

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

Prepared by the Great Lakes Commission (in Liters)

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 boats, 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 litres) 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 sustianing regional and national economies. According to the Brookings Institution, if it stood alone as a country, the 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, federaland 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 Agreement and Compact. 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 Great Lakes water; and the collection of technical data to improve water resources decisionmaking.

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 the Agreement. The proceeding pages describe the data collection methods as well as the attributes of the data in greater detail.

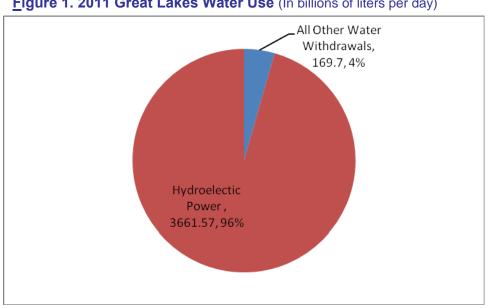
The Great Lakes Water Use Database is updated annually by the Great Lakes Commission. Each year water use data are provided by each state and province. All data submitted to the Commission are in a Microsoft Excel or Access format then compiled into a single Microsoft Access database.

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.



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

Figure 2. 2011 Great Lakes Water Use by Jurisdiction

(In billions of liters per day and includes hydroelectric)

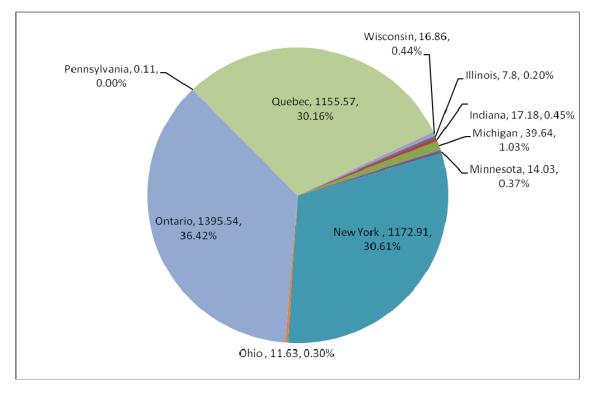
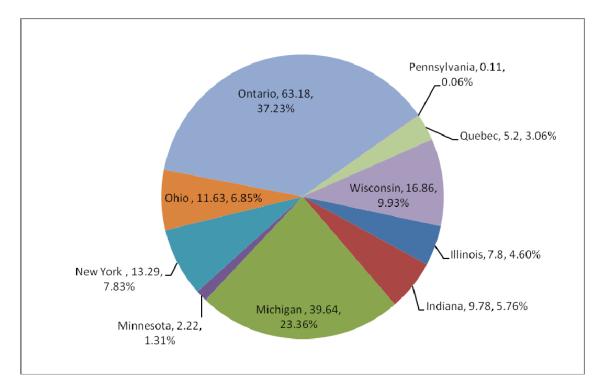


Figure 3. 2011 Great Lakes Water Use by Jurisdiction

(In billions of liters 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 (<u>http://glc.org/wateruse/wrmdss/finalreport/pdf/CU_Briefing.pdf</u>).

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		1		Coefficient f	or all states a	nd provinces is	0%		1	<u>. </u>
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

		Withdra	Diver	Consumptive			
Jurisdiction	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Illinois	7.80	0.00	0.00	7.80	0.00	4.28	0.00
Indiana	6.44	10.35	0.38	17.18	0.00	0.31	0.70
Michigan	32.48	5.30	1.86	39.64	0.00		2.26
Minnesota	1.30	12.70	0.03	14.03	0.00	0.03	0.12
New York	490.08	682.66	0.18	1172.91	0.00	0.16	1.72
Ohio	7.77	3.27	0.60	11.63	0.00	-0.04	0.66
Ontario	779.33	615.15	1.06	1395.54	0.23	-15.17	1.21
Pennsylvania	0.10	0.00	0.01	0.11			0.01
Quebec	649.53	505.66	0.38	1155.57	0.00	0.00	0.60
Wisconsin	14.57	1.87	0.43	16.86	0.00	-0.10	0.53
Total:	1989.39	1836.96	4.92	3831.27	0.23	-10.53	7.80

Water-Use by Jurisdiction - Principal Facilities

		Withdra	awals	Diver	sions	Consumptive	
Jurisdiction	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Illinois	7.80	0.00	0.00	7.80	0.00	4.28	0.00
Indiana	6.44	7.59	0.38	14.41	0.00	0.31	0.64
Michigan	32.47	5.27	1.74	39.49	0.00		2.18
Minnesota	1.30	12.70	0.02	14.02	0.00	0.03	0.12
New York	490.08	682.63	0.16	1172.87	0.00	0.00	1.63
Ohio	7.77	3.26	0.33	11.36	0.00	-0.04	0.59
Ontario	775.90	614.97	0.33	1391.20	0.23	0.00	0.93
Pennsylvania	0.10	0.00	0.01	0.11			0.01
Quebec	649.53	505.64	0.18	1155.36	0.00	0.00	0.50
Wisconsin							
Total:	1971.39	1832.06	3.16	3806.60	0.23	4.58	6.59

SUMMARY REPORT - GREAT LAKES BASIN

		Withdra	awals	Diver	Consumptive			
Basin	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use	
Lake Superior	3.31	104.88	0.09	108.28	0.00	-15.14	0.24	
Lake Michigan	40.88	14.47	2.14	57.49	0.00	4.46	2.50	
Lake Huron	96.18	68.74	0.32	165.24	0.18	0.00	0.49	
Lake Erie	215.33	6.57	1.39	223.29	22.02	-0.01	1.82	
Lake Ontario	178.28	358.00	0.49	536.77	-21.96	0.16	2.01	
St. Lawrence River	1455.40	1284.30	0.49	2740.20	0.00	0.00	0.74	
Total:	1989.39	1836.96	4.92	3831.27	0.23	-10.53	7.80	

Water-Use by Basin - All Facilities

Water-Use by Basin - Principal Facilities

		Withdra	awals	Diver	Consumptive			
Basin	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use	
Lake Superior	2.57	104.85	0.07	107.49	0.00	0.03	0.20	
Lake Michigan	26.44	9.84	1.64	37.92	0.00	4.56	1.86	
Lake Huron	95.46	68.66	0.20	164.32	0.18	0.00	0.43	
Lake Erie	214.67	6.50	0.88	222.05	22.02	-0.01	1.68	
Lake Ontario	177.45	357.95	0.14	535.54	-21.96	0.00	1.84	
St. Lawrence River	1454.80	1284.26	0.23	2739.29	0.00	0.00	0.59	
Total:	1971.39	1832.06	3.16	3806.60	0.23	4.58	6.59	

SUMMARY REPORT - GREAT LAKES BASIN

Units: BL/d Year Of Data: 2011

		Withdra	awais	Diver	Consumptive			
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use	
Public Supply	14.78	3.89	1.70	20.37	0.00	3.66	2.17	
Domestic Supply	0.01	0.16	0.94	1.11	0.00	0.01	0.14	
Irrigation	0.01	0.79	1.10	1.90	0.00	0.00	1.43	
Livestock	0.01	0.29	0.35	0.66	0.00	0.00	0.27	
Industrial	12.11	3.11	0.77	15.99	0.00	0.12	1.36	
Fossil Fuel Power	49.86	11.99	0.01	61.85	0.00	0.00	0.93	
Nuclear Power	66.03	0.00	0.00	66.03	0.00	0.00	1.47	
Hydroelectric Power	1845.69	1815.88	0.00	3661.57	0.00	-15.17	0.00	
Other	0.89	0.85	0.04	1.78	0.23	0.85	0.03	
Total:	1989.39	1836.96	4.92	3831.27	0.23	-10.53	7.80	

Water-Use by Category - All Facilities

Water-Use by Category - Principal Facilities

		Withdra	awals		Diver	Consumptive	
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Public Supply	13.78	3.79	1.44	19.00	0.00	3.62	1.94
Domestic Supply	0.01	0.15	0.20	0.37	0.00	0.01	0.03
Irrigation	0.00	0.58	0.77	1.36	0.00	0.00	1.22
Livestock	0.00	0.18	0.07	0.25	0.00	0.00	0.14
Industrial	8.70	2.51	0.61	11.82	0.00	0.12	1.06
Fossil Fuel Power	40.75	8.13	0.01	48.89	0.00	0.00	0.74
Nuclear Power	61.58	0.00	0.00	61.58	0.00	0.00	1.43
Hydroelectric Power	1845.69	1815.88	0.00	3661.57	0.00	0.00	0.00
Other	0.87	0.84	0.04	1.75	0.23	0.83	0.01
Total:	1971.39	1832.06	3.16	3806.60	0.23	4.58	6.59

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 7,796.15 mld – a decrease in water usage from 2010 (8,186.69 mld).

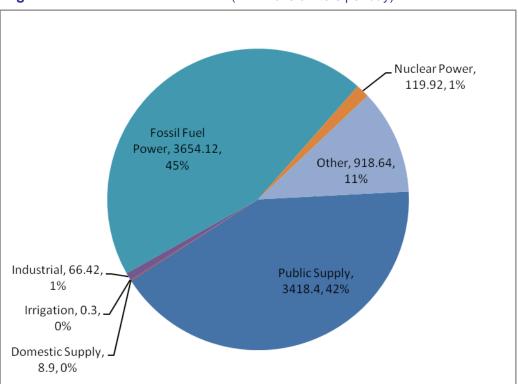


Figure 5. 2011 Illinois Water Use (In millions of liters per day)

Consumptive Use: Consumptive use information for the industrial selector was reported at 0.09 mld.

Interbasin Diversions: Total diversions from the Lake Michigan basin in 2011 were 4280.72 mld. 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 Units: ML/d and Consumptive Uses Year Of Data: 2011

			All Facilities			Principal Facilities	
Basin	Category	Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake M	lichigan						
	Public Supply	3402.99	3402.99	0.00	3402.99	3402.99	0.00
	Domestic Supply	8.08	8.03	0.00	8.08	8.03	0.00
	Irrigation	0.52	0.00	0.00	0.52	0.00	0.00
	Livestock						
	Industrial	40.48	0.06	0.09	40.48	0.06	0.09
	Fossil Fuel Power	3354.51	0.00	0.00	3354.51	0.00	0.00
	Nuclear Power	119.92	0.00	0.00	119.92	0.00	0.00
	Hydroelectric Power						
	Other	869.65	869.65	0.00	869.65	869.65	0.00
	Total:	7796.15	4280.72	0.09	7796.15	4280.72	0.09
Grand	Total:	7796.15	4280.72	0.09	7796.15	4280.72	0.09

JURISDICTION REPORT- Illinois

Withdrawals by Source

Year Of Data: 2011

			All Facilities		Pri	ncipal Facilities	
Basin	Category	GLSW	OSW	GW	GLSW	OSW	GW
Lake M	lichigan						
	Public Supply	3402.99	0.00	0.00	3402.99	0.00	0.00
	Domestic Supply	8.03	0.00	0.05	8.03	0.00	0.05
	Irrigation	0.08	0.00	0.44	0.08	0.00	0.44
	Livestock						
	Industrial	40.48	0.00	0.00	40.48	0.00	0.00
	Fossil Fuel Power	3354.51	0.00	0.00	3354.51	0.00	0.00
	Nuclear Power	119.92	0.00	0.00	119.92	0.00	0.00
	Hydroelectric Power						
	Other	869.65	0.00	0.00	869.65	0.00	0.00
	Total:	7795.66	0.00	0.48	7795.66	0.00	0.48
Grand	Total:	7795.66	0.00	0.48	7795.66	0.00	0.48

JURISDICTION REPORT- Illinois

Units: ML/d **Jurisdiction Totals**

Year Of Data: 2011

Total Report - All Facilities

		Withdra	awals	Diver	Consumptive		
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Public Supply	3402.99	0.00	0.00	3402.99	0.00	3402.99	0.00
Domestic Supply	8.03	0.00	0.05	8.08	0.00	8.03	0.00
Irrigation	0.08	0.00	0.44	0.52	0.00	0.00	0.00
Livestock							
Industrial	40.48	0.00	0.00	40.48	0.00	0.06	0.09
Fossil Fuel Power	3354.51	0.00	0.00	3354.51	0.00	0.00	0.00
Nuclear Power	119.92	0.00	0.00	119.92	0.00	0.00	0.00
Hydroelectric Power							
Other	869.65	0.00	0.00	869.65	0.00	869.65	0.00

Total Report - Principal Facilities

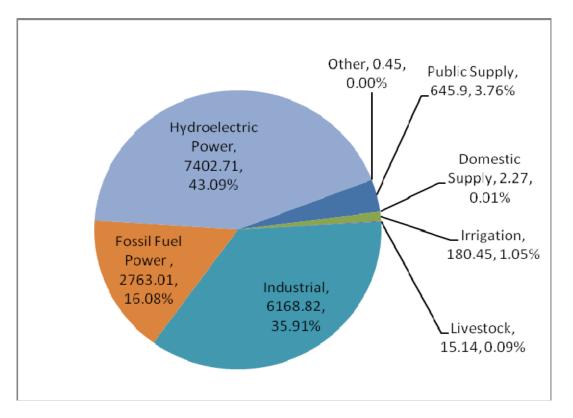
		Withdra	awals	Diver	Consumptive		
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Public Supply	3402.99	0.00	0.00	3402.99	0.00	3402.99	0.00
Domestic Supply	8.03	0.00	0.05	8.08	0.00	8.03	0.00
Irrigation	0.08	0.00	0.44	0.52	0.00	0.00	0.00
Livestock							
Industrial	40.48	0.00	0.00	40.48	0.00	0.06	0.09
Fossil Fuel Power	3354.51	0.00	0.00	3354.51	0.00	0.00	0.00
Nuclear Power	119.92	0.00	0.00	119.92	0.00	0.00	0.00
Hydroelectric Power							
Other	869.65	0.00	0.00	869.65	0.00	869.65	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 17,178.77 mld compared to the 2010 figure of 16721.87 mld. Of this amount, nearly 99 percent of the water used was from the Lake Michigan basin. Industrial, reported as 6,140.05 mld, and hydroelectric power at 7,402.71 mld were the primary uses of Lake Michigan water. The primary use of Lake Erie basin water was public supply, at 150.62 mld.

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



Consumptive Use: The total consumptive use of water in Indiana's portion of the Great Lakes basin was 697.24 mld, compared to 676.53 mld in 2010. In the Lake Michigan basin, the industrial water use category was the largest consumptive use at 60 percent (368.40 mld of a total of 667.82 mld), 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 191.26 mld for public supply and another of 87.85 mld for industrial use. A diversion from the Lake Erie Basin for public supply uses is 28.28 mld.

JURISDICTION REPORT- Indiana

Withdrawals, Diversions Units: ML/d and Consumptive Uses Year Of Data: 2011

			All Facilities		Principal Facilities			
Basin	Category	Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.	
Lake M	lichigan							
	Public Supply	495.28	191.26	74.31	494.00	191.26	74.08	
	Irrigation	175.26	0.00	157.74	172.77	0.00	155.47	
	Livestock	15.14	0.00	12.11	15.03	0.00	12.04	
	Industrial	6140.05	87.85	368.40	6138.73	87.85	368.32	
	Fossil Fuel Power	2761.99	0.00	55.23	0.00	0.00	0.00	
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	
	Hydroelectric Power	7402.71	0.00	0.00	7402.71	0.00	0.00	
	Other	0.26	0.00	0.04	0.15	0.00	0.00	
	Total:	16990.71	279.11	667.82	14223.38	279.11	609.91	
Lake E	rie							
	Public Supply	150.62	28.28	22.60	150.32	28.28	22.56	
	Domestic Supply	2.27	0.00	0.34	1.74	0.00	0.26	
	Irrigation	5.19	0.00	4.66	4.32	0.00	3.86	
	Livestock	0.00	0.00	0.00	0.00	0.00	0.00	
	Industrial	28.77	0.00	1.74	28.09	0.00	1.70	
	Fossil Fuel Power	1.02	0.00	0.04	1.02	0.00	0.04	
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	
	Other	0.19	0.00	0.04	0.19	0.00	0.04	
	Total:	188.06	28.28	29.41	185.67	28.28	28.47	
Grand	Total:	17178.77	307.39	697.24	14409.06	307.39	638.37	

JURISDICTION REPORT- Indiana

Withdrawals by Source

Year Of Data: 2011

			All Facilities		P	rincipal Facilitie	S
Basin	Category	GLSW	OSW	GW	GLSW	OSW	GW
Lake N	/lichigan						
	Public Supply	337.92	0.00	157.36	337.92	0.00	156.07
	Irrigation	0.00	30.81	144.45	0.00	29.79	142.98
	Livestock	0.00	4.58	10.56	0.00	4.58	10.45
	Industrial	6103.56	14.01	22.49	6103.56	13.89	21.27
	Fossil Fuel Power	0.00	2761.99	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	7402.71	0.00	0.00	7402.71	0.00
	Other	0.00	0.00	0.26	0.00	0.00	0.15
	Total:	6441.48	10214.10	335.12	6441.48	7450.98	330.92
Lake E	Frie						
	Public Supply	0.00	127.95	22.67	0.00	127.95	22.37
	Domestic Supply	0.00	0.00	2.27	0.00	0.00	1.74
	Irrigation	0.00	1.40	3.79	0.00	1.06	3.26
	Livestock	0.00	0.00	0.00	0.00	0.00	0.00
	Industrial	0.00	11.24	17.53	0.00	11.24	16.85
	Fossil Fuel Power	0.00	0.00	1.02	0.00	0.00	1.02
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.19	0.00	0.00	0.19
	Total:	0.00	140.59	47.47	0.00	140.25	45.42
Grand	d Total:	6441.48	10354.69	382.59	6441.48	7591.23	376.35

JURISDICTION REPORT- Indiana

0.00

0.00

7402.71

0.00

Hydroelectric Power

Other

Units: ML/d Jurisdiction Totals Year Of Data: 2011

		Total Re	eport - A	II Facilit	ties		
		Withd	rawals		Diver	sions	Consumptive
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Public Supply	337.92	127.95	180.03	645.90	0.00	219.55	96.91
Domestic Supply	0.00	0.00	2.27	2.27	0.00	0.00	0.34
Irrigation	0.00	32.21	148.24	180.45	0.00	0.00	162.39
Livestock	0.00	4.58	10.56	15.14	0.00	0.00	12.11
Industrial	6103.56	25.25	40.01	6168.82	0.00	87.85	370.14
Fossil Fuel Power	0.00	2761.99	1.02	2763.01	0.00	0.00	55.27
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Total Report - Principal Facilities

0.00

0.45

7402.71

0.45

0.00

0.00

0.00

0.00

0.00

0.08

		Withd	rawals		Diver	sions	Consumptive
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Public Supply	337.92	127.95	178.44	644.31	0.00	219.55	96.64
Domestic Supply	0.00	0.00	1.74	1.74	0.00	0.00	0.26
Irrigation	0.00	30.85	146.23	177.08	0.00	0.00	159.33
Livestock	0.00	4.58	10.45	15.03	0.00	0.00	12.04
Industrial	6103.56	25.14	38.12	6166.81	0.00	87.85	370.02
Fossil Fuel Power	0.00	0.00	1.02	1.02	0.00	0.00	0.04
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	7402.71	0.00	7402.71	0.00	0.00	0.00
Other	0.00	0.00	0.34	0.34	0.00	0.00	0.04

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 39,641.64 mld, a decrease from 2010 (39,775.53 mld). Of the four basins, the state of Michigan withdraws the most from Lake Erie (19,286.64 mld) and the least from Lake Superior (930.39 mld). Fossil fuel power, at 58 percent, was the largest withdrawal category for the state of Michigan.

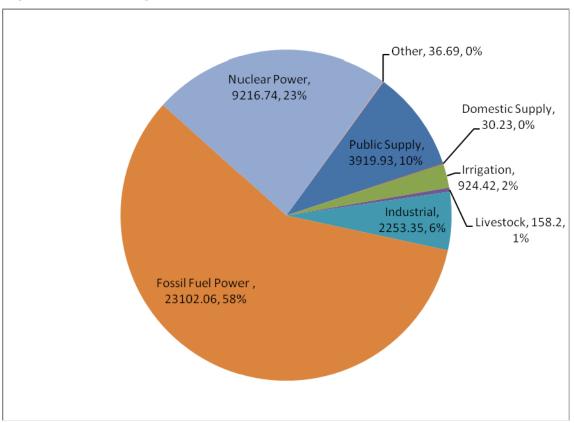


Figure 7. 2011 Michigan Water Use (In millions of liters per day)

Consumptive Use: Consumptive uses in the Michigan portion of the Great Lakes basin were calculated to be approximately 2,007.63 mld; irrigation was the largest single consumptive use at 798.43 mld, or about 37 percent of the total consumptive use.

Interbasin Diversions: None reported.

JURISDICTION REPORT- Michigan

Withdrawals, Diversions Units: ML/d and Consumptive Uses Year Of Data: 2011

			All Facilities			Principal Facilities	
Basin	Category	Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake S	Superior						
	Public Supply	50.21		6.28	47.83		5.98
	Domestic Supply	0.27		0.03	0.27		0.03
	Irrigation	2.55		2.30	2.26		2.03
	Livestock	44.64		35.72	44.64		35.72
	Industrial	17.66		1.77	16.74		1.67
	Fossil Fuel Power	815.06		1.05	815.06		1.05
	Nuclear Power						
	Hydroelectric Power						
	Other						
	Total:	930.39		47.14	926.80		46.48
Lake M	lichigan						
	Public Supply	984.63		123.08	956.67		119.58
	Domestic Supply	27.30		3.41	24.14		3.02
	Irrigation	763.13		686.82	709.99		638.99
	Livestock	89.45		71.56	76.93		61.54
	Industrial	834.28		83.43	826.30		82.63
	Fossil Fuel Power	4285.91		283.07	4285.86		283.07
	Nuclear Power	8997.79		58.12	8997.79		58.12
	Hydroelectric Power						
	Other	23.06		0.00	22.84		0.00
	Total:	16005.55		1309.49	15900.53		1246.95
Lake H	luron						
	Public Supply	437.89		54.74	424.15		53.02
	Domestic Supply	1.55		0.19	1.16		0.15
	Irrigation	94.11		84.70	88.00		79.20
	Livestock	21.22		16.98	19.00		15.20
	Industrial	256.34		25.63	255.17		25.52
	Fossil Fuel Power	2607.94		15.68	2607.94		14.78
	Nuclear Power						
	Hydroelectric Power						
	Other						
	Total:	3419.05		197.92	3395.42		187.86

			All Facilities		Principal Facilities
Basin	Category	Withdr.	Inter-Basin Diver. Consum.	Withdr.	Inter-Basin Diver. Consum.
Lake E	Frie				
	Public Supply	2447.20	305.90	2434.65	304.33
	Domestic Supply	1.12	0.14	0.43	0.05
	Irrigation	64.64	58.17	59.06	53.15
	Livestock	2.88	2.31	0.56	0.45
	Industrial	1145.07	114.51	1143.47	114.35
	Fossil Fuel Power	15393.16	151.00	15393.16	151.00
	Nuclear Power	218.95	71.59	218.95	71.59
	Hydroelectric Power				
	Other	13.63	0.00	13.58	0.00
	Total:	19286.64	703.61	19263.87	694.93
Grand	l Total:	39641.64	2258.16	39486.61	2176.22

JURISDICTION REPORT- Michigan

Withdrawals by Source

Year Of Data: 2011

			All Facilities		P	rincipal Faciliti	es
Basin	Category	GLSW	OSW	GW	GLSW	OSW	GW
Lake S	Superior						
	Public Supply	18.09	0.00	32.13	18.09	0.00	29.74
	Domestic Supply	0.00	0.27	0.00	0.00	0.27	0.00
	Irrigation	0.03	0.86	1.65	0.00	0.79	1.47
	Livestock	0.00	41.07	3.58	0.00	41.07	3.58
	Industrial	16.74	0.00	0.92	16.74	0.00	0.00
	Fossil Fuel Power	815.06	0.00	0.00	815.06	0.00	0.00
	Nuclear Power						
	Hydroelectric Power						
	Other						
	Total:	849.92	42.20	38.28	849.88	42.13	34.79
Lake N	lichigan						
	Public Supply	449.83	0.00	534.80	449.83	0.00	506.84
	Domestic Supply	0.00	11.25	16.04	0.00	11.17	12.98
	Irrigation	0.98	199.41	562.74	0.90	180.35	528.74
	Livestock	0.00	39.60	49.85	0.00	37.91	39.02
	Industrial	167.33	473.37	193.57	167.28	472.78	186.24
	Fossil Fuel Power	2590.30	1687.43	8.18	2590.30	1687.42	8.14
	Nuclear Power	8997.79	0.00	0.00	8997.79	0.00	0.00
	Hydroelectric Power						
	Other	0.00	0.00	23.06	0.00	0.00	22.84
	Total:	12206.24	2411.07	1388.25	12206.10	2389.62	1304.80
Lake F	luron						
	Public Supply	351.14	1.17	85.58	350.34	1.17	72.65
	Domestic Supply	0.00	0.04	1.51	0.00	0.00	1.16
	Irrigation	0.65	49.20	44.26	0.57	45.52	41.92
	Livestock	0.00	5.21	16.02	0.00	5.21	13.79
	Industrial	111.40	141.03	3.91	111.40	140.90	2.87
	Fossil Fuel Power	612.30	1991.05	4.58	612.30	1991.05	4.58
	Nuclear Power						
	Hydroelectric Power						
	Other						
	Total:	1075.50	2187.70	155.85	1074.61	2183.84	136.97

			All Facilities		P	rincipal Faciliti	BS
Basin	Category	GLSW	OSW	GW	GLSW	OSW	GW
Lake E	Frie						
	Public Supply	2246.07	73.11	128.03	2246.07	72.79	115.80
	Domestic Supply	0.00	0.01	1.11	0.00	0.00	0.43
	Irrigation	0.64	33.11	30.89	0.52	30.15	28.40
	Livestock	0.00	1.05	1.83	0.00	0.56	0.00
	Industrial	988.53	41.92	114.63	988.53	41.82	113.13
	Fossil Fuel Power	14889.37	503.58	0.20	14889.37	503.58	0.20
	Nuclear Power	218.95	0.00	0.00	218.95	0.00	0.00
	Hydroelectric Power						
	Other	0.00	9.50	4.13	0.00	9.50	4.09
	Total:	18343.55	662.27	280.83	18343.42	658.40	262.05
Grand	d Total:	32475.20	5303.24	1863.20	32474.02	5273.99	1738.60

JURISDICTION REPORT- Michigan

Units: ML/d Jurisdiction Totals Year Of Data: 2011

Total Report - All Facilities

		Withd	rawals	Diver	Consumptive		
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Public Supply	3065.13	74.28	780.53	3919.93	0.00		489.99
Domestic Supply	0.00	11.57	18.66	30.23			3.78
Irrigation	2.29	282.58	639.55	924.42			831.98
Livestock	0.00	86.93	71.28	158.20			126.56
Industrial	1284.00	656.32	313.03	2253.35			225.34
Fossil Fuel Power	18907.03	4182.06	12.97	23102.06			450.80
Nuclear Power	9216.74	0.00	0.00	9216.74			129.71
Hydroelectric Power							
Other	0.00	9.50	27.19	36.69			0.00

Total Report - Principal Facilities

		Withd	rawals	Diver	sions	Consumptive	
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Public Supply	3064.32	73.95	725.03	3863.31	0.00		482.91
Domestic Supply	0.00	11.44	14.57	26.00			3.25
Irrigation	1.98	256.80	600.52	859.30			773.37
Livestock	0.00	84.75	56.39	141.14			112.91
Industrial	1283.95	655.50	302.24	2241.69			224.17
Fossil Fuel Power	18907.03	4182.05	12.92	23102.01			449.90
Nuclear Power	9216.74	0.00	0.00	9216.74			129.71
Hydroelectric Power							
Other	0.00	9.50	26.93	36.43			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 14,026.58 mld. Water used for hydroelectric power generation purposes (11,808.21mld) 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.

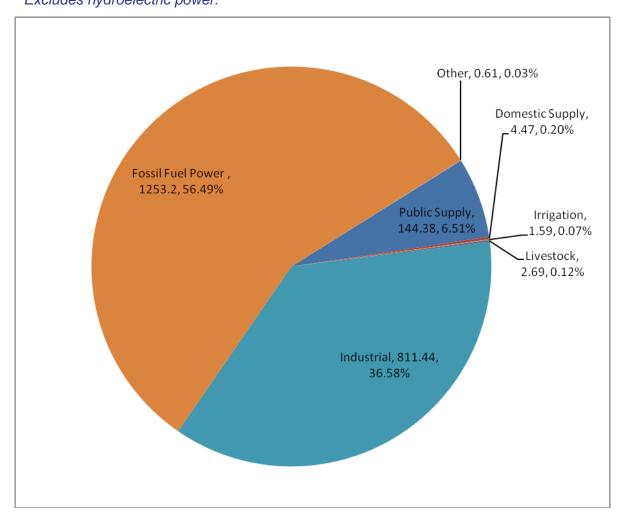


Figure 8. 2011 Minnesota Water Use (In millions of liters per day) Excludes hydroelectric power.

Consumptive Use: The largest consumptive use was industrial, at 81.20 mld, or 65 percent of total consumption (124.99 mld). Public supply was the third largest consumptive use at 14.42 mld, or 11 percent of Minnesota's total consumptive use.

Interbasin Diversions: A diversion of 30.25 mld was reported for industrial use.

JURISDICTION REPORT- Minnesota

Withdrawals, Diversions Units: ML/d and Consumptive Uses Year Of Data: 2011

			All Facilities		Principal Facilities			
Basin	Category	Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.	
Lake S	Superior							
	Public Supply	144.38	0.00	14.42	143.47	0.00	14.38	
	Domestic Supply	4.47	0.00	0.45	4.05	0.00	0.42	
	Irrigation	1.59	0.00	1.44	0.87	0.00	0.79	
	Livestock	2.69	0.00	2.42	2.42	0.00	2.20	
	Industrial	811.44	30.25	81.20	810.27	30.25	81.05	
	Fossil Fuel Power	1253.20	0.00	25.06	1253.12	0.00	25.06	
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	
	Hydroelectric Power	11808.21	0.00	0.00	11808.21	0.00	0.00	
	Other	0.61	0.00	0.00	0.53	0.00	0.00	
	Total:	14026.58	30.25	124.99	14022.95	30.25	123.90	
Grand	l Total:	14026.58	30.25	124.99	14022.95	30.25	123.90	

JURISDICTION REPORT- Minnesota

Withdrawals by Source

Year Of Data: 2011

			All Facilities		F	Principal Facilities	\$
Basin	Category	GLSW	OSW	GW	GLSW	OSW	GW
Lake S	Superior						
	Public Supply	113.60	6.78	24.00	113.45	6.74	23.28
	Domestic Supply	2.84	1.51	0.11	2.65	1.40	0.00
	Irrigation	0.26	1.17	0.15	0.00	0.87	0.00
	Livestock	2.69	0.00	0.00	2.42	0.00	0.00
	Industrial	482.07	328.76	0.61	481.73	328.01	0.53
	Fossil Fuel Power	701.55	551.61	0.04	701.55	551.57	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	11808.21	0.00	0.00	11808.21	0.00
	Other	0.00	0.00	0.61	0.00	0.00	0.53
	Total:	1303.01	12698.05	25.51	1301.80	12696.80	24.34
Grand	l Total:	1303.01	12698.05	25.51	1301.80	12696.80	24.34

JURISDICTION REPORT- Minnesota

Units: ML/d **Jurisdiction Totals**

Year Of Data: 2011

Total Report - All Facilities

		Withd	rawals	Diver	Consumptive		
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Public Supply	113.60	6.78	24.00	144.38	0.00	0.00	14.42
Domestic Supply	2.84	1.51	0.11	4.47	0.00	0.00	0.45
Irrigation	0.26	1.17	0.15	1.59	0.00	0.00	1.44
Livestock	2.69	0.00	0.00	2.69	0.00	0.00	2.42
Industrial	482.07	328.76	0.61	811.44	0.00	30.25	81.20
Fossil Fuel Power	701.55	551.61	0.04	1253.20	0.00	0.00	25.06
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	11808.21	0.00	11808.21	0.00	0.00	0.00
Other	0.00	0.00	0.61	0.61	0.00	0.00	0.00

Total Report - Principal Facilities

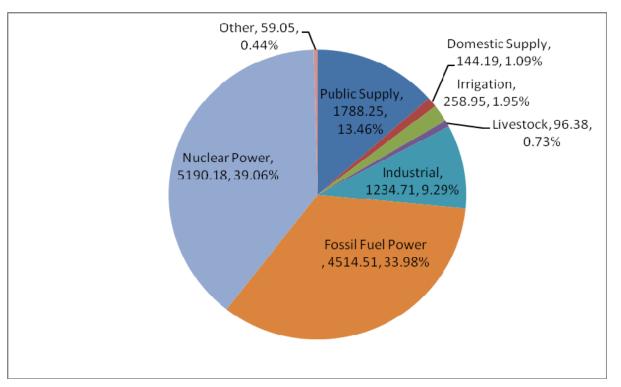
		Withd	rawals	Diver	Consumptive		
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Public Supply	113.45	6.74	23.28	143.47	0.00	0.00	14.38
Domestic Supply	2.65	1.40	0.00	4.05	0.00	0.00	0.42
Irrigation	0.00	0.87	0.00	0.87	0.00	0.00	0.79
Livestock	2.42	0.00	0.00	2.42	0.00	0.00	2.20
Industrial	481.73	328.01	0.53	810.27	0.00	30.25	81.05
Fossil Fuel Power	701.55	551.57	0.00	1253.12	0.00	0.00	25.06
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	11808.21	0.00	11808.21	0.00	0.00	0.00
Other	0.00	0.00	0.53	0.53	0.00	0.00	0.00

New York

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

Withdrawals: In 2011, New York's total water use was 1,172,913.10 mld. Total withdrawals, not including hydroelectric power, were 13,286.2 mld. Hydroelectric power uses of 1,159,626.90 mld represented 98.9 percent of total withdrawals in New York. The next largest categories of use were fossil fuel and nuclear power.





Consumptive Use: New York reported total consumptive uses of 1,716.25 mld. Lake Ontario comprised 1,405.17 mld or 82 percent; Lake Erie comprised 256.95 mld or 15 percent; and the St. Lawrence River comprised 54.13 mld or 3 percent. The largest categories of consumptive use were nuclear power (832.60 mld) and industrial (272.04 mld); 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 36.30 mld from the Tagasoke Reservoir on the East Branch of Fish Creek (Lake Ontario basin) is made by the city of Rome for public water supply and emptied into the Mohawk River basin. The Forestport/Black River Canal (Lake Ontario basin) was decommissioned in the 1980s but still allows for residual flow of up to 121.13 mld into the Mohawk River basin.

Intrabasin Diversions: No intrabasin diversions were reported.

JURISDICTION REPORT- New York

Withdrawals, Diversions Units: ML/d and Consumptive Uses Year Of Data: 2011

		All Facilities			Principal Facilities		
Basin	Category	Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake E	rie						
	Public Supply	785.86	0.00	78.59	785.30	0.00	78.53
	Domestic Supply	2.15	0.00	0.22	2.15	0.00	0.22
	Irrigation	30.34	0.00	27.30	26.38	0.00	23.75
	Livestock	0.00	0.00		0.00	0.00	0.00
	Industrial	662.87	0.00	111.19	662.63	0.00	111.16
	Fossil Fuel Power	1907.85	0.00	38.16	1907.85	0.00	38.16
	Nuclear Power	0.00	0.00		0.00	0.00	0.00
	Hydroelectric Power	179667.01	0.00	0.00	179667.01	0.00	0.00
	Other	15.04	0.00	1.50	14.62	0.00	1.46
	Total:	183071.11	0.00	256.95	183065.94	0.00	253.27
Lake C	ntario						
	Public Supply	898.26	36.30	155.92	892.39	0.00	89.24
	Domestic Supply	136.92	0.00	9.11	136.92	0.00	9.11
	Irrigation	216.15	0.00	194.53	200.94	0.00	180.85
	Livestock	79.15	0.00	12.30	76.15	0.00	9.90
	Industrial	420.27	0.00	144.16	419.25	0.00	143.93
	Fossil Fuel Power	2601.21	0.00	52.66	2600.86	0.00	52.49
	Nuclear Power	5190.18	0.00	832.60	5190.18	0.00	832.60
	Hydroelectric Power	306270.11	0.00		306270.11	0.00	0.00
	Other	38.85	121.13	3.88	38.40	0.00	3.84
	Total:	315851.10	157.44	1405.17	315825.20	0.00	1321.96
St. Lav	vrence River						
	Public Supply	104.12	0.00	19.61	99.74	0.00	19.17
	Domestic Supply	5.12	0.00	0.51	4.72	0.00	0.47
	Irrigation	12.46	0.00	11.21	10.01	0.00	9.01
	Livestock	17.22	0.00	2.62	16.34	0.00	1.91
	Industrial	151.57	0.00	16.69	150.91	0.00	16.56
	Fossil Fuel Power	5.45	0.00	2.73	5.45	0.00	2.73
	Nuclear Power	0.00	0.00		0.00	0.00	0.00
	Hydroelectric Power	673689.77	0.00	0.00	673689.77	0.00	0.00
	Other	5.17	0.00	0.75	4.93	0.00	0.73
	Total:	673990.88	0.00	54.13	673981.87	0.00	50.58
Grand Total:		1172913.10	157.44	1716.25	1172873.02	0.00	1625.81

JURISDICTION REPORT- New York

Withdrawals by Source

Year Of Data: 2011

			All Facilities			Principal Facilitie	S
Basin	Category	GLSW	OSW	GW	GLSW	OSW	GW
Lake E	rie						
	Public Supply	750.55	30.00	5.31	750.55	30.00	4.75
	Domestic Supply	0.00	2.15	0.00	0.00	2.15	0.00
	Irrigation	1.17	27.27	1.90	0.62	24.67	1.09
	Livestock	0.00	0.00	0.00	0.00	0.00	0.00
	Industrial	504.28	145.98	12.61	504.28	145.77	12.57
	Fossil Fuel Power	1907.85	0.00	0.00	1907.85	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	179667.01	0.00	0.00	179667.01	0.00	0.00
	Other	0.00	10.20	4.84	0.00	9.84	4.78
	Total:	182830.86	215.60	24.66	182830.31	212.44	23.19
Lake O	ntario						
	Public Supply	334.76	525.34	38.16	334.76	523.53	34.10
	Domestic Supply	0.00	135.63	1.29	0.00	135.63	1.29
	Irrigation	0.06	194.38	21.71	0.00	182.65	18.29
	Livestock	0.00	75.91	3.25	0.00	74.50	1.65
	Industrial	53.58	320.94	45.75	53.58	320.56	45.10
	Fossil Fuel Power	1539.53	1061.67	0.01	1539.53	1061.34	0.00
	Nuclear Power	5190.18	0.00	0.00	5190.18	0.00	0.00
	Hydroelectric Power	0.00	306270.11	0.00	0.00	306270.11	0.00
	Other	0.00	37.09	1.76	0.00	36.68	1.71
	Total:	7118.11	308621.05	111.94	7118.05	308605.00	102.15
St. Lav	vrence River						
	Public Supply	14.83	59.16	30.13	14.66	57.71	27.37
	Domestic Supply	0.00	1.63	3.49	0.00	1.63	3.09
	Irrigation	0.13	10.37	1.96	0.00	9.21	0.80
	Livestock	0.00	16.59	0.63	0.00	15.94	0.40
	Industrial	10.36	137.14	4.07	10.14	136.95	3.82
	Fossil Fuel Power	5.45	0.00	0.00	5.45	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	300099.89	373589.88	0.00	300099.89	373589.88	0.00
	Other	0.00	3.87	1.30	0.00	3.63	1.30
	Total:	300130.66	373818.65	41.57	300130.15	373814.95	36.77
Grand	Total:	490079.63	682655.30	178.17	490078.51	682632.39	162.12

JURISDICTION REPORT- New York

Units: ML/d **Jurisdiction Totals**

Year Of Data: 2011

Total Report - All Facilities

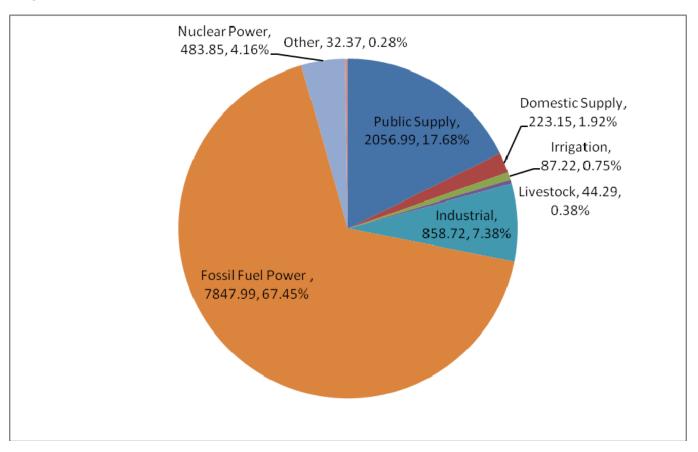
		With	drawals		Diver	Consumptive	
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Public Supply	1100.14	614.50	73.60	1788.25	0.00	36.30	254.12
Domestic Supply	0.00	139.41	4.78	144.19	0.00	0.00	9.84
Irrigation	1.35	232.02	25.57	258.95	0.00	0.00	233.05
Livestock	0.00	92.50	3.88	96.38	0.00	0.00	14.93
Industrial	568.22	604.05	62.43	1234.71	0.00	0.00	272.04
Fossil Fuel Power	3452.83	1061.67	0.01	4514.51	0.00	0.00	93.54
Nuclear Power	5190.18	0.00	0.00	5190.18	0.00	0.00	832.60
Hydroelectric Power	479766.90	679860.00	0.00	1159626.90	0.00	0.00	0.00
Other	0.00	51.15	7.90	59.05	0.00	121.13	6.14

		With	drawals		Diver	Consumptive	
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Public Supply	1099.97	611.23	66.22	1777.43	0.00	0.00	186.94
Domestic Supply	0.00	139.41	4.38	143.79	0.00	0.00	9.80
Irrigation	0.62	216.53	20.18	237.34	0.00	0.00	213.60
Livestock	0.00	90.44	2.05	92.49	0.00	0.00	11.82
Industrial	568.01	603.28	61.49	1232.78	0.00	0.00	271.64
Fossil Fuel Power	3452.83	1061.34	0.00	4514.16	0.00	0.00	93.37
Nuclear Power	5190.18	0.00	0.00	5190.18	0.00	0.00	832.60
Hydroelectric Power	479766.90	679860.00	0.00	1159626.90	0.00	0.00	0.00
Other	0.00	50.16	7.79	57.95	0.00	0.00	6.03

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 11,634.58 mld. Fossil fuel power was the largest use of water at 7,847.99 mld (67.4%); public supply was the second largest withdrawal at2,056.99 mld (17.7%).





Consumptive Use: Total consumptive uses were calculated to be 657.03 mld. Public supply represents the largest consumptive use sector at 308.55 mld and accounts for 46 percent of the total. The next three largest consumptive use categories were irrigation at 78.51 mld, fossil fuel power at 78.47 mld, and industrial at 67.27 mld.

Interbasin Diversions: Two permitted Lake Erie basin diversions provided drinking water to service areas outside the basin without return, resulting in total outgoing diversions of 1.21 mld. Releases from the Ohio & Erie Canal into the Lake Erie basin resulted in incoming diversions of 42.59 mld.

JURISDICTION REPORT- Ohio

Withdrawals, Diversions Units: ML/d and Consumptive Uses Year Of Data: 2011

	Category		All Facilities		Principal Facilities			
Basin		Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.	
Lake E	Frie							
	Public Supply	2056.99	1.21	308.55	2052.19	1.21	307.83	
	Domestic Supply	223.15	0.00	33.46	1.14	0.00	0.19	
	Irrigation	87.22	0.00	78.51	82.41	0.00	74.16	
	Livestock	44.29	0.00	35.43	3.29	0.00	2.61	
	Industrial	858.72	0.00	67.27	856.79	0.00	67.12	
	Fossil Fuel Power	7847.99	0.00	78.47	7847.99	0.00	78.47	
	Nuclear Power	483.85	0.00	48.38	483.85	0.00	48.38	
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	
	Other	32.37	-42.59	6.97	32.29	-42.59	6.93	
	Total:	11634.58	-41.37	657.03	11359.95	-41.37	585.68	
Grand	I Total:	11634.58	-41.37	657.03	11359.95	-41.37	585.68	

JURISDICTION REPORT- Ohio

Withdrawals by Source

Year Of Data: 2011

			All Facilities		P	rincipal Facilitie	IS
Basin	Category	GLSW	OSW	GW	GLSW	OSW	GW
Lake E	rie						
	Public Supply	1511.21	430.17	115.61	1511.21	429.98	110.99
	Domestic Supply	1.21	0.00	221.94	1.14	0.00	0.00
	Irrigation	1.48	76.92	8.82	1.40	73.47	7.53
	Livestock	0.00	4.81	39.48	0.00	0.79	2.50
	Industrial	223.42	421.85	213.46	223.42	421.54	211.83
	Fossil Fuel Power	5543.47	2304.52	0.00	5543.47	2304.52	0.00
	Nuclear Power	483.85	0.00	0.00	483.85	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	1.17	29.11	2.08	1.17	29.03	2.08
	Total:	7765.81	3267.38	601.39	7765.66	3259.35	334.93
Grand	I Total:	7765.81	3267.38	601.39	7765.66	3259.35	334.93

JURISDICTION REPORT- Ohio

Units: ML/d **Jurisdiction Totals**

		Withd	rawals	Diver	Consumptive		
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Public Supply	1511.21	430.17	115.61	2056.99	0.00	1.21	308.55
Domestic Supply	1.21	0.00	221.94	223.15	0.00	0.00	33.46
Irrigation	1.48	76.92	8.82	87.22	0.00	0.00	78.51
Livestock	0.00	4.81	39.48	44.29	0.00	0.00	35.43
Industrial	223.42	421.85	213.46	858.72	0.00	0.00	67.27
Fossil Fuel Power	5543.47	2304.52	0.00	7847.99	0.00	0.00	78.47
Nuclear Power	483.85	0.00	0.00	483.85	0.00	0.00	48.38
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	1.17	29.11	2.08	32.37	0.00	-42.59	6.97

Total Report - All Facilities

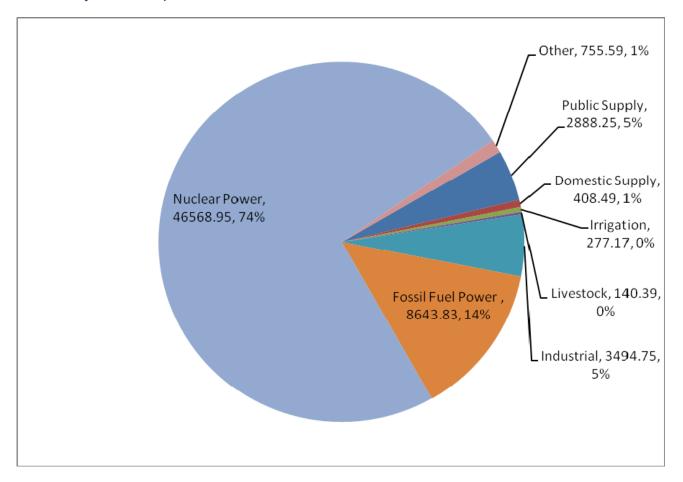
		Withd	rawals		Diver	Consumptive	
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Public Supply	1511.21	429.98	110.99	2052.19	0.00	1.21	307.83
Domestic Supply	1.14	0.00	0.00	1.14	0.00	0.00	0.19
Irrigation	1.40	73.47	7.53	82.41	0.00	0.00	74.16
Livestock	0.00	0.79	2.50	3.29	0.00	0.00	2.61
Industrial	223.42	421.54	211.83	856.79	0.00	0.00	67.12
Fossil Fuel Power	5543.47	2304.52	0.00	7847.99	0.00	0.00	78.47
Nuclear Power	483.85	0.00	0.00	483.85	0.00	0.00	48.38
Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	1.17	29.03	2.08	32.29	0.00	-42.59	6.93

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 liters per day) Excludes hydroelectric power.



Withdrawals: Total Great Lakes water uses were approximately 1,395,540.42 mld. However, hydroelectric withdrawals represented more than 95 percent of the total. Excluding hydroelectric, the total use is 63,177.42 mld. Nuclear power uses were the largest at 73.7 percent (46,568.95 mld).

Consumptive Use: Total consumptive uses were calculated to be 1,211.57 mld. Public supply represents the largest consumptive use sector at 433.24 mld and accounts for 35.7 percent of the total. The next two largest consumptive uses were nuclear power and industrial use, at 419.12 mld and 220.15 mld respectively.

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

Intrabasin Diversions: Refer to the associated table below.

Table 1: Intrabasin Diversions in Ontario

Name of Originating Watershed	Amount in mld
Erie	19,586.1 (Other – seaway)
Huron	161.64 (Public Supply)
Ontario	12.11 (Public Supply)

JURISDICTION REPORT- Ontario

Withdrawals, Diversions Units: ML/d and Consumptive Uses Year Of Data: 2011

			All Facilities			Principal Facilities	
Basin	Category	Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake S	Superior						
	Public Supply	173.27	0.00	26.00	172.52	0.00	25.88
	Domestic Supply	6.61	0.00	0.99	0.00	0.00	0.00
	Irrigation	1.42	0.00			0.00	
	Livestock	0.53	0.00			0.00	
	Industrial	613.70	0.00	38.66	0.00	0.00	0.00
	Fossil Fuel Power	306.85	0.00	2.76	306.85	0.00	2.76
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	92059.00	-15170.99	0.00	92059.00	0.00	0.00
	Other		0.00			0.00	
	Total:	93161.38	-15170.99	68.41	92538.37	0.00	28.64
Lake H	luron						
	Public Supply	319.38	0.00	47.90	309.12	0.00	46.36
	Domestic Supply	40.15	0.00	6.02	0.00	0.00	0.00
	Irrigation	79.17	0.00			0.00	
	Livestock	46.99	0.00			0.00	
	Industrial	719.96	0.00	45.35	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	21560.73	0.00	194.05	21560.73	0.00	194.05
	Hydroelectric Power	138870.00	0.00	0.00	138870.00	0.00	0.00
	Other	181.59	0.00	0.00	181.59	0.00	0.00
	Total:	161817.96	0.00	293.32	160921.44	0.00	240.41
Lake E	rie						
	Public Supply	355.41	0.00	53.31	351.42	0.00	52.71
	Domestic Supply	75.48	0.00	11.32	0.00	0.00	0.00
	Irrigation	120.57	0.00			0.00	
	Livestock	50.04	0.00			0.00	
	Industrial	683.08	0.00	43.03	0.00	0.00	0.00
	Fossil Fuel Power	5600.00	0.00	50.40	5600.00	0.00	50.40
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	2121.00	0.00	0.00	2121.00	0.00	0.00
	Other		0.00			0.00	
	Total:	9005.59	0.00	158.06	8072.42	0.00	103.11

			All Facilities			Principal Facilities	
Basin	Category	Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake C	Intario						
	Public Supply	1763.74	0.00	264.56	1758.79	0.00	263.82
	Domestic Supply	242.90	0.00	36.44	0.00	0.00	0.00
	Irrigation	67.13	0.00			0.00	
	Livestock	20.45	0.00			0.00	
	Industrial	869.27	0.00	54.76	0.00	0.00	0.00
	Fossil Fuel Power	2736.98	0.00	24.63	2736.98	0.00	24.63
	Nuclear Power	25008.22	0.00	225.07	25008.22	0.00	225.07
	Hydroelectric Power	189705.00	0.00	0.00	189705.00	0.00	0.00
	Other	501.00	0.00	0.00	501.00	0.00	0.00
	Total:	220914.69	0.00	605.47	219709.99	0.00	513.53
St. Lav	vrence River						
	Public Supply	276.45	0.00	41.47	272.87	0.00	40.94
	Domestic Supply	43.35	0.00	6.50	0.00	0.00	0.00
	Irrigation	8.89	0.00			0.00	
	Livestock	22.37	0.00			0.00	
	Industrial	608.74	0.00	38.35	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	909608.00	0.00	0.00	909608.00	0.00	0.00
	Other	73.00	0.00	0.00	73.00	0.00	0.00
	Total:	910640.81	0.00	86.32	909953.87	0.00	40.94
Grand	Total:	1395540.42	-15170.99	1211.57	1391196.08	0.00	926.62

JURISDICTION REPORT- Ontario

Withdrawals by Source

Year Of Data: 2011

			All Facilities		Principal Facilities			
Basin	Category	GLSW	OSW	GW	GLSW	OSW	GW	
Lake S	Superior							
	Public Supply	113.93	49.31	10.03	113.83	49.05	9.65	
	Domestic Supply	0.00	0.00	6.61	0.00	0.00	0.00	
	Irrigation	0.08	1.16	0.17				
	Livestock	0.00	0.53	0.00				
	Industrial	613.69	0.00	0.01	0.00	0.00	0.00	
	Fossil Fuel Power	306.85	0.00	0.00	306.85	0.00	0.00	
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	
	Hydroelectric Power	0.00	92059.00	0.00	0.00	92059.00	0.00	
	Other							
	Total:	1034.55	92110.00	16.82	420.68	92108.05	9.65	
Lake H	luron							
	Public Supply	161.49	89.21	68.68	159.08	87.94	62.10	
	Domestic Supply	0.00	0.00	40.15	0.00	0.00	0.00	
	Irrigation	0.59	58.33	20.25				
	Livestock	11.08	11.63	24.27				
	Industrial	709.43	0.00	10.53	0.00	0.00	0.00	
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00	
	Nuclear Power	21560.73	0.00	0.00	21560.73	0.00	0.00	
	Hydroelectric Power	72662.00	66208.00	0.00	72662.00	66208.00	0.00	
	Other	0.00	181.59	0.00	0.00	181.59	0.00	
	Total:	95105.32	66548.76	163.88	94381.81	66477.53	62.10	
Lake E	rie							
	Public Supply	33.94	110.78	210.70	33.94	110.63	206.85	
	Domestic Supply	0.00	0.00	75.48	0.00	0.00	0.00	
	Irrigation	2.23	45.84	72.50				
	Livestock	0.08	3.36	46.60				
	Industrial	655.80	0.00	27.28	0.00	0.00	0.00	
	Fossil Fuel Power	5600.00	0.00	0.00	5600.00	0.00	0.00	
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	
	Hydroelectric Power	0.00	2121.00	0.00	0.00	2121.00	0.00	
	Other							
	Total:	6292.05	2280.98	432.56	5633.94	2231.63	206.85	

			All Facilities			Principal Facilitie	S
Basin	Category	GLSW	OSW	GW	GLSW	OSW	GW
Lake C	Ontario						
	Public Supply	1519.90	200.08	43.76	1519.74	199.41	39.64
	Domestic Supply	0.00	0.00	242.90	0.00	0.00	0.00
	Irrigation	4.11	36.06	26.96			
	Livestock	0.00	3.56	16.89			
	Industrial	825.88	0.00	43.39	0.00	0.00	0.00
	Fossil Fuel Power	2736.98	0.00	0.00	2736.98	0.00	0.00
	Nuclear Power	25008.22	0.00	0.00	25008.22	0.00	0.00
	Hydroelectric Power	141065.00	48640.00	0.00	141065.00	48640.00	0.00
	Other	0.00	501.00	0.00	0.00	501.00	0.00
	Total:	171160.09	49380.70	373.90	170329.94	49340.41	39.64
St. Lav	wrence River						
	Public Supply	40.27	222.72	13.46	40.27	221.52	11.08
	Domestic Supply	0.00	0.00	43.35	0.00	0.00	0.00
	Irrigation	0.03	7.73	1.13			
	Livestock	0.00	13.73	8.65			
	Industrial	604.75	0.00	3.99	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	505095.00	404513.00	0.00	505095.00	404513.00	0.00
	Other	0.00	73.00	0.00	0.00	73.00	0.00
	Total:	505740.05	404830.17	70.58	505135.27	404807.52	11.08
Grand	d Total:	779332.06	615150.62	1057.75	775901.63	614965.14	329.31

JURISDICTION REPORT- Ontario

Units: ML/d **Jurisdiction Totals**

Total Report - All Facilities

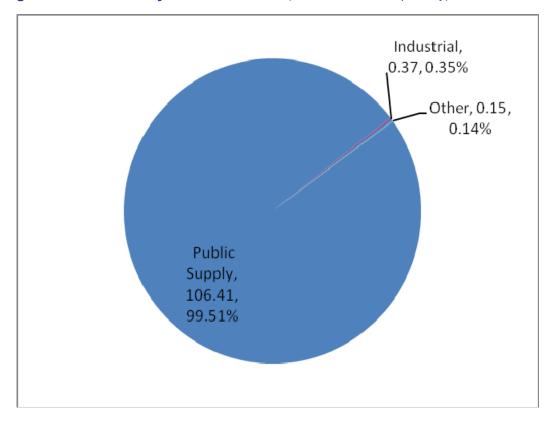
		With	drawals	Diver	sions	Consumptive	
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Public Supply	1869.53	672.09	346.63	2888.25	0.00	0.00	433.24
Domestic Supply	0.00	0.00	408.49	408.49	0.00	0.00	61.27
Irrigation	7.04	149.13	121.01	277.17	0.00	0.00	
Livestock	11.16	32.81	96.42	140.39	0.00	0.00	
Industrial	3409.55	0.00	85.20	3494.75	0.00	0.00	220.15
Fossil Fuel Power	8643.83	0.00	0.00	8643.83	0.00	0.00	77.79
Nuclear Power	46568.95	0.00	0.00	46568.95	0.00	0.00	419.12
Hydroelectric Power	718822.00	613541.00	0.00	1332363.00	0.00	-15170.99	0.00
Other	0.00	755.59	0.00	755.59	234.59	0.00	0.00

	Withdrawals Diversions					sions	Consumptive
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Public Supply	1866.85	668.55	329.31	2864.71	0.00	0.00	429.71
Domestic Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Irrigation					0.00	0.00	
Livestock					0.00	0.00	
Industrial	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fossil Fuel Power	8643.83	0.00	0.00	8643.83	0.00	0.00	77.79
Nuclear Power	46568.95	0.00	0.00	46568.95	0.00	0.00	419.12
Hydroelectric Power	718822.00	613541.00	0.00	1332363.00	0.00	0.00	0.00
Other	0.00	755.59	0.00	755.59	234.59	0.00	0.00

Pennsylvania

Data Sources: The Department of Environmental Protection – Bureau of 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 106.77 mld. Public supply at 106.25 mld (includes 0.16 mld from Lake Ontario of public supply) or 99.5 percent, and industrial at 0.37 mld or 0.4 percent, constituted the primary uses of water.





Consumptive Use: Consumptive use totaled 10.68 mld.

JURISDICTION REPORT - Pennsylvania Withdrawals, Diversions Units: ML/d and Consumptive Uses Uses User Of Data: 2011

			All Facilities		Principal Facilities		
Basin	Category	Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Lake E	Frie						
	Public Supply	106.25		10.62	105.46		10.55
	Domestic Supply						
	Irrigation						
	Livestock						
	Industrial	0.37		0.04			
	Fossil Fuel Power						
	Nuclear Power						
	Hydroelectric Power						
	Other	0.15					
	Total:	106.77		10.66	105.46		10.55
Lake C	Ontario						
	Public Supply	0.16		0.02			
	Total:	0.16		0.02			
Grand	l Total:	106.93		10.68	105.46		10.55

JURISDICTION REPORT- Pennsylvania Withdrawals by Source

Units: ML/d Year Of Data: 2011

			All Facilities			ncipal Facilities	
Basin	Category	GLSW	OSW	GW	GLSW	OSW	GW
Lake E	Erie						
	Public Supply	99.12	0.52	6.62	99.12	0.47	5.88
	Domestic Supply						
	Irrigation						
	Livestock						
	Industrial	0.00	0.00	0.37			
	Fossil Fuel Power						
	Nuclear Power						
	Hydroelectric Power						
	Other	0.00	0.00	0.15			
	Total:	99.12	0.52	7.13	99.12	0.47	5.88
Lake (Ontario						
	Public Supply	0.00	0.00	0.16			
	Total:	0.00	0.00	0.16			
Grand	d Total:	99.12	0.52	7.29	99.12	0.47	5.88

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JURISDICTION REPORT - Pennsylvania Jurisdiction Totals

Total Report - All Facilities

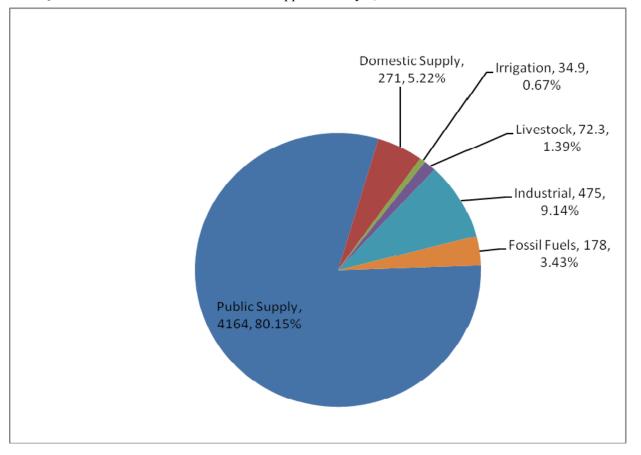
		Withdr	awais	Diver	Consumptive		
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Public Supply	99.12	0.52	6.78	106.41			10.64
Domestic Supply							
Irrigation							
Livestock							
Industrial	0.00	0.00	0.37	0.37			0.04
Fossil Fuel Power							
Nuclear Power							
Hydroelectric Power							
Other	0.00	0.00	0.15	0.15			

		Withdr	awais	Diver	Consumptive		
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Public Supply	99.12	0.47	5.88	105.46			10.55
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 1,150,371.00 mld, the total water withdrawal from Québec's St. Lawrence River basin was approximately 5,195.2 mld.



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

Diversions: Diversions are currently being inventoried.

Historically, water withdrawals have not been a source of great conflict in Québec; however, water shortage caused by severe drought and increasing demands for water withdrawal have brought the problem to the forefront. Since the adoption of a Water Policy by Québec's National Assembly in 2002, existing regulations have been amended to improve water management. 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 Units: ML/d and Consumptive Uses Year Of Data: 2011

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

JURISDICTION REPORT- Quebec

Withdrawals by Source Units: ML/d Year Of Data: 2011

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

JURISDICTION REPORT- Quebec

Units: ML/d Jurisdiction Totals Year Of Data: 2011

Total Report - All Facilities

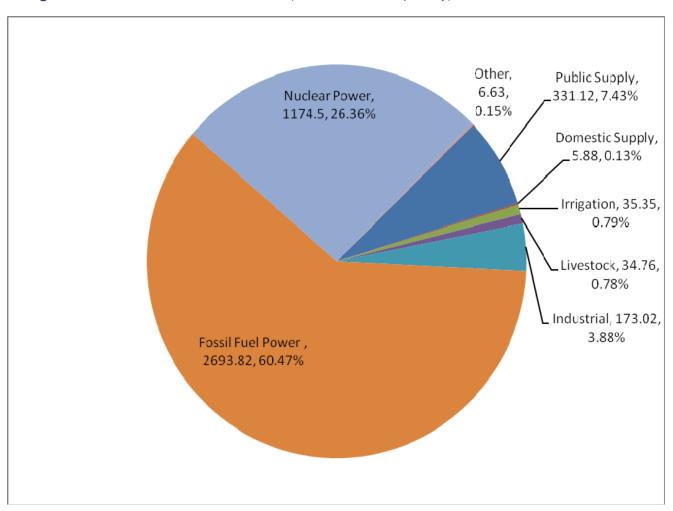
		With	ndrawals	Diver	Consumptive		
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Public Supply	2282.00	1882.00	0.00	4164.00	0.00	0.00	416.00
Domestic Supply	0.00	0.00	271.00	271.00	0.00	0.00	27.00
Irrigation	0.00	0.00	34.90	34.90	0.00	0.00	31.41
Livestock	0.00	0.00	72.30	72.30	0.00	0.00	57.84
Industrial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

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

Wisconsin

Data Sources: Wisconsin 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 16,864.27 mld: 16,700.26 mld from Lake Michigan (99 % of the total) and 164.01 mld from Lake Superior. Water use in the Lake Michigan basin was primarily for fossil fuel (10,076.01 mld) and nuclear power (4,445.97 mld), at 60 percent and 26 percent respectively. Of the Lake Superior uses, the largest single use was for fossil fuel power at 121.19 mld or 74 percent.





Consumptive Use: Consumptive uses from Wisconsin's portion of the basin were calculated to be 525.14 mld.

Interbasin Diversions: A small diversion remains at the Portage Canal site, with 97.85 mld flowing from the Wisconsin River (the Mississippi River basin) into the Fox River (the Lake Michigan basin).

JURISDICTION REPORT- Wisconsin

Withdrawals, Diversions Units: ML/d and Consumptive Uses Year Of Data: 2011

			All Facilities		Principal Facilities			
Basin	Category	Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum	
Lake S	Superior							
	Public Supply	3.12		0.37				
	Domestic Supply	0.66		0.08				
	Irrigation	0.00		0.00				
	Livestock	36.80		0.00				
	Industrial	2.25		0.18				
	Fossil Fuel Power	121.19		1.21				
	Other	0.00		0.00				
	Total:	164.01		1.85				
Lake N	flichigan Public Supply	1250.30		150.04				
	Domestic Supply	21.61		2.61				
	Irrigation	133.80		93.66				
	Livestock	94.77		16.28				
	Industrial	652.69		75.08				
	Fossil Fuel Power	10076.01		129.08				
	Nuclear Power	4445.97		44.46				
	Other	25.11	-97.85	12.09				
	Total:	16700.26	-97.85	523.29				
Grand	Total:	16864.27	-97.85	525.14				

JURISDICTION REPORT- Wisconsin

Withdrawals by Source

Year Of Data: 2011

			All Facilities		Pri	ncipal Facilities	
Basin	Category	GLSW	OSW	GW	GLSW	OSW	GW
Lake S	Superior						
	Public Supply	2.66	0.00	0.46			
	Domestic Supply	0.00	0.00	0.66			
	Irrigation	0.00	0.00	0.00			
	Livestock	0.00	30.61	6.19			
	Industrial	0.00	1.83	0.41			
	Fossil Fuel Power	121.19	0.00	0.00			
	Other	0.00	0.00	0.00			
	Total:	123.85	32.44	7.72			
Lake N	/ lichigan						
	Public Supply	991.38	84.56	174.36			
	Domestic Supply	0.45	8.64	12.52			
	Irrigation	0.00	15.94	117.86			
	Livestock	0.00	42.56	52.20			
	Industrial	1.08	594.79	56.83			
	Fossil Fuel Power	8982.61	1093.40	0.00			
	Nuclear Power	4445.97	0.00	0.00			
	Other	19.93	1.21	3.97			
	Total:	14441.42	1841.10	417.74			

JURISDICTION REPORT- Wisconsin

Units: ML/d **Jurisdiction Totals**

Year Of Data: 2011

Total Report - All Facilities

		Withd	rawals	Diver	Consumptive		
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Public Supply	994.04	84.56	174.81	1253.42	0.00		150.41
Domestic Supply	0.45	8.64	13.18	22.27	0.00		2.69
Irrigation	0.00	15.94	117.86	133.80	0.00		93.66
Livestock	0.00	73.17	58.39	131.56	0.00		16.28
Industrial	1.08	596.62	57.24	654.94	0.00		75.27
Fossil Fuel Power	9103.80	1093.40	0.00	10197.20	0.00		130.29
Nuclear Power	4445.97	0.00	0.00	4445.97	0.00		44.46
Other	19.93	1.21	3.97	25.11	0.00	-97.85	12.09

		Withdra	wals		Diver	Consumptive	
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
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: ML/d Year Of Data: 2011

			All Facilities			Principal Facilities	
Jurisdictio	n Category	Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Michiga	n						
	Public Supply	50.21		6.28	47.83		5.98
	Domestic Supply	0.27		0.03	0.27		0.03
	Irrigation	2.55		2.30	2.26		2.03
	Livestock	44.64		35.72	44.64		35.72
	Industrial	17.66		1.77	16.74		1.67
	Fossil Fuel Power	815.06		1.05	815.06		1.05
	Nuclear Power						
	Hydroelectric Power						
	Other						
	Total	930.39		47.14	926.80		46.48
Minneso	ota						
	Public Supply	144.38	0.00	14.42	143.47	0.00	14.38
	Domestic Supply	4.47	0.00	0.45	4.05	0.00	0.42
	Irrigation	1.59	0.00	1.44	0.87	0.00	0.79
	Livestock	2.69	0.00	2.42	2.42	0.00	2.20
	Industrial	811.44	30.25	81.20	810.27	30.25	81.05
	Fossil Fuel Power	1253.20	0.00	25.06	1253.12	0.00	25.06
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	11808.21	0.00	0.00	11808.21	0.00	0.00
	Other	0.61	0.00	0.00	0.53	0.00	0.00
	Total	14026.58	30.25	124.99	14022.95	30.25	123.90
Ontario							
	Public Supply	173.27	0.00	26.00	172.52	0.00	25.88
	Domestic Supply	6.61	0.00	0.99	0.00	0.00	0.00
	Irrigation	1.42	0.00			0.00	
	Livestock	0.53	0.00			0.00	
	Industrial	613.70	0.00	38.66	0.00	0.00	0.00
	Fossil Fuel Power	306.85	0.00	2.76	306.85	0.00	2.76
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	92059.00	-15170.99	0.00	92059.00	0.00	0.00
	Other		0.00			0.00	
	Total	93161.38	-15170.99	68.41	92538.37	0.00	28.64

			All Facilities			Principal Facilitie	S
Jurisdiction	Category	Withdr.	Inter-Basin Dive	r. Consum.	Withdr.	Inter-Basin Dive	r. Consum.
Wisconsin							
Pub	lic Supply	3.12		0.37			
Don	nestic Supply	0.66		0.08			
Irrig	ation	0.00		0.00			
Live	estock	36.80		0.00			
Indu	ustrial	2.25		0.18			
Fos	sil Fuel Power	121.19		1.21			
Oth	er	0.00		0.00			
	Total	164.01		1.85			
Grand Total:		108282.36	-15140.74	242.39	107488.11	30.25	199.02

BASIN REPORT- Lake Superior

Withdrawals by Source

Year Of Data: 2011

Units: ML/d

			All Facilities			Principle Facili	ies
Jurisdiction	n Category	GLSW	OSW	GW	GLSW	OSW	GW
Michigar	า						
•	Public Supply	18.09	0.00	32.13	18.09	0.00	29.74
	Domestic Supply	0.00	0.27	0.00	0.00	0.27	0.00
	Irrigation	0.03	0.86	1.65	0.00	0.79	1.47
	Livestock	0.00	41.07	3.58	0.00	41.07	3.58
	Industrial	16.74	0.00	0.92	16.74	0.00	0.00
	Fossil Fuel Power	815.06	0.00	0.00	815.06	0.00	0.00
	Nuclear Power						
	Hydroelectric Power						
	Other						
	TOTAL	849.92	42.20	38.28	849.88	42.13	34.79
Minneso	ta						
	Public Supply	113.60	6.78	24.00	113.45	6.74	23.28
	Domestic Supply	2.84	1.51	0.11	2.65	1.40	0.00
	Irrigation	0.26	1.17	0.15	0.00	0.87	0.00
	Livestock	2.69	0.00	0.00	2.42	0.00	0.00
	Industrial	482.07	328.76	0.61	481.73	328.01	0.53
	Fossil Fuel Power	701.55	551.61	0.04	701.55	551.57	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	11808.21	0.00	0.00	11808.21	0.00
	Other	0.00	0.00	0.61	0.00	0.00	0.53
	TOTAL	1303.01	12698.05	25.51	1301.80	12696.80	24.34
Ontario							
	Public Supply	113.93	49.31	10.03	113.83	49.05	9.65
	Domestic Supply	0.00	0.00	6.61	0.00	0.00	0.00
	Irrigation	0.08	1.16	0.17			
	Livestock	0.00	0.53	0.00			
	Industrial	613.69	0.00	0.01	0.00	0.00	0.00
	Fossil Fuel Power	306.85	0.00	0.00	306.85	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	92059.00	0.00	0.00	92059.00	0.00
	Other						
	TOTAL	1034.55	92110.00	16.82	420.68	92108.05	9.65
Wiscons	sin						
	Public Supply	2.66	0.00	0.46			
	Domestic Supply	0.00	0.00	0.66			
	Irrigation	0.00	0.00	0.00			
	Livestock	0.00	30.61	6.19			
	Industrial	0.00	1.83	0.41			
	Fossil Fuel Power	121.19	0.00	0.00			
	Other	0.00	0.00	0.00			
	TOTAL	123.85	32.44	7.72			

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			All Facilitie	IS		Principle Facilities		
Jurisdiction	Category	GLSW	OSW	GW	GLSW	OSW	GW	
Grand Tota	l:	3311.34	104882.70	88.33	2572.36	104846.97	68.77	

BASIN REPORT- Lake Superior

Basin Total

		TOTAL RO	eport - A		lies		
		With	drawals	Diver	Consumptive		
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Public Supply	248.28	56.09	66.61	370.98	-1.20	0.00	47.07
Domestic Supply	2.84	1.78	7.39	12.01	0.00	0.00	1.56
Irrigation	0.38	3.20	1.98	5.56	0.00	0.00	3.73
Livestock	2.69	72.21	9.77	84.66	0.00	0.00	38.14
Industrial	1112.50	330.60	1.95	1445.04	0.00	30.25	121.81
Fossil Fuel Power	1944.65	551.61	0.04	2496.30	0.00	0.00	30.08
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	0.00	103867.21	0.00	103867.21	0.00	-15170.99	0.00
Other	0.00	0.00	0.61	0.61	0.00	0.00	0.00

Total Report - All Facilities

		With	drawals	Diver	Diversions			
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use	
Public Supply	245.36	55.79	62.67	363.82	-1.20	0.00	46.24	
Domestic Supply	2.65	1.67	0.00	4.32	0.00	0.00	0.45	
Irrigation	0.00	1.66	1.47	3.13	0.00	0.00	2.83	
Livestock	2.42	41.07	3.58	47.07	0.00	0.00	37.91	
Industrial	498.47	328.01	0.53	827.01	0.00	30.25	82.72	
Fossil Fuel Power	1823.46	551.57	0.00	2375.03	0.00	0.00	28.87	
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Hydroelectric Power	0.00	103867.21	0.00	103867.21	0.00	0.00	0.00	
Other	0.00	0.00	0.53	0.53	0.00	0.00	0.00	

BASIN REPORT- Lake Michigan

Withdrawals, Diversions and Consumptive Uses

Units: ML/d Year Of Data: 2011

			All Facilities			Principal Facilities	
Jurisdiction	n Category	Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Illinois							
	Public Supply	3402.99	3402.99	0.00	3402.99	3402.99	0.00
	Domestic Supply	8.08	8.03	0.00	8.08	8.03	0.00
	Irrigation	0.52	0.00	0.00	0.52	0.00	0.00
	Livestock						
	Industrial	40.48	0.06	0.09	40.48	0.06	0.09
	Fossil Fuel Power	3354.51	0.00	0.00	3354.51	0.00	0.00
	Nuclear Power	119.92	0.00	0.00	119.92	0.00	0.00
	Hydroelectric Power						
	Other	869.65	869.65	0.00	869.65	869.65	0.00
	Total	7796.15	4280.72	0.09	7796.15	4280.72	0.09
Indiana							
	Public Supply	495.28	191.26	74.31	494.00	191.26	74.08
	Irrigation	175.26	0.00	157.74	172.77	0.00	155.47
	Livestock	15.14	0.00	12.11	15.03	0.00	12.04
	Industrial	6140.05	87.85	368.40	6138.73	87.85	368.32
	Fossil Fuel Power	2761.99	0.00	55.23	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	7402.71	0.00	0.00	7402.71	0.00	0.00
	Other	0.26	0.00	0.04	0.15	0.00	0.00
	Total	16990.71	279.11	667.82	14223.38	279.11	609.91
Michigar	า						
_	Public Supply	984.63		123.08	956.67		119.58
	Domestic Supply	27.30		3.41	24.14		3.02
	Irrigation	763.13		686.82	709.99		638.99
	Livestock	89.45		71.56	76.93		61.54
	Industrial	834.28		83.43	826.30		82.63
	Fossil Fuel Power	4285.91		283.07	4285.86		283.07
	Nuclear Power	8997.79		58.12	8997.79		58.12
	Hydroelectric Power						
	Other	23.06		0.00	22.84		0.00
	Total	16005.55		1309.49	15900.53		1246.95

			All Facilities	}		Principal Faciliti	98
Jurisdiction	Category	Withdr.	Inter-Basin Diver. Consum.		Withdr.	Inter-Basin Dive	er. Consum.
Wisconsi	n						
F	Public Supply	1250.30		150.04			
[Domestic Supply	21.61		2.61			
Ī	rrigation	133.80		93.66			
Ī	_ivestock	94.77		16.28			
Ī	ndustrial	652.69		75.08			
F	Fossil Fuel Power	10076.01		129.08			
1	Nuclear Power	4445.97		44.46			
(Other	25.11	-97.85	12.09			
=	Total	16700.26	-97.85	523.29			
Grand Tota	al:	57492.67	4461.98	2500.70	37920.06	4559.83	1856.95

BASIN REPORT- Lake Michigan

Withdrawals by Source

Year Of Data: 2011

Units: ML/d

			All Facilities			Principle Faci	ities
Jurisdictio	on Category	GLSW	OSW	GW	GLSW	OSW	GW
Illinois	2 2						
	Public Supply	3402.99	0.00	0.00	3402.99	0.00	0.00
	Domestic Supply	8.03	0.00	0.05	8.03	0.00	0.05
	Irrigation	0.08	0.00	0.44	0.08	0.00	0.44
	Livestock	0.00	0.00	••••	0.00	0.00	••••
	Industrial	40.48	0.00	0.00	40.48	0.00	0.00
	Fossil Fuel Power	3354.51	0.00	0.00	3354.51	0.00	0.00
	Nuclear Power	119.92	0.00	0.00	119.92	0.00	0.00
	Hydroelectric Power						
	Other	869.65	0.00	0.00	869.65	0.00	0.00
	TOTAL	7795.66	0.00	0.48	7795.66	0.00	0.48
Indiana							
	Public Supply	337.92	0.00	157.36	337.92	0.00	156.07
	Irrigation	0.00	30.81	144.45	0.00	29.79	142.98
	Livestock	0.00	4.58	10.56	0.00	4.58	10.45
	Industrial	6103.56	14.01	22.49	6103.56	13.89	21.27
	Fossil Fuel Power	0.00	2761.99	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	7402.71	0.00	0.00	7402.71	0.00
	Other	0.00	0.00	0.26	0.00	0.00	0.15
	TOTAL	6441.48	10214.10	335.12	6441.48	7450.98	330.92
Michiga	n						
•	Public Supply	449.83	0.00	534.80	449.83	0.00	506.84
	Domestic Supply	0.00	11.25	16.04	0.00	11.17	12.98
	Irrigation	0.98	199.41	562.74	0.90	180.35	528.74
	Livestock	0.00	39.60	49.85	0.00	37.91	39.02
	Industrial	167.33	473.37	193.57	167.28	472.78	186.24
	Fossil Fuel Power	2590.30	1687.43	8.18	2590.30	1687.42	8.14
	Nuclear Power	8997.79	0.00	0.00	8997.79	0.00	0.00
	Hydroelectric Power						
	Other	0.00	0.00	23.06	0.00	0.00	22.84
	TOTAL	12206.24	2411.07	1388.25	12206.10	2389.62	1304.80
Wiscon	sin						
	Public Supply	991.38	84.56	174.36			
	Domestic Supply	0.45	8.64	12.52			
	Irrigation	0.00	15.94	117.86			
	Livestock	0.00	42.56	52.20			
	Industrial	1.08	594.79	56.83			-
	Fossil Fuel Power	8982.61	1093.40	0.00			
	Nuclear Power	4445.97	0.00	0.00			
	Others	10.02	4.04	2.07			
	Other	19.93	1.21	3.97			

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			All Facilities			Principle Facilities		
Jurisdiction	Category	GLSW	OSW	GW	GLSW	OSW	GW	
Grand Tota	ıl:	40884.80	14466.27	2141.60	26443.25	9840.60	1636.21	

BASIN REPORT- Lake Michigan

Basin Total

		Total Re	eport - P	п гаспп	les		
		Withd	rawals	Diver	Consumptive		
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Public Supply	5182.12	84.56	866.52	6133.21	1.51	3594.25	347.42
Domestic Supply	8.48	19.89	28.61	56.98	0.00	8.03	6.02
Irrigation	1.06	246.16	825.49	1072.72	0.00	0.00	938.22
Livestock	0.00	86.75	112.62	199.36	0.00	0.00	99.95
Industrial	6312.46	1082.17	272.88	7667.51	0.00	87.90	527.00
Fossil Fuel Power	14927.42	5542.82	8.18	20478.42	0.00	0.00	467.38
Nuclear Power	13563.68	0.00	0.00	13563.68	0.00	0.00	102.58
Hydroelectric Power	0.00	7402.71	0.00	7402.71	0.00	0.00	0.00
Other	889.58	1.21	27.29	918.08	0.00	771.80	12.13

Total Report - All Facilities

Category	Withdrawals				Diversions		Consumptive
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Public Supply	4190.74	0.00	662.91	4853.66	1.51	3594.25	193.66
Domestic Supply	8.03	11.17	13.03	32.22	0.00	8.03	3.02
Irrigation	0.98	210.14	672.15	883.27	0.00	0.00	794.45
Livestock	0.00	42.49	49.47	91.96	0.00	0.00	73.58
Industrial	6311.33	486.68	207.51	7005.52	0.00	87.90	451.05
Fossil Fuel Power	5944.81	1687.42	8.14	7640.36	0.00	0.00	283.07
Nuclear Power	9117.72	0.00	0.00	9117.72	0.00	0.00	58.12
Hydroelectric Power	0.00	7402.71	0.00	7402.71	0.00	0.00	0.00
Other	869.65	0.00	23.00	892.64	0.00	869.65	0.00

BASIN REPORT- Lake Huron

Withdrawals, Diversions and Consumptive Uses

Units: ML/d Year Of Data: 2011

			All Facilities			Principal Facilities	
Jurisdiction	Category	Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Michigan							
-	Public Supply	437.89		54.74	424.15		53.02
	Domestic Supply	1.55		0.19	1.16		0.15
	Irrigation	94.11		84.70	88.00		79.20
	Livestock	21.22		16.98	19.00		15.20
	Industrial	256.34		25.63	255.17		25.52
	Fossil Fuel Power	2607.94		15.68	2607.94		14.78
	Nuclear Power						
	Hydroelectric Power						
	Other						
	Total	3419.05		197.92	3395.42		187.86
Ontario							
	Public Supply	319.38	0.00	47.90	309.12	0.00	46.36
	Domestic Supply	40.15	0.00	6.02	0.00	0.00	0.00
	Irrigation	79.17	0.00			0.00	
	Livestock	46.99	0.00			0.00	
	Industrial	719.96	0.00	45.35	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	21560.73	0.00	194.05	21560.73	0.00	194.05
	Hydroelectric Power	138870.00	0.00	0.00	138870.00	0.00	0.00
	Other	181.59	0.00	0.00	181.59	0.00	0.00
	Total	161817.96	0.00	293.32	160921.44	0.00	240.41
Grand To	tal:	165237.01	0.00	491.24	164316.86	0.00	428.27

BASIN REPORT- Lake Huron

Withdrawals by Source

Units: ML/d Year Of Data: 2011

			All Facilities			Principle Facili	ties
Jurisdiction	i Category	GLSW	OSW	GW	GLSW	OSW	GW
Michigan							
•	Public Supply	351.14	1.17	85.58	350.34	1.17	72.65
	Domestic Supply	0.00	0.04	1.51	0.00	0.00	1.16
	Irrigation	0.65	49.20	44.26	0.57	45.52	41.92
	Livestock	0.00	5.21	16.02	0.00	5.21	13.79
	Industrial	111.40	141.03	3.91	111.40	140.90	2.87
	Fossil Fuel Power	612.30	1991.05	4.58	612.30	1991.05	4.58
	Nuclear Power						
	Hydroelectric Power						
	Other						
	TOTAL	1075.50	2187.70	155.85	1074.61	2183.84	136.97
Ontario							
	Public Supply	161.49	89.21	68.68	159.08	87.94	62.10
	Domestic Supply	0.00	0.00	40.15	0.00	0.00	0.00
	Irrigation	0.59	58.33	20.25			
	Livestock	11.08	11.63	24.27			
	Industrial	709.43	0.00	10.53	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	21560.73	0.00	0.00	21560.73	0.00	0.00
	Hydroelectric Power	72662.00	66208.00	0.00	72662.00	66208.00	0.00
	Other	0.00	181.59	0.00	0.00	181.59	0.00
	TOTAL	95105.32	66548.76	163.88	94381.81	66477.53	62.10
Grand To	otal:	96180.82	68736.47	319.73	95456.42	68661.37	199.07

BASIN REPORT- Lake Huron

Basin Total

		Total Re	eport - P	ап гаспп	les		
		Withd	irawais	Diver	Consumptive		
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Public Supply	512.64	90.37	154.25	757.26	0.00	0.00	102.64
Domestic Supply	0.00	0.04	41.66	41.70	0.00	0.00	6.21
Irrigation	1.23	107.53	64.51	173.28	0.00	0.00	84.70
Livestock	11.08	16.84	40.29	68.22	0.00	0.00	16.98
Industrial	820.83	141.03	14.44	976.30	0.00	0.00	70.98
Fossil Fuel Power	612.30	1991.05	4.58	2607.94	0.00	0.00	15.68
Nuclear Power	21560.73	0.00	0.00	21560.73	0.00	0.00	194.05
Hydroelectric Power	72662.00	66208.00	0.00	138870.00	0.00	0.00	0.00
Other	0.00	181.59	0.00	181.59	181.59	0.00	0.00
-							

Total Report - All Facilities

Total Report - Principal Facilities

		Witho	irawais	Diver	Diversions		
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Public Supply	509.42	89.11	134.75	733.27	0.00	0.00	99.38
Domestic Supply	0.00	0.00	1.16	1.16	0.00	0.00	0.15
Irrigation	0.57	45.52	41.92	88.00	0.00	0.00	79.20
Livestock	0.00	5.21	13.79	19.00	0.00	0.00	15.20
Industrial	111.40	140.90	2.87	255.17	0.00	0.00	25.52
Fossil Fuel Power	612.30	1991.05	4.58	2607.94	0.00	0.00	14.78
Nuclear Power	21560.73	0.00	0.00	21560.73	0.00	0.00	194.05
Hydroelectric Power	72662.00	66208.00	0.00	138870.00	0.00	0.00	0.00
Other	0.00	181.59	0.00	181.59	181.59	0.00	0.00

BASIN REPORT- Lake Erie

Withdrawals, Diversions and Consumptive Uses

Units: ML/d Year Of Data: 2011

			All Facilities			Principal Facilities	
Jurisdictio	n Category	Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
Indiana							
	Public Supply	150.62	28.28	22.60	150.32	28.28	22.56
	Domestic Supply	2.27	0.00	0.34	1.74	0.00	0.26
	Irrigation	5.19	0.00	4.66	4.32	0.00	3.86
	Livestock	0.00	0.00	0.00	0.00	0.00	0.00
	Industrial	28.77	0.00	1.74	28.09	0.00	1.70
	Fossil Fuel Power	1.02	0.00	0.04	1.02	0.00	0.04
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.19	0.00	0.04	0.19	0.00	0.04
	Total	188.06	28.28	29.41	185.67	28.28	28.47
Michiga	n						
	Public Supply	2447.20		305.90	2434.65		304.33
	Domestic Supply	1.12		0.14	0.43		0.05
	Irrigation	64.64		58.17	59.06		53.15
	Livestock	2.88		2.31	0.56		0.45
	Industrial	1145.07		114.51	1143.47		114.35
	Fossil Fuel Power	15393.16		151.00	15393.16		151.00
	Nuclear Power	218.95		71.59	218.95		71.59
	Hydroelectric Power						
	Other	13.63		0.00	13.58		0.00
	Total	19286.64		703.61	19263.87		694.93
New Yo	rk						
	Public Supply	785.86	0.00	78.59	785.30	0.00	78.53
	Domestic Supply	2.15	0.00	0.22	2.15	0.00	0.22
	Irrigation	30.34	0.00	27.30	26.38	0.00	23.75
	Livestock	0.00	0.00		0.00	0.00	0.00
	Industrial	662.87	0.00	111.19	662.63	0.00	111.16
	Fossil Fuel Power	1907.85	0.00	38.16	1907.85	0.00	38.16
	Nuclear Power	0.00	0.00		0.00	0.00	0.00
	Hydroelectric Power	179667.01	0.00	0.00	179667.01	0.00	0.00
	Other	15.04	0.00	1.50	14.62	0.00	1.46
	Total	183071.11	0.00	256.95	183065.94	0.00	253.27

			All Facilities			Principal Facilities	
Jurisdictio	n Category	Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum
Ohio							
	Public Supply	2056.99	1.21	308.55	2052.19	1.21	307.83
	Domestic Supply	223.15	0.00	33.46	1.14	0.00	0.19
	Irrigation	87.22	0.00	78.51	82.41	0.00	74.16
	Livestock	44.29	0.00	35.43	3.29	0.00	2.61
	Industrial	858.72	0.00	67.27	856.79	0.00	67.12
	Fossil Fuel Power	7847.99	0.00	78.47	7847.99	0.00	78.47
	Nuclear Power	483.85	0.00	48.38	483.85	0.00	48.38
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	32.37	-42.59	6.97	32.29	-42.59	6.93
	Total	11634.58	-41.37	657.03	11359.95	-41.37	585.68
Ontario							
	Public Supply	355.41	0.00	53.31	351.42	0.00	52.71
	Domestic Supply	75.48	0.00	11.32	0.00	0.00	0.00
	Irrigation	120.57	0.00			0.00	
	Livestock	50.04	0.00			0.00	
	Industrial	683.08	0.00	43.03	0.00	0.00	0.00
	Fossil Fuel Power	5600.00	0.00	50.40	5600.00	0.00	50.40
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	2121.00	0.00	0.00	2121.00	0.00	0.00
	Other		0.00			0.00	
	Total	9005.59	0.00	158.06	8072.42	0.00	103.11
Pennsyl	vania						
, .	Public Supply	106.25		10.62	105.46		10.55
	Domestic Supply						
	Irrigation						
	Livestock						
	Industrial	0.37		0.04			
	Fossil Fuel Power						
	Nuclear Power						
	Hydroelectric Power						
	Other	0.15					
	Total	106.77		10.66	105.46		10.55

BASIN REPORT- Lake Erie

Withdrawals by Source

Units: ML/d Year Of Data: 2011

			All Facilities			Principle Facili	ties
Jurisdiction	n Category	GLSW	OSW	GW	GLSW	OSW	GW
Indiana							
	Public Supply	0.00	127.95	22.67	0.00	127.95	22.37
	Domestic Supply	0.00	0.00	2.27	0.00	0.00	1.74
	Irrigation	0.00	1.40	3.79	0.00	1.06	3.26
	Livestock	0.00	0.00	0.00	0.00	0.00	0.00
	Industrial	0.00	11.24	17.53	0.00	11.24	16.85
	Fossil Fuel Power	0.00	0.00	1.02	0.00	0.00	1.02
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.19	0.00	0.00	0.19
	TOTAL	0.00	140.59	47.47	0.00	140.25	45.42
Michigan	n						
•	Public Supply	2246.07	73.11	128.03	2246.07	72.79	115.80
	Domestic Supply	0.00	0.01	1.11	0.00	0.00	0.43
	Irrigation	0.64	33.11	30.89	0.52	30.15	28.40
	Livestock	0.00	1.05	1.83	0.00	0.56	0.00
	Industrial	988.53	41.92	114.63	988.53	41.82	113.13
	Fossil Fuel Power	14889.37	503.58	0.20	14889.37	503.58	0.20
	Nuclear Power	218.95	0.00	0.00	218.95	0.00	0.00
	Hydroelectric Power						
	Other	0.00	9.50	4.13	0.00	9.50	4.09
	TOTAL	18343.55	662.27	280.83	18343.42	658.40	262.05
New Yor	k						
	Public Supply	750.55	30.00	5.31	750.55	30.00	4.75
	Domestic Supply	0.00	2.15	0.00	0.00	2.15	0.00
	Irrigation	1.17	27.27	1.90	0.62	24.67	1.09
	Livestock	0.00	0.00	0.00	0.00	0.00	0.00
	Industrial	504.28	145.98	12.61	504.28	145.77	12.57
	Fossil Fuel Power	1907.85	0.00	0.00	1907.85	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	179667.01	0.00	0.00	179667.01	0.00	0.00
	Other	0.00	10.20	4.84	0.00	9.84	4.78
	TOTAL	182830.86	215.60	24.66	182830.31	212.44	23.19

			All Facilities	}		Principle Facilities			
Jurisdiction	Category	GLSW	OSW	GW	GLSW	OSW	GW		
Ohio									
Ī	Public Supply	1511.21	430.17	115.61	1511.21	429.98	110.99		
-	Domestic Supply	1.21	0.00	221.94	1.14	0.00	0.00		
Ī	Irrigation	1.48	76.92	8.82	1.40	73.47	7.53		
Ī	Livestock	0.00	4.81	39.48	0.00	0.79	2.50		
Ī	Industrial	223.42	421.85	213.46	223.42	421.54	211.83		
Ī	Fossil Fuel Power	5543.47	2304.52	0.00	5543.47	2304.52	0.00		
1	Nuclear Power	483.85	0.00	0.00	483.85	0.00	0.00		
Ī	Hydroelectric Power	0.00	0.00	0.00	0.00	0.00	0.00		
_	Other	1.17	29.11	2.08	1.17	29.03	2.08		
-	TOTAL	7765.81	3267.38	601.39	7765.66	3259.35	334.93		
Ontario									
Ī	Public Supply	33.94	110.78	210.70	33.94	110.63	206.85		
_	Domestic Supply	0.00	0.00	75.48	0.00	0.00	0.00		
-	Irrigation	2.23	45.84	72.50					
-	Livestock	0.08	3.36	46.60					
	Industrial	655.80	0.00	27.28	0.00	0.00	0.00		
F	Fossil Fuel Power	5600.00	0.00	0.00	5600.00	0.00	0.00		
1	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00		
- H	Hydroelectric Power	0.00	2121.00	0.00	0.00	2121.00	0.00		
_	Other								
=	TOTAL	6292.05	2280.98	432.56	5633.94	2231.63	206.85		
Pennsylva	ania								
	Public Supply	99.12	0.52	6.62	99.12	0.47	5.88		
-	Domestic Supply								
	Irrigation								
_	Livestock								
	Industrial	0.00	0.00	0.37					
Ē	Fossil Fuel Power								
1	Nuclear Power								
-	Hydroelectric Power								
_	Other	0.00	0.00	0.15					
_	TOTAL	99.12	0.52	7.13	99.12	0.47	5.88		
Grand To			6567.34						

BASIN REPORT- Lake Erie

Basin Total

		TOTAL RE	port - P		lies		
		Withd	rawals	Diver	Consumptive		
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Public Supply	4640.88	772.52	488.93	5902.34	-0.31	29.50	779.57
Domestic Supply	1.21	2.16	300.80	304.17	0.00	0.00	45.48
Irrigation	5.51	184.54	117.90	307.95	0.00	0.00	168.64
Livestock	0.08	9.22	87.92	97.21	0.00	0.00	37.74
Industrial	2372.02	620.98	385.87	3378.88	0.00	0.00	337.77
Fossil Fuel Power	27940.69	2808.11	1.23	30750.02	0.00	0.00	318.06
Nuclear Power	702.80	0.00	0.00	702.80	0.00	0.00	119.97
Hydroelectric Power	179667.01	2121.00	0.00	181788.01	0.00	0.00	0.00
Other	1.17	48.81	11.40	61.37	22017.43	-42.59	8.51

Total Report - All Facilities

Total Report - Principal Facilities

		Withd	rawals	Diver	sions	Consumptive	
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Public Supply	4640.88	771.82	466.64	5879.34	-0.31	29.50	776.51
Domestic Supply	1.14	2.15	2.17	5.46	0.00	0.00	0.72
Irrigation	2.54	129.35	40.28	172.17	0.00	0.00	154.92
Livestock	0.00	1.36	2.50	3.86	0.00	0.00	3.06
Industrial	1716.22	620.38	354.38	2690.98	0.00	0.00	294.33
Fossil Fuel Power	27940.69	2808.11	1.23	30750.02	0.00	0.00	318.06
Nuclear Power	702.80	0.00	0.00	702.80	0.00	0.00	119.97
Hydroelectric Power	179667.01	2121.00	0.00	181788.01	0.00	0.00	0.00
Other	1.17	48.37	11.14	60.69	22017.43	-42.59	8.43

BASIN REPORT- Lake Ontario

Withdrawals, Diversions and Consumptive Uses

Units: ML/d Year Of Data: 2011

			All Facilities		Principal Facilities			
Jurisdiction	Category	Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.	
New York								
F	Public Supply	898.26	36.30	155.92	892.39	0.00	89.24	
C	Domestic Supply	136.92	0.00	9.11	136.92	0.00	9.11	
li	rrigation	216.15	0.00	194.53	200.94	0.00	180.85	
L	ivestock	79.15	0.00	12.30	76.15	0.00	9.90	
h	ndustrial	420.27	0.00	144.16	419.25	0.00	143.93	
F	Fossil Fuel Power	2601.21	0.00	52.66	2600.86	0.00	52.49	
N	Nuclear Power	5190.18	0.00	832.60	5190.18	0.00	832.60	
F	Hydroelectric Power	306270.11	0.00		306270.11	0.00	0.00	
C	Other	38.85	121.13	3.88	38.40	0.00	3.84	
	Total	315851.10	157.44	1405.17	315825.20	0.00	1321.96	
Ontario								
F	Public Supply	1763.74	0.00	264.56	1758.79	0.00	263.82	
C	Domestic Supply	242.90	0.00	36.44	0.00	0.00	0.00	
h	rrigation	67.13	0.00			0.00		
L	ivestock	20.45	0.00			0.00		
li I	ndustrial	869.27	0.00	54.76	0.00	0.00	0.00	
F	Fossil Fuel Power	2736.98	0.00	24.63	2736.98	0.00	24.63	
N	Nuclear Power	25008.22	0.00	225.07	25008.22	0.00	225.07	
F	Hydroelectric Power	189705.00	0.00	0.00	189705.00	0.00	0.00	
C	Other	501.00	0.00	0.00	501.00	0.00	0.00	
_	Total	220914.69	0.00	605.47	219709.99	0.00	513.53	
Pennsylva	ania							
F	Public Supply	0.16		0.02				
	Total	0.16		0.02				
Grand Tota	_	536765.95	157.44	2010.65	535535.19	0.00	1835.49	

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BASIN REPORT- Lake Ontario

Withdrawals by Source

Year Of Data: 2011

Units: ML/d

			All Facilities			Principle Facili	ties
Jurisdiction	Category	GLSW	OSW	GW	GLSW	OSW	GW
New Yorl	k						
	Public Supply	334.76	525.34	38.16	334.76	523.53	34.10
	Domestic Supply	0.00	135.63	1.29	0.00	135.63	1.29
	Irrigation	0.06	194.38	21.71	0.00	182.65	18.29
	Livestock	0.00	75.91	3.25	0.00	74.50	1.65
	Industrial	53.58	320.94	45.75	53.58	320.56	45.10
	Fossil Fuel Power	1539.53	1061.67	0.01	1539.53	1061.34	0.00
	Nuclear Power	5190.18	0.00	0.00	5190.18	0.00	0.00
	Hydroelectric Power	0.00	306270.11	0.00	0.00	306270.11	0.00
	Other	0.00	37.09	1.76	0.00	36.68	1.71
	TOTAL	7118.11	308621.05	111.94	7118.05	308605.00	102.15
Ontario							
	Public Supply	1519.90	200.08	43.76	1519.74	199.41	39.64
	Domestic Supply	0.00	0.00	242.90	0.00	0.00	0.00
	Irrigation	4.11	36.06	26.96			
	Livestock	0.00	3.56	16.89			
	Industrial	825.88	0.00	43.39	0.00	0.00	0.00
	Fossil Fuel Power	2736.98	0.00	0.00	2736.98	0.00	0.00
	Nuclear Power	25008.22	0.00	0.00	25008.22	0.00	0.00
	Hydroelectric Power	141065.00	48640.00	0.00	141065.00	48640.00	0.00
	Other	0.00	501.00	0.00	0.00	501.00	0.00
	TOTAL	171160.09	49380.70	373.90	170329.94	49340.41	39.64
Pennsylv	vania						
2	Public Supply	0.00	0.00	0.16			
	TOTAL	0.00	0.00	0.16			
Grand To	otal:	178278.20	358001.75	486.00	177447.99	357945.41	141.79

BASIN REPORT- Lake Ontario

Basin Total

		I OLAI R	eport - <i>F</i>	ан гасш	lies		
		With	drawals	Diver	Consumptive		
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Public Supply	1854.66	725.41	82.08	2662.16	0.00	36.30	420.50
Domestic Supply	0.00	135.63	244.19	379.82	0.00	0.00	45.55
Irrigation	4.17	230.44	48.66	283.27	0.00	0.00	194.53
Livestock	0.00	79.46	20.14	99.60	0.00	0.00	12.30
Industrial	879.46	320.94	89.14	1289.54	0.00	0.00	198.92
Fossil Fuel Power	4276.51	1061.67	0.01	5338.19	0.00	0.00	77.29
Nuclear Power	30198.40	0.00	0.00	30198.40	0.00	0.00	1057.68
Hydroelectric Power	141065.00	354910.11	0.00	495975.11	0.00	0.00	0.00
Other	0.00	538.09	1.76	539.85	-21964.43	121.13	3.88

Total Report - All Facilities

Total Report - Principal Facilities

		Wit	hdrawals	Diver	Consumptive		
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Public Supply	1854.50	722.93	73.74	2651.17	0.00	0.00	353.06
Domestic Supply	0.00	135.63	1.29	136.92	0.00	0.00	9.11
Irrigation	0.00	182.65	18.29	200.94	0.00	0.00	180.85
Livestock	0.00	74.50	1.65	76.15	0.00	0.00	9.90
Industrial	53.58	320.56	45.10	419.25	0.00	0.00	143.93
Fossil Fuel Power	4276.51	1061.34	0.00	5337.84	0.00	0.00	77.12
Nuclear Power	30198.40	0.00	0.00	30198.40	0.00	0.00	1057.68
Hydroelectric Power	141065.00	354910.11	0.00	495975.11	0.00	0.00	0.00
Other	0.00	537.68	1.71	539.40	-21964.43	0.00	3.84

BASIN REPORT- St. Lawrence River

Withdrawals, Diversions and Consumptive Uses

Units: ML/d Year Of Data: 2011

			All Facilities			Principal Facilities	
Jurisdictio	n Category	Withdr.	Inter-Basin Diver.	Consum.	Withdr.	Inter-Basin Diver.	Consum.
New Yor	·k						
	Public Supply	104.12	0.00	19.61	99.74	0.00	19.17
	Domestic Supply	5.12	0.00	0.51	4.72	0.00	0.47
	Irrigation	12.46	0.00	11.21	10.01	0.00	9.01
	Livestock	17.22	0.00	2.62	16.34	0.00	1.91
	Industrial	151.57	0.00	16.69	150.91	0.00	16.56
	Fossil Fuel Power	5.45	0.00	2.73	5.45	0.00	2.73
	Nuclear Power	0.00	0.00		0.00	0.00	0.00
	Hydroelectric Power	673689.77	0.00	0.00	673689.77	0.00	0.00
	Other	5.17	0.00	0.75	4.93	0.00	0.73
	Total	673990.88	0.00	54.13	673981.87	0.00	50.58
Ontario							
	Public Supply	276.45	0.00	41.47	272.87	0.00	40.94
	Domestic Supply	43.35	0.00	6.50	0.00	0.00	0.00
	Irrigation	8.89	0.00			0.00	
	Livestock	22.37	0.00			0.00	
	Industrial	608.74	0.00	38.35	0.00	0.00	0.00
	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	909608.00	0.00	0.00	909608.00	0.00	0.00
	Other	73.00	0.00	0.00	73.00	0.00	0.00
	Total	910640.81	0.00	86.32	909953.87	0.00	40.94
Quebec							
	Public Supply	4164.00	0.00	416.00	4149.00	0.00	415.00
	Domestic Supply	271.00	0.00	27.00	184.00	0.00	18.00
	Irrigation	34.90	0.00	31.41		0.00	
	Livestock	72.30	0.00	57.84		0.00	
	Industrial	475.00	0.00	47.50	473.00	0.00	47.30
	Fossil Fuel Power	178.00	0.00	17.80	178.00	0.00	17.80
	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
	Hydroelectric Power	1150371.00	0.00	0.00	1150371.00	0.00	0.00
	Other		0.00			0.00	
	Total	1155566.20	0.00	597.55	1155355.00	0.00	498.10
Grand To	ntal	2740197.89	0.00	738.00	2739290.74	0.00	589.62

BASIN REPORT - St. Lawrence River Withdrawals by Source

Year Of Data: 2011

Units: ML/d

			All Facilities	8		Principle Facili	ties
Jurisdiction	Category	GLSW	OSW	GW	GLSW	OSW	GW
New York							
Ī	Public Supply	14.83	59.16	30.13	14.66	57.71	27.37
Ī	Domestic Supply	0.00	1.63	3.49	0.00	1.63	3.09
Ī	Irrigation	0.13	10.37	1.96	0.00	9.21	0.80
Ī	Livestock	0.00	16.59	0.63	0.00	15.94	0.40
Ī	Industrial	10.36	137.14	4.07	10.14	136.95	3.82
1	Fossil Fuel Power	5.45	0.00	0.00	5.45	0.00	0.00
1	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
Ī	Hydroelectric Power	300099.89	373589.88	0.00	300099.89	373589.88	0.00
(Other	0.00	3.87	1.30	0.00	3.63	1.30
=	TOTAL	300130.66	373818.65	41.57	300130.15	373814.95	36.77
Ontario							
Ī	Public Supply	40.27	222.72	13.46	40.27	221.52	11.08
1	Domestic Supply	0.00	0.00	43.35	0.00	0.00	0.00
Ī	Irrigation	0.03	7.73	1.13			
Ī	Livestock	0.00	13.73	8.65			
Ī	Industrial	604.75	0.00	3.99	0.00	0.00	0.00
- 	Fossil Fuel Power	0.00	0.00	0.00	0.00	0.00	0.00
1	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
Ī	Hydroelectric Power	505095.00	404513.00	0.00	505095.00	404513.00	0.00
(Other	0.00	73.00	0.00	0.00	73.00	0.00
-	TOTAL	505740.05	404830.17	70.58	505135.27	404807.52	11.08
Quebec							
Ī	Public Supply	2282.00	1882.00	0.00	2281.00	1868.00	0.00
	Domestic Supply	0.00	0.00	271.00	0.00	0.00	184.00
	Irrigation	0.00	0.00	34.90			
Ī	Livestock	0.00	0.00	72.30			
	Industrial	0.00	475.00	0.00	0.00	473.00	0.00
1	Fossil Fuel Power	148.00	30.00	0.00	148.00	30.00	0.00
Ī	Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00
Ī	Hydroelectric Power	647102.00	503269.00	0.00	647102.00	503269.00	0.00
_	Other						
-	TOTAL	649532.00	505656.00	378.20	649531.00	505640.00	184.00
Grand To							

BASIN REPORT- St. Lawrence River

Basin Total

		Total R	eport - A	Ап гасш	lies		
		With	drawals	Diver	Consumptive		
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Public Supply	2337.10	2163.88	43.59	4544.58	0.00	0.00	477.08
Domestic Supply	0.00	1.63	317.84	319.47	0.00	0.00	34.01
Irrigation	0.16	18.10	37.99	56.25	0.00	0.00	42.62
Livestock	0.00	30.32	81.58	111.90	0.00	0.00	60.46
Industrial	615.11	612.14	8.06	1235.31	0.00	0.00	102.54
Fossil Fuel Power	153.45	30.00	0.00	183.45	0.00	0.00	20.53
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	1452296.89	1281371.88	0.00	2733668.77	0.00	0.00	0.00
Other	0.00	76.87	1.30	78.17	0.00	0.00	0.75

Total Report - All Facilities

Total Report - Principal Facilities

		Wit	hdrawals	Diver	Diversions		
Category	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Public Supply	2335.93	2147.23	38.45	4521.61	0.00	0.00	475.11
Domestic Supply	0.00	1.63	187.09	188.72	0.00	0.00	18.47
Irrigation	0.00	9.21	0.80	10.01	0.00	0.00	9.01
Livestock	0.00	15.94	0.40	16.34	0.00	0.00	1.91
Industrial	10.14	609.95	3.82	623.91	0.00	0.00	63.86
Fossil Fuel Power	153.45	30.00	0.00	183.45	0.00	0.00	20.53
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydroelectric Power	1452296.89	1281371.88	0.00	2733668.77	0.00	0.00	0.00
Other	0.00	76.63	1.30	77.93	0.00	0.00	0.73

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

		Withd	rawals		Diver	sions	Consumptive
lurisdiction	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Illinois	3402.99	0.00	0.00	3402.99	0.00	3402.99	0.00
Indiana	337.92	127.95	180.03	645.90	0.00	219.55	96.91
Michigan	3065.13	74.28	780.53	3919.93	0.00		489.99
Minnesota	113.60	6.78	24.00	144.38	0.00	0.00	14.42
New York	1100.14	614.50	73.60	1788.25	0.00	36.30	254.12
Ohio	1511.21	430.17	115.61	2056.99	0.00	1.21	308.55
Ontario	1869.53	672.09	346.63	2888.25	0.00	0.00	433.24
Pennsylvania	99.12	0.52	6.78	106.41			10.64
Quebec	2282.00	1882.00	0.00	4164.00	0.00	0.00	416.00
Wisconsin	994.04	84.56	174.81	1253.42	0.00		150.41

		Withd	rawals	Diver	Consumptive		
Jurisdiction	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Illinois	3402.99	0.00	0.00	3402.99	0.00	3402.99	0.00
Indiana	337.92	127.95	178.44	644.31	0.00	219.55	96.64
Michigan	3064.32	73.95	725.03	3863.31	0.00		482.91
Minnesota	113.45	6.74	23.28	143.47	0.00	0.00	14.38
New York	1099.97	611.23	66.22	1777.43	0.00	0.00	186.94
Ohio	1511.21	429.98	110.99	2052.19	0.00	1.21	307.83
Ontario	1866.85	668.55	329.31	2864.71	0.00	0.00	429.71
Pennsylvania	99.12	0.47	5.88	105.46			10.55
Quebec	2281.00	1868.00	0.00	4149.00	0.00	0.00	415.00
Wisconsin							

WATER-USE CATEGORY REPORT- Public Supply

mai		y Buon	7.1110			
	Withda	rawals		Diver	Consumptive	
GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
248.28	56.09	66.61	370.98	-1.20	0.00	47.07
5182.12	84.56	866.52	6133.21	1.51	3594.25	347.42
512.64	90.37	154.25	757.26	0.00	0.00	102.64
4640.88	772.52	488.93	5902.34	-0.31	29.50	779.57
1854.66	725.41	82.08	2662.16	0.00	36.30	420.50
2337.10	2163.88	43.59	4544.58	0.00	0.00	477.08
	GLSW 248.28 5182.12 512.64 4640.88 1854.66	Withda GLSW OSW 248.28 56.09 5182.12 84.56 512.64 90.37 4640.88 772.52 1854.66 725.41	Withdrawals GLSW OSW GW 248.28 56.09 66.61 5182.12 84.56 866.52 512.64 90.37 154.25 4640.88 772.52 488.93 1854.66 725.41 82.08	WithdrawalsGLSWOSWGWTOTAL248.2856.0966.61370.985182.1284.56866.526133.21512.6490.37154.25757.264640.88772.52488.935902.341854.66725.4182.082662.16	Withdrawals Diver GLSW OSW GW TOTAL Intrabasin 248.28 56.09 66.61 370.98 -1.20 5182.12 84.56 866.52 6133.21 1.51 512.64 90.37 154.25 757.26 0.00 4640.88 772.52 488.93 5902.34 -0.31 1854.66 725.41 82.08 2662.16 0.00	Withdrawals Diversions GLSW OSW GW TOTAL Intrabasin Interbasin 248.28 56.09 66.61 370.98 -1.20 0.00 5182.12 84.56 866.52 6133.21 1.51 3594.25 512.64 90.37 154.25 757.26 0.00 0.00 4640.88 772.52 488.93 5902.34 -0.31 29.50 1854.66 725.41 82.08 2662.16 0.00 36.30

Water-Use by Basin - All Facilities

	Water-	Water-Use by Basin - Principal Facilities									
		Withd	rawals	Diver	Consumptive						
Basin	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use				
Lake Superior	245.36	55.79	62.67	363.82	-1.20	0.00	46.24				
Lake Michigan	4190.74	0.00	662.91	4853.66	1.51	3594.25	193.66				
Lake Huron	509.42	89.11	134.75	733.27	0.00	0.00	99.38				
Lake Erie	4640.88	771.82	466.64	5879.34	-0.31	29.50	776.51				
Lake Ontario	1854.50	722.93	73.74	2651.17	0.00	0.00	353.06				
St. Lawrence River	2335.93	2147.23	38.45	4521.61	0.00	0.00	475.11				

WATER-USE CATEGORY REPORT- Domestic Supply

		Withd	rawals		Diver	sions	Consumptive
lurisdiction	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Illinois	8.03	0.00	0.05	8.08	0.00	8.03	0.00
Indiana	0.00	0.00	2.27	2.27	0.00	0.00	0.34
Michigan	0.00	11.57	18.66	30.23			3.78
Minnesota	2.84	1.51	0.11	4.47	0.00	0.00	0.45
New York	0.00	139.41	4.78	144.19	0.00	0.00	9.84
Ohio	1.21	0.00	221.94	223.15	0.00	0.00	33.46
Ontario	0.00	0.00	408.49	408.49	0.00	0.00	61.27
Pennsylvania							
Quebec	0.00	0.00	271.00	271.00	0.00	0.00	27.00
Wisconsin	0.45	8.64	13.18	22.27	0.00		2.69

		Withd	rawals		Diver	Consumptive	
Jurisdiction	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Illinois	8.03	0.00	0.05	8.08	0.00	8.03	0.00
Indiana	0.00	0.00	1.74	1.74	0.00	0.00	0.26
Michigan	0.00	11.44	14.57	26.00			3.25
Minnesota	2.65	1.40	0.00	4.05	0.00	0.00	0.42
New York	0.00	139.41	4.38	143.79	0.00	0.00	9.80
Ohio	1.14	0.00	0.00	1.14	0.00	0.00	0.19
Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania							
Quebec	0.00	0.00	184.00	184.00	0.00	0.00	18.00
Wisconsin							

WATER-USE CATEGORY REPORT- Domestic Supply

	wat		y Dasin	- АПТ а			
		Withd	rawals	Diversions		Consumptive	
Basin	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Lake Superior	2.84	1.78	7.39	12.01	0.00	0.00	1.56
Lake Michigan	8.48	19.89	28.61	56.98	0.00	8.03	6.02
Lake Huron	0.00	0.04	41.66	41.70	0.00	0.00	6.21
Lake Erie	1.21	2.16	300.80	304.17	0.00	0.00	45.48
Lake Ontario	0.00	135.63	244.19	379.82	0.00	0.00	45.55
St. Lawrence River	0.00	1.63	317.84	319.47	0.00	0.00	34.01

Water-Use by Basin - All Facilities

Water-Use by Basin - Principal Facilities										
		Withdu	rawals	Diver	Consumptive					
Basin	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use			
Lake Superior	2.65	1.67	0.00	4.32	0.00	0.00	0.45			
Lake Michigan	8.03	11.17	13.03	32.22	0.00	8.03	3.02			
Lake Huron	0.00	0.00	1.16	1.16	0.00	0.00	0.15			
Lake Erie	1.14	2.15	2.17	5.46	0.00	0.00	0.72			
Lake Ontario	0.00	135.63	1.29	136.92	0.00	0.00	9.11			
St. Lawrence River	0.00	1.63	187.09	188.72	0.00	0.00	18.47			

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WATER-USE CATEGORY REPORT- Irrigation

		Withd	rawals		Diver	Consumptive	
Jurisdiction	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Illinois	0.08	0.00	0.44	0.52	0.00	0.00	0.00
Indiana	0.00	32.21	148.24	180.45	0.00	0.00	162.39
Michigan	2.29	282.58	639.55	924.42			831.98
Minnesota	0.26	1.17	0.15	1.59	0.00	0.00	1.44
New York	1.35	232.02	25.57	258.95	0.00	0.00	233.05
Ohio	1.48	76.92	8.82	87.22	0.00	0.00	78.51
Ontario	7.04	149.13	121.01	277.17	0.00	0.00	
Pennsylvania							
Quebec	0.00	0.00	34.90	34.90	0.00	0.00	31.41
Wisconsin	0.00	15.94	117.86	133.80	0.00		93.66

		Withd	rawals	Diver	sions	Consumptive	
Jurisdiction	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Illinois	0.08	0.00	0.44	0.52	0.00	0.00	0.00
Indiana	0.00	30.85	146.23	177.08	0.00	0.00	159.33
Michigan	1.98	256.80	600.52	859.30			773.37
Minnesota	0.00	0.87	0.00	0.87	0.00	0.00	0.79
New York	0.62	216.53	20.18	237.34	0.00	0.00	213.60
Ohio	1.40	73.47	7.53	82.41	0.00	0.00	74.16
Ontario					0.00	0.00	
Pennsylvania							
Quebec					0.00	0.00	
Wisconsin							

WATER-USE CATEGORY REPORT- Irrigation

		Withd	rawals		Diver	eione	Concumptivo
Basin	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Consumptive Use
Lake Superior	0.38	3.20	1.98	5.56	0.00	0.00	3.73
Lake Michigan	1.06	246.16	825.49	1072.72	0.00	0.00	938.22
Lake Huron	1.23	107.53	64.51	173.28	0.00	0.00	84.70
Lake Erie	5.51	184.54	117.90	307.95	0.00	0.00	168.64
Lake Ontario	4.17	230.44	48.66	283.27	0.00	0.00	194.53
St. Lawrence River	0.16	18.10	37.99	56.25	0.00	0.00	42.62

Water-Use by Basin - All Facilities

Water-Use by Basin - Principal Facilities									
		Withd	rawais	Diver	Consumptive				
Basin	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use		
Lake Superior	0.00	1.66	1.47	3.13	0.00	0.00	2.83		
Lake Michigan	0.98	210.14	672.15	883.27	0.00	0.00	794.45		
Lake Huron	0.57	45.52	41.92	88.00	0.00	0.00	79.20		
Lake Erie	2.54	129.35	40.28	172.17	0.00	0.00	154.92		
Lake Ontario	0.00	182.65	18.29	200.94	0.00	0.00	180.85		
St. Lawrence River	0.00	9.21	0.80	10.01	0.00	0.00	9.01		

WATER-USE CATEGORY REPORT- Livestock

		Withdr	awals		Diver	sions	Consumptive
Jurisdiction	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Illinois							
Indiana	0.00	4.58	10.56	15.14	0.00	0.00	12.11
Michigan	0.00	86.93	71.28	158.20			126.56
Minnesota	2.69	0.00	0.00	2.69	0.00	0.00	2.42
New York	0.00	92.50	3.88	96.38	0.00	0.00	14.93
Ohio	0.00	4.81	39.48	44.29	0.00	0.00	35.43
Ontario	11.16	32.81	96.42	140.39	0.00	0.00	
Pennsylvania							
Quebec	0.00	0.00	72.30	72.30	0.00	0.00	57.84
Wisconsin	0.00	73.17	58.39	131.56	0.00		16.28

		Withdr	awals		Diver	sions	Consumptive	
Jurisdiction	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use	
Illinois								
Indiana	0.00	4.58	10.45	15.03	0.00	0.00	12.04	
Michigan	0.00	84.75	56.39	141.14			112.91	
Minnesota	2.42	0.00	0.00	2.42	0.00	0.00	2.20	
New York	0.00	90.44	2.05	92.49	0.00	0.00	11.82	
Ohio	0.00	0.79	2.50	3.29	0.00	0.00	2.61	
Ontario					0.00	0.00		
Pennsylvania								
Quebec					0.00	0.00		
Wisconsin								

WATER-USE CATEGORY REPORT- Livestock

			4	- All I d			_
		Withdi	rawals	Diver	Consumptive		
Basin	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Lake Superior	2.69	72.21	9.77	84.66	0.00	0.00	38.14
Lake Michigan	0.00	86.75	112.62	199.36	0.00	0.00	99.95
Lake Huron	11.08	16.84	40.29	68.22	0.00	0.00	16.98
Lake Erie	0.08	9.22	87.92	97.21	0.00	0.00	37.74
Lake Ontario	0.00	79.46	20.14	99.60	0.00	0.00	12.30
St. Lawrence River	0.00	30.32	81.58	111.90	0.00	0.00	60.46

Water-Use by Basin - All Facilities

	Water-Use by Basin - Principal Facilities								
		Withdr	awais	Diver	Consumptive				
Basin	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use		
Lake Superior	2.42	41.07	3.58	47.07	0.00	0.00	37.91		
Lake Michigan	0.00	42.49	49.47	91.96	0.00	0.00	73.58		
Lake Huron	0.00	5.21	13.79	19.00	0.00	0.00	15.20		
Lake Erie	0.00	1.36	2.50	3.86	0.00	0.00	3.06		
Lake Ontario	0.00	74.50	1.65	76.15	0.00	0.00	9.90		
St. Lawrence River	0.00	15.94	0.40	16.34	0.00	0.00	1.91		

WATER-USE CATEGORY REPORT- Industrial

		Withd	rawals		Diver	sions	Consumptive
Jurisdiction	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Illinois	40.48	0.00	0.00	40.48	0.00	0.06	0.09
Indiana	6103.56	25.25	40.01	6168.82	0.00	87.85	370.14
Michigan	1284.00	656.32	313.03	2253.35			225.34
Minnesota	482.07	328.76	0.61	811.44	0.00	30.25	81.20
New York	568.22	604.05	62.43	1234.71	0.00	0.00	272.04
Ohio	223.42	421.85	213.46	858.72	0.00	0.00	67.27
Ontario	3409.55	0.00	85.20	3494.75	0.00	0.00	220.15
Pennsylvania	0.00	0.00	0.37	0.37			0.04
Quebec	0.00	475.00	0.00	475.00	0.00	0.00	47.50
Wisconsin	1.08	596.62	57.24	654.94	0.00		75.27

		Withd	rawals	Diver	Consumptive		
Jurisdiction	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Illinois	40.48	0.00	0.00	40.48	0.00	0.06	0.09
Indiana	6103.56	25.14	38.12	6166.81	0.00	87.85	370.02
Michigan	1283.95	655.50	302.24	2241.69			224.17
Minnesota	481.73	328.01	0.53	810.27	0.00	30.25	81.05
New York	568.01	603.28	61.49	1232.78	0.00	0.00	271.64
Ohio	223.42	421.54	211.83	856.79	0.00	0.00	67.12
Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania							
Quebec	0.00	473.00	0.00	473.00	0.00	0.00	47.30
Wisconsin							

WATER-USE CATEGORY REPORT- Industrial

Waler-USE by Dasin - An Fachilies											
	Withdu	rawals	Diver	Consumptive							
GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use					
1112.50	330.60	1.95	1445.04	0.00	30.25	121.81					
6312.46	1082.17	272.88	7667.51	0.00	87.90	527.00					
820.83	141.03	14.44	976.30	0.00	0.00	70.98					
2372.02	620.98	385.87	3378.88	0.00	0.00	337.77					
879.46	320.94	89.14	1289.54	0.00	0.00	198.92					
615.11	612.14	8.06	1235.31	0.00	0.00	102.54					
	1112.50 6312.46 820.83 2372.02 879.46	GLSWOSW1112.50330.606312.461082.17820.83141.032372.02620.98879.46320.94	1112.50330.601.956312.461082.17272.88820.83141.0314.442372.02620.98385.87879.46320.9489.14	GLSWOSWGWTOTAL1112.50330.601.951445.046312.461082.17272.887667.51820.83141.0314.44976.302372.02620.98385.873378.88879.46320.9489.141289.54	GLSWOSWGWTOTALIntrabasin1112.50330.601.951445.040.006312.461082.17272.887667.510.00820.83141.0314.44976.300.002372.02620.98385.873378.880.00879.46320.9489.141289.540.00	CLSWOSWGWTOTALIntrabasinInterbasin1112.50330.601.951445.040.0030.256312.461082.17272.887667.510.0087.90820.83141.0314.44976.300.000.002372.02620.98385.873378.880.000.00879.46320.9489.141289.540.000.00					

Water-lise by Rasin - All Facilities

Water-Use by Basin - Principal Facilities								
		Withdrawala	S	Divers	Consumptive			
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use	

Basin	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Lake Superior	498.47	328.01	0.53	827.01	0.00	30.25	82.72
Lake Michigan	6311.33	486.68	207.51	7005.52	0.00	87.90	451.05
Lake Huron	111.40	140.90	2.87	255.17	0.00	0.00	25.52
Lake Erie	1716.22	620.38	354.38	2690.98	0.00	0.00	294.33
Lake Ontario	53.58	320.56	45.10	419.25	0.00	0.00	143.93
St. Lawrence River	10.14	609.95	3.82	623.91	0.00	0.00	63.86

WATER-USE CATEGORY REPORT- Fossil Fuel Power

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		Withdr	awais		Diver	Consumptive	
Jurisdiction	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Illinois	3354.51	0.00	0.00	3354.51	0.00	0.00	0.00
Indiana	0.00	2761.99	1.02	2763.01	0.00	0.00	55.27
Michigan	18907.03	4182.06	12.97	23102.06			450.80
Minnesota	701.55	551.61	0.04	1253.20	0.00	0.00	25.06
New York	3452.83	1061.67	0.01	4514.51	0.00	0.00	93.54
Ohio	5543.47	2304.52	0.00	7847.99	0.00	0.00	78.47
Ontario	8643.83	0.00	0.00	8643.83	0.00	0.00	77.79
Pennsylvania							
Quebec	148.00	30.00	0.00	178.00	0.00	0.00	17.80
Wisconsin	9103.80	1093.40	0.00	10197.20	0.00		130.29

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		Withdr	awais		Diver	Consumptive	
Jurisdiction	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Illinois	3354.51	0.00	0.00	3354.51	0.00	0.00	0.00
Indiana	0.00	0.00	1.02	1.02	0.00	0.00	0.04
Michigan	18907.03	4182.05	12.92	23102.01			449.90
Minnesota	701.55	551.57	0.00	1253.12	0.00	0.00	25.06
New York	3452.83	1061.34	0.00	4514.16	0.00	0.00	93.37
Ohio	5543.47	2304.52	0.00	7847.99	0.00	0.00	78.47
Ontario	8643.83	0.00	0.00	8643.83	0.00	0.00	77.79
Pennsylvania							
Quebec	148.00	30.00	0.00	178.00	0.00	0.00	17.80
Wisconsin							

WATER-USE CATEGORY REPORT- Fossil Fuel Power

	Withdra	wals	Diver	Consumptive						
GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use				
1944.65	551.61	0.04	2496.30	0.00	0.00	30.08				
14927.42	5542.82	8.18	20478.42	0.00	0.00	467.38				
612.30	1991.05	4.58	2607.94	0.00	0.00	15.68				
27940.69	2808.11	1.23	30750.02	0.00	0.00	318.06				
4276.51	1061.67	0.01	5338.19	0.00	0.00	77.29				
153.45	30.00	0.00	183.45	0.00	0.00	20.53				
	1944.65 14927.42 612.30 27940.69 4276.51	GLSWOSW1944.65551.6114927.425542.82612.301991.0527940.692808.114276.511061.67	1944.65551.610.0414927.425542.828.18612.301991.054.5827940.692808.111.234276.511061.670.01	GLSWOSWCWTOTAL1944.65551.610.042496.3014927.425542.828.1820478.42612.301991.054.582607.9427940.692808.111.2330750.024276.511061.670.015338.19	GLSWOSWGWTOTALIntrabasin1944.65551.610.042496.300.0014927.425542.828.1820478.420.00612.301991.054.582607.940.0027940.692808.111.2330750.020.004276.511061.670.015338.190.00	GLSWOSWGWTOTALIntrabasinInterbasin1944.65551.610.042496.300.000.0014927.425542.828.1820478.420.000.00612.301991.054.582607.940.000.0027940.692808.111.2330750.020.000.004276.511061.670.015338.190.000.00				

Water-Use by Basin - All Facilities

Water-Use by	y Basin - Princ	cipal Facilities
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		Withdra	awals	Diver	Consumptive		
Basin	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Lake Superior	1823.46	551.57	0.00	2375.03	0.00	0.00	28.87
Lake Michigan	5944.81	1687.42	8.14	7640.36	0.00	0.00	283.07
Lake Huron	612.30	1991.05	4.58	2607.94	0.00	0.00	14.78
Lake Erie	27940.69	2808.11	1.23	30750.02	0.00	0.00	318.06
Lake Ontario	4276.51	1061.34	0.00	5337.84	0.00	0.00	77.12
St. Lawrence River	153.45	30.00	0.00	183.45	0.00	0.00	20.53

WATER-USE CATEGORY REPORT- Nuclear Power

		Diver	sions	Consumptive			
Jurisdiction	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Illinois	119.92	0.00	0.00	119.92	0.00	0.00	0.00
Indiana	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Michigan	9216.74	0.00	0.00	9216.74			129.71
Minnesota	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York	5190.18	0.00	0.00	5190.18	0.00	0.00	832.60
Ohio	483.85	0.00	0.00	483.85	0.00	0.00	48.38
Ontario	46568.95	0.00	0.00	46568.95	0.00	0.00	419.12
Pennsylvania							
Quebec	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wisconsin	4445.97	0.00	0.00	4445.97	0.00		44.46

		Withdra	wals		Diver	Consumptive	
Jurisdiction	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Illinois	119.92	0.00	0.00	119.92	0.00	0.00	0.00
Indiana	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Michigan	9216.74	0.00	0.00	9216.74			129.71
Minnesota	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York	5190.18	0.00	0.00	5190.18	0.00	0.00	832.60
Ohio	483.85	0.00	0.00	483.85	0.00	0.00	48.38
Ontario	46568.95	0.00	0.00	46568.95	0.00	0.00	419.12
Pennsylvania							
Quebec	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wisconsin							

WATER-USE CATEGORY REPORT- Nuclear Power

		1-05e b	/ 2001	I - АП Га			
		wais	Diver	Consumptive			
Basin	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Lake Superior	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Michigan	13563.68	0.00	0.00	13563.68	0.00	0.00	102.58
Lake Huron	21560.73	0.00	0.00	21560.73	0.00	0.00	194.05
Lake Erie	702.80	0.00	0.00	702.80	0.00	0.00	119.97
Lake Ontario	30198.40	0.00	0.00	30198.40	0.00	0.00	1057.68
St. Lawrence River	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Water-Use by Basin - All Facilities

	Water-Use by Basin - Principal Facilities									
		awals	Diver	Consumptive						
Basin	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use			
Lake Superior	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Lake Michigan	9117.72	0.00	0.00	9117.72	0.00	0.00	58.12			
Lake Huron	21560.73	0.00	0.00	21560.73	0.00	0.00	194.05			
Lake Erie	702.80	0.00	0.00	702.80	0.00	0.00	119.97			
Lake Ontario	30198.40	0.00	0.00	30198.40	0.00	0.00	1057.68			
St. Lawrence River	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
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WATER-USE CATEGORY REPORT- Hydroelectric Power

Water-Use by Jurisdiction - All Facilities									
Jurisdiction		Withdra	Diversions		Consumptive				
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use		
Illinois									
Indiana	0.00	7402.71	0.00	7402.71	0.00	0.00	0.00		
Michigan									
Minnesota	0.00	11808.21	0.00	11808.21	0.00	0.00	0.00		
New York	479766.90	679860.00	0.00	1159626.90	0.00	0.00	0.00		
Ohio	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Ontario	718822.00	613541.00	0.00	1332363.00	0.00	-15170.99	0.00		
Pennsylvania									
Quebec	647102.00	503269.00	0.00	1150371.00	0.00	0.00	0.00		

	Withdra	Diver	Consumptive			
GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
0.00	7402.71	0.00	7402.71	0.00	0.00	0.00
0.00	11808.21	0.00	11808.21	0.00	0.00	0.00
479766.90	679860.00	0.00	1159626.90	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00
718822.00	613541.00	0.00	1332363.00	0.00	0.00	0.00
647102.00	503269.00	0.00	1150371.00	0.00	0.00	0.00
	0.00 0.00 479766.90 0.00 718822.00	GLSW OSW 0.00 7402.71 0.00 11808.21 479766.90 679860.00 0.00 0.00 718822.00 613541.00	0.00 7402.71 0.00 0.00 11808.21 0.00 479766.90 679860.00 0.00 0.00 0.00 0.00 718822.00 613541.00 0.00	GLSWOSWGWTOTAL0.007402.710.007402.710.0011808.210.0011808.21479766.90679860.000.001159626.900.000.000.000.00718822.00613541.000.001332363.00	GLSW OSW GW TOTAL Intrabasin 0.00 7402.71 0.00 7402.71 0.00 0.00 7402.71 0.00 7402.71 0.00 0.00 11808.21 0.00 11808.21 0.00 479766.90 679860.00 0.00 1159626.90 0.00 0.00 0.00 0.00 1332363.00 0.00	CLSW OSW CW TOTAL Intrabasin Interbasin 0.00 7402.71 0.00 7402.71 0.00 0.00 0.00 7402.71 0.00 7402.71 0.00 0.00 0.00 11808.21 0.00 11808.21 0.00 0.00 479766.90 679860.00 0.00 1159626.90 0.00 0.00 0.00 0.00 0.00 1332363.00 0.00 0.00 718822.00 613541.00 0.00 1332363.00 0.00 0.00

WATER-USE CATEGORY REPORT- Hydroelectric Power

			J Duoi				
Basin		Withd	rawais	Diver	Consumptive		
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Lake Superior	0.00	103867.21	0.00	103867.21	0.00	-15170.99	0.00
Lake Michigan	0.00	7402.71	0.00	7402.71	0.00	0.00	0.00
Lake Huron	72662.00	66208.00	0.00	138870.00	0.00	0.00	0.00
Lake Erie	179667.01	2121.00	0.00	181788.01	0.00	0.00	0.00
Lake Ontario	141065.00	354910.11	0.00	495975.11	0.00	0.00	0.00
St. Lawrence River	1452296.89	1281371.88	0.00	2733668.77	0.00	0.00	0.00

Water-Use by Basin - All Facilities

Basin		Withdra	Diver	Consumptive			
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Lake Superior	0.00	103867.21	0.00	103867.21	0.00	0.00	0.00
Lake Michigan	0.00	7402.71	0.00	7402.71	0.00	0.00	0.00
Lake Huron	72662.00	66208.00	0.00	138870.00	0.00	0.00	0.00
Lake Erie	179667.01	2121.00	0.00	181788.01	0.00	0.00	0.00
Lake Ontario	141065.00	354910.11	0.00	495975.11	0.00	0.00	0.00
St. Lawrence River	1452296.89	1281371.88	0.00	2733668.77	0.00	0.00	0.00

Water-Lise by Basin - Principal Facilities

WATER-USE CATEGORY REPORT- Other

Jurisdiction		Withdr	awals		Diver	sions	Consumptive
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Illinois	869.65	0.00	0.00	869.65	0.00	869.65	0.00
Indiana	0.00	0.00	0.45	0.45	0.00	0.00	0.08
Michigan	0.00	9.50	27.19	36.69			0.00
Minnesota	0.00	0.00	0.61	0.61	0.00	0.00	0.00
New York	0.00	51.15	7.90	59.05	0.00	121.13	6.14
Ohio	1.17	29.11	2.08	32.37	0.00	-42.59	6.97
Ontario	0.00	755.59	0.00	755.59	234.59	0.00	0.00
Pennsylvania	0.00	0.00	0.15	0.15			
Quebec					0.00	0.00	
Wisconsin	19.93	1.21	3.97	25.11	0.00	-97.85	12.09

		Withdr	awals	Diver	Consumptive		
Jurisdiction	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Illinois	869.65	0.00	0.00	869.65	0.00	869.65	0.00
Indiana	0.00	0.00	0.34	0.34	0.00	0.00	0.04
Michigan	0.00	9.50	26.93	36.43			0.00
Minnesota	0.00	0.00	0.53	0.53	0.00	0.00	0.00
New York	0.00	50.16	7.79	57.95	0.00	0.00	6.03
Ohio	1.17	29.03	2.08	32.29	0.00	-42.59	6.93
Ontario	0.00	755.59	0.00	755.59	234.59	0.00	0.00
Pennsylvania							
Quebec					0.00	0.00	
Wisconsin							

WATER-USE CATEGORY REPORT- Other

	mat		y Duom				
Basin		Withdr	awais	Diversions		Consumptive	
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Lake Superior	0.00	0.00	0.61	0.61	0.00	0.00	0.00
Lake Michigan	889.58	1.21	27.29	918.08	0.00	771.80	12.13
Lake Huron	0.00	181.59	0.00	181.59	181.59	0.00	0.00
Lake Erie	1.17	48.81	11.40	61.37	22017.43	-42.59	8.51
Lake Ontario	0.00	538.09	1.76	539.85	-21964.43	121.13	3.88
St. Lawrence River	0.00	76.87	1.30	78.17	0.00	0.00	0.75

Water-Use by Basin - All Facilities

Water-Use by Basin - Principal Facilities

		Withdr	awals	Diver	Consumptive		
Basin	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	Use
Lake Superior	0.00	0.00	0.53	0.53	0.00	0.00	0.00
Lake Michigan	869.65	0.00	23.00	892.64	0.00	869.65	0.00
Lake Huron	0.00	181.59	0.00	181.59	181.59	0.00	0.00
Lake Erie	1.17	48.37	11.14	60.69	22017.43	-42.59	8.43
Lake Ontario	0.00	537.68	1.71	539.40	-21964.43	0.00	3.84
St. Lawrence River	0.00	76.63	1.30	77.93	0.00	0.00	0.73