

Annual Report of the Great Lakes Regional Water Use Database **Representing 2010 Water Use Data**

Prepared by Rebecca Pearson, Great Lakes Commission (in Liters)

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.

Forward

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, which 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the evolving needs of the Great Lakes state and provincial water resources management programs, that system soon became outdated.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 required under Article 4 of the Great Lakes—St. Lawrence River Basin Water Resources Compact (hereinafter referred to as “the Compact”) and Article 301 of the Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement (hereinafter referred to as “the Agreement”). Under the Compact and the 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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Overview of the Great Lakes Basin Water Use

Introduction

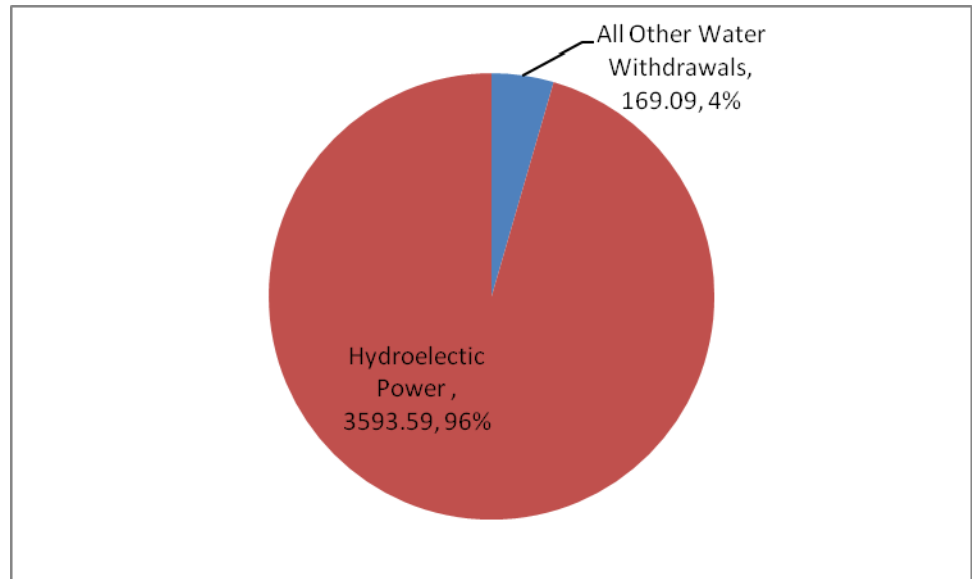
The Great Lakes Commission - the repository for the Great Lakes Regional Water Use Database - annually requests for the previous year’s water use data from the states and provinces. All data are submitted to the repository in a Microsoft Excel or Access format then compiled into a single Microsoft Access 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). 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 level of accuracy for each entry is rated as 1) measured, 2) partially measured or 3) estimated, and the level of aggregation is rated as originating from 1) site-specific sources or 2) 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 interim reporting protocols adopted in 2009 pursuant to the Compact and the Agreement, hydroelectric will not be considered a “withdrawal”, but rather a “use.” In future reports starting with 2012 data, it will be not aggregated with total withdrawals, but rather aggregated separately as a use. As the following chart illustrates, this is the largest single category of withdrawal and represents 96 percent of the total amount of water “withdrawn” in 2010.

Figure 1. 2010 Great Lakes Water Use (In billions of liters per day)



Each of the ten jurisdictions’ water use is represented in Figure 2 and Figure 3. Figure 2 includes self-supply hydroelectric use. In total, water withdrawals for the year 2010 were approximately 949.33 billion gallons per day, or about 3,593.59 billion liters per day.

Figure 2. 2010 Great Lakes Water Use by Jurisdiction
(In billions of liters per day and includes hydroelectric)

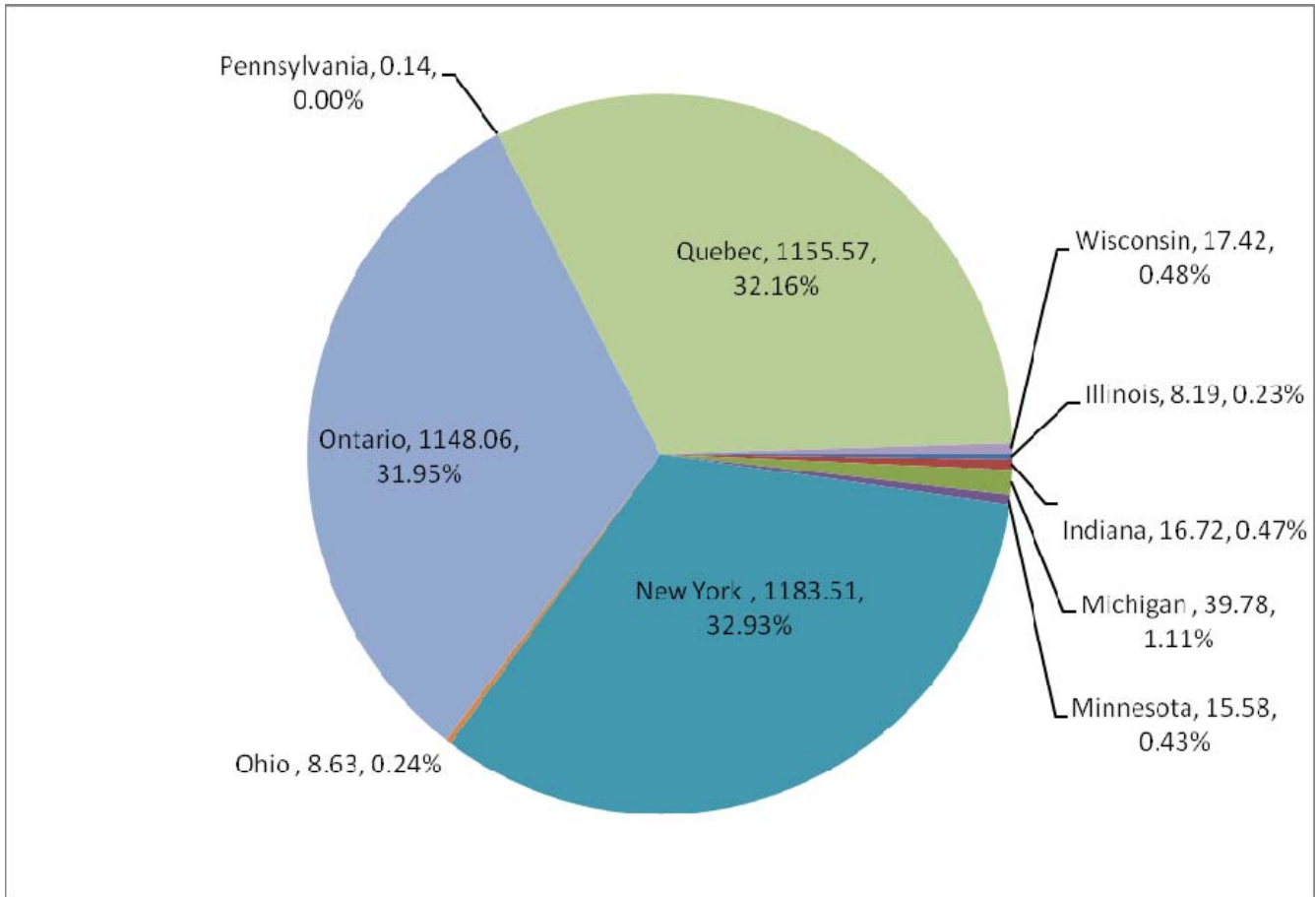
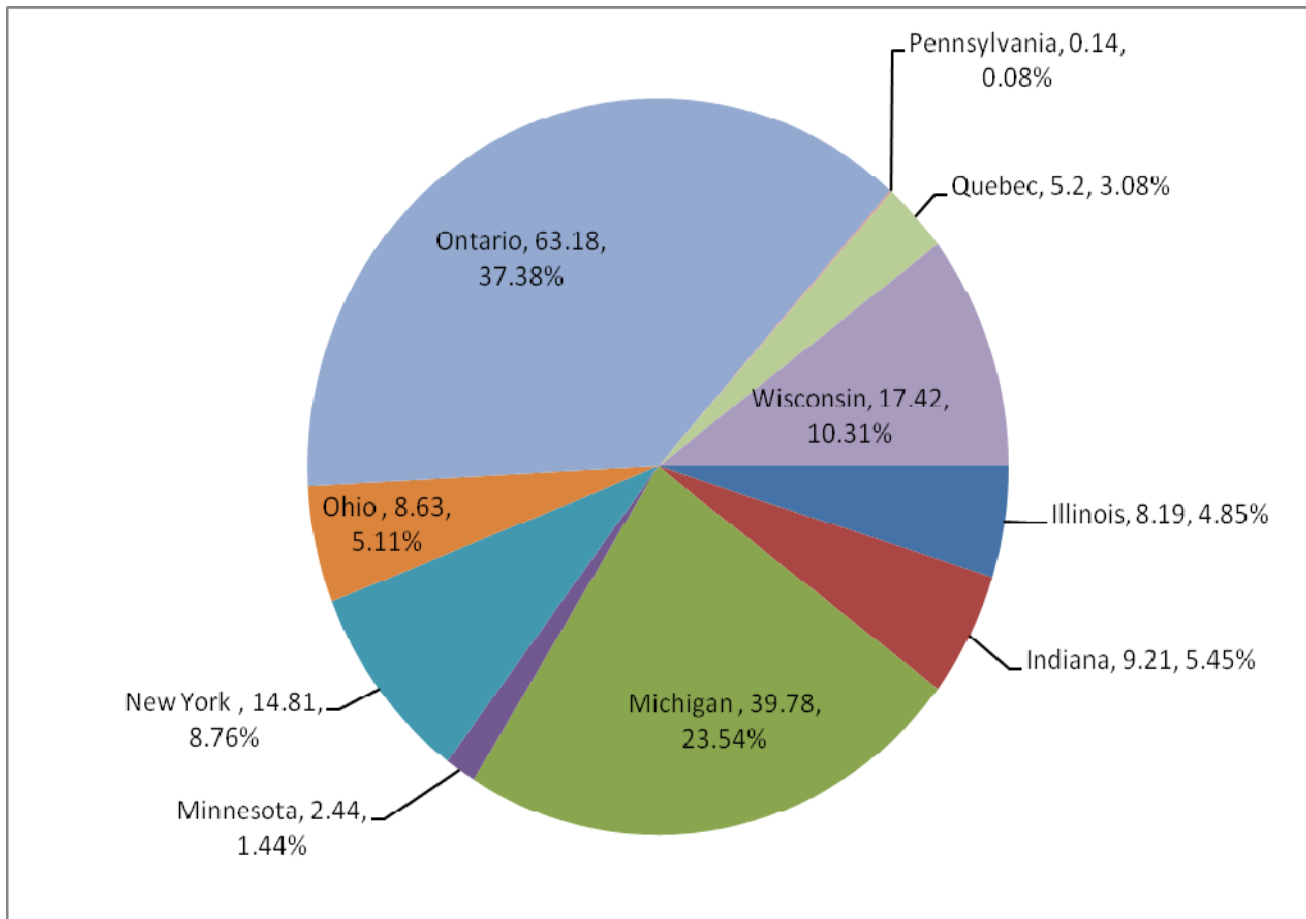


Figure 3 more accurately reflects the actual water withdrawals within the basin, as it does not include self-supply hydroelectric use. Water withdrawals for the eight remaining off-stream categories totaled 44.67 billion gallons per day, or 169.09 billion liters per day.

Figure 3. 2010 Great Lakes Water Use by Jurisdiction
 (In billions of liters per day and excludes hydroelectric)



Pie charts showing individual jurisdictional water use, beginning with Illinois on page 14, are in million gallons per day.

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 positive numbers (e.g. without a minus sign) indicate water leaving the Great Lakes basin; interbasin diversions shown in the tables as negative numbers (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, or by calling 519/622-4764.

Consumptive Uses

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. Total consumptive use in the basin for 2010 was calculated to be 1.79 bgd (6.76 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)

Measuring and Estimating Consumptive Use of Great Lakes Water
(www.glc.org/wateruse/wrmdss/finalreport/pdf/CU_briefing.pdf).

Consumptive Use Coefficients

Water Use Category	Illinois	Indiana	Michigan	Minnesota	New York	Ohio	Ontario	Pennsylvania	Québec	Wisconsin
Public Supply	10-15%	15%	10-15%	10-15%	10%	10-15%	15%	10%	10-15%	10-15%
Domestic	10-15%	15%	10-15%	10-15%	10%	10-15%	15%	10%	10-15%	10-15%
Irrigation	90%	90%	90%	90%	90%	90%	78%	90%	90%	70%
Livestock	80%	80%	80%	80%	90%	80%	80%	80%	80%	90%
Industrial	Varies by plant & SIC code	6%	10-15%	Varies by plant & SIC code	25%	10%; except quarry dewatering which is 0%	Varies by plant & SIC code	Varies by plant & SIC code	10% for pulp & paper industry	10.2% for manufacturing & mining
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%	10% for closed cycle cooling facilities & 1% for once-through cooling facilities	.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%
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%	10% for closed cycle cooling facilities & 1% for once-through cooling facilities	.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%									
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

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, all surface water in the basin except that within one of the Great Lakes themselves

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 its total withdrawal (or consumption) from all sources combined (Great Lakes surface water, other surface water, and groundwater). 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 ^a)

^a 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^b

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 not provided by a public water supply and used for normal residential, commercial and institutional purposes. Residential water use includes water used for drinking, food preparation, bathing, washing clothes and dishes, flushing toilets, and watering lawns. Commercial and institutional uses include water used within motels, hotels, restaurants, office buildings and institutions, both civilian and military, mobile homes, hospitals, schools, fire fighting, air conditioning and other similar uses not provided by a public water supply. In addition, this category includes amusement and recreational water uses such as snowmaking and water slides. The use coefficient per capita 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 is 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 withdrawals. 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 fuels. 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.

^b 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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Great Lakes Basin Summary Tables

Water use tables in this section are organized by:

- Jurisdiction
- Great Lakes or St. Lawrence basin, and
- Water use category

SUMMARY REPORT - GREAT LAKES BASIN

Units: BL/d
Year Of Data: 2010

Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	8.19	0.00	0.00	8.19	0.00	4.35	0.00
Indiana	8.64	7.68	0.40	16.72	0.00	0.31	0.68
Michigan	32.11	5.78	1.88	39.78	0.00		2.01
Minnesota	1.52	14.04	0.02	15.58	0.00	0.03	0.13
New York	499.81	683.14	0.56	1183.51	0.00	0.16	1.34
Ohio	4.93	3.09	0.60	8.63	0.00	-0.03	0.66
Ontario	599.17	547.83	1.06	1148.06	0.23	-15.17	1.21
Pennsylvania	0.13	0.01	0.01	0.14			0.02
Quebec	649.53	505.66	0.38	1155.57	0.00	0.00	0.60
Wisconsin	14.79	2.27	0.36	17.42	0.00	-0.10	0.40
Total:	1818.81	1769.50	5.28	3593.59	0.23	-10.45	7.03

Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	8.19	0.00	0.00	8.19	0.00	4.35	0.00
Indiana	8.64	7.68	0.39	16.71	0.00	0.31	0.67
Michigan	32.11	5.75	1.76	39.62	0.00		1.92
Minnesota	1.52	14.04	0.02	15.58	0.00	0.03	0.12
New York	494.75	1.91	0.07	496.73	0.00	0.16	0.78
Ohio	4.93	3.08	0.32	8.34	0.00	-0.03	0.58
Ontario	595.74	547.65	0.33	1143.72	0.23	0.00	0.93
Pennsylvania	0.13	0.01	0.01	0.14			0.02
Quebec	649.53	505.64	0.18	1155.36	0.00	0.00	0.50
Wisconsin							
Total:	1795.53	1085.76	3.09	2884.38	0.23	4.82	5.53

SUMMARY REPORT - GREAT LAKES BASIN

Units: BL/d

Year Of Data: 2010

Water-Use by Basin - All Facilities

Basin	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Lake Superior	3.52	150.46	0.08	154.06	0.00	-15.14	0.23
Lake Michigan	43.06	12.39	2.06	57.51	0.00	4.53	2.11
Lake Huron	96.16	83.19	0.38	179.73	0.18	0.00	0.47
Lake Erie	200.70	6.55	1.51	208.76	22.02	0.00	1.94
Lake Ontario	179.72	365.29	0.71	545.71	-21.96	0.16	1.49
St. Lawrence River	1295.66	1151.62	0.55	2447.83	0.00	0.00	0.80
Total:	1818.81	1769.50	5.28	3593.59	0.23	-10.45	7.03

Water-Use by Basin - Principal Facilities

Basin	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Lake Superior	2.77	150.43	0.06	153.27	0.00	0.03	0.16
Lake Michigan	28.40	10.12	1.61	40.14	0.00	4.63	1.67
Lake Huron	95.43	83.12	0.26	178.81	0.18	0.00	0.41
Lake Erie	196.74	6.18	0.88	203.80	22.02	0.00	1.60
Lake Ontario	177.15	58.10	0.08	235.33	-21.96	0.16	1.11
St. Lawrence River	1295.02	777.81	0.20	2073.04	0.00	0.00	0.58
Total:	1795.53	1085.76	3.09	2884.38	0.23	4.82	5.53

SUMMARY REPORT - GREAT LAKES BASIN

Units: BL/d
Year Of Data: 2010

Water-Use by Category - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	14.78	4.26	1.76	20.79	0.00	3.68	2.11
Domestic Supply	0.21	0.42	1.22	1.86	0.00	0.01	0.22
Irrigation	0.01	0.66	0.98	1.65	0.00	0.00	1.22
Livestock	0.03	0.21	0.36	0.60	0.00	0.00	0.39
Industrial	12.14	2.91	0.92	15.97	0.00	0.12	1.36
Fossil Fuel Power	50.15	10.09	0.01	60.25	0.00	0.00	0.64
Nuclear Power	65.97	0.00	0.00	65.97	0.00	0.00	0.92
Hydroelectric Power	1674.60	1749.90	0.00	3424.50	0.00	-15.17	0.00
Other	0.92	1.06	0.03	2.01	0.23	0.91	0.16
Total:	1818.81	1769.50	5.28	3593.59	0.23	-10.45	7.03

Water-Use by Category - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	12.69	3.17	1.33	17.19	0.00	3.68	1.75
Domestic Supply	0.01	0.13	0.23	0.38	0.00	0.01	0.04
Irrigation	0.00	0.47	0.70	1.17	0.00	0.00	1.06
Livestock	0.00	0.02	0.02	0.04	0.00	0.00	0.03
Industrial	8.73	2.29	0.75	11.78	0.00	0.12	1.07
Fossil Fuel Power	37.86	8.59	0.01	46.47	0.00	0.00	0.52
Nuclear Power	60.71	0.00	0.00	60.71	0.00	0.00	0.89
Hydroelectric Power	1674.60	1070.04	0.00	2744.64	0.00	0.00	0.00
Other	0.92	1.06	0.03	2.01	0.23	1.01	0.16
Total:	1795.53	1085.76	3.09	2884.38	0.23	4.82	5.53

Jurisdiction Tables and Analyses

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

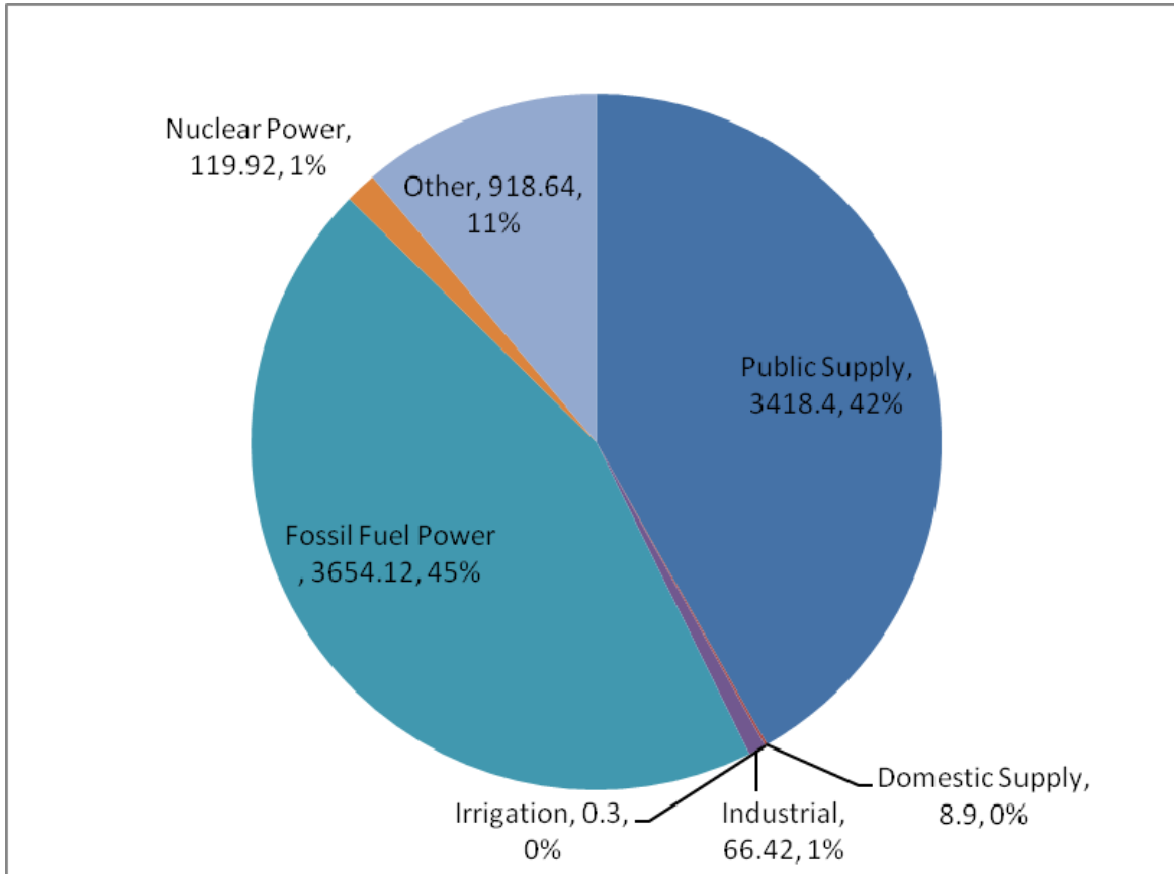
- Withdrawals, diversions and consumptive uses;
- Withdrawals by sources; and
- Jurisdiction totals.

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 james.casey@illinois.gov with specific questions regarding Illinois' data.

Withdrawals: Illinois' water withdrawals from Lake Michigan in 2010 totaled 2162.7mgd.

Figure 5. 2010 Illinois Water Use (In millions of liters per day)



Consumptive Use: Consumptive use information for the industrial selector was reported at 0.63 mgd.

Interbasin Diversions: Total diversions from the Lake Michigan basin in 2010 were 3,418.40 mgd. Public water supply accounted for about nearly 79 percent of these diversions. All diversions for Illinois are outgoing interbasin diversions –water transferred from the Lake Michigan basin to the Illinois River in the Mississippi River basin.

JURISDICTION REPORT- Illinois

Withdrawals, Diversions and Consumptive Uses Units: ML/d
Year Of Data: 2010

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Michigan							
	Public Supply	3418.40	3418.40	0.00	3418.40	3418.40	0.00
	Domestic Supply	8.90	8.88	0.00	8.90	8.88	0.00
	Irrigation	0.30	0.00	0.00	0.30	0.00	0.00
	Livestock						
	Industrial	66.42	0.04	0.63	66.42	0.04	0.63
	Fossil Fuel Power	3654.12	0.00	0.00	3654.12	0.00	0.00
	Nuclear Power	119.92	0.00	0.00	119.92	0.00	0.00
	Hydroelectric Power						
	Other	918.64	918.64	0.00	918.64	918.64	0.00
	Total:	8186.69	4345.96	0.63	8186.69	4345.96	0.63
Grand Total:		8186.69	4345.96	0.63	8186.69	4345.96	0.63

JURISDICTION REPORT- Illinois

Withdrawals by Source

Units: ML/d

Year Of Data: 2010

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Michigan							
	Public Supply	3418.40	0.00	0.00	3418.40	0.00	0.00
	Domestic Supply	8.88	0.00	0.02	8.88	0.00	0.02
	Irrigation	0.00	0.00	0.30	0.00	0.00	0.30
	Livestock						
	Industrial	66.42	0.00	0.00	66.42	0.00	0.00
	Fossil Fuel Power	3654.12	0.00	0.00	3654.12	0.00	0.00
	Nuclear Power	119.92	0.00	0.00	119.92	0.00	0.00
	Hydroelectric Power						
	Other	918.64	0.00	0.00	918.64	0.00	0.00
	Total:	8186.37	0.00	0.32	8186.37	0.00	0.32
Grand Total:		8186.37	0.00	0.32	8186.37	0.00	0.32

JURISDICTION REPORT- Illinois

Jurisdiction Totals

Units: ML/d
Year Of Data: 2010

Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	3418.40	0.00	0.00	3418.40	0.00	3418.40	0.00
Domestic Supply	8.88	0.00	0.02	8.90	0.00	8.88	0.00
Irrigation	0.00	0.00	0.30	0.30	0.00	0.00	0.00
Livestock							
Industrial	66.42	0.00	0.00	66.42	0.00	0.04	0.63
Fossil Fuel Power	3654.12	0.00	0.00	3654.12	0.00	0.00	0.00
Nuclear Power	119.92	0.00	0.00	119.92	0.00	0.00	0.00
Hydroelectric Power							
Other	918.64	0.00	0.00	918.64	0.00	918.64	0.00

Total Report - Principal Facilities

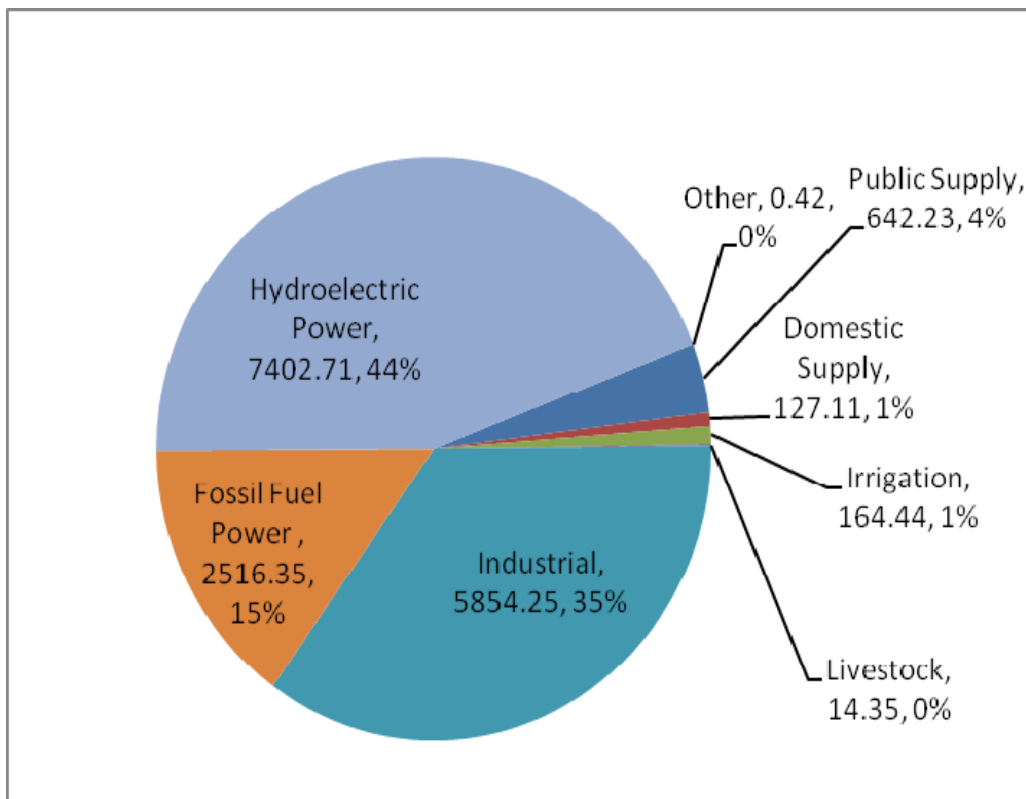
Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	3418.40	0.00	0.00	3418.40	0.00	3418.40	0.00
Domestic Supply	8.88	0.00	0.02	8.90	0.00	8.88	0.00
Irrigation	0.00	0.00	0.30	0.30	0.00	0.00	0.00
Livestock							
Industrial	66.42	0.00	0.00	66.42	0.00	0.04	0.63
Fossil Fuel Power	3654.12	0.00	0.00	3654.12	0.00	0.00	0.00
Nuclear Power	119.92	0.00	0.00	119.92	0.00	0.00	0.00
Hydroelectric Power							
Other	918.64	0.00	0.00	918.64	0.00	918.64	0.00

Indiana

Data Sources: The Indiana Department of Natural Resources, Division of Water compiled the 2009 water use data for the Indiana Lake Erie and Lake Michigan basins. Please contact Mark Basch at 317/232-0154 or mbasch@dnr.in.gov with questions regarding Indiana’s data.

Withdrawals: In 2010, total use was 16,721.87 mld. Of this amount, 99 percent of the water used was from the Lake Michigan basin. Industrial was reported as 5,823.86 mld and hydroelectric power, at 7,402.71 mld were the primary uses of Lake Michigan water. The primary use of Lake Erie basin water was public supply, at 147.48 mld.

Figure 6. 2010 Indiana Water Use (In millions of liters per day)



Consumptive Use: The total consumptive use of water in Indiana’s portion of the Great Lakes basin was 676.53 mld. In the Lake Michigan basin, industrial water use category was the largest consumptive use, at 51.6 percent (349.43 mgd of a total of 647.12 mld) and in the Lake Erie basin public supply accounted for all the consumptive use.

Interbasin Diversions: Diversions from Lake Michigan include one of 192.45 mld for public supply and another of 92.06 mld for industrial use. A diversion from the Lake Erie Basin for public supply uses is 27.38 mgd.

JURISDICTION REPORT- Indiana

Withdrawals, Diversions and Consumptive Uses Units: ML/d
Year Of Data: 2010

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Michigan							
	Public Supply	494.75	192.11	74.23	493.47	192.45	74.04
	Domestic Supply	124.81	0.00	18.74	121.85	0.00	18.28
	Irrigation	158.76	0.00	142.90	156.49	0.00	140.86
	Livestock	14.35	0.00	11.47	14.23	0.00	11.39
	Industrial	5823.86	92.06	349.43	5822.42	92.06	349.36
	Fossil Fuel Power	2515.33	0.00	50.31	2515.33	0.00	50.31
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	7402.71	0.00	0.00	7402.71	0.00	0.00
	Other	0.42	0.00	0.04	0.26	0.00	0.04
	Total:	16534.98	284.17	647.12	16526.77	284.51	644.28
Lake Erie							
	Public Supply	147.48	27.38	22.11	147.14	27.38	22.07
	Domestic Supply	2.31	0.00	0.34	1.67	0.00	0.26
	Irrigation	5.68	0.00	5.11	4.54	0.00	4.09
	Livestock	0.00	0.00	0.00	0.00	0.00	0.00
	Industrial	30.40	0.00	1.82	29.98	0.00	1.82
	Fossil Fuel Power	1.02	0.00	0.04	1.02	0.00	0.04
	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:	186.89	27.38	29.41	184.35	27.38	28.28
Grand Total:		16721.87	311.55	676.53	16711.12	311.89	672.55

JURISDICTION REPORT- Indiana

Withdrawals by Source

Units: ML/d
Year Of Data: 2010

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Michigan							
	Public Supply	334.52	0.00	160.24	334.52	0.00	158.95
	Domestic Supply	0.00	97.17	27.63	0.00	97.06	24.79
	Irrigation	0.00	29.56	129.20	0.00	28.73	127.76
	Livestock	0.00	4.35	9.99	0.00	4.35	9.88
	Industrial	5791.49	9.54	22.83	5791.49	9.54	21.39
	Fossil Fuel Power	2515.33	0.00	0.00	2515.33	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	7402.71	0.00	0.00	7402.71	0.00
	Other	0.00	0.00	0.42	0.00	0.00	0.26
	Total:	8641.34	7543.34	350.30	8641.34	7542.40	343.03
Lake Erie							
	Public Supply	0.00	123.75	23.73	0.00	123.75	23.39
	Domestic Supply	0.00	0.00	2.31	0.00	0.00	1.67
	Irrigation	0.00	1.59	4.09	0.00	1.10	3.44
	Livestock	0.00	0.00	0.00	0.00	0.00	0.00
	Industrial	0.00	13.25	17.15	0.00	13.25	16.73
	Fossil Fuel Power	0.00	0.00	1.02	0.00	0.00	1.02
	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	138.58	48.30	0.00	138.09	46.26
Grand Total:		8641.34	7681.93	398.60	8641.34	7680.49	389.29

JURISDICTION REPORT- Indiana

Jurisdiction Totals

Units: ML/d
Year Of Data: 2010

Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	334.52	123.75	183.97	642.23	0.00	219.49	96.34
Domestic Supply	0.00	97.17	29.94	127.11	0.00	0.00	19.08
Irrigation	0.00	31.15	133.28	164.44	0.00	0.00	148.01
Livestock	0.00	4.35	9.99	14.35	0.00	0.00	11.47
Industrial	5791.49	22.79	39.97	5854.25	0.00	92.06	351.25
Fossil Fuel Power	2515.33	0.00	1.02	2516.35	0.00	0.00	50.35
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	7402.71	0.00	7402.71	0.00	0.00	0.00
Other	0.00	0.00	0.42	0.42	0.00	0.00	0.04

Total Report - Principal Facilities

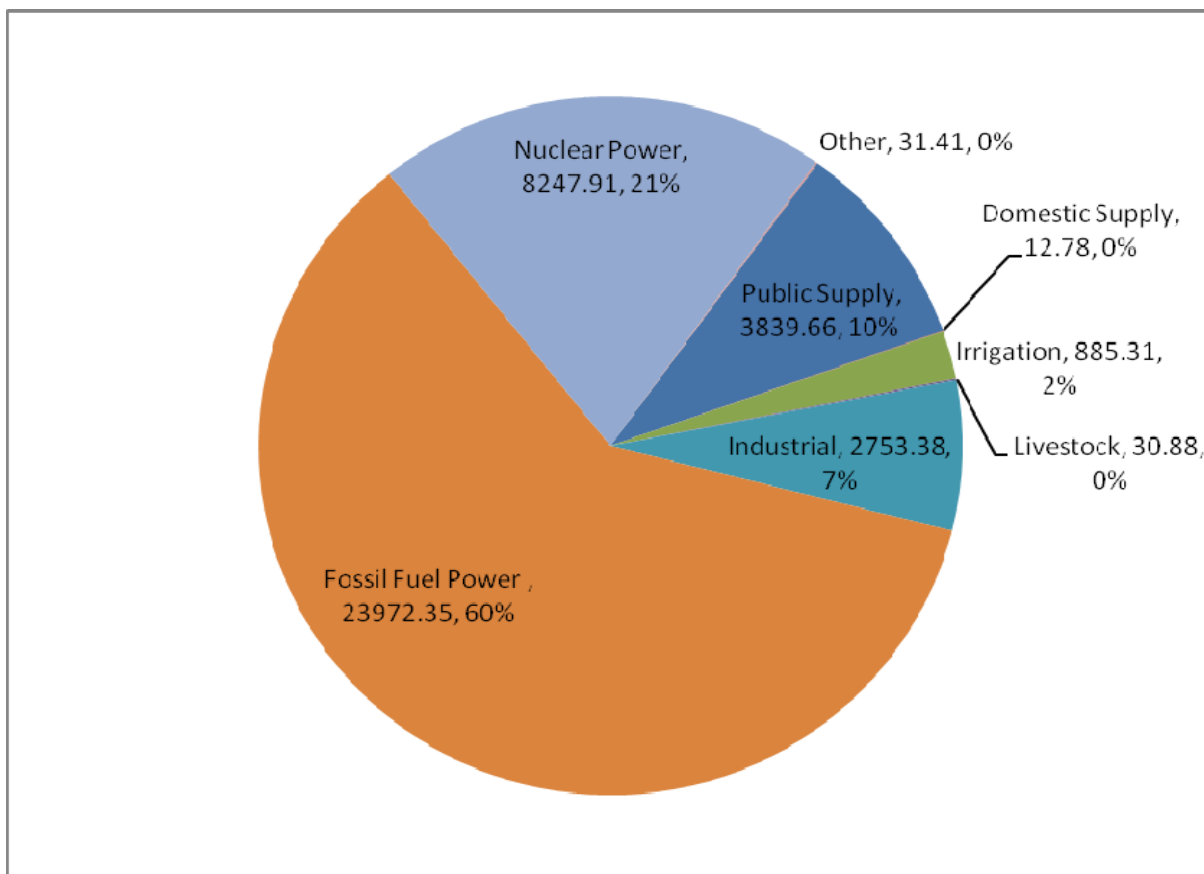
Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	334.52	123.75	182.34	640.61	0.00	219.83	96.11
Domestic Supply	0.00	97.06	26.46	123.52	0.00	0.00	18.55
Irrigation	0.00	29.83	131.20	161.03	0.00	0.00	144.94
Livestock	0.00	4.35	9.88	14.23	0.00	0.00	11.39
Industrial	5791.49	22.79	38.12	5852.40	0.00	92.06	351.17
Fossil Fuel Power	2515.33	0.00	1.02	2516.35	0.00	0.00	50.35
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	7402.71	0.00	7402.71	0.00	0.00	0.00
Other	0.00	0.00	0.26	0.26	0.00	0.00	0.04

Michigan

Data Sources: The Michigan Department of Environmental Quality (DEQ) submitted water use data for 2010. All data are directly reported to the Michigan DEQ by the facilities within each category except irrigation, which is divided into agricultural and nonagricultural irrigation. Agricultural irrigation use is reported to the Michigan Department of Agriculture and Rural Development and then transmitted to the DEQ. Nonagricultural irrigation facilities (e.g., golf course, park, etc.) 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 39,775.53 mld. Of the four basins, the state of Michigan withdraws the most from Lake Erie (19,655.19 mld) and the least from Lake Superior (870.24 mld). Fossil fuel power, at 60 percent, was the largest withdrawal category for the state of Michigan.

Figure 7. 2010 Michigan Water Use (In million of liters per day)



Consumptive Use: Consumptive uses in the Michigan portion of the Great Lakes basin were calculated to be approximately 1,082.56 mld; irrigation was the largest single consumptive use at 798.43 mld, or about 40 percent of the total consumptive use.

Interbasin Diversions: None reported.

JURISDICTION REPORT- Michigan

Withdrawals, Diversions and Consumptive Uses Units: ML/d
Year Of Data: 2010

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Superior							
	Public Supply	50.63		6.33	47.82		5.98
	Domestic Supply						
	Irrigation	3.88		3.49	3.67		3.30
	Livestock						
	Industrial	17.61		1.76	17.16		1.72
	Fossil Fuel Power	798.13		1.36	798.13		1.36
	Nuclear Power						
	Hydroelectric Power						
	Other						
	Total:	870.24		12.94	866.78		12.36
Lake Michigan							
	Public Supply	958.59		119.82	928.05		116.01
	Domestic Supply	11.99		1.50	10.70		1.34
	Irrigation	724.86		652.38	671.73		604.56
	Livestock	20.54		16.43	9.46		7.57
	Industrial	985.44		98.54	979.75		97.98
	Fossil Fuel Power	4765.19		111.35	4765.15		111.35
	Nuclear Power	8048.32		82.54	8048.32		82.54
	Hydroelectric Power						
	Other	14.41		0.00	14.29		0.00
	Total:	15529.33		1082.56	15427.48		1021.33
Lake Huron							
	Public Supply	443.91		55.49	433.43		54.18
	Domestic Supply	0.23		0.03			
	Irrigation	87.90		79.11	82.27		74.04
	Livestock	7.84		6.28	4.64		3.71
	Industrial	278.70		27.87	277.36		27.74
	Fossil Fuel Power	2902.16		4.94	2902.16		4.94
	Nuclear Power						
	Hydroelectric Power						
	Other						
	Total:	3720.76		173.71	3699.87		164.61

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Erie							
	Public Supply	2386.53		298.32	2374.35		296.79
	Domestic Supply	0.56		0.07	0.41		0.05
	Irrigation	70.50		63.45	60.91		54.82
	Livestock	2.50		2.00	0.56		0.45
	Industrial	1471.63		147.16	1470.09		147.01
	Fossil Fuel Power	15506.88		150.78	15506.88		150.78
	Nuclear Power	199.59		76.64	199.59		76.64
	Hydroelectric Power						
	Other	17.01		0.00	16.89		0.00
	Total:	19655.19		738.42	19629.68		726.54
Grand Total:		39775.53		2007.63	39623.80		1924.84

JURISDICTION REPORT- Michigan

Withdrawals by Source

Units: ML/d
Year Of Data: 2010

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Superior							
	Public Supply	18.67	0.00	31.95	18.67	0.00	29.15
	Domestic Supply						
	Irrigation	0.04	1.83	2.00	0.00	1.79	1.88
	Livestock						
	Industrial	17.16	0.00	0.46	17.16	0.00	0.00
	Fossil Fuel Power	798.13	0.00	0.00	798.13	0.00	0.00
	Nuclear Power						
	Hydroelectric Power						
	Other						
	Total:	834.00	1.83	34.41	833.96	1.79	31.03
Lake Michigan							
	Public Supply	468.44	0.00	490.15	468.44	0.00	459.61
	Domestic Supply	0.00	0.00	11.99	0.00	0.00	10.70
	Irrigation	1.01	204.96	518.90	0.92	185.29	485.52
	Livestock	0.00	4.25	16.29	0.00	4.06	5.41
	Industrial	177.87	516.58	290.99	177.81	516.40	285.54
	Fossil Fuel Power	2881.55	1874.74	8.90	2881.55	1874.74	8.87
	Nuclear Power	8048.32	0.00	0.00	8048.32	0.00	0.00
	Hydroelectric Power						
	Other	0.00	0.00	14.41	0.00	0.00	14.29
	Total:	11577.19	2600.52	1351.62	11577.05	2580.48	1269.95
Lake Huron							
	Public Supply	357.39	3.89	82.63	356.56	3.89	72.99
	Domestic Supply	0.00	0.00	0.23			
	Irrigation	0.53	44.21	43.17	0.37	40.38	41.52
	Livestock	0.00	2.69	5.16	0.00	2.69	1.95
	Industrial	60.19	139.05	79.46	60.19	138.80	78.38
	Fossil Fuel Power	631.62	2267.36	3.19	631.62	2267.36	3.19
	Nuclear Power						
	Hydroelectric Power						
	Other						
	Total:	1049.72	2457.19	213.84	1048.73	2453.11	198.02

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Erie							
	Public Supply	2186.90	70.77	128.87	2186.90	70.41	117.04
	Domestic Supply	0.00	0.00	0.56	0.00	0.00	0.41
	Irrigation	0.82	40.27	29.41	0.52	34.86	25.53
	Livestock	0.00	0.83	1.67	0.00	0.56	0.00
	Industrial	1300.32	56.90	114.40	1300.32	56.65	113.12
	Fossil Fuel Power	14964.31	542.12	0.44	14964.31	542.12	0.44
	Nuclear Power	199.59	0.00	0.00	199.59	0.00	0.00
	Hydroelectric Power						
	Other	0.00	8.28	8.73	0.00	8.28	8.61
	Total:	18651.94	719.18	284.08	18651.64	712.88	265.16
Grand Total:		32112.85	5778.72	1883.95	32111.38	5748.27	1764.16

JURISDICTION REPORT- Michigan

Jurisdiction Totals

Units: ML/d
Year Of Data: 2010

Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	3031.40	74.66	733.60	3839.66	0.00	479.96	
Domestic Supply	0.00	0.00	12.78	12.78		1.60	
Irrigation	2.40	291.27	593.48	887.15		798.43	
Livestock	0.00	7.77	23.12	30.88		24.70	
Industrial	1555.54	712.53	485.32	2753.38		275.34	
Fossil Fuel Power	19275.60	4684.22	12.53	23972.35		268.43	
Nuclear Power	8247.91	0.00	0.00	8247.91		159.18	
Hydroelectric Power							
Other	0.00	8.28	23.13	31.41		0.00	

Total Report - Principal Facilities

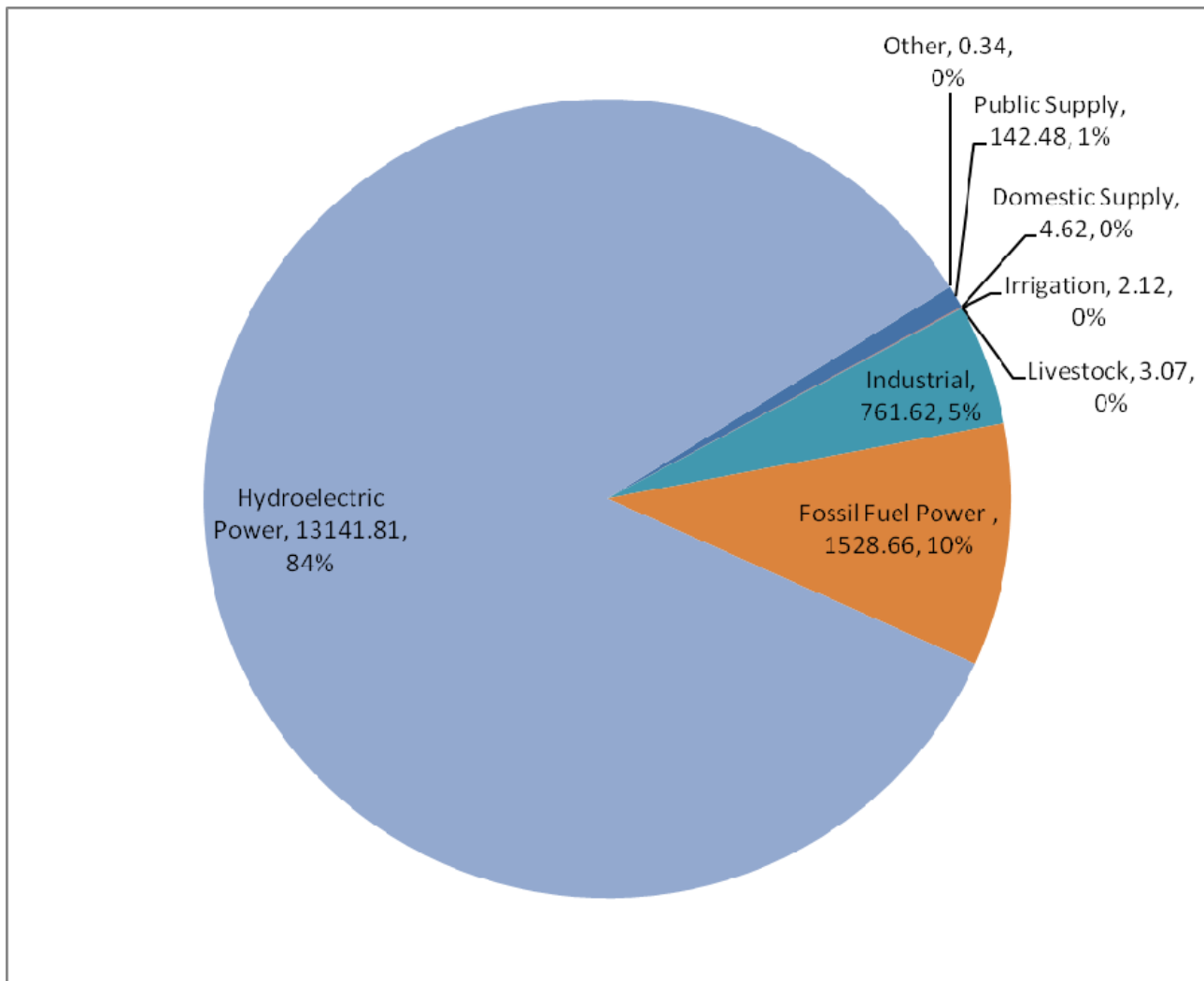
Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	3030.57	74.30	678.79	3783.66	0.05	472.96	
Domestic Supply	0.00	0.00	11.11	11.11		1.39	
Irrigation	1.81	262.32	554.44	818.57		736.72	
Livestock	0.00	7.31	7.36	14.67		11.73	
Industrial	1555.48	711.84	477.05	2744.37		274.44	
Fossil Fuel Power	19275.60	4684.22	12.50	23972.32		268.43	
Nuclear Power	8247.91	0.00	0.00	8247.91		159.18	
Hydroelectric Power							
Other	0.00	8.28	22.91	31.18		0.00	

Minnesota

Data Sources: Water use data for Minnesota were provided by the Minnesota Department of Natural Resources, Division of Ecological and Water Resources. Please contact Sean Hunt at 651/259-5679 or sean.hunt@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 was 15,585.00 mld. Water used for hydroelectric power generation purposes (13,141.81 mld), accounted for nearly 84 percent of Minnesota’s total water use in 2010. Excluding hydroelectric power, industrial and fossil fuel power accounted for the largest uses, together accounting for 94 percent of the total.

Figure 8. 2010 Minnesota Water Use (In millions of liters per day)



Consumptive Use: The largest consumptive use was calculated to be industrial, at 76.16 mld, or 60 percent of total consumption (126.02 mld).

Interbasin Diversions: A diversion of 32.21 mld was reported for industrial use.

JURISDICTION REPORT- Minnesota

Withdrawals, Diversions and Consumptive Uses Units: ML/d
Year Of Data: 2010

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Superior							
	Public Supply	142.48	0.00	14.23	141.46	0.00	14.16
	Domestic Supply	4.62	0.00	0.45	4.35	0.00	0.42
	Irrigation	2.12	0.11	1.85	0.00	0.00	0.00
	Livestock	3.07	0.00	2.73	2.80	0.00	2.54
	Industrial	761.62	32.21	76.16	760.34	32.21	76.05
	Fossil Fuel Power	1528.66	0.00	30.59	1528.63	0.00	30.59
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	13141.81	0.00	0.00	13141.81	0.00	0.00
	Other	0.61	0.00	0.00	0.53	0.00	0.00
	Total:	15585.00	32.33	126.02	15579.92	32.21	123.75
Grand Total:		15585.00	32.33	126.02	15579.92	32.21	123.75

JURISDICTION REPORT- Minnesota

Withdrawals by Source

Units: ML/d

Year Of Data: 2010

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Superior							
	Public Supply	115.87	6.85	19.76	115.87	6.81	18.78
	Domestic Supply	2.84	1.63	0.15	2.73	1.63	0.00
	Irrigation	0.23	1.70	0.19	0.00	0.00	0.00
	Livestock	3.07	0.00	0.00	2.80	0.00	0.00
	Industrial	469.24	291.89	0.49	468.90	291.02	0.42
	Fossil Fuel Power	928.56	600.06	0.04	928.56	600.06	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	13141.81	0.00	0.00	13141.81	0.00
	Other	0.00	0.00	0.61	0.00	0.00	0.53
	Total:	1519.81	14043.95	21.24	1518.86	14041.34	19.72
Grand Total:		1519.81	14043.95	21.24	1518.86	14041.34	19.72

JURISDICTION REPORT- Minnesota

Jurisdiction Totals

Units: ML/d
Year Of Data: 2010

Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	115.87	6.85	19.76	142.48	0.00	0.00	14.23
Domestic Supply	2.84	1.63	0.15	4.62	0.00	0.00	0.45
Irrigation	0.23	1.70	0.19	2.12	0.00	0.11	1.85
Livestock	3.07	0.00	0.00	3.07	0.00	0.00	2.73
Industrial	469.24	291.89	0.49	761.62	0.00	32.21	76.16
Fossil Fuel Power	928.56	600.06	0.04	1528.66	0.00	0.00	30.59
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	13141.81	0.00	13141.81	0.00	0.00	0.00
Other	0.00	0.00	0.61	0.61	0.00	0.00	0.00

Total Report - Principal Facilities

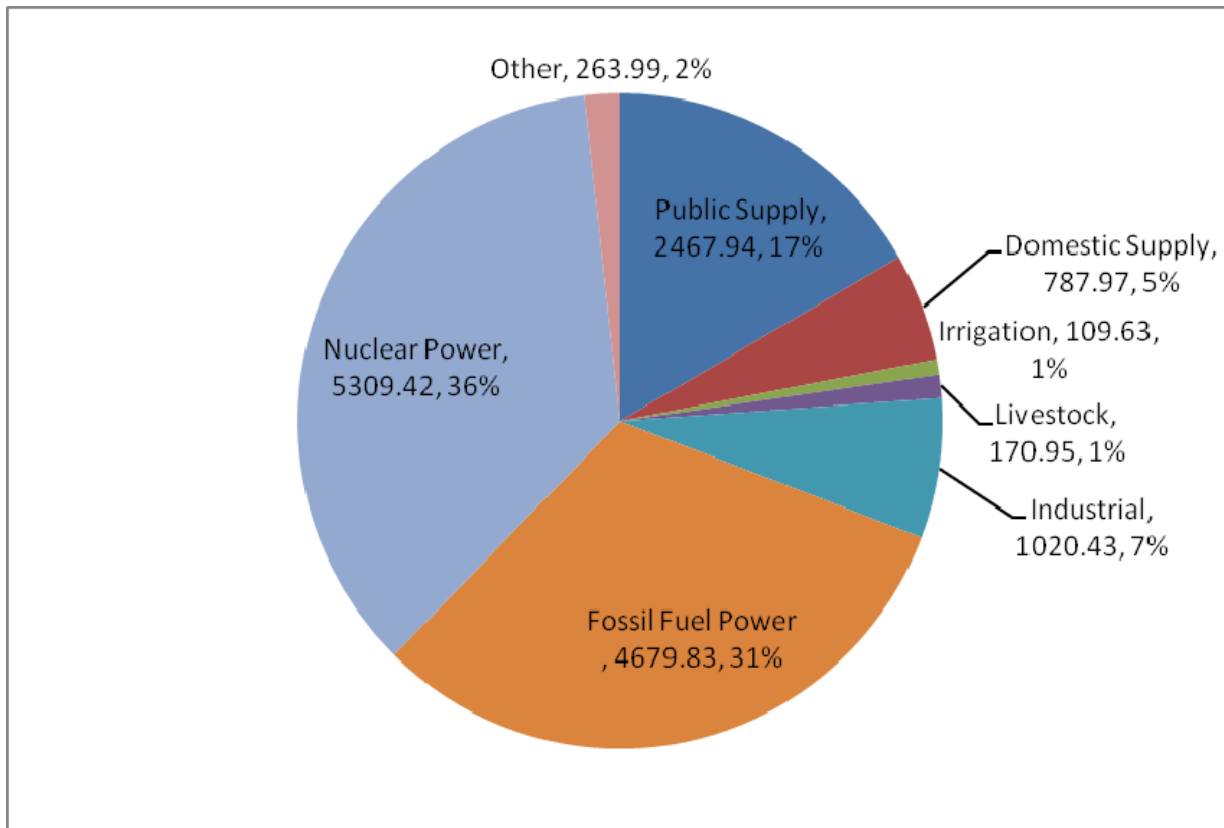
Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	115.87	6.81	18.78	141.46	0.00	0.00	14.16
Domestic Supply	2.73	1.63	0.00	4.35	0.00	0.00	0.42
Irrigation	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Livestock	2.80	0.00	0.00	2.80	0.00	0.00	2.54
Industrial	468.90	291.02	0.42	760.34	0.00	32.21	76.05
Fossil Fuel Power	928.56	600.06	0.00	1528.63	0.00	0.00	30.59
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	13141.81	0.00	13141.81	0.00	0.00	0.00
Other	0.00	0.00	0.53	0.53	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 2010, New York’s total water use was 1,183,506.90 mld. Total withdrawals, not including hydroelectric power, were 14,810.16 mld. Hydroelectric power uses of 1,168,696.74 mld represented 98.7 percent of total withdrawals in New York. The next largest categories of use were fossil fuel and nuclear power.

Figure 9. 2010 New York Water Use (In millions of liters per day)
Excludes hydroelectric power.



Consumptive Use: New York reported total consumptive uses of 1,340.74 mld. Lake Ontario comprised 883.35 mld or 66 percent; Lake Erie comprised 342.50 mld or 25.5 percent; the St. Lawrence River comprised 114.89 mld or 85 percent. The largest categories of consumptive use were nuclear power (265.47 mld) and public supply (246.79 mld), both uses are 38 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 36.30 mld 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 121.13 mld into the Mohawk River basin.

Intrabasin Diversions: No intrabasin diversions were reported.

JURISDICTION REPORT- New York

Withdrawals, Diversions and Consumptive Uses Units: ML/d
Year Of Data: 2010

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Erie							
	Public Supply	992.04	0.00	99.20		0.00	
	Domestic Supply	167.85	0.00	16.78		0.00	
	Irrigation	6.85	0.00	6.17			
	Livestock	33.54	0.00	30.21		0.00	
	Industrial	556.61	0.00	139.49	553.31	0.00	138.66
	Fossil Fuel Power	2515.14	0.00	50.30	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	166864.75	0.00	0.00	166864.75	0.00	0.00
	Other	3.52	0.00	0.34	3.52	0.00	0.34
	Total:	171140.29	0.00	342.50	167421.58	0.00	139.00
Lake Ontario							
	Public Supply	1293.02	36.30	129.30		36.30	0.00
	Domestic Supply	536.81	0.00	53.67		0.00	
	Irrigation	98.69	0.00	88.82	91.08	0.00	81.95
	Livestock	80.52	0.00	72.45		0.00	
	Industrial	341.67	0.00	85.42	341.67	0.00	85.40
	Fossil Fuel Power	2164.65	0.00	43.29	1171.74	0.00	23.43
	Nuclear Power	5309.42	0.00	265.47	5309.42	0.00	265.47
	Hydroelectric Power	306270.11	0.00	0.00	0.00	0.00	0.00
	Other	231.74	121.13	144.92	231.74	121.13	144.91
	Total:	316326.63	157.44	883.35	7145.65	157.44	601.16
St. Lawrence River							
	Public Supply	182.87	0.00	18.29		0.00	
	Domestic Supply	83.32	0.00	8.33	32.33	0.00	3.22
	Irrigation	4.09	0.00	3.68	4.09	0.00	3.67
	Livestock	56.89	0.00	51.18		0.00	
	Industrial	122.16	0.00	30.54	109.36	0.00	27.33
	Fossil Fuel Power	0.04	0.00	0.00	0.04	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	695561.88	0.00	0.00	321972.00	0.00	0.00
	Other	28.73	0.00	2.88	28.73	0.00	2.88
	Total:	696039.98	0.00	114.89	322146.55	0.00	37.10
Grand Total:		1183506.90	157.44	1340.74	496713.78	157.44	777.26

JURISDICTION REPORT- New York

Withdrawals by Source Units: ML/d
Year Of Data: 2010

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Erie							
	Public Supply	687.20	281.86	22.98			
	Domestic Supply	86.91	12.72	68.21			
	Irrigation	0.57	0.87	5.41			
	Livestock	3.44	11.05	19.04			
	Industrial	537.68	3.29	15.63	537.68	0.00	15.63
	Fossil Fuel Power	2515.14	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	166864.75	0.00	0.00	166864.75	0.00	0.00
	Other	0.00	3.52	0.00	0.00	3.52	0.00
	Total:	170695.70	313.32	131.28	167402.43	3.52	15.63
Lake Ontario							
	Public Supply	616.80	577.50	98.72			
	Domestic Supply	111.03	271.75	154.03			
	Irrigation	0.00	91.08	7.61	0.00	91.08	0.00
	Livestock	14.80	28.62	37.10			
	Industrial	55.27	253.36	33.05	55.27	253.36	33.05
	Fossil Fuel Power	992.91	1171.74	0.00	0.00	1171.74	0.00
	Nuclear Power	5309.42	0.00	0.00	5309.42	0.00	0.00
	Hydroelectric Power	0.00	306270.11	0.00	0.00	0.00	0.00
	Other	0.00	227.81	3.94	0.00	227.81	3.94
	Total:	7100.22	308891.97	334.44	5364.69	1743.98	36.98
St. Lawrence River							
	Public Supply	29.83	136.09	16.96			
	Domestic Supply	0.00	32.33	50.99	0.00	32.33	0.00
	Irrigation	0.00	4.09	0.00	0.00	4.09	0.00
	Livestock	1.44	39.97	15.48			
	Industrial	8.06	101.30	12.79	8.06	101.30	0.00
	Fossil Fuel Power	0.04	0.00	0.00	0.04	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	321972.00	373589.88	0.00	321972.00	0.00	0.00
	Other	0.00	27.25	1.48	0.00	27.25	1.48
	Total:	322011.37	373930.91	97.70	321980.10	164.97	1.48
Grand Total:		499807.29	683136.19	563.42	494747.22	1912.47	54.09

JURISDICTION REPORT- New York

Jurisdiction Totals

Units: ML/d
Year Of Data: 2010

Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	1333.83	995.45	138.66	2467.94	0.00	36.30	246.79
Domestic Supply	197.94	316.80	273.23	787.97	0.00	0.00	78.79
Irrigation	0.57	96.04	13.02	109.63	0.00	0.00	98.66
Livestock	19.68	79.65	71.62	170.95	0.00	0.00	153.84
Industrial	601.01	357.95	61.48	1020.43	0.00	0.00	255.45
Fossil Fuel Power	3508.09	1171.74	0.00	4679.83	0.00	0.00	93.60
Nuclear Power	5309.42	0.00	0.00	5309.42	0.00	0.00	265.47
Hydroelectric Power	488836.75	679860.00	0.00	1168696.74	0.00	0.00	0.00
Other	0.00	258.58	5.41	263.99	0.00	121.13	148.14

Total Report - Principal Facilities

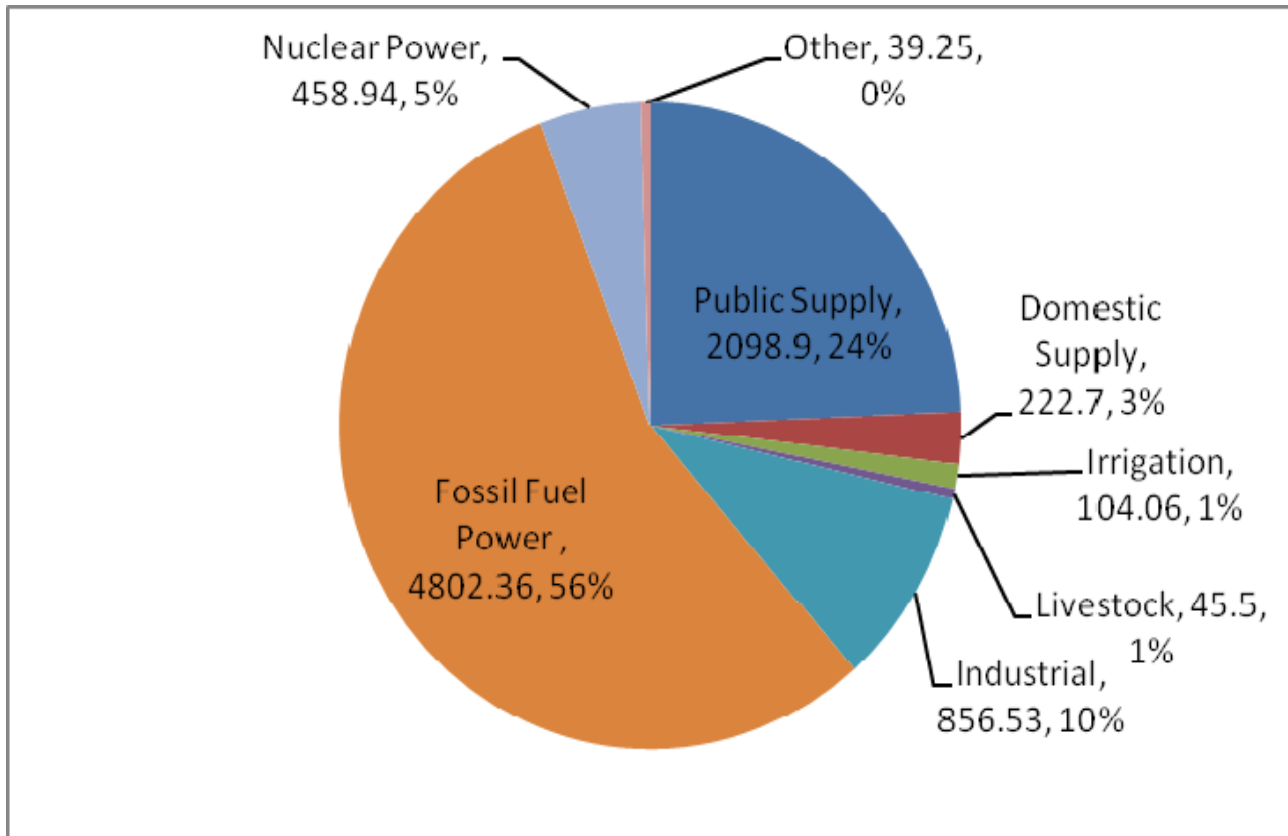
Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply					0.00	36.30	0.00
Domestic Supply	0.00	32.33	0.00	32.33	0.00	0.00	3.22
Irrigation	0.00	95.17	0.00	95.17	0.00	0.00	85.63
Livestock					0.00	0.00	
Industrial	601.01	354.66	48.68	1004.35	0.00	0.00	251.39
Fossil Fuel Power	0.04	1171.74	0.00	1171.77	0.00	0.00	23.43
Nuclear Power	5309.42	0.00	0.00	5309.42	0.00	0.00	265.47
Hydroelectric Power	488836.75	0.00	0.00	488836.75	0.00	0.00	0.00
Other	0.00	258.58	5.41	263.99	0.00	121.13	148.12

Ohio

Data Sources: Water use data for Ohio are collected by the Ohio Department of Natural Resources-Division of Soil & Water Resources, the Ohio Environmental Protection Agency and the U.S. Geological Survey. Please contact Lenn Black at 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 2010 were 8,628.24 mld. Fossil fuel power was by far the largest use of water at 4,802.36 mgd (55.6%); public supply was the second largest withdrawal at 2,098.90 mld (24.3%).

Figure 10. 2010 Ohio Water Use (In millions of liters per day)



Consumptive Use: Total consumptive uses were calculated to be 656.88 mld. Public supply represents the largest consumptive use sector at 314.83 mld and accounts for 46 percent of the total. The next three largest consumptive use categories were irrigation at 93.65 mld, industrial at 68.78 mld, and fossil fuel power at 48.04 mld.

Interbasin Diversions: Two permitted Lake Erie basin diversions provided drinking water to service areas outside the basin without return, resulting in total outgoing diversions of 1.21 mld. Releases from the Ohio & Erie Canal into the Lake Erie basin resulted in incoming diversions of 29.11 mld.

JURISDICTION REPORT- Ohio

Withdrawals, Diversions Units: ML/d
and Consumptive Uses Year Of Data: 2010

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Erie							
	Public Supply	2098.90	1.21	314.83	2084.59	1.21	312.68
	Domestic Supply	222.70	0.00	33.39	1.51	0.00	0.23
	Irrigation	104.06	0.00	93.65	92.67	0.00	83.43
	Livestock	45.50	0.00	36.38	2.35	0.00	1.85
	Industrial	856.53	0.00	68.78	854.18	0.00	68.55
	Fossil Fuel Power	4802.36	0.00	48.04	4802.36	0.00	48.04
	Nuclear Power	458.94	0.00	45.88	458.94	0.00	45.88
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	39.25	-29.11	15.94	38.91	-29.11	15.79
	Total:	8628.24	-27.90	656.88	8335.52	-27.90	576.44
Grand Total:		8628.24	-27.90	656.88	8335.52	-27.90	576.44

JURISDICTION REPORT- Ohio

Withdrawals by Source

Units: ML/d

Year Of Data: 2010

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Erie							
	Public Supply	1538.96	428.70	131.24	1538.96	428.24	117.39
	Domestic Supply	1.51	0.00	221.18	1.51	0.00	0.00
	Irrigation	1.67	85.13	17.26	1.63	79.46	11.58
	Livestock	0.00	5.60	39.90	0.00	1.59	0.76
	Industrial	228.71	435.28	192.53	228.71	434.83	190.63
	Fossil Fuel Power	2697.18	2105.18	0.00	2697.18	2105.18	0.00
	Nuclear Power	458.94	0.00	0.00	458.94	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	3.41	33.46	2.38	3.41	33.43	2.08
	Total:	4930.39	3093.36	604.49	4930.35	3082.73	322.44
Grand Total:		4930.39	3093.36	604.49	4930.35	3082.73	322.44

JURISDICTION REPORT- Ohio

Jurisdiction Totals

Units: ML/d
Year Of Data: 2010

Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	1538.96	428.70	131.24	2098.90	0.00	1.21	314.83
Domestic Supply	1.51	0.00	221.18	222.70	0.00	0.00	33.39
Irrigation	1.67	85.13	17.26	104.06	0.00	0.00	93.65
Livestock	0.00	5.60	39.90	45.50	0.00	0.00	36.38
Industrial	228.71	435.28	192.53	856.53	0.00	0.00	68.78
Fossil Fuel Power	2697.18	2105.18	0.00	4802.36	0.00	0.00	48.04
Nuclear Power	458.94	0.00	0.00	458.94	0.00	0.00	45.88
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	3.41	33.46	2.38	39.25	0.00	-29.11	15.94

Total Report - Principal Facilities

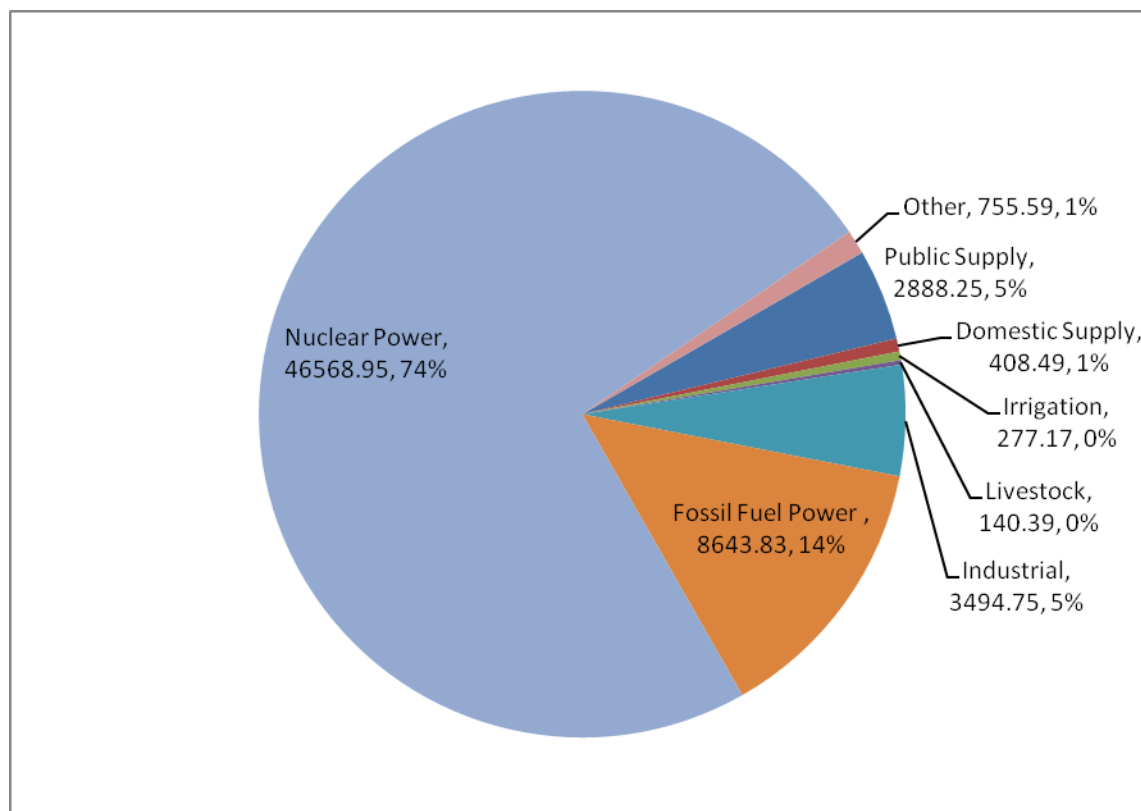
Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	1538.96	428.24	117.39	2084.59	0.00	1.21	312.68
Domestic Supply	1.51	0.00	0.00	1.51	0.00	0.00	0.23
Irrigation	1.63	79.46	11.58	92.67	0.00	0.00	83.43
Livestock	0.00	1.59	0.76	2.35	0.00	0.00	1.85
Industrial	228.71	434.83	190.63	854.18	0.00	0.00	68.55
Fossil Fuel Power	2697.18	2105.18	0.00	4802.36	0.00	0.00	48.04
Nuclear Power	458.94	0.00	0.00	458.94	0.00	0.00	45.88
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	3.41	33.43	2.08	38.91	0.00	-29.11	15.79

Ontario

Data Sources: Data Sources: Water use data reporting for Ontario was coordinated by the Ontario Ministry of Natural Resources. Hydropower data was updated using 2010 data. For thermoelectric and nuclear water use, inter-basin diversions and intra-basin transfer reporting 2009 data were used. Calendar year 2000-01 data are used for all other sectors.

Please contact Jonathan Staples at Jonathan.Staples@ontario.ca, Ontario Ministry of Natural Resources with questions regarding Ontario's regional water use data reporting.

Figure 11. 2010 Ontario Water Use (In millions of liters per day)



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 2010, Great Lakes water uses for were approximately 972,783.42 mld. However, hydroelectric withdrawals represented more than 94.5 percent of the total, leaving total use at 63,176.42 mld. Thermoelectric—nuclear plant uses (not including hydropower) were the largest at 73.7 percent (46,568.95 mld).

Consumptive Use: Total consumptive uses were calculated to be 1211.57 mld. Public supply represents the largest consumptive use sector at 433.24 mld and accounts for 35.7 percent of the total. The next two largest consumptive uses were nuclear power and industrial use, at 419.12 mld and 220.15 mld respectively.

Interbasin Diversions: Ontario reported incoming interbasin diversions into the Lake Superior basin from the Hudson Bay basin for hydroelectric purposes (the Ogoki and Long Lac projects) amounting to 15170.99 mld.

Intrabasin Diversions: Summarized in the table below are intrabasin diversions that occurred between lakes Huron, Erie and Ontario.

Table 1: Intrabasin Diversions in Ontario

Name of Originating Watershed	Amount in MLD
Erie	19,586 (Other – seaway)
Huron	161 (Public Supply)
Ontario	12 (Public Supply)

Table 2: Hydropower Use in Ontario in MLD

	2009	2010
Erie GLSW	0	0
Erie OSW	2,121	2,121
Erie Total	2,121	2,121
Huron GLSW	72,662	72,662
Huron OSW	80,394	66,208
Huron Total	153,057	138,870
Ontario GLSW	142,525	141,065
Ontario OSW	55,653	48,640
Ontario Total	198,179	189,705
Superior GLSW	0	0
Superior OSW	136,339	92,059
Superior Total	136,339	92,059
SLR GLSW	323,473	291,367
SLR OSW	271,715	195,485
SLR Total	595,188	486,852
Total GLSW	538,661	505,095
Total OSW	546,223	404,513
Total All	1,084,884	909,607

GLSW- Great Lakes Surface Water

OSW – Other Surface Water

Note: The proceeding tables do not reflect the 2010 hydroelectric data as shown in Table 2 above but rather those for 2009.

JURISDICTION REPORT- Ontario

Withdrawals, Diversions and Consumptive Uses Units: ML/d
Year Of Data: 2010

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Superior							
	Public Supply	173.27	0.00	26.00	172.52	0.00	25.88
	Domestic Supply	6.61	0.00	0.99	0.00	0.00	0.00
	Irrigation	1.42	0.00			0.00	
	Livestock	0.53	0.00			0.00	
	Industrial	613.70	0.00	38.66	0.00	0.00	0.00
	Fossil Fuel Power	306.85	0.00	2.76	306.85	0.00	2.76
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	136339.00	-15170.99	0.00	136339.00	0.00	0.00
	Other		0.00			0.00	
	Total:	137441.38	-15170.99	68.41	136818.37	0.00	28.64
Lake Huron							
	Public Supply	319.38	0.00	47.90	309.12	0.00	46.36
	Domestic Supply	40.15	0.00	6.02	0.00	0.00	0.00
	Irrigation	79.17	0.00			0.00	
	Livestock	46.99	0.00			0.00	
	Industrial	719.96	0.00	45.35	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	21560.73	0.00	194.05	21560.73	0.00	194.05
	Hydroelectric Power	153057.00	0.00	0.00	153057.00	0.00	0.00
	Other	181.59	0.00	0.00	181.59	0.00	0.00
	Total:	176004.96	0.00	293.32	175108.44	0.00	240.41
Lake Erie							
	Public Supply	355.41	0.00	53.31	351.42	0.00	52.71
	Domestic Supply	75.48	0.00	11.32	0.00	0.00	0.00
	Irrigation	120.57	0.00			0.00	
	Livestock	50.04	0.00			0.00	
	Industrial	683.08	0.00	43.03	0.00	0.00	0.00
	Fossil Fuel Power	5600.00	0.00	50.40	5600.00	0.00	50.40
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	2121.00	0.00	0.00	2121.00	0.00	0.00
	Other		0.00			0.00	
	Total:	9005.59	0.00	158.06	8072.42	0.00	103.11

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Ontario							
	Public Supply	1763.74	0.00	264.56	1758.79	0.00	263.82
	Domestic Supply	242.90	0.00	36.44	0.00	0.00	0.00
	Irrigation	67.13	0.00			0.00	
	Livestock	20.45	0.00			0.00	
	Industrial	869.27	0.00	54.76	0.00	0.00	0.00
	Fossil Fuel Power	2736.98	0.00	24.63	2736.98	0.00	24.63
	Nuclear Power	25008.22	0.00	225.07	25008.22	0.00	225.07
	Hydroelectric Power	198178.00	0.00	0.00	198178.00	0.00	0.00
	Other	501.00	0.00	0.00	501.00	0.00	0.00
	Total:	229387.69	0.00	605.47	228182.99	0.00	513.53
St. Lawrence River							
	Public Supply	276.45	0.00	41.47	272.87	0.00	40.94
	Domestic Supply	43.35	0.00	6.50	0.00	0.00	0.00
	Irrigation	8.89	0.00			0.00	
	Livestock	22.37	0.00			0.00	
	Industrial	608.74	0.00	38.35	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	595188.00	0.00	0.00	595188.00	0.00	0.00
	Other	73.00	0.00	0.00	73.00	0.00	0.00
	Total:	596220.81	0.00	86.32	595533.87	0.00	40.94
Grand Total:		1148060.42	-15170.99	1211.57	1143716.08	0.00	926.62

JURISDICTION REPORT- Ontario

Withdrawals by Source

Units: ML/d
Year Of Data: 2010

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Superior							
	Public Supply	113.93	49.31	10.03	113.83	49.05	9.65
	Domestic Supply	0.00	0.00	6.61	0.00	0.00	0.00
	Irrigation	0.08	1.16	0.17			
	Livestock	0.00	0.53	0.00			
	Industrial	613.69	0.00	0.01	0.00	0.00	0.00
	Fossil Fuel Power	306.85	0.00	0.00	306.85	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	136339.00	0.00	0.00	136339.00	0.00
	Other						
	Total:	1034.55	136390.00	16.82	420.68	136388.05	9.65
Lake Huron							
	Public Supply	161.49	89.21	68.68	159.08	87.94	62.10
	Domestic Supply	0.00	0.00	40.15	0.00	0.00	0.00
	Irrigation	0.59	58.33	20.25			
	Livestock	11.08	11.63	24.27			
	Industrial	709.43	0.00	10.53	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	21560.73	0.00	0.00	21560.73	0.00	0.00
	Hydroelectric Power	72662.00	80395.00	0.00	72662.00	80395.00	0.00
	Other	0.00	181.59	0.00	0.00	181.59	0.00
	Total:	95105.32	80735.76	163.88	94381.81	80664.53	62.10
Lake Erie							
	Public Supply	33.94	110.78	210.70	33.94	110.63	206.85
	Domestic Supply	0.00	0.00	75.48	0.00	0.00	0.00
	Irrigation	2.23	45.84	72.50			
	Livestock	0.08	3.36	46.60			
	Industrial	655.80	0.00	27.28	0.00	0.00	0.00
	Fossil Fuel Power	5600.00	0.00	0.00	5600.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	2121.00	0.00	0.00	2121.00	0.00
	Other						
	Total:	6292.05	2280.98	432.56	5633.94	2231.63	206.85

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Ontario							
	Public Supply	1519.90	200.08	43.76	1519.74	199.41	39.64
	Domestic Supply	0.00	0.00	242.90	0.00	0.00	0.00
	Irrigation	4.11	36.06	26.96			
	Livestock	0.00	3.56	16.89			
	Industrial	825.88	0.00	43.39	0.00	0.00	0.00
	Fossil Fuel Power	2736.98	0.00	0.00	2736.98	0.00	0.00
	Nuclear Power	25008.22	0.00	0.00	25008.22	0.00	0.00
	Hydroelectric Power	142525.00	55653.00	0.00	142525.00	55653.00	0.00
	Other	0.00	501.00	0.00	0.00	501.00	0.00
	Total:	172620.09	56393.70	373.90	171789.94	56353.41	39.64
St. Lawrence River							
	Public Supply	40.27	222.72	13.46	40.27	221.52	11.08
	Domestic Supply	0.00	0.00	43.35	0.00	0.00	0.00
	Irrigation	0.03	7.73	1.13			
	Livestock	0.00	13.73	8.65			
	Industrial	604.75	0.00	3.99	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	323473.00	271715.00	0.00	323473.00	271715.00	0.00
	Other	0.00	73.00	0.00	0.00	73.00	0.00
	Total:	324118.05	272032.17	70.58	323513.27	272009.52	11.08
Grand Total:		599170.06	547832.62	1057.75	595739.63	547647.14	329.31

JURISDICTION REPORT- Ontario

Jurisdiction Totals

Units: ML/d
Year Of Data: 2010

Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	1869.53	672.09	346.63	2888.25	0.00	0.00	433.24
Domestic Supply	0.00	0.00	408.49	408.49	0.00	0.00	61.27
Irrigation	7.04	149.13	121.01	277.17	0.00	0.00	
Livestock	11.16	32.81	96.42	140.39	0.00	0.00	
Industrial	3409.55	0.00	85.20	3494.75	0.00	0.00	220.15
Fossil Fuel Power	8643.83	0.00	0.00	8643.83	0.00	0.00	77.79
Nuclear Power	46568.95	0.00	0.00	46568.95	0.00	0.00	419.12
Hydroelectric Power	538660.00	546223.00	0.00	1084883.00	0.00	-15170.99	0.00
Other	0.00	755.59	0.00	755.59	234.59	0.00	0.00

Total Report - Principal Facilities

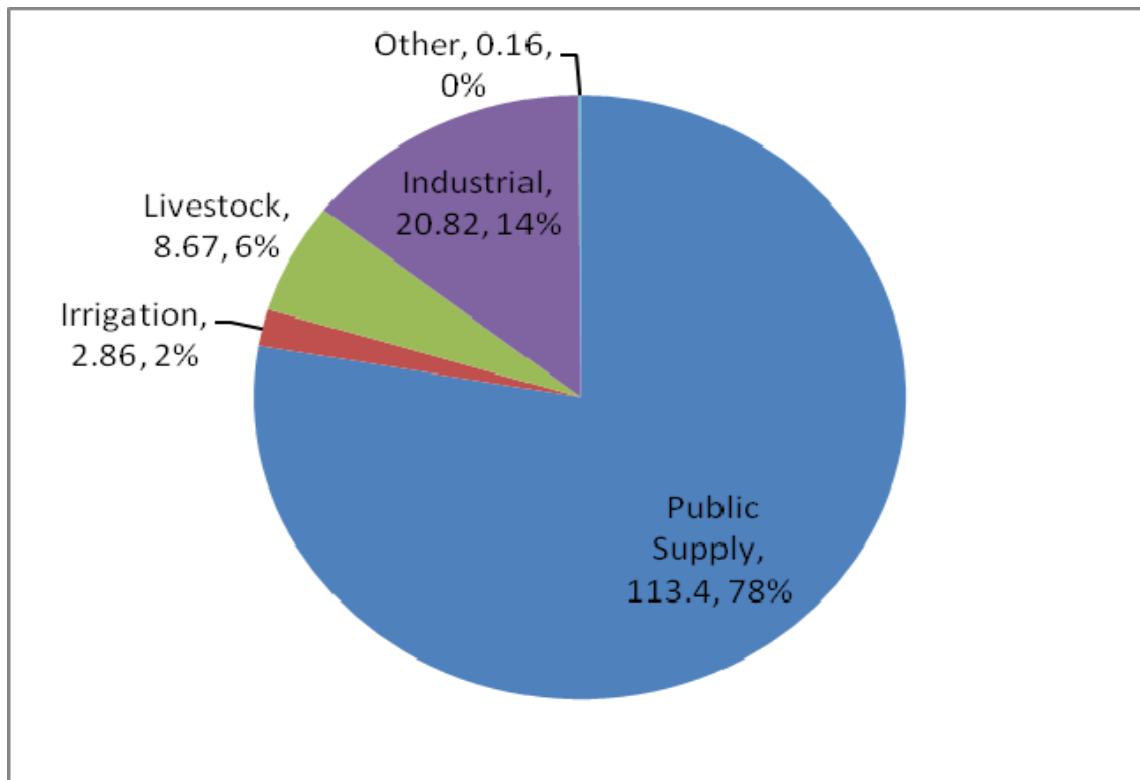
Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	1866.85	668.55	329.31	2864.71	0.00	0.00	429.71
Domestic Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Irrigation					0.00	0.00	
Livestock					0.00	0.00	
Industrial	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fossil Fuel Power	8643.83	0.00	0.00	8643.83	0.00	0.00	77.79
Nuclear Power	46568.95	0.00	0.00	46568.95	0.00	0.00	419.12
Hydroelectric Power	538660.00	546223.00	0.00	1084883.00	0.00	0.00	0.00
Other	0.00	755.59	0.00	755.59	234.59	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 water use data.

Withdrawals: Total withdrawals from Lake Erie were 139.17 mld. Public supply at 111.30 mld or 80 percent, and industrial at 20.36 mgd or 15 percent, constituted the primary uses of water.

Figure 12. 2010 Pennsylvania Water Use (In millions of liters per day)



Consumptive Use: Consumptive use totaled 19.15 mld.

JURISDICTION REPORT- Pennsylvania

Withdrawals, Diversions and Consumptive Uses Units: ML/d
Year Of Data: 2010

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Erie							
	Public Supply	111.13		11.11	109.72	10.97	
	Domestic Supply						
	Irrigation	0.33		0.29			
	Livestock	7.11		5.69	6.82	5.46	
	Industrial	20.36		2.04	20.10	2.01	
	Fossil Fuel Power						
	Nuclear Power						
	Hydroelectric Power						
	Other	0.08					
	Total:	139.00		19.13	136.64	18.44	
Lake Ontario							
	Public Supply	0.17		0.02			
	Total:	0.17		0.02			
Grand Total:		139.17		19.15	136.64	18.44	

JURISDICTION REPORT- Pennsylvania

Jurisdiction Totals

Units: ML/d

Year Of Data: 2010

Total Report - All Facilities

Category	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Public Supply	104.92	0.40	5.97	111.30			11.13
Domestic Supply							
Irrigation	0.00	0.33	0.00	0.33			0.29
Livestock	0.00	6.30	0.81	7.11			5.69
Industrial	20.10	0.00	0.26	20.36			2.04
Fossil Fuel Power							
Nuclear Power							
Hydroelectric Power							
Other	0.00	0.00	0.08	0.08			

Total Report - Principal Facilities

Category	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Public Supply	104.92	0.00	4.79	109.72			10.97
Domestic Supply							
Irrigation							
Livestock	0.00	6.02	0.81	6.82			5.46
Industrial	20.10	0.00	0.00	20.10			2.01
Fossil Fuel Power							
Nuclear Power							
Hydroelectric Power							
Other							

JURISDICTION REPORT- Pennsylvania

Withdrawals by Source

Units: ML/d

Year Of Data: 2010

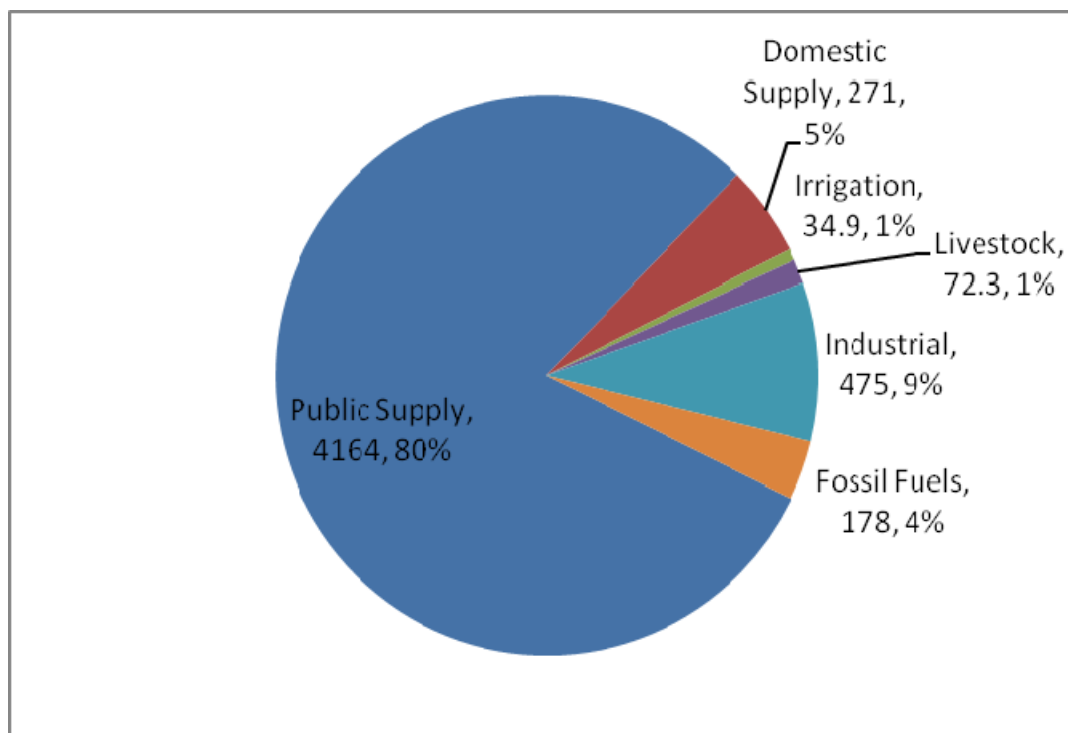
Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Erie							
	Public Supply	104.92	0.40	5.80	104.92	0.00	4.79
	Domestic Supply						
	Irrigation	0.00	0.33	0.00			
	Livestock	0.00	6.30	0.81	0.00	6.02	0.81
	Industrial	20.10	0.00	0.26	20.10	0.00	0.00
	Fossil Fuel Power						
	Nuclear Power						
	Hydroelectric Power						
	Other	0.00	0.00	0.08			
	Total:	125.02	7.03	6.95	125.02	6.02	5.60
Lake Ontario							
	Public Supply	0.00	0.00	0.17			
	Total:	0.00	0.00	0.17			
Grand Total:		125.02	7.03	7.12	125.02	6.02	5.60

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 2011. Please contact Veronique Lavoie at veronique.lavoie@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: Excluding hydroelectric power which accounts for 1,150,371 mld, the total water withdrawals from Québec's St. Lawrence River basin was approximately 5,195.2 mld.

Figure 13. 2010 Québec Water Use (In millions of liters per day)



Consumptive Use: Total consumptive use was 597.5 mld. Public supply accounted for 416 mld, or nearly 70 percent of the total consumptive use.

Diversions: Diversions are currently being inventoried.

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. The implementation of this new legislation will enable Québec to implement the Agreement on its territory and to fulfill its commitments. 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 for highlights and the complete text.)

JURISDICTION REPORT- Quebec

Withdrawals, Diversions and Consumptive Uses Units: ML/d
Year Of Data: 2010

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
St. Lawrence River							
	Public Supply	4164.00	0.00	416.00	4149.00	0.00	415.00
	Domestic Supply	271.00	0.00	27.00	184.00	0.00	18.00
	Irrigation	34.90	0.00	31.41		0.00	
	Livestock	72.30	0.00	57.84		0.00	
	Industrial	475.00	0.00	47.50	473.00	0.00	47.30
	Fossil Fuel Power	178.00	0.00	17.80	178.00	0.00	17.80
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	1150371.00	0.00	0.00	1150371.00	0.00	0.00
	Other		0.00			0.00	
	Total:	1155566.20	0.00	597.55	1155355.00	0.00	498.10
Grand Total:		1155566.20	0.00	597.55	1155355.00	0.00	498.10

JURISDICTION REPORT- Quebec

Withdrawals by Source

Units: ML/d
Year Of Data: 2010

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
St. Lawrence River							
	Public Supply	2282.00	1882.00	0.00	2281.00	1868.00	0.00
	Domestic Supply	0.00	0.00	271.00	0.00	0.00	184.00
	Irrigation	0.00	0.00	34.90			
	Livestock	0.00	0.00	72.30			
	Industrial	0.00	475.00	0.00	0.00	473.00	0.00
	Fossil Fuel Power	148.00	30.00	0.00	148.00	30.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	647102.00	503269.00	0.00	647102.00	503269.00	0.00
	Other						
	Total:	649532.00	505656.00	378.20	649531.00	505640.00	184.00
Grand Total:		649532.00	505656.00	378.20	649531.00	505640.00	184.00

JURISDICTION REPORT- Quebec

Jurisdiction Totals

Units: ML/d
Year Of Data: 2010

Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	2282.00	1882.00	0.00	4164.00	0.00	0.00	416.00
Domestic Supply	0.00	0.00	271.00	271.00	0.00	0.00	27.00
Irrigation	0.00	0.00	34.90	34.90	0.00	0.00	31.41
Livestock	0.00	0.00	72.30	72.30	0.00	0.00	57.84
Industrial	0.00	475.00	0.00	475.00	0.00	0.00	47.50
Fossil Fuel Power	148.00	30.00	0.00	178.00	0.00	0.00	17.80
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	647102.00	503269.00	0.00	1150371.00	0.00	0.00	0.00
Other					0.00	0.00	

Total Report - Principal Facilities

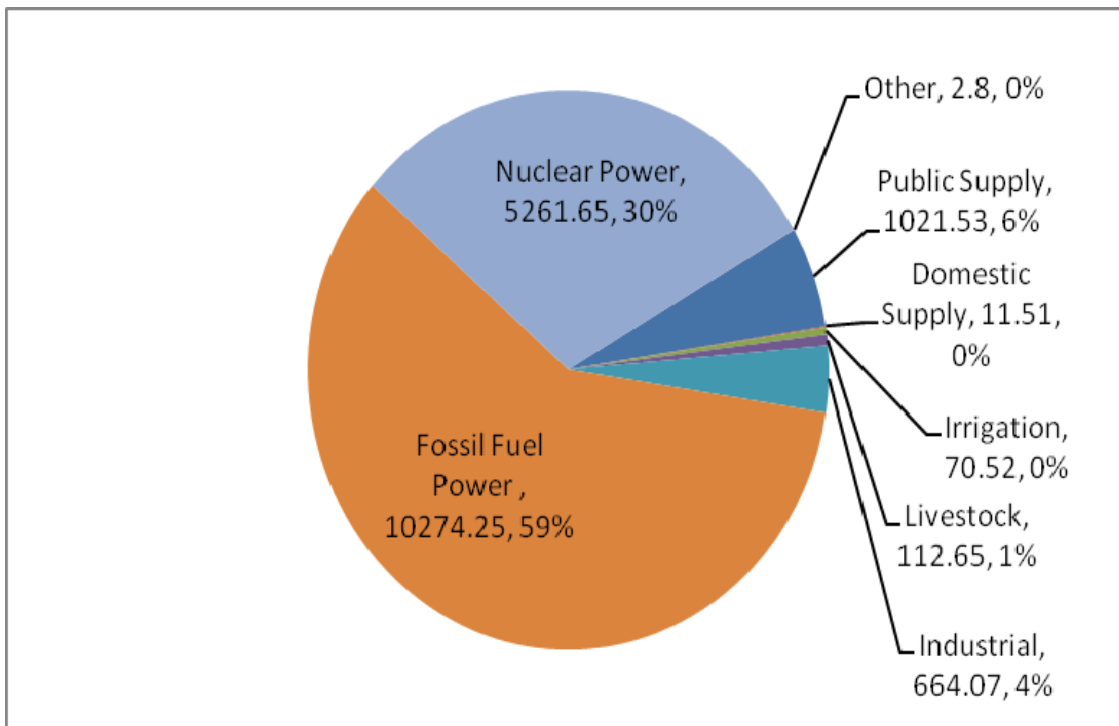
Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	2281.00	1868.00	0.00	4149.00	0.00	0.00	415.00
Domestic Supply	0.00	0.00	184.00	184.00	0.00	0.00	18.00
Irrigation					0.00	0.00	
Livestock					0.00	0.00	
Industrial	0.00	473.00	0.00	473.00	0.00	0.00	47.30
Fossil Fuel Power	148.00	30.00	0.00	178.00	0.00	0.00	17.80
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	647102.00	503269.00	0.00	1150371.00	0.00	0.00	0.00
Other					0.00	0.00	

Wisconsin

Data Sources: Wisconsin 2010 water use data for the Lake Michigan and Lake Superior basins were submitted by the Wisconsin Department of Natural Resources—Bureau of Drinking Water and Groundwater. Contact Shaili Pfeiffer at 608/267-7630 or Shaili.Pfeiffer@wisconsin.gov with questions regarding Wisconsin’s water use data.

Withdrawals: Total withdrawals were 17,418.99 mld: 17,254.59 mld from Lake Michigan (99 % of the total) and 164.40 mld from Lake Superior. Water use in the Lake Michigan basin was primarily for fossil fuel (10,141.42 mld) and nuclear power (5,261.65 mgd)—at 59 percent and 30 percent respectively. Of the Lake Superior uses, the largest single use was for fossil fuel power at 132.83 mld at 81percent.

Figure 14. 2010 Wisconsin Water Use (In millions of liters per day)



Consumptive Use: Consumptive uses from Wisconsin’s portion of the basin were calculated to be 398.11 mld.

Interbasin Diversions: A withdrawal for public supply at Pleasant Prairie diverts 398.11 mld from the Lake Michigan basin to the Mississippi River basin. This diversion ended in October 2010.

JURISDICTION REPORT- Wisconsin

Withdrawals, Diversions and Consumptive Uses Units: ML/d
Year Of Data: 2010

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Superior							
	Public Supply	5.22	0.00	0.49			
	Domestic Supply	0.04	0.00	0.00			
	Irrigation	0.08	0.00	0.04			
	Livestock	24.45	0.00	21.99			
	Industrial	1.78	0.00	0.15			
	Fossil Fuel Power	132.83	0.00	0.68			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power		0.00				
	Other	0.00	0.00	0.00			
	Total:	164.40	0.00	23.36			
Lake Michigan							
	Public Supply	1016.31	2.04	101.64			
	Domestic Supply	11.47	0.00	1.14			
	Irrigation	70.45	0.00	49.32			
	Livestock	88.20	0.00	79.38			
	Industrial	662.30	0.00	66.24			
	Fossil Fuel Power	10141.42	0.00	50.72			
	Nuclear Power	5261.65	0.00	26.31			
	Hydroelectric Power						
	Other	2.80	-97.85	0.00			
	Total:	17254.59	-95.81	374.76			
Grand Total:		17418.99	-95.81	398.11			

JURISDICTION REPORT- Quebec

Withdrawals by Source

Units: ML/d
Year Of Data: 2010

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
St. Lawrence River							
	Public Supply	2282.00	1882.00	0.00	2281.00	1868.00	0.00
	Domestic Supply	0.00	0.00	271.00	0.00	0.00	184.00
	Irrigation	0.00	0.00	34.90			
	Livestock	0.00	0.00	72.30			
	Industrial	0.00	475.00	0.00	0.00	473.00	0.00
	Fossil Fuel Power	148.00	30.00	0.00	148.00	30.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	647102.00	503269.00	0.00	647102.00	503269.00	0.00
	Other						
	Total:	649532.00	505656.00	378.20	649531.00	505640.00	184.00
Grand Total:		649532.00	505656.00	378.20	649531.00	505640.00	184.00

JURISDICTION REPORT- Wisconsin

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2010

Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	197.23	20.66	51.97	269.86	0.00	0.54	26.98
Domestic Supply	0.09	1.63	1.32	3.04	0.00	0.00	0.30
Irrigation	0.00	1.08	17.55	18.63	0.00	0.00	13.04
Livestock	0.00	18.35	11.41	29.76	0.00	0.00	26.78
Industrial	0.36	161.79	13.28	175.43	0.00	0.00	17.54
Fossil Fuel Power	2318.62	395.53	0.02	2714.17	0.00	0.00	13.58
Nuclear Power	1389.93	0.00	0.05	1389.98	0.00	0.00	6.95
Hydroelectric Power					0.00	0.00	
Other	0.00	0.00	0.74	0.74	0.00	-25.85	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							

Basin Tables

Each Great Lake and St. Lawrence River basin is represented by three tables:

- Withdrawals, diversions and consumptive uses;
- Withdrawals by sources; and
- Basin totals.

BASIN REPORT - Lake Superior

Withdrawals, Diversions
and Consumptive Uses

Units: ML/d
Year Of Data: 2010

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Michigan							
	Public Supply	50.63		6.33	47.82		5.98
	Domestic Supply						
	Irrigation	3.88		3.49	3.67		3.30
	Livestock						
	Industrial	17.61		1.76	17.16		1.72
	Fossil Fuel Power	798.13		1.36	798.13		1.36
	Nuclear Power						
	Hydroelectric Power						
	Other						
	Total	870.24		12.94	866.78		12.36
Minnesota							
	Public Supply	142.48	0.00	14.23	141.46	0.00	14.16
	Domestic Supply	4.62	0.00	0.45	4.35	0.00	0.42
	Irrigation	2.12	0.11	1.85	0.00	0.00	0.00
	Livestock	3.07	0.00	2.73	2.80	0.00	2.54
	Industrial	761.62	32.21	76.16	760.34	32.21	76.05
	Fossil Fuel Power	1528.66	0.00	30.59	1528.63	0.00	30.59
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	13141.81	0.00	0.00	13141.81	0.00	0.00
	Other	0.61	0.00	0.00	0.53	0.00	0.00
	Total	15585.00	32.33	126.02	15579.92	32.21	123.75
Ontario							
	Public Supply	173.27	0.00	26.00	172.52	0.00	25.88
	Domestic Supply	6.61	0.00	0.99	0.00	0.00	0.00
	Irrigation	1.42	0.00			0.00	
	Livestock	0.53	0.00			0.00	
	Industrial	613.70	0.00	38.66	0.00	0.00	0.00
	Fossil Fuel Power	306.85	0.00	2.76	306.85	0.00	2.76
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	136339.00	-15170.99	0.00	136339.00	0.00	0.00
	Other		0.00			0.00	
	Total	137441.38	-15170.99	68.41	136818.37	0.00	28.64

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Wisconsin							
	Public Supply	5.22	0.00	0.49			
	Domestic Supply	0.04	0.00	0.00			
	Irrigation	0.08	0.00	0.04			
	Livestock	24.45	0.00	21.99			
	Industrial	1.78	0.00	0.15			
	Fossil Fuel Power	132.83	0.00	0.68			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power		0.00				
	Other	0.00	0.00	0.00			
	Total	164.40	0.00	23.36			
Grand Total:		154061.02	-15138.66	230.72	153265.07	32.21	164.74

BASIN REPORT- Lake Superior

Units: ML/d
 Withdrawals by Source
 Year Of Data: 2010

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Michigan							
	Public Supply	18.67	0.00	31.95	18.67	0.00	29.15
	Domestic Supply						
	Irrigation	0.04	1.83	2.00	0.00	1.79	1.88
	Livestock						
	Industrial	17.16	0.00	0.46	17.16	0.00	0.00
	Fossil Fuel Power	798.13	0.00	0.00	798.13	0.00	0.00
	Nuclear Power						
	Hydroelectric Power						
	Other						
	TOTAL	834.00	1.83	34.41	833.96	1.79	31.03
Minnesota							
	Public Supply	115.87	6.85	19.76	115.87	6.81	18.78
	Domestic Supply	2.84	1.63	0.15	2.73	1.63	0.00
	Irrigation	0.23	1.70	0.19	0.00	0.00	0.00
	Livestock	3.07	0.00	0.00	2.80	0.00	0.00
	Industrial	469.24	291.89	0.49	468.90	291.02	0.42
	Fossil Fuel Power	928.56	600.06	0.04	928.56	600.06	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	13141.81	0.00	0.00	13141.81	0.00
	Other	0.00	0.00	0.61	0.00	0.00	0.53
	TOTAL	1519.81	14043.95	21.24	1518.86	14041.34	19.72
Ontario							
	Public Supply	113.93	49.31	10.03	113.83	49.05	9.65
	Domestic Supply	0.00	0.00	6.61	0.00	0.00	0.00
	Irrigation	0.08	1.16	0.17			
	Livestock	0.00	0.53	0.00			
	Industrial	613.69	0.00	0.01	0.00	0.00	0.00
	Fossil Fuel Power	306.85	0.00	0.00	306.85	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	136339.00	0.00	0.00	136339.00	0.00
	Other						
	TOTAL	1034.55	136390.00	16.82	420.68	136388.05	9.65

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Wisconsin							
	Public Supply	2.42	0.00	2.80			
	Domestic Supply	0.00	0.00	0.04			
	Irrigation	0.00	0.00	0.08			
	Livestock	0.00	24.45	0.00			
	Industrial	1.29	0.11	0.38			
	Fossil Fuel Power	132.75	0.00	0.08			
	Nuclear Power	0.00	0.00	0.00			
	Hydroelectric Power						
	Other	0.00	0.00	0.00			
	TOTAL	136.46	24.57	3.37			
Grand Total:		3524.82	150460.36	75.84	2773.49	150431.18	60.40

BASIN REPORT- Lake Superior

Basin Total

Units: ML/d

Year Of Data: 2010

Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	250.90	56.16	64.54	371.60	-1.14	0.00	47.05
Domestic Supply	2.84	1.63	6.80	11.27	0.00	0.00	1.44
Irrigation	0.35	4.70	2.44	7.49	0.00	0.11	5.38
Livestock	3.07	24.99	0.00	28.05	0.00	0.00	24.72
Industrial	1101.37	292.01	1.34	1394.72	0.00	32.21	116.74
Fossil Fuel Power	2166.29	600.06	0.11	2766.47	0.00	0.00	35.39
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	149480.81	0.00	149480.81	0.00	-15170.99	0.00
Other	0.00	0.00	0.61	0.61	0.00	0.00	0.00

Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	248.37	55.86	57.57	361.80	-1.14	0.00	46.02
Domestic Supply	2.73	1.63	0.00	4.35	0.00	0.00	0.42
Irrigation	0.00	1.79	1.88	3.67	0.00	0.00	3.30
Livestock	2.80	0.00	0.00	2.80	0.00	0.00	2.54
Industrial	486.06	291.02	0.42	777.50	0.00	32.21	77.76
Fossil Fuel Power	2033.54	600.06	0.00	2633.60	0.00	0.00	34.71
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	149480.81	0.00	149480.81	0.00	0.00	0.00
Other	0.00	0.00	0.53	0.53	0.00	0.00	0.00

BASIN REPORT- Lake Michigan

Withdrawals, Diversions
and Consumptive Uses

Units: ML/d
Year Of Data: 2010

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Illinois							
	Public Supply	3418.40	3418.40	0.00	3418.40	3418.40	0.00
	Domestic Supply	8.90	8.88	0.00	8.90	8.88	0.00
	Irrigation	0.30	0.00	0.00	0.30	0.00	0.00
	Livestock						
	Industrial	66.42	0.04	0.63	66.42	0.04	0.63
	Fossil Fuel Power	3654.12	0.00	0.00	3654.12	0.00	0.00
	Nuclear Power	119.92	0.00	0.00	119.92	0.00	0.00
	Hydroelectric Power						
	Other	918.64	918.64	0.00	918.64	918.64	0.00
	Total	8186.69	4345.96	0.63	8186.69	4345.96	0.63
Indiana							
	Public Supply	494.75	192.11	74.23	493.47	192.45	74.04
	Domestic Supply	124.81	0.00	18.74	121.85	0.00	18.28
	Irrigation	158.76	0.00	142.90	156.49	0.00	140.86
	Livestock	14.35	0.00	11.47	14.23	0.00	11.39
	Industrial	5823.86	92.06	349.43	5822.42	92.06	349.36
	Fossil Fuel Power	2515.33	0.00	50.31	2515.33	0.00	50.31
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	7402.71	0.00	0.00	7402.71	0.00	0.00
	Other	0.42	0.00	0.04	0.26	0.00	0.04
	Total	16534.98	284.17	647.12	16526.77	284.51	644.28
Michigan							
	Public Supply	958.59		119.82	928.05		116.01
	Domestic Supply	11.99		1.50	10.70		1.34
	Irrigation	724.86		652.38	671.73		604.56
	Livestock	20.54		16.43	9.46		7.57
	Industrial	985.44		98.54	979.75		97.98
	Fossil Fuel Power	4765.19		111.35	4765.15		111.35
	Nuclear Power	8048.32		82.54	8048.32		82.54
	Hydroelectric Power						
	Other	14.41		0.00	14.29		0.00
	Total	15529.33		1082.56	15427.48		1021.33

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Wisconsin							
	Public Supply	1016.31	2.04	101.64			
	Domestic Supply	11.47	0.00	1.14			
	Irrigation	70.45	0.00	49.32			
	Livestock	88.20	0.00	79.38			
	Industrial	662.30	0.00	66.24			
	Fossil Fuel Power	10141.42	0.00	50.72			
	Nuclear Power	5261.65	0.00	26.31			
	Hydroelectric Power						
	Other	2.80	-97.85	0.00			
	Total	17254.59	-95.81	374.76			
Grand Total:		57505.60	4534.32	2105.06	40140.94	4630.47	1666.24

BASIN REPORT- Lake Michigan

Units: ML/d
Withdrawals by Source
Year Of Data: 2010

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Illinois							
	Public Supply	3418.40	0.00	0.00	3418.40	0.00	0.00
	Domestic Supply	8.88	0.00	0.02	8.88	0.00	0.02
	Irrigation	0.00	0.00	0.30	0.00	0.00	0.30
	Livestock						
	Industrial	66.42	0.00	0.00	66.42	0.00	0.00
	Fossil Fuel Power	3654.12	0.00	0.00	3654.12	0.00	0.00
	Nuclear Power	119.92	0.00	0.00	119.92	0.00	0.00
	Hydroelectric Power						
	Other	918.64	0.00	0.00	918.64	0.00	0.00
	TOTAL	8186.37	0.00	0.32	8186.37	0.00	0.32
Indiana							
	Public Supply	334.52	0.00	160.24	334.52	0.00	158.95
	Domestic Supply	0.00	97.17	27.63	0.00	97.06	24.79
	Irrigation	0.00	29.56	129.20	0.00	28.73	127.76
	Livestock	0.00	4.35	9.99	0.00	4.35	9.88
	Industrial	5791.49	9.54	22.83	5791.49	9.54	21.39
	Fossil Fuel Power	2515.33	0.00	0.00	2515.33	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	7402.71	0.00	0.00	7402.71	0.00
	Other	0.00	0.00	0.42	0.00	0.00	0.26
	TOTAL	8641.34	7543.34	350.30	8641.34	7542.40	343.03
Michigan							
	Public Supply	468.44	0.00	490.15	468.44	0.00	459.61
	Domestic Supply	0.00	0.00	11.99	0.00	0.00	10.70
	Irrigation	1.01	204.96	518.90	0.92	185.29	485.52
	Livestock	0.00	4.25	16.29	0.00	4.06	5.41
	Industrial	177.87	516.58	290.99	177.81	516.40	285.54
	Fossil Fuel Power	2881.55	1874.74	8.90	2881.55	1874.74	8.87
	Nuclear Power	8048.32	0.00	0.00	8048.32	0.00	0.00
	Hydroelectric Power						
	Other	0.00	0.00	14.41	0.00	0.00	14.29
	TOTAL	11577.19	2600.52	1351.62	11577.05	2580.48	1269.95

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Wisconsin							
	Public Supply	744.17	78.21	193.93			
	Domestic Supply	0.34	6.17	4.96			
	Irrigation	0.00	4.09	66.36			
	Livestock	0.00	45.01	43.19			
	Industrial	0.08	612.33	49.89			
	Fossil Fuel Power	8644.18	1497.24	0.00			
	Nuclear Power	5261.46	0.00	0.19			
	Hydroelectric Power						
	Other	0.00	0.00	2.80			
	TOTAL	14650.23	2243.05	361.32			
Grand Total:		43055.12	12386.91	2063.56	28404.76	10122.88	1613.30

BASIN REPORT- Lake Michigan

Basin Total

Units: ML/d

Year Of Data: 2010

Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	4965.53	78.21	844.31	5888.05	1.51	3612.55	295.69
Domestic Supply	9.23	103.34	44.60	157.16	0.00	8.88	21.37
Irrigation	1.01	238.61	714.75	954.37	0.00	0.00	844.60
Livestock	0.00	53.61	69.48	123.08	0.00	0.00	107.28
Industrial	6035.85	1138.45	363.71	7538.01	0.00	92.10	514.85
Fossil Fuel Power	17695.17	3371.98	8.90	21076.06	0.00	0.00	212.38
Nuclear Power	13429.70	0.00	0.19	13429.89	0.00	0.00	108.84
Hydroelectric Power	0.00	7402.71	0.00	7402.71	0.00	0.00	0.00
Other	918.64	0.00	17.62	936.26	0.00	820.78	0.04

Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	4221.36	0.00	618.56	4839.92	1.51	3610.85	190.05
Domestic Supply	8.88	97.06	35.51	141.46	0.00	8.88	19.62
Irrigation	0.92	214.02	613.58	828.52	0.00	0.00	745.41
Livestock	0.00	8.41	15.29	23.70	0.00	0.00	18.96
Industrial	6035.72	525.94	306.93	6868.59	0.00	92.10	447.96
Fossil Fuel Power	9051.00	1874.74	8.87	10934.60	0.00	0.00	161.66
Nuclear Power	8168.25	0.00	0.00	8168.25	0.00	0.00	82.54
Hydroelectric Power	0.00	7402.71	0.00	7402.71	0.00	0.00	0.00
Other	918.64	0.00	14.56	933.19	0.00	918.64	0.04

BASIN REPORT- Lake Huron

Withdrawals, Diversions
and Consumptive Uses

Units: ML/d
Year Of Data: 2010

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Michigan							
	Public Supply	443.91		55.49	433.43		54.18
	Domestic Supply	0.23		0.03			
	Irrigation	87.90		79.11	82.27		74.04
	Livestock	7.84		6.28	4.64		3.71
	Industrial	278.70		27.87	277.36		27.74
	Fossil Fuel Power	2902.16		4.94	2902.16		4.94
	Nuclear Power						
	Hydroelectric Power						
	Other						
	Total	3720.76		173.71	3699.87		164.61
Ontario							
	Public Supply	319.38	0.00	47.90	309.12	0.00	46.36
	Domestic Supply	40.15	0.00	6.02	0.00	0.00	0.00
	Irrigation	79.17	0.00			0.00	
	Livestock	46.99	0.00			0.00	
	Industrial	719.96	0.00	45.35	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	21560.73	0.00	194.05	21560.73	0.00	194.05
	Hydroelectric Power	153057.00	0.00	0.00	153057.00	0.00	0.00
	Other	181.59	0.00	0.00	181.59	0.00	0.00
	Total	176004.96	0.00	293.32	175108.44	0.00	240.41
Grand Total:		179725.72	0.00	467.03	178808.31	0.00	405.01

BASIN REPORT- Lake Huron

Units: ML/d
 Withdrawals by Source
 Year Of Data: 2010

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Michigan							
	Public Supply	357.39	3.89	82.63	356.56	3.89	72.99
	Domestic Supply	0.00	0.00	0.23			
	Irrigation	0.53	44.21	43.17	0.37	40.38	41.52
	Livestock	0.00	2.69	5.16	0.00	2.69	1.95
	Industrial	60.19	139.05	79.46	60.19	138.80	78.38
	Fossil Fuel Power	631.62	2267.36	3.19	631.62	2267.36	3.19
	Nuclear Power						
	Hydroelectric Power						
	Other						
	TOTAL	1049.72	2457.19	213.84	1048.73	2453.11	198.02
Ontario							
	Public Supply	161.49	89.21	68.68	159.08	87.94	62.10
	Domestic Supply	0.00	0.00	40.15	0.00	0.00	0.00
	Irrigation	0.59	58.33	20.25			
	Livestock	11.08	11.63	24.27			
	Industrial	709.43	0.00	10.53	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	21560.73	0.00	0.00	21560.73	0.00	0.00
	Hydroelectric Power	72662.00	80395.00	0.00	72662.00	80395.00	0.00
	Other	0.00	181.59	0.00	0.00	181.59	0.00
	TOTAL	95105.32	80735.76	163.88	94381.81	80664.53	62.10
Grand Total:		96155.04	83192.95	377.72	95430.54	83117.64	260.12

BASIN REPORT- Lake Huron

Basin Total

Units: ML/d

Year Of Data: 2010

Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	518.88	93.09	151.31	763.29	0.00	0.00	103.39
Domestic Supply	0.00	0.00	40.38	40.38	0.00	0.00	6.05
Irrigation	1.12	102.54	63.42	167.07	0.00	0.00	79.11
Livestock	11.08	14.32	29.43	54.84	0.00	0.00	6.28
Industrial	769.62	139.05	89.99	998.66	0.00	0.00	73.22
Fossil Fuel Power	631.62	2267.36	3.19	2902.16	0.00	0.00	4.94
Nuclear Power	21560.73	0.00	0.00	21560.73	0.00	0.00	194.05
Hydroelectric Power	72662.00	80395.00	0.00	153057.00	0.00	0.00	0.00
Other	0.00	181.59	0.00	181.59	181.59	0.00	0.00

Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	515.64	91.83	135.09	742.55	0.00	0.00	100.54
Domestic Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Irrigation	0.37	40.38	41.52	82.27	0.00	0.00	74.04
Livestock	0.00	2.69	1.95	4.64	0.00	0.00	3.71
Industrial	60.19	138.80	78.38	277.36	0.00	0.00	27.74
Fossil Fuel Power	631.62	2267.36	3.19	2902.16	0.00	0.00	4.94
Nuclear Power	21560.73	0.00	0.00	21560.73	0.00	0.00	194.05
Hydroelectric Power	72662.00	80395.00	0.00	153057.00	0.00	0.00	0.00
Other	0.00	181.59	0.00	181.59	181.59	0.00	0.00

BASIN REPORT - Lake Erie

Withdrawals, Diversions
and Consumptive Uses

Units: ML/d
Year Of Data: 2010

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Indiana							
	Public Supply	147.48	27.38	22.11	147.14	27.38	22.07
	Domestic Supply	2.31	0.00	0.34	1.67	0.00	0.26
	Irrigation	5.68	0.00	5.11	4.54	0.00	4.09
	Livestock	0.00	0.00	0.00	0.00	0.00	0.00
	Industrial	30.40	0.00	1.82	29.98	0.00	1.82
	Fossil Fuel Power	1.02	0.00	0.04	1.02	0.00	0.04
	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	186.89	27.38	29.41	184.35	27.38	28.28
Michigan							
	Public Supply	2386.53		298.32	2374.35		296.79
	Domestic Supply	0.56		0.07	0.41		0.05
	Irrigation	70.50		63.45	60.91		54.82
	Livestock	2.50		2.00	0.56		0.45
	Industrial	1471.63		147.16	1470.09		147.01
	Fossil Fuel Power	15506.88		150.78	15506.88		150.78
	Nuclear Power	199.59		76.64	199.59		76.64
	Hydroelectric Power						
	Other	17.01		0.00	16.89		0.00
	Total	19655.19		738.42	19629.68		726.54
New York							
	Public Supply	992.04	0.00	99.20		0.00	
	Domestic Supply	167.85	0.00	16.78	12.72	0.00	1.29
	Irrigation	6.85	0.00	6.17	6.85		6.16
	Livestock	33.54	0.00	30.21		0.00	
	Industrial	556.61	0.00	139.49	553.31	0.00	138.66
	Fossil Fuel Power	2515.14	0.00	50.30	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	166864.75	0.00	0.00	166864.75	0.00	0.00
	Other	3.52	0.00	0.34	3.52	0.00	0.34
	Total	171140.29	0.00	342.50	167441.15	0.00	146.45

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Ohio							
	Public Supply	2098.90	1.21	314.83	2084.59	1.21	312.68
	Domestic Supply	222.70	0.00	33.39	1.51	0.00	0.23
	Irrigation	104.06	0.00	93.65	92.67	0.00	83.43
	Livestock	45.50	0.00	36.38	2.35	0.00	1.85
	Industrial	856.53	0.00	68.78	854.18	0.00	68.55
	Fossil Fuel Power	4802.36	0.00	48.04	4802.36	0.00	48.04
	Nuclear Power	458.94	0.00	45.88	458.94	0.00	45.88
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	39.25	-29.11	15.94	38.91	-29.11	15.79
	Total	8628.24	-27.90	656.88	8335.52	-27.90	576.44
Ontario							
	Public Supply	355.41	0.00	53.31	351.42	0.00	52.71
	Domestic Supply	75.48	0.00	11.32	0.00	0.00	0.00
	Irrigation	120.57	0.00			0.00	
	Livestock	50.04	0.00			0.00	
	Industrial	683.08	0.00	43.03	0.00	0.00	0.00
	Fossil Fuel Power	5600.00	0.00	50.40	5600.00	0.00	50.40
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	2121.00	0.00	0.00	2121.00	0.00	0.00
	Other		0.00			0.00	
	Total	9005.59	0.00	158.06	8072.42	0.00	103.11
Pennsylvania							
	Public Supply	111.13		11.11	109.72		10.97
	Domestic Supply						
	Irrigation	0.33		0.29			
	Livestock	7.11		5.69	6.82		5.46
	Industrial	20.36		2.04	20.10		2.01
	Fossil Fuel Power						
	Nuclear Power						
	Hydroelectric Power						
	Other	0.08					
	Total	139.00		19.13	136.64		18.44
Grand Total:		208755.21	-0.52	1944.40	203799.75	-0.52	1599.26

BASIN REPORT- Lake Erie

Units: ML/d
Withdrawals by Source
Year Of Data: 2010

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Indiana							
	Public Supply	0.00	123.75	23.73	0.00	123.75	23.39
	Domestic Supply	0.00	0.00	2.31	0.00	0.00	1.67
	Irrigation	0.00	1.59	4.09	0.00	1.10	3.44
	Livestock	0.00	0.00	0.00	0.00	0.00	0.00
	Industrial	0.00	13.25	17.15	0.00	13.25	16.73
	Fossil Fuel Power	0.00	0.00	1.02	0.00	0.00	1.02
	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	138.58	48.30	0.00	138.09	46.26
Michigan							
	Public Supply	2186.90	70.77	128.87	2186.90	70.41	117.04
	Domestic Supply	0.00	0.00	0.56	0.00	0.00	0.41
	Irrigation	0.82	40.27	29.41	0.52	34.86	25.53
	Livestock	0.00	0.83	1.67	0.00	0.56	0.00
	Industrial	1300.32	56.90	114.40	1300.32	56.65	113.12
	Fossil Fuel Power	14964.31	542.12	0.44	14964.31	542.12	0.44
	Nuclear Power	199.59	0.00	0.00	199.59	0.00	0.00
	Hydroelectric Power						
	Other	0.00	8.28	8.73	0.00	8.28	8.61
	TOTAL	18651.94	719.18	284.08	18651.64	712.88	265.16
New York							
	Public Supply	687.20	281.86	22.98			
	Domestic Supply	86.91	12.72	68.21	0.00	0.00	12.72
	Irrigation	0.57	0.87	5.41	0.57	0.87	5.41
	Livestock	3.44	11.05	19.04			
	Industrial	537.68	3.29	15.63	537.68	0.00	15.63
	Fossil Fuel Power	2515.14	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	166864.75	0.00	0.00	166864.75	0.00	0.00
	Other	0.00	3.52	0.00	0.00	3.52	0.00
	TOTAL	170695.70	313.32	131.28	167402.99	4.39	33.77

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Ohio							
	Public Supply	1538.96	428.70	131.24	1538.96	428.24	117.39
	Domestic Supply	1.51	0.00	221.18	1.51	0.00	0.00
	Irrigation	1.67	85.13	17.26	1.63	79.46	11.58
	Livestock	0.00	5.60	39.90	0.00	1.59	0.76
	Industrial	228.71	435.28	192.53	228.71	434.83	190.63
	Fossil Fuel Power	2697.18	2105.18	0.00	2697.18	2105.18	0.00
	Nuclear Power	458.94	0.00	0.00	458.94	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	3.41	33.46	2.38	3.41	33.43	2.08
	TOTAL	4930.39	3093.36	604.49	4930.35	3082.73	322.44
Ontario							
	Public Supply	33.94	110.78	210.70	33.94	110.63	206.85
	Domestic Supply	0.00	0.00	75.48	0.00	0.00	0.00
	Irrigation	2.23	45.84	72.50			
	Livestock	0.08	3.36	46.60			
	Industrial	655.80	0.00	27.28	0.00	0.00	0.00
	Fossil Fuel Power	5600.00	0.00	0.00	5600.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	2121.00	0.00	0.00	2121.00	0.00
	Other						
	TOTAL	6292.05	2280.98	432.56	5633.94	2231.63	206.85
Pennsylvania							
	Public Supply	104.92	0.40	5.80	104.92	0.00	4.79
	Domestic Supply						
	Irrigation	0.00	0.33	0.00			
	Livestock	0.00	6.30	0.81	0.00	6.02	0.81
	Industrial	20.10	0.00	0.26	20.10	0.00	0.00
	Fossil Fuel Power						
	Nuclear Power						
	Hydroelectric Power						
	Other	0.00	0.00	0.08			
	TOTAL	125.02	7.03	6.95	125.02	6.02	5.60
Grand Total:		200695.09	6552.45	1507.67	196743.94	6175.74	880.07

BASIN REPORT- Lake Erie

Basin Total

Units: ML/d

Year Of Data: 2010

Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	4551.92	1016.25	523.32	6091.49	-0.37	28.59	798.88
Domestic Supply	88.43	12.72	367.74	468.89	0.00	0.00	61.90
Irrigation	5.29	174.03	128.67	307.99	0.00	0.00	168.67
Livestock	3.52	27.15	108.02	138.69	0.00	0.00	74.27
Industrial	2742.62	508.73	367.25	3618.60	0.00	0.00	402.32
Fossil Fuel Power	25776.64	2647.30	1.46	28425.40	0.00	0.00	299.56
Nuclear Power	658.53	0.00	0.00	658.53	0.00	0.00	122.52
Hydroelectric Power	166864.75	2121.00	0.00	168985.75	0.00	0.00	0.00
Other	3.41	45.26	11.20	59.86	22017.43	-29.11	16.28

Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	3864.72	733.03	469.47	5067.21	-0.32	28.59	695.22
Domestic Supply	1.51	0.00	14.79	16.31	0.00	0.00	1.83
Irrigation	2.71	116.28	45.97	164.97	0.00	0.00	148.50
Livestock	0.00	8.17	1.56	9.74	0.00	0.00	7.77
Industrial	2086.82	504.73	336.12	2927.66	0.00	0.00	358.05
Fossil Fuel Power	23261.49	2647.30	1.46	25910.26	0.00	0.00	249.26
Nuclear Power	658.53	0.00	0.00	658.53	0.00	0.00	122.52
Hydroelectric Power	166864.75	2121.00	0.00	168985.75	0.00	0.00	0.00
Other	3.41	45.22	10.70	59.33	22017.43	-29.11	16.13

BASIN REPORT- Lake Ontario

Withdrawals, Diversions
and Consumptive Uses

Units: ML/d
Year Of Data: 2010

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
New York							
	Public Supply	1293.02	36.30	129.30		36.30	0.00
	Domestic Supply	536.81	0.00	53.67		0.00	
	Irrigation	98.69	0.00	88.82	91.08	0.00	81.95
	Livestock	80.52	0.00	72.45		0.00	
	Industrial	341.67	0.00	85.42	341.67	0.00	85.40
	Fossil Fuel Power	2164.65	0.00	43.29	1171.74	0.00	23.43
	Nuclear Power	5309.42	0.00	265.47	5309.42	0.00	265.47
	Hydroelectric Power	306270.11	0.00	0.00	0.00	0.00	0.00
	Other	231.74	121.13	144.92	231.74	121.13	144.91
	Total	316326.63	157.44	883.35	7145.65	157.44	601.16
Ontario							
	Public Supply	1763.74	0.00	264.56	1758.79	0.00	263.82
	Domestic Supply	242.90	0.00	36.44	0.00	0.00	0.00
	Irrigation	67.13	0.00			0.00	
	Livestock	20.45	0.00			0.00	
	Industrial	869.27	0.00	54.76	0.00	0.00	0.00
	Fossil Fuel Power	2736.98	0.00	24.63	2736.98	0.00	24.63
	Nuclear Power	25008.22	0.00	225.07	25008.22	0.00	225.07
	Hydroelectric Power	198178.00	0.00	0.00	198178.00	0.00	0.00
	Other	501.00	0.00	0.00	501.00	0.00	0.00
	Total	229387.69	0.00	605.47	228182.99	0.00	513.53
Pennsylvania							
	Public Supply	0.17		0.02			
	Total	0.17		0.02			
Grand Total:		545714.48	157.44	1488.83	235328.63	157.44	1114.69

BASIN REPORT- Lake Ontario

Units: ML/d
 Withdrawals by Source
 Year Of Data: 2010

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
New York							
	Public Supply	616.80	577.50	98.72			
	Domestic Supply	111.03	271.75	154.03			
	Irrigation	0.00	91.08	7.61	0.00	91.08	0.00
	Livestock	14.80	28.62	37.10			
	Industrial	55.27	253.36	33.05	55.27	253.36	33.05
	Fossil Fuel Power	992.91	1171.74	0.00	0.00	1171.74	0.00
	Nuclear Power	5309.42	0.00	0.00	5309.42	0.00	0.00
	Hydroelectric Power	0.00	306270.11	0.00	0.00	0.00	0.00
	Other	0.00	227.81	3.94	0.00	227.81	3.94
	TOTAL	7100.22	308891.97	334.44	5364.69	1743.98	36.98
Ontario							
	Public Supply	1519.90	200.08	43.76	1519.74	199.41	39.64
	Domestic Supply	0.00	0.00	242.90	0.00	0.00	0.00
	Irrigation	4.11	36.06	26.96			
	Livestock	0.00	3.56	16.89			
	Industrial	825.88	0.00	43.39	0.00	0.00	0.00
	Fossil Fuel Power	2736.98	0.00	0.00	2736.98	0.00	0.00
	Nuclear Power	25008.22	0.00	0.00	25008.22	0.00	0.00
	Hydroelectric Power	142525.00	55653.00	0.00	142525.00	55653.00	0.00
	Other	0.00	501.00	0.00	0.00	501.00	0.00
	TOTAL	172620.09	56393.70	373.90	171789.94	56353.41	39.64
Pennsylvania							
	Public Supply	0.00	0.00	0.17			
	TOTAL	0.00	0.00	0.17			
Grand Total:		179720.31	365285.66	708.51	177154.62	58097.39	76.63

BASIN REPORT- Lake Ontario

Basin Total

Units: ML/d

Year Of Data: 2010

Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	2136.70	777.58	142.66	3056.93	0.00	36.30	393.88
Domestic Supply	111.03	271.75	396.93	779.71	0.00	0.00	90.11
Irrigation	4.11	127.14	34.56	165.81	0.00	0.00	88.82
Livestock	14.80	32.17	53.99	100.96	0.00	0.00	72.45
Industrial	881.15	253.36	76.44	1210.94	0.00	0.00	140.18
Fossil Fuel Power	3729.89	1171.74	0.00	4901.63	0.00	0.00	67.93
Nuclear Power	30317.64	0.00	0.00	30317.64	0.00	0.00	490.54
Hydroelectric Power	142525.00	361923.11	0.00	504448.11	0.00	0.00	0.00
Other	0.00	728.81	3.94	732.74	-21964.43	121.13	144.92

Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	1519.74	199.41	39.64	1758.79	0.00	36.30	263.82
Domestic Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Irrigation	0.00	91.08	0.00	91.08	0.00	0.00	81.95
Livestock					0.00	0.00	
Industrial	55.27	253.36	33.05	341.67	0.00	0.00	85.40
Fossil Fuel Power	2736.98	1171.74	0.00	3908.72	0.00	0.00	48.06
Nuclear Power	30317.64	0.00	0.00	30317.64	0.00	0.00	490.54
Hydroelectric Power	142525.00	55653.00	0.00	198178.00	0.00	0.00	0.00
Other	0.00	728.81	3.94	732.74	-21964.43	121.13	144.91

BASIN REPORT - St. Lawrence River

Withdrawals, Diversions
and Consumptive Uses

Units: ML/d
Year Of Data: 2010

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
New York							
	Public Supply	182.87	0.00	18.29	0.00		
	Domestic Supply	83.32	0.00	8.33	32.33	0.00	3.22
	Irrigation	4.09	0.00	3.68	4.09	0.00	3.67
	Livestock	56.89	0.00	51.18		0.00	
	Industrial	122.16	0.00	30.54	109.36	0.00	27.33
	Fossil Fuel Power	0.04	0.00	0.00	0.04	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	695561.88	0.00	0.00	321972.00	0.00	0.00
	Other	28.73	0.00	2.88	28.73	0.00	2.88
	Total	696039.98	0.00	114.89	322146.55	0.00	37.10
Ontario							
	Public Supply	276.45	0.00	41.47	272.87	0.00	40.94
	Domestic Supply	43.35	0.00	6.50	0.00	0.00	0.00
	Irrigation	8.89	0.00			0.00	
	Livestock	22.37	0.00			0.00	
	Industrial	608.74	0.00	38.35	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	595188.00	0.00	0.00	595188.00	0.00	0.00
	Other	73.00	0.00	0.00	73.00	0.00	0.00
	Total	596220.81	0.00	86.32	595533.87	0.00	40.94
Quebec							
	Public Supply	4164.00	0.00	416.00	4149.00	0.00	415.00
	Domestic Supply	271.00	0.00	27.00	184.00	0.00	18.00
	Irrigation	34.90	0.00	31.41		0.00	
	Livestock	72.30	0.00	57.84		0.00	
	Industrial	475.00	0.00	47.50	473.00	0.00	47.30
	Fossil Fuel Power	178.00	0.00	17.80	178.00	0.00	17.80
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	1150371.00	0.00	0.00	1150371.00	0.00	0.00
	Other		0.00			0.00	
	Total	1155566.20	0.00	597.55	1155355.00	0.00	498.10
Grand Total:		2447826.99	0.00	798.76	2073035.42	0.00	576.14

BASIN REPORT- St. Lawrence River

Units: ML/d
 Withdrawals by Source
 Year Of Data: 2010

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
New York							
	Public Supply	29.83	136.09	16.96			
	Domestic Supply	0.00	32.33	50.99	0.00	32.33	0.00
	Irrigation	0.00	4.09	0.00	0.00	4.09	0.00
	Livestock	1.44	39.97	15.48			
	Industrial	8.06	101.30	12.79	8.06	101.30	0.00
	Fossil Fuel Power	0.04	0.00	0.00	0.04	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	321972.00	373589.88	0.00	321972.00	0.00	0.00
	Other	0.00	27.25	1.48	0.00	27.25	1.48
	TOTAL	322011.37	373930.91	97.70	321980.10	164.97	1.48
Ontario							
	Public Supply	40.27	222.72	13.46	40.27	221.52	11.08
	Domestic Supply	0.00	0.00	43.35	0.00	0.00	0.00
	Irrigation	0.03	7.73	1.13			
	Livestock	0.00	13.73	8.65			
	Industrial	604.75	0.00	3.99	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	323473.00	271715.00	0.00	323473.00	271715.00	0.00
	Other	0.00	73.00	0.00	0.00	73.00	0.00
	TOTAL	324118.05	272032.17	70.58	323513.27	272009.52	11.08
Quebec							
	Public Supply	2282.00	1882.00	0.00	2281.00	1868.00	0.00
	Domestic Supply	0.00	0.00	271.00	0.00	0.00	184.00
	Irrigation	0.00	0.00	34.90			
	Livestock	0.00	0.00	72.30			
	Industrial	0.00	475.00	0.00	0.00	473.00	0.00
	Fossil Fuel Power	148.00	30.00	0.00	148.00	30.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	647102.00	503269.00	0.00	647102.00	503269.00	0.00
	Other						
	TOTAL	649532.00	505656.00	378.20	649531.00	505640.00	184.00
Grand Total:		1295661.43	1151619.08	546.48	1295024.38	777814.49	196.55

BASIN REPORT- St. Lawrence River

Basin Total

Units: ML/d

Year Of Data: 2010

Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	2352.10	2240.80	30.42	4623.33	0.00	0.00	475.76
Domestic Supply	0.00	32.33	365.34	397.67	0.00	0.00	41.83
Irrigation	0.03	11.81	36.03	47.88	0.00	0.00	35.09
Livestock	1.44	53.70	96.43	151.57	0.00	0.00	109.02
Industrial	612.81	576.30	16.78	1205.90	0.00	0.00	116.39
Fossil Fuel Power	148.04	30.00	0.00	178.04	0.00	0.00	17.80
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	1292547.00	1148573.88	0.00	2441120.88	0.00	0.00	0.00
Other	0.00	100.25	1.48	101.73	0.00	0.00	2.88

Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	2321.27	2089.52	11.08	4421.87	0.00	0.00	455.94
Domestic Supply	0.00	32.33	184.00	216.33	0.00	0.00	21.22
Irrigation	0.00	4.09	0.00	4.09	0.00	0.00	3.67
Livestock					0.00	0.00	
Industrial	8.06	574.30	0.00	582.36	0.00	0.00	74.63
Fossil Fuel Power	148.04	30.00	0.00	178.04	0.00	0.00	17.80
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	1292547.00	774984.00	0.00	2067531.00	0.00	0.00	0.00
Other	0.00	100.25	1.48	101.73	0.00	0.00	2.88

Water Use Category Tables

Each of the 9 water use categories is represented by two tables:

- Water use by jurisdiction; and
- Water use by basin.

WATER-USE CATEGORY REPORT - Public Supply

Units: ML/d

Year Of Data: 2010

Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	3418.40	0.00	0.00	3418.40	0.00	3418.40	0.00
Indiana	334.52	123.75	183.97	642.23	0.00	219.49	96.34
Michigan	2562.96	74.66	211.50	2849.12	-0.37		356.14
Minnesota	115.87	6.85	19.76	142.48	0.00	0.00	14.23
New York	1333.83	995.45	138.66	2467.94	0.00	36.30	246.79
Ohio	1538.96	428.70	131.24	2098.90	0.00	1.21	314.83
Ontario	1869.53	672.09	346.63	2888.25	0.00	0.00	433.24
Pennsylvania	104.92	0.40	5.97	111.30			11.13
Quebec	2282.00	1882.00	0.00	4164.00	0.00	0.00	416.00
Wisconsin	746.60	78.21	196.73	1021.53	0.00	2.04	102.13

Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	3418.40	0.00	0.00	3418.40	0.00	3418.40	0.00
Indiana	334.52	123.75	182.34	640.61	0.00	219.83	96.11
Michigan	2562.13	74.30	190.03	2826.46	-0.32		353.31
Minnesota	115.87	6.81	18.78	141.46	0.00	0.00	14.16
New York					0.00	36.30	0.00
Ohio	1538.96	428.24	117.39	2084.59	0.00	1.21	312.68
Ontario	1866.85	668.55	329.31	2864.71	0.00	0.00	429.71
Pennsylvania	104.92	0.00	4.79	109.72			10.97
Quebec	2281.00	1868.00	0.00	4149.00	0.00	0.00	415.00
Wisconsin							

WATER-USE CATEGORY REPORT - Public Supply

Units: ML/d

Year Of Data: 2010

Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	250.90	56.16	32.59	339.65	0.00	2.04	43.06
Lake Michigan	4497.09	78.21	354.16	4929.46	0.00	3610.51	175.87
Lake Huron	518.88	93.09	151.31	763.29	0.00	0.00	103.39
Lake Erie	4551.92	1016.25	523.32	6091.49	-0.37	28.59	798.88
Lake Ontario	2136.70	777.58	142.66	3056.93	0.00	36.30	393.88
St. Lawrence River	2352.10	2240.80	30.42	4623.33	0.00	0.00	475.76

Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	248.37	55.86	28.42	332.66	0.00	0.00	42.37
Lake Michigan	3752.91	0.00	158.95	3911.86	0.00	3610.85	74.04
Lake Huron	515.64	91.83	135.09	742.55	0.00	0.00	100.54
Lake Erie	3864.72	733.03	469.47	5067.21	-0.32	28.59	695.22
Lake Ontario	1519.74	199.41	39.64	1758.79	0.00	36.30	263.82
St. Lawrence River	2321.27	2089.52	11.08	4421.87	0.00	0.00	455.94

WATER-USE CATEGORY REPORT - Domestic Supply

Units: ML/d

Year Of Data: 2010

Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	8.88	0.00	0.02	8.90	0.00	8.88	0.00
Indiana	0.00	97.17	29.94	127.11	0.00	0.00	19.08
Michigan	0.00	0.00	12.78	12.78			1.60
Minnesota	2.84	1.63	0.15	4.62	0.00	0.00	0.45
New York	197.94	316.80	273.23	787.97	0.00	0.00	78.79
Ohio	1.51	0.00	221.18	222.70	0.00	0.00	33.39
Ontario	0.00	0.00	408.49	408.49	0.00	0.00	61.27
Pennsylvania							
Quebec	0.00	0.00	271.00	271.00	0.00	0.00	27.00
Wisconsin	0.34	6.17	5.00	11.51	0.00	1.89	1.14

Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	8.88	0.00	0.02	8.90	0.00	8.88	0.00
Indiana	0.00	97.06	26.46	123.52	0.00	0.00	18.55
Michigan	0.00	0.00	11.11	11.11			1.39
Minnesota	2.73	1.63	0.00	4.35	0.00	0.00	0.42
New York	0.00	32.33	0.00	32.33	0.00	0.00	3.22
Ohio	1.51	0.00	0.00	1.51	0.00	0.00	0.23
Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania							
Quebec	0.00	0.00	184.00	184.00	0.00	0.00	18.00
Wisconsin							

WATER-USE CATEGORY REPORT - Domestic Supply

Units: ML/d

Year Of Data: 2010

Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	2.84	1.63	6.80	11.27	0.00	0.00	1.44
Lake Michigan	9.23	103.34	44.60	157.16	0.00	10.78	21.37
Lake Huron	0.00	0.00	40.38	40.38	0.00	0.00	6.05
Lake Erie	88.43	12.72	367.74	468.89	0.00	0.00	61.90
Lake Ontario	111.03	271.75	396.93	779.71	0.00	0.00	90.11
St. Lawrence River	0.00	32.33	365.34	397.67	0.00	0.00	41.83

Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	2.73	1.63	0.00	4.35	0.00	0.00	0.42
Lake Michigan	8.88	97.06	35.51	141.46	0.00	8.88	19.62
Lake Huron	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Erie	1.51	0.00	2.07	3.59	0.00	0.00	0.54
Lake Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Lawrence River	0.00	32.33	184.00	216.33	0.00	0.00	21.22

WATER-USE CATEGORY REPORT- Irrigation

Units: ML/d

Year Of Data: 2010

Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	0.00	0.00	0.30	0.30	0.00	0.00	0.00
Indiana	0.00	31.15	133.28	164.44	0.00	0.00	148.01
Michigan	2.40	289.44	593.48	885.31			796.78
Minnesota	0.23	1.70	0.19	2.12	0.00	0.11	1.85
New York	0.57	96.04	13.02	109.63	0.00	0.00	98.66
Ohio	1.67	85.13	17.26	104.06	0.00	0.00	93.65
Ontario	7.04	149.13	121.01	277.17	0.00	0.00	
Pennsylvania	0.00	0.33	0.00	0.33			0.29
Quebec	0.00	0.00	34.90	34.90	0.00	0.00	31.41
Wisconsin	0.00	4.09	66.43	70.52	0.00	0.00	49.36

Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	0.00	0.00	0.30	0.30	0.00	0.00	0.00
Indiana	0.00	29.83	131.20	161.03	0.00	0.00	144.94
Michigan	1.81	260.53	554.52	816.87			735.18
Minnesota	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York	0.00	95.17	0.00	95.17	0.00	0.00	85.63
Ohio	1.63	79.46	11.58	92.67	0.00	0.00	83.43
Ontario					0.00	0.00	
Pennsylvania							
Quebec					0.00	0.00	
Wisconsin							

WATER-USE CATEGORY REPORT- Irrigation

Units: ML/d

Year Of Data: 2010

Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.35	2.86	2.44	5.66	0.00	0.11	3.73
Lake Michigan	1.01	238.61	714.75	954.37	0.00	0.00	844.60
Lake Huron	1.12	102.54	63.42	167.07	0.00	0.00	79.11
Lake Erie	5.29	174.03	128.67	307.99	0.00	0.00	168.67
Lake Ontario	4.11	127.14	34.56	165.81	0.00	0.00	88.82
St. Lawrence River	0.03	11.81	36.03	47.88	0.00	0.00	35.09

Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	0.00	1.96	1.96	0.00	0.00	1.77
Lake Michigan	0.92	214.02	613.58	828.52	0.00	0.00	745.41
Lake Huron	0.37	40.38	41.52	82.27	0.00	0.00	74.04
Lake Erie	2.15	115.41	40.56	158.12	0.00	0.00	142.33
Lake Ontario	0.00	91.08	0.00	91.08	0.00	0.00	81.95
St. Lawrence River	0.00	4.09	0.00	4.09	0.00	0.00	3.67

WATER-USE CATEGORY REPORT- Livestock

Units: ML/d

Year Of Data: 2010

Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois							
Indiana	0.00	4.35	9.99	14.35	0.00	0.00	11.47
Michigan	0.00	7.77	23.12	30.88			24.70
Minnesota	3.07	0.00	0.00	3.07	0.00	0.00	2.73
New York	19.68	79.65	71.62	170.95	0.00	0.00	153.84
Ohio	0.00	5.60	39.90	45.50	0.00	0.00	36.38
Ontario	11.16	32.81	96.42	140.39	0.00	0.00	
Pennsylvania	0.00	6.30	0.81	7.11			5.69
Quebec	0.00	0.00	72.30	72.30	0.00	0.00	57.84
Wisconsin	0.00	69.46	43.19	112.65	0.00	0.00	101.37

Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois							
Indiana	0.00	4.35	9.88	14.23	0.00	0.00	11.39
Michigan	0.00	7.31	7.36	14.67			11.73
Minnesota	2.80	0.00	0.00	2.80	0.00	0.00	2.54
New York					0.00	0.00	
Ohio	0.00	1.59	0.76	2.35	0.00	0.00	1.85
Ontario					0.00	0.00	
Pennsylvania	0.00	6.02	0.81	6.82			5.46
Quebec					0.00	0.00	
Wisconsin							

WATER-USE CATEGORY REPORT- Livestock

Units: ML/d

Year Of Data: 2010

Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	3.07	24.99	0.00	28.05	0.00	0.00	24.72
Lake Michigan	0.00	53.61	69.48	123.08	0.00	0.00	107.28
Lake Huron	11.08	14.32	29.43	54.84	0.00	0.00	6.28
Lake Erie	3.52	27.15	108.02	138.69	0.00	0.00	74.27
Lake Ontario	14.80	32.17	53.99	100.96	0.00	0.00	72.45
St. Lawrence River	1.44	53.70	96.43	151.57	0.00	0.00	109.02

Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	2.80	0.00	0.00	2.80	0.00	0.00	2.54
Lake Michigan	0.00	8.41	15.29	23.70	0.00	0.00	18.96
Lake Huron	0.00	2.69	1.95	4.64	0.00	0.00	3.71
Lake Erie	0.00	8.17	1.56	9.74	0.00	0.00	7.77
Lake Ontario					0.00	0.00	
St. Lawrence River					0.00	0.00	

WATER-USE CATEGORY REPORT- Industrial

Units: ML/d

Year Of Data: 2010

Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	66.42	0.00	0.00	66.42	0.00	0.04	0.63
Indiana	5791.49	22.79	39.97	5854.25	0.00	92.06	351.25
Michigan	1555.54	712.53	485.32	2753.38			275.34
Minnesota	469.24	291.89	0.49	761.62	0.00	32.21	76.16
New York	601.01	357.95	61.48	1020.43	0.00	0.00	255.45
Ohio	228.71	435.28	192.53	856.53	0.00	0.00	68.78
Ontario	3409.55	0.00	85.20	3494.75	0.00	0.00	220.15
Pennsylvania	20.10	0.00	0.26	20.36			2.04
Quebec	0.00	475.00	0.00	475.00	0.00	0.00	47.50
Wisconsin	1.36	612.44	50.27	664.07	0.00	0.00	66.40

Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	66.42	0.00	0.00	66.42	0.00	0.04	0.63
Indiana	5791.49	22.79	38.12	5852.40	0.00	92.06	351.17
Michigan	1555.48	711.84	477.05	2744.37			274.44
Minnesota	468.90	291.02	0.42	760.34	0.00	32.21	76.05
New York	601.01	354.66	48.68	1004.35	0.00	0.00	251.39
Ohio	228.71	434.83	190.63	854.18	0.00	0.00	68.55
Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania	20.10	0.00	0.00	20.10			2.01
Quebec	0.00	473.00	0.00	473.00	0.00	0.00	47.30
Wisconsin							

WATER-USE CATEGORY REPORT- Irrigation

Units: ML/d

Year Of Data: 2010

Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.35	2.86	2.44	5.66	0.00	0.11	3.73
Lake Michigan	1.01	238.61	714.75	954.37	0.00	0.00	844.60
Lake Huron	1.12	102.54	63.42	167.07	0.00	0.00	79.11
Lake Erie	5.29	174.03	128.67	307.99	0.00	0.00	168.67
Lake Ontario	4.11	127.14	34.56	165.81	0.00	0.00	88.82
St. Lawrence River	0.03	11.81	36.03	47.88	0.00	0.00	35.09

Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	0.00	1.96	1.96	0.00	0.00	1.77
Lake Michigan	0.92	214.02	613.58	828.52	0.00	0.00	745.41
Lake Huron	0.37	40.38	41.52	82.27	0.00	0.00	74.04
Lake Erie	2.15	115.41	40.56	158.12	0.00	0.00	142.33
Lake Ontario	0.00	91.08	0.00	91.08	0.00	0.00	81.95
St. Lawrence River	0.00	4.09	0.00	4.09	0.00	0.00	3.67

WATER-USE CATEGORY REPORT- Fossil Fuel Power

Units: BL/d

Year Of Data: 2010

Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	3.65	0.00	0.00	3.65	0.00	0.00	0.00
Indiana	2.52	0.00	0.00	2.52	0.00	0.00	0.05
Michigan	19.28	4.68	0.01	23.97			0.27
Minnesota	0.93	0.60	0.00	1.53	0.00	0.00	0.03
New York	3.51	1.17	0.00	4.68	0.00	0.00	0.09
Ohio	2.70	2.11	0.00	4.80	0.00	0.00	0.05
Ontario	8.64	0.00	0.00	8.64	0.00	0.00	0.08
Pennsylvania							
Quebec	0.15	0.03	0.00	0.18	0.00	0.00	0.02
Wisconsin	8.78	1.50	0.00	10.27	0.00	0.00	0.05

Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	3.65	0.00	0.00	3.65	0.00	0.00	0.00
Indiana	2.52	0.00	0.00	2.52	0.00	0.00	0.05
Michigan	19.28	4.68	0.01	23.97			0.27
Minnesota	0.93	0.60	0.00	1.53	0.00	0.00	0.03
New York	0.00	1.17	0.00	1.17	0.00	0.00	0.02
Ohio	2.70	2.11	0.00	4.80	0.00	0.00	0.05
Ontario	8.64	0.00	0.00	8.64	0.00	0.00	0.08
Pennsylvania							
Quebec	0.15	0.03	0.00	0.18	0.00	0.00	0.02
Wisconsin							

WATER-USE CATEGORY REPORT - Fossil Fuel Power

Units: ML/d

Year Of Data: 2010

Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	2166.29	600.06	0.11	2766.47	0.00	0.00	35.39
Lake Michigan	17695.17	3371.98	8.90	21076.06	0.00	0.00	212.38
Lake Huron	631.62	2267.36	3.19	2902.16	0.00	0.00	4.94
Lake Erie	25776.64	2647.30	1.46	28425.40	0.00	0.00	299.56
Lake Ontario	3729.89	1171.74	0.00	4901.63	0.00	0.00	67.93
St. Lawrence River	148.04	30.00	0.00	178.04	0.00	0.00	17.80

Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	2033.54	600.06	0.00	2633.60	0.00	0.00	34.71
Lake Michigan	9051.00	1874.74	8.87	10934.60	0.00	0.00	161.66
Lake Huron	631.62	2267.36	3.19	2902.16	0.00	0.00	4.94
Lake Erie	23261.49	2647.30	1.46	25910.26	0.00	0.00	249.26
Lake Ontario	2736.98	1171.74	0.00	3908.72	0.00	0.00	48.06
St. Lawrence River	148.04	30.00	0.00	178.04	0.00	0.00	17.80

WATER-USE CATEGORY REPORT - Nuclear Power

Units: ML/d

Year Of Data: 2010

Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	119.92	0.00	0.00	119.92	0.00	0.00	0.00
Indiana	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Michigan	8247.91	0.00	0.00	8247.91			159.18
Minnesota	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York	5309.42	0.00	0.00	5309.42	0.00	0.00	265.47
Ohio	458.94	0.00	0.00	458.94	0.00	0.00	45.88
Ontario	46568.95	0.00	0.00	46568.95	0.00	0.00	419.12
Pennsylvania							
Quebec	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wisconsin	5261.46	0.00	0.19	5261.65	0.00	0.00	26.31

Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Illinois	119.92	0.00	0.00	119.92	0.00	0.00	0.00
Indiana	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Michigan	8247.91	0.00	0.00	8247.91			159.18
Minnesota	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York	5309.42	0.00	0.00	5309.42	0.00	0.00	265.47
Ohio	458.94	0.00	0.00	458.94	0.00	0.00	45.88
Ontario	46568.95	0.00	0.00	46568.95	0.00	0.00	419.12
Pennsylvania							
Quebec	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wisconsin							

WATER-USE CATEGORY REPORT- Nuclear Power

Units: ML/d

Year Of Data: 2010

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	13429.70	0.00	0.19	13429.89	0.00	0.00	108.84
Lake Huron	21560.73	0.00	0.00	21560.73	0.00	0.00	194.05
Lake Erie	658.53	0.00	0.00	658.53	0.00	0.00	122.52
Lake Ontario	30317.64	0.00	0.00	30317.64	0.00	0.00	490.54
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	8168.25	0.00	0.00	8168.25	0.00	0.00	82.54
Lake Huron	21560.73	0.00	0.00	21560.73	0.00	0.00	194.05
Lake Erie	658.53	0.00	0.00	658.53	0.00	0.00	122.52
Lake Ontario	30317.64	0.00	0.00	30317.64	0.00	0.00	490.54
St. Lawrence River	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WATER-USE CATEGORY REPORT - Hydroelectric Power

Units: ML/d

Year Of Data: 2010

Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois							
Indiana	0.00	7402.71	0.00	7402.71	0.00	0.00	0.00
Michigan							
Minnesota	0.00	13141.81	0.00	13141.81	0.00	0.00	0.00
New York	488836.75	679860.00	0.00	1168696.74	0.00	0.00	0.00
Ohio	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ontario	538660.00	546223.00	0.00	1084883.00	0.00	-15170.99	0.00
Pennsylvania							
Quebec	647102.00	503269.00	0.00	1150371.00	0.00	0.00	0.00
Wisconsin					0.00	0.00	

Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois							
Indiana	0.00	7402.71	0.00	7402.71	0.00	0.00	0.00
Michigan							
Minnesota	0.00	13141.81	0.00	13141.81	0.00	0.00	0.00
New York	488836.75	0.00	0.00	488836.75	0.00	0.00	0.00
Ohio	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ontario	538660.00	546223.00	0.00	1084883.00	0.00	0.00	0.00
Pennsylvania							
Quebec	647102.00	503269.00	0.00	1150371.00	0.00	0.00	0.00
Wisconsin							

WATER-USE CATEGORY REPORT- Hydroelectric Power

Units: ML/d

Year Of Data: 2010

Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	149480.81	0.00	149480.81	0.00	-15170.99	0.00
Lake Michigan	0.00	7402.71	0.00	7402.71	0.00	0.00	0.00
Lake Huron	72662.00	80395.00	0.00	153057.00	0.00	0.00	0.00
Lake Erie	166864.75	2121.00	0.00	168985.75	0.00	0.00	0.00
Lake Ontario	142525.00	361923.11	0.00	504448.11	0.00	0.00	0.00
St. Lawrence River	1292547.00	1148573.88	0.00	2441120.88	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	149480.81	0.00	149480.81	0.00	0.00	0.00
Lake Michigan	0.00	7402.71	0.00	7402.71	0.00	0.00	0.00
Lake Huron	72662.00	80395.00	0.00	153057.00	0.00	0.00	0.00
Lake Erie	166864.75	2121.00	0.00	168985.75	0.00	0.00	0.00
Lake Ontario	142525.00	55653.00	0.00	198178.00	0.00	0.00	0.00
St. Lawrence River	1292547.00	774984.00	0.00	2067531.00	0.00	0.00	0.00

WATER-USE CATEGORY REPORT- Other

Units: ML/d

Year Of Data: 2010

Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	918.64	0.00	0.00	918.64	0.00	918.64	0.00
Indiana	0.00	0.00	0.42	0.42	0.00	0.00	0.04
Michigan	0.00	8.28	23.13	31.41			0.00
Minnesota	0.00	0.00	0.61	0.61	0.00	0.00	0.00
New York	0.00	258.58	5.41	263.99	0.00	121.13	148.14
Ohio	3.41	33.46	2.38	39.25	0.00	-29.11	15.94
Ontario	0.00	755.59	0.00	755.59	234.59	0.00	0.00
Pennsylvania	0.00	0.00	0.08	0.08			
Quebec					0.00	0.00	
Wisconsin	0.00	0.00	2.80	2.80	0.00	-97.85	0.00

Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	918.64	0.00	0.00	918.64	0.00	918.64	0.00
Indiana	0.00	0.00	0.26	0.26	0.00	0.00	0.04
Michigan	0.00	8.28	22.91	31.18			0.00
Minnesota	0.00	0.00	0.53	0.53	0.00	0.00	0.00
New York	0.00	258.58	5.41	263.99	0.00	121.13	148.12
Ohio	3.41	33.43	2.08	38.91	0.00	-29.11	15.79
Ontario	0.00	755.59	0.00	755.59	234.59	0.00	0.00
Pennsylvania							
Quebec					0.00	0.00	
Wisconsin							

WATER-USE CATEGORY REPORT- Other

Units: ML/d

Year Of Data: 2010

Water-Use by Basin - All Facilities

Basin	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Lake Superior	0.00	0.00	0.61	0.61	0.00	0.00	0.00
Lake Michigan	918.64	0.00	17.62	936.26	0.00	820.78	0.04
Lake Huron	0.00	181.59	0.00	181.59	181.59	0.00	0.00
Lake Erie	3.41	45.26	11.20	59.86	22017.43	-29.11	16.28
Lake Ontario	0.00	728.81	3.94	732.74	-21964.43	121.13	144.92
St. Lawrence River	0.00	100.25	1.48	101.73	0.00	0.00	2.88

Water-Use by Basin - Principal Facilities

Basin	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Lake Superior	0.00	0.00	0.53	0.53	0.00	0.00	0.00
Lake Michigan	918.64	0.00	14.56	933.19	0.00	918.64	0.04
Lake Huron	0.00	181.59	0.00	181.59	181.59	0.00	0.00
Lake Erie	3.41	45.22	10.70	59.33	22017.43	-29.11	16.13
Lake Ontario	0.00	728.81	3.94	732.74	-21964.43	121.13	144.91
St. Lawrence River	0.00	100.25	1.48	101.73	0.00	0.00	2.88