin is represented by three tables:  
Withdrawals, Diversions and Consumptive Uses  
Withdrawals by Source  
Basin Totals

**Lake Erie  
Lake Huron  
Lake Michigan  
Lake Ontario  
Lake Superior  
St. Lawrence River**

# BASIN REPORT- Lake Erie

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2006

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Indiana							
	Public Supply	40.61	6.26	6.09	40.43	0.00	6.07
	Domestic Supply	6.37	0.00	0.96	0.39	0.00	0.06
	Irrigation	1.05	0.00	0.95	0.82	0.00	0.73
	Livestock	0.95	0.00	0.76	0.00	0.00	0.00
	Industrial	9.22	0.00	0.56	9.05	0.00	0.55
	Fossil Fuel Power	0.27	0.00	0.01	0.27	0.00	0.01
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total	58.47	6.26	9.33	50.96	0.00	7.42
Michigan							
	Public Supply	637.44	0.00	79.68			
	Domestic Supply	0.17	0.00	0.02			
	Irrigation	22.03	0.00	19.83			
	Livestock		0.00				
	Industrial	84.25	0.00	8.43			
	Fossil Fuel Power	4120.96	0.00	49.45			
	Nuclear Power	49.06	0.00	0.93			
	Hydroelectric Power		0.00				
	Other		0.00				
	Total	4913.91	0.00	158.34			
New York							
	Public Supply	264.03	0.00	26.40		0.00	
	Domestic Supply	22.94	0.00	2.29	0.00	0.00	0.00
	Irrigation	0.30	0.00	0.27	0.30	0.00	0.27
	Livestock	4.24	0.00	3.82		0.00	
	Industrial	171.21	0.00	42.81	170.26	0.00	42.57
	Fossil Fuel Power	822.85	0.00	16.46	822.85	0.00	16.46
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	47168.00	0.00	0.00	47168.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	Total	48453.57	0.00	92.05	48161.41	0.00	59.30

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Ohio							
	Public Supply	551.66	0.32	82.76	547.97	0.32	82.19
	Domestic Supply	58.93	0.00	8.84	0.37	0.00	0.06
	Irrigation	13.55	0.00	12.19	11.77	0.00	10.60
	Livestock	12.45	0.00	9.96	0.96	0.00	0.77
	Industrial	303.46	0.00	30.35	302.93	0.00	30.30
	Fossil Fuel Power	2444.47	0.00	24.45	2444.46	0.00	24.45
	Nuclear Power	152.48	0.00	15.25	152.48	0.00	15.25
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	2.42	-9.97	1.36	2.25	-9.97	1.36
	Total	3539.42	-9.65	185.16	3463.19	-9.65	164.98
Ontario							
	Public Supply	93.89	0.00	14.08	92.84	0.00	13.92
	Domestic Supply	19.94	0.00	2.99	0.00	0.00	0.00
	Irrigation	31.85	0.00			0.00	
	Livestock	13.22	0.00			0.00	
	Industrial	180.45	0.00	11.37	0.00	0.00	0.00
	Fossil Fuel Power	463.20	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total	802.56	0.00	28.44	92.84	0.00	13.92
Pennsylvania							
	Public Supply	31.53	0.00	3.15	31.53	0.00	3.15
	Domestic Supply	0.00	0.00		0.00	0.00	0.00
	Irrigation	0.31	0.00	0.28	0.31	0.00	0.28
	Livestock		0.00		0.00	0.00	0.00
	Industrial	5.34	0.00		5.34	0.00	0.00
	Fossil Fuel Power		0.00		0.00	0.00	0.00
	Nuclear Power	0.00	0.00		0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00		0.00	0.00	0.00
	Other		0.00		0.00	0.00	0.00
	Total	37.19	0.00	3.43	37.19	0.00	3.43
Grand Total:		57805.12	-3.39	476.75	51805.58	-9.65	249.06

# BASIN REPORT- Lake Erie

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2006

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Indiana							
	Public Supply	0.00	31.32	9.29	0.00	31.32	9.11
	Domestic Supply	0.00	0.00	6.37	0.00	0.00	0.39
	Irrigation	0.00	0.28	0.77	0.00	0.16	0.66
	Livestock	0.00	0.00	0.95	0.00	0.00	0.00
	Industrial	0.00	3.61	5.61	0.00	3.61	5.44
	Fossil Fuel Power	0.00	0.00	0.27	0.00	0.00	0.27
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	TOTAL	0.00	35.21	23.26	0.00	35.09	15.87
Michigan							
	Public Supply	580.58	16.06	40.81			
	Domestic Supply	0.00	0.00	0.17			
	Irrigation	0.44	11.99	9.61			
	Livestock						
	Industrial	33.55	20.84	29.86			
	Fossil Fuel Power	4006.42	114.44	0.11			
	Nuclear Power	49.06	0.00	0.00			
	Hydroelectric Power						
	Other						
	TOTAL	4670.04	163.32	80.55			
New York							
	Public Supply	184.58	72.12	7.33			
	Domestic Supply	12.33	0.00	10.61	0.00	0.00	0.00
	Irrigation	0.23	0.07	0.00	0.23	0.07	0.00
	Livestock	1.51	0.00	2.73			
	Industrial	170.22	0.95	0.04	170.22	0.00	0.04
	Fossil Fuel Power	822.85	0.00	0.00	822.85	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	47168.00	0.00	0.00	47168.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00
	TOTAL	48359.72	73.14	20.71	48161.30	0.07	0.04

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Ohio							
	Public Supply	408.95	108.83	33.88	408.95	108.50	30.52
	Domestic Supply	0.37	0.07	58.49	0.37	0.00	0.00
	Irrigation	0.26	11.00	2.29	0.24	9.92	1.61
	Livestock	0.00	1.76	10.69	0.00	0.00	0.96
	Industrial	56.38	187.88	59.20	56.38	187.67	58.88
	Fossil Fuel Power	1694.90	749.57	0.00	1694.89	749.57	0.00
	Nuclear Power	152.48	0.00	0.00	152.48	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.27	1.42	0.73	0.27	1.42	0.56
	TOTAL	2313.61	1060.53	165.28	2313.58	1057.08	92.53
Ontario							
	Public Supply	8.97	29.26	55.66	8.97	29.23	54.64
	Domestic Supply	0.00	0.00	19.94	0.00	0.00	0.00
	Irrigation	0.59	12.11	19.15			
	Livestock	0.02	0.89	12.31			
	Industrial	173.24	0.00	7.21	0.00	0.00	0.00
	Fossil Fuel Power	463.20	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other						
	TOTAL	646.02	42.26	114.27	8.97	29.23	54.64
Pennsylvania							
	Public Supply	29.41	0.64	1.49	29.41	0.64	1.49
	Domestic Supply	0.00	0.00	0.00	0.00	0.00	0.00
	Irrigation	0.00	0.31	0.00	0.00	0.31	0.00
	Livestock				0.00	0.00	0.00
	Industrial	5.34	0.00	0.00	5.34	0.00	0.00
	Fossil Fuel Power				0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other				0.00	0.00	0.00
	TOTAL	34.75	0.94	1.49	34.75	0.94	1.49
Grand Total:		56024.15	1375.40	405.56	50518.60	1122.41	164.58

# BASIN REPORT- Lake Erie

Basin Totals

Units: Mgal(US)/d

Year Of Data: 2006

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	1212.48	258.23	148.46	1619.16	0.00	6.58	212.17
Domestic Supply	12.70	0.07	95.58	108.35	0.00	0.00	15.10
Irrigation	1.52	35.76	31.82	69.10	0.00	0.00	33.52
Livestock	1.53	2.65	26.68	30.86	0.00	0.00	14.54
Industrial	438.74	213.28	101.92	753.94	0.00	0.00	93.51
Fossil Fuel Power	6987.37	864.01	0.38	7851.76	0.00	0.00	90.37
Nuclear Power	201.54	0.00	0.00	201.54	0.00	0.00	16.18
Hydroelectric Power	47168.00	0.00	0.00	47168.00	0.00	0.00	0.00
Other	0.27	1.42	0.73	2.42	5816.39	-9.97	1.36

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	447.32	169.68	95.77	712.77	0.00	0.32	105.34
Domestic Supply	0.37	0.00	0.39	0.76	0.00	0.00	0.12
Irrigation	0.47	10.46	2.27	13.20	0.00	0.00	11.88
Livestock	0.00	0.00	0.96	0.96	0.00	0.00	0.77
Industrial	231.94	191.28	64.36	487.58	0.00	0.00	73.42
Fossil Fuel Power	2517.74	749.57	0.27	3267.58	0.00	0.00	40.92
Nuclear Power	152.48	0.00	0.00	152.48	0.00	0.00	15.25
Hydroelectric Power	47168.00	0.00	0.00	47168.00	0.00	0.00	0.00
Other	0.27	1.42	0.56	2.25	5816.39	-9.97	1.36



# BASIN REPORT- Lake Huron

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2006

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Michigan							
	Public Supply	125.43	0.00	15.68			
	Domestic Supply	0.01	0.00	0.00			
	Irrigation	27.47	0.00	24.72			
	Livestock		0.00				
	Industrial	77.94	0.00	7.79			
	Fossil Fuel Power	741.15	0.00	8.89			
	Nuclear Power		0.00				
	Hydroelectric Power		0.00				
	Other	0.15	0.00	0.00			
	Total	972.15	0.00	57.09			
Ontario							
	Public Supply	84.37	0.00	12.65	81.66	0.00	12.25
	Domestic Supply	10.61	0.00	1.59	0.00	0.00	0.00
	Irrigation	20.91	0.00			0.00	
	Livestock	12.41	0.00			0.00	
	Industrial	190.19	0.00	11.98	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	4697.20	0.00	42.28	0.00	0.00	0.00
	Hydroelectric Power	33608.07	0.00	0.00	0.00	0.00	0.00
	Other	47.97	0.00	0.00	47.97	0.00	0.00
	Total	38671.73	0.00	68.50	129.63	0.00	12.25
Grand Total:		39643.88	0.00	125.59	129.63	0.00	12.25

# BASIN REPORT- Lake Huron

Units: Mgal(US)/d  
 Withdrawals by Source  
 Year Of Data: 2006

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Michigan							
	Public Supply	94.34	0.67	30.42			
	Domestic Supply	0.00	0.00	0.01			
	Irrigation	3.35	9.37	14.75			
	Livestock						
	Industrial	13.89	38.46	25.60			
	Fossil Fuel Power	174.51	565.40	1.24			
	Nuclear Power						
	Hydroelectric Power						
	Other	0.00	0.00	0.15			
	TOTAL	286.09	613.90	72.16			
Ontario							
	Public Supply	42.66	23.57	18.14	42.02	23.23	16.40
	Domestic Supply	0.00	0.00	10.61	0.00	0.00	0.00
	Irrigation	0.15	15.41	5.35			
	Livestock	2.93	3.07	6.41			
	Industrial	187.41	0.00	2.78	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	4697.20	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	20000.41	13607.66	0.00	0.00	0.00	0.00
	Other	0.00	47.97	0.00	0.00	47.97	0.00
	TOTAL	24930.76	13697.68	43.29	42.02	71.20	16.40
Grand Total:		25216.85	14311.58	115.45	42.02	71.20	16.40

# BASIN REPORT- Lake Huron

Basin Totals

Units: Mgal(US)/d

Year Of Data: 2006

## Total Report - All Facilities

Category	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Public Supply	137.01	24.23	48.57	209.80	0.00	0.00	28.33
Domestic Supply	0.00	0.00	10.61	10.61	0.00	0.00	1.59
Irrigation	3.51	24.78	20.10	48.38	0.00	0.00	24.72
Livestock	2.93	3.07	6.41	12.41	0.00	0.00	
Industrial	201.30	38.46	28.38	268.14	0.00	0.00	19.77
Fossil Fuel Power	174.51	565.40	1.24	741.15	0.00	0.00	8.89
Nuclear Power	4697.20	0.00	0.00	4697.20	0.00	0.00	42.28
Hydroelectric Power	20000.41	13607.66	0.00	33608.07	0.00	0.00	0.00
Other	0.00	47.97	0.15	48.12	47.97	0.00	0.00

## Total Report - Principal Facilities

Category	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Public Supply	42.02	23.23	16.40	81.66	0.00	0.00	12.25
Domestic Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Irrigation					0.00	0.00	
Livestock					0.00	0.00	
Industrial	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	47.97	0.00	47.97	47.97	0.00	0.00

# BASIN REPORT- Lake Michigan

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2006

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Illinois							
	Public Supply	988.81	988.81	0.00	988.81	988.81	0.00
	Domestic Supply	27.52	2.50	0.00	27.52	2.50	0.00
	Irrigation		0.00		0.00	0.00	
	Livestock		0.00		0.00	0.00	
	Industrial	12.43	0.01	0.00	12.43	0.01	0.00
	Fossil Fuel Power	692.32	0.00	0.00	692.32	0.00	0.00
	Nuclear Power	31.70	0.00	0.00	31.70	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	222.95	222.95	0.00	222.95	222.95	0.00
	Total	1975.73	1214.27	0.00	1975.73	1214.27	0.00
Indiana							
	Public Supply	136.90	-2.72	20.53	136.49	0.00	20.47
	Domestic Supply	47.33	0.00	7.10	24.87	0.00	3.74
	Irrigation	20.08	0.00	18.07	19.05	0.00	17.15
	Livestock	4.67	0.00	3.74	2.56	0.00	2.05
	Industrial	1658.80	0.00	99.53	1658.19	0.00	99.49
	Fossil Fuel Power	692.27	0.00	13.85	692.27	0.00	13.85
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	1782.89	0.00	0.00	1782.89	0.00	0.00
	Other	0.05	0.00	0.01	0.00	0.00	0.00
	Total	4342.99	-2.72	162.83	4316.32	0.00	156.75
Michigan							
	Public Supply	302.91	0.00				
	Domestic Supply	3.29	0.00				
	Irrigation	203.88	0.00				
	Livestock		0.00				
	Industrial	511.29	0.00				
	Fossil Fuel Power	1168.83	0.00				
	Nuclear Power	2176.72	0.00				
	Hydroelectric Power		0.00				
	Other	2.24	0.00				
	Total	4369.17	0.00				

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Wisconsin							
	Public Supply	303.00	0.40	33.30			
	Domestic Supply	32.60	3.26	0.00			
	Irrigation	42.40	0.00	42.40			
	Livestock	32.30	0.00	32.30			
	Industrial	187.00	0.00	19.07			
	Fossil Fuel Power	1725.00	0.00	8.62			
	Nuclear Power	1195.00	0.00	5.97			
	Hydroelectric Power	0.00	0.00	0.00			
	Other		-0.64				
	Total	3517.30	3.02	141.66			
Grand Total:		14205.18	1214.57	304.49	6292.05	1214.27	156.75

# BASIN REPORT- Lake Michigan

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2006

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Illinois							
	Public Supply	988.81	0.00	0.00	988.81	0.00	0.00
	Domestic Supply	27.51	0.00	0.01	27.51	0.00	0.01
	Irrigation				0.00	0.00	0.00
	Livestock				0.00	0.00	0.00
	Industrial	12.43	0.00	0.00	12.43	0.00	0.00
	Fossil Fuel Power	692.32	0.00	0.00	692.32	0.00	0.00
	Nuclear Power	31.70	0.00	0.00	31.70	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	222.95	0.00	0.00	222.95	0.00	0.00
	TOTAL	1975.71	0.00	0.01	1975.71	0.00	0.01
Indiana							
	Public Supply	89.62	0.00	47.28	89.62	0.00	46.87
	Domestic Supply	0.00	17.78	29.55	0.00	17.77	7.10
	Irrigation	0.00	4.08	16.00	0.00	3.69	15.36
	Livestock	0.00	1.25	3.42	0.00	1.25	1.31
	Industrial	1648.11	3.90	6.79	1648.07	3.87	6.25
	Fossil Fuel Power	692.27	0.00	0.00	692.27	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	1782.89	0.00	0.00	1782.89	0.00
	Other	0.00	0.00	0.05	0.00	0.00	0.00
	TOTAL	2430.00	1809.90	103.09	2429.96	1809.47	76.89
Michigan							
	Public Supply	136.88	0.47	165.56			
	Domestic Supply	0.00	1.26	2.03			
	Irrigation	1.99	62.51	139.38			
	Livestock						
	Industrial	297.89	148.60	64.80			
	Fossil Fuel Power	651.94	471.44	45.45			
	Nuclear Power	2176.72	0.00	0.00			
	Hydroelectric Power						
	Other	0.00	0.00	2.24			
	TOTAL	3265.42	684.28	419.46			

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Wisconsin							
	Public Supply	210.00	23.00	70.00			
	Domestic Supply	0.00	0.00	32.60			
	Irrigation	0.00	0.00	42.40			
	Livestock	0.00	0.00	32.30			
	Industrial	187.00	0.00	0.00			
	Fossil Fuel Power	1725.00	0.00	0.00			
	Nuclear Power	1195.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	TOTAL	3317.00	23.00	177.30			
Grand Total:		10988.13	2517.18	699.87	4405.67	1809.47	76.90

# BASIN REPORT- Lake Michigan

Basin Totals

Units: Mgal(US)/d

Year Of Data: 2006

## Total Report - All Facilities

Category	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Public Supply	1425.30	23.47	282.84	1731.61	0.00	986.49	53.83
Domestic Supply	27.51	19.04	64.19	110.74	0.00	5.76	7.10
Irrigation	1.99	66.59	197.78	266.36	0.00	0.00	60.47
Livestock	0.00	1.25	35.72	36.97	0.00	0.00	36.04
Industrial	2145.43	152.50	71.59	2369.52	0.00	0.01	118.60
Fossil Fuel Power	3761.53	471.44	45.45	4278.42	0.00	0.00	22.47
Nuclear Power	3403.42	0.00	0.00	3403.42	0.00	0.00	5.97
Hydroelectric Power	0.00	1782.89	0.00	1782.89	0.00	0.00	0.00
Other	222.95	0.00	2.29	225.25	0.00	222.31	0.01

## Total Report - Principal Facilities

Category	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Public Supply	1078.43	0.00	46.87	1125.30	0.00	988.81	20.47
Domestic Supply	27.51	17.77	7.11	52.39	0.00	2.50	3.74
Irrigation	0.00	3.69	15.36	19.05	0.00	0.00	17.15
Livestock	0.00	1.25	1.31	2.56	0.00	0.00	2.05
Industrial	1660.50	3.87	6.25	1670.62	0.00	0.01	99.49
Fossil Fuel Power	1384.59	0.00	0.00	1384.59	0.00	0.00	13.85
Nuclear Power	31.70	0.00	0.00	31.70	0.00	0.00	0.00
Hydroelectric Power	0.00	1782.89	0.00	1782.89	0.00	0.00	0.00
Other	222.95	0.00	0.00	222.95	0.00	222.95	0.00



# BASIN REPORT- Lake Ontario

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2006

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
New York							
	Public Supply	390.27	9.59	39.03		9.59	0.00
	Domestic Supply	91.17	0.00	9.12	29.28	0.00	2.93
	Irrigation	3.92	0.00	3.53	3.92	0.00	3.53
	Livestock	11.03	0.00	9.92		0.00	6.45
	Industrial	65.68	0.00	16.42	65.68	0.00	16.42
	Fossil Fuel Power	846.83	0.00	16.93	846.83	0.00	16.93
	Nuclear Power	1395.65	0.00	69.78	1395.65	0.00	69.78
	Hydroelectric Power	80908.00	0.00	0.00	0.00	0.00	0.00
	Other	39.44	32.00	32.77	7.44	32.00	0.01
	Total	83751.99	41.59	197.50	2348.80	41.59	116.05
Ontario							
	Public Supply	465.93	0.00	69.89	464.62	0.00	69.69
	Domestic Supply	64.17	0.00	9.63	0.00	0.00	0.00
	Irrigation	17.73	0.00			0.00	
	Livestock	5.40	0.00			0.00	
	Industrial	229.64	0.00	14.47	0.00	0.00	0.00
	Fossil Fuel Power	708.95	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	5428.19	0.00	48.85	0.00	0.00	0.00
	Hydroelectric Power	41542.31	0.00	0.00	0.00	0.00	0.00
	Other	132.35	0.00	0.00	132.35	0.00	0.00
	Total	48594.67	0.00	142.84	596.97	0.00	69.69
Pennsylvania							
	Public Supply		0.00			0.00	
	Domestic Supply		0.00			0.00	
	Irrigation		0.00			0.00	
	Livestock		0.00			0.00	
	Industrial		0.00			0.00	
	Fossil Fuel Power		0.00			0.00	
	Nuclear Power		0.00			0.00	
	Hydroelectric Power		0.00			0.00	
	Other		0.00			0.00	
	Total		0.00			0.00	
Grand Total:		132346.66	41.59	340.34	2945.77	41.59	185.74

# BASIN REPORT- Lake Ontario

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2006

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
New York							
	Public Supply	187.28	170.51	32.48			
	Domestic Supply	21.10	29.28	40.79	0.00	29.28	0.00
	Irrigation	0.00	3.75	0.17	0.00	3.75	0.17
	Livestock	3.86	0.00	7.17			
	Industrial	21.88	33.99	9.81	21.88	33.99	9.81
	Fossil Fuel Power	458.12	388.71	0.00	458.12	388.71	0.00
	Nuclear Power	1395.65	0.00	0.00	1395.65	0.00	0.00
	Hydroelectric Power	0.00	80908.00	0.00	0.00	0.00	0.00
	Other	0.00	39.33	0.11	0.00	7.33	0.11
	TOTAL	2087.89	81573.57	90.53	1875.65	463.06	10.09
Ontario							
	Public Supply	401.52	52.86	11.56	401.47	52.68	10.47
	Domestic Supply	0.00	0.00	64.17	0.00	0.00	0.00
	Irrigation	1.08	9.53	7.12			
	Livestock	0.00	0.94	4.46			
	Industrial	218.17	0.00	11.46	0.00	0.00	0.00
	Fossil Fuel Power	708.95	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	5428.19	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	33861.04	7681.26	0.00	0.00	0.00	0.00
	Other	0.00	132.35	0.00	0.00	132.35	0.00
	TOTAL	40618.96	7876.94	98.77	401.47	185.03	10.47
Pennsylvania							
	Public Supply						
	Domestic Supply						
	Irrigation						
	Livestock						
	Industrial						
	Fossil Fuel Power						
	Nuclear Power						
	Hydroelectric Power						
	Other						
	TOTAL						
Grand Total:		42706.85	89450.51	189.30	2277.12	648.09	20.56

# BASIN REPORT- Lake Ontario

Basin Totals

Units: Mgal(US)/d

Year Of Data: 2006

## Total Report - All Facilities

Category	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Public Supply	588.80	223.37	44.04	856.20	0.00	9.59	108.92
Domestic Supply	21.10	29.28	104.96	155.34	0.00	0.00	18.75
Irrigation	1.08	13.28	7.29	21.65	0.00	0.00	3.53
Livestock	3.86	0.94	11.63	16.43	0.00	0.00	9.92
Industrial	240.05	33.99	21.27	295.32	0.00	0.00	30.89
Fossil Fuel Power	1167.07	388.71	0.00	1555.78	0.00	0.00	16.93
Nuclear Power	6823.84	0.00	0.00	6823.84	0.00	0.00	118.63
Hydroelectric Power	33861.04	88589.26	0.00	122450.31	0.00	0.00	0.00
Other	0.00	171.68	0.11	171.79	-5802.39	32.00	32.77

## Total Report - Principal Facilities

Category	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Public Supply	401.47	52.68	10.47	464.62	0.00	9.59	69.69
Domestic Supply	0.00	29.28	0.00	29.28	0.00	0.00	2.93
Irrigation	0.00	3.75	0.17	3.92	0.00	0.00	3.53
Livestock					0.00	0.00	6.45
Industrial	21.88	33.99	9.81	65.68	0.00	0.00	16.42
Fossil Fuel Power	458.12	388.71	0.00	846.83	0.00	0.00	16.93
Nuclear Power	1395.65	0.00	0.00	1395.65	0.00	0.00	69.78
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	139.68	0.11	139.79	-5802.39	32.00	0.01

# BASIN REPORT- Lake Superior

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2006

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Michigan							
	Public Supply	11.61	0.00				
	Domestic Supply		0.00				
	Irrigation	0.35	0.00				
	Livestock		0.00				
	Industrial	12.58	0.00				
	Fossil Fuel Power	270.10	0.00				
	Nuclear Power		0.00				
	Hydroelectric Power		0.00				
	Other		0.00				
	Total	294.65	0.00				
Minnesota							
	Public Supply	40.44	0.00	4.05	40.13	0.00	4.02
	Domestic Supply	1.08	0.00	0.10	1.03	0.00	0.10
	Irrigation	0.64	0.00	0.57	0.25	0.00	0.22
	Livestock	0.80	0.00	0.72	0.75	0.00	0.67
	Industrial	361.06	0.00	36.10	360.73	0.00	36.07
	Fossil Fuel Power	181.93	0.00	3.63	181.91	0.00	3.63
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	2645.73	0.00	0.00	2645.73	0.00	0.00
	Other	0.11	0.00	0.00	0.00	0.00	0.00
	Total	3231.79	0.00	45.17	3230.53	0.00	44.71
Ontario							
	Public Supply	45.77	0.00	6.87	45.58	0.00	6.84
	Domestic Supply	1.75	0.00	0.26	0.00	0.00	0.00
	Irrigation	0.37	0.00			0.00	
	Livestock	0.14	0.00			0.00	
	Industrial	162.12	0.00	10.21	0.00	0.00	0.00
	Fossil Fuel Power	295.52	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	38156.31	-4007.75	0.00	0.00	0.00	0.00
	Other		0.00			0.00	
	Total	38661.99	-4007.75	17.34	45.58	0.00	6.84

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Wisconsin							
	Public Supply	4.42	0.00	0.32			
	Domestic Supply	1.40	0.00	0.14			
	Irrigation	0.30	0.00	0.30			
	Livestock	8.30	0.00	8.30			
	Industrial		0.00				
	Fossil Fuel Power	38.00	0.00	0.19			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other		0.00				
	Total	52.42	0.00	9.25			
Grand Total:		42240.85	-4007.75	71.76	3276.11	0.00	51.55

# BASIN REPORT- Lake Superior

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2006

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Michigan							
	Public Supply	3.86	0.00	7.75			
	Domestic Supply						
	Irrigation	0.00	0.11	0.24			
	Livestock						
	Industrial	12.44	0.00	0.14			
	Fossil Fuel Power	270.10	0.00	0.00			
	Nuclear Power						
	Hydroelectric Power						
	Other						
	TOTAL	286.41	0.11	8.13			
Minnesota							
	Public Supply	32.26	2.09	6.09	32.20	2.06	5.87
	Domestic Supply	0.73	0.34	0.01	0.69	0.34	0.00
	Irrigation	0.09	0.48	0.07	0.00	0.25	0.00
	Livestock	0.80	0.00	0.00	0.75	0.00	0.00
	Industrial	297.71	63.32	0.03	297.64	63.09	0.00
	Fossil Fuel Power	46.22	135.58	0.13	46.21	135.58	0.12
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	2645.73	0.00	0.00	2645.73	0.00
	Other	0.00	0.00	0.11	0.00	0.00	0.00
	TOTAL	377.81	2847.54	6.44	377.49	2847.05	5.99
Ontario							
	Public Supply	30.10	13.03	2.65	30.07	12.96	2.55
	Domestic Supply	0.00	0.00	1.75	0.00	0.00	0.00
	Irrigation	0.02	0.31	0.05			
	Livestock	0.00	0.14	0.00			
	Industrial	162.12	0.00	0.00	0.00	0.00	0.00
	Fossil Fuel Power	295.52	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	38156.31	0.00	0.00	0.00	0.00
	Other						
	TOTAL	487.76	38169.79	4.44	30.07	12.96	2.55

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Wisconsin	Public Supply	3.86	0.00	0.56			
	Domestic Supply	0.00	0.00	1.40			
	Irrigation	0.00	0.00	0.30			
	Livestock	0.00	0.00	8.30			
	Industrial						
	Fossil Fuel Power	38.00	0.00	0.00			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power	0.00	0.00	0.00			
	Other						
	TOTAL	41.86	0.00	10.56			
Grand Total:	1193.84	41017.44	29.57	407.56	2860.01	8.54	

# BASIN REPORT- Lake Superior

Basin Totals

Units: Mgal(US)/d

Year Of Data: 2006

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	70.08	15.12	17.05	102.24	0.00	0.00	11.24
Domestic Supply	0.73	0.34	3.16	4.23	0.00	0.00	0.50
Irrigation	0.12	0.90	0.65	1.67	0.00	0.00	0.87
Livestock	0.80	0.14	8.30	9.24	0.00	0.00	9.02
Industrial	472.27	63.32	0.17	535.76	0.00	0.00	46.31
Fossil Fuel Power	649.84	135.58	0.13	785.55	0.00	0.00	3.82
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	40802.04	0.00	40802.04	0.00	-4007.75	0.00
Other	0.00	0.00	0.11	0.11	0.00	0.00	0.00

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	62.27	15.02	8.42	85.71	0.00	0.00	10.86
Domestic Supply	0.69	0.34	0.00	1.03	0.00	0.00	0.10
Irrigation	0.00	0.25	0.00	0.25	0.00	0.00	0.22
Livestock	0.75	0.00	0.00	0.75	0.00	0.00	0.67
Industrial	297.64	63.09	0.00	360.73	0.00	0.00	36.07
Fossil Fuel Power	46.21	135.58	0.12	181.91	0.00	0.00	3.63
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	2645.73	0.00	2645.73	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00



# BASIN REPORT- St. Lawrence River

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2006

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
New York							
	Public Supply	39.69	0.00	3.98		0.00	
	Domestic Supply	15.16	0.00	1.52	0.49	0.00	0.05
	Irrigation	0.00	0.00	0.00	0.00	0.00	0.00
	Livestock	5.07	0.00	4.56		0.00	
	Industrial	15.01	0.00	3.76	15.01	0.00	3.76
	Fossil Fuel Power	0.02	0.00	0.00	0.02	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	179719.00	0.00	0.00	81027.00	0.00	0.00
	Other	4.14	0.00	0.41	4.14	0.00	0.41
	Total	179798.09	0.00	14.23	81046.66	0.00	4.22
Ontario							
	Public Supply	73.03	0.00	10.96	72.08	0.00	10.82
	Domestic Supply	11.45	0.00	1.72	0.00	0.00	0.00
	Irrigation	2.35	0.00			0.00	
	Livestock	5.91	0.00			0.00	
	Industrial	160.81	0.00	10.13	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	76235.15	0.00	0.00	0.00	0.00	0.00
	Other	19.28	0.00	0.00	19.28	0.00	0.00
	Total	76507.99	0.00	22.80	91.37	0.00	10.82
Quebec							
	Public Supply	1100.01	0.00	109.90	1096.05	0.00	109.63
	Domestic Supply	71.59	0.00	7.13	48.61	0.00	4.76
	Irrigation	9.22	0.00	8.30		0.00	
	Livestock	19.10	0.00	15.28		0.00	
	Industrial	125.48	0.00	12.55	124.95	0.00	12.50
	Fossil Fuel Power	47.02	0.00	4.70	47.02	0.00	4.70
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	303895.85	0.00	0.00	303895.85	0.00	0.00
	Other		0.00			0.00	
	Total	305268.28	0.00	157.86	305212.48	0.00	131.58
Grand Total:		561574.35	0.00	194.89	386350.51	0.00	146.62

# BASIN REPORT- St. Lawrence River

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2006

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
New York							
	Public Supply	2.86	32.47	4.36			
	Domestic Supply	2.55	0.49	12.12	0.00	0.49	0.00
	Irrigation	0.00	0.00	0.00	0.00	0.00	0.00
	Livestock	1.77	0.00	3.30			
	Industrial	4.90	6.92	3.19	4.90	6.92	3.19
	Fossil Fuel Power	0.02	0.00	0.00	0.02	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	81027.00	98692.00	0.00	81027.00	0.00	0.00
	Other	0.00	4.14	0.00	0.00	4.14	0.00
	TOTAL	81039.10	98736.02	22.97	81031.92	11.55	3.19
Ontario							
	Public Supply	10.64	58.84	3.56	10.64	58.52	2.93
	Domestic Supply	0.00	0.00	11.45	0.00	0.00	0.00
	Irrigation	0.01	2.04	0.30			
	Livestock	0.00	3.63	2.28			
	Industrial	159.76	0.00	1.05	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	76149.02	86.13	0.00	0.00	0.00	0.00
	Other	0.00	19.28	0.00	0.00	19.28	0.00
	TOTAL	76319.43	169.91	18.65	10.64	77.80	2.93
Quebec							
	Public Supply	602.84	497.17	0.00	602.58	493.47	0.00
	Domestic Supply	0.00	0.00	71.59	0.00	0.00	48.61
	Irrigation	0.00	0.00	9.22			
	Livestock	0.00	0.00	19.10			
	Industrial	0.00	125.48	0.00	0.00	124.95	0.00
	Fossil Fuel Power	39.10	7.93	0.00	39.10	7.93	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	170946.25	132949.60	0.00	170946.25	132949.60	0.00
	Other						
	TOTAL	171588.19	133580.18	99.91	171587.93	133575.95	48.61
Grand Total:		328946.72	232486.11	141.53	252630.49	133665.30	54.72

# BASIN REPORT- St. Lawrence River

Basin Totals

Units: Mgal(US)/d

Year Of Data: 2006

## Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	616.34	588.48	7.92	1212.73	0.00	0.00	124.83
Domestic Supply	2.55	0.49	95.16	98.20	0.00	0.00	10.37
Irrigation	0.01	2.04	9.52	11.57	0.00	0.00	8.30
Livestock	1.77	3.63	24.68	30.08	0.00	0.00	19.84
Industrial	164.66	132.40	4.24	301.30	0.00	0.00	26.44
Fossil Fuel Power	39.12	7.93	0.00	47.04	0.00	0.00	4.70
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	328122.28	231727.72	0.00	559850.00	0.00	0.00	0.00
Other	0.00	23.42	0.00	23.42	0.00	0.00	0.41

## Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	613.22	551.99	2.93	1168.13	0.00	0.00	120.45
Domestic Supply	0.00	0.49	48.61	49.10	0.00	0.00	4.81
Irrigation	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Livestock					0.00	0.00	
Industrial	4.90	131.87	3.19	139.96	0.00	0.00	16.26
Fossil Fuel Power	39.12	7.93	0.00	47.04	0.00	0.00	4.70
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	251973.25	132949.60	0.00	384922.85	0.00	0.00	0.00
Other	0.00	23.42	0.00	23.42	0.00	0.00	0.41



## ***V. WATER USE CATEGORY TABLES***

Each water use category is represented by two tables:

Water Use by Jurisdiction

Water Use by Basin

**Public Supply-Domestic & Industrial**

**Self Supply-Domestic**

**Self Supply – Irrigation**

**Self Supply-Livestock**

**Self Supply-Industrial**

**Self Supply-Thermoelectric Power, Fossil Fuel**

**Self Supply-Thermoelectric Power, Nuclear Power**

**Self Supply-Hydroelectric Power**

**Self Supply-Other**

# WATER-USE CATEGORY REPORT- Public Supply

Units: Mgal(US)/d

Year Of Data: 2006

## Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	988.81	0.00	0.00	988.81	0.00	988.81	0.00
Indiana	89.62	31.32	56.57	177.51	0.00	3.54	26.62
Michigan	815.66	17.19	244.54	1077.39	0.00	0.00	134.67
Minnesota	32.26	2.09	6.09	40.44	0.00	0.00	4.05
New York	374.72	275.10	44.17	693.99	0.00	9.59	69.41
Ohio	408.95	108.83	33.88	551.66	0.00	0.32	82.76
Ontario	493.88	177.55	91.57	763.00	0.00	0.00	114.45
Pennsylvania	29.41	0.64	1.49	31.53	0.00	0.00	3.15
Quebec	602.84	497.17	0.00	1100.01	0.00	0.00	109.90
Wisconsin	213.86	23.00	70.56	307.42	0.00	0.40	33.62

## Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	988.81	0.00	0.00	988.81	0.00	988.81	0.00
Indiana	89.62	31.32	55.98	176.92	0.00	0.00	26.54
Michigan							
Minnesota	32.20	2.06	5.87	40.13	0.00	0.00	4.02
New York					0.00	9.59	0.00
Ohio	408.95	108.50	30.52	547.97	0.00	0.32	82.19
Ontario	493.17	176.61	87.00	756.78	0.00	0.00	113.52
Pennsylvania	29.41	0.64	1.49	31.53	0.00	0.00	3.15
Quebec	602.58	493.47	0.00	1096.05	0.00	0.00	109.63
Wisconsin							

# WATER-USE CATEGORY REPORT- Public Supply

Units: Mgal(US)/d

Year Of Data: 2006

## Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	70.08	15.12	17.05	102.24	0.00	0.00	12.69
Lake Michigan	1425.30	23.47	282.84	1731.61	0.00	986.49	91.69
Lake Huron	137.01	24.23	48.57	209.80	0.00	0.00	28.33
Lake Erie	1212.48	258.23	148.46	1619.16	0.00	6.58	212.17
Lake Ontario	588.80	223.37	44.04	856.20	0.00	9.59	108.92
St. Lawrence River	616.34	588.48	7.92	1212.73	0.00	0.00	124.83

## Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	62.27	15.02	8.42	85.71	0.00	0.00	10.86
Lake Michigan	1078.43	0.00	46.87	1125.30	0.00	988.81	20.47
Lake Huron	42.02	23.23	16.40	81.66	0.00	0.00	12.25
Lake Erie	447.32	169.68	95.77	712.77	0.00	0.32	105.34
Lake Ontario	401.47	52.68	10.47	464.62	0.00	9.59	69.69
St. Lawrence River	613.22	551.99	2.93	1168.13	0.00	0.00	120.45

# WATER-USE CATEGORY REPORT- Domestic Supply

Units: Mgal(US)/d

Year Of Data: 2006

## Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	27.51	0.00	0.01	27.52	0.00	2.50	0.00
Indiana	0.00	17.78	35.92	53.70	0.00	0.00	8.06
Michigan	0.00	1.26	2.20	3.46	0.00	0.00	
Minnesota	0.73	0.34	0.01	1.08	0.00	0.00	0.10
New York	35.98	29.77	63.52	129.27	0.00	0.00	12.93
Ohio	0.37	0.07	58.49	58.93	0.00	0.00	8.84
Ontario	0.00	0.00	107.91	107.91	0.00	0.00	16.19
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	
Quebec	0.00	0.00	71.59	71.59	0.00	0.00	7.13
Wisconsin	0.00	0.00	34.00	34.00	0.00	3.26	0.14

## Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	27.51	0.00	0.01	27.52	0.00	2.50	0.00
Indiana	0.00	17.77	7.49	25.26	0.00	0.00	3.80
Michigan							
Minnesota	0.69	0.34	0.00	1.03	0.00	0.00	0.10
New York	0.00	29.77	0.00	29.77	0.00	0.00	2.98
Ohio	0.37	0.00	0.00	0.37	0.00	0.00	0.06
Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quebec	0.00	0.00	48.61	48.61	0.00	0.00	4.76
Wisconsin							



# WATER-USE CATEGORY REPORT- Domestic Supply

Units: Mgal(US)/d

Year Of Data: 2006

## Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.73	0.34	3.16	4.23	0.00	0.00	0.50
Lake Michigan	27.51	19.04	64.19	110.74	0.00	5.76	7.10
Lake Huron	0.00	0.00	10.61	10.61	0.00	0.00	1.59
Lake Erie	12.70	0.07	95.58	108.35	0.00	0.00	15.08
Lake Ontario	21.10	29.28	104.96	155.34	0.00	0.00	18.75
St. Lawrence River	2.55	0.49	95.16	98.20	0.00	0.00	10.37

## Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.69	0.34	0.00	1.03	0.00	0.00	0.10
Lake Michigan	27.51	17.77	7.11	52.39	0.00	2.50	3.74
Lake Huron	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Erie	0.37	0.00	0.39	0.76	0.00	0.00	0.12
Lake Ontario	0.00	29.28	0.00	29.28	0.00	0.00	2.93
St. Lawrence River	0.00	0.49	48.61	49.10	0.00	0.00	4.81

# WATER-USE CATEGORY REPORT- Irrigation

Units: Mgal(US)/d

Year Of Data: 2006

## Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois					0.00	0.00	
Indiana	0.00	4.36	16.77	21.13	0.00	0.00	19.02
Michigan	5.79	83.98	163.97	253.73	0.00	0.00	228.36
Minnesota	0.09	0.48	0.07	0.64	0.00	0.00	0.57
New York	0.23	3.82	0.17	4.22	0.00	0.00	3.80
Ohio	0.26	11.00	2.29	13.55	0.00	0.00	12.19
Ontario	1.86	39.39	31.97	73.22	0.00	0.00	
Pennsylvania	0.00	0.31	0.00	0.31	0.00	0.00	0.28
Quebec	0.00	0.00	9.22	9.22	0.00	0.00	8.30
Wisconsin	0.00	0.00	42.70	42.70	0.00	0.00	42.70

## Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	0.00	0.00	0.00	0.00	0.00	0.00	
Indiana	0.00	3.85	16.02	19.87	0.00	0.00	17.88
Michigan							
Minnesota	0.00	0.25	0.00	0.25	0.00	0.00	0.22
New York	0.23	3.82	0.17	4.22	0.00	0.00	3.80
Ohio	0.24	9.92	1.61	11.77	0.00	0.00	10.60
Ontario					0.00	0.00	
Pennsylvania	0.00	0.31	0.00	0.31	0.00	0.00	0.28
Quebec					0.00	0.00	
Wisconsin							

# WATER-USE CATEGORY REPORT- Irrigation

Units: Mgal(US)/d

Year Of Data: 2006

## Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.12	0.90	0.65	1.67	0.00	0.00	1.19
Lake Michigan	1.99	66.59	197.78	266.36	0.00	0.00	243.96
Lake Huron	3.51	24.78	20.10	48.38	0.00	0.00	24.72
Lake Erie	1.52	35.76	31.82	69.10	0.00	0.00	33.52
Lake Ontario	1.08	13.28	7.29	21.65	0.00	0.00	3.53
St. Lawrence River	0.01	2.04	9.52	11.57	0.00	0.00	8.30

## Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	0.25	0.00	0.25	0.00	0.00	0.22
Lake Michigan	0.00	3.69	15.36	19.05	0.00	0.00	17.15
Lake Huron					0.00	0.00	
Lake Erie	0.47	10.46	2.27	13.20	0.00	0.00	11.88
Lake Ontario	0.00	3.75	0.17	3.92	0.00	0.00	3.53
St. Lawrence River	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# WATER-USE CATEGORY REPORT- Livestock

Units: Mgal(US)/d

Year Of Data: 2006

## Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois					0.00	0.00	
Indiana	0.00	1.25	4.37	5.62	0.00	0.00	4.50
Michigan					0.00	0.00	
Minnesota	0.80	0.00	0.00	0.80	0.00	0.00	0.72
New York	7.14	0.00	13.20	20.34	0.00	0.00	18.30
Ohio	0.00	1.76	10.69	12.45	0.00	0.00	9.96
Ontario	2.95	8.67	25.47	37.09	0.00	0.00	
Pennsylvania					0.00	0.00	
Quebec	0.00	0.00	19.10	19.10	0.00	0.00	15.28
Wisconsin	0.00	0.00	40.60	40.60	0.00	0.00	40.60

## Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	0.00	0.00	0.00	0.00	0.00	0.00	
Indiana	0.00	1.25	1.31	2.56	0.00	0.00	2.05
Michigan							
Minnesota	0.75	0.00	0.00	0.75	0.00	0.00	0.67
New York					0.00	0.00	6.45
Ohio	0.00	0.00	0.96	0.96	0.00	0.00	0.77
Ontario					0.00	0.00	
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quebec					0.00	0.00	
Wisconsin							

# WATER-USE CATEGORY REPORT- Livestock

Units: Mgal(US)/d

Year Of Data: 2006

## Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.80	0.14	8.30	9.24	0.00	0.00	9.02
Lake Michigan	0.00	1.25	35.72	36.97	0.00	0.00	36.04
Lake Huron	2.93	3.07	6.41	12.41	0.00	0.00	
Lake Erie	1.53	2.65	26.68	30.86	0.00	0.00	14.54
Lake Ontario	3.86	0.94	11.63	16.43	0.00	0.00	9.92
St. Lawrence River	1.77	3.63	24.68	30.08	0.00	0.00	19.84

## Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.75	0.00	0.00	0.75	0.00	0.00	0.67
Lake Michigan	0.00	1.25	1.31	2.56	0.00	0.00	2.05
Lake Huron					0.00	0.00	
Lake Erie	0.00	0.00	0.96	0.96	0.00	0.00	0.77
Lake Ontario					0.00	0.00	6.45
St. Lawrence River					0.00	0.00	

# WATER-USE CATEGORY REPORT- Industrial

Units: Mgal(US)/d

Year Of Data: 2006

## Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	12.43	0.00	0.00	12.43	0.00	0.01	0.00
Indiana	1648.11	7.51	12.40	1668.02	0.00	0.00	100.09
Michigan	357.77	207.90	120.40	686.07	0.00	0.00	
Minnesota	297.71	63.32	0.03	361.06	0.00	0.00	36.10
New York	197.00	41.86	13.04	251.90	0.00	0.00	62.99
Ohio	56.38	187.88	59.20	303.46	0.00	0.00	30.35
Ontario	900.71	0.00	22.51	923.22	0.00	0.00	58.16
Pennsylvania	5.34	0.00	0.00	5.34	0.00	0.00	
Quebec	0.00	125.48	0.00	125.48	0.00	0.00	12.55
Wisconsin	187.00	0.00	0.00	187.00	0.00	0.00	19.07

## Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	12.43	0.00	0.00	12.43	0.00	0.01	0.00
Indiana	1648.07	7.48	11.69	1667.24	0.00	0.00	100.04
Michigan							
Minnesota	297.64	63.09	0.00	360.73	0.00	0.00	36.07
New York	197.00	40.91	13.04	250.95	0.00	0.00	62.75
Ohio	56.38	187.67	58.88	302.93	0.00	0.00	30.30
Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania	5.34	0.00	0.00	5.34	0.00	0.00	0.00
Quebec	0.00	124.95	0.00	124.95	0.00	0.00	12.50
Wisconsin							

# WATER-USE CATEGORY REPORT- Industrial

Units: Mgal(US)/d

Year Of Data: 2006

## Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	472.27	63.32	0.17	535.76	0.00	0.00	46.31
Lake Michigan	2145.43	152.50	71.59	2369.52	0.00	0.01	118.60
Lake Huron	201.30	38.46	28.38	268.14	0.00	0.00	11.98
Lake Erie	438.74	213.28	101.92	753.94	0.00	0.00	85.09
Lake Ontario	240.05	33.99	21.27	295.32	0.00	0.00	30.89
St. Lawrence River	164.66	132.40	4.24	301.30	0.00	0.00	26.44

## Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	297.64	63.09	0.00	360.73	0.00	0.00	36.07
Lake Michigan	1660.50	3.87	6.25	1670.62	0.00	0.01	99.49
Lake Huron	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Erie	231.94	191.28	64.36	487.58	0.00	0.00	73.42
Lake Ontario	21.88	33.99	9.81	65.68	0.00	0.00	16.42
St. Lawrence River	4.90	131.87	3.19	139.96	0.00	0.00	16.26

# WATER-USE CATEGORY REPORT- Fossil Fuel Power

Units: Mgal(US)/d

Year Of Data: 2006

## Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	692.32	0.00	0.00	692.32	0.00	0.00	0.00
Indiana	692.27	0.00	0.27	692.54	0.00	0.00	13.86
Michigan	5102.98	1151.27	46.80	6301.05	0.00	0.00	
Minnesota	46.22	135.58	0.13	181.93	0.00	0.00	3.63
New York	1280.99	388.71	0.00	1669.70	0.00	0.00	33.39
Ohio	1694.90	749.57	0.00	2444.47	0.00	0.00	24.45
Ontario	1467.67	0.00	0.00	1467.67	0.00	0.00	0.00
Pennsylvania					0.00	0.00	
Quebec	39.10	7.93	0.00	47.02	0.00	0.00	4.70
Wisconsin	1763.00	0.00	0.00	1763.00	0.00	0.00	8.81

## Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	692.32	0.00	0.00	692.32	0.00	0.00	0.00
Indiana	692.27	0.00	0.27	692.54	0.00	0.00	13.86
Michigan							
Minnesota	46.21	135.58	0.12	181.91	0.00	0.00	3.63
New York	1280.99	388.71	0.00	1669.70	0.00	0.00	33.39
Ohio	1694.89	749.57	0.00	2444.46	0.00	0.00	24.45
Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quebec	39.10	7.93	0.00	47.02	0.00	0.00	4.70
Wisconsin							



# WATER-USE CATEGORY REPORT- Fossil Fuel Power

Units: Mgal(US)/d

Year Of Data: 2006

## Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	649.84	135.58	0.13	785.55	0.00	0.00	3.82
Lake Michigan	3761.53	471.44	45.45	4278.42	0.00	0.00	22.47
Lake Huron	174.51	565.40	1.24	741.15	0.00	0.00	0.00
Lake Erie	6987.37	864.01	0.38	7851.76	0.00	0.00	40.92
Lake Ontario	1167.07	388.71	0.00	1555.78	0.00	0.00	16.93
St. Lawrence River	39.12	7.93	0.00	47.04	0.00	0.00	4.70

## Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	46.21	135.58	0.12	181.91	0.00	0.00	3.63
Lake Michigan	1384.59	0.00	0.00	1384.59	0.00	0.00	13.85
Lake Huron	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Erie	2517.74	749.57	0.27	3267.58	0.00	0.00	40.92
Lake Ontario	458.12	388.71	0.00	846.83	0.00	0.00	16.93
St. Lawrence River	39.12	7.93	0.00	47.04	0.00	0.00	4.70

# WATER-USE CATEGORY REPORT- Nuclear Power

Units: Mgal(US)/d

Year Of Data: 2006

## Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	31.70	0.00	0.00	31.70	0.00	0.00	0.00
Indiana	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Michigan	2225.78	0.00	0.00	2225.78	0.00	0.00	
Minnesota	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York	1395.65	0.00	0.00	1395.65	0.00	0.00	69.78
Ohio	152.48	0.00	0.00	152.48	0.00	0.00	15.25
Ontario	10125.39	0.00	0.00	10125.39	0.00	0.00	91.13
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	
Quebec	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wisconsin	1195.00	0.00	0.00	1195.00	0.00	0.00	5.97

## Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	31.70	0.00	0.00	31.70	0.00	0.00	0.00
Indiana	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Michigan							
Minnesota	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York	1395.65	0.00	0.00	1395.65	0.00	0.00	69.78
Ohio	152.48	0.00	0.00	152.48	0.00	0.00	15.25
Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quebec	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wisconsin							

# WATER-USE CATEGORY REPORT- Nuclear Power

Units: Mgal(US)/d

Year Of Data: 2006

## Water-Use by Basin - All Facilities

Basin	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Lake Superior	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Michigan	3403.42	0.00	0.00	3403.42	0.00	0.00	5.97
Lake Huron	4697.20	0.00	0.00	4697.20	0.00	0.00	42.28
Lake Erie	201.54	0.00	0.00	201.54	0.00	0.00	15.25
Lake Ontario	6823.84	0.00	0.00	6823.84	0.00	0.00	118.63
St. Lawrence River	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## Water-Use by Basin - Principal Facilities

Basin	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Lake Superior	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Michigan	31.70	0.00	0.00	31.70	0.00	0.00	0.00
Lake Huron	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Erie	152.48	0.00	0.00	152.48	0.00	0.00	15.25
Lake Ontario	1395.65	0.00	0.00	1395.65	0.00	0.00	69.78
St. Lawrence River	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# WATER-USE CATEGORY REPORT- Hydroelectric Power

Units: Mgal(US)/d

Year Of Data: 2006

## Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indiana	0.00	1782.89	0.00	1782.89	0.00	0.00	0.00
Michigan					0.00	0.00	
Minnesota	0.00	2645.73	0.00	2645.73	0.00	0.00	0.00
New York	128195.00	179600.00	0.00	307795.00	0.00	0.00	0.00
Ohio	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ontario	130010.47	59531.37	0.00	189541.84	0.00	-4007.75	0.00
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	
Quebec	170946.25	132949.60	0.00	303895.85	0.00	0.00	0.00
Wisconsin	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indiana	0.00	1782.89	0.00	1782.89	0.00	0.00	0.00
Michigan							
Minnesota	0.00	2645.73	0.00	2645.73	0.00	0.00	0.00
New York	128195.00	0.00	0.00	128195.00	0.00	0.00	0.00
Ohio	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quebec	170946.25	132949.60	0.00	303895.85	0.00	0.00	0.00
Wisconsin							

# WATER-USE CATEGORY REPORT- Hydroelectric Power

Units: Mgal(US)/d

Year Of Data: 2006

## Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	40802.04	0.00	40802.04	0.00	-4007.75	0.00
Lake Michigan	0.00	1782.89	0.00	1782.89	0.00	0.00	0.00
Lake Huron	20000.41	13607.66	0.00	33608.07	0.00	0.00	0.00
Lake Erie	47168.00	0.00	0.00	47168.00	0.00	0.00	0.00
Lake Ontario	33861.04	88589.26	0.00	122450.31	0.00	0.00	0.00
St. Lawrence River	328122.28	231727.72	0.00	559850.00	0.00	0.00	0.00

## Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	2645.73	0.00	2645.73	0.00	0.00	0.00
Lake Michigan	0.00	1782.89	0.00	1782.89	0.00	0.00	0.00
Lake Huron	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Erie	47168.00	0.00	0.00	47168.00	0.00	0.00	0.00
Lake Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Lawrence River	251973.25	132949.60	0.00	384922.85	0.00	0.00	0.00

# WATER-USE CATEGORY REPORT- Other

Units: Mgal(US)/d

Year Of Data: 2006

## Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	222.95	0.00	0.00	222.95	0.00	222.95	0.00
Indiana	0.00	0.00	0.05	0.05	0.00	0.00	0.01
Michigan	0.00	0.00	2.39	2.39	0.00	0.00	
Minnesota	0.00	0.00	0.11	0.11	0.00	0.00	0.00
New York	0.00	43.47	0.11	43.58	0.00	32.00	33.18
Ohio	0.27	1.42	0.73	2.42	0.00	-9.97	1.36
Ontario	0.00	199.61	0.00	199.61	61.97	0.00	0.00
Pennsylvania					0.00	0.00	
Quebec					0.00	0.00	
Wisconsin					0.00	-0.64	

## Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	222.95	0.00	0.00	222.95	0.00	222.95	0.00
Indiana	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Michigan							
Minnesota	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York	0.00	11.47	0.11	11.58	0.00	32.00	0.42
Ohio	0.27	1.42	0.56	2.25	0.00	-9.97	1.36
Ontario	0.00	199.61	0.00	199.61	61.97	0.00	0.00
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quebec					0.00	0.00	
Wisconsin							

# WATER-USE CATEGORY REPORT- Other

Units: Mgal(US)/d

Year Of Data: 2006

## Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	0.00	0.11	0.11	0.00	0.00	0.00
Lake Michigan	222.95	0.00	2.29	225.25	0.00	222.31	0.01
Lake Huron	0.00	47.97	0.15	48.12	47.97	0.00	0.00
Lake Erie	0.27	1.42	0.73	2.42	5816.39	-9.97	1.36
Lake Ontario	0.00	171.68	0.11	171.79	-5802.39	32.00	32.77
St. Lawrence River	0.00	23.42	0.00	23.42	0.00	0.00	0.41

## Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Michigan	222.95	0.00	0.00	222.95	0.00	222.95	0.00
Lake Huron	0.00	47.97	0.00	47.97	47.97	0.00	0.00
Lake Erie	0.27	1.42	0.56	2.25	5816.39	-9.97	1.36
Lake Ontario	0.00	139.68	0.11	139.79	-5802.39	32.00	0.01
St. Lawrence River	0.00	23.42	0.00	23.42	0.00	0.00	0.41