Annual Report of the Great Lakes Regional Water Use Database
Representing 2011 Water Use Data

Prepared by the Great Lakes Commission

Acknowledgments

The Great Lakes Commission extends its thanks to the state and provincial contacts listed on Page 8 for their work in collecting and transmitting the data presented in this document and for reviewing the draft report, which helps ensure accuracy. The attention to detail and collective familiarity with the subject matter are invaluable in preparing this report.

Forward

The Great Lakes Regional Water Use Database provides comparable water use information on withdrawals, diversions and consumptive use, a requirment under Article 4 of the 2008 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 is made available to the public on an annual basis.

The original annual reports were established by the Great Lakes states and provinces in response to a provision in the Great Lakes Charter of 1985, which called for a uniform, consistent base of data on Great Lakes water withdrawals, diversions and consumptive uses. Beginning in 1987, water use data have been submitted to the the Great Lakes Commission (which serves as the database repository) on an annual basis and reports are prepared 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 summer 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.

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Overview of Great Lakes Basin Water Use

Introduction

Water is the region's most precious resource. It defines the borders of our states and provinces, powers our industries, floats our watercraft, quenches our thirsts and nourishes our spirits. The Great Lakes, their connecting channels and the St. Lawrence River collectively comprise the world's largest body of fresh water, which provides the region's eight states and two provices with an abundance of high quality fresh water. The Great Lakes system contains 6.5 quadrillion gallons (24.6 quadrillion liters) of fresh water, 20 percent of the world's surface supply. The Great Lakes and St. Lawrence River influence and are inseparably linked to the region's environmental health, economic well being and quality of life. They play an important role in advancing and sustaining regional and national economies. According to The Brookings Institution, if it stood alone as a country, the Great Lakes economy would be one of the largest economic units on earth (with a $4.5 trillion gross regional product). A Great Lakes Commission study documented that recreational boats and boating activites in the Great Lakes states alone totaled $16 billion in 2003, directly supporting 107,000 jobs. The region's waters provide a home to a large sport and commerical fishery, infusing $7 billion in the region's economy. Last but not least,36 million people get their drinking water from the Great Lakes.

In many areas of North America (and beyond) water resources and associated ecosystems are being stressed by water withdrawals, consumption and diversions from aquifers, lakes, rivers and reservoirs. High quality freshwater is needed to meet the needs of cities, farms, homes and industries. The water rich Great Lakes-St. Lawrence River region has historically been immune from serious water shortages and other water supply problems. Communities situated just outside the Great Lakes-St. Lawrence River basin have begun to look toward the Great Lakes for their water supply needs, as have some places far removed from this region. Implications of this increased interest present a significant challenge for the region's policymakers and resource managers at the state, provincial, federal and municipal levels.

To meet this challenge, the Great Lakes-St. Lawrence River governors and premiers have committed to manage and protect the basin's water resources by implementing the Compact and Agreement. The Compact and Agreement include a ban on new diversions of water from the basin (with limited exceptions), a consistent standard to review proposed uses of basin water, the collection of technical data to improve water resources decisionmaking, and implementation of water management, conservation and efficiency programs.

The Great Lakes states, Ontario and Québec are continuing to work to ensure that high-quality water use information is being collected, made publicly available and used to inform management decisions. This report is a partial fulfillment of state and provincial commitments to improve the collection, sharing and use of regional water use information. It provides aggregated water use data on an annual basis that can be used for regional water use assessments including the regional cumulative impact assessments called for in the Compact and Agreement. The proceeding pages describe the data collection methods as well as the attributes of the data in greater detail.

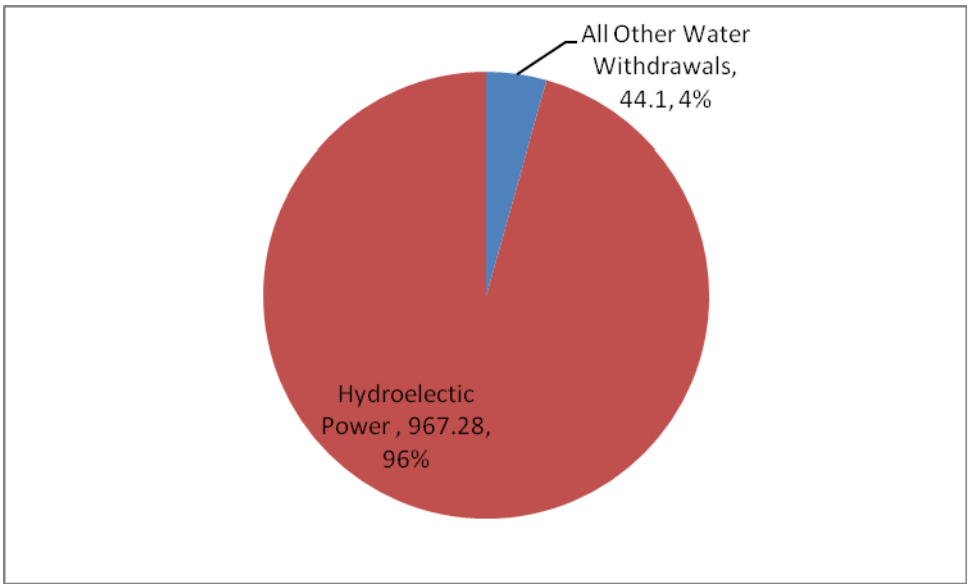
The Great Lakes Water Use Database is updated annually by the Great Lakes Commission. Each year water use data are provided by each state and province. All data submitted to the Commission are in a Microsoft Excel or Access format and then compiled into a single Microsoft Access database.

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. 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 water use will not be considered a "withdrawal," but rather a "use." In future reports (starting with 2012 data), hydroelectric water use will not be aggregated with total withdrawals, but rather aggregated separately as a use. As the following chart illustrates, this is the largest single category of water use and represents 96 percent of the total amount of water used in 2011.

Figure 1. 2011 Great Lakes Water Use (In billions of gallons per day)



Each of the 10 jurisdictions' water use is represented in Figure 2 and Figure 3. Figure 2, which includes self-supply hydroelectric use shows that water withdrawals for the year 2011 were approximately 1,011.38 billion gallons per day, or about 3,828.51 billion liters per day. Figure 3, which excludes hydroelectric water use, more accurately reflects the actual water withdrawals within the basin. Water withdrawals for the eight remaining off-stream categories totaled 44.1 billion gallons per day, or 166.94 billion liters per day.

Figure 2. 2011 Great Lakes Water Use by Jurisdiction
(In billions of gallons per day and includes hydroelectric)

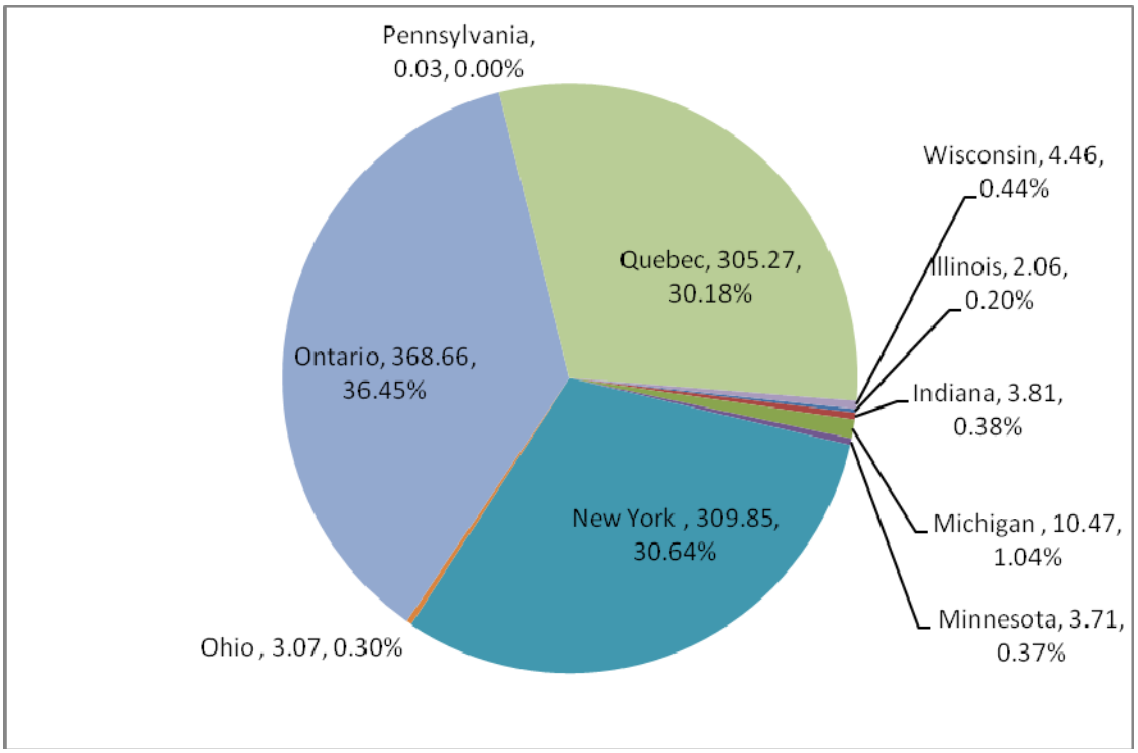
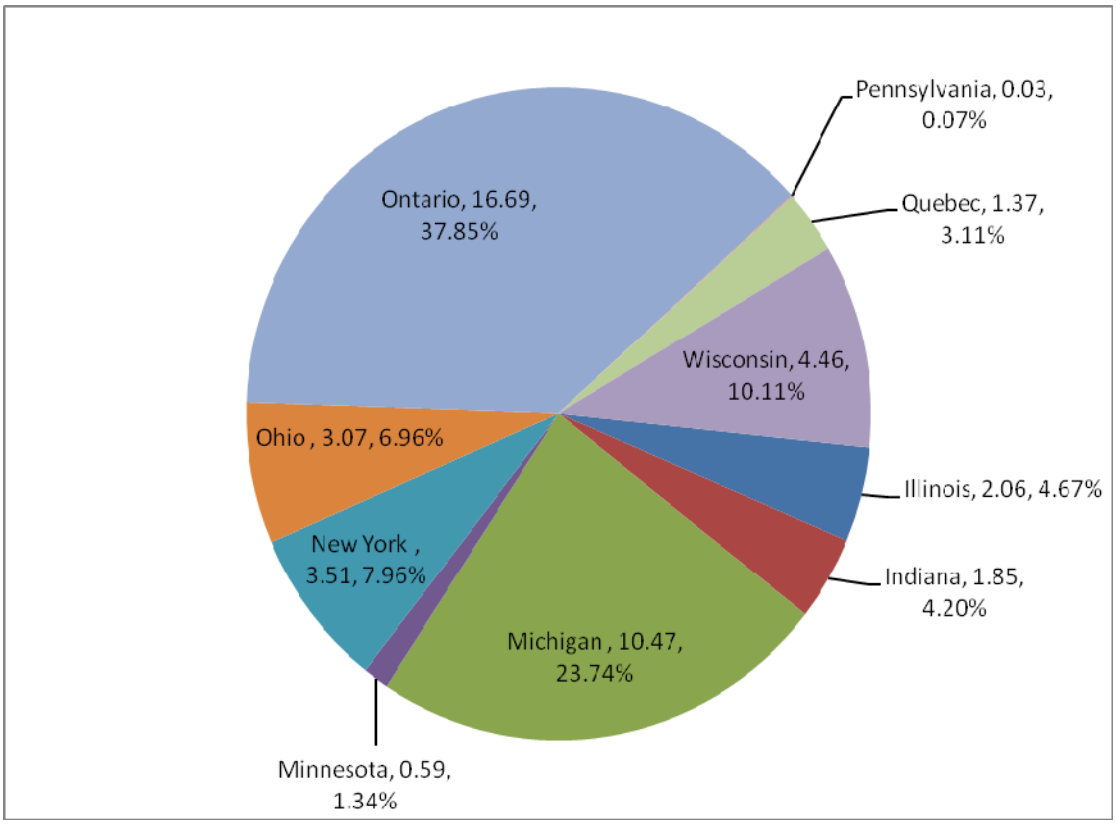


Figure 3. 2011 Great Lakes Water Use by Jurisdiction
(In billions of gallons per day and excludes hydroelectric)



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 2011was calculated to be 2.05 bgd (7.74 bld).

For a more detailed overview, please see:

Annotated Bibliography of Consumptive Use in the Great Lakes Region and Basin (http://glc.org/wateruse/wrmdss/finalreport/pdf/CU_biblio.pdf)

Measuring and Estimating Consumptive Use of Great Lakes Water (http://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 manufac-turing & 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 (Pennsyl-vania 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 (Pennsyl-vania 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

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

diversion: a transfer of Water from the basin into another watershed, or from the watershed of one of the Great Lakes into that of another by any means of transfer, including but not limited to a pipeline, canal, tunnel, aqueduct, channel, modification of the direction of a watercourse, a tanker ship, tanker truck or rail tanker but does not apply to water that is used in the basin or Great Lakes watershed to manufacture or produce a product that is then transferred out of the basin or watershed (Agreement Article 103; Compact Section 1.2)

intrabasin transfer: a transfer of water from the watershed of one of the Great Lakes into the watershed of another Great Lake (Agreement Article 103; Compact Section 1.2)

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 1-8. 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, recreation, fish and wildlife habitat creation and enhancement (excluding fish hatchery operations included under Category 5), flow augmentation (or diversion), 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 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
- Water use category

SUMMARY REPORT - GREAT LAKES BASIN

Units: Bgal(US)/d
Year Of Data: 2011

Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	2.06	0.00	0.00	2.06	0.00	1.13	0.00
Indiana	1.70	2.74	0.10	4.54	0.00	0.08	0.18
Michigan	8.58	1.40	0.49	10.47	0.00		0.60
Minnesota	0.34	3.35	0.01	3.71	0.00	0.01	0.03
New York	129.47	180.34	0.05	309.85	0.00	0.04	0.45
Ohio	2.05	0.86	0.16	3.07	0.00	-0.01	0.17
Ontario	205.88	162.51	0.28	368.66	0.06	-4.01	0.32
Pennsylvania	0.03	0.00	0.00	0.03			0.00
Quebec	171.59	133.58	0.10	305.27	0.00	0.00	0.16
Wisconsin	3.85	0.49	0.11	4.46	0.00	-0.03	0.14
Total:	**525.54**	**485.27**	**1.30**	**1012.11**	**0.06**	**-2.78**	**2.06**

Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	2.06	0.00	0.00	2.06	0.00	1.13	0.00
Indiana	1.70	2.01	0.10	3.81	0.00	0.08	0.17
Michigan	8.58	1.39	0.46	10.43	0.00		0.57
Minnesota	0.34	3.35	0.01	3.70	0.00	0.01	0.03
New York	129.47	180.33	0.04	309.84	0.00	0.00	0.43
Ohio	2.05	0.86	0.09	3.00	0.00	-0.01	0.15
Ontario	204.97	162.46	0.09	367.52	0.06	0.00	0.24
Pennsylvania	0.03	0.00	0.00	0.03			0.00
Quebec	171.59	133.58	0.05	305.21	0.00	0.00	0.13
Wisconsin							
Total:	**520.79**	**483.98**	**0.83**	**1005.60**	**0.06**	**1.21**	**1.74**

SUMMARY REPORT - GREAT LAKES BASIN

Units: Bgal(US)/d
Year Of Data: 2011

Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.87	27.71	0.02	28.61	0.00	-4.00	0.06
Lake Michigan	10.80	3.82	0.57	15.19	0.00	1.18	0.66
Lake Huron	25.41	18.16	0.08	43.65	0.05	0.00	0.13
Lake Erie	56.88	1.73	0.37	58.99	5.82	0.00	0.48
Lake Ontario	47.10	94.57	0.13	141.80	-5.80	0.04	0.53
St. Lawrence River	384.48	339.28	0.13	723.88	0.00	0.00	0.19
Total:	**525.54**	**485.27**	**1.30**	**1012.11**	**0.06**	**-2.78**	**2.06**

Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.68	27.70	0.02	28.40	0.00	0.01	0.05
Lake Michigan	6.99	2.60	0.43	10.02	0.00	1.20	0.49
Lake Huron	25.22	18.14	0.05	43.41	0.05	0.00	0.11
Lake Erie	56.71	1.72	0.23	58.66	5.82	0.00	0.44
Lake Ontario	46.88	94.56	0.04	141.47	-5.80	0.00	0.48
St. Lawrence River	384.32	339.27	0.06	723.64	0.00	0.00	0.16
Total:	**520.79**	**483.98**	**0.83**	**1005.60**	**0.06**	**1.21**	**1.74**

SUMMARY REPORT - GREAT LAKES BASIN

Units: Bgal(US)/d
Year Of Data: 2011

Water-Use by Category - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	3.90	1.03	0.45	5.38	0.00	0.97	0.57
Domestic Supply	0.00	0.04	0.25	0.29	0.00	0.00	0.04
Irrigation	0.00	0.21	0.29	0.50	0.00	0.00	0.38
Livestock	0.00	0.08	0.09	0.17	0.00	0.00	0.07
Industrial	3.20	0.82	0.20	4.22	0.00	0.03	0.36
Fossil Fuel Power	13.17	3.17	0.00	16.34	0.00	0.00	0.25
Nuclear Power	17.44	0.00	0.00	17.44	0.00	0.00	0.39
Hydroelectric Power	487.58	479.70	0.00	967.28	0.00	-4.01	0.00
Other	0.24	0.22	0.01	0.47	0.06	0.22	0.01
Total:	**525.54**	**485.27**	**1.30**	**1012.11**	**0.06**	**-2.78**	**2.06**

Water-Use by Category - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	3.64	1.00	0.38	5.02	0.00	0.96	0.51
Domestic Supply	0.00	0.04	0.05	0.10	0.00	0.00	0.01
Irrigation	0.00	0.15	0.20	0.36	0.00	0.00	0.32
Livestock	0.00	0.05	0.02	0.07	0.00	0.00	0.04
Industrial	2.30	0.66	0.16	3.12	0.00	0.03	0.28
Fossil Fuel Power	10.77	2.15	0.00	12.92	0.00	0.00	0.20
Nuclear Power	16.27	0.00	0.00	16.27	0.00	0.00	0.38
Hydroelectric Power	487.58	479.70	0.00	967.28	0.00	0.00	0.00
Other	0.23	0.22	0.01	0.46	0.06	0.22	0.00
Total:	**520.79**	**483.98**	**0.83**	**1005.60**	**0.06**	**1.21**	**1.74**

Jurisdiction Tables and Analyses

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

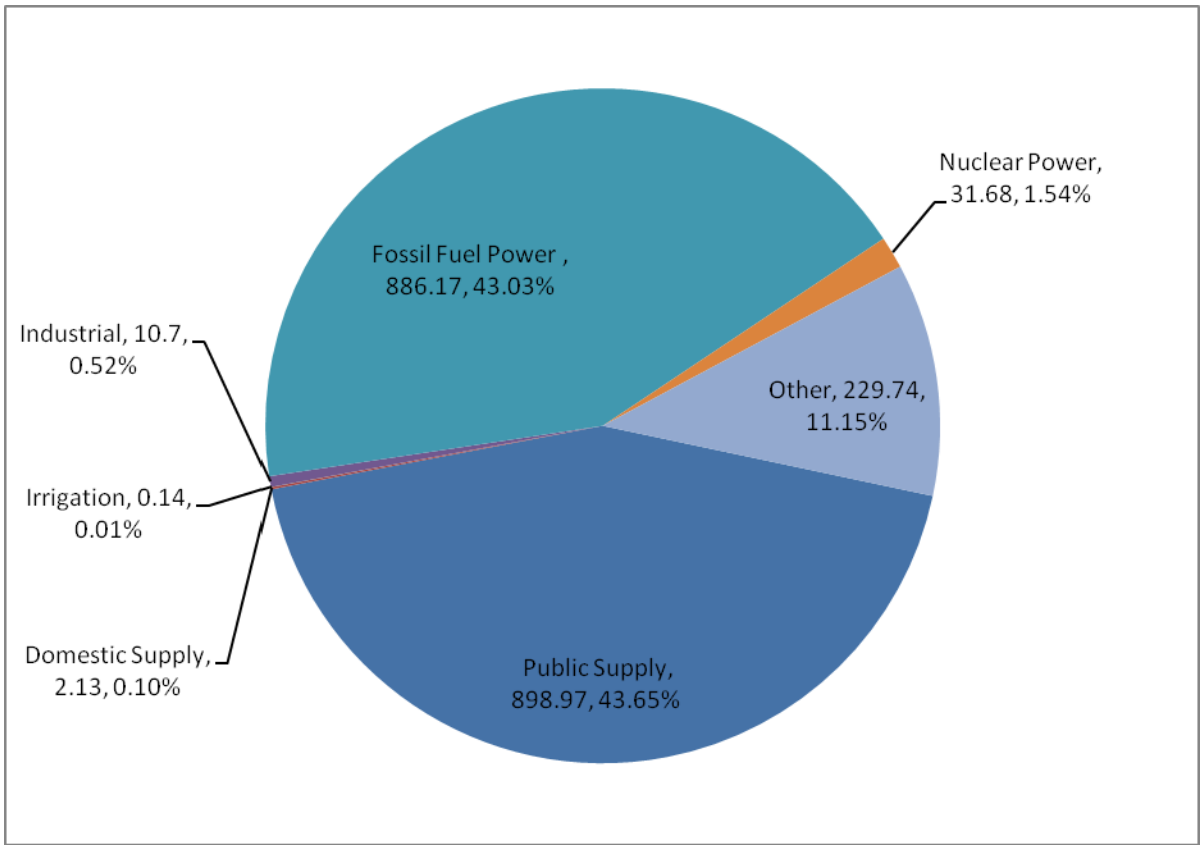
- Withdrawals, diversions and consumptive uses
- Withdrawals by sources
- Jurisdiction totals

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 2011 totaled 2,059.40 mgd – a decrease in water usage from 2010 (2,162.7 mgd).

Figure 5. 2011 Illinois Water Use (In millions of gallons per day)



Consumptive Use: Consumptive use information for the industrial selector was reported at 0.03 mgd.

Interbasin Diversions: Total diversions from the Lake Michigan basin in 2011 were 1,130.85 mgd. Public water supply accounted for 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: Mgal(US)/d** **Year Of Data: 2011**

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Michigan							
	Public Supply	898.97	898.97	0.00	898.97	898.97	0.00
	Domestic Supply	2.13	2.12	0.00	2.13	2.12	0.00
	Irrigation	0.14	0.00	0.00	0.14	0.00	0.00
	Livestock						
	Industrial	10.70	0.02	0.03	10.70	0.02	0.03
	Fossil Fuel Power	886.17	0.00	0.00	886.17	0.00	0.00
	Nuclear Power	31.68	0.00	0.00	31.68	0.00	0.00
	Hydroelectric Power						
	Other	229.74	229.74	0.00	229.74	229.74	0.00
	Total:	**2059.52**	**1130.85**	**0.03**	**2059.52**	**1130.85**	**0.03**
Grand Total:		**2059.52**	**1130.85**	**0.03**	**2059.52**	**1130.85**	**0.03**

JURISDICTION REPORT- Illinois

Withdrawals by Source | **Units: Mgal(US)/d** | **Year Of Data: 2011**

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Michigan							
	Public Supply	898.97	0.00	0.00	898.97	0.00	0.00
	Domestic Supply	2.12	0.00	0.01	2.12	0.00	0.01
	Irrigation	0.02	0.00	0.12	0.02	0.00	0.12
	Livestock						
	Industrial	10.70	0.00	0.00	10.70	0.00	0.00
	Fossil Fuel Power	886.17	0.00	0.00	886.17	0.00	0.00
	Nuclear Power	31.68	0.00	0.00	31.68	0.00	0.00
	Hydroelectric Power						
	Other	229.74	0.00	0.00	229.74	0.00	0.00
	Total:	**2059.40**	**0.00**	**0.13**	**2059.40**	**0.00**	**0.13**
Grand Total:		**2059.40**	**0.00**	**0.13**	**2059.40**	**0.00**	**0.13**

JURISDICTION REPORT- Illinois

Jurisdiction Totals

Units: Mgal(US)/d
Year Of Data: 2011

Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	898.97	0.00	0.00	898.97	0.00	898.97	0.00
Domestic Supply	2.12	0.00	0.01	2.13	0.00	2.12	0.00
Irrigation	0.02	0.00	0.12	0.14	0.00	0.00	0.00
Livestock							
Industrial	10.70	0.00	0.00	10.70	0.00	0.02	0.03
Fossil Fuel Power	886.17	0.00	0.00	886.17	0.00	0.00	0.00
Nuclear Power	31.68	0.00	0.00	31.68	0.00	0.00	0.00
Hydroelectric Power							
Other	229.74	0.00	0.00	229.74	0.00	229.74	0.00

Total Report - Principal Facilities

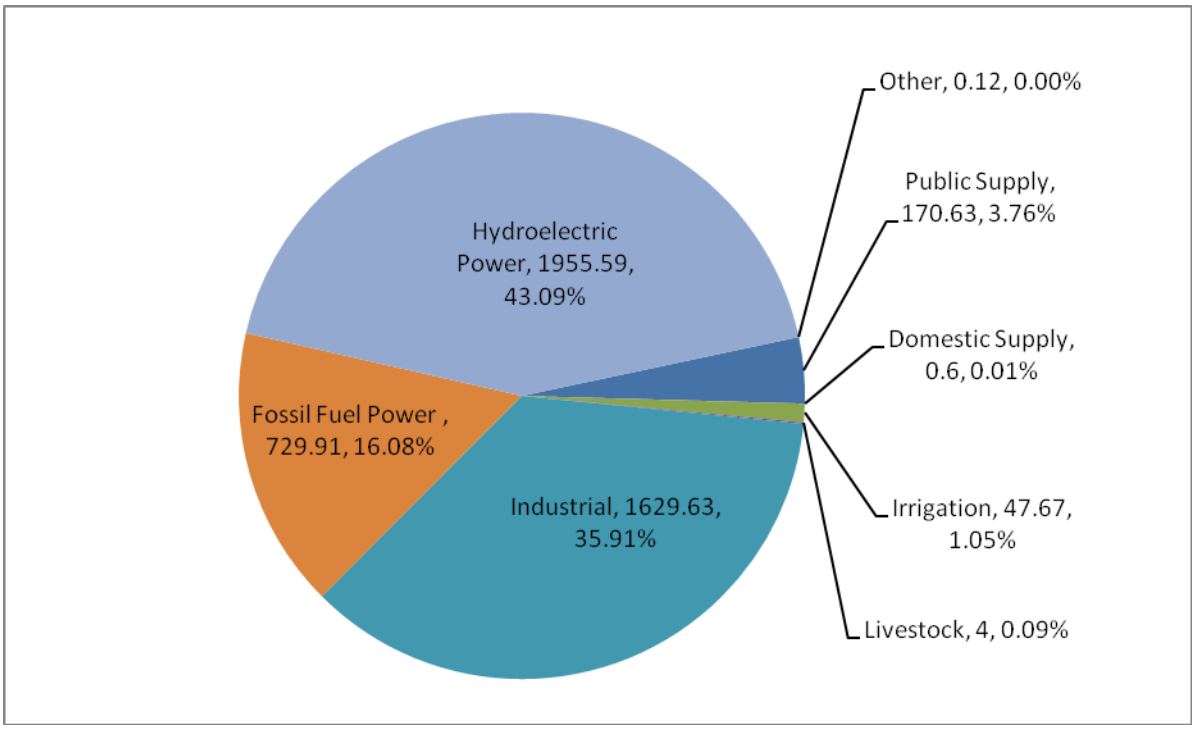
Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	898.97	0.00	0.00	898.97	0.00	898.97	0.00
Domestic Supply	2.12	0.00	0.01	2.13	0.00	2.12	0.00
Irrigation	0.02	0.00	0.12	0.14	0.00	0.00	0.00
Livestock							
Industrial	10.70	0.00	0.00	10.70	0.00	0.02	0.03
Fossil Fuel Power	886.17	0.00	0.00	886.17	0.00	0.00	0.00
Nuclear Power	31.68	0.00	0.00	31.68	0.00	0.00	0.00
Hydroelectric Power							
Other	229.74	0.00	0.00	229.74	0.00	229.74	0.00

Indiana

Data Sources: The Indiana Department of Natural Resources, Division of Water, compiled the 2011 water use data for the Indiana Lake Erie and Lake Michigan basins. Please contact Allison Mann at 317/234-1101 or almann@dnr.in.gov with questions regarding Indiana's data.

Withdrawals: In 2011, total use was 4,538.15 mgd compared to the 2010 figure of 4,417.45 7 mgd. Of this amount, nearly 99 percent of the water used was from the Lake Michigan basin. Industrial, reported as 1,622.03 mgd, and hydroelectric power at 1,955.59 mgd were the primary uses of Lake Michigan water. The primary use of Lake Erie basin water was public supply, at 39.79 mgd.

Figure 6. 2011 Indiana Water Use (In millions of gallons per day)



Consumptive Use: The total consumptive use of water in Indiana's portion of the Great Lakes basin was 169.60 mgd, compared to 178.72 mgd in 2010. In the Lake Michigan basin, the industrial water use category was the largest consumptive use at 60 percent (97.32 mgd of a total of 161.83 mgd), and in the Lake Erie basin, public supply accounted for 77 percent of the total consumptive use.

Interbasin Diversions: Diversions from Lake Michigan include one of 50.53 mgd for public supply and another of 23.21 mgd for industrial use. A diversion from the Lake Erie Basin for public supply uses is 7.47 mgd.

JURISDICTION REPORT- Indiana

Withdrawals, Diversions and Consumptive Uses **Units: Mgal(US)/d** **Year Of Data: 2011**

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Michigan							
	Public Supply	130.84	50.53	19.63	130.50	50.53	19.57
	Irrigation	46.30	0.00	41.67	45.64	0.00	41.07
	Livestock	4.00	0.00	3.20	3.97	0.00	3.18
	Industrial	1622.03	23.21	97.32	1621.68	23.21	97.30
	Fossil Fuel Power	729.64	0.00	14.59	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	1955.59	0.00	0.00	1955.59	0.00	0.00
	Other	0.07	0.00	0.01	0.04	0.00	0.00
	Total:	**4488.47**	**73.73**	**176.42**	**3757.42**	**73.73**	**161.12**
Lake Erie							
	Public Supply	39.79	7.47	5.97	39.71	7.47	5.96
	Domestic Supply	0.60	0.00	0.09	0.46	0.00	0.07
	Irrigation	1.37	0.00	1.23	1.14	0.00	1.02
	Livestock	0.00	0.00	0.00	0.00	0.00	0.00
	Industrial	7.60	0.00	0.46	7.42	0.00	0.45
	Fossil Fuel Power	0.27	0.00	0.01	0.27	0.00	0.01
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.05	0.00	0.01	0.05	0.00	0.01
	Total:	**49.68**	**7.47**	**7.77**	**49.05**	**7.47**	**7.52**
Grand Total:		**4538.15**	**81.20**	**184.19**	**3806.47**	**81.20**	**168.64**

JURISDICTION REPORT- Indiana

Withdrawals by Source | **Units: Mgal(US)/d** | **Year Of Data: 2011**

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Michigan							
	Public Supply	89.27	0.00	41.57	89.27	0.00	41.23
	Irrigation	0.00	8.14	38.16	0.00	7.87	37.77
	Livestock	0.00	1.21	2.79	0.00	1.21	2.76
	Industrial	1612.39	3.70	5.94	1612.39	3.67	5.62
	Fossil Fuel Power	0.00	729.64	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	1955.59	0.00	0.00	1955.59	0.00
	Other	0.00	0.00	0.07	0.00	0.00	0.04
	Total:	**1701.66**	**2698.28**	**88.53**	**1701.66**	**1968.34**	**87.42**
Lake Erie							
	Public Supply	0.00	33.80	5.99	0.00	33.80	5.91
	Domestic Supply	0.00	0.00	0.60	0.00	0.00	0.46
	Irrigation	0.00	0.37	1.00	0.00	0.28	0.86
	Livestock	0.00	0.00	0.00	0.00	0.00	0.00
	Industrial	0.00	2.97	4.63	0.00	2.97	4.45
	Fossil Fuel Power	0.00	0.00	0.27	0.00	0.00	0.27
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.05	0.00	0.00	0.05
	Total:	**0.00**	**37.14**	**12.54**	**0.00**	**37.05**	**12.00**
Grand Total:		**1701.66**	**2735.42**	**101.07**	**1701.66**	**2005.39**	**99.42**

JURISDICTION REPORT- Indiana

Jurisdiction Totals

Units: Mgal(US)/d
Year Of Data: 2011

Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	89.27	33.80	47.56	170.63	0.00	58.00	25.60
Domestic Supply	0.00	0.00	0.60	0.60	0.00	0.00	0.09
Irrigation	0.00	8.51	39.16	47.67	0.00	0.00	42.90
Livestock	0.00	1.21	2.79	4.00	0.00	0.00	3.20
Industrial	1612.39	6.67	10.57	1629.63	0.00	23.21	97.78
Fossil Fuel Power	0.00	729.64	0.27	729.91	0.00	0.00	14.60
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	1955.59	0.00	1955.59	0.00	0.00	0.00
Other	0.00	0.00	0.12	0.12	0.00	0.00	0.02

Total Report - Principal Facilities

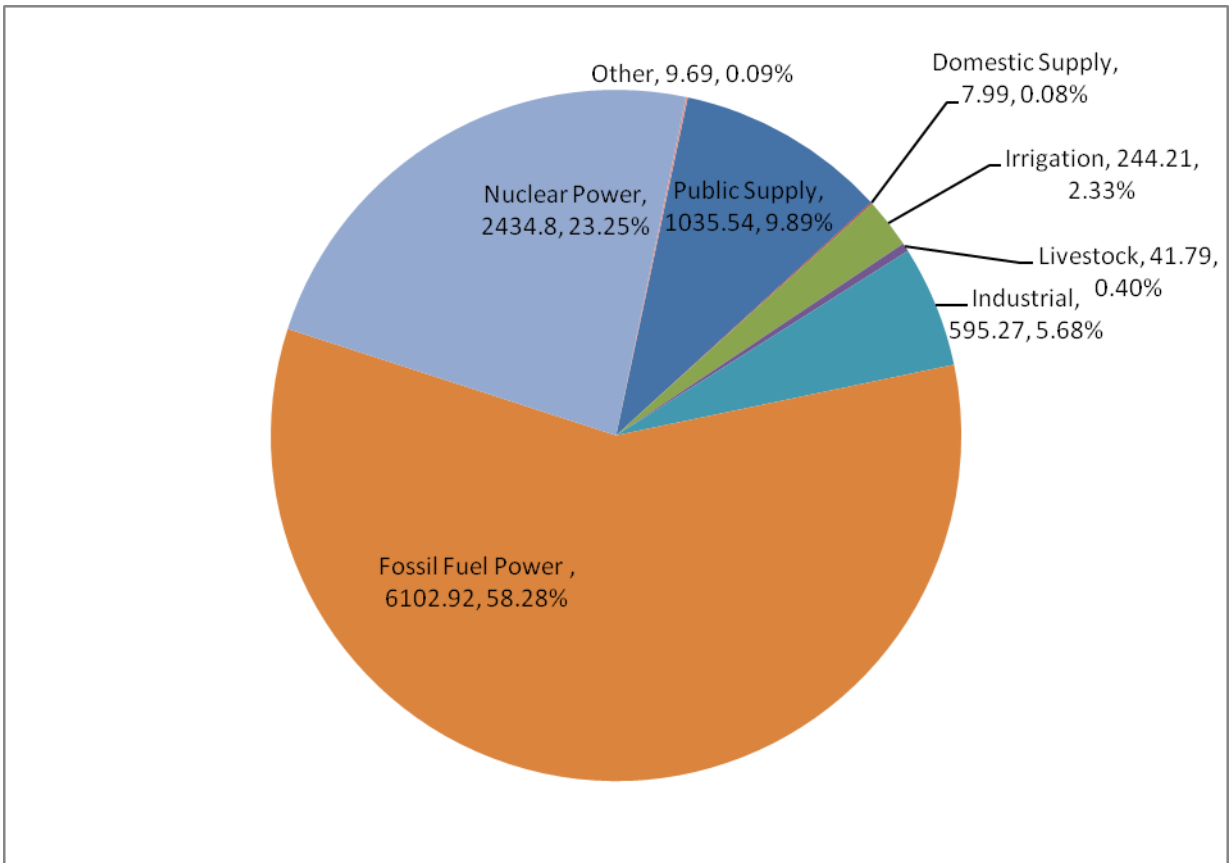
Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	89.27	33.80	47.14	170.21	0.00	58.00	25.53
Domestic Supply	0.00	0.00	0.46	0.46	0.00	0.00	0.07
Irrigation	0.00	8.15	38.63	46.78	0.00	0.00	42.09
Livestock	0.00	1.21	2.76	3.97	0.00	0.00	3.18
Industrial	1612.39	6.64	10.07	1629.10	0.00	23.21	97.75
Fossil Fuel Power	0.00	0.00	0.27	0.27	0.00	0.00	0.01
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	1955.59	0.00	1955.59	0.00	0.00	0.00
Other	0.00	0.00	0.09	0.09	0.00	0.00	0.01

Michigan

Data Sources: The Michigan Department of Environmental Quality (DEQ) submitted water use data for 2011. 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. Non-agricultural 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 data.

Withdrawals: Water withdrawals for the Lake Superior, Lake Michigan, Lake Huron, and Lake Erie basins of Michigan were approximately 10,472.21 mgd, a relatively slight decrease from 2010 (10,507.58 mgd). Of the four basins, the state of Michigan withdraws the most from Lake Erie (5,094.99 mgd) and the least from Lake Superior (245.78 mgd). Fossil fuel power, at 58 percent, was the largest withdrawal category for the state of Michigan.

Figure 7. 2011 Michigan Water Use (In millions of gallons per day)



Consumptive Use: Consumptive uses in the Michigan portion of the Great Lakes basin were calculated to be approximately 596.54 mgd; irrigation was the largest single consumptive use at 219.79 mgd, or about 37 percent of the total consumptive use.

Interbasin Diversions: None reported.

JURISDICTION REPORT- Michigan

Withdrawals, Diversions and Consumptive Uses **Units: Mgal(US)/d** **Year Of Data: 2011**

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Superior							
	Public Supply	13.26	1.66		12.64		1.58
	Domestic Supply	0.07	0.01		0.07		0.01
	Irrigation	0.67	0.61		0.60		0.54
	Livestock	11.79	9.44		11.79		9.44
	Industrial	4.66	0.47		4.42		0.44
	Fossil Fuel Power	215.32	0.28		215.32		0.28
	Nuclear Power						
	Hydroelectric Power						
	Other						
	Total:	**245.78**	**12.45**		**244.83**		**12.28**
Lake Michigan							
	Public Supply	260.11	32.51		252.73		31.59
	Domestic Supply	7.21	0.90		6.38		0.80
	Irrigation	201.60	181.44		187.56		168.80
	Livestock	23.63	18.90		20.32		16.26
	Industrial	220.39	22.04		218.29		21.83
	Fossil Fuel Power	1132.22	74.78		1132.20		74.78
	Nuclear Power	2376.97	15.35		2376.97		15.35
	Hydroelectric Power						
	Other	6.09	0.00		6.03		0.00
	Total:	**4228.22**	**345.93**		**4200.47**		**329.41**
Lake Huron							
	Public Supply	115.68	14.46		112.05		14.01
	Domestic Supply	0.41	0.05		0.31		0.04
	Irrigation	24.86	22.37		23.25		20.92
	Livestock	5.61	4.49		5.02		4.02
	Industrial	67.72	6.77		67.41		6.74
	Fossil Fuel Power	688.94	4.14		688.94		3.90
	Nuclear Power						
	Hydroelectric Power						
	Other						
	Total:	**903.22**	**52.29**		**896.98**		**49.63**

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Erie							
	Public Supply	646.48	80.81		643.17	80.40	
	Domestic Supply	0.30	0.04		0.11	0.01	
	Irrigation	17.07	15.37		15.60	14.04	
	Livestock	0.76	0.61		0.15	0.12	
	Industrial	302.50	30.25		302.07	30.21	
	Fossil Fuel Power	4066.44	39.89		4066.44	39.89	
	Nuclear Power	57.84	18.91		57.84	18.91	
	Hydroelectric Power						
	Other	3.60	0.00		3.59	0.00	
	Total:	**5094.99**	**185.88**		**5088.98**	**183.58**	
Grand Total:		**10472.21**	**596.54**		**10431.26**	**574.90**	

JURISDICTION REPORT- Michigan

Withdrawals by Source | **Units: Mgal(US)/d** | **Year Of Data: 2011**

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Superior							
	Public Supply	4.78	0.00	8.49	4.78	0.00	7.86
	Domestic Supply	0.00	0.07	0.00	0.00	0.07	0.00
	Irrigation	0.01	0.23	0.44	0.00	0.21	0.39
	Livestock	0.00	10.85	0.94	0.00	10.85	0.94
	Industrial	4.42	0.00	0.24	4.42	0.00	0.00
	Fossil Fuel Power	215.32	0.00	0.00	215.32	0.00	0.00
	Nuclear Power						
	Hydroelectric Power						
	Other						
	Total:	**224.52**	**11.15**	**10.11**	**224.52**	**11.13**	**9.19**
Lake Michigan							
	Public Supply	118.83	0.00	141.28	118.83	0.00	133.89
	Domestic Supply	0.00	2.97	4.24	0.00	2.95	3.43
	Irrigation	0.26	52.68	148.66	0.24	47.64	139.68
	Livestock	0.00	10.46	13.17	0.00	10.01	10.31
	Industrial	44.20	125.05	51.14	44.19	124.90	49.20
	Fossil Fuel Power	684.29	445.77	2.16	684.29	445.77	2.15
	Nuclear Power	2376.97	0.00	0.00	2376.97	0.00	0.00
	Hydroelectric Power						
	Other	0.00	0.00	6.09	0.00	0.00	6.03
	Total:	**3224.55**	**636.94**	**366.74**	**3224.51**	**631.27**	**344.69**
Lake Huron							
	Public Supply	92.76	0.31	22.61	92.55	0.31	19.19
	Domestic Supply	0.00	0.01	0.40	0.00	0.00	0.31
	Irrigation	0.17	13.00	11.69	0.15	12.02	11.07
	Livestock	0.00	1.38	4.23	0.00	1.38	3.64
	Industrial	29.43	37.26	1.03	29.43	37.22	0.76
	Fossil Fuel Power	161.75	525.98	1.21	161.75	525.98	1.21
	Nuclear Power						
	Hydroelectric Power						
	Other						
	Total:	**284.12**	**577.93**	**41.17**	**283.88**	**576.91**	**36.18**

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Erie							
	Public Supply	593.35	19.31	33.82	593.35	19.23	30.59
	Domestic Supply	0.00	0.00	0.29	0.00	0.00	0.11
	Irrigation	0.17	8.75	8.16	0.14	7.96	7.50
	Livestock	0.00	0.28	0.48	0.00	0.15	0.00
	Industrial	261.14	11.07	30.28	261.14	11.05	29.89
	Fossil Fuel Power	3933.36	133.03	0.05	3933.36	133.03	0.05
	Nuclear Power	57.84	0.00	0.00	57.84	0.00	0.00
	Hydroelectric Power						
	Other	0.00	2.51	1.09	0.00	2.51	1.08
	Total:	**4845.85**	**174.95**	**74.19**	**4845.82**	**173.93**	**69.23**
Grand Total:		**8579.04**	**1400.97**	**492.21**	**8578.73**	**1393.24**	**459.29**

JURISDICTION REPORT- Michigan

Jurisdiction Totals

Units: Mgal(US)/d
Year Of Data: 2011

Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	809.72	19.62	206.19	1035.54	0.00		129.44
Domestic Supply	0.00	3.06	4.93	7.99			1.00
Irrigation	0.61	74.65	168.95	244.21			219.79
Livestock	0.00	22.96	18.83	41.79			33.43
Industrial	339.20	173.38	82.69	595.27			59.53
Fossil Fuel Power	4994.71	1104.78	3.43	6102.92			119.09
Nuclear Power	2434.80	0.00	0.00	2434.80			34.27
Hydroelectric Power							
Other	0.00	2.51	7.18	9.69			0.00

Total Report - Principal Facilities

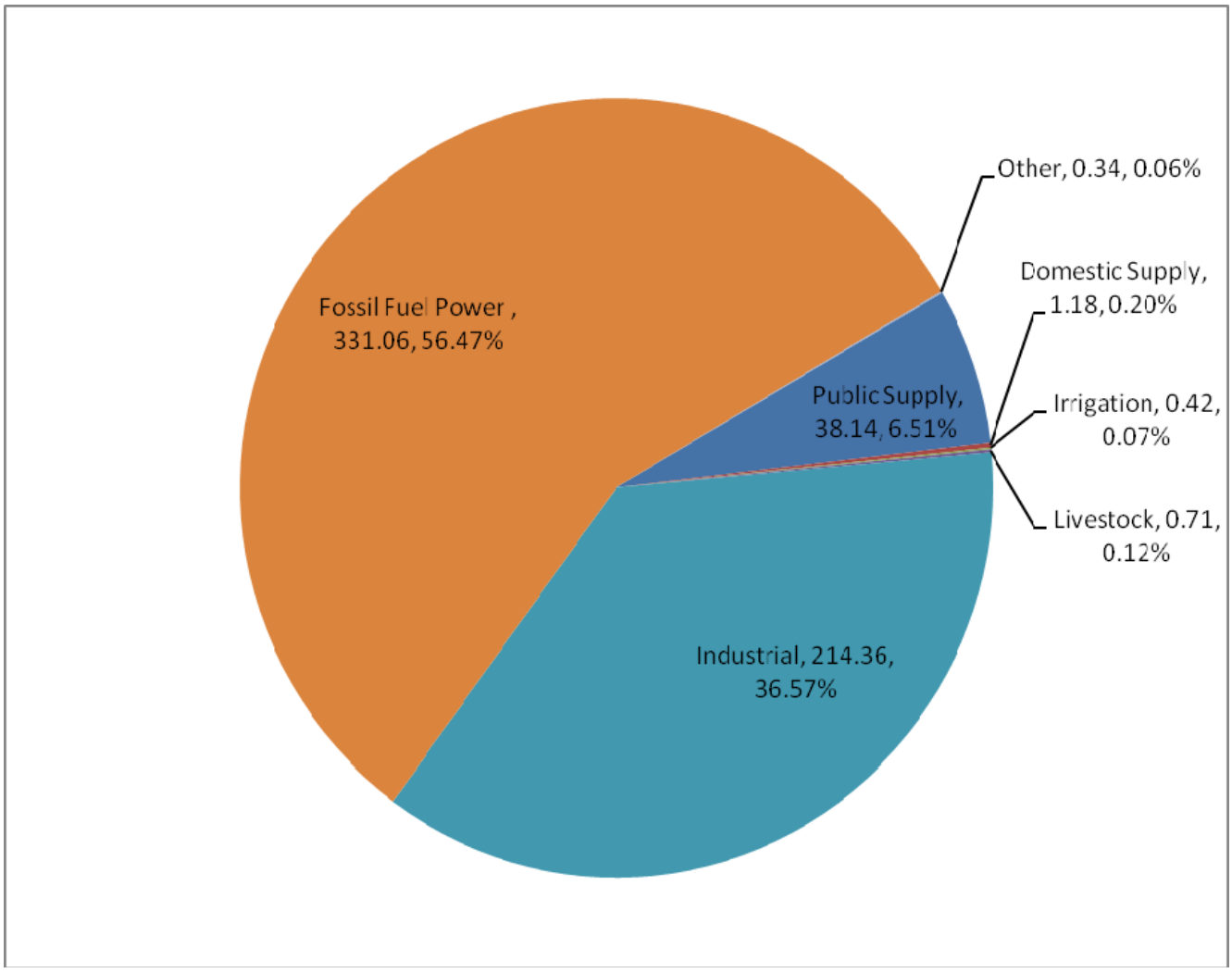
Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	809.51	19.54	191.53	1020.58	0.00		127.57
Domestic Supply	0.00	3.02	3.85	6.87			0.86
Irrigation	0.52	67.84	158.64	227.00			204.30
Livestock	0.00	22.39	14.90	37.28			29.83
Industrial	339.18	173.17	79.84	592.19			59.22
Fossil Fuel Power	4994.71	1104.78	3.41	6102.90			118.85
Nuclear Power	2434.80	0.00	0.00	2434.80			34.27
Hydroelectric Power							
Other	0.00	2.51	7.11	9.62			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 data.

Withdrawals: Total water use from the Minnesota portion of the Lake Superior basin was 3,705.43 mgd. Water used for hydroelectric power generation purposes (3,119.40 mgd) accounted for nearly 84 percent of Minnesota's total water use in 2011. Excluding hydroelectric power, industrial and fossil fuel power accounted for the largest uses, together accounting for 93 percent of the total.

Figure 8. 2011 Minnesota Water Use (In millions of gallons per day)
Excludes hydroelectric power.



Consumptive Use: The largest consumptive use was industrial, at 21.45 mgd, or 65 percent of total consumption (33.02 mgd). Public supply was the second largest consumptive use at 3.81 mgd, or 11 percent of Minnesota's total consumptive use.

Interbasin Diversions: A diversion of 7.99 mgd was reported for industrial use.

JURISDICTION REPORT- Minnesota

Withdrawals, Diversions and Consumptive Uses **Units: Mgal(US)/d** **Year Of Data: 2011**

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Superior							
	Public Supply	38.14	0.00	3.81	37.90	0.00	3.80
	Domestic Supply	1.18	0.00	0.12	1.07	0.00	0.11
	Irrigation	0.42	0.00	0.38	0.23	0.00	0.21
	Livestock	0.71	0.00	0.64	0.64	0.00	0.58
	Industrial	214.36	7.99	21.45	214.05	7.99	21.41
	Fossil Fuel Power	331.06	0.00	6.62	331.04	0.00	6.62
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	3119.40	0.00	0.00	3119.40	0.00	0.00
	Other	0.16	0.00	0.00	0.14	0.00	0.00
	Total:	**3705.43**	**7.99**	**33.02**	**3704.47**	**7.99**	**32.73**
Grand Total:		**3705.43**	**7.99**	**33.02**	**3704.47**	**7.99**	**32.73**

JURISDICTION REPORT- Minnesota

Withdrawals by Source | **Units: Mgal(US)/d** | **Year Of Data: 2011**

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Superior							
	Public Supply	30.01	1.79	6.34	29.97	1.78	6.15
	Domestic Supply	0.75	0.40	0.03	0.70	0.37	0.00
	Irrigation	0.07	0.31	0.04	0.00	0.23	0.00
	Livestock	0.71	0.00	0.00	0.64	0.00	0.00
	Industrial	127.35	86.85	0.16	127.26	86.65	0.14
	Fossil Fuel Power	185.33	145.72	0.01	185.33	145.71	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	3119.40	0.00	0.00	3119.40	0.00
	Other	0.00	0.00	0.16	0.00	0.00	0.14
	Total:	**344.22**	**3354.47**	**6.74**	**343.90**	**3354.14**	**6.43**
Grand Total:		**344.22**	**3354.47**	**6.74**	**343.90**	**3354.14**	**6.43**

JURISDICTION REPORT- Minnesota

Jurisdiction Totals

Units: Mgal(US)/d
Year Of Data: 2011

Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	30.01	1.79	6.34	38.14	0.00	0.00	3.81
Domestic Supply	0.75	0.40	0.03	1.18	0.00	0.00	0.12
Irrigation	0.07	0.31	0.04	0.42	0.00	0.00	0.38
Livestock	0.71	0.00	0.00	0.71	0.00	0.00	0.64
Industrial	127.35	86.85	0.16	214.36	0.00	7.99	21.45
Fossil Fuel Power	185.33	145.72	0.01	331.06	0.00	0.00	6.62
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	3119.40	0.00	3119.40	0.00	0.00	0.00
Other	0.00	0.00	0.16	0.16	0.00	0.00	0.00

Total Report - Principal Facilities

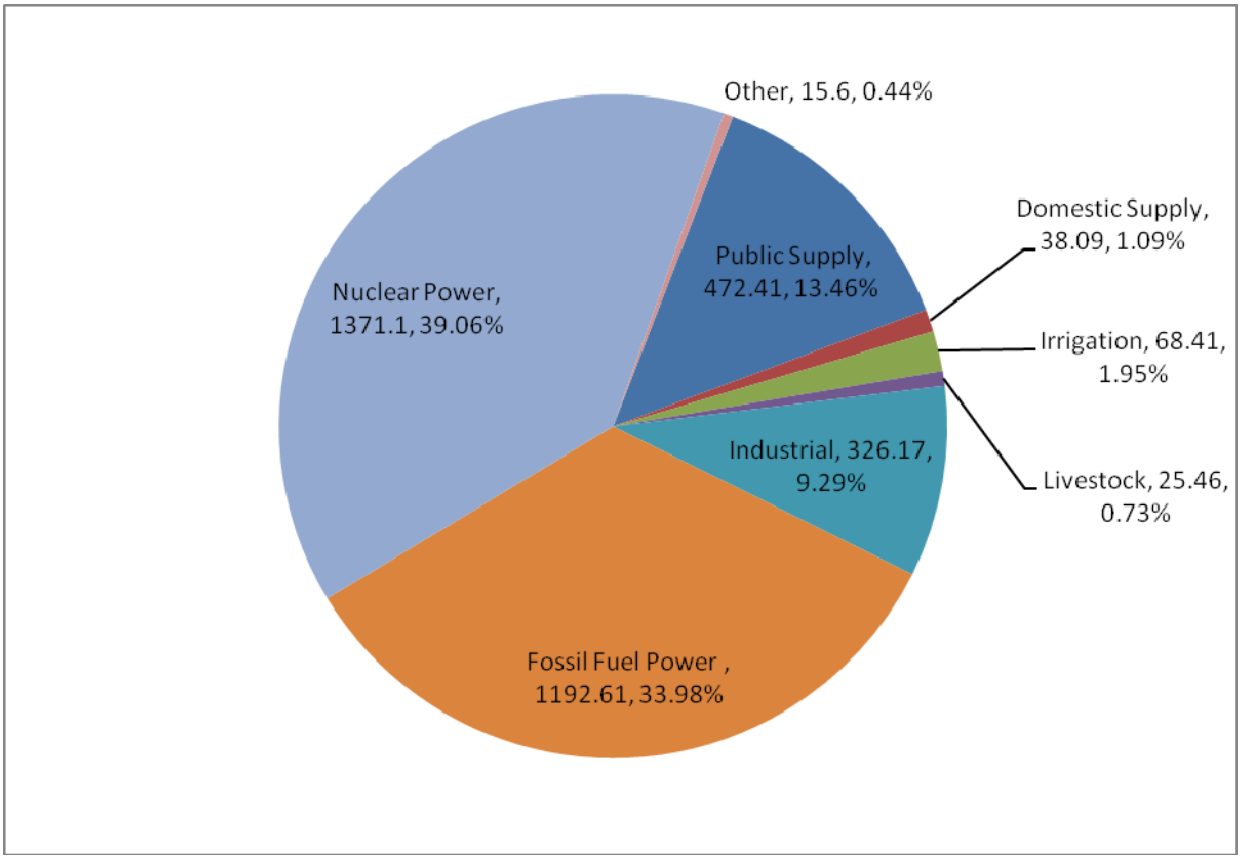
Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	29.97	1.78	6.15	37.90	0.00	0.00	3.80
Domestic Supply	0.70	0.37	0.00	1.07	0.00	0.00	0.11
Irrigation	0.00	0.23	0.00	0.23	0.00	0.00	0.21
Livestock	0.64	0.00	0.00	0.64	0.00	0.00	0.58
Industrial	127.26	86.65	0.14	214.05	0.00	7.99	21.41
Fossil Fuel Power	185.33	145.71	0.00	331.04	0.00	0.00	6.62
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	3119.40	0.00	3119.40	0.00	0.00	0.00
Other	0.00	0.00	0.14	0.14	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 2011, New York's total water use was 309,850.84 mgd. Total withdrawals, not including hydroelectric power, were 3,509.84 mgd. Hydroelectric power uses of 306,341 mgd represented 98.9 percent of total withdrawals in New York. The next largest categories of use were fossil fuel and nuclear power.

Figure 9. 2011 New York Water Use (In millions of gallons per day)
Excludes hydroelectric power.



Consumptive Use: New York reported total consumptive uses of 453.39 mgd. Lake Ontario comprised 371.21 mgd or 82 percent; Lake Erie comprised 67.88 mgd or 15 percent; and the St. Lawrence River comprised 14.30 mgd or 3 percent. The largest categories of consumptive use were nuclear power (219.95 mgd) and industrial (71.86 mgd); both uses are 64 percent of total consumptive use.

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

Intrabasin Diversions: No intrabasin diversions were reported.

JURISDICTION REPORT- New York

Withdrawals, Diversions and Consumptive Uses **Units: Mgal(US)/d** **Year Of Data: 2011**

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Erie							
	Public Supply	207.60	0.00	20.76	207.45	0.00	20.75
	Domestic Supply	0.57	0.00	0.06	0.57	0.00	0.06
	Irrigation	8.01	0.00	7.21	6.97	0.00	6.27
	Livestock	0.00	0.00		0.00	0.00	0.00
	Industrial	175.11	0.00	29.37	175.05	0.00	29.37
	Fossil Fuel Power	504.00	0.00	10.08	504.00	0.00	10.08
	Nuclear Power	0.00	0.00		0.00	0.00	0.00
	Hydroelectric Power	47463.00	0.00	0.00	47463.00	0.00	0.00
	Other	3.97	0.00	0.40	3.86	0.00	0.39
	Total:	**48362.27**	**0.00**	**67.88**	**48360.90**	**0.00**	**66.91**
Lake Ontario							
	Public Supply	237.30	9.59	41.19	235.74	0.00	23.57
	Domestic Supply	36.17	0.00	2.41	36.17	0.00	2.41
	Irrigation	57.10	0.00	51.39	53.08	0.00	47.78
	Livestock	20.91	0.00	3.25	20.12	0.00	2.62
	Industrial	111.02	0.00	38.08	110.75	0.00	38.02
	Fossil Fuel Power	687.17	0.00	13.91	687.08	0.00	13.87
	Nuclear Power	1371.10	0.00	219.95	1371.10	0.00	219.95
	Hydroelectric Power	80908.00	0.00		80908.00	0.00	0.00
	Other	10.26	32.00	1.03	10.14	0.00	1.01
	Total:	**83439.03**	**41.59**	**371.21**	**83432.19**	**0.00**	**349.23**
St. Lawrence River							
	Public Supply	27.51	0.00	5.18	26.35	0.00	5.06
	Domestic Supply	1.35	0.00	0.14	1.25	0.00	0.12
	Irrigation	3.29	0.00	2.96	2.64	0.00	2.38
	Livestock	4.55	0.00	0.69	4.32	0.00	0.51
	Industrial	40.04	0.00	4.41	39.87	0.00	4.37
	Fossil Fuel Power	1.44	0.00	0.72	1.44	0.00	0.72
	Nuclear Power	0.00	0.00		0.00	0.00	0.00
	Hydroelectric Power	177970.00	0.00	0.00	177970.00	0.00	0.00
	Other	1.37	0.00	0.20	1.30	0.00	0.19
	Total:	**178049.54**	**0.00**	**14.30**	**178047.16**	**0.00**	**13.36**
Grand Total:		**309850.84**	**41.59**	**453.39**	**309840.25**	**0.00**	**429.49**

JURISDICTION REPORT- New York

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2011

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Erie							
	Public Supply	198.28	7.93	1.40	198.28	7.93	1.25
	Domestic Supply	0.00	0.57	0.00	0.00	0.57	0.00
	Irrigation	0.31	7.21	0.50	0.16	6.52	0.29
	Livestock	0.00	0.00	0.00	0.00	0.00	0.00
	Industrial	133.22	38.56	3.33	133.22	38.51	3.32
	Fossil Fuel Power	504.00	0.00	0.00	504.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	47463.00	0.00	0.00	47463.00	0.00	0.00
	Other	0.00	2.69	1.28	0.00	2.60	1.26
	Total:	**48298.80**	**56.95**	**6.51**	**48298.66**	**56.12**	**6.13**
Lake Ontario							
	Public Supply	88.43	138.78	10.08	88.43	138.30	9.01
	Domestic Supply	0.00	35.83	0.34	0.00	35.83	0.34
	Irrigation	0.02	51.35	5.73	0.00	48.25	4.83
	Livestock	0.00	20.05	0.86	0.00	19.68	0.44
	Industrial	14.16	84.78	12.09	14.16	84.68	11.92
	Fossil Fuel Power	406.70	280.46	0.00	406.70	280.38	0.00
	Nuclear Power	1371.10	0.00	0.00	1371.10	0.00	0.00
	Hydroelectric Power	0.00	80908.00	0.00	0.00	80908.00	0.00
	Other	0.00	9.80	0.46	0.00	9.69	0.45
	Total:	**1880.41**	**81529.05**	**29.57**	**1880.39**	**81524.81**	**26.99**
St. Lawrence River							
	Public Supply	3.92	15.63	7.96	3.87	15.24	7.23
	Domestic Supply	0.00	0.43	0.92	0.00	0.43	0.82
	Irrigation	0.03	2.74	0.52	0.00	2.43	0.21
	Livestock	0.00	4.38	0.17	0.00	4.21	0.11
	Industrial	2.74	36.23	1.08	2.68	36.18	1.01
	Fossil Fuel Power	1.44	0.00	0.00	1.44	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	79278.00	98692.00	0.00	79278.00	98692.00	0.00
	Other	0.00	1.02	0.34	0.00	0.96	0.34
	Total:	**79286.13**	**98752.43**	**10.98**	**79285.99**	**98751.46**	**9.71**
Grand Total:		**129465.33**	**180338.44**	**47.07**	**129465.04**	**180332.39**	**42.83**

JURISDICTION REPORT- New York

Jurisdiction Totals

Units: Mgal(US)/d
Year Of Data: 2011

Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	290.63	162.33	19.44	472.41	0.00	9.59	67.13
Domestic Supply	0.00	36.83	1.26	38.09	0.00	0.00	2.60
Irrigation	0.36	61.29	6.75	68.41	0.00	0.00	61.57
Livestock	0.00	24.44	1.02	25.46	0.00	0.00	3.94
Industrial	150.11	159.57	16.49	326.17	0.00	0.00	71.86
Fossil Fuel Power	912.14	280.46	0.00	1192.61	0.00	0.00	24.71
Nuclear Power	1371.10	0.00	0.00	1371.10	0.00	0.00	219.95
Hydroelectric Power	126741.00	179600.00	0.00	306341.00	0.00	0.00	0.00
Other	0.00	13.51	2.09	15.60	0.00	32.00	1.62

Total Report - Principal Facilities

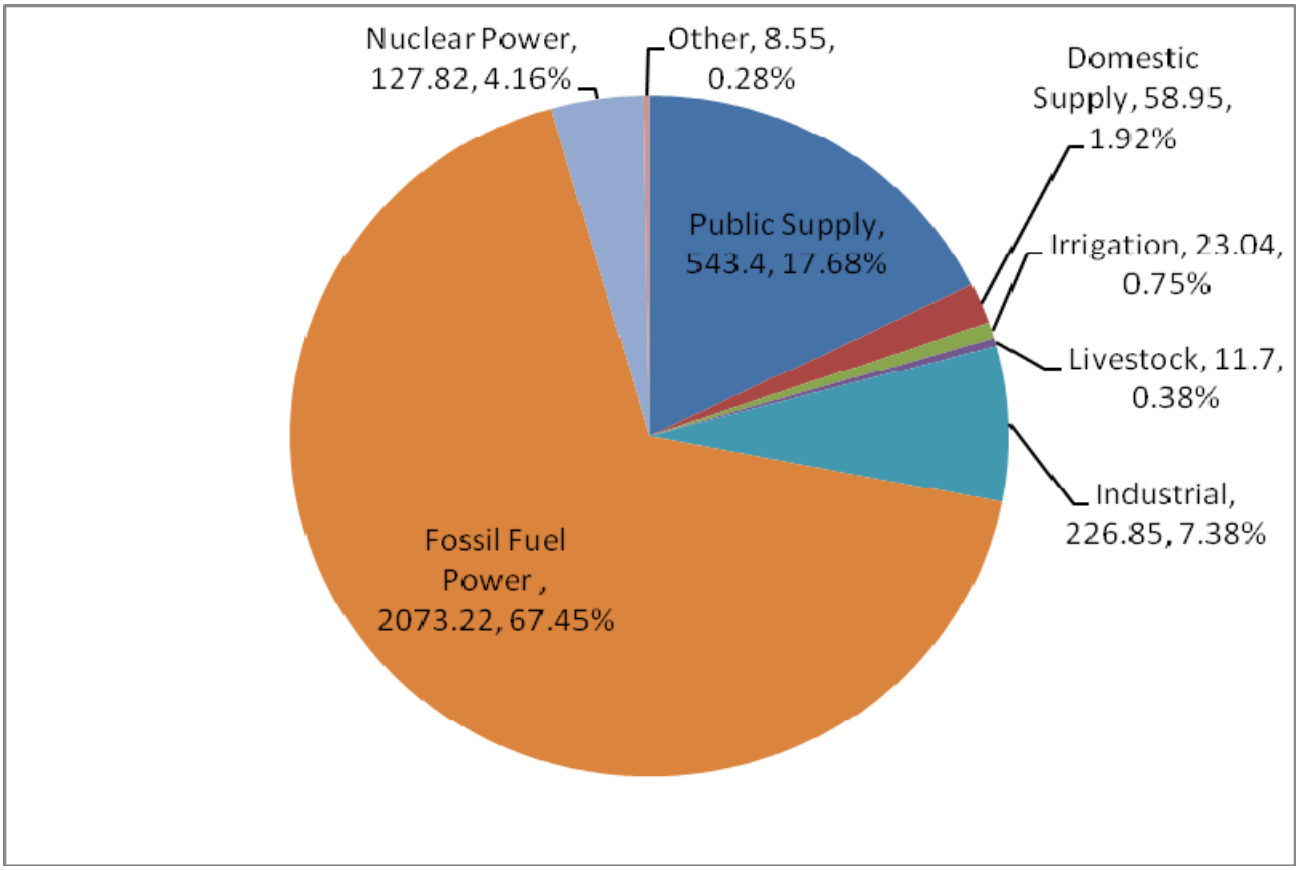
Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	290.58	161.47	17.49	469.55	0.00	0.00	49.38
Domestic Supply	0.00	36.83	1.16	37.99	0.00	0.00	2.59
Irrigation	0.16	57.20	5.33	62.70	0.00	0.00	56.43
Livestock	0.00	23.89	0.54	24.43	0.00	0.00	3.12
Industrial	150.05	159.37	16.24	325.67	0.00	0.00	71.76
Fossil Fuel Power	912.14	280.38	0.00	1192.52	0.00	0.00	24.67
Nuclear Power	1371.10	0.00	0.00	1371.10	0.00	0.00	219.95
Hydroelectric Power	126741.00	179600.00	0.00	306341.00	0.00	0.00	0.00
Other	0.00	13.25	2.06	15.31	0.00	0.00	1.59

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 Mike Hallfrisch at 614/265-6745 or mike.hallfrisch@dnr.state.oh.us with questions regarding Ohio's data.

Withdrawals: Total withdrawals from the Ohio Lake Erie basin for 2011 were 3,073.53 mgd. Fossil fuel power was the largest use of water at 2,073.22 mgd (67.4%); public supply was the second largest withdrawal at 543.40 mgd (17.7%).

Figure 10. 2011 Ohio Water Use (In millions of gallons per day)



Consumptive Use: Total consumptive uses were calculated to be 173.57 mgd. Public supply represents the largest consumptive use sector at 81.51 mgd and accounts for 46 percent of the total. The next three largest consumptive use categories were irrigation at 20.74 mgd, fossil fuel power at 20.73 mgd, and industrial at 17.77 mgd.

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 0.32 mgd. Releases from the Ohio & Erie Canal into the Lake Erie basin resulted in incoming diversions of 11.25 mgd.

JURISDICTION REPORT- Ohio

Withdrawals, Diversions and Consumptive Uses **Units: Mgal(US)/d** **Year Of Data: 2011**

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Erie							
	Public Supply	543.40	0.32	81.51	542.13	0.32	81.32
	Domestic Supply	58.95	0.00	8.84	0.30	0.00	0.05
	Irrigation	23.04	0.00	20.74	21.77	0.00	19.59
	Livestock	11.70	0.00	9.36	0.87	0.00	0.69
	Industrial	226.85	0.00	17.77	226.34	0.00	17.73
	Fossil Fuel Power	2073.22	0.00	20.73	2073.22	0.00	20.73
	Nuclear Power	127.82	0.00	12.78	127.82	0.00	12.78
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	8.55	-11.25	1.84	8.53	-11.25	1.83
	Total:	**3073.53**	**-10.93**	**173.57**	**3000.98**	**-10.93**	**154.72**
Grand Total:		**3073.53**	**-10.93**	**173.57**	**3000.98**	**-10.93**	**154.72**

JURISDICTION REPORT- Ohio

Withdrawals by Source | **Units: Mgal(US)/d** | **Year Of Data: 2011**

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Erie							
	Public Supply	399.22	113.64	30.54	399.22	113.59	29.32
	Domestic Supply	0.32	0.00	58.63	0.30	0.00	0.00
	Irrigation	0.39	20.32	2.33	0.37	19.41	1.99
	Livestock	0.00	1.27	10.43	0.00	0.21	0.66
	Industrial	59.02	111.44	56.39	59.02	111.36	55.96
	Fossil Fuel Power	1464.43	608.79	0.00	1464.43	608.79	0.00
	Nuclear Power	127.82	0.00	0.00	127.82	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.31	7.69	0.55	0.31	7.67	0.55
	Total:	**2051.51**	**863.15**	**158.87**	**2051.47**	**861.03**	**88.48**
Grand Total:		**2051.51**	**863.15**	**158.87**	**2051.47**	**861.03**	**88.48**

JURISDICTION REPORT- Ohio

Jurisdiction Totals

Units: Mgal(US)/d
Year Of Data: 2011

Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	399.22	113.64	30.54	543.40	0.00	0.32	81.51
Domestic Supply	0.32	0.00	58.63	58.95	0.00	0.00	8.84
Irrigation	0.39	20.32	2.33	23.04	0.00	0.00	20.74
Livestock	0.00	1.27	10.43	11.70	0.00	0.00	9.36
Industrial	59.02	111.44	56.39	226.85	0.00	0.00	17.77
Fossil Fuel Power	1464.43	608.79	0.00	2073.22	0.00	0.00	20.73
Nuclear Power	127.82	0.00	0.00	127.82	0.00	0.00	12.78
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.31	7.69	0.55	8.55	0.00	-11.25	1.84

Total Report - Principal Facilities

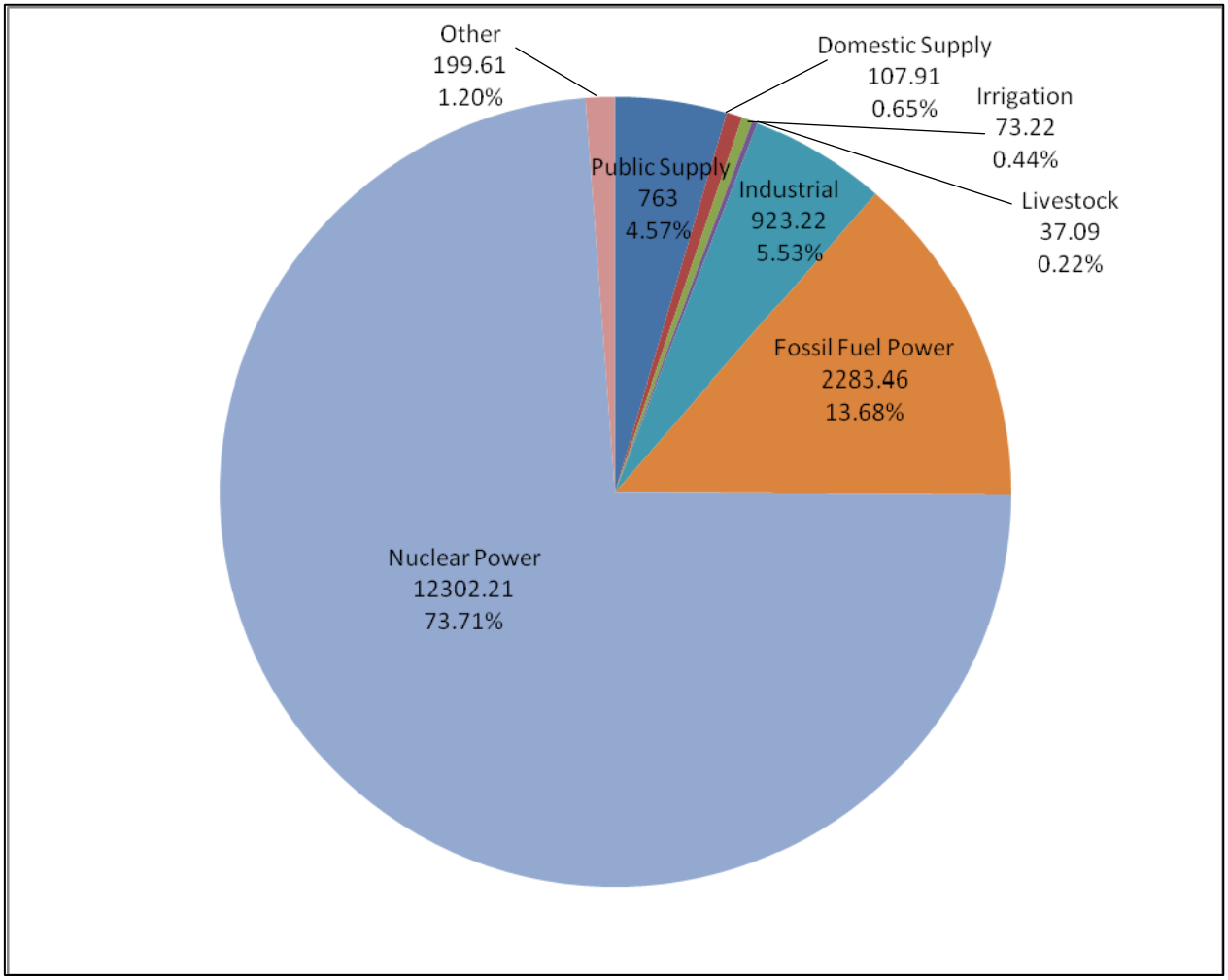
Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	399.22	113.59	29.32	542.13	0.00	0.32	81.32
Domestic Supply	0.30	0.00	0.00	0.30	0.00	0.00	0.05
Irrigation	0.37	19.41	1.99	21.77	0.00	0.00	19.59
Livestock	0.00	0.21	0.66	0.87	0.00	0.00	0.69
Industrial	59.02	111.36	55.96	226.34	0.00	0.00	17.73
Fossil Fuel Power	1464.43	608.79	0.00	2073.22	0.00	0.00	20.73
Nuclear Power	127.82	0.00	0.00	127.82	0.00	0.00	12.78
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.31	7.67	0.55	8.53	0.00	-11.25	1.83

Ontario

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, interbasin diversions and intrabasin transfer reporting 2009 data were used. Calendar year 2000-01 data are used for all other sectors.

Please contact Jonathan Staples at 705/755-1219 or Jonathan.Staples@ontario.ca, Ontario Ministry of Natural Resources, with questions regarding Ontario's water use data reporting. Although this water withdrawal report accounts for the majority of water use within Ontario, data for some water users are not available, therefore this database does not represent all water use in the province.

Figure 11. 2011 Ontario Water Use (In millions of gallons per day)
Excludes hydroelectric power.



Withdrawals: Total Great Lakes water uses were approximately 368,662.76 mgd. However, hydroelectric withdrawals represented more than 95 percent of the total. Excluding hydroelectric, the total use is 16,689.71 mgd. Nuclear power uses were the largest at 73.7 percent (12,302.21 mgd).

Consumptive Use: Total consumptive uses were calculated to be 320.06 mgd. Public supply represents the largest consumptive use sector at 114.45 mgd and accounts for 35.7 percent of the total. The next two largest consumptive uses were nuclear power and industrial use, at 110.72 mgd and 58.16 mgd 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 4,007.75 mgd.

Intrabasin Diversions: Refer to the associated table below.

Table 1: Intrabasin Diversions in Ontario

Name of Originating Watershed	Amount in mgd
Erie	5,174.1 (Other – seaway)
Huron	42.7 (Public Supply)
Ontario	3.2 (Public Supply)

JURISDICTION REPORT- Ontario

Withdrawals, Diversions and Consumptive Uses **Units: Mgal(US)/d** **Year Of Data: 2011**

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Superior							
	Public Supply	45.77	0.00	6.87	45.58	0.00	6.84
	Domestic Supply	1.75	0.00	0.26	0.00	0.00	0.00
	Irrigation	0.37	0.00			0.00	
	Livestock	0.14	0.00			0.00	
	Industrial	162.12	0.00	10.21	0.00	0.00	0.00
	Fossil Fuel Power	81.06	0.00	0.73	81.06	0.00	0.73
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	24319.41	-4007.75	0.00	24319.41	0.00	0.00
	Other		0.00			0.00	
	Total:	**24610.63**	**-4007.75**	**18.07**	**24446.05**	**0.00**	**7.57**
Lake Huron							
	Public Supply	84.37	0.00	12.65	81.66	0.00	12.25
	Domestic Supply	10.61	0.00	1.59	0.00	0.00	0.00
	Irrigation	20.91	0.00			0.00	
	Livestock	12.41	0.00			0.00	
	Industrial	190.19	0.00	11.98	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	5695.74	0.00	51.26	5695.74	0.00	51.26
	Hydroelectric Power	36685.57	0.00	0.00	36685.57	0.00	0.00
	Other	47.97	0.00	0.00	47.97	0.00	0.00
	Total:	**42747.78**	**0.00**	**77.49**	**42510.94**	**0.00**	**63.51**
Lake Erie							
	Public Supply	93.89	0.00	14.08	92.84	0.00	13.92
	Domestic Supply	19.94	0.00	2.99	0.00	0.00	0.00
	Irrigation	31.85	0.00			0.00	
	Livestock	13.22	0.00			0.00	
	Industrial	180.45	0.00	11.37	0.00	0.00	0.00
	Fossil Fuel Power	1479.36	0.00	13.31	1479.36	0.00	13.31
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	560.31	0.00	0.00	560.31	0.00	0.00
	Other		0.00			0.00	
	Total:	**2379.03**	**0.00**	**41.76**	**2132.51**	**0.00**	**27.24**

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Ontario							
	Public Supply	465.93	0.00	69.89	464.62	0.00	69.69
	Domestic Supply	64.17	0.00	9.63	0.00	0.00	0.00
	Irrigation	17.73	0.00			0.00	
	Livestock	5.40	0.00			0.00	
	Industrial	229.64	0.00	14.47	0.00	0.00	0.00
	Fossil Fuel Power	723.03	0.00	6.51	723.03	0.00	6.51
	Nuclear Power	6606.47	0.00	59.46	6606.47	0.00	59.46
	Hydroelectric Power	50114.76	0.00	0.00	50114.76	0.00	0.00
	Other	132.35	0.00	0.00	132.35	0.00	0.00
	Total:	**58359.48**	**0.00**	**159.95**	**58041.23**	**0.00**	**135.66**
St. Lawrence River							
	Public Supply	73.03	0.00	10.96	72.08	0.00	10.82
	Domestic Supply	11.45	0.00	1.72	0.00	0.00	0.00
	Irrigation	2.35	0.00			0.00	
	Livestock	5.91	0.00			0.00	
	Industrial	160.81	0.00	10.13	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	240293.00	0.00	0.00	240293.00	0.00	0.00
	Other	19.28	0.00	0.00	19.28	0.00	0.00
	Total:	**240565.84**	**0.00**	**22.80**	**240384.37**	**0.00**	**10.82**
Grand Total:		**368662.76**	**-4007.75**	**320.06**	**367515.10**	**0.00**	**244.79**

JURISDICTION REPORT- Ontario

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2011

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Superior							
	Public Supply	30.10	13.03	2.65	30.07	12.96	2.55
	Domestic Supply	0.00	0.00	1.75	0.00	0.00	0.00
	Irrigation	0.02	0.31	0.05			
	Livestock	0.00	0.14	0.00			
	Industrial	162.12	0.00	0.00	0.00	0.00	0.00
	Fossil Fuel Power	81.06	0.00	0.00	81.06	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	24319.41	0.00	0.00	24319.41	0.00
	Other						
	Total:	**273.30**	**24332.89**	**4.44**	**111.13**	**24332.37**	**2.55**
Lake Huron							
	Public Supply	42.66	23.57	18.14	42.02	23.23	16.40
	Domestic Supply	0.00	0.00	10.61	0.00	0.00	0.00
	Irrigation	0.15	15.41	5.35			
	Livestock	2.93	3.07	6.41			
	Industrial	187.41	0.00	2.78	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	5695.74	0.00	0.00	5695.74	0.00	0.00
	Hydroelectric Power	19195.27	17490.30	0.00	19195.27	17490.30	0.00
	Other	0.00	47.97	0.00	0.00	47.97	0.00
	Total:	**25124.17**	**17580.32**	**43.29**	**24933.03**	**17561.50**	**16.40**
Lake Erie							
	Public Supply	8.97	29.26	55.66	8.97	29.23	54.64
	Domestic Supply	0.00	0.00	19.94	0.00	0.00	0.00
	Irrigation	0.59	12.11	19.15			
	Livestock	0.02	0.89	12.31			
	Industrial	173.24	0.00	7.21	0.00	0.00	0.00
	Fossil Fuel Power	1479.36	0.00	0.00	1479.36	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	560.31	0.00	0.00	560.31	0.00
	Other						
	Total:	**1662.18**	**602.57**	**114.27**	**1488.33**	**589.54**	**54.64**

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Ontario							
	Public Supply	401.52	52.86	11.56	401.47	52.68	10.47
	Domestic Supply	0.00	0.00	64.17	0.00	0.00	0.00
	Irrigation	1.08	9.53	7.12			
	Livestock	0.00	0.94	4.46			
	Industrial	218.17	0.00	11.46	0.00	0.00	0.00
	Fossil Fuel Power	723.03	0.00	0.00	723.03	0.00	0.00
	Nuclear Power	6606.47	0.00	0.00	6606.47	0.00	0.00
	Hydroelectric Power	37265.43	12849.33	0.00	37265.43	12849.33	0.00
	Other	0.00	132.35	0.00	0.00	132.35	0.00
	Total:	**45215.71**	**13045.00**	**98.77**	**44996.41**	**13034.36**	**10.47**
St. Lawrence River							
	Public Supply	10.64	58.84	3.56	10.64	58.52	2.93
	Domestic Supply	0.00	0.00	11.45	0.00	0.00	0.00
	Irrigation	0.01	2.04	0.30			
	Livestock	0.00	3.63	2.28			
	Industrial	159.76	0.00	1.05	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	133431.98	106861.02	0.00	133431.98	106861.02	0.00
	Other	0.00	19.28	0.00	0.00	19.28	0.00
	Total:	**133602.38**	**106944.81**	**18.65**	**133442.61**	**106938.83**	**2.93**
Grand Total:		**205877.74**	**162505.59**	**279.43**	**204971.51**	**162456.59**	**87.00**

JURISDICTION REPORT- Ontario

Jurisdiction Totals

Units: Mgal(US)/d
Year Of Data: 2011

Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	493.88	177.55	91.57	763.00	0.00	0.00	114.45
Domestic Supply	0.00	0.00	107.91	107.91	0.00	0.00	16.19
Irrigation	1.86	39.39	31.97	73.22	0.00	0.00	
Livestock	2.95	8.67	25.47	37.09	0.00	0.00	
Industrial	900.71	0.00	22.51	923.22	0.00	0.00	58.16
Fossil Fuel Power	2283.46	0.00	0.00	2283.46	0.00	0.00	20.55
Nuclear Power	12302.21	0.00	0.00	12302.21	0.00	0.00	110.72
Hydroelectric Power	189892.67	162080.38	0.00	351973.05	0.00	-4007.75	0.00
Other	0.00	199.61	0.00	199.61	61.97	0.00	0.00

Total Report - Principal Facilities

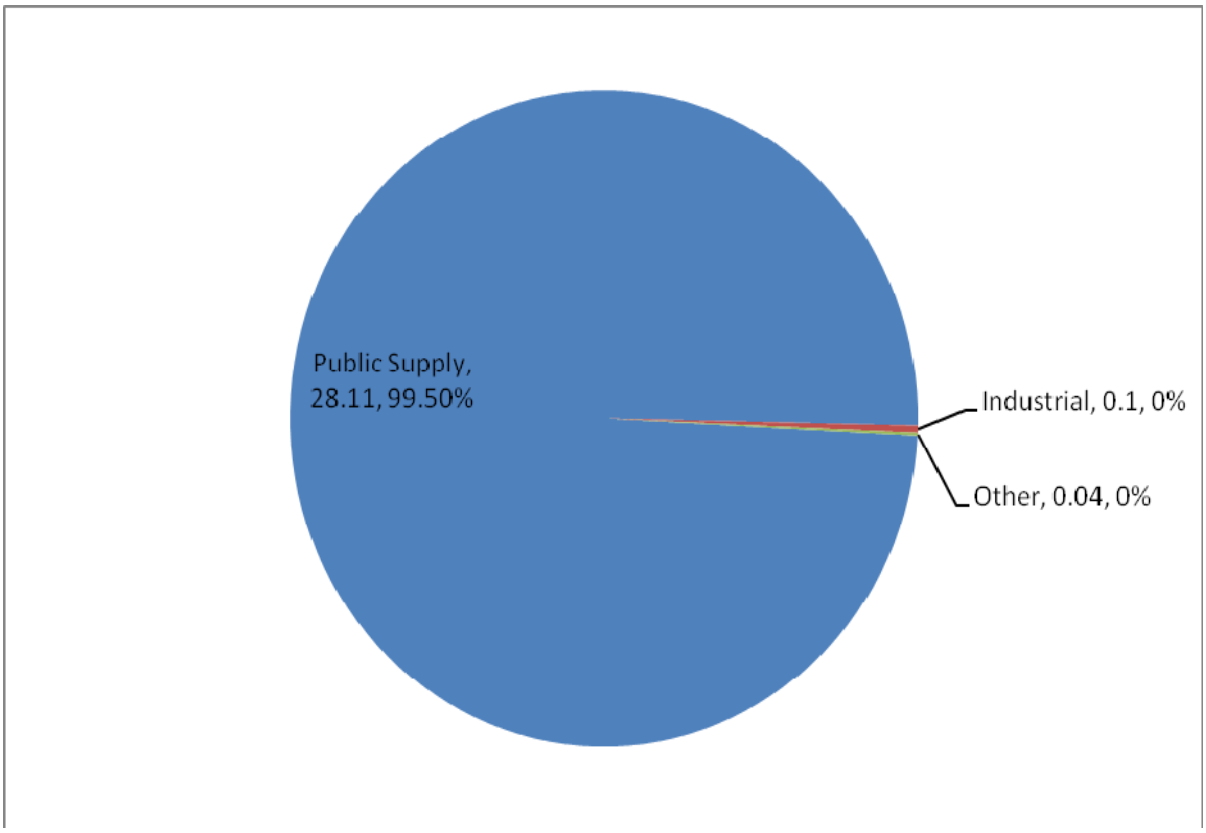
Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	493.17	176.61	87.00	756.78	0.00	0.00	113.52
Domestic Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Irrigation					0.00	0.00	
Livestock					0.00	0.00	
Industrial	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fossil Fuel Power	2283.46	0.00	0.00	2283.46	0.00	0.00	20.55
Nuclear Power	12302.21	0.00	0.00	12302.21	0.00	0.00	110.72
Hydroelectric Power	189892.67	162080.38	0.00	351973.05	0.00	0.00	0.00
Other	0.00	199.61	0.00	199.61	61.97	0.00	0.00

Pennsylvania

Data Sources: The Department of Environmental Protection – Bureau of Safe Drinking Water, Division of Planning and Conservation submitted water use data for the Lake Erie and Lake Ontario basins of Pennsylvania. Please contact David Jostenski at 717/772-5659 or djostenski@pa.org with questions regarding Pennsylvania's data.

Withdrawals: Total withdrawals from Lake Erie were 28.21 mgd. Public supply at 28.07 mgd or 99.5 percent, and industrial at 0.10 mgd or 0.4 percent, constituted the primary uses of water.

Figure 12. 2011 Pennsylvania Water Use (In millions of gallons per day)



Consumptive Use: Consumptive use totaled 2.82 mgd.

JURISDICTION REPORT- Pennsylvania

Withdrawals, Diversions and Consumptive Uses **Units: Mgal(US)/d** **Year Of Data: 2011**

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Erie							
	Public Supply	28.07		2.81	27.86		2.79
	Domestic Supply						
	Irrigation						
	Livestock						
	Industrial	0.10		0.01			
	Fossil Fuel Power						
	Nuclear Power						
	Hydroelectric Power						
	Other	0.04					
	Total:	**28.21**		**2.82**	**27.86**		**2.79**
Lake Ontario							
	Public Supply	0.04		0.00			
	Total:	**0.04**		**0.00**			
Grand Total:		**28.25**		**2.82**	**27.86**		**2.79**

JURISDICTION REPORT- Pennsylvania Withdrawals by Source

Units: Mgal(US)/d
Year Of Data: 2011

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Erie							
	Public Supply	26.18	0.14	1.75	26.18	0.12	1.55
	Domestic Supply						
	Irrigation						
	Livestock						
	Industrial	0.00	0.00	0.10			
	Fossil Fuel Power						
	Nuclear Power						
	Hydroelectric Power						
	Other	0.00	0.00	0.04			
	Total:	**26.18**	**0.14**	**1.88**	**26.18**	**0.12**	**1.55**
Lake Ontario							
	Public Supply	0.00	0.00	0.04			
	Total:	**0.00**	**0.00**	**0.04**			
Grand Total:		**26.18**	**0.14**	**1.93**	**26.18**	**0.12**	**1.55**

JURISDICTION REPORT- Pennsylvania

Jurisdiction Totals

Units: Mgal(US)/d
Year Of Data: 2011

Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	26.18	0.14	1.79	28.11			2.81
Domestic Supply							
Irrigation							
Livestock							
Industrial	0.00	0.00	0.10	0.10			0.01
Fossil Fuel Power							
Nuclear Power							
Hydroelectric Power							
Other	0.00	0.00	0.04	0.04			

Total Report - Principal Facilities

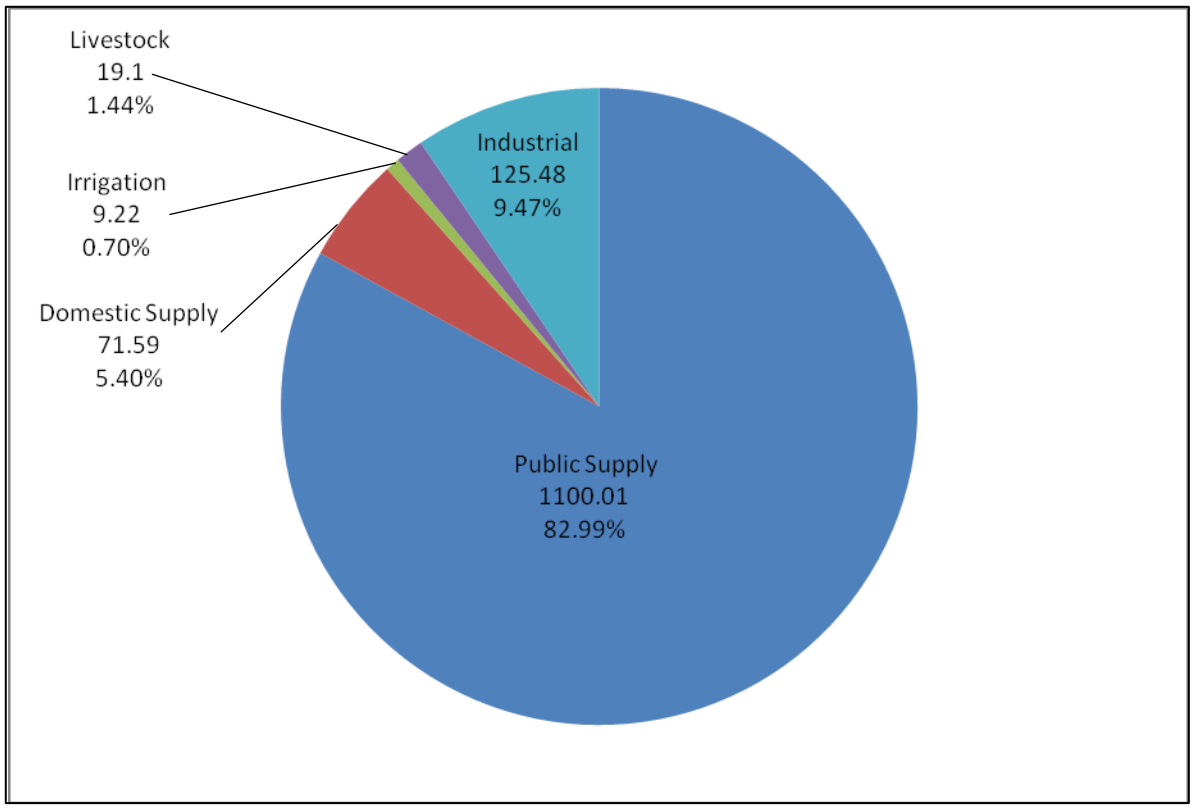
Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	26.18	0.12	1.55	27.86			2.79
Domestic Supply							
Irrigation							
Livestock							
Industrial							
Fossil Fuel Power							
Nuclear Power							
Hydroelectric Power							
Other							

Québec

Data Source: Water use data was provided by the Ministère du Développement durable, de l'Environnement, de la faune 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 new data are available. A regulation to support collection of water withdrawal data has been adopted in June 2011 and updated information about Québec water use should be available for 2012. Please contact Veronique Lavoie at veronique.lavoie@mddep.gouv.qc.ca with questions regarding Québec's data.

Withdrawals: Excluding hydroelectric power, which accounts for 303,895.85 mgd, the total water withdrawal from Québec's St. Lawrence River basin was approximately 1,372.43 mgd.

Figure 13. 2011 Québec Water Use (In millions of gallons per day)
Excludes hydroelectric power.



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

Diversions: Diversions are currently being inventoried.

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. In June 2009, Québec adopted an Act to affirm the collective nature of water resources and provide for increased water resource protection (Water Act). 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 of the Water Act and related regulations.)

JURISDICTION REPORT- Quebec

Withdrawals, Diversions and Consumptive Uses **Units: Mgal(US)/d** **Year Of Data: 2011**

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

JURISDICTION REPORT- Quebec

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2011

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

JURISDICTION REPORT- Quebec

Jurisdiction Totals

Units: Mgal(US)/d
Year Of Data: 2011

Total Report - All Facilities

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

Total Report - Principal Facilities

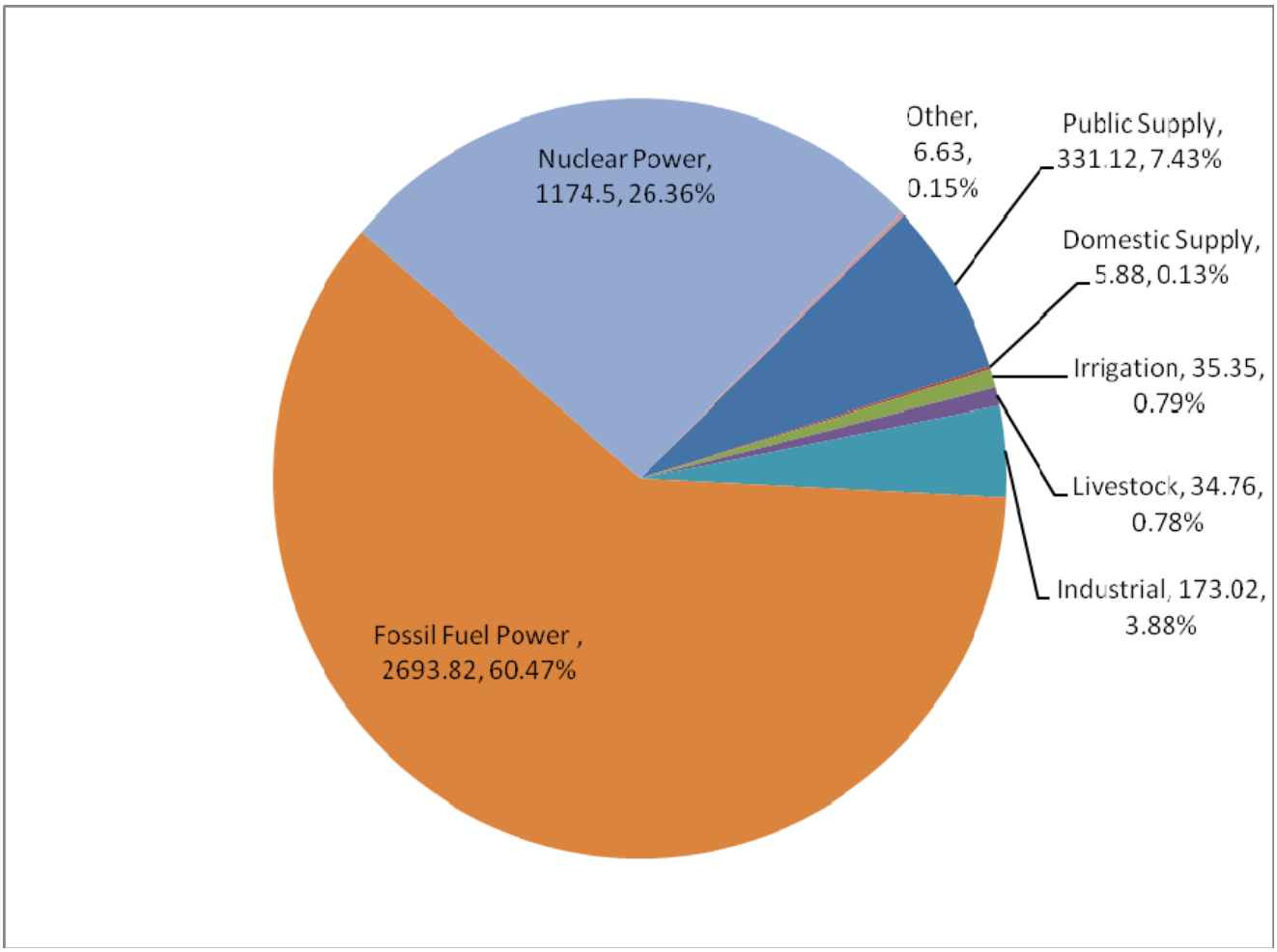
Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	602.58	493.47	0.00	1096.05	0.00	0.00	109.63
Domestic Supply	0.00	0.00	48.61	48.61	0.00	0.00	4.76
Irrigation					0.00	0.00	
Livestock					0.00	0.00	
Industrial	0.00	124.95	0.00	124.95	0.00	0.00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

Wisconsin

Data Sources: Wisconsin 2011 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 data.

Withdrawals: Total withdrawals were 4,455.07 mgd: 4,411.74 mgd from Lake Michigan (99 % of the total) and 43.33 mgd from Lake Superior. Water use in the Lake Michigan basin was primarily for fossil fuel (2,661.80 mgd) and nuclear power (1,174.50 mgd), at 60 percent and 26 percent respectively. Of the Lake Superior uses, the largest single use was for fossil fuel power at 32.02 mgd or 74 percent.

Figure 14. 2011 Wisconsin Water Use (In millions of gallons per day)



Consumptive Use: Consumptive uses from Wisconsin's portion of the basin were calculated to be 138.73 mgd.

Interbasin Diversions: A small diversion remains at the Portage Canal site, with 25.85 mgd flowing from the Wisconsin River (the Mississippi River basin) into the Fox River (the Lake Michigan basin).

JURISDICTION REPORT- Wisconsin

Withdrawals, Diversions and Consumptive Uses **Units: Mgal(US)/d** **Year Of Data: 2011**

Basin	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake Superior							
	Public Supply	0.82		0.10			
	Domestic Supply	0.17		0.02			
	Irrigation	0.00		0.00			
	Livestock	9.72		0.00			
	Industrial	0.59		0.05			
	Fossil Fuel Power	32.02		0.32			
	Other	0.00		0.00			
	Total:	**43.33**		**0.49**			
Lake Michigan							
	Public Supply	330.29		39.64			
	Domestic Supply	5.71		0.69			
	Irrigation	35.35		24.74			
	Livestock	25.04		4.30			
	Industrial	172.42		19.84			
	Fossil Fuel Power	2661.80		34.10			
	Nuclear Power	1174.50		11.74			
	Other	6.63	-25.85	3.19			
	Total:	**4411.74**	**-25.85**	**138.24**			
Grand Total:		**4455.07**	**-25.85**	**138.73**			

JURISDICTION REPORT- Wisconsin

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2011

Basin	Category	All Facilities			Principal Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Lake Superior							
	Public Supply	0.70	0.00	0.12			
	Domestic Supply	0.00	0.00	0.17			
	Irrigation	0.00	0.00	0.00			
	Livestock	0.00	8.09	1.64			
	Industrial	0.00	0.48	0.11			
	Fossil Fuel Power	32.02	0.00	0.00			
	Other	0.00	0.00	0.00			
	Total:	**32.72**	**8.57**	**2.04**			
Lake Michigan							
	Public Supply	261.89	22.34	46.06			
	Domestic Supply	0.12	2.28	3.31			
	Irrigation	0.00	4.21	31.14			
	Livestock	0.00	11.24	13.79			
	Industrial	0.29	157.13	15.01			
	Fossil Fuel Power	2372.95	288.85	0.00			
	Nuclear Power	1174.50	0.00	0.00			
	Other	5.27	0.32	1.05			
	Total:	**3815.02**	**486.37**	**110.35**			
Grand Total:		**3847.74**	**494.94**	**112.39**			

JURISDICTION REPORT- Wisconsin

Jurisdiction Totals

Units: Mgal(US)/d
Year Of Data: 2011

Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	262.60	22.34	46.18	331.12	0.00		39.73
Domestic Supply	0.12	2.28	3.48	5.88	0.00		0.71
Irrigation	0.00	4.21	31.14	35.35	0.00		24.74
Livestock	0.00	19.33	15.43	34.76	0.00		4.30
Industrial	0.29	157.61	15.12	173.02	0.00		19.88
Fossil Fuel Power	2404.97	288.85	0.00	2693.82	0.00		34.42
Nuclear Power	1174.50	0.00	0.00	1174.50	0.00		11.74
Other	5.27	0.32	1.05	6.63	0.00	-25.85	3.19

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							
Other							

Basin Tables

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

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

BASIN REPORT- Lake Superior

Withdrawals, Diversions and Consumptive Uses

Units: Mgal(US)/d

Year Of Data: 2011

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Michigan							
	Public Supply	13.26		1.66	12.64		1.58
	Domestic Supply	0.07		0.01	0.07		0.01
	Irrigation	0.67		0.61	0.60		0.54
	Livestock	11.79		9.44	11.79		9.44
	Industrial	4.66		0.47	4.42		0.44
	Fossil Fuel Power	215.32		0.28	215.32		0.28
	Nuclear Power						
	Hydroelectric Power						
	Other						
	Total	**245.78**		**12.45**	**244.83**		**12.28**
Minnesota							
	Public Supply	38.14	0.00	3.81	37.90	0.00	3.80
	Domestic Supply	1.18	0.00	0.12	1.07	0.00	0.11
	Irrigation	0.42	0.00	0.38	0.23	0.00	0.21
	Livestock	0.71	0.00	0.64	0.64	0.00	0.58
	Industrial	214.36	7.99	21.45	214.05	7.99	21.41
	Fossil Fuel Power	331.06	0.00	6.62	331.04	0.00	6.62
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	3119.40	0.00	0.00	3119.40	0.00	0.00
	Other	0.16	0.00	0.00	0.14	0.00	0.00
	Total	**3705.43**	**7.99**	**33.02**	**3704.47**	**7.99**	**32.73**
Ontario							
	Public Supply	45.77	0.00	6.87	45.58	0.00	6.84
	Domestic Supply	1.75	0.00	0.26	0.00	0.00	0.00
	Irrigation	0.37	0.00			0.00	
	Livestock	0.14	0.00			0.00	
	Industrial	162.12	0.00	10.21	0.00	0.00	0.00
	Fossil Fuel Power	81.06	0.00	0.73	81.06	0.00	0.73
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	24319.41	-4007.75	0.00	24319.41	0.00	0.00
	Other		0.00			0.00	
	Total	**24610.63**	**-4007.75**	**18.07**	**24446.05**	**0.00**	**7.57**

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Wisconsin							
	Public Supply	0.82		0.10			
	Domestic Supply	0.17		0.02			
	Irrigation	0.00		0.00			
	Livestock	9.72		0.00			
	Industrial	0.59		0.05			
	Fossil Fuel Power	32.02		0.32			
	Other	0.00		0.00			
	Total	**43.33**		**0.49**			
Grand Total:		**28605.17**	**-3999.76**	**64.03**	**28395.35**	**7.99**	**52.58**

BASIN REPORT- Lake Superior

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2011

Jurisdiction	Category	All Facilities GLSW	All Facilities OSW	All Facilities GW	Principle Facilities GLSW	Principle Facilities OSW	Principle Facilities GW
Michigan							
	Public Supply	4.78	0.00	8.49	4.78	0.00	7.86
	Domestic Supply	0.00	0.07	0.00	0.00	0.07	0.00
	Irrigation	0.01	0.23	0.44	0.00	0.21	0.39
	Livestock	0.00	10.85	0.94	0.00	10.85	0.94
	Industrial	4.42	0.00	0.24	4.42	0.00	0.00
	Fossil Fuel Power	215.32	0.00	0.00	215.32	0.00	0.00
	Nuclear Power						
	Hydroelectric Power						
	Other						
	TOTAL	**224.52**	**11.15**	**10.11**	**224.52**	**11.13**	**9.19**
Minnesota							
	Public Supply	30.01	1.79	6.34	29.97	1.78	6.15
	Domestic Supply	0.75	0.40	0.03	0.70	0.37	0.00
	Irrigation	0.07	0.31	0.04	0.00	0.23	0.00
	Livestock	0.71	0.00	0.00	0.64	0.00	0.00
	Industrial	127.35	86.85	0.16	127.26	86.65	0.14
	Fossil Fuel Power	185.33	145.72	0.01	185.33	145.71	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	3119.40	0.00	0.00	3119.40	0.00
	Other	0.00	0.00	0.16	0.00	0.00	0.14
	TOTAL	**344.22**	**3354.47**	**6.74**	**343.90**	**3354.14**	**6.43**
Ontario							
	Public Supply	30.10	13.03	2.65	30.07	12.96	2.55
	Domestic Supply	0.00	0.00	1.75	0.00	0.00	0.00
	Irrigation	0.02	0.31	0.05			
	Livestock	0.00	0.14	0.00			
	Industrial	162.12	0.00	0.00	0.00	0.00	0.00
	Fossil Fuel Power	81.06	0.00	0.00	81.06	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	24319.41	0.00	0.00	24319.41	0.00
	Other						
	TOTAL	**273.30**	**24332.89**	**4.44**	**111.13**	**24332.37**	**2.55**
Wisconsin							
	Public Supply	0.70	0.00	0.12			
	Domestic Supply	0.00	0.00	0.17			
	Irrigation	0.00	0.00	0.00			
	Livestock	0.00	8.09	1.64			
	Industrial	0.00	0.48	0.11			
	Fossil Fuel Power	32.02	0.00	0.00			
	Other	0.00	0.00	0.00			
	TOTAL	**32.72**	**8.57**	**2.04**			

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Grand Total:		**874.76**	**27707.08**	**23.34**	**679.55**	**27697.64**	**18.17**

BASIN REPORT- Lake Superior

Basin Total

Units: Mgal(US)/d

Year Of Data: 2011

Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	65.59	14.82	17.60	98.00	-0.32	0.00	12.44
Domestic Supply	0.75	0.47	1.95	3.17	0.00	0.00	0.41
Irrigation	0.10	0.84	0.52	1.47	0.00	0.00	0.99
Livestock	0.71	19.08	2.58	22.37	0.00	0.00	10.08
Industrial	293.89	87.33	0.51	381.74	0.00	7.99	32.18
Fossil Fuel Power	513.72	145.72	0.01	659.45	0.00	0.00	7.95
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	27438.81	0.00	27438.81	0.00	-4007.75	0.00
Other	0.00	0.00	0.16	0.16	0.00	0.00	0.00

Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	64.82	14.74	16.56	96.11	-0.32	0.00	12.22
Domestic Supply	0.70	0.44	0.00	1.14	0.00	0.00	0.12
Irrigation	0.00	0.44	0.39	0.83	0.00	0.00	0.75
Livestock	0.64	10.85	0.94	12.43	0.00	0.00	10.02
Industrial	131.68	86.65	0.14	218.47	0.00	7.99	21.85
Fossil Fuel Power	481.71	145.71	0.00	627.42	0.00	0.00	7.63
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	27438.81	0.00	27438.81	0.00	0.00	0.00
Other	0.00	0.00	0.14	0.14	0.00	0.00	0.00

BASIN REPORT- Lake Michigan

Withdrawals, Diversions and Consumptive Uses

Units: Mgal(US)/d

Year Of Data: 2011

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Illinois							
	Public Supply	898.97	898.97	0.00	898.97	898.97	0.00
	Domestic Supply	2.13	2.12	0.00	2.13	2.12	0.00
	Irrigation	0.14	0.00	0.00	0.14	0.00	0.00
	Livestock						
	Industrial	10.70	0.02	0.03	10.70	0.02	0.03
	Fossil Fuel Power	886.17	0.00	0.00	886.17	0.00	0.00
	Nuclear Power	31.68	0.00	0.00	31.68	0.00	0.00
	Hydroelectric Power						
	Other	229.74	229.74	0.00	229.74	229.74	0.00
	Total	**2059.52**	**1130.85**	**0.03**	**2059.52**	**1130.85**	**0.03**
Indiana							
	Public Supply	130.84	50.53	19.63	130.50	50.53	19.57
	Irrigation	46.30	0.00	41.67	45.64	0.00	41.07
	Livestock	4.00	0.00	3.20	3.97	0.00	3.18
	Industrial	1622.03	23.21	97.32	1621.68	23.21	97.30
	Fossil Fuel Power	729.64	0.00	14.59	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	1955.59	0.00	0.00	1955.59	0.00	0.00
	Other	0.07	0.00	0.01	0.04	0.00	0.00
	Total	**4488.47**	**73.73**	**176.42**	**3757.42**	**73.73**	**161.12**
Michigan							
	Public Supply	260.11		32.51	252.73		31.59
	Domestic Supply	7.21		0.90	6.38		0.80
	Irrigation	201.60		181.44	187.56		168.80
	Livestock	23.63		18.90	20.32		16.26
	Industrial	220.39		22.04	218.29		21.83
	Fossil Fuel Power	1132.22		74.78	1132.20		74.78
	Nuclear Power	2376.97		15.35	2376.97		15.35
	Hydroelectric Power						
	Other	6.09		0.00	6.03		0.00
	Total	**4228.22**		**345.93**	**4200.47**		**329.41**

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Wisconsin							
	Public Supply	330.29		39.64			
	Domestic Supply	5.71		0.69			
	Irrigation	35.35		24.74			
	Livestock	25.04		4.30			
	Industrial	172.42		19.84			
	Fossil Fuel Power	2661.80		34.10			
	Nuclear Power	1174.50		11.74			
	Other	6.63	-25.85	3.19			
	Total	**4411.74**	**-25.85**	**138.24**			
Grand Total:		**15187.96**	**1178.73**	**660.61**	**10017.42**	**1204.58**	**490.55**

BASIN REPORT- Lake Michigan

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2011

Jurisdiction	Category	All Facilities GLSW	All Facilities OSW	All Facilities GW	Principle Facilities GLSW	Principle Facilities OSW	Principle Facilities GW
Illinois							
	Public Supply	898.97	0.00	0.00	898.97	0.00	0.00
	Domestic Supply	2.12	0.00	0.01	2.12	0.00	0.01
	Irrigation	0.02	0.00	0.12	0.02	0.00	0.12
	Livestock						
	Industrial	10.70	0.00	0.00	10.70	0.00	0.00
	Fossil Fuel Power	886.17	0.00	0.00	886.17	0.00	0.00
	Nuclear Power	31.68	0.00	0.00	31.68	0.00	0.00
	Hydroelectric Power						
	Other	229.74	0.00	0.00	229.74	0.00	0.00
	TOTAL	**2059.40**	**0.00**	**0.13**	**2059.40**	**0.00**	**0.13**
Indiana							
	Public Supply	89.27	0.00	41.57	89.27	0.00	41.23
	Irrigation	0.00	8.14	38.16	0.00	7.87	37.77
	Livestock	0.00	1.21	2.79	0.00	1.21	2.76
	Industrial	1612.39	3.70	5.94	1612.39	3.67	5.62
	Fossil Fuel Power	0.00	729.64	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	1955.59	0.00	0.00	1955.59	0.00
	Other	0.00	0.00	0.07	0.00	0.00	0.04
	TOTAL	**1701.66**	**2698.28**	**88.53**	**1701.66**	**1968.34**	**87.42**
Michigan							
	Public Supply	118.83	0.00	141.28	118.83	0.00	133.89
	Domestic Supply	0.00	2.97	4.24	0.00	2.95	3.43
	Irrigation	0.26	52.68	148.66	0.24	47.64	139.68
	Livestock	0.00	10.46	13.17	0.00	10.01	10.31
	Industrial	44.20	125.05	51.14	44.19	124.90	49.20
	Fossil Fuel Power	684.29	445.77	2.16	684.29	445.77	2.15
	Nuclear Power	2376.97	0.00	0.00	2376.97	0.00	0.00
	Hydroelectric Power						
	Other	0.00	0.00	6.09	0.00	0.00	6.03
	TOTAL	**3224.55**	**636.94**	**366.74**	**3224.51**	**631.27**	**344.69**
Wisconsin							
	Public Supply	261.89	22.34	46.06			
	Domestic Supply	0.12	2.28	3.31			
	Irrigation	0.00	4.21	31.14			
	Livestock	0.00	11.24	13.79			
	Industrial	0.29	157.13	15.01			
	Fossil Fuel Power	2372.95	288.85	0.00			
	Nuclear Power	1174.50	0.00	0.00			
	Other	5.27	0.32	1.05			
	TOTAL	**3815.02**	**486.37**	**110.35**			

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Grand Total:		**10800.62**	**3821.58**	**565.75**	**6985.57**	**2599.61**	**432.24**

BASIN REPORT- Lake Michigan

Basin Total

Units: Mgal(US)/d

Year Of Data: 2011

Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	1368.97	22.34	228.91	1620.22	0.40	949.50	91.78
Domestic Supply	2.24	5.25	7.56	15.05	0.00	2.12	1.59
Irrigation	0.28	65.03	218.07	283.38	0.00	0.00	247.85
Livestock	0.00	22.92	29.75	52.67	0.00	0.00	26.40
Industrial	1667.57	285.88	72.09	2025.54	0.00	23.22	139.22
Fossil Fuel Power	3943.41	1464.26	2.16	5409.83	0.00	0.00	123.47
Nuclear Power	3583.15	0.00	0.00	3583.15	0.00	0.00	27.10
Hydroelectric Power	0.00	1955.59	0.00	1955.59	0.00	0.00	0.00
Other	235.00	0.32	7.21	242.53	0.00	203.89	3.20

Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	1107.08	0.00	175.12	1282.20	0.40	949.50	51.16
Domestic Supply	2.12	2.95	3.44	8.51	0.00	2.12	0.80
Irrigation	0.26	55.51	177.56	233.34	0.00	0.00	209.87
Livestock	0.00	11.22	13.07	24.29	0.00	0.00	19.44
Industrial	1667.28	128.57	54.82	1850.66	0.00	23.22	119.15
Fossil Fuel Power	1570.45	445.77	2.15	2018.37	0.00	0.00	74.78
Nuclear Power	2408.65	0.00	0.00	2408.65	0.00	0.00	15.35
Hydroelectric Power	0.00	1955.59	0.00	1955.59	0.00	0.00	0.00
Other	229.74	0.00	6.07	235.81	0.00	229.74	0.00

BASIN REPORT- Lake Huron

Withdrawals, Diversions and Consumptive Uses

Units: Mgal(US)/d

Year Of Data: 2011

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Michigan							
	Public Supply	115.68		14.46	112.05		14.01
	Domestic Supply	0.41		0.05	0.31		0.04
	Irrigation	24.86		22.37	23.25		20.92
	Livestock	5.61		4.49	5.02		4.02
	Industrial	67.72		6.77	67.41		6.74
	Fossil Fuel Power	688.94		4.14	688.94		3.90
	Nuclear Power						
	Hydroelectric Power						
	Other						
	Total	**903.22**		**52.29**	**896.98**		**49.63**
Ontario							
	Public Supply	84.37	0.00	12.65	81.66	0.00	12.25
	Domestic Supply	10.61	0.00	1.59	0.00	0.00	0.00
	Irrigation	20.91	0.00			0.00	
	Livestock	12.41	0.00			0.00	
	Industrial	190.19	0.00	11.98	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	5695.74	0.00	51.26	5695.74	0.00	51.26
	Hydroelectric Power	36685.57	0.00	0.00	36685.57	0.00	0.00
	Other	47.97	0.00	0.00	47.97	0.00	0.00
	Total	**42747.78**	**0.00**	**77.49**	**42510.94**	**0.00**	**63.51**
Grand Total:		**43651.00**	**0.00**	**129.77**	**43407.92**	**0.00**	**113.14**

BASIN REPORT- Lake Huron

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2011

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Michigan							
	Public Supply	92.76	0.31	22.61	92.55	0.31	19.19
	Domestic Supply	0.00	0.01	0.40	0.00	0.00	0.31
	Irrigation	0.17	13.00	11.69	0.15	12.02	11.07
	Livestock	0.00	1.38	4.23	0.00	1.38	3.64
	Industrial	29.43	37.26	1.03	29.43	37.22	0.76
	Fossil Fuel Power	161.75	525.98	1.21	161.75	525.98	1.21
	Nuclear Power						
	Hydroelectric Power						
	Other						
	TOTAL	**284.12**	**577.93**	**41.17**	**283.88**	**576.91**	**36.18**
Ontario							
	Public Supply	42.66	23.57	18.14	42.02	23.23	16.40
	Domestic Supply	0.00	0.00	10.61	0.00	0.00	0.00
	Irrigation	0.15	15.41	5.35			
	Livestock	2.93	3.07	6.41			
	Industrial	187.41	0.00	2.78	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	5695.74	0.00	0.00	5695.74	0.00	0.00
	Hydroelectric Power	19195.27	17490.30	0.00	19195.27	17490.30	0.00
	Other	0.00	47.97	0.00	0.00	47.97	0.00
	TOTAL	**25124.17**	**17580.32**	**43.29**	**24933.03**	**17561.50**	**16.40**
Grand Total:		**25408.28**	**18158.25**	**84.46**	**25216.92**	**18138.41**	**52.59**

BASIN REPORT- Lake Huron

Basin Total

Units: Mgal(US)/d
Year Of Data: 2011

Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	135.42	23.87	40.75	200.05	0.00	0.00	27.11
Domestic Supply	0.00	0.01	11.00	11.01	0.00	0.00	1.64
Irrigation	0.33	28.41	17.04	45.78	0.00	0.00	22.37
Livestock	2.93	4.45	10.64	18.02	0.00	0.00	4.49
Industrial	216.84	37.26	3.81	257.91	0.00	0.00	18.75
Fossil Fuel Power	161.75	525.98	1.21	688.94	0.00	0.00	4.14
Nuclear Power	5695.74	0.00	0.00	5695.74	0.00	0.00	51.26
Hydroelectric Power	19195.27	17490.30	0.00	36685.57	0.00	0.00	0.00
Other	0.00	47.97	0.00	47.97	47.97	0.00	0.00

Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	134.57	23.54	35.60	193.71	0.00	0.00	26.25
Domestic Supply	0.00	0.00	0.31	0.31	0.00	0.00	0.04
Irrigation	0.15	12.02	11.07	23.25	0.00	0.00	20.92
Livestock	0.00	1.38	3.64	5.02	0.00	0.00	4.02
Industrial	29.43	37.22	0.76	67.41	0.00	0.00	6.74
Fossil Fuel Power	161.75	525.98	1.21	688.94	0.00	0.00	3.90
Nuclear Power	5695.74	0.00	0.00	5695.74	0.00	0.00	51.26
Hydroelectric Power	19195.27	17490.30	0.00	36685.57	0.00	0.00	0.00
Other	0.00	47.97	0.00	47.97	47.97	0.00	0.00

BASIN REPORT- Lake Erie

Withdrawals, Diversions and Consumptive Uses

Units: Mgal(US)/d

Year Of Data: 2011

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Indiana							
	Public Supply	39.79	7.47	5.97	39.71	7.47	5.96
	Domestic Supply	0.60	0.00	0.09	0.46	0.00	0.07
	Irrigation	1.37	0.00	1.23	1.14	0.00	1.02
	Livestock	0.00	0.00	0.00	0.00	0.00	0.00
	Industrial	7.60	0.00	0.46	7.42	0.00	0.45
	Fossil Fuel Power	0.27	0.00	0.01	0.27	0.00	0.01
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.05	0.00	0.01	0.05	0.00	0.01
	Total	**49.68**	**7.47**	**7.77**	**49.05**	**7.47**	**7.52**
Michigan							
	Public Supply	646.48		80.81	643.17		80.40
	Domestic Supply	0.30		0.04	0.11		0.01
	Irrigation	17.07		15.37	15.60		14.04
	Livestock	0.76		0.61	0.15		0.12
	Industrial	302.50		30.25	302.07		30.21
	Fossil Fuel Power	4066.44		39.89	4066.44		39.89
	Nuclear Power	57.84		18.91	57.84		18.91
	Hydroelectric Power						
	Other	3.60		0.00	3.59		0.00
	Total	**5094.99**		**185.88**	**5088.98**		**183.58**
New York							
	Public Supply	207.60	0.00	20.76	207.45	0.00	20.75
	Domestic Supply	0.57	0.00	0.06	0.57	0.00	0.06
	Irrigation	8.01	0.00	7.21	6.97	0.00	6.27
	Livestock	0.00	0.00		0.00	0.00	0.00
	Industrial	175.11	0.00	29.37	175.05	0.00	29.37
	Fossil Fuel Power	504.00	0.00	10.08	504.00	0.00	10.08
	Nuclear Power	0.00	0.00		0.00	0.00	0.00
	Hydroelectric Power	47463.00	0.00	0.00	47463.00	0.00	0.00
	Other	3.97	0.00	0.40	3.86	0.00	0.39
	Total	**48362.27**	**0.00**	**67.88**	**48360.90**	**0.00**	**66.91**

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Ohio							
	Public Supply	543.40	0.32	81.51	542.13	0.32	81.32
	Domestic Supply	58.95	0.00	8.84	0.30	0.00	0.05
	Irrigation	23.04	0.00	20.74	21.77	0.00	19.59
	Livestock	11.70	0.00	9.36	0.87	0.00	0.69
	Industrial	226.85	0.00	17.77	226.34	0.00	17.73
	Fossil Fuel Power	2073.22	0.00	20.73	2073.22	0.00	20.73
	Nuclear Power	127.82	0.00	12.78	127.82	0.00	12.78
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	8.55	-11.25	1.84	8.53	-11.25	1.83
	Total	**3073.53**	**-10.93**	**173.57**	**3000.98**	**-10.93**	**154.72**
Ontario							
	Public Supply	93.89	0.00	14.08	92.84	0.00	13.92
	Domestic Supply	19.94	0.00	2.99	0.00	0.00	0.00
	Irrigation	31.85	0.00			0.00	
	Livestock	13.22	0.00			0.00	
	Industrial	180.45	0.00	11.37	0.00	0.00	0.00
	Fossil Fuel Power	1479.36	0.00	13.31	1479.36	0.00	13.31
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	560.31	0.00	0.00	560.31	0.00	0.00
	Other		0.00			0.00	
	Total	**2379.03**	**0.00**	**41.76**	**2132.51**	**0.00**	**27.24**
Pennsylvania							
	Public Supply	28.07		2.81	27.86		2.79
	Domestic Supply						
	Irrigation						
	Livestock						
	Industrial	0.10		0.01			
	Fossil Fuel Power						
	Nuclear Power						
	Hydroelectric Power						
	Other	0.04					
	Total	**28.21**		**2.82**	**27.86**		**2.79**
Grand Total:		**58987.70**	**-3.46**	**479.67**	**58660.28**	**-3.46**	**442.75**

BASIN REPORT- Lake Erie

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2011

Jurisdiction	Category	All Facilities GLSW	All Facilities OSW	All Facilities GW	Principle Facilities GLSW	Principle Facilities OSW	Principle Facilities GW
Indiana							
	Public Supply	0.00	33.80	5.99	0.00	33.80	5.91
	Domestic Supply	0.00	0.00	0.60	0.00	0.00	0.46
	Irrigation	0.00	0.37	1.00	0.00	0.28	0.86
	Livestock	0.00	0.00	0.00	0.00	0.00	0.00
	Industrial	0.00	2.97	4.63	0.00	2.97	4.45
	Fossil Fuel Power	0.00	0.00	0.27	0.00	0.00	0.27
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.05	0.00	0.00	0.05
	TOTAL	**0.00**	**37.14**	**12.54**	**0.00**	**37.05**	**12.00**
Michigan							
	Public Supply	593.35	19.31	33.82	593.35	19.23	30.59
	Domestic Supply	0.00	0.00	0.29	0.00	0.00	0.11
	Irrigation	0.17	8.75	8.16	0.14	7.96	7.50
	Livestock	0.00	0.28	0.48	0.00	0.15	0.00
	Industrial	261.14	11.07	30.28	261.14	11.05	29.89
	Fossil Fuel Power	3933.36	133.03	0.05	3933.36	133.03	0.05
	Nuclear Power	57.84	0.00	0.00	57.84	0.00	0.00
	Hydroelectric Power						
	Other	0.00	2.51	1.09	0.00	2.51	1.08
	TOTAL	**4845.85**	**174.95**	**74.19**	**4845.82**	**173.93**	**69.23**
New York							
	Public Supply	198.28	7.93	1.40	198.28	7.93	1.25
	Domestic Supply	0.00	0.57	0.00	0.00	0.57	0.00
	Irrigation	0.31	7.21	0.50	0.16	6.52	0.29
	Livestock	0.00	0.00	0.00	0.00	0.00	0.00
	Industrial	133.22	38.56	3.33	133.22	38.51	3.32
	Fossil Fuel Power	504.00	0.00	0.00	504.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	47463.00	0.00	0.00	47463.00	0.00	0.00
	Other	0.00	2.69	1.28	0.00	2.60	1.26
	TOTAL	**48298.80**	**56.95**	**6.51**	**48298.66**	**56.12**	**6.13**

Jurisdiction	Category	All Facilities			Principle Facilities		
		GLSW	OSW	GW	GLSW	OSW	GW
Ohio							
	Public Supply	399.22	113.64	30.54	399.22	113.59	29.32
	Domestic Supply	0.32	0.00	58.63	0.30	0.00	0.00
	Irrigation	0.39	20.32	2.33	0.37	19.41	1.99
	Livestock	0.00	1.27	10.43	0.00	0.21	0.66
	Industrial	59.02	111.44	56.39	59.02	111.36	55.96
	Fossil Fuel Power	1464.43	608.79	0.00	1464.43	608.79	0.00
	Nuclear Power	127.82	0.00	0.00	127.82	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.31	7.69	0.55	0.31	7.67	0.55
	TOTAL	**2051.51**	**863.15**	**158.87**	**2051.47**	**861.03**	**88.48**
Ontario							
	Public Supply	8.97	29.26	55.66	8.97	29.23	54.64
	Domestic Supply	0.00	0.00	19.94	0.00	0.00	0.00
	Irrigation	0.59	12.11	19.15			
	Livestock	0.02	0.89	12.31			
	Industrial	173.24	0.00	7.21	0.00	0.00	0.00
	Fossil Fuel Power	1479.36	0.00	0.00	1479.36	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	560.31	0.00	0.00	560.31	0.00
	Other						
	TOTAL	**1662.18**	**602.57**	**114.27**	**1488.33**	**589.54**	**54.64**
Pennsylvania							
	Public Supply	26.18	0.14	1.75	26.18	0.12	1.55
	Domestic Supply						
	Irrigation						
	Livestock						
	Industrial	0.00	0.00	0.10			
	Fossil Fuel Power						
	Nuclear Power						
	Hydroelectric Power						
	Other	0.00	0.00	0.04			
	TOTAL	**26.18**	**0.14**	**1.88**	**26.18**	**0.12**	**1.55**
Grand Total:		**56884.53**	**1734.91**	**368.27**	**56710.46**	**1717.79**	**232.03**

BASIN REPORT- Lake Erie

Basin Total

Units: Mgal(US)/d

Year Of Data: 2011

Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	1225.99	204.08	129.16	1559.23	-0.08	7.79	205.94
Domestic Supply	0.32	0.57	79.46	80.35	0.00	0.00	12.01
Irrigation	1.46	48.75	31.15	81.35	0.00	0.00	44.55
Livestock	0.02	2.43	23.23	25.68	0.00	0.00	9.97
Industrial	626.62	164.05	101.94	892.60	0.00	0.00	89.23
Fossil Fuel Power	7381.15	741.82	0.32	8123.30	0.00	0.00	84.02
Nuclear Power	185.66	0.00	0.00	185.66	0.00	0.00	31.69
Hydroelectric Power	47463.00	560.31	0.00	48023.31	0.00	0.00	0.00
Other	0.31	12.89	3.01	16.21	5816.39	-11.25	2.25

Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	1225.99	203.89	123.27	1553.16	-0.08	7.79	205.13
Domestic Supply	0.30	0.57	0.57	1.44	0.00	0.00	0.19
Irrigation	0.67	34.17	10.64	45.48	0.00	0.00	40.92
Livestock	0.00	0.36	0.66	1.02	0.00	0.00	0.81
Industrial	453.38	163.89	93.62	710.88	0.00	0.00	77.75
Fossil Fuel Power	7381.15	741.82	0.32	8123.30	0.00	0.00	84.02
Nuclear Power	185.66	0.00	0.00	185.66	0.00	0.00	31.69
Hydroelectric Power	47463.00	560.31	0.00	48023.31	0.00	0.00	0.00
Other	0.31	12.78	2.94	16.03	5816.39	-11.25	2.23

BASIN REPORT- Lake Ontario

Withdrawals, Diversions and Consumptive Uses

Units: Mgal(US)/d

Year Of Data: 2011

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
New York							
	Public Supply	237.30	9.59	41.19	235.74	0.00	23.57
	Domestic Supply	36.17	0.00	2.41	36.17	0.00	2.41
	Irrigation	57.10	0.00	51.39	53.08	0.00	47.78
	Livestock	20.91	0.00	3.25	20.12	0.00	2.62
	Industrial	111.02	0.00	38.08	110.75	0.00	38.02
	Fossil Fuel Power	687.17	0.00	13.91	687.08	0.00	13.87
	Nuclear Power	1371.10	0.00	219.95	1371.10	0.00	219.95
	Hydroelectric Power	80908.00	0.00		80908.00	0.00	0.00
	Other	10.26	32.00	1.03	10.14	0.00	1.01
	Total	**83439.03**	**41.59**	**371.21**	**83432.19**	**0.00**	**349.23**
Ontario							
	Public Supply	465.93	0.00	69.89	464.62	0.00	69.69
	Domestic Supply	64.17	0.00	9.63	0.00	0.00	0.00
	Irrigation	17.73	0.00			0.00	
	Livestock	5.40	0.00			0.00	
	Industrial	229.64	0.00	14.47	0.00	0.00	0.00
	Fossil Fuel Power	723.03	0.00	6.51	723.03	0.00	6.51
	Nuclear Power	6606.47	0.00	59.46	6606.47	0.00	59.46
	Hydroelectric Power	50114.76	0.00	0.00	50114.76	0.00	0.00
	Other	132.35	0.00	0.00	132.35	0.00	0.00
	Total	**58359.48**	**0.00**	**159.95**	**58041.23**	**0.00**	**135.66**
Pennsylvania							
	Public Supply	0.04		0.00			
	Total	**0.04**		**0.00**			
Grand Total:		**141798.55**	**41.59**	**531.16**	**141473.42**	**0.00**	**484.88**

BASIN REPORT- Lake Ontario

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2011

Jurisdiction	Category	All Facilities GLSW	All Facilities OSW	All Facilities GW	Principle Facilities GLSW	Principle Facilities OSW	Principle Facilities GW
New York							
	Public Supply	88.43	138.78	10.08	88.43	138.30	9.01
	Domestic Supply	0.00	35.83	0.34	0.00	35.83	0.34
	Irrigation	0.02	51.35	5.73	0.00	48.25	4.83
	Livestock	0.00	20.05	0.86	0.00	19.68	0.44
	Industrial	14.16	84.78	12.09	14.16	84.68	11.92
	Fossil Fuel Power	406.70	280.46	0.00	406.70	280.38	0.00
	Nuclear Power	1371.10	0.00	0.00	1371.10	0.00	0.00
	Hydroelectric Power	0.00	80908.00	0.00	0.00	80908.00	0.00
	Other	0.00	9.80	0.46	0.00	9.69	0.45
	TOTAL	**1880.41**	**81529.05**	**29.57**	**1880.39**	**81524.81**	**26.99**
Ontario							
	Public Supply	401.52	52.86	11.56	401.47	52.68	10.47
	Domestic Supply	0.00	0.00	64.17	0.00	0.00	0.00
	Irrigation	1.08	9.53	7.12			
	Livestock	0.00	0.94	4.46			
	Industrial	218.17	0.00	11.46	0.00	0.00	0.00
	Fossil Fuel Power	723.03	0.00	0.00	723.03	0.00	0.00
	Nuclear Power	6606.47	0.00	0.00	6606.47	0.00	0.00
	Hydroelectric Power	37265.43	12849.33	0.00	37265.43	12849.33	0.00
	Other	0.00	132.35	0.00	0.00	132.35	0.00
	TOTAL	**45215.71**	**13045.00**	**98.77**	**44996.41**	**13034.36**	**10.47**
Pennsylvania							
	Public Supply	0.00	0.00	0.04			
	TOTAL	**0.00**	**0.00**	**0.04**			
Grand Total:		**47096.12**	**94574.05**	**128.39**	**46876.80**	**94559.17**	**37.46**

BASIN REPORT- Lake Ontario

Basin Total

Units: Mgal(US)/d

Year Of Data: 2011

Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	489.95	191.63	21.68	703.27	0.00	9.59	111.08
Domestic Supply	0.00	35.83	64.51	100.34	0.00	0.00	12.03
Irrigation	1.10	60.88	12.86	74.83	0.00	0.00	51.39
Livestock	0.00	20.99	5.32	26.31	0.00	0.00	3.25
Industrial	232.33	84.78	23.55	340.66	0.00	0.00	52.55
Fossil Fuel Power	1129.73	280.46	0.00	1410.20	0.00	0.00	20.42
Nuclear Power	7977.57	0.00	0.00	7977.57	0.00	0.00	279.41
Hydroelectric Power	37265.43	93757.33	0.00	131022.76	0.00	0.00	0.00
Other	0.00	142.15	0.46	142.61	-5802.39	32.00	1.03

Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	489.91	190.98	19.48	700.37	0.00	0.00	93.27
Domestic Supply	0.00	35.83	0.34	36.17	0.00	0.00	2.41
Irrigation	0.00	48.25	4.83	53.08	0.00	0.00	47.78
Livestock	0.00	19.68	0.44	20.12	0.00	0.00	2.62
Industrial	14.16	84.68	11.92	110.75	0.00	0.00	38.02
Fossil Fuel Power	1129.73	280.38	0.00	1410.11	0.00	0.00	20.37
Nuclear Power	7977.57	0.00	0.00	7977.57	0.00	0.00	279.41
Hydroelectric Power	37265.43	93757.33	0.00	131022.76	0.00	0.00	0.00
Other	0.00	142.04	0.45	142.49	-5802.39	0.00	1.01

BASIN REPORT- St. Lawrence River

Withdrawals, Diversions and Consumptive Uses

Units: Mgal(US)/d

Year Of Data: 2011

Jurisdiction	Category	All Facilities			Principal Facilities		
		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
New York							
	Public Supply	27.51	0.00	5.18	26.35	0.00	5.06
	Domestic Supply	1.35	0.00	0.14	1.25	0.00	0.12
	Irrigation	3.29	0.00	2.96	2.64	0.00	2.38
	Livestock	4.55	0.00	0.69	4.32	0.00	0.51
	Industrial	40.04	0.00	4.41	39.87	0.00	4.37
	Fossil Fuel Power	1.44	0.00	0.72	1.44	0.00	0.72
	Nuclear Power	0.00	0.00		0.00	0.00	0.00
	Hydroelectric Power	177970.00	0.00	0.00	177970.00	0.00	0.00
	Other	1.37	0.00	0.20	1.30	0.00	0.19
	Total	**178049.54**	**0.00**	**14.30**	**178047.16**	**0.00**	**13.36**
Ontario							
	Public Supply	73.03	0.00	10.96	72.08	0.00	10.82
	Domestic Supply	11.45	0.00	1.72	0.00	0.00	0.00
	Irrigation	2.35	0.00			0.00	
	Livestock	5.91	0.00			0.00	
	Industrial	160.81	0.00	10.13	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	240293.00	0.00	0.00	240293.00	0.00	0.00
	Other	19.28	0.00	0.00	19.28	0.00	0.00
	Total	**240565.84**	**0.00**	**22.80**	**240384.37**	**0.00**	**10.82**
Quebec							
	Public Supply	1100.01	0.00	109.90	1096.05	0.00	109.63
	Domestic Supply	71.59	0.00	7.13	48.61	0.00	4.76
	Irrigation	9.22	0.00	8.30		0.00	
	Livestock	19.10	0.00	15.28		0.00	
	Industrial	125.48	0.00	12.55	124.95	0.00	12.50
	Fossil Fuel Power	47.02	0.00	4.70	47.02	0.00	4.70
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	303895.85	0.00	0.00	303895.85	0.00	0.00
	Other		0.00			0.00	
	Total	**305268.28**	**0.00**	**157.86**	**305212.48**	**0.00**	**131.58**
Grand Total:		**723883.66**	**0.00**	**194.96**	**723644.02**	**0.00**	**155.76**

BASIN REPORT- St. Lawrence River

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2011

Jurisdiction	Category	All Facilities GLSW	All Facilities OSW	All Facilities GW	Principle Facilities GLSW	Principle Facilities OSW	Principle Facilities GW
New York							
	Public Supply	3.92	15.63	7.96	3.87	15.24	7.23
	Domestic Supply	0.00	0.43	0.92	0.00	0.43	0.82
	Irrigation	0.03	2.74	0.52	0.00	2.43	0.21
	Livestock	0.00	4.38	0.17	0.00	4.21	0.11
	Industrial	2.74	36.23	1.08	2.68	36.18	1.01
	Fossil Fuel Power	1.44	0.00	0.00	1.44	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	79278.00	98692.00	0.00	79278.00	98692.00	0.00
	Other	0.00	1.02	0.34	0.00	0.96	0.34
	TOTAL	**79286.13**	**98752.43**	**10.98**	**79285.99**	**98751.46**	**9.71**
Ontario							
	Public Supply	10.64	58.84	3.56	10.64	58.52	2.93
	Domestic Supply	0.00	0.00	11.45	0.00	0.00	0.00
	Irrigation	0.01	2.04	0.30			
	Livestock	0.00	3.63	2.28			
	Industrial	159.76	0.00	1.05	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	133431.98	106861.02	0.00	133431.98	106861.02	0.00
	Other	0.00	19.28	0.00	0.00	19.28	0.00
	TOTAL	**133602.38**	**106944.81**	**18.65**	**133442.61**	**106938.83**	**2.93**
Quebec							
	Public Supply	602.84	497.17	0.00	602.58	493.47	0.00
	Domestic Supply	0.00	0.00	71.59	0.00	0.00	48.61
	Irrigation	0.00	0.00	9.22			
	Livestock	0.00	0.00	19.10			
	Industrial	0.00	125.48	0.00	0.00	124.95	0.00
	Fossil Fuel Power	39.10	7.93	0.00	39.10	7.93	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	170946.25	132949.60	0.00	170946.25	132949.60	0.00
	Other						
	TOTAL	**171588.19**	**133580.18**	**99.91**	**171587.93**	**133575.95**	**48.61**
Grand Total:		**384476.70**	**339277.42**	**129.54**	**384316.53**	**339266.23**	**61.25**

BASIN REPORT- St. Lawrence River

Basin Total

Units: Mgal(US)/d

Year Of Data: 2011

Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	617.40	571.64	11.52	1200.55	0.00	0.00	126.03
Domestic Supply	0.00	0.43	83.96	84.39	0.00	0.00	8.98
Irrigation	0.04	4.78	10.04	14.86	0.00	0.00	11.26
Livestock	0.00	8.01	21.55	29.56	0.00	0.00	15.97
Industrial	162.50	161.71	2.13	326.33	0.00	0.00	27.09
Fossil Fuel Power	40.54	7.93	0.00	48.46	0.00	0.00	5.42
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	383656.23	338502.62	0.00	722158.85	0.00	0.00	0.00
Other	0.00	20.31	0.34	20.65	0.00	0.00	0.20

Total Report - Principal Facilities

Category	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Supply	617.09	567.24	10.16	1194.48	0.00	0.00	125.51
Domestic Supply	0.00	0.43	49.42	49.85	0.00	0.00	4.88
Irrigation	0.00	2.43	0.21	2.64	0.00	0.00	2.38
Livestock	0.00	4.21	0.11	4.32	0.00	0.00	0.51
Industrial	2.68	161.13	1.01	164.82	0.00	0.00	16.87
Fossil Fuel Power	40.54	7.93	0.00	48.46	0.00	0.00	5.42
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	383656.23	338502.62	0.00	722158.85	0.00	0.00	0.00
Other	0.00	20.24	0.34	20.59	0.00	0.00	0.19

Water Use Category Tables

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

- Water use by jurisdiction
- Water use by basin

WATER-USE CATEGORY REPORT- Public Supply

Units: Mgal(US)/d
Year Of Data: 2011

Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	898.97	0.00	0.00	898.97	0.00	898.97	0.00
Indiana	89.27	33.80	47.56	170.63	0.00	58.00	25.60
Michigan	809.72	19.62	206.19	1035.54	0.00		129.44
Minnesota	30.01	1.79	6.34	38.14	0.00	0.00	3.81
New York	290.63	162.33	19.44	472.41	0.00	9.59	67.13
Ohio	399.22	113.64	30.54	543.40	0.00	0.32	81.51
Ontario	493.88	177.55	91.57	763.00	0.00	0.00	114.45
Pennsylvania	26.18	0.14	1.79	28.11			2.81
Quebec	602.84	497.17	0.00	1100.01	0.00	0.00	109.90
Wisconsin	262.60	22.34	46.18	331.12	0.00		39.73

Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	898.97	0.00	0.00	898.97	0.00	898.97	0.00
Indiana	89.27	33.80	47.14	170.21	0.00	58.00	25.53
Michigan	809.51	19.54	191.53	1020.58	0.00		127.57
Minnesota	29.97	1.78	6.15	37.90	0.00	0.00	3.80
New York	290.58	161.47	17.49	469.55	0.00	0.00	49.38
Ohio	399.22	113.59	29.32	542.13	0.00	0.32	81.32
Ontario	493.17	176.61	87.00	756.78	0.00	0.00	113.52
Pennsylvania	26.18	0.12	1.55	27.86			2.79
Quebec	602.58	493.47	0.00	1096.05	0.00	0.00	109.63
Wisconsin							

WATER-USE CATEGORY REPORT- Public Supply

Units: Mgal(US)/d
Year Of Data: 2011

Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	65.59	14.82	17.60	98.00	-0.32	0.00	12.44
Lake Michigan	1368.97	22.34	228.91	1620.22	0.40	949.50	91.78
Lake Huron	135.42	23.87	40.75	200.05	0.00	0.00	27.11
Lake Erie	1225.99	204.08	129.16	1559.23	-0.08	7.79	205.94
Lake Ontario	489.95	191.63	21.68	703.27	0.00	9.59	111.08
St. Lawrence River	617.40	571.64	11.52	1200.55	0.00	0.00	126.03

Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	64.82	14.74	16.56	96.11	-0.32	0.00	12.22
Lake Michigan	1107.08	0.00	175.12	1282.20	0.40	949.50	51.16
Lake Huron	134.57	23.54	35.60	193.71	0.00	0.00	26.25
Lake Erie	1225.99	203.89	123.27	1553.16	-0.08	7.79	205.13
Lake Ontario	489.91	190.98	19.48	700.37	0.00	0.00	93.27
St. Lawrence River	617.09	567.24	10.16	1194.48	0.00	0.00	125.51

WATER-USE CATEGORY REPORT- Domestic Supply

Units: Mgal(US)/d
Year Of Data: 2011

Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	2.12	0.00	0.01	2.13	0.00	2.12	0.00
Indiana	0.00	0.00	0.60	0.60	0.00	0.00	0.09
Michigan	0.00	3.06	4.93	7.99			1.00
Minnesota	0.75	0.40	0.03	1.18	0.00	0.00	0.12
New York	0.00	36.83	1.26	38.09	0.00	0.00	2.60
Ohio	0.32	0.00	58.63	58.95	0.00	0.00	8.84
Ontario	0.00	0.00	107.91	107.91	0.00	0.00	16.19
Pennsylvania							
Quebec	0.00	0.00	71.59	71.59	0.00	0.00	7.13
Wisconsin	0.12	2.28	3.48	5.88	0.00		0.71

Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	2.12	0.00	0.01	2.13	0.00	2.12	0.00
Indiana	0.00	0.00	0.46	0.46	0.00	0.00	0.07
Michigan	0.00	3.02	3.85	6.87			0.86
Minnesota	0.70	0.37	0.00	1.07	0.00	0.00	0.11
New York	0.00	36.83	1.16	37.99	0.00	0.00	2.59
Ohio	0.30	0.00	0.00	0.30	0.00	0.00	0.05
Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania							
Quebec	0.00	0.00	48.61	48.61	0.00	0.00	4.76
Wisconsin							

WATER-USE CATEGORY REPORT- Domestic Supply

Units: Mgal(US)/d
Year Of Data: 2011

Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.75	0.47	1.95	3.17	0.00	0.00	0.41
Lake Michigan	2.24	5.25	7.56	15.05	0.00	2.12	1.59
Lake Huron	0.00	0.01	11.00	11.01	0.00	0.00	1.64
Lake Erie	0.32	0.57	79.46	80.35	0.00	0.00	12.01
Lake Ontario	0.00	35.83	64.51	100.34	0.00	0.00	12.03
St. Lawrence River	0.00	0.43	83.96	84.39	0.00	0.00	8.98

Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.70	0.44	0.00	1.14	0.00	0.00	0.12
Lake Michigan	2.12	2.95	3.44	8.51	0.00	2.12	0.80
Lake Huron	0.00	0.00	0.31	0.31	0.00	0.00	0.04
Lake Erie	0.30	0.57	0.57	1.44	0.00	0.00	0.19
Lake Ontario	0.00	35.83	0.34	36.17	0.00	0.00	2.41
St. Lawrence River	0.00	0.43	49.42	49.85	0.00	0.00	4.88

WATER-USE CATEGORY REPORT- Irrigation

Units: Mgal(US)/d
Year Of Data: 2011

Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	0.02	0.00	0.12	0.14	0.00	0.00	0.00
Indiana	0.00	8.51	39.16	47.67	0.00	0.00	42.90
Michigan	0.61	74.65	168.95	244.21			219.79
Minnesota	0.07	0.31	0.04	0.42	0.00	0.00	0.38
New York	0.36	61.29	6.75	68.41	0.00	0.00	61.57
Ohio	0.39	20.32	2.33	23.04	0.00	0.00	20.74
Ontario	1.86	39.39	31.97	73.22	0.00	0.00	
Pennsylvania							
Quebec	0.00	0.00	9.22	9.22	0.00	0.00	8.30
Wisconsin	0.00	4.21	31.14	35.35	0.00		24.74

Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	0.02	0.00	0.12	0.14	0.00	0.00	0.00
Indiana	0.00	8.15	38.63	46.78	0.00	0.00	42.09
Michigan	0.52	67.84	158.64	227.00			204.30
Minnesota	0.00	0.23	0.00	0.23	0.00	0.00	0.21
New York	0.16	57.20	5.33	62.70	0.00	0.00	56.43
Ohio	0.37	19.41	1.99	21.77	0.00	0.00	19.59
Ontario					0.00	0.00	
Pennsylvania							
Quebec					0.00	0.00	
Wisconsin							

WATER-USE CATEGORY REPORT- Irrigation

Units: Mgal(US)/d
Year Of Data: 2011

Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.10	0.84	0.52	1.47	0.00	0.00	0.99
Lake Michigan	0.28	65.03	218.07	283.38	0.00	0.00	247.85
Lake Huron	0.33	28.41	17.04	45.78	0.00	0.00	22.37
Lake Erie	1.46	48.75	31.15	81.35	0.00	0.00	44.55
Lake Ontario	1.10	60.88	12.86	74.83	0.00	0.00	51.39
St. Lawrence River	0.04	4.78	10.04	14.86	0.00	0.00	11.26

Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	0.44	0.39	0.83	0.00	0.00	0.75
Lake Michigan	0.26	55.51	177.56	233.34	0.00	0.00	209.87
Lake Huron	0.15	12.02	11.07	23.25	0.00	0.00	20.92
Lake Erie	0.67	34.17	10.64	45.48	0.00	0.00	40.92
Lake Ontario	0.00	48.25	4.83	53.08	0.00	0.00	47.78
St. Lawrence River	0.00	2.43	0.21	2.64	0.00	0.00	2.38

WATER-USE CATEGORY REPORT- Livestock

Units: Mgal(US)/d
Year Of Data: 2011

Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois							
Indiana	0.00	1.21	2.79	4.00	0.00	0.00	3.20
Michigan	0.00	22.96	18.83	41.79			33.43
Minnesota	0.71	0.00	0.00	0.71	0.00	0.00	0.64
New York	0.00	24.44	1.02	25.46	0.00	0.00	3.94
Ohio	0.00	1.27	10.43	11.70	0.00	0.00	9.36
Ontario	2.95	8.67	25.47	37.09	0.00	0.00	
Pennsylvania							
Quebec	0.00	0.00	19.10	19.10	0.00	0.00	15.28
Wisconsin	0.00	19.33	15.43	34.76	0.00		4.30

Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois							
Indiana	0.00	1.21	2.76	3.97	0.00	0.00	3.18
Michigan	0.00	22.39	14.90	37.28			29.83
Minnesota	0.64	0.00	0.00	0.64	0.00	0.00	0.58
New York	0.00	23.89	0.54	24.43	0.00	0.00	3.12
Ohio	0.00	0.21	0.66	0.87	0.00	0.00	0.69
Ontario					0.00	0.00	
Pennsylvania							
Quebec					0.00	0.00	
Wisconsin							

WATER-USE CATEGORY REPORT- Livestock

Units: Mgal(US)/d
Year Of Data: 2011

Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.71	19.08	2.58	22.37	0.00	0.00	10.08
Lake Michigan	0.00	22.92	29.75	52.67	0.00	0.00	26.40
Lake Huron	2.93	4.45	10.64	18.02	0.00	0.00	4.49
Lake Erie	0.02	2.43	23.23	25.68	0.00	0.00	9.97
Lake Ontario	0.00	20.99	5.32	26.31	0.00	0.00	3.25
St. Lawrence River	0.00	8.01	21.55	29.56	0.00	0.00	15.97

Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.64	10.85	0.94	12.43	0.00	0.00	10.02
Lake Michigan	0.00	11.22	13.07	24.29	0.00	0.00	19.44
Lake Huron	0.00	1.38	3.64	5.02	0.00	0.00	4.02
Lake Erie	0.00	0.36	0.66	1.02	0.00	0.00	0.81
Lake Ontario	0.00	19.68	0.44	20.12	0.00	0.00	2.62
St. Lawrence River	0.00	4.21	0.11	4.32	0.00	0.00	0.51

WATER-USE CATEGORY REPORT- Industrial

Units: Mgal(US)/d
Year Of Data: 2011

Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	10.70	0.00	0.00	10.70	0.00	0.02	0.03
Indiana	1612.39	6.67	10.57	1629.63	0.00	23.21	97.78
Michigan	339.20	173.38	82.69	595.27			59.53
Minnesota	127.35	86.85	0.16	214.36	0.00	7.99	21.45
New York	150.11	159.57	16.49	326.17	0.00	0.00	71.86
Ohio	59.02	111.44	56.39	226.85	0.00	0.00	17.77
Ontario	900.71	0.00	22.51	923.22	0.00	0.00	58.16
Pennsylvania	0.00	0.00	0.10	0.10			0.01
Quebec	0.00	125.48	0.00	125.48	0.00	0.00	12.55
Wisconsin	0.29	157.61	15.12	173.02	0.00		19.88

Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	10.70	0.00	0.00	10.70	0.00	0.02	0.03
Indiana	1612.39	6.64	10.07	1629.10	0.00	23.21	97.75
Michigan	339.18	173.17	79.84	592.19			59.22
Minnesota	127.26	86.65	0.14	214.05	0.00	7.99	21.41
New York	150.05	159.37	16.24	325.67	0.00	0.00	71.76
Ohio	59.02	111.36	55.96	226.34	0.00	0.00	17.73
Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania							
Quebec	0.00	124.95	0.00	124.95	0.00	0.00	12.50
Wisconsin							

WATER-USE CATEGORY REPORT- Industrial

Units: Mgal(US)/d
Year Of Data: 2011

Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	293.89	87.33	0.51	381.74	0.00	7.99	32.18
Lake Michigan	1667.57	285.88	72.09	2025.54	0.00	23.22	139.22
Lake Huron	216.84	37.26	3.81	257.91	0.00	0.00	18.75
Lake Erie	626.62	164.05	101.94	892.60	0.00	0.00	89.23
Lake Ontario	232.33	84.78	23.55	340.66	0.00	0.00	52.55
St. Lawrence River	162.50	161.71	2.13	326.33	0.00	0.00	27.09

Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	131.68	86.65	0.14	218.47	0.00	7.99	21.85
Lake Michigan	1667.28	128.57	54.82	1850.66	0.00	23.22	119.15
Lake Huron	29.43	37.22	0.76	67.41	0.00	0.00	6.74
Lake Erie	453.38	163.89	93.62	710.88	0.00	0.00	77.75
Lake Ontario	14.16	84.68	11.92	110.75	0.00	0.00	38.02
St. Lawrence River	2.68	161.13	1.01	164.82	0.00	0.00	16.87

WATER-USE CATEGORY REPORT- Fossil Fuel Power

Units: Mgal(US)/d
Year Of Data: 2011

Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	886.17	0.00	0.00	886.17	0.00	0.00	0.00
Indiana	0.00	729.64	0.27	729.91	0.00	0.00	14.60
Michigan	4994.71	1104.78	3.43	6102.92			119.09
Minnesota	185.33	145.72	0.01	331.06	0.00	0.00	6.62
New York	912.14	280.46	0.00	1192.61	0.00	0.00	24.71
Ohio	1464.43	608.79	0.00	2073.22	0.00	0.00	20.73
Ontario	2283.46	0.00	0.00	2283.46	0.00	0.00	20.55
Pennsylvania							
Quebec	39.10	7.93	0.00	47.02	0.00	0.00	4.70
Wisconsin	2404.97	288.85	0.00	2693.82	0.00		34.42

Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	886.17	0.00	0.00	886.17	0.00	0.00	0.00
Indiana	0.00	0.00	0.27	0.27	0.00	0.00	0.01
Michigan	4994.71	1104.78	3.41	6102.90			118.85
Minnesota	185.33	145.71	0.00	331.04	0.00	0.00	6.62
New York	912.14	280.38	0.00	1192.52	0.00	0.00	24.67
Ohio	1464.43	608.79	0.00	2073.22	0.00	0.00	20.73
Ontario	2283.46	0.00	0.00	2283.46	0.00	0.00	20.55
Pennsylvania							
Quebec	39.10	7.93	0.00	47.02	0.00	0.00	4.70
Wisconsin							

WATER-USE CATEGORY REPORT- Fossil Fuel Power

Units: Mgal(US)/d
Year Of Data: 2011

Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	513.72	145.72	0.01	659.45	0.00	0.00	7.95
Lake Michigan	3943.41	1464.26	2.16	5409.83	0.00	0.00	123.47
Lake Huron	161.75	525.98	1.21	688.94	0.00	0.00	4.14
Lake Erie	7381.15	741.82	0.32	8123.30	0.00	0.00	84.02
Lake Ontario	1129.73	280.46	0.00	1410.20	0.00	0.00	20.42
St. Lawrence River	40.54	7.93	0.00	48.46	0.00	0.00	5.42

Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	481.71	145.71	0.00	627.42	0.00	0.00	7.63
Lake Michigan	1570.45	445.77	2.15	2018.37	0.00	0.00	74.78
Lake Huron	161.75	525.98	1.21	688.94	0.00	0.00	3.90
Lake Erie	7381.15	741.82	0.32	8123.30	0.00	0.00	84.02
Lake Ontario	1129.73	280.38	0.00	1410.11	0.00	0.00	20.37
St. Lawrence River	40.54	7.93	0.00	48.46	0.00	0.00	5.42

WATER-USE CATEGORY REPORT- Nuclear Power

Units: Mgal(US)/d
Year Of Data: 2011

Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	31.68	0.00	0.00	31.68	0.00	0.00	0.00
Indiana	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Michigan	2434.80	0.00	0.00	2434.80			34.27
Minnesota	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York	1371.10	0.00	0.00	1371.10	0.00	0.00	219.95
Ohio	127.82	0.00	0.00	127.82	0.00	0.00	12.78
Ontario	12302.21	0.00	0.00	12302.21	0.00	0.00	110.72
Pennsylvania							
Quebec	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wisconsin	1174.50	0.00	0.00	1174.50	0.00		11.74

Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	31.68	0.00	0.00	31.68	0.00	0.00	0.00
Indiana	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Michigan	2434.80	0.00	0.00	2434.80			34.27
Minnesota	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York	1371.10	0.00	0.00	1371.10	0.00	0.00	219.95
Ohio	127.82	0.00	0.00	127.82	0.00	0.00	12.78
Ontario	12302.21	0.00	0.00	12302.21	0.00	0.00	110.72
Pennsylvania							
Quebec	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wisconsin							

WATER-USE CATEGORY REPORT- Nuclear Power

Units: Mgal(US)/d
Year Of Data: 2011

Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Michigan	3583.15	0.00	0.00	3583.15	0.00	0.00	27.10
Lake Huron	5695.74	0.00	0.00	5695.74	0.00	0.00	51.26
Lake Erie	185.66	0.00	0.00	185.66	0.00	0.00	31.69
Lake Ontario	7977.57	0.00	0.00	7977.57	0.00	0.00	279.41
St. Lawrence River	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Michigan	2408.65	0.00	0.00	2408.65	0.00	0.00	15.35
Lake Huron	5695.74	0.00	0.00	5695.74	0.00	0.00	51.26
Lake Erie	185.66	0.00	0.00	185.66	0.00	0.00	31.69
Lake Ontario	7977.57	0.00	0.00	7977.57	0.00	0.00	279.41
St. Lawrence River	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WATER-USE CATEGORY REPORT- Hydroelectric Power

Units: Mgal(US)/d
Year Of Data: 2011

Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois							
Indiana	0.00	1955.59	0.00	1955.59	0.00	0.00	0.00
Michigan							
Minnesota	0.00	3119.40	0.00	3119.40	0.00	0.00	0.00
New York	126741.00	179600.00	0.00	306341.00	0.00	0.00	0.00
Ohio	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ontario	189892.67	162080.38	0.00	351973.05	0.00	-4007.75	0.00
Pennsylvania							
Quebec	170946.25	132949.60	0.00	303895.85	0.00	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	1955.59	0.00	1955.59	0.00	0.00	0.00
Michigan							
Minnesota	0.00	3119.40	0.00	3119.40	0.00	0.00	0.00
New York	126741.00	179600.00	0.00	306341.00	0.00	0.00	0.00
Ohio	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ontario	189892.67	162080.38	0.00	351973.05	0.00	0.00	0.00
Pennsylvania							
Quebec	170946.25	132949.60	0.00	303895.85	0.00	0.00	0.00

WATER-USE CATEGORY REPORT- Hydroelectric Power

Units: Mgal(US)/d
Year Of Data: 2011

Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	27438.81	0.00	27438.81	0.00	-4007.75	0.00
Lake Michigan	0.00	1955.59	0.00	1955.59	0.00	0.00	0.00
Lake Huron	19195.27	17490.30	0.00	36685.57	0.00	0.00	0.00
Lake Erie	47463.00	560.31	0.00	48023.31	0.00	0.00	0.00
Lake Ontario	37265.43	93757.33	0.00	131022.76	0.00	0.00	0.00
St. Lawrence River	383656.23	338502.62	0.00	722158.85	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	27438.81	0.00	27438.81	0.00	0.00	0.00
Lake Michigan	0.00	1955.59	0.00	1955.59	0.00	0.00	0.00
Lake Huron	19195.27	17490.30	0.00	36685.57	0.00	0.00	0.00
Lake Erie	47463.00	560.31	0.00	48023.31	0.00	0.00	0.00
Lake Ontario	37265.43	93757.33	0.00	131022.76	0.00	0.00	0.00
St. Lawrence River	383656.23	338502.62	0.00	722158.85	0.00	0.00	0.00

WATER-USE CATEGORY REPORT- Other

Units: Mgal(US)/d
Year Of Data: 2011

Water-Use by Jurisdiction - All Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	229.74	0.00	0.00	229.74	0.00	229.74	0.00
Indiana	0.00	0.00	0.12	0.12	0.00	0.00	0.02
Michigan	0.00	2.51	7.18	9.69			0.00
Minnesota	0.00	0.00	0.16	0.16	0.00	0.00	0.00
New York	0.00	13.51	2.09	15.60	0.00	32.00	1.62
Ohio	0.31	7.69	0.55	8.55	0.00	-11.25	1.84
Ontario	0.00	199.61	0.00	199.61	61.97	0.00	0.00
Pennsylvania	0.00	0.00	0.04	0.04			
Quebec					0.00	0.00	
Wisconsin	5.27	0.32	1.05	6.63	0.00	-25.85	3.19

Water-Use by Jurisdiction - Principal Facilities

Jurisdiction	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Illinois	229.74	0.00	0.00	229.74	0.00	229.74	0.00
Indiana	0.00	0.00	0.09	0.09	0.00	0.00	0.01
Michigan	0.00	2.51	7.11	9.62			0.00
Minnesota	0.00	0.00	0.14	0.14	0.00	0.00	0.00
New York	0.00	13.25	2.06	15.31	0.00	0.00	1.59
Ohio	0.31	7.67	0.55	8.53	0.00	-11.25	1.83
Ontario	0.00	199.61	0.00	199.61	61.97	0.00	0.00
Pennsylvania							
Quebec					0.00	0.00	
Wisconsin							

WATER-USE CATEGORY REPORT- Other

Units: Mgal(US)/d
Year Of Data: 2011

Water-Use by Basin - All Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	0.00	0.16	0.16	0.00	0.00	0.00
Lake Michigan	235.00	0.32	7.21	242.53	0.00	203.89	3.20
Lake Huron	0.00	47.97	0.00	47.97	47.97	0.00	0.00
Lake Erie	0.31	12.89	3.01	16.21	5816.39	-11.25	2.25
Lake Ontario	0.00	142.15	0.46	142.61	-5802.39	32.00	1.03
St. Lawrence River	0.00	20.31	0.34	20.65	0.00	0.00	0.20

Water-Use by Basin - Principal Facilities

Basin	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Lake Superior	0.00	0.00	0.14	0.14	0.00	0.00	0.00
Lake Michigan	229.74	0.00	6.07	235.81	0.00	229.74	0.00
Lake Huron	0.00	47.97	0.00	47.97	47.97	0.00	0.00
Lake Erie	0.31	12.78	2.94	16.03	5816.39	-11.25	2.23
Lake Ontario	0.00	142.04	0.45	142.49	-5802.39	0.00	1.01
St. Lawrence River	0.00	20.24	0.34	20.59	0.00	0.00	0.19