

# Annual Report of the Great Lakes Regional Water Use Database **Representing 2008 Water Use Data**

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## Acknowledgements

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

## Forward

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

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

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the evolving needs of the Great Lakes state and provincial water resources management programs, that system soon became outdated.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

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

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# Overview of the Great Lakes Basin Water Use

## Introduction

The Great Lakes Commission - the repository for the Great Lakes Regional Water Use Database - annually requests for the previous year’s water use data from the states and provinces. All data are submitted to the repository in a Microsoft Excel or Access format then compiled into a single Microsoft Access database.

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

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

For this report, self-supply hydroelectric (water used in the generation of electricity at plants where turbine generators are driven by falling water) is treated as a withdrawal, even though all water for this purpose is considered to be returned to the basin. Under the interim reporting protocols adopted in 2009 pursuant to the Compact and the

Agreement, hydroelectric will not be considered a “withdrawal”, but rather a “use.” In future reports starting in 2011, it will be not aggregated with total withdrawals, but rather aggregated separately as a use. As the following chart illustrates, this is the largest single category of withdrawal and represents 95 percent of the total amount of water “withdrawn” in 2008.

Each of the ten jurisdictions’ water use is represented in Figure 2 and Figure 3. Figure 2 includes self-supply hydroelectric use. In total, water withdrawals for the

year 2008 were approximately 850.49 billion gallons per day, or about 3,219.45 billion liters per day.

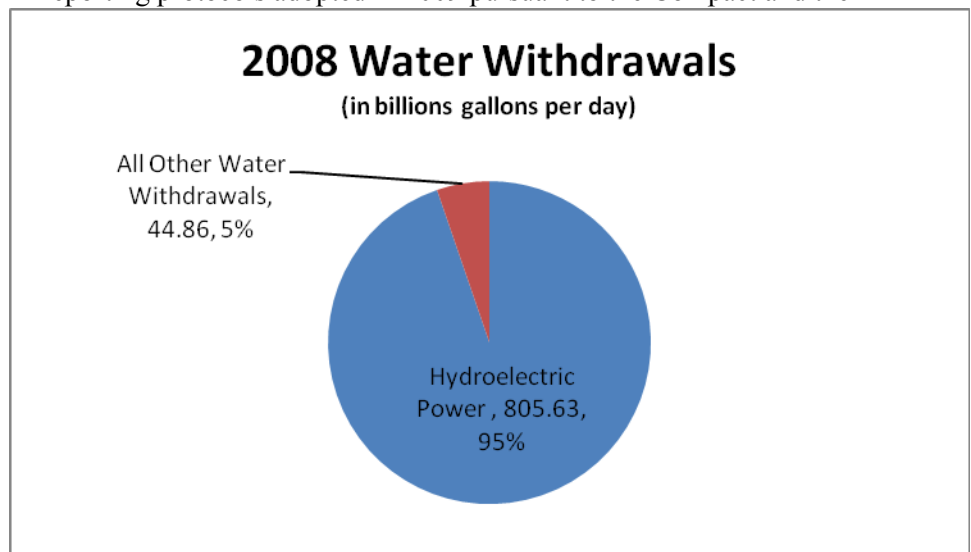


Figure 1

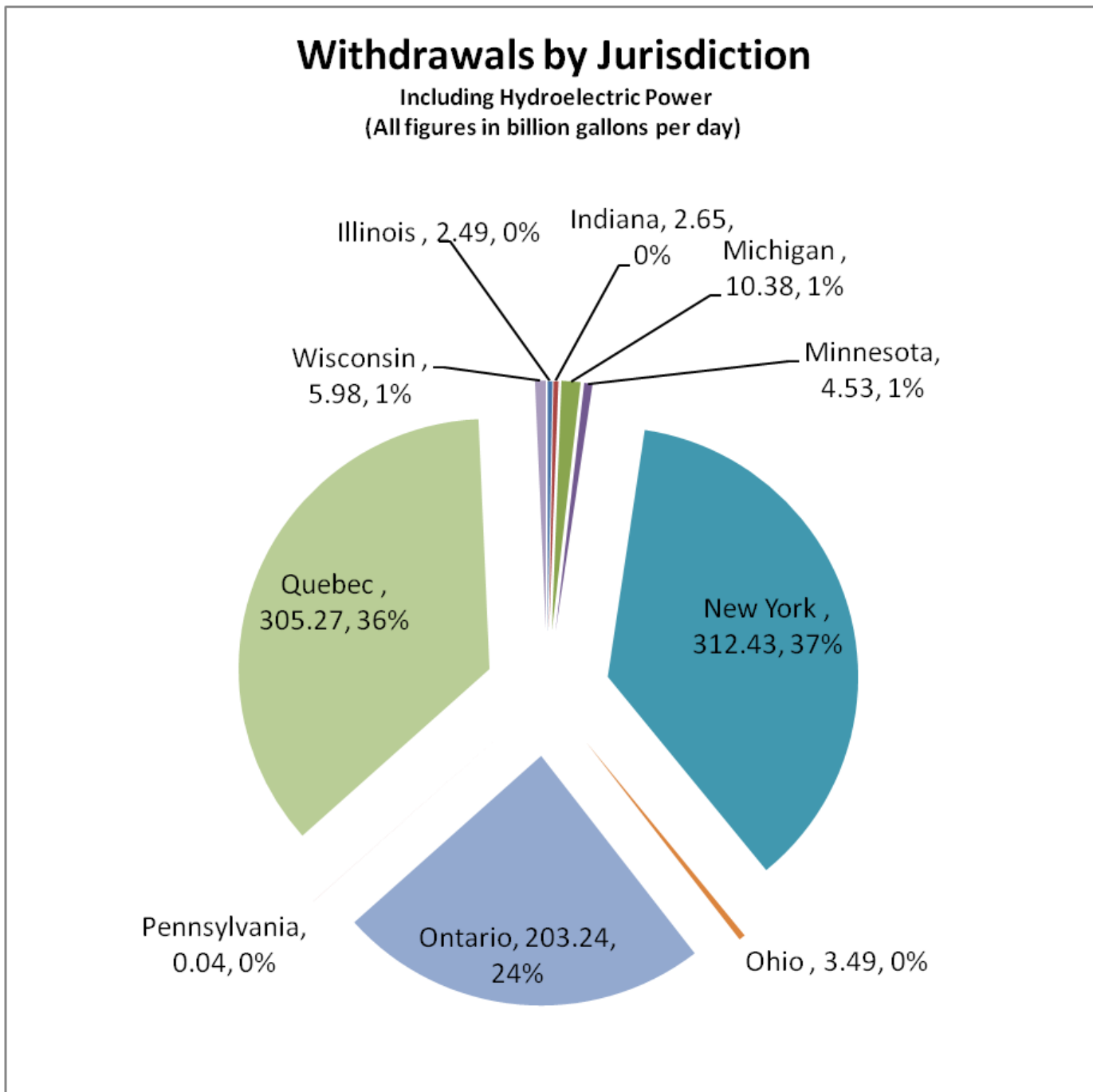


Figure 2

Figure 3 more accurately reflects the actual water withdrawals within the basin, as it does not include self-supply hydroelectric use. Water withdrawals for the eight remaining off-stream categories totaled 44.9 billion gallons per day, or 169.8 billion liters per day.

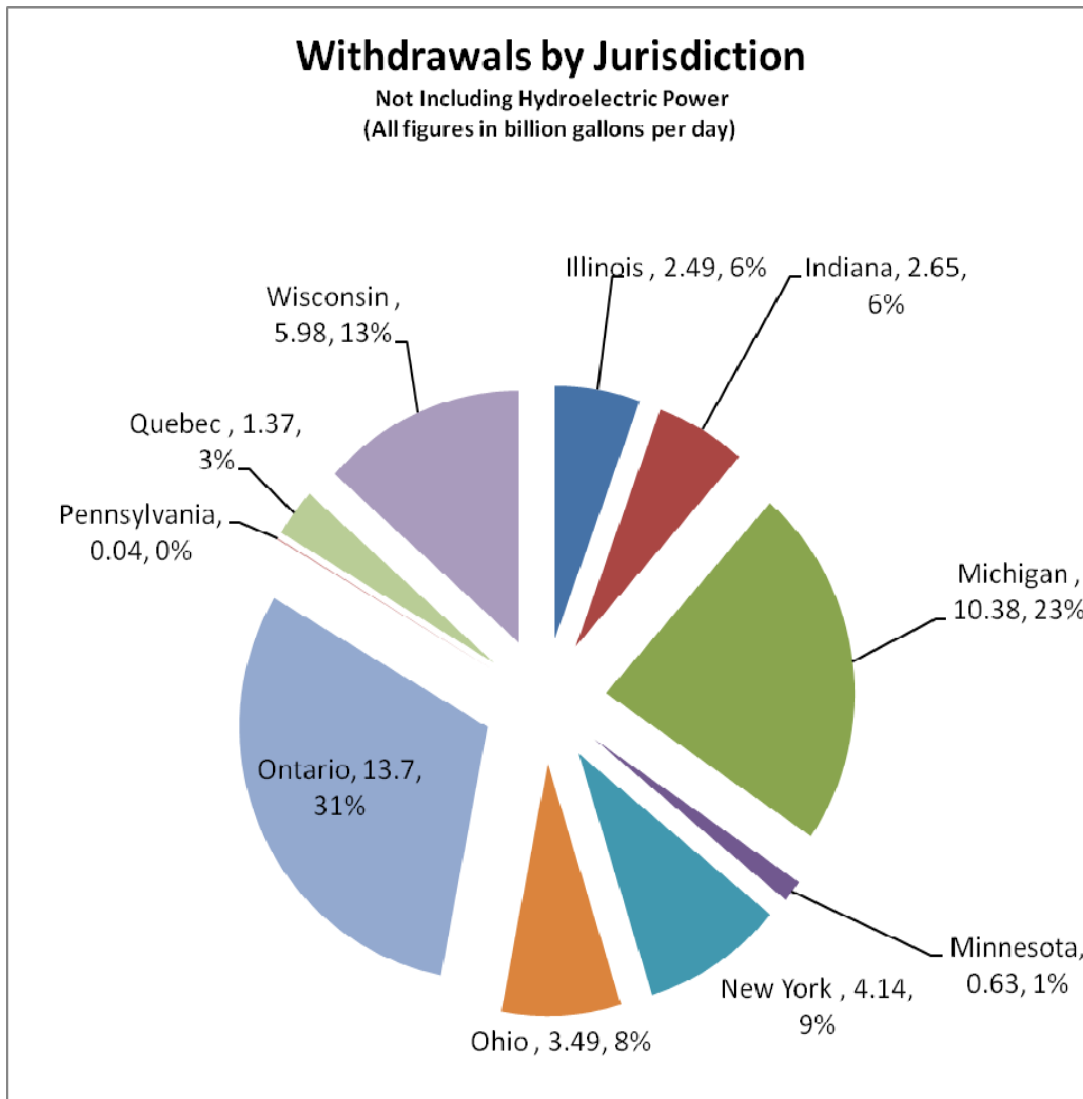


Figure 3

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

## 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](http://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 2008 was calculated to be 1.95 bgd (7.38 bld).

For a more detailed overview, please see:

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

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

## Consumptive Use Coefficients

| Water Use Category   | Illinois  | Indiana                                     | Michigan   | Minnesota                                     | New York            | Ohio   | Ontario  | Pennsylvania                                     | Québec                                     | Wisconsin                        |
|----------------------|---|---|--|---|---------------------|--|--|--|--|----------------------------------|
| <b>Public Supply</b> | 10-15%  | 15%   | 10-15%   | 10-15%  | 10%                 | 10-15%   | 15%  | 10%  | 10-15%                                     | 10-15%                           |
| <b>Domestic</b>      | 10-15%  | 15%   | 10-15%   | 10-15%  | 10%                 | 10-15%   | 15%  | 10%  | 10-15%                                     | 10-15%                           |
| <b>Irrigation</b>    | 90%   | 90%   | 90%  | 90%   | 90%                 | 90%  | 78%  | 90%  | 90%  | 70%                              |
| <b>Livestock</b>     | 80%   | 80%   | 80%  | 80%   | 90%                 | 80%  | 80%  | 80%  | 80%  | 90%                              |
| <b>Industrial</b>    | Varies by plant & SIC code                                    | 6%  | 10-15%   | Varies by plant & SIC code                    | 25%                 | 10%; except quarry dewatering which is 0%  | Varies by plant & SIC code   | Varies by plant & SIC code                       | 10% for pulp & paper industry              | 10.2% for manufacturing & mining |
| <b>Fossil Fuel</b>   | Individually estimated based on the quantity of make-up water | 2%  | 1-2% for plants using once-through cooling; individual analysis for wet cooling towers | 2%  | 2%                  | 10% for closed cycle cooling facilities & 1% for once-through cooling facilities | .9% based on reports of increased local lake evaporation due to discharge of heated water to lakes | NA (Pennsylvania has no facilities in the basin) | 10%; estimates obtained from USGS report   | .5-1%                            |
| <b>Nuclear</b>       | Individually estimated based on the quantity of make-up water | NA (Indiana has no facilities in the basin) | 1-2% for plants using once-through cooling; individual analysis for wet cooling towers | NA (Minnesota has no facilities in the basin) | 5%                  | 10% for closed cycle cooling facilities & 1% for once-through cooling facilities | .9% based on reports of increased local lake evaporation due to discharge of heated water to lakes | NA (Pennsylvania has no facilities in the basin) | NA (Quebec has no facilities in the basin) | .5-1%                            |
| <b>Hydroelectric</b> | Coefficient for all states and provinces is 0%                |   |  |   |                     |  |  |  |  |                                  |
| <b>Other</b>         | 0%  | 12%   | Varies based on use  | Varies based on use                           | Varies based on use | Varies based on use  | Varies based on use  | Varies based on use                              | Varies based on use                        | Varies based on use              |

Figure 4



## Definitions and Abbreviations

**bgd:** billion gallons per day

**bld:** billion liters per day

**consumptive use:** that portion of water withdrawn or withheld from the Great Lakes basin and assumed to be lost or otherwise not returned to the Great Lakes basin due to evapotranspiration, incorporation into products, or other processes

**Great Lakes surface water (GLSW):** the Great Lakes, their connecting channels (the St. Clair River, the Detroit River, the Niagara River and the St. Marys River), and the St. Lawrence River

**groundwater (GW):** all subsurface water

**interbasin diversion (positive):** water transferred from the Great Lakes basin into another watershed

**interbasin diversion (negative):** water transferred from another watershed into the Great Lakes basin

**intrabasin diversion (positive):** water transferred out of one Great Lakes watershed into another

**intrabasin diversion (negative):** water transferred into one Great Lakes watershed from another

**level of accuracy:** the quality of data based on percentage of total volume and rated as 1) measured; 2) partially measured or: 3) estimated,

**level of aggregation:** the quality of data based on percentage of total volume and rated as 1) originating from site-specific sources or 2) originating from higher level aggregate sources, such as county or census databases

**mgd:** million gallons per day

**mld:** million liters per day

**other surface water (OSW):** tributary streams, lakes, ponds, and reservoirs within the Great Lakes basin, all surface water in the basin except that within one of the Great Lakes themselves

**principal facility:** facilities withdrawing in excess of the Great Lakes Charter uniform trigger level of 100,000 U.S. gallons/day (380,000 liters/day) average over a 30-day period. A principal facility is determined by its total withdrawal (or consumption) from all sources combined (Great Lakes surface water, other surface water, and groundwater). The combined withdrawals (or consumption) of separate wells or operations undertaken by the same facility or company will be evaluated separately for the purpose of determining principal facility status unless those operations are covered under the same registration (or permit) or are physically contiguous. Principal facilities are a subset of all facilities in the database.

**tgd:** trillion gallons per day

**tld:** trillion liters per day

**withdrawal amount:** water removed or taken from surface or groundwater (including hydroelectric use <sup>a</sup>)

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

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

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

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

included. Water used in temporary or immediate emergency situations (e.g., fighting forest or peat fires) is also reported here.

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## Great Lakes Basin Summary Tables

Water use tables in this section are organized by:

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

# SUMMARY REPORT - GREAT LAKES BASIN

Units: Bgal(US)/d

Year Of Data: 2008

## Water-Use by Jurisdiction - All Facilities

| Jurisdiction  | Withdrawals   |               |             | TOTAL         | Diversions  |              | Consumptive Use |
|---------------|---------------|---------------|-------------|---------------|-------------|--------------|-----------------|
|               | GLSW          | OSW           | GW          |               | Intrabasin  | Interbasin   |                 |
| Illinois      | 2.49          | 0.00          | 0.00        | 2.49          | 0.00        | 1.52         | 0.00            |
| Indiana       | 2.44          | 2.00          | 0.14        | 4.58          | 0.00        | 0.00         | 0.19            |
| Michigan      | 8.48          | 1.35          | 0.54        | 10.38         | 0.00        |              | 0.57            |
| Minnesota     | 0.38          | 4.14          | 0.01        | 4.53          | 0.00        | 0.01         | 0.05            |
| New York      | 131.84        | 180.44        | 0.15        | 312.43        | 0.00        | 0.04         | 0.33            |
| Ohio          | 2.32          | 1.02          | 0.15        | 3.49          | 0.00        | -0.01        | 0.18            |
| Ontario       | 143.00        | 59.96         | 0.28        | 203.24        | 0.06        | -4.01        | 0.28            |
| Pennsylvania  | 0.03          | 0.00          | 0.00        | 0.04          | 0.00        | 0.00         | 0.01            |
| Quebec        | 171.59        | 133.58        | 0.10        | 305.27        | 0.00        | 0.00         | 0.16            |
| Wisconsin     | 4.82          | 0.89          | 0.27        | 5.98          | 0.00        | -0.03        | 0.19            |
| <b>Total:</b> | <b>467.39</b> | <b>383.40</b> | <b>1.64</b> | <b>852.42</b> | <b>0.06</b> | <b>-2.48</b> | <b>1.95</b>     |

## Water-Use by Jurisdiction - Principal Facilities

| Jurisdiction  | Withdrawals   |               |             | TOTAL         | Diversions  |             | Consumptive Use |
|---------------|---------------|---------------|-------------|---------------|-------------|-------------|-----------------|
|               | GLSW          | OSW           | GW          |               | Intrabasin  | Interbasin  |                 |
| Illinois      | 2.49          | 0.00          | 0.00        | 2.49          | 0.00        | 1.52        | 0.00            |
| Indiana       | 2.44          | 2.00          | 0.11        | 4.55          | 0.00        | 0.00        | 0.18            |
| Michigan      | 8.48          | 1.35          | 0.51        | 10.33         | 0.00        |             | 0.54            |
| Minnesota     | 0.38          | 4.14          | 0.01        | 4.53          | 0.00        | 0.01        | 0.05            |
| New York      | 131.42        | 0.54          | 0.01        | 131.97        | 0.00        | 0.04        | 0.21            |
| Ohio          | 2.32          | 1.02          | 0.08        | 3.41          | 0.00        | -0.01       | 0.16            |
| Ontario       | 0.49          | 0.38          | 0.09        | 0.96          | 0.06        | 0.00        | 0.11            |
| Pennsylvania  | 0.03          | 0.00          | 0.00        | 0.04          | 0.00        | 0.00        | 0.01            |
| Quebec        | 171.59        | 133.58        | 0.05        | 305.21        | 0.00        | 0.00        | 0.13            |
| Wisconsin     |               |               |             |               |             |             |                 |
| <b>Total:</b> | <b>319.63</b> | <b>143.00</b> | <b>0.85</b> | <b>463.48</b> | <b>0.06</b> | <b>1.55</b> | <b>1.39</b>     |

# SUMMARY REPORT - GREAT LAKES BASIN

Units: Bgal(US)/d

Year Of Data: 2008

## Water-Use by Basin - All Facilities

| Basin              | Withdrawals   |               |             | TOTAL         | Diversions  |              | Consumptive Use |
|--------------------|---------------|---------------|-------------|---------------|-------------|--------------|-----------------|
|                    | GLSW          | OSW           | GW          |               | Intrabasin  | Interbasin   |                 |
| Lake Superior      | 1.21          | 42.31         | 0.03        | 43.55         | 0.00        | -4.03        | 0.08            |
| Lake Michigan      | 12.60         | 3.52          | 0.78        | 16.90         | 0.00        | 1.51         | 0.70            |
| Lake Huron         | 25.21         | 14.22         | 0.11        | 39.54         | 0.05        | 0.00         | 0.12            |
| Lake Erie          | 54.75         | 1.35          | 0.39        | 56.49         | 5.82        | -0.01        | 0.50            |
| Lake Ontario       | 42.60         | 89.47         | 0.19        | 132.25        | -5.80       | 0.04         | 0.35            |
| St. Lawrence River | 331.02        | 232.52        | 0.15        | 563.69        | 0.00        | 0.00         | 0.21            |
| <b>Total:</b>      | <b>467.39</b> | <b>383.40</b> | <b>1.64</b> | <b>852.42</b> | <b>0.06</b> | <b>-2.48</b> | <b>1.95</b>     |

## Water-Use by Basin - Principal Facilities

| Basin              | Withdrawals   |               |             | TOTAL         | Diversions  |             | Consumptive Use |
|--------------------|---------------|---------------|-------------|---------------|-------------|-------------|-----------------|
|                    | GLSW          | OSW           | GW          |               | Intrabasin  | Interbasin  |                 |
| Lake Superior      | 0.69          | 4.15          | 0.02        | 4.86          | 0.00        | 0.01        | 0.06            |
| Lake Michigan      | 7.85          | 2.63          | 0.47        | 10.95         | 0.00        | 1.52        | 0.49            |
| Lake Huron         | 0.32          | 0.59          | 0.07        | 0.99          | 0.05        | 0.00        | 0.06            |
| Lake Erie          | 53.91         | 1.26          | 0.22        | 55.38         | 5.82        | -0.01       | 0.42            |
| Lake Ontario       | 2.16          | 0.69          | 0.02        | 2.86          | -5.80       | 0.04        | 0.21            |
| St. Lawrence River | 254.71        | 133.69        | 0.06        | 388.45        | 0.00        | 0.00        | 0.15            |
| <b>Total:</b>      | <b>319.63</b> | <b>143.00</b> | <b>0.85</b> | <b>463.48</b> | <b>0.06</b> | <b>1.55</b> | <b>1.39</b>     |

# SUMMARY REPORT - GREAT LAKES BASIN

Units: Bgal(US)/d

Year Of Data: 2008

## Water-Use by Category - All Facilities

| Category            | Withdrawals   |               |             | TOTAL         | Diversions  |              | Consumptive Use |
|---------------------|---------------|---------------|-------------|---------------|-------------|--------------|-----------------|
|                     | GLSW          | OSW           | GW          |               | Intrabasin  | Interbasin   |                 |
| Public Supply       | 4.09          | 1.13          | 0.51        | 5.72          | 0.00        | 0.97         | 0.58            |
| Domestic Supply     | 0.06          | 0.10          | 0.38        | 0.54          | 0.00        | 0.00         | 0.07            |
| Irrigation          | 0.00          | 0.15          | 0.39        | 0.55          | 0.00        | 0.00         | 0.40            |
| Livestock           | 0.01          | 0.04          | 0.11        | 0.15          | 0.00        | 0.00         | 0.10            |
| Industrial          | 3.26          | 0.83          | 0.25        | 4.33          | 0.00        | 0.01         | 0.37            |
| Fossil Fuel Power   | 14.11         | 2.98          | 0.00        | 17.10         | 0.00        | 0.00         | 0.17            |
| Nuclear Power       | 15.66         | 0.00          | 0.00        | 15.66         | 0.00        | 0.00         | 0.23            |
| Hydroelectric Power | 429.65        | 377.91        | 0.00        | 807.56        | 0.00        | -4.01        | 0.00            |
| Other               | 0.56          | 0.25          | 0.00        | 0.81          | 0.06        | 0.55         | 0.04            |
| <b>Total:</b>       | <b>467.39</b> | <b>383.40</b> | <b>1.64</b> | <b>852.42</b> | <b>0.06</b> | <b>-2.48</b> | <b>1.95</b>     |

## Water-Use by Category - Principal Facilities

| Category            | Withdrawals   |               |             | TOTAL         | Diversions  |             | Consumptive Use |
|---------------------|---------------|---------------|-------------|---------------|-------------|-------------|-----------------|
|                     | GLSW          | OSW           | GW          |               | Intrabasin  | Interbasin  |                 |
| Public Supply       | 3.49          | 0.83          | 0.38        | 4.70          | 0.00        | 0.97        | 0.48            |
| Domestic Supply     | 0.00          | 0.10          | 0.06        | 0.16          | 0.00        | 0.00        | 0.02            |
| Irrigation          | 0.00          | 0.10          | 0.23        | 0.33          | 0.00        | 0.00        | 0.29            |
| Livestock           | 0.00          | 0.01          | 0.01        | 0.01          | 0.00        | 0.00        | 0.01            |
| Industrial          | 2.34          | 0.61          | 0.17        | 3.13          | 0.00        | 0.01        | 0.28            |
| Fossil Fuel Power   | 9.89          | 2.33          | 0.00        | 12.22         | 0.00        | 0.00        | 0.15            |
| Nuclear Power       | 3.70          | 0.00          | 0.00        | 3.70          | 0.00        | 0.00        | 0.13            |
| Hydroelectric Power | 299.64        | 138.78        | 0.00        | 438.42        | 0.00        | 0.00        | 0.00            |
| Other               | 0.56          | 0.25          | 0.00        | 0.81          | 0.06        | 0.58        | 0.04            |
| <b>Total:</b>       | <b>319.63</b> | <b>143.00</b> | <b>0.85</b> | <b>463.48</b> | <b>0.06</b> | <b>1.55</b> | <b>1.39</b>     |

## Jurisdiction Tables and Analyses

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

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



## Illinois

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

**Withdrawals:** Illinois' water withdrawals from Lake Michigan in 2008 totaled 2,485.92 mdg – a decrease of nearly 7 percent in water usage from 2007 (2,669.57 mdg).

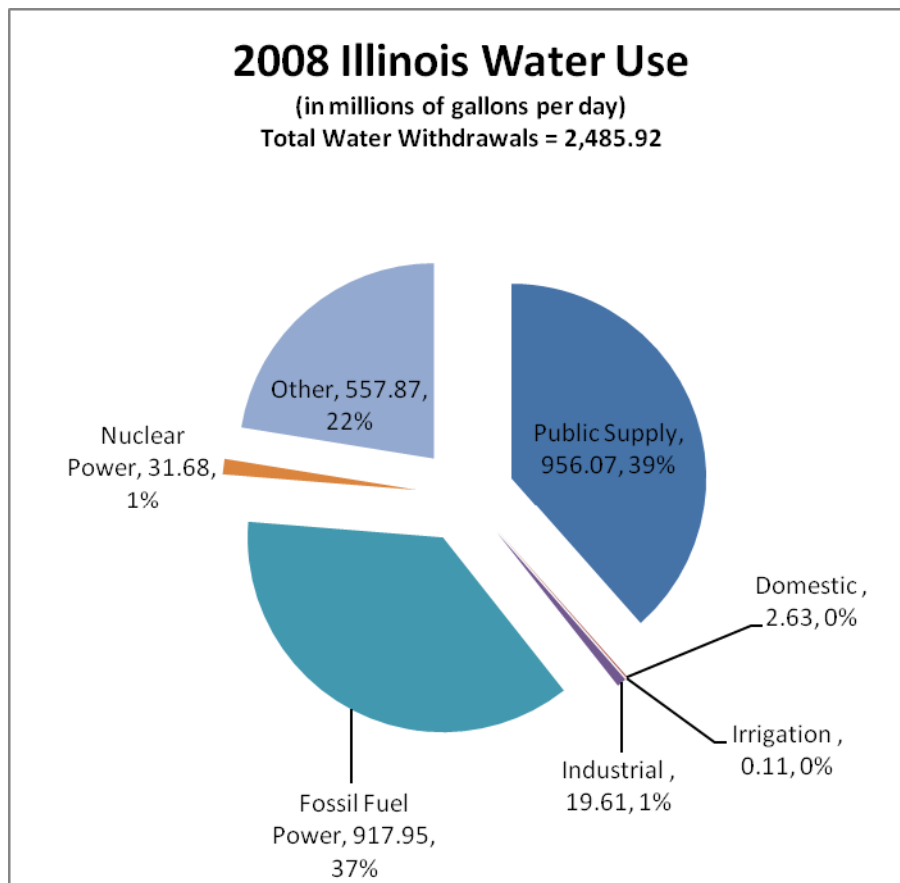


Figure 5

**Consumptive Use:** Except for the industrial category (0.17 mdg of the withdrawal was consumptively used), no other consumptive use information was reported.

**Interbasin Diversions:** Total diversions from the Lake Michigan basin in 2008 were 1516.58 mdg, a decrease of nearly 5 percent from the 2007 figure (1,596.33 mdg). Public water supply accounted for about 63 percent of these diversions. All diversions for Illinois are outgoing interbasin diversions –water transferred from the Lake Michigan basin to the Illinois River in the Mississippi River basin.

# JURISDICTION REPORT- Illinois

Withdrawals, Diversions and Consumptive Uses Units: Mgal(US)/d  
Year Of Data: 2008

| Basin                | Category            | All Facilities |                    |             | Principal Facilities |                    |             |
|----------------------|---------------------|----------------|--------------------|-------------|----------------------|--------------------|-------------|
|                      |                     | Withdr.        | Inter-Basin Diver. | Consum.     | Withdr.              | Inter-Basin Diver. | Consum.     |
| <b>Lake Michigan</b> |                     |                |                    |             |                      |                    |             |
|                      | Public Supply       | 956.07         | 956.07             | 0.00        | 956.07               | 956.07             | 0.00        |
|                      | Domestic Supply     | 2.63           | 2.62               | 0.00        | 2.63                 | 2.62               | 0.00        |
|                      | Irrigation          | 0.11           | 0.00               | 0.00        | 0.11                 | 0.00               | 0.00        |
|                      | Livestock           |                |                    |             |                      |                    |             |
|                      | Industrial          | 19.61          | 0.02               | 0.17        | 19.61                | 0.02               | 0.17        |
|                      | Fossil Fuel Power   | 917.95         | 0.00               | 0.00        | 917.95               | 0.00               | 0.00        |
|                      | Nuclear Power       | 31.68          | 0.00               | 0.00        | 31.68                | 0.00               | 0.00        |
|                      | Hydroelectric Power |                |                    |             |                      |                    |             |
|                      | Other               | 557.87         | 557.87             | 0.00        | 557.87               | 557.87             | 0.00        |
|                      | <b>Total:</b>       | <b>2485.92</b> | <b>1516.58</b>     | <b>0.17</b> | <b>2485.92</b>       | <b>1516.58</b>     | <b>0.17</b> |
| <b>Grand Total:</b>  |                     | <b>2485.92</b> | <b>1516.58</b>     | <b>0.17</b> | <b>2485.92</b>       | <b>1516.58</b>     | <b>0.17</b> |

# JURISDICTION REPORT- Illinois

Withdrawals by Source  
 Units: Mgal(US)/d  
 Year Of Data: 2008

| Basin                | Category            | All Facilities |             |             | Principal Facilities |             |             |
|----------------------|---------------------|----------------|-------------|-------------|----------------------|-------------|-------------|
|                      |                     | GLSW           | OSW         | GW          | GLSW                 | OSW         | GW          |
| <b>Lake Michigan</b> |                     |                |             |             |                      |             |             |
|                      | Public Supply       | 956.07         | 0.00        | 0.00        | 956.07               | 0.00        | 0.00        |
|                      | Domestic Supply     | 2.62           | 0.00        | 0.00        | 2.62                 | 0.00        | 0.00        |
|                      | Irrigation          | 0.00           | 0.00        | 0.11        | 0.00                 | 0.00        | 0.11        |
|                      | Livestock           |                |             |             |                      |             |             |
|                      | Industrial          | 19.61          | 0.00        | 0.00        | 19.61                | 0.00        | 0.00        |
|                      | Fossil Fuel Power   | 917.95         | 0.00        | 0.00        | 917.95               | 0.00        | 0.00        |
|                      | Nuclear Power       | 31.68          | 0.00        | 0.00        | 31.68                | 0.00        | 0.00        |
|                      | Hydroelectric Power |                |             |             |                      |             |             |
|                      | Other               | 557.87         | 0.00        | 0.00        | 557.87               | 0.00        | 0.00        |
|                      | <b>Total:</b>       | <b>2485.80</b> | <b>0.00</b> | <b>0.12</b> | <b>2485.80</b>       | <b>0.00</b> | <b>0.12</b> |
| <b>Grand Total:</b>  |                     | <b>2485.80</b> | <b>0.00</b> | <b>0.12</b> | <b>2485.80</b>       | <b>0.00</b> | <b>0.12</b> |

# JURISDICTION REPORT- Illinois

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2008

## Total Report - All Facilities

| Category            | Withdrawals |      |      |        | Diversions |            | Consumptive Use |
|---------------------|-------------|------|------|--------|------------|------------|-----------------|
|                     | GLSW        | OSW  | GW   | TOTAL  | Intrabasin | Interbasin |                 |
| Public Supply       | 956.07      | 0.00 | 0.00 | 956.07 | 0.00       | 956.07     | 0.00            |
| Domestic Supply     | 2.62        | 0.00 | 0.00 | 2.63   | 0.00       | 2.62       | 0.00            |
| Irrigation          | 0.00        | 0.00 | 0.11 | 0.11   | 0.00       | 0.00       | 0.00            |
| Livestock           |             |      |      |        |            |            |                 |
| Industrial          | 19.61       | 0.00 | 0.00 | 19.61  | 0.00       | 0.02       | 0.17            |
| Fossil Fuel Power   | 917.95      | 0.00 | 0.00 | 917.95 | 0.00       | 0.00       | 0.00            |
| Nuclear Power       | 31.68       | 0.00 | 0.00 | 31.68  | 0.00       | 0.00       | 0.00            |
| Hydroelectric Power |             |      |      |        |            |            |                 |
| Other               | 557.87      | 0.00 | 0.00 | 557.87 | 0.00       | 557.87     | 0.00            |

## Total Report - Principal Facilities

| Category            | Withdrawals |      |      |        | Diversions |            | Consumptive Use |
|---------------------|-------------|------|------|--------|------------|------------|-----------------|
|                     | GLSW        | OSW  | GW   | TOTAL  | Intrabasin | Interbasin |                 |
| Public Supply       | 956.07      | 0.00 | 0.00 | 956.07 | 0.00       | 956.07     | 0.00            |
| Domestic Supply     | 2.62        | 0.00 | 0.00 | 2.63   | 0.00       | 2.62       | 0.00            |
| Irrigation          | 0.00        | 0.00 | 0.11 | 0.11   | 0.00       | 0.00       | 0.00            |
| Livestock           |             |      |      |        |            |            |                 |
| Industrial          | 19.61       | 0.00 | 0.00 | 19.61  | 0.00       | 0.02       | 0.17            |
| Fossil Fuel Power   | 917.95      | 0.00 | 0.00 | 917.95 | 0.00       | 0.00       | 0.00            |
| Nuclear Power       | 31.68       | 0.00 | 0.00 | 31.68  | 0.00       | 0.00       | 0.00            |
| Hydroelectric Power |             |      |      |        |            |            |                 |
| Other               | 557.87      | 0.00 | 0.00 | 557.87 | 0.00       | 557.87     | 0.00            |

## Indiana

**Data Sources:** The Indiana Department of Natural Resources, Division of Water compiled the 2007 water use data for the Indiana Lake Erie and Lake Michigan basins.

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

**Withdrawals:** In 2008, total use was 2,650.39 mgd compared to the 2007 figure of 2,613.37 mgd. Of this amount, 98 percent of the water used was from the Lake Michigan basin. Hydroelectric was reported as 1,930.5 mgd and industrial, at 1,586.15 mgd were the primary uses of Lake Michigan water. The primary use of Lake Erie water was public supply, at 40.22 mgd.

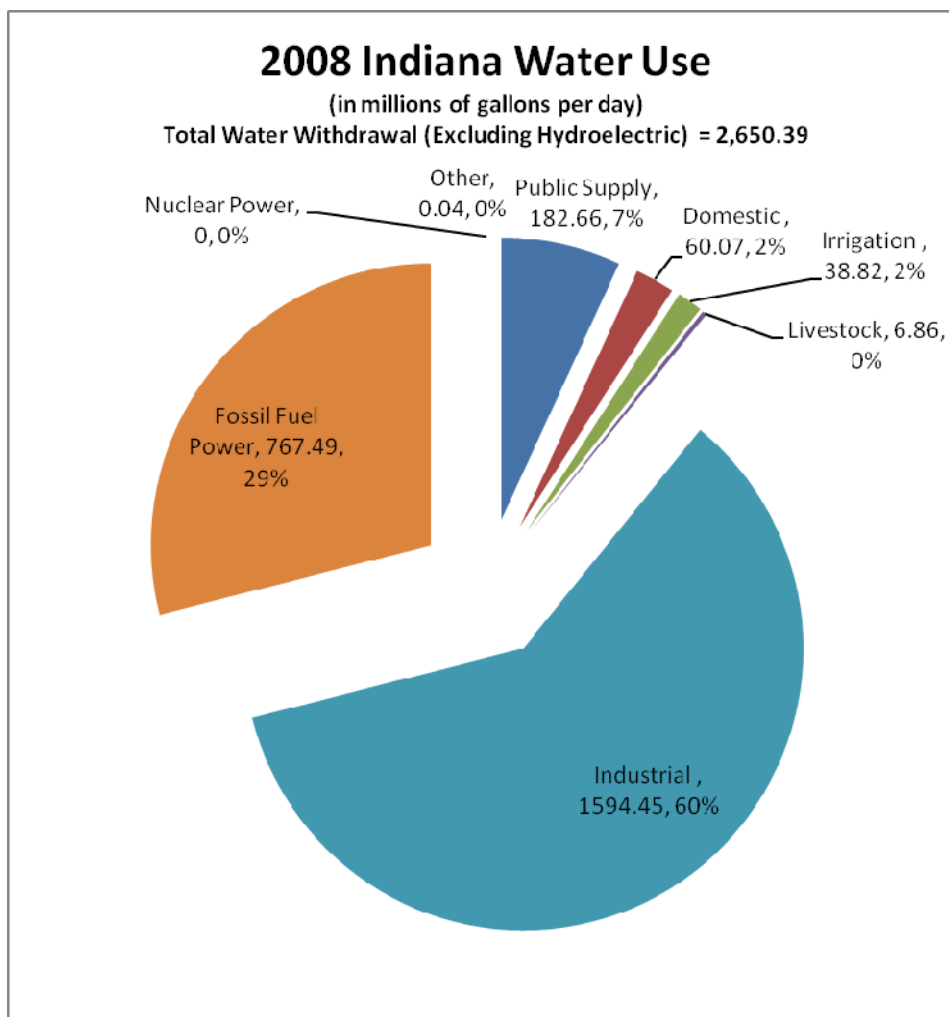


Figure 6

**Consumptive Use:** The total consumptive use of water in Indiana’s portion of the Great Lakes basin was 180.27 mgd, compared to 187.4 mgd in 2007. In the Lake Michigan basin, industrial water use category was the largest consumptive use, at 54.5 percent (95.14 mgd of a total of 172.59 mgd) and in the Lake Erie basin public supply was the largest consumptive use, at 78.5 percent (6.03 mgd of a total of 7.68 mgd).

**Interbasin Diversions:** A diversion by the city of Valparaiso withdrew 3.79 mgd groundwater for public supply from the Kankakee River basin which is discharged as treated sewage into Salt Creek which is in the Lake Michigan basin. A diversion from the Lake Erie Basin for public supply uses is 6.59 mgd.

# JURISDICTION REPORT- Indiana

Withdrawals, Diversions and Consumptive Uses Units: Mgal(US)/d  
Year Of Data: 2008

| Basin                | Category            | All Facilities |                    |               | Principal Facilities |                    |               |
|----------------------|---------------------|----------------|--------------------|---------------|----------------------|--------------------|---------------|
|                      |                     | Withdr.        | Inter-Basin Diver. | Consum.       | Withdr.              | Inter-Basin Diver. | Consum.       |
| <b>Lake Michigan</b> |                     |                |                    |               |                      |                    |               |
|                      | Public Supply       | 142.44         | -3.79              | 21.36         | 142.16               | 0.00               | 21.32         |
|                      | Domestic Supply     | 53.50          | 0.00               | 8.02          | 30.75                | 0.00               | 4.61          |
|                      | Irrigation          | 37.51          | 0.00               | 33.76         | 36.79                | 0.00               | 33.11         |
|                      | Livestock           | 5.91           | 0.00               | 4.74          | 3.83                 | 0.00               | 3.07          |
|                      | Industrial          | 1586.15        | 0.00               | 95.17         | 1585.65              | 0.00               | 95.14         |
|                      | Fossil Fuel Power   | 767.22         | 0.00               | 15.34         | 767.22               | 0.00               | 15.34         |
|                      | Nuclear Power       | 0.00           | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00          |
|                      | Hydroelectric Power | 1930.50        | 0.00               | 0.00          | 1930.50              | 0.00               | 0.00          |
|                      | Other               | 0.04           | 0.00               | 0.01          | 0.00                 | 0.00               | 0.00          |
|                      | <b>Total:</b>       | <b>4523.27</b> | <b>-3.79</b>       | <b>178.40</b> | <b>4496.90</b>       | <b>0.00</b>        | <b>172.59</b> |
| <b>Lake Erie</b>     |                     |                |                    |               |                      |                    |               |
|                      | Public Supply       | 40.22          | 6.59               | 6.03          | 40.18                | 0.00               | 6.03          |
|                      | Domestic Supply     | 6.57           | 0.00               | 0.99          | 0.56                 | 0.00               | 0.08          |
|                      | Irrigation          | 1.31           | 0.00               | 1.18          | 1.20                 | 0.00               | 1.08          |
|                      | Livestock           | 0.95           | 0.00               | 0.76          | 0.00                 | 0.00               | 0.00          |
|                      | Industrial          | 8.30           | 0.00               | 0.49          | 8.11                 | 0.00               | 0.48          |
|                      | Fossil Fuel Power   | 0.27           | 0.00               | 0.01          | 0.27                 | 0.00               | 0.01          |
|                      | Nuclear Power       | 0.00           | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00          |
|                      | Hydroelectric Power | 0.00           | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00          |
|                      | Other               | 0.00           | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00          |
|                      | <b>Total:</b>       | <b>57.62</b>   | <b>6.59</b>        | <b>9.46</b>   | <b>50.32</b>         | <b>0.00</b>        | <b>7.68</b>   |
| <b>Grand Total:</b>  |                     | <b>4580.89</b> | <b>2.80</b>        | <b>187.86</b> | <b>4547.22</b>       | <b>0.00</b>        | <b>180.27</b> |

# JURISDICTION REPORT- Indiana

Withdrawals by Source

Units: Mgal(US)/d  
Year Of Data: 2008

| Basin                | Category            | All Facilities |                |               | Principal Facilities |                |               |
|----------------------|---------------------|----------------|----------------|---------------|----------------------|----------------|---------------|
|                      |                     | GLSW           | OSW            | GW            | GLSW                 | OSW            | GW            |
| <b>Lake Michigan</b> |                     |                |                |               |                      |                |               |
|                      | Public Supply       | 94.57          | 0.00           | 47.87         | 94.57                | 0.00           | 47.59         |
|                      | Domestic Supply     | 0.00           | 23.76          | 29.74         | 0.00                 | 23.74          | 7.01          |
|                      | Irrigation          | 0.00           | 7.08           | 30.43         | 0.00                 | 6.80           | 29.99         |
|                      | Livestock           | 0.00           | 1.28           | 4.63          | 0.00                 | 1.28           | 2.55          |
|                      | Industrial          | 1576.44        | 3.39           | 6.32          | 1576.42              | 3.39           | 5.84          |
|                      | Fossil Fuel Power   | 767.22         | 0.00           | 0.00          | 767.22               | 0.00           | 0.00          |
|                      | Nuclear Power       | 0.00           | 0.00           | 0.00          | 0.00                 | 0.00           | 0.00          |
|                      | Hydroelectric Power | 0.00           | 1930.50        | 0.00          | 0.00                 | 1930.50        | 0.00          |
|                      | Other               | 0.00           | 0.00           | 0.04          | 0.00                 | 0.00           | 0.00          |
|                      | <b>Total:</b>       | <b>2438.23</b> | <b>1966.01</b> | <b>119.03</b> | <b>2438.21</b>       | <b>1965.71</b> | <b>92.88</b>  |
| <b>Lake Erie</b>     |                     |                |                |               |                      |                |               |
|                      | Public Supply       | 0.00           | 33.06          | 7.16          | 0.00                 | 33.06          | 7.12          |
|                      | Domestic Supply     | 0.00           | 0.00           | 6.57          | 0.00                 | 0.00           | 0.56          |
|                      | Irrigation          | 0.00           | 0.34           | 0.97          | 0.00                 | 0.29           | 0.91          |
|                      | Livestock           | 0.00           | 0.00           | 0.95          | 0.00                 | 0.00           | 0.00          |
|                      | Industrial          | 0.00           | 3.56           | 4.74          | 0.00                 | 3.56           | 4.55          |
|                      | Fossil Fuel Power   | 0.00           | 0.00           | 0.27          | 0.00                 | 0.00           | 0.27          |
|                      | Nuclear Power       | 0.00           | 0.00           | 0.00          | 0.00                 | 0.00           | 0.00          |
|                      | Hydroelectric Power | 0.00           | 0.00           | 0.00          | 0.00                 | 0.00           | 0.00          |
|                      | Other               | 0.00           | 0.00           | 0.00          | 0.00                 | 0.00           | 0.00          |
|                      | <b>Total:</b>       | <b>0.00</b>    | <b>36.96</b>   | <b>20.66</b>  | <b>0.00</b>          | <b>36.91</b>   | <b>13.41</b>  |
| <b>Grand Total:</b>  |                     | <b>2438.23</b> | <b>2002.97</b> | <b>139.69</b> | <b>2438.21</b>       | <b>2002.62</b> | <b>106.39</b> |



# JURISDICTION REPORT- Indiana

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2008

## Total Report - All Facilities

| Category            | Withdrawals |         |       |         | Diversions |            | Consumptive Use |
|---------------------|-------------|---------|-------|---------|------------|------------|-----------------|
|                     | GLSW        | OSW     | GW    | TOTAL   | Intrabasin | Interbasin |                 |
| Public Supply       | 94.57       | 33.06   | 55.03 | 182.66  | 0.00       | 2.80       | 27.39           |
| Domestic Supply     | 0.00        | 23.76   | 36.31 | 60.07   | 0.00       | 0.00       | 9.01            |
| Irrigation          | 0.00        | 7.42    | 31.40 | 38.82   | 0.00       | 0.00       | 34.94           |
| Livestock           | 0.00        | 1.28    | 5.58  | 6.86    | 0.00       | 0.00       | 5.50            |
| Industrial          | 1576.44     | 6.95    | 11.06 | 1594.45 | 0.00       | 0.00       | 95.66           |
| Fossil Fuel Power   | 767.22      | 0.00    | 0.27  | 767.49  | 0.00       | 0.00       | 15.35           |
| Nuclear Power       | 0.00        | 0.00    | 0.00  | 0.00    | 0.00       | 0.00       | 0.00            |
| Hydroelectric Power | 0.00        | 1930.50 | 0.00  | 1930.50 | 0.00       | 0.00       | 0.00            |
| Other               | 0.00        | 0.00    | 0.04  | 0.04    | 0.00       | 0.00       | 0.01            |

## Total Report - Principal Facilities

| Category            | Withdrawals |         |       |         | Diversions |            | Consumptive Use |
|---------------------|-------------|---------|-------|---------|------------|------------|-----------------|
|                     | GLSW        | OSW     | GW    | TOTAL   | Intrabasin | Interbasin |                 |
| Public Supply       | 94.57       | 33.06   | 54.71 | 182.34  | 0.00       | 0.00       | 27.35           |
| Domestic Supply     | 0.00        | 23.74   | 7.57  | 31.31   | 0.00       | 0.00       | 4.69            |
| Irrigation          | 0.00        | 7.09    | 30.90 | 37.99   | 0.00       | 0.00       | 34.19           |
| Livestock           | 0.00        | 1.28    | 2.55  | 3.83    | 0.00       | 0.00       | 3.07            |
| Industrial          | 1576.42     | 6.95    | 10.39 | 1593.76 | 0.00       | 0.00       | 95.62           |
| Fossil Fuel Power   | 767.22      | 0.00    | 0.27  | 767.49  | 0.00       | 0.00       | 15.35           |
| Nuclear Power       | 0.00        | 0.00    | 0.00  | 0.00    | 0.00       | 0.00       | 0.00            |
| Hydroelectric Power | 0.00        | 1930.50 | 0.00  | 1930.50 | 0.00       | 0.00       | 0.00            |
| Other               | 0.00        | 0.00    | 0.00  | 0.00    | 0.00       | 0.00       | 0.00            |

## Michigan

**Data Sources:** The Michigan Department of Environmental Quality (DEQ) submitted water use data for 2008. 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 then transmitted to the DEQ. Nonagricultural irrigation facilities (golf course, park, etc.) report directly to the DEQ. Please contact Andrew LeBaron at 517/241-1435 or lebarona@michigan.gov with questions regarding Michigan’s water use data.

**Withdrawals** Water withdrawals for the Lake Superior, Lake Michigan, Lake Huron, and Lake Erie basins of Michigan were approximately 10,378.46 mgd, a decrease of 11 percent from 2007 (11,682.69 mgd). Of the four basins, the state of Michigan withdraws the most about 50 percent from Lake Erie (5,236.18 mgd) and the least—about 3 percent from Lake Superior (284.38 mgd). Thermoelectric power-fossil fuel, at 61 percent, was the largest withdrawal category for the state of Michigan.

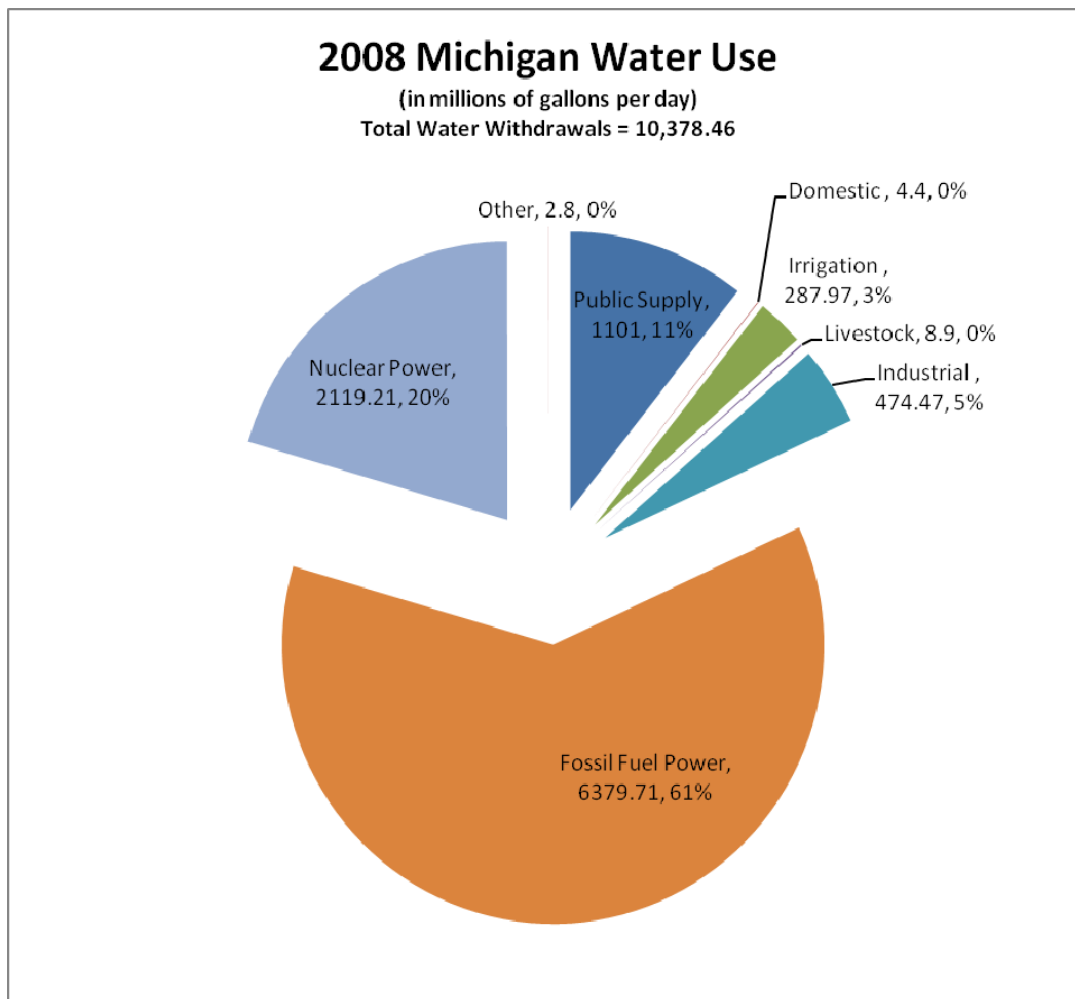


Figure 7

**Consumptive Use:** Consumptive uses in the Michigan portion of the Great Lakes basin were calculated to be approximately 568.74 mgd; irrigation was the largest single consumptive use at 259.18 mgd, or about 45.5 percent of the total consumptive use.

**Interbasin Diversions:** None reported.

# JURISDICTION REPORT- Michigan

Withdrawals, Diversions and Consumptive Uses Units: Mgal(US)/d  
Year Of Data: 2008

| Basin                | Category            | All Facilities |                    |               | Principal Facilities |                    |               |
|----------------------|---------------------|----------------|--------------------|---------------|----------------------|--------------------|---------------|
|                      |                     | Withdr.        | Inter-Basin Diver. | Consum.       | Withdr.              | Inter-Basin Diver. | Consum.       |
| <b>Lake Superior</b> |                     |                |                    |               |                      |                    |               |
|                      | Public Supply       | 14.41          |                    | 1.80          | 13.63                |                    | 1.70          |
|                      | Domestic Supply     |                |                    |               |                      |                    |               |
|                      | Irrigation          | 0.93           |                    | 0.84          | 0.86                 |                    | 0.78          |
|                      | Livestock           |                |                    |               |                      |                    |               |
|                      | Industrial          | 12.18          |                    | 1.22          | 12.06                |                    | 1.21          |
|                      | Fossil Fuel Power   | 256.86         |                    | 3.08          | 256.86               |                    | 3.08          |
|                      | Nuclear Power       |                |                    |               |                      |                    |               |
|                      | Hydroelectric Power |                |                    |               |                      |                    |               |
|                      | Other               |                |                    |               |                      |                    |               |
|                      | <b>Total:</b>       | <b>284.38</b>  |                    | <b>6.94</b>   | <b>283.42</b>        |                    | <b>6.77</b>   |
| <b>Lake Michigan</b> |                     |                |                    |               |                      |                    |               |
|                      | Public Supply       | 281.30         |                    | 35.16         | 273.98               |                    | 34.25         |
|                      | Domestic Supply     | 4.20           |                    | 0.53          | 3.96                 |                    | 0.50          |
|                      | Irrigation          | 246.60         |                    | 221.94        | 229.75               |                    | 206.77        |
|                      | Livestock           | 6.07           |                    | 4.85          | 2.82                 |                    | 2.26          |
|                      | Industrial          | 208.04         |                    | 20.80         | 206.08               |                    | 20.61         |
|                      | Fossil Fuel Power   | 1179.28        |                    | 14.15         | 1179.28              |                    | 14.15         |
|                      | Nuclear Power       | 2066.54        |                    | 39.26         | 2066.54              |                    | 39.26         |
|                      | Hydroelectric Power |                |                    |               |                      |                    |               |
|                      | Other               |                |                    |               |                      |                    |               |
|                      | <b>Total:</b>       | <b>3992.04</b> |                    | <b>336.70</b> | <b>3962.41</b>       |                    | <b>317.80</b> |
| <b>Lake Huron</b>    |                     |                |                    |               |                      |                    |               |
|                      | Public Supply       | 122.53         |                    | 15.32         | 119.50               |                    | 14.94         |
|                      | Domestic Supply     | 0.02           |                    | 0.00          |                      |                    |               |
|                      | Irrigation          | 22.37          |                    | 20.14         | 20.10                |                    | 18.09         |
|                      | Livestock           | 2.26           |                    | 1.81          | 1.27                 |                    | 1.01          |
|                      | Industrial          | 61.26          |                    | 6.13          | 60.86                |                    | 6.09          |
|                      | Fossil Fuel Power   | 657.42         |                    | 7.89          | 657.42               |                    | 7.89          |
|                      | Nuclear Power       |                |                    |               |                      |                    |               |
|                      | Hydroelectric Power |                |                    |               |                      |                    |               |
|                      | Other               |                |                    |               |                      |                    |               |
|                      | <b>Total:</b>       | <b>865.85</b>  |                    | <b>51.28</b>  | <b>859.14</b>        |                    | <b>48.01</b>  |

| Basin               | Category            | All Facilities  |                    |               | Principal Facilities |                    |               |
|---------------------|---------------------|-----------------|--------------------|---------------|----------------------|--------------------|---------------|
|                     |                     | Withdr.         | Inter-Basin Diver. | Consum.       | Withdr.              | Inter-Basin Diver. | Consum.       |
| <b>Lake Erie</b>    |                     |                 |                    |               |                      |                    |               |
|                     | Public Supply       | 682.76          |                    | 85.35         | 679.86               |                    | 84.98         |
|                     | Domestic Supply     | 0.18            |                    | 0.02          | 0.13                 |                    | 0.02          |
|                     | Irrigation          | 18.07           |                    | 16.26         | 15.67                |                    | 14.11         |
|                     | Livestock           | 0.57            |                    | 0.46          | 0.15                 |                    | 0.12          |
|                     | Industrial          | 192.99          |                    | 19.30         | 192.43               |                    | 19.24         |
|                     | Fossil Fuel Power   | 4286.15         |                    | 51.43         | 4286.15              |                    | 51.43         |
|                     | Nuclear Power       | 52.67           |                    | 1.00          | 52.67                |                    | 1.00          |
|                     | Hydroelectric Power |                 |                    |               |                      |                    |               |
|                     | Other               | 2.80            |                    | 0.00          | 2.80                 |                    | 0.00          |
|                     | <b>Total:</b>       | <b>5236.18</b>  |                    | <b>173.82</b> | <b>5229.85</b>       |                    | <b>170.90</b> |
| <b>Grand Total:</b> |                     | <b>10378.46</b> |                    | <b>568.74</b> | <b>10334.82</b>      |                    | <b>543.48</b> |

# JURISDICTION REPORT- Michigan

Withdrawals by Source

Units: Mgal(US)/d  
Year Of Data: 2008

| Basin                | Category            | All Facilities |               |               | Principal Facilities |               |               |
|----------------------|---------------------|----------------|---------------|---------------|----------------------|---------------|---------------|
|                      |                     | GLSW           | OSW           | GW            | GLSW                 | OSW           | GW            |
| <b>Lake Superior</b> |                     |                |               |               |                      |               |               |
|                      | Public Supply       | 5.14           | 0.00          | 9.27          | 5.14                 | 0.00          | 8.49          |
|                      | Domestic Supply     |                |               |               |                      |               |               |
|                      | Irrigation          | 0.00           | 0.32          | 0.62          | 0.00                 | 0.27          | 0.59          |
|                      | Livestock           |                |               |               |                      |               |               |
|                      | Industrial          | 12.06          | 0.00          | 0.12          | 12.06                | 0.00          | 0.00          |
|                      | Fossil Fuel Power   | 256.86         | 0.00          | 0.00          | 256.86               | 0.00          | 0.00          |
|                      | Nuclear Power       |                |               |               |                      |               |               |
|                      | Hydroelectric Power |                |               |               |                      |               |               |
|                      | Other               |                |               |               |                      |               |               |
|                      | <b>Total:</b>       | <b>274.07</b>  | <b>0.32</b>   | <b>10.00</b>  | <b>274.07</b>        | <b>0.27</b>   | <b>9.08</b>   |
| <b>Lake Michigan</b> |                     |                |               |               |                      |               |               |
|                      | Public Supply       | 134.19         | 0.00          | 147.12        | 134.19               | 0.00          | 139.79        |
|                      | Domestic Supply     | 0.05           | 2.33          | 1.82          | 0.05                 | 2.31          | 1.61          |
|                      | Irrigation          | 0.19           | 61.60         | 184.81        | 0.18                 | 56.08         | 173.48        |
|                      | Livestock           | 0.00           | 1.08          | 4.98          | 0.00                 | 1.07          | 1.75          |
|                      | Industrial          | 23.94          | 126.33        | 57.77         | 23.94                | 126.25        | 55.88         |
|                      | Fossil Fuel Power   | 701.95         | 474.67        | 2.65          | 701.95               | 474.67        | 2.65          |
|                      | Nuclear Power       | 2066.54        | 0.00          | 0.00          | 2066.54              | 0.00          | 0.00          |
|                      | Hydroelectric Power |                |               |               |                      |               |               |
|                      | Other               |                |               |               |                      |               |               |
|                      | <b>Total:</b>       | <b>2926.87</b> | <b>666.02</b> | <b>399.15</b> | <b>2926.86</b>       | <b>660.39</b> | <b>375.16</b> |
| <b>Lake Huron</b>    |                     |                |               |               |                      |               |               |
|                      | Public Supply       | 98.66          | 1.04          | 22.83         | 98.53                | 1.04          | 19.93         |
|                      | Domestic Supply     | 0.00           | 0.00          | 0.02          |                      |               |               |
|                      | Irrigation          | 0.16           | 8.98          | 13.24         | 0.09                 | 7.77          | 12.23         |
|                      | Livestock           | 0.00           | 0.75          | 1.51          | 0.00                 | 0.71          | 0.56          |
|                      | Industrial          | 2.95           | 35.21         | 23.10         | 2.95                 | 35.16         | 22.75         |
|                      | Fossil Fuel Power   | 180.11         | 476.19        | 1.11          | 180.11               | 476.19        | 1.11          |
|                      | Nuclear Power       |                |               |               |                      |               |               |
|                      | Hydroelectric Power |                |               |               |                      |               |               |
|                      | Other               |                |               |               |                      |               |               |
|                      | <b>Total:</b>       | <b>281.88</b>  | <b>522.18</b> | <b>61.80</b>  | <b>281.68</b>        | <b>520.88</b> | <b>56.58</b>  |

| Basin               | Category            | All Facilities |                |               | Principal Facilities |                |               |
|---------------------|---------------------|----------------|----------------|---------------|----------------------|----------------|---------------|
|                     |                     | GLSW           | OSW            | GW            | GLSW                 | OSW            | GW            |
| <b>Lake Erie</b>    |                     |                |                |               |                      |                |               |
|                     | Public Supply       | 628.23         | 19.52          | 35.00         | 628.23               | 19.46          | 32.17         |
|                     | Domestic Supply     | 0.00           | 0.00           | 0.18          | 0.00                 | 0.00           | 0.13          |
|                     | Irrigation          | 0.33           | 9.27           | 8.47          | 0.28                 | 8.15           | 7.25          |
|                     | Livestock           | 0.00           | 0.28           | 0.30          | 0.00                 | 0.15           | 0.00          |
|                     | Industrial          | 148.37         | 17.79          | 26.83         | 148.37               | 17.65          | 26.41         |
|                     | Fossil Fuel Power   | 4168.38        | 117.64         | 0.13          | 4168.38              | 117.64         | 0.13          |
|                     | Nuclear Power       | 52.67          | 0.00           | 0.00          | 52.67                | 0.00           | 0.00          |
|                     | Hydroelectric Power |                |                |               |                      |                |               |
|                     | Other               | 0.00           | 1.45           | 1.35          | 0.00                 | 1.45           | 1.35          |
|                     | <b>Total:</b>       | <b>4997.98</b> | <b>165.96</b>  | <b>72.25</b>  | <b>4997.93</b>       | <b>164.49</b>  | <b>67.43</b>  |
| <b>Grand Total:</b> |                     | <b>8480.78</b> | <b>1354.47</b> | <b>543.20</b> | <b>8480.54</b>       | <b>1346.03</b> | <b>508.25</b> |

# JURISDICTION REPORT- Michigan

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2008

## Total Report - All Facilities

| Category            | Withdrawals |         |        |         | Diversions |            | Consumptive Use |
|---------------------|-------------|---------|--------|---------|------------|------------|-----------------|
|                     | GLSW        | OSW     | GW     | TOTAL   | Intrabasin | Interbasin |                 |
| Public Supply       | 866.22      | 20.57   | 214.21 | 1101.00 | 0.00       | 137.62     |                 |
| Domestic Supply     | 0.05        | 2.33    | 2.02   | 4.40    |            | 0.55       |                 |
| Irrigation          | 0.67        | 80.17   | 207.13 | 287.97  |            | 259.18     |                 |
| Livestock           | 0.00        | 2.11    | 6.79   | 8.90    |            | 7.12       |                 |
| Industrial          | 187.32      | 179.33  | 107.81 | 474.47  |            | 47.45      |                 |
| Fossil Fuel Power   | 5307.31     | 1068.51 | 3.89   | 6379.71 |            | 76.56      |                 |
| Nuclear Power       | 2119.21     | 0.00    | 0.00   | 2119.21 |            | 40.26      |                 |
| Hydroelectric Power |             |         |        |         |            |            |                 |
| Other               | 0.00        | 1.45    | 1.35   | 2.80    |            | 0.00       |                 |

## Total Report - Principal Facilities

| Category            | Withdrawals |         |        |         | Diversions |            | Consumptive Use |
|---------------------|-------------|---------|--------|---------|------------|------------|-----------------|
|                     | GLSW        | OSW     | GW     | TOTAL   | Intrabasin | Interbasin |                 |
| Public Supply       | 866.09      | 20.50   | 200.39 | 1086.98 | 0.00       | 135.87     |                 |
| Domestic Supply     | 0.05        | 2.31    | 1.73   | 4.09    |            | 0.51       |                 |
| Irrigation          | 0.56        | 72.27   | 193.55 | 266.38  |            | 239.74     |                 |
| Livestock           | 0.00        | 1.93    | 2.30   | 4.24    |            | 3.39       |                 |
| Industrial          | 187.32      | 179.06  | 105.05 | 471.42  |            | 47.14      |                 |
| Fossil Fuel Power   | 5307.31     | 1068.51 | 3.89   | 6379.71 |            | 76.56      |                 |
| Nuclear Power       | 2119.21     | 0.00    | 0.00   | 2119.21 |            | 40.26      |                 |
| Hydroelectric Power |             |         |        |         |            |            |                 |
| Other               | 0.00        | 1.45    | 1.35   | 2.80    |            | 0.00       |                 |

## Minnesota

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

**Withdrawals:** Total water use from the Minnesota portion of the Lake Superior basin were 4,530.97 mgd, an increase of 9 percent from 2007 (4,155.57 mgd). This increase can be attributed to the increase in hydroelectric power generation. Water used for hydroelectric power generation purposes (3,899.08 mgd), accounted for nearly 86 percent of Minnesota’s total water use in 2008. Of the remainder (631.89 mgd), industrial use accounted for 62 percent.

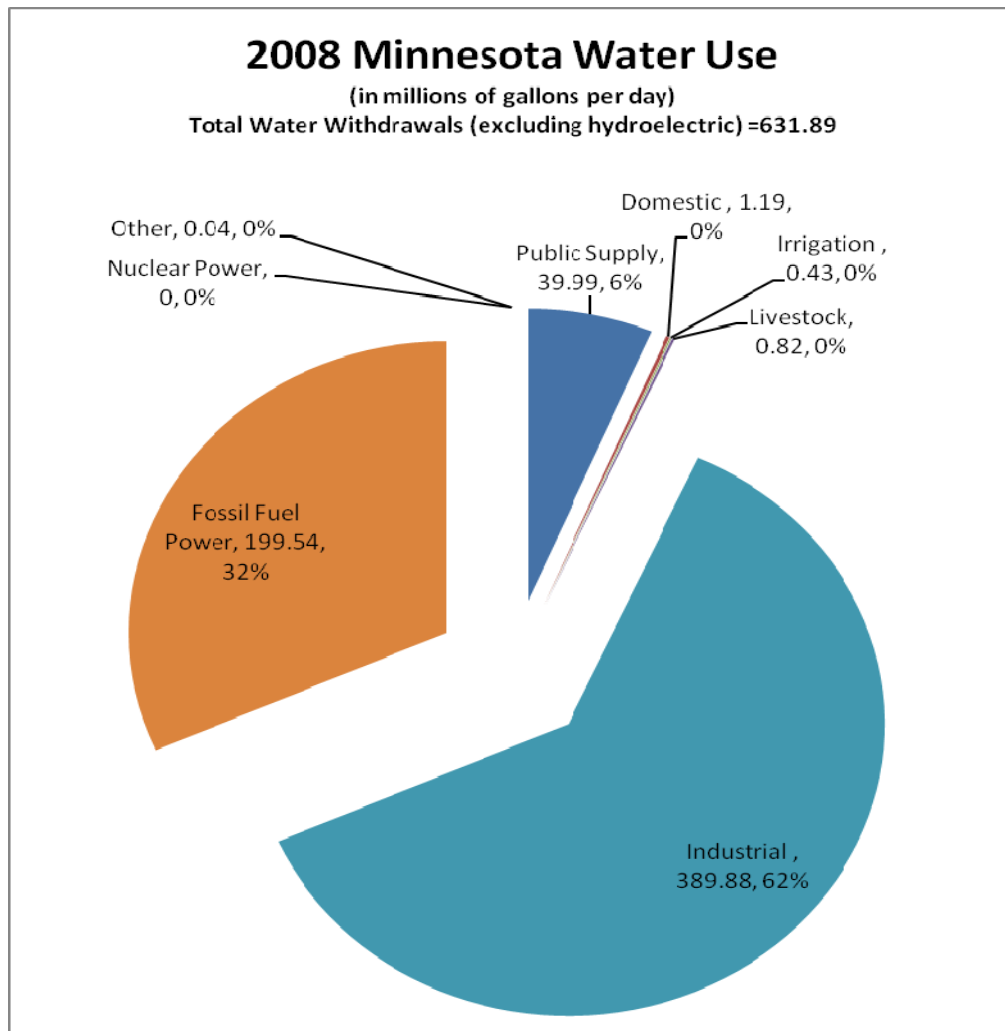


Figure 8

**Consumptive Use:** The largest consumptive use was calculated to be industrial, at 38.99 mgd, or 80 percent of total consumption (48.21 mgd). Public supply was the second largest consumptive use at 3.99 mgd, or 8 percent of Minnesota’s total consumptive use.

**Interbasin Diversions:** None reported.



# JURISDICTION REPORT- Minnesota

Withdrawals, Diversions and Consumptive Uses Units: Mgal(US)/d  
Year Of Data: 2008

| Basin                | Category            | All Facilities |                    |              | Principal Facilities |                    |              |
|----------------------|---------------------|----------------|--------------------|--------------|----------------------|--------------------|--------------|
|                      |                     | Withdr.        | Inter-Basin Diver. | Consum.      | Withdr.              | Inter-Basin Diver. | Consum.      |
| <b>Lake Superior</b> |                     |                |                    |              |                      |                    |              |
|                      | Public Supply       | 39.99          | 0.00               | 3.99         | 39.04                | 0.00               | 3.91         |
|                      | Domestic Supply     | 1.19           | 0.00               | 0.12         | 1.14                 | 0.00               | 0.11         |
|                      | Irrigation          | 0.43           | 0.00               | 0.38         | 0.11                 | 0.00               | 0.01         |
|                      | Livestock           | 0.82           | 0.00               | 0.74         | 0.76                 | 0.00               | 0.68         |
|                      | Industrial          | 389.88         | 7.06               | 38.99        | 387.91               | 7.06               | 38.79        |
|                      | Fossil Fuel Power   | 199.54         | 0.00               | 3.99         | 199.44               | 0.00               | 3.99         |
|                      | Nuclear Power       | 0.00           | 0.00               | 0.00         | 0.00                 | 0.00               | 0.00         |
|                      | Hydroelectric Power | 3899.08        | 0.00               | 0.00         | 3899.08              | 0.00               | 0.00         |
|                      | Other               | 0.04           | 0.00               | 0.00         | 0.00                 | 0.00               | 0.00         |
|                      | <b>Total:</b>       | <b>4530.97</b> | <b>7.06</b>        | <b>48.21</b> | <b>4527.48</b>       | <b>7.06</b>        | <b>47.49</b> |
| <b>Grand Total:</b>  |                     | <b>4530.97</b> | <b>7.06</b>        | <b>48.21</b> | <b>4527.48</b>       | <b>7.06</b>        | <b>47.49</b> |

# JURISDICTION REPORT- Minnesota

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2008

| Basin                | Category            | All Facilities |                |             | Principal Facilities |                |             |
|----------------------|---------------------|----------------|----------------|-------------|----------------------|----------------|-------------|
|                      |                     | GLSW           | OSW            | GW          | GLSW                 | OSW            | GW          |
| <b>Lake Superior</b> |                     |                |                |             |                      |                |             |
|                      | Public Supply       | 31.84          | 2.00           | 6.15        | 31.47                | 1.97           | 5.60        |
|                      | Domestic Supply     | 0.79           | 0.39           | 0.01        | 0.75                 | 0.39           | 0.00        |
|                      | Irrigation          | 0.00           | 0.39           | 0.04        | 0.00                 | 0.11           | 0.00        |
|                      | Livestock           | 0.82           | 0.00           | 0.00        | 0.76                 | 0.00           | 0.00        |
|                      | Industrial          | 308.69         | 81.16          | 0.03        | 308.60               | 79.31          | 0.00        |
|                      | Fossil Fuel Power   | 39.84          | 159.60         | 0.10        | 39.84                | 159.60         | 0.00        |
|                      | Nuclear Power       | 0.00           | 0.00           | 0.00        | 0.00                 | 0.00           | 0.00        |
|                      | Hydroelectric Power | 0.00           | 3899.08        | 0.00        | 0.00                 | 3899.08        | 0.00        |
|                      | Other               | 0.00           | 0.00           | 0.04        | 0.00                 | 0.00           | 0.00        |
|                      | <b>Total:</b>       | <b>381.98</b>  | <b>4142.62</b> | <b>6.37</b> | <b>381.42</b>        | <b>4140.46</b> | <b>5.60</b> |
| <b>Grand Total:</b>  |                     | <b>381.98</b>  | <b>4142.62</b> | <b>6.37</b> | <b>381.42</b>        | <b>4140.46</b> | <b>5.60</b> |

# JURISDICTION REPORT- Minnesota

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2008

## Total Report - All Facilities

| Category            | Withdrawals |         |      |         | Diversions |            | Consumptive Use |
|---------------------|-------------|---------|------|---------|------------|------------|-----------------|
|                     | GLSW        | OSW     | GW   | TOTAL   | Intrabasin | Interbasin |                 |
| Public Supply       | 31.84       | 2.00    | 6.15 | 39.99   | 0.00       | 0.00       | 3.99            |
| Domestic Supply     | 0.79        | 0.39    | 0.01 | 1.19    | 0.00       | 0.00       | 0.12            |
| Irrigation          | 0.00        | 0.39    | 0.04 | 0.43    | 0.00       | 0.00       | 0.38            |
| Livestock           | 0.82        | 0.00    | 0.00 | 0.82    | 0.00       | 0.00       | 0.74            |
| Industrial          | 308.69      | 81.16   | 0.03 | 389.88  | 0.00       | 7.06       | 38.99           |
| Fossil Fuel Power   | 39.84       | 159.60  | 0.10 | 199.54  | 0.00       | 0.00       | 3.99            |
| Nuclear Power       | 0.00        | 0.00    | 0.00 | 0.00    | 0.00       | 0.00       | 0.00            |
| Hydroelectric Power | 0.00        | 3899.08 | 0.00 | 3899.08 | 0.00       | 0.00       | 0.00            |
| Other               | 0.00        | 0.00    | 0.04 | 0.04    | 0.00       | 0.00       | 0.00            |

## Total Report - Principal Facilities

| Category            | Withdrawals |         |      |         | Diversions |            | Consumptive Use |
|---------------------|-------------|---------|------|---------|------------|------------|-----------------|
|                     | GLSW        | OSW     | GW   | TOTAL   | Intrabasin | Interbasin |                 |
| Public Supply       | 31.47       | 1.97    | 5.60 | 39.04   | 0.00       | 0.00       | 3.91            |
| Domestic Supply     | 0.75        | 0.39    | 0.00 | 1.14    | 0.00       | 0.00       | 0.11            |
| Irrigation          | 0.00        | 0.11    | 0.00 | 0.11    | 0.00       | 0.00       | 0.01            |
| Livestock           | 0.76        | 0.00    | 0.00 | 0.76    | 0.00       | 0.00       | 0.68            |
| Industrial          | 308.60      | 79.31   | 0.00 | 387.91  | 0.00       | 7.06       | 38.79           |
| Fossil Fuel Power   | 39.84       | 159.60  | 0.00 | 199.44  | 0.00       | 0.00       | 3.99            |
| Nuclear Power       | 0.00        | 0.00    | 0.00 | 0.00    | 0.00       | 0.00       | 0.00            |
| Hydroelectric Power | 0.00        | 3899.08 | 0.00 | 3899.08 | 0.00       | 0.00       | 0.00            |
| Other               | 0.00        | 0.00    | 0.00 | 0.00    | 0.00       | 0.00       | 0.00            |

## New York

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

**Withdrawals:** In 2008, New York’s total water use was 312,433.13 mgd. Total withdrawals, not including hydroelectric power, were 4,143.13 mgd, compared with 4,574.35 in 2007. Hydroelectric power uses of 308,290 mgd represented 98.6 percent of total withdrawals in New York. The next largest categories of use were fossil fuel and nuclear power.

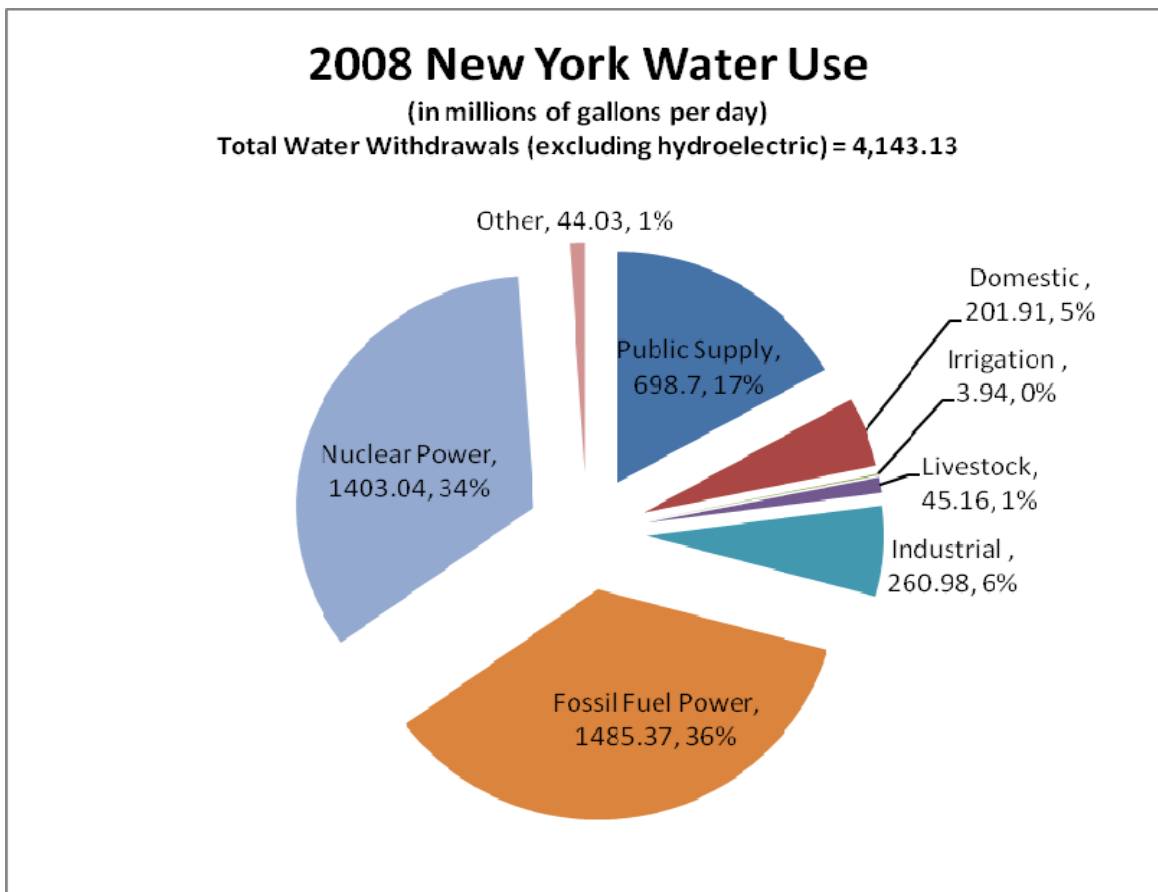


Figure 9

**Consumptive Use:** New York reported total consumptive uses of 209.29 mgd. Lake Ontario comprised 142.45 mgd or 68 percent; Lake Erie comprised 57.93 mgd or 28 percent; the St. Lawrence River comprised 8.91 mgd or 4 percent. The largest categories of consumptive use were nuclear power (70.15 mgd) and public supply (69.88 mgd), both uses are about at 67 percent of total consumptive use.

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

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

# JURISDICTION REPORT- New York

Withdrawals, Diversions and Consumptive Uses Units: Mgal(US)/d  
Year Of Data: 2008

| Basin                     | Category            | All Facilities   |                    |               | Principal Facilities |                    |               |
|---------------------------|---------------------|------------------|--------------------|---------------|----------------------|--------------------|---------------|
|                           |                     | Withdr.          | Inter-Basin Diver. | Consum.       | Withdr.              | Inter-Basin Diver. | Consum.       |
| <b>Lake Erie</b>          |                     |                  |                    |               |                      |                    |               |
|                           | Public Supply       | 263.95           | 0.00               | 26.40         | 4.00                 | 0.00               |               |
|                           | Domestic Supply     | 43.87            | 0.00               | 4.40          | 0.00                 | 0.00               |               |
|                           | Irrigation          | 0.16             | 0.00               | 0.14          | 0.16                 | 0.00               | 0.14          |
|                           | Livestock           | 8.86             | 0.00               | 7.98          |                      | 0.00               |               |
|                           | Industrial          | 167.75           | 0.00               | 41.92         | 167.66               | 0.00               | 41.92         |
|                           | Fossil Fuel Power   | 793.58           | 0.00               | 15.87         | 793.58               | 0.00               | 15.87         |
|                           | Nuclear Power       | 0.00             | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00          |
|                           | Hydroelectric Power | 45584.00         | 0.00               | 0.00          | 45584.00             | 0.00               | 0.00          |
|                           | Other               | 0.00             | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00          |
|                           | <b>Total:</b>       | <b>46862.17</b>  | <b>0.00</b>        | <b>96.71</b>  | <b>46549.40</b>      | <b>0.00</b>        | <b>57.93</b>  |
| <b>Lake Ontario</b>       |                     |                  |                    |               |                      |                    |               |
|                           | Public Supply       | 390.73           | 9.59               | 39.08         |                      | 9.59               | 0.00          |
|                           | Domestic Supply     | 135.69           | 0.00               | 13.57         | 65.67                | 0.00               | 6.57          |
|                           | Irrigation          | 3.71             | 0.00               | 3.34          | 3.71                 | 0.00               | 3.34          |
|                           | Livestock           | 21.27            | 0.00               | 19.14         |                      | 0.00               |               |
|                           | Industrial          | 63.08            | 0.00               | 15.77         | 63.08                | 0.00               | 15.77         |
|                           | Fossil Fuel Power   | 691.77           | 0.00               | 13.84         | 691.77               | 0.00               | 13.84         |
|                           | Nuclear Power       | 1403.04          | 0.00               | 70.15         | 1403.04              | 0.00               | 70.15         |
|                           | Hydroelectric Power | 80908.00         | 0.00               | 0.00          | 0.00                 | 0.00               |               |
|                           | Other               | 39.57            | 32.00              | 32.78         | 39.46                | 32.00              | 32.78         |
|                           | <b>Total:</b>       | <b>83656.86</b>  | <b>41.59</b>       | <b>207.67</b> | <b>2266.73</b>       | <b>41.59</b>       | <b>142.45</b> |
| <b>St. Lawrence River</b> |                     |                  |                    |               |                      |                    |               |
|                           | Public Supply       | 44.02            | 0.00               | 4.40          |                      | 0.00               |               |
|                           | Domestic Supply     | 22.35            | 0.00               | 2.21          | 8.61                 | 0.00               | 0.86          |
|                           | Irrigation          | 0.07             | 0.00               | 0.06          | 0.07                 | 0.00               | 0.06          |
|                           | Livestock           | 15.03            | 0.00               | 13.52         |                      | 0.00               |               |
|                           | Industrial          | 30.15            | 0.00               | 7.54          | 30.15                | 0.00               | 7.54          |
|                           | Fossil Fuel Power   | 0.02             | 0.00               | 0.00          | 0.02                 | 0.00               | 0.00          |
|                           | Nuclear Power       | 0.00             | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00          |
|                           | Hydroelectric Power | 181798.00        | 0.00               | 0.00          | 83106.00             | 0.00               | 0.00          |
|                           | Other               | 4.46             | 0.00               | 0.45          | 4.46                 | 0.00               | 0.45          |
|                           | <b>Total:</b>       | <b>181914.10</b> | <b>0.00</b>        | <b>28.18</b>  | <b>83149.31</b>      | <b>0.00</b>        | <b>8.91</b>   |
| <b>Grand Total:</b>       |                     | <b>312433.13</b> | <b>41.59</b>       | <b>332.56</b> | <b>131965.44</b>     | <b>41.59</b>       | <b>209.29</b> |

# JURISDICTION REPORT- New York

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2008

| Basin                     | Category            | All Facilities   |                  |               | Principal Facilities |               |             |
|---------------------------|---------------------|------------------|------------------|---------------|----------------------|---------------|-------------|
|                           |                     | GLSW             | OSW              | GW            | GLSW                 | OSW           | GW          |
| <b>Lake Erie</b>          |                     |                  |                  |               |                      |               |             |
|                           | Public Supply       | 184.50           | 72.12            | 7.33          | 4.00                 | 0.00          | 0.00        |
|                           | Domestic Supply     | 22.96            | 3.36             | 17.55         | 0.00                 | 0.00          | 0.00        |
|                           | Irrigation          | 0.08             | 0.08             | 0.00          | 0.08                 | 0.08          | 0.00        |
|                           | Livestock           | 0.91             | 2.92             | 5.03          |                      |               |             |
|                           | Industrial          | 166.69           | 0.94             | 0.12          | 166.60               | 0.94          | 0.12        |
|                           | Fossil Fuel Power   | 793.58           | 0.00             | 0.00          | 793.58               | 0.00          | 0.00        |
|                           | Nuclear Power       | 0.00             | 0.00             | 0.00          | 0.00                 | 0.00          | 0.00        |
|                           | Hydroelectric Power | 45584.00         | 0.00             | 0.00          | 45584.00             | 0.00          | 0.00        |
|                           | Other               | 0.00             | 0.00             | 0.00          | 0.00                 | 0.00          | 0.00        |
|                           | <b>Total:</b>       | <b>46752.72</b>  | <b>79.42</b>     | <b>30.03</b>  | <b>46548.26</b>      | <b>1.02</b>   | <b>0.12</b> |
| <b>Lake Ontario</b>       |                     |                  |                  |               |                      |               |             |
|                           | Public Supply       | 187.28           | 170.27           | 33.18         |                      |               |             |
|                           | Domestic Supply     | 29.33            | 65.67            | 40.69         | 0.00                 | 65.67         | 0.00        |
|                           | Irrigation          | 0.00             | 3.57             | 0.14          | 0.00                 | 3.57          | 0.14        |
|                           | Livestock           | 3.91             | 7.56             | 9.80          |                      |               |             |
|                           | Industrial          | 18.47            | 38.84            | 5.77          | 18.47                | 38.84         | 5.77        |
|                           | Fossil Fuel Power   | 334.88           | 356.89           | 0.00          | 334.88               | 356.89        | 0.00        |
|                           | Nuclear Power       | 1403.04          | 0.00             | 0.00          | 1403.04              | 0.00          | 0.00        |
|                           | Hydroelectric Power | 0.00             | 80908.00         | 0.00          | 0.00                 | 0.00          | 0.00        |
|                           | Other               | 0.00             | 39.33            | 0.24          | 0.00                 | 39.33         | 0.13        |
|                           | <b>Total:</b>       | <b>1976.91</b>   | <b>81590.13</b>  | <b>89.82</b>  | <b>1756.39</b>       | <b>504.30</b> | <b>6.04</b> |
| <b>St. Lawrence River</b> |                     |                  |                  |               |                      |               |             |
|                           | Public Supply       | 2.80             | 35.71            | 5.51          |                      |               |             |
|                           | Domestic Supply     | 0.00             | 8.61             | 13.74         | 0.00                 | 8.61          | 0.00        |
|                           | Irrigation          | 0.00             | 0.07             | 0.00          | 0.00                 | 0.07          | 0.00        |
|                           | Livestock           | 0.38             | 10.56            | 4.09          |                      |               |             |
|                           | Industrial          | 4.59             | 21.79            | 3.77          | 4.59                 | 21.79         | 3.77        |
|                           | Fossil Fuel Power   | 0.02             | 0.00             | 0.00          | 0.02                 | 0.00          | 0.00        |
|                           | Nuclear Power       | 0.00             | 0.00             | 0.00          | 0.00                 | 0.00          | 0.00        |
|                           | Hydroelectric Power | 83106.00         | 98692.00         | 0.00          | 83106.00             | 0.00          | 0.00        |
|                           | Other               | 0.00             | 4.46             | 0.00          | 0.00                 | 4.46          | 0.00        |
|                           | <b>Total:</b>       | <b>83113.79</b>  | <b>98773.20</b>  | <b>27.11</b>  | <b>83110.61</b>      | <b>34.93</b>  | <b>3.77</b> |
| <b>Grand Total:</b>       |                     | <b>131843.42</b> | <b>180442.75</b> | <b>146.96</b> | <b>131415.26</b>     | <b>540.25</b> | <b>9.93</b> |

# JURISDICTION REPORT- New York

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2008

## Total Report - All Facilities

| Category            | Withdrawals |           |       |           | Diversions |            | Consumptive Use |
|---------------------|-------------|-----------|-------|-----------|------------|------------|-----------------|
|                     | GLSW        | OSW       | GW    | TOTAL     | Intrabasin | Interbasin |                 |
| Public Supply       | 374.58      | 278.10    | 46.02 | 698.70    | 0.00       | 9.59       | 69.88           |
| Domestic Supply     | 52.29       | 77.64     | 71.98 | 201.91    | 0.00       | 0.00       | 20.18           |
| Irrigation          | 0.08        | 3.72      | 0.14  | 3.94      | 0.00       | 0.00       | 3.54            |
| Livestock           | 5.20        | 21.04     | 18.92 | 45.16     | 0.00       | 0.00       | 40.64           |
| Industrial          | 189.75      | 61.57     | 9.66  | 260.98    | 0.00       | 0.00       | 65.23           |
| Fossil Fuel Power   | 1128.48     | 356.89    | 0.00  | 1485.37   | 0.00       | 0.00       | 29.71           |
| Nuclear Power       | 1403.04     | 0.00      | 0.00  | 1403.04   | 0.00       | 0.00       | 70.15           |
| Hydroelectric Power | 128690.00   | 179600.00 | 0.00  | 308290.00 | 0.00       | 0.00       | 0.00            |
| Other               | 0.00        | 43.79     | 0.24  | 44.03     | 0.00       | 32.00      | 33.23           |

## Total Report - Principal Facilities

| Category            | Withdrawals |        |      |           | Diversions |            | Consumptive Use |
|---------------------|-------------|--------|------|-----------|------------|------------|-----------------|
|                     | GLSW        | OSW    | GW   | TOTAL     | Intrabasin | Interbasin |                 |
| Public Supply       | 4.00        | 0.00   | 0.00 | 4.00      | 0.00       | 9.59       | 0.00            |
| Domestic Supply     | 0.00        | 74.28  | 0.00 | 74.28     | 0.00       | 0.00       | 7.43            |
| Irrigation          | 0.08        | 3.72   | 0.14 | 3.94      | 0.00       | 0.00       | 3.54            |
| Livestock           |             |        |      |           | 0.00       | 0.00       |                 |
| Industrial          | 189.66      | 61.57  | 9.66 | 260.89    | 0.00       | 0.00       | 65.23           |
| Fossil Fuel Power   | 1128.48     | 356.89 | 0.00 | 1485.37   | 0.00       | 0.00       | 29.71           |
| Nuclear Power       | 1403.04     | 0.00   | 0.00 | 1403.04   | 0.00       | 0.00       | 70.15           |
| Hydroelectric Power | 128690.00   | 0.00   | 0.00 | 128690.00 | 0.00       | 0.00       | 0.00            |
| Other               | 0.00        | 43.79  | 0.13 | 43.92     | 0.00       | 32.00      | 33.23           |



## Ohio

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

**Withdrawals:** Total withdrawals from the Ohio Lake Erie basin for 2008 were 3,491.79 mgd. Thermoelectric-fossil fuel was by far the largest use of water at 2,427.62 mgd (70%); public supply was the second largest withdrawal at 554.61mgd (16%).

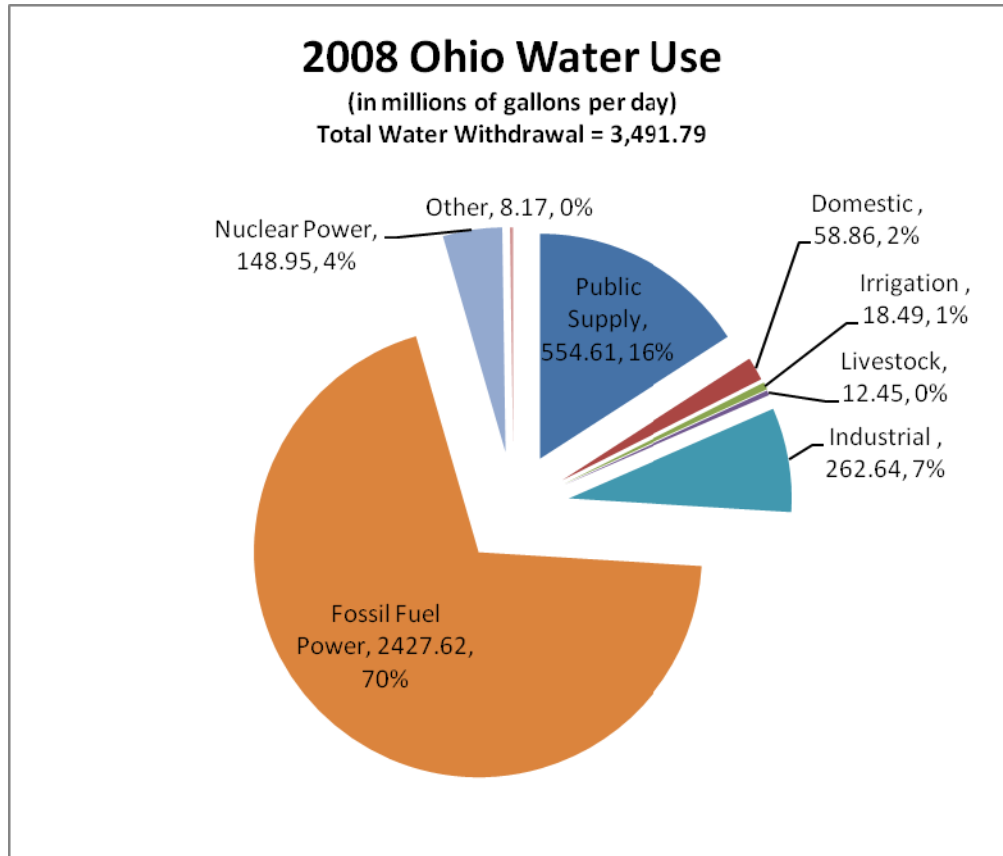


Figure 10

**Consumptive Use:** Total consumptive uses were calculated to be 182.32 mgd. Public supply represents the largest consumptive use sector at 83.20 mgd and accounts for 46 percent of the total. The next three largest consumptive use categories were thermoelectric - fossil fuel at 24.28 mgd, industrial facilities at 22.46 mgd, and irrigation at 16.64 mgd.

**Interbasin Diversions:** Two permitted Lake Erie basin diversions provided drinking water to service areas outside the basin without return, resulting in total outgoing diversions of 0.32 mgd. Releases from the Ohio & Erie Canal into the Lake Erie basin resulted in incoming diversions of 12.48mgd.

# JURISDICTION REPORT- Ohio

Withdrawals, Diversions and Consumptive Uses Units: Mgal(US)/d  
Year Of Data: 2008

| Basin               | Category            | All Facilities |                    |               | Principal Facilities |                    |               |
|---------------------|---------------------|----------------|--------------------|---------------|----------------------|--------------------|---------------|
|                     |                     | Withdr.        | Inter-Basin Diver. | Consum.       | Withdr.              | Inter-Basin Diver. | Consum.       |
| <b>Lake Erie</b>    |                     |                |                    |               |                      |                    |               |
|                     | Public Supply       | 554.61         | 0.32               | 83.20         | 551.13               | 0.32               | 82.67         |
|                     | Domestic Supply     | 58.86          | 0.00               | 8.83          | 0.30                 | 0.00               | 0.05          |
|                     | Irrigation          | 18.49          | 0.00               | 16.64         | 15.89                | 0.00               | 14.28         |
|                     | Livestock           | 12.45          | 0.00               | 9.96          | 0.35                 | 0.00               | 0.28          |
|                     | Industrial          | 262.64         | 0.00               | 22.46         | 262.12               | 0.00               | 22.41         |
|                     | Fossil Fuel Power   | 2427.62        | 0.00               | 24.28         | 2427.62              | 0.00               | 24.28         |
|                     | Nuclear Power       | 148.95         | 0.00               | 14.90         | 148.95               | 0.00               | 14.90         |
|                     | Hydroelectric Power | 0.00           | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00          |
|                     | Other               | 8.17           | -12.80             | 2.05          | 8.06                 | -12.80             | 2.00          |
|                     | <b>Total:</b>       | <b>3491.79</b> | <b>-12.48</b>      | <b>182.32</b> | <b>3414.42</b>       | <b>-12.48</b>      | <b>160.87</b> |
| <b>Grand Total:</b> |                     | <b>3491.79</b> | <b>-12.48</b>      | <b>182.32</b> | <b>3414.42</b>       | <b>-12.48</b>      | <b>160.87</b> |

# JURISDICTION REPORT- Ohio

Withdrawals by Source  
Units: Mgal(US)/d  
Year Of Data: 2008

| Basin               | Category            | All Facilities |                |               | Principal Facilities |                |              |
|---------------------|---------------------|----------------|----------------|---------------|----------------------|----------------|--------------|
|                     |                     | GLSW           | OSW            | GW            | GLSW                 | OSW            | GW           |
| <b>Lake Erie</b>    |                     |                |                |               |                      |                |              |
|                     | Public Supply       | 415.98         | 103.71         | 34.92         | 415.98               | 103.59         | 31.56        |
|                     | Domestic Supply     | 0.30           | 0.07           | 58.49         | 0.30                 | 0.00           | 0.00         |
|                     | Irrigation          | 0.31           | 15.22          | 2.96          | 0.29                 | 13.41          | 2.19         |
|                     | Livestock           | 0.00           | 1.76           | 10.69         | 0.00                 | 0.00           | 0.35         |
|                     | Industrial          | 56.94          | 160.37         | 45.33         | 56.94                | 160.22         | 44.96        |
|                     | Fossil Fuel Power   | 1692.95        | 734.67         | 0.00          | 1692.95              | 734.67         | 0.00         |
|                     | Nuclear Power       | 148.95         | 0.00           | 0.00          | 148.95               | 0.00           | 0.00         |
|                     | Hydroelectric Power | 0.00           | 0.00           | 0.00          | 0.00                 | 0.00           | 0.00         |
|                     | Other               | 0.69           | 7.16           | 0.32          | 0.69                 | 7.15           | 0.22         |
|                     | <b>Total:</b>       | <b>2316.12</b> | <b>1022.96</b> | <b>152.71</b> | <b>2316.10</b>       | <b>1019.04</b> | <b>79.28</b> |
| <b>Grand Total:</b> |                     | <b>2316.12</b> | <b>1022.96</b> | <b>152.71</b> | <b>2316.10</b>       | <b>1019.04</b> | <b>79.28</b> |

# JURISDICTION REPORT- Ohio

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2008

## Total Report - All Facilities

| Category            | Withdrawals |        |       |         | Diversions |            | Consumptive Use |
|---------------------|-------------|--------|-------|---------|------------|------------|-----------------|
|                     | GLSW        | OSW    | GW    | TOTAL   | Intrabasin | Interbasin |                 |
| Public Supply       | 415.98      | 103.71 | 34.92 | 554.61  | 0.00       | 0.32       | 83.20           |
| Domestic Supply     | 0.30        | 0.07   | 58.49 | 58.86   | 0.00       | 0.00       | 8.83            |
| Irrigation          | 0.31        | 15.22  | 2.96  | 18.49   | 0.00       | 0.00       | 16.64           |
| Livestock           | 0.00        | 1.76   | 10.69 | 12.45   | 0.00       | 0.00       | 9.96            |
| Industrial          | 56.94       | 160.37 | 45.33 | 262.64  | 0.00       | 0.00       | 22.46           |
| Fossil Fuel Power   | 1692.95     | 734.67 | 0.00  | 2427.62 | 0.00       | 0.00       | 24.28           |
| Nuclear Power       | 148.95      | 0.00   | 0.00  | 148.95  | 0.00       | 0.00       | 14.90           |
| Hydroelectric Power | 0.00        | 0.00   | 0.00  | 0.00    | 0.00       | 0.00       | 0.00            |
| Other               | 0.69        | 7.16   | 0.32  | 8.17    | 0.00       | -12.80     | 2.05            |

## Total Report - Principal Facilities

| Category            | Withdrawals |        |       |         | Diversions |            | Consumptive Use |
|---------------------|-------------|--------|-------|---------|------------|------------|-----------------|
|                     | GLSW        | OSW    | GW    | TOTAL   | Intrabasin | Interbasin |                 |
| Public Supply       | 415.98      | 103.59 | 31.56 | 551.13  | 0.00       | 0.32       | 82.67           |
| Domestic Supply     | 0.30        | 0.00   | 0.00  | 0.30    | 0.00       | 0.00       | 0.05            |
| Irrigation          | 0.29        | 13.41  | 2.19  | 15.89   | 0.00       | 0.00       | 14.28           |
| Livestock           | 0.00        | 0.00   | 0.35  | 0.35    | 0.00       | 0.00       | 0.28            |
| Industrial          | 56.94       | 160.22 | 44.96 | 262.12  | 0.00       | 0.00       | 22.41           |
| Fossil Fuel Power   | 1692.95     | 734.67 | 0.00  | 2427.62 | 0.00       | 0.00       | 24.28           |
| Nuclear Power       | 148.95      | 0.00   | 0.00  | 148.95  | 0.00       | 0.00       | 14.90           |
| Hydroelectric Power | 0.00        | 0.00   | 0.00  | 0.00    | 0.00       | 0.00       | 0.00            |
| Other               | 0.69        | 7.15   | 0.22  | 8.06    | 0.00       | -12.80     | 2.00            |

## Ontario

**Data Sources:** Water use data reporting for Ontario was coordinated by the Ontario Ministry of Natural Resources, Science and Information Branch. Calendar year 2000 data are used for this report because: 1) water use estimates for 2006 are not anticipated to be greatly different than those reported for 2000 assuming a similar data collection and assessment approach, and 2) the provincial government has phased-in new regulatory reporting requirements for permitted water takers with the requirements being fully implemented in 2008. Water use information from the new reporting program will represent a significant enhancement in estimating the reported overall water use in the province. Permit holders are now required to collect and record data on the volume of water taken daily and report the data on an annual basis. Please contact Jonathan Staples at Jonathan.Staples@ontario.ca, Ontario Ministry of Natural Resources with questions regarding Ontario’s water use data.

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

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

**Withdrawals:**  
The reported 2008, Great Lakes water uses for Ontario (using 2000 surrogate data) were approximately 769,343.12 mld, or 203,238.94 mgd. However, hydroelectric withdrawals represented more than 93 percent of the total, leaving

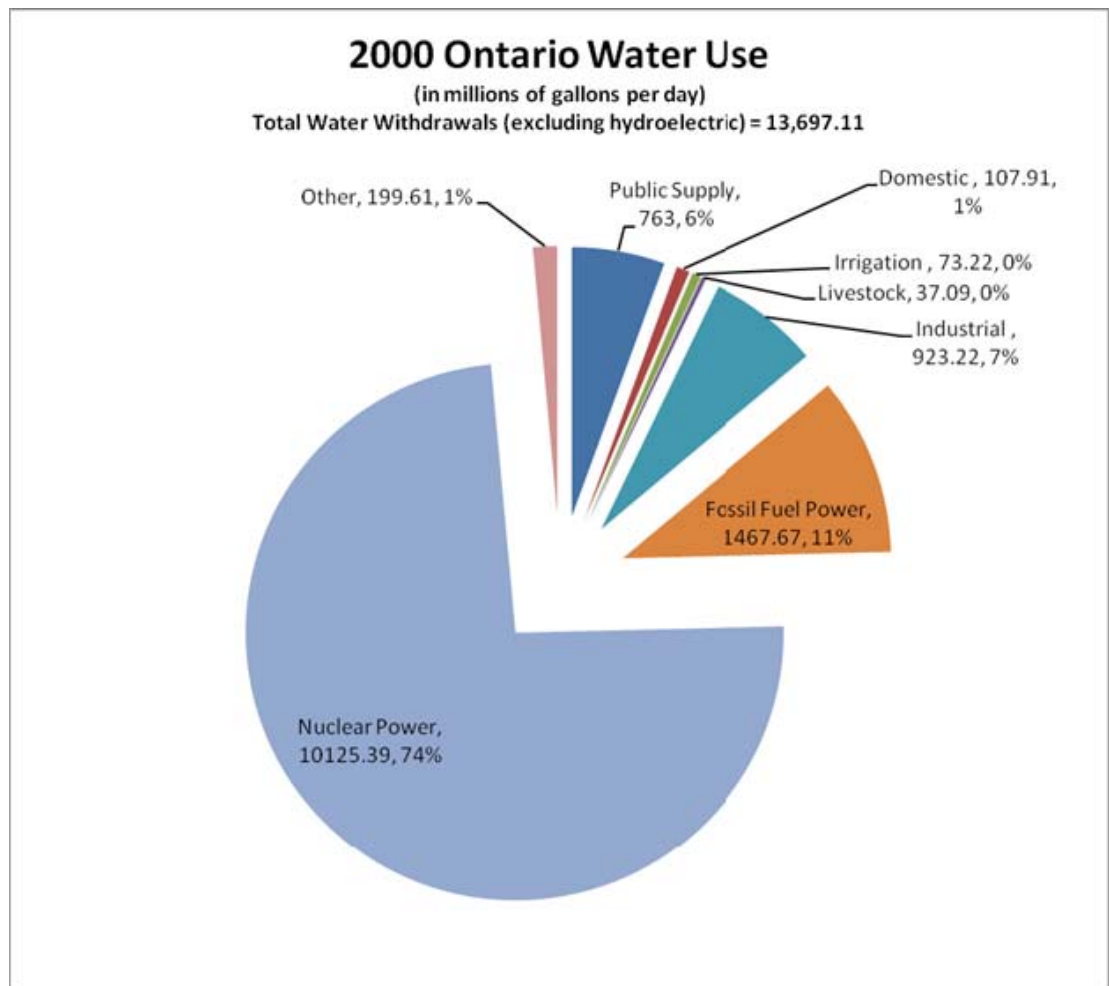


Figure 11

total use at 51,849.17 mld (13,697.10 mgd). Thermoelectric—nuclear plant uses (not including hydropower) were the largest at 74 percent (38,328.77 mld, or 10,125.39 mgd).

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

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

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

# JURISDICTION REPORT- Ontario

Withdrawals, Diversions and Consumptive Uses Units: Mgal(US)/d  
Year Of Data: 2008

| Basin                | Category            | All Facilities  |                    |              | Principal Facilities |                    |             |
|----------------------|---------------------|-----------------|--------------------|--------------|----------------------|--------------------|-------------|
|                      |                     | Withdr.         | Inter-Basin Diver. | Consum.      | Withdr.              | Inter-Basin Diver. | Consum.     |
| <b>Lake Superior</b> |                     |                 |                    |              |                      |                    |             |
|                      | Public Supply       | 45.77           | 0.00               | 6.87         | 45.58                | 0.00               | 6.84        |
|                      | Domestic Supply     | 1.75            | 0.00               | 0.26         | 0.00                 | 0.00               | 0.00        |
|                      | Irrigation          | 0.37            | 0.00               |              |                      | 0.00               |             |
|                      | Livestock           | 0.14            | 0.00               |              |                      | 0.00               |             |
|                      | Industrial          | 162.12          | 0.00               | 10.21        | 0.00                 | 0.00               | 0.00        |
|                      | Fossil Fuel Power   | 295.52          | 0.00               | 0.00         | 0.00                 | 0.00               | 0.00        |
|                      | Nuclear Power       | 0.00            | 0.00               | 0.00         | 0.00                 | 0.00               | 0.00        |
|                      | Hydroelectric Power | 38156.31        | -4007.75           | 0.00         | 0.00                 | 0.00               | 0.00        |
|                      | Other               |                 | 0.00               |              |                      | 0.00               |             |
|                      | <b>Total:</b>       | <b>38661.99</b> | <b>-4007.75</b>    | <b>17.34</b> | <b>45.58</b>         | <b>0.00</b>        | <b>6.84</b> |

|                   |                     |                 |             |              |               |             |              |
|-------------------|---------------------|-----------------|-------------|--------------|---------------|-------------|--------------|
| <b>Lake Huron</b> |                     |                 |             |              |               |             |              |
|                   | Public Supply       | 84.37           | 0.00        | 12.65        | 81.66         | 0.00        | 12.25        |
|                   | Domestic Supply     | 10.61           | 0.00        | 1.59         | 0.00          | 0.00        | 0.00         |
|                   | Irrigation          | 20.91           | 0.00        |              |               | 0.00        |              |
|                   | Livestock           | 12.41           | 0.00        |              |               | 0.00        |              |
|                   | Industrial          | 190.19          | 0.00        | 11.98        | 0.00          | 0.00        | 0.00         |
|                   | Fossil Fuel Power   | 0.00            | 0.00        | 0.00         | 0.00          | 0.00        | 0.00         |
|                   | Nuclear Power       | 4697.20         | 0.00        | 42.28        | 0.00          | 0.00        | 0.00         |
|                   | Hydroelectric Power | 33608.07        | 0.00        | 0.00         | 0.00          | 0.00        | 0.00         |
|                   | Other               | 47.97           | 0.00        | 0.00         | 47.97         | 0.00        | 0.00         |
|                   | <b>Total:</b>       | <b>38671.73</b> | <b>0.00</b> | <b>68.50</b> | <b>129.63</b> | <b>0.00</b> | <b>12.25</b> |

|                  |                     |               |             |              |              |             |              |
|------------------|---------------------|---------------|-------------|--------------|--------------|-------------|--------------|
| <b>Lake Erie</b> |                     |               |             |              |              |             |              |
|                  | Public Supply       | 93.89         | 0.00        | 14.08        | 92.84        | 0.00        | 13.92        |
|                  | Domestic Supply     | 19.94         | 0.00        | 2.99         | 0.00         | 0.00        | 0.00         |
|                  | Irrigation          | 31.85         | 0.00        |              |              | 0.00        |              |
|                  | Livestock           | 13.22         | 0.00        |              |              | 0.00        |              |
|                  | Industrial          | 180.45        | 0.00        | 11.37        | 0.00         | 0.00        | 0.00         |
|                  | Fossil Fuel Power   | 463.20        | 0.00        | 0.00         | 0.00         | 0.00        | 0.00         |
|                  | Nuclear Power       | 0.00          | 0.00        | 0.00         | 0.00         | 0.00        | 0.00         |
|                  | Hydroelectric Power | 0.00          | 0.00        | 0.00         | 0.00         | 0.00        | 0.00         |
|                  | Other               |               | 0.00        |              |              | 0.00        |              |
|                  | <b>Total:</b>       | <b>802.56</b> | <b>0.00</b> | <b>28.44</b> | <b>92.84</b> | <b>0.00</b> | <b>13.92</b> |

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



# JURISDICTION REPORT- Ontario

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2008

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

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

# JURISDICTION REPORT- Ontario

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2008

## Total Report - All Facilities

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

## Total Report - Principal Facilities

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

## Pennsylvania

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

**Withdrawals:** Total withdrawals from Lake Erie were 40.08 mgd, with no hydroelectric withdrawals reported. Public supply at 30.1 mgd or 75 percent, and industrial at 6.81 mgd or 17 percent, constituted the primary uses of water.

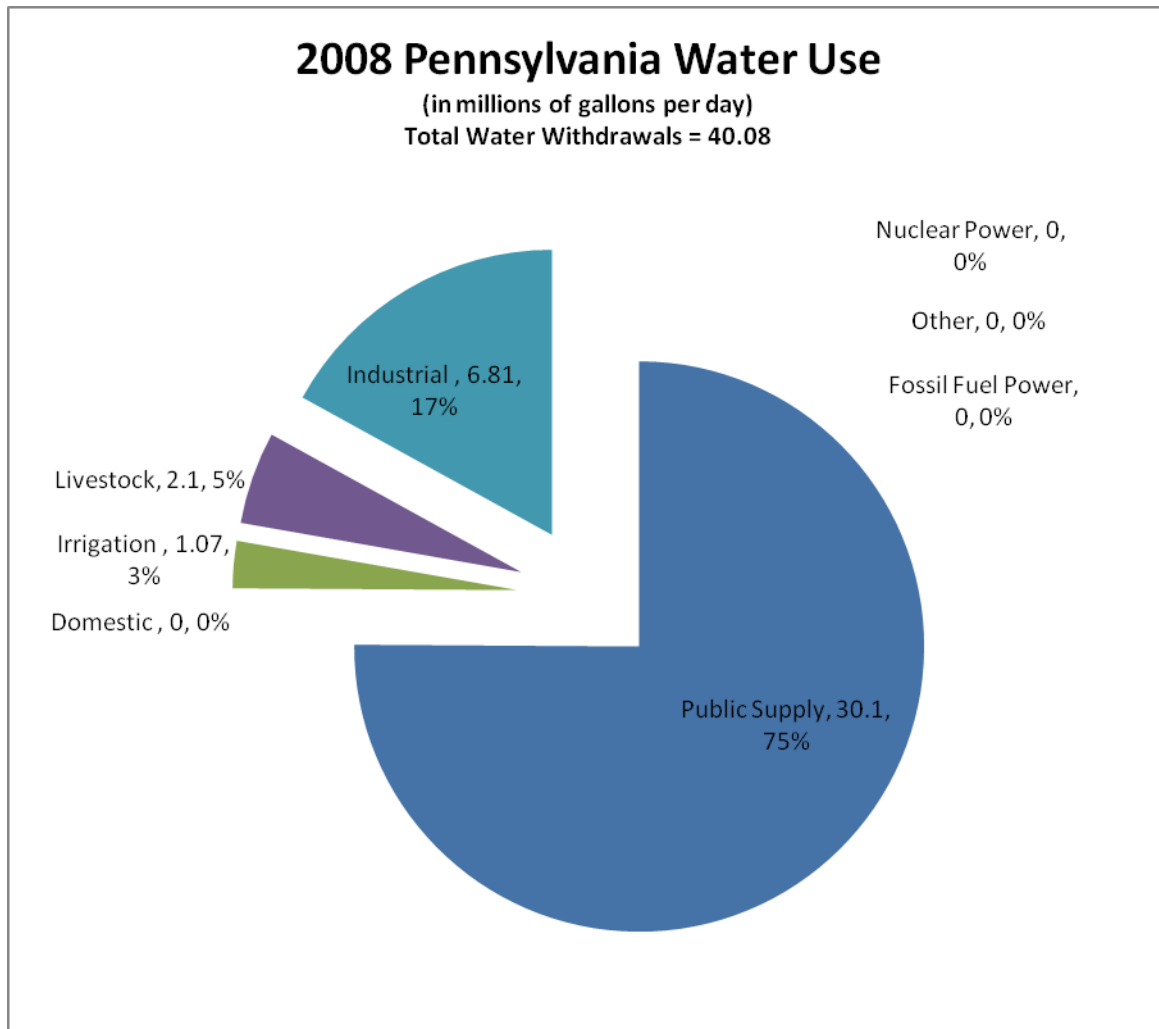


Figure 12

**Consumptive Use:** Consumptive use totaled 6.33 mgd, up by nearly 3 percent from the 2007 figure of 6.17 mgd.

# JURISDICTION REPORT- Pennsylvania

Withdrawals, Diversions and Consumptive Uses Units: Mgal(US)/d  
Year Of Data: 2008

| Basin               | Category            | All Facilities |                    |             | Principal Facilities |                    |             |
|---------------------|---------------------|----------------|--------------------|-------------|----------------------|--------------------|-------------|
|                     |                     | Withdr.        | Inter-Basin Diver. | Consum.     | Withdr.              | Inter-Basin Diver. | Consum.     |
| <b>Lake Erie</b>    |                     |                |                    |             |                      |                    |             |
|                     | Public Supply       | 30.10          | 0.00               | 3.01        | 30.10                | 0.00               | 3.01        |
|                     | Domestic Supply     | 0.00           | 0.00               | 0.00        | 0.00                 | 0.00               | 0.00        |
|                     | Irrigation          | 1.07           | 0.00               | 0.96        | 1.07                 | 0.00               | 0.96        |
|                     | Livestock           | 2.10           | 0.00               | 1.68        | 2.10                 | 0.00               | 1.68        |
|                     | Industrial          | 6.81           | 0.00               | 0.68        | 6.81                 | 0.00               | 0.68        |
|                     | Fossil Fuel Power   | 0.00           | 0.00               | 0.00        | 0.00                 | 0.00               | 0.00        |
|                     | Nuclear Power       | 0.00           | 0.00               | 0.00        | 0.00                 | 0.00               | 0.00        |
|                     | Hydroelectric Power | 0.00           | 0.00               | 0.00        | 0.00                 | 0.00               | 0.00        |
|                     | Other               | 0.00           | 0.00               | 0.00        | 0.00                 | 0.00               | 0.00        |
|                     | <b>Total:</b>       | <b>40.08</b>   | <b>0.00</b>        | <b>6.33</b> | <b>40.08</b>         | <b>0.00</b>        | <b>6.33</b> |
| <b>Grand Total:</b> |                     | <b>40.08</b>   | <b>0.00</b>        | <b>6.33</b> | <b>40.08</b>         | <b>0.00</b>        | <b>6.33</b> |

# JURISDICTION REPORT- Pennsylvania

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2008

| Basin               | Category            | All Facilities |             |             | Principal Facilities |             |             |
|---------------------|---------------------|----------------|-------------|-------------|----------------------|-------------|-------------|
|                     |                     | GLSW           | OSW         | GW          | GLSW                 | OSW         | GW          |
| <b>Lake Erie</b>    |                     |                |             |             |                      |             |             |
|                     | Public Supply       | 28.77          | 0.10        | 1.23        | 28.77                | 0.10        | 1.23        |
|                     | Domestic Supply     | 0.00           | 0.00        | 0.00        | 0.00                 | 0.00        | 0.00        |
|                     | Irrigation          | 0.18           | 0.89        | 0.00        | 0.18                 | 0.89        | 0.00        |
|                     | Livestock           | 0.00           | 1.93        | 0.17        | 0.00                 | 1.93        | 0.17        |
|                     | Industrial          | 5.37           | 1.44        | 0.00        | 5.37                 | 1.44        | 0.00        |
|                     | Fossil Fuel Power   | 0.00           | 0.00        | 0.00        | 0.00                 | 0.00        | 0.00        |
|                     | Nuclear Power       | 0.00           | 0.00        | 0.00        | 0.00                 | 0.00        | 0.00        |
|                     | Hydroelectric Power | 0.00           | 0.00        | 0.00        | 0.00                 | 0.00        | 0.00        |
|                     | Other               | 0.00           | 0.00        | 0.00        | 0.00                 | 0.00        | 0.00        |
|                     | <b>Total:</b>       | <b>34.32</b>   | <b>4.36</b> | <b>1.40</b> | <b>34.32</b>         | <b>4.36</b> | <b>1.40</b> |
| <b>Grand Total:</b> |                     | <b>34.32</b>   | <b>4.36</b> | <b>1.40</b> | <b>34.32</b>         | <b>4.36</b> | <b>1.40</b> |

# JURISDICTION REPORT- Pennsylvania

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2008

## Total Report - All Facilities

| Category            | Withdrawals |      |      | TOTAL | Diversions |            | Consumptive Use |
|---------------------|-------------|------|------|-------|------------|------------|-----------------|
|                     | GLSW        | OSW  | GW   |       | Intrabasin | Interbasin |                 |
| Public Supply       | 28.77       | 0.10 | 1.23 | 30.10 | 0.00       | 0.00       | 3.01            |
| Domestic Supply     | 0.00        | 0.00 | 0.00 | 0.00  | 0.00       | 0.00       | 0.00            |
| Irrigation          | 0.18        | 0.89 | 0.00 | 1.07  | 0.00       | 0.00       | 0.96            |
| Livestock           | 0.00        | 1.93 | 0.17 | 2.10  | 0.00       | 0.00       | 1.68            |
| Industrial          | 5.37        | 1.44 | 0.00 | 6.81  | 0.00       | 0.00       | 0.68            |
| Fossil Fuel Power   | 0.00        | 0.00 | 0.00 | 0.00  | 0.00       | 0.00       | 0.00            |
| Nuclear Power       | 0.00        | 0.00 | 0.00 | 0.00  | 0.00       | 0.00       | 0.00            |
| Hydroelectric Power | 0.00        | 0.00 | 0.00 | 0.00  | 0.00       | 0.00       | 0.00            |
| Other               | 0.00        | 0.00 | 0.00 | 0.00  | 0.00       | 0.00       | 0.00            |

## Total Report - Principal Facilities

| Category            | Withdrawals |      |      | TOTAL | Diversions |            | Consumptive Use |
|---------------------|-------------|------|------|-------|------------|------------|-----------------|
|                     | GLSW        | OSW  | GW   |       | Intrabasin | Interbasin |                 |
| Public Supply       | 28.77       | 0.10 | 1.23 | 30.10 | 0.00       | 0.00       | 3.01            |
| Domestic Supply     | 0.00        | 0.00 | 0.00 | 0.00  | 0.00       | 0.00       | 0.00            |
| Irrigation          | 0.18        | 0.89 | 0.00 | 1.07  | 0.00       | 0.00       | 0.96            |
| Livestock           | 0.00        | 1.93 | 0.17 | 2.10  | 0.00       | 0.00       | 1.68            |
| Industrial          | 5.37        | 1.44 | 0.00 | 6.81  | 0.00       | 0.00       | 0.68            |
| Fossil Fuel Power   | 0.00        | 0.00 | 0.00 | 0.00  | 0.00       | 0.00       | 0.00            |
| Nuclear Power       | 0.00        | 0.00 | 0.00 | 0.00  | 0.00       | 0.00       | 0.00            |
| Hydroelectric Power | 0.00        | 0.00 | 0.00 | 0.00  | 0.00       | 0.00       | 0.00            |
| Other               | 0.00        | 0.00 | 0.00 | 0.00  | 0.00       | 0.00       | 0.00            |

## Québec

**Data Source:** Water use data was provided by the Ministère du Développement durable, de l'Environnement et des Parcs—Centre d'expertise hydrique du Québec for this report. The Centre has compiled water use data primarily to support hydrologic and hydraulic research, floodplain delineation and hydrometric network management. Data from 1993 is being used for this report until a proposed regulation to support collection of water withdrawal data is adopted. The adoption of the regulation is expected in the fall of 2011. Please contact Guy Desmarais at 418/521-3885 #4525 or [guy-s.desmarais@mddep.gouv.qc.ca](mailto:guy-s.desmarais@mddep.gouv.qc.ca) with questions regarding Québec's data. See the following page for an update on the status of water quantity management in Québec.

**Withdrawals:** Excluding hydroelectric power which accounts for 304 billion per day, the total water withdrawals from Québec's St. Lawrence River basin was approximately 1,372.43 mgd.

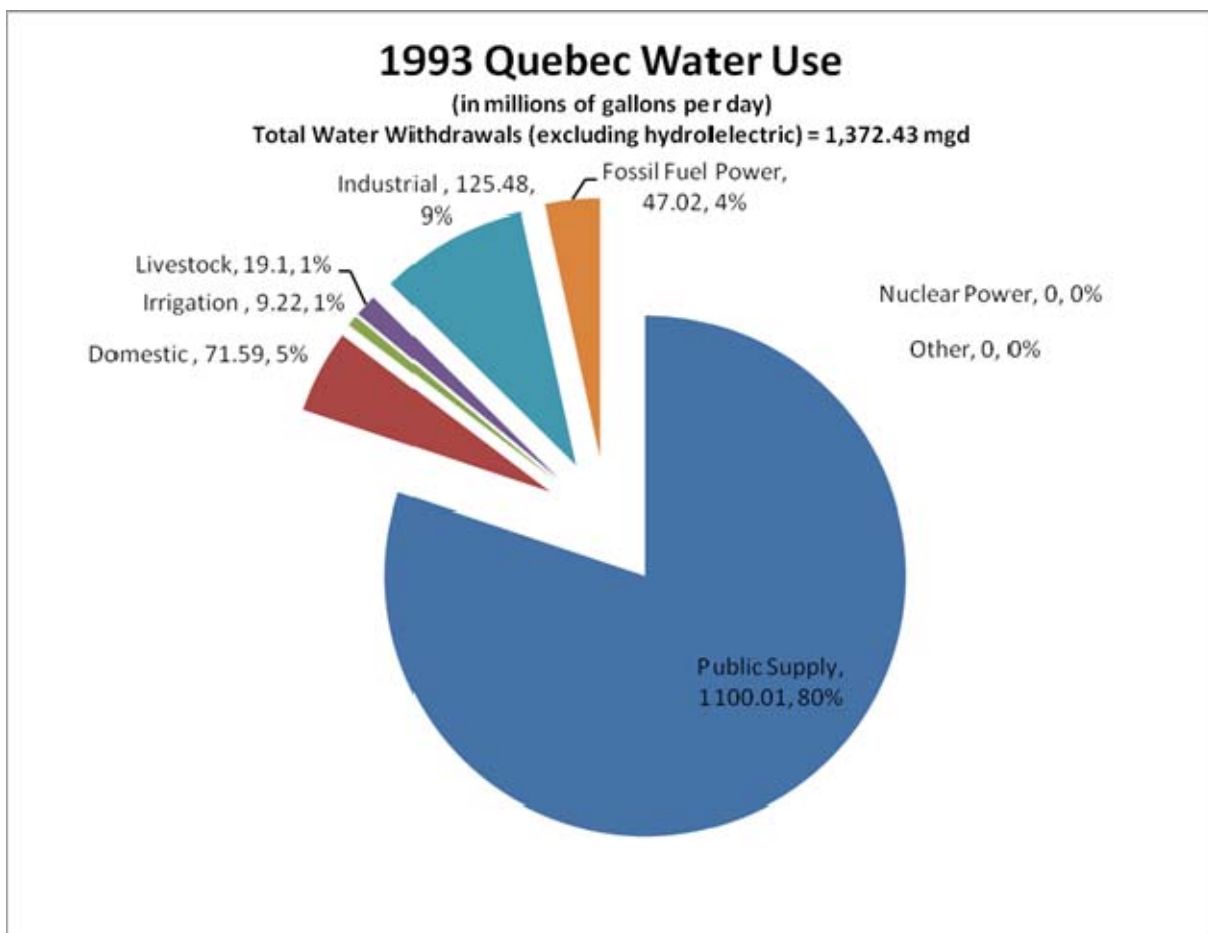


Figure 13

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

**Diversions:** Diversions are currently being inventoried.

Historically, water withdrawals have not been a source of great conflict in Québec; however, water shortage caused by severe drought and increasing demands for water withdrawal have brought the problem to the forefront. Since the adoption of a Water Policy by Québec's National Assembly in 2002, existing regulations have been amended to improve water management. One of the guiding principles is that users must be accountable for the utilization and degradation of water by means of a user-pays and polluter-pays approach. In June 2009, Québec adopted an Act to



affirm the collective nature of water resources and provide for increased water resource protection. The implementation of this new legislation will enable Québec to implement the Agreement on its territory and to fulfill its commitments. It will also allow Québec to meet the requirements of Article 301 of the Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement.

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

# JURISDICTION REPORT- Quebec

Withdrawals, Diversions and Consumptive Uses Units: Mgal(US)/d  
Year Of Data: 2008

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

# JURISDICTION REPORT- Quebec

Withdrawals by Source

Units: Mgal(US)/d

Year Of Data: 2008

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

# JURISDICTION REPORT- Pennsylvania

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2008

## Total Report - All Facilities

| Category            | Withdrawals |      |      |       | Diversions |            | Consumptive Use |
|---------------------|-------------|------|------|-------|------------|------------|-----------------|
|                     | GLSW        | OSW  | GW   | TOTAL | Intrabasin | Interbasin |                 |
| Public Supply       | 28.77       | 0.10 | 1.23 | 30.10 | 0.00       | 0.00       | 3.01            |
| Domestic Supply     | 0.00        | 0.00 | 0.00 | 0.00  | 0.00       | 0.00       | 0.00            |
| Irrigation          | 0.18        | 0.89 | 0.00 | 1.07  | 0.00       | 0.00       | 0.96            |
| Livestock           | 0.00        | 1.93 | 0.17 | 2.10  | 0.00       | 0.00       | 1.68            |
| Industrial          | 5.37        | 1.44 | 0.00 | 6.81  | 0.00       | 0.00       | 0.68            |
| Fossil Fuel Power   | 0.00        | 0.00 | 0.00 | 0.00  | 0.00       | 0.00       | 0.00            |
| Nuclear Power       | 0.00        | 0.00 | 0.00 | 0.00  | 0.00       | 0.00       | 0.00            |
| Hydroelectric Power | 0.00        | 0.00 | 0.00 | 0.00  | 0.00       | 0.00       | 0.00            |
| Other               | 0.00        | 0.00 | 0.00 | 0.00  | 0.00       | 0.00       | 0.00            |

## Total Report - Principal Facilities

| Category            | Withdrawals |      |      |       | Diversions |            | Consumptive Use |
|---------------------|-------------|------|------|-------|------------|------------|-----------------|
|                     | GLSW        | OSW  | GW   | TOTAL | Intrabasin | Interbasin |                 |
| Public Supply       | 28.77       | 0.10 | 1.23 | 30.10 | 0.00       | 0.00       | 3.01            |
| Domestic Supply     | 0.00        | 0.00 | 0.00 | 0.00  | 0.00       | 0.00       | 0.00            |
| Irrigation          | 0.18        | 0.89 | 0.00 | 1.07  | 0.00       | 0.00       | 0.96            |
| Livestock           | 0.00        | 1.93 | 0.17 | 2.10  | 0.00       | 0.00       | 1.68            |
| Industrial          | 5.37        | 1.44 | 0.00 | 6.81  | 0.00       | 0.00       | 0.68            |
| Fossil Fuel Power   | 0.00        | 0.00 | 0.00 | 0.00  | 0.00       | 0.00       | 0.00            |
| Nuclear Power       | 0.00        | 0.00 | 0.00 | 0.00  | 0.00       | 0.00       | 0.00            |
| Hydroelectric Power | 0.00        | 0.00 | 0.00 | 0.00  | 0.00       | 0.00       | 0.00            |
| Other               | 0.00        | 0.00 | 0.00 | 0.00  | 0.00       | 0.00       | 0.00            |

## Wisconsin

**Data Sources:** Wisconsin 2007 water use data for the Lake Michigan and Lake Superior basins were submitted by the Wisconsin Department of Natural Resources—Bureau of Water Resources Management. Contact Shaili Pfeiffer at 608/267-7630 or Shaili.Pfeiffer@wisconsin.gov with questions regarding Wisconsin’s water use data.

**Withdrawals:** Total withdrawals were 5,976.10 mgd: 5,899.85 mgd from Lake Michigan (98.7% of the total) and 76.16 mgd from Lake Superior. Water use in the Lake Michigan basin was primarily for fossil fuel (3,353.37 mgd) and nuclear power (1,828.89 mgd)—at 57 percent and 31 percent respectively. Of the Lake Superior uses, the largest single use was for fossil fuel at 51.00 mgd at 67 percent.

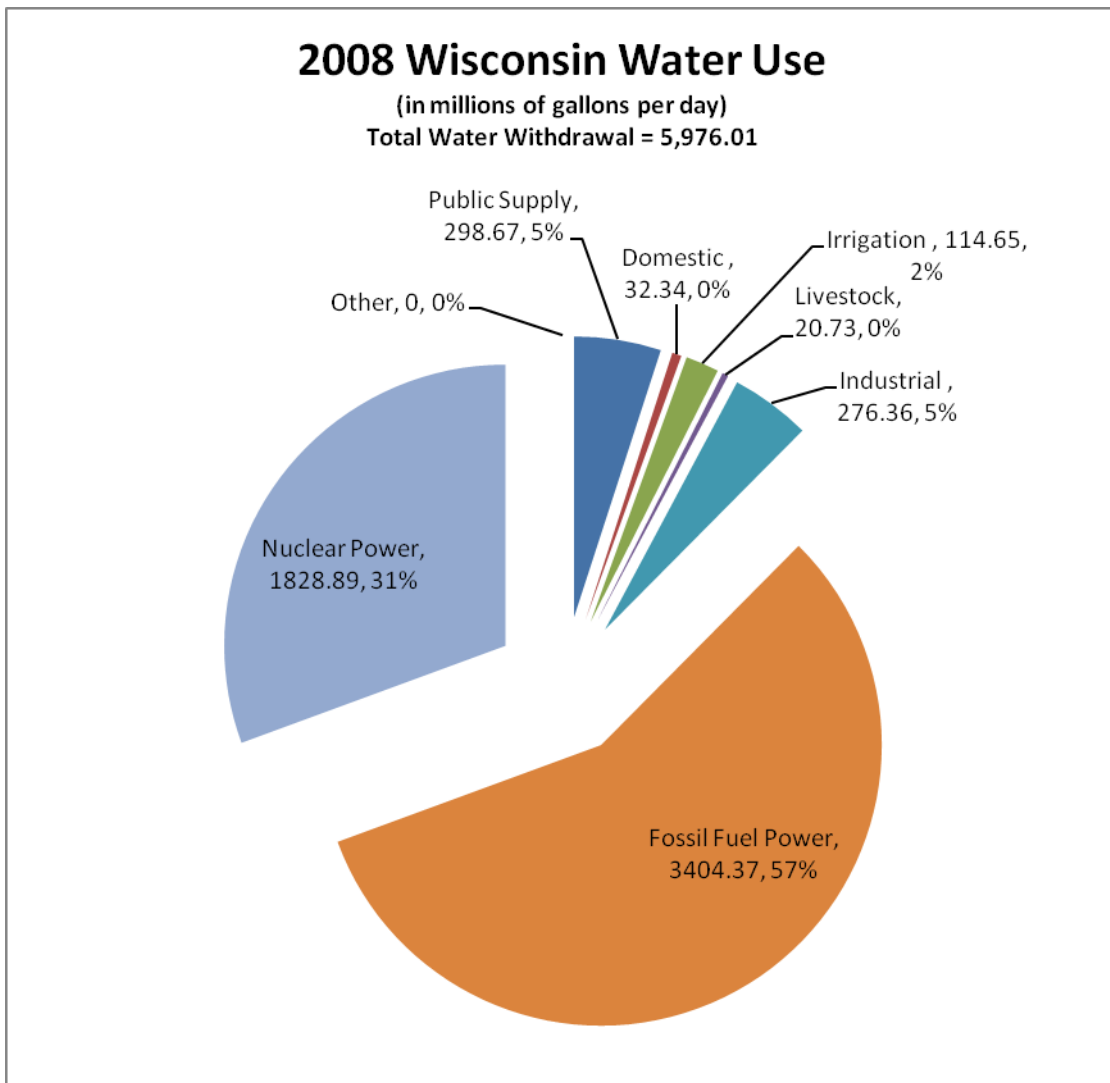


Figure 14

**Consumptive Use:** Consumptive uses from Wisconsin’s portion of the basin were calculated to be 185.66 mgd.

**Interbasin Diversions:** A withdrawal for public supply at Pleasant Prairie diverts 0.49 mgd from the Lake Michigan basin to the Mississippi River basin. A small diversion remains at the Portage Canal site, with 0.64 mgd flowing from the Wisconsin River (the Mississippi River basin) into the Fox River (the Lake Michigan basin).

# JURISDICTION REPORT- Wisconsin

Withdrawals, Diversions and Consumptive Uses Units: Mgal(US)/d  
Year Of Data: 2008

| Basin                | Category            | All Facilities |                    |               | Principal Facilities |                    |         |
|----------------------|---------------------|----------------|--------------------|---------------|----------------------|--------------------|---------|
|                      |                     | Withdr.        | Inter-Basin Diver. | Consum.       | Withdr.              | Inter-Basin Diver. | Consum. |
| <b>Lake Superior</b> |                     |                |                    |               |                      |                    |         |
|                      | Public Supply       | 4.31           | 0.00               | 0.43          |                      |                    |         |
|                      | Domestic Supply     | 1.12           | 0.00               | 0.11          |                      |                    |         |
|                      | Irrigation          | 0.77           | 0.00               | 0.54          |                      |                    |         |
|                      | Livestock           | 0.33           | 0.00               | 0.30          |                      |                    |         |
|                      | Industrial          | 18.63          | 0.00               | 1.90          |                      |                    |         |
|                      | Fossil Fuel Power   | 51.00          | 0.00               | 0.25          |                      |                    |         |
|                      | Nuclear Power       | 0.00           | 0.00               | 0.00          |                      |                    |         |
|                      | Hydroelectric Power | 0.00           | 0.00               | 0.00          |                      |                    |         |
|                      | Other               | 0.00           | -25.85             |               |                      |                    |         |
|                      | <b>Total:</b>       | <b>76.16</b>   | <b>-25.85</b>      | <b>3.53</b>   |                      |                    |         |
| <b>Lake Michigan</b> |                     |                |                    |               |                      |                    |         |
|                      | Public Supply       | 294.36         | 0.49               | 29.43         |                      |                    |         |
|                      | Domestic Supply     | 31.22          | 0.00               | 3.12          |                      |                    |         |
|                      | Irrigation          | 113.88         | 0.00               | 79.02         |                      |                    |         |
|                      | Livestock           | 20.40          | 0.00               | 18.36         |                      |                    |         |
|                      | Industrial          | 257.73         | 0.00               | 26.29         |                      |                    |         |
|                      | Fossil Fuel Power   | 3353.37        | 0.00               | 16.77         |                      |                    |         |
|                      | Nuclear Power       | 1828.89        | 0.00               | 9.14          |                      |                    |         |
|                      | Hydroelectric Power | 0.00           | 0.00               | 0.00          |                      |                    |         |
|                      | Other               |                | 0.00               |               |                      |                    |         |
|                      | <b>Total:</b>       | <b>5899.85</b> | <b>0.49</b>        | <b>182.13</b> |                      |                    |         |
| <b>Grand Total:</b>  |                     | <b>5976.01</b> | <b>-25.36</b>      | <b>185.66</b> |                      |                    |         |

# JURISDICTION REPORT- Wisconsin

Withdrawals by Source

Units: Mgal(US)/d  
Year Of Data: 2008

| Basin                | Category            | All Facilities |               |               | Principal Facilities |     |    |
|----------------------|---------------------|----------------|---------------|---------------|----------------------|-----|----|
|                      |                     | GLSW           | OSW           | GW            | GLSW                 | OSW | GW |
| <b>Lake Superior</b> |                     |                |               |               |                      |     |    |
|                      | Public Supply       | 3.57           | 0.00          | 0.74          |                      |     |    |
|                      | Domestic Supply     | 0.00           | 0.00          | 1.12          |                      |     |    |
|                      | Irrigation          | 0.00           | 0.15          | 0.62          |                      |     |    |
|                      | Livestock           | 0.00           | 0.03          | 0.30          |                      |     |    |
|                      | Industrial          | 13.80          | 0.10          | 4.73          |                      |     |    |
|                      | Fossil Fuel Power   | 50.56          | 0.44          | 0.00          |                      |     |    |
|                      | Nuclear Power       | 0.00           | 0.00          | 0.00          |                      |     |    |
|                      | Hydroelectric Power | 0.00           | 0.00          | 0.00          |                      |     |    |
|                      | Other               | 0.00           | 0.00          | 0.00          |                      |     |    |
|                      | <b>Total:</b>       | <b>67.93</b>   | <b>0.72</b>   | <b>7.51</b>   |                      |     |    |
| <b>Lake Michigan</b> |                     |                |               |               |                      |     |    |
|                      | Public Supply       | 216.86         | 21.44         | 56.06         |                      |     |    |
|                      | Domestic Supply     | 0.00           | 0.00          | 31.22         |                      |     |    |
|                      | Irrigation          | 0.00           | 3.90          | 109.98        |                      |     |    |
|                      | Livestock           | 0.00           | 2.04          | 18.36         |                      |     |    |
|                      | Industrial          | 1.84           | 211.65        | 44.24         |                      |     |    |
|                      | Fossil Fuel Power   | 2703.05        | 650.32        | 0.00          |                      |     |    |
|                      | Nuclear Power       | 1828.09        | 0.00          | 0.80          |                      |     |    |
|                      | Hydroelectric Power | 0.00           | 0.00          | 0.00          |                      |     |    |
|                      | Other               |                |               |               |                      |     |    |
|                      | <b>Total:</b>       | <b>4749.84</b> | <b>889.35</b> | <b>260.66</b> |                      |     |    |
| <b>Grand Total:</b>  |                     | <b>4817.77</b> | <b>890.07</b> | <b>268.17</b> |                      |     |    |

# JURISDICTION REPORT- Wisconsin

Jurisdiction Totals

Units: Mgal(US)/d

Year Of Data: 2008

## Total Report - All Facilities

| Category            | Withdrawals |        |        |         | Diversions |            | Consumptive Use |
|---------------------|-------------|--------|--------|---------|------------|------------|-----------------|
|                     | GLSW        | OSW    | GW     | TOTAL   | Intrabasin | Interbasin |                 |
| Public Supply       | 220.43      | 21.44  | 56.80  | 298.67  | 0.00       | 0.49       | 29.86           |
| Domestic Supply     | 0.00        | 0.00   | 32.34  | 32.34   | 0.00       | 0.00       | 3.23            |
| Irrigation          | 0.00        | 4.05   | 110.60 | 114.65  | 0.00       | 0.00       | 79.56           |
| Livestock           | 0.00        | 2.07   | 18.66  | 20.73   | 0.00       | 0.00       | 18.66           |
| Industrial          | 15.64       | 211.75 | 48.97  | 276.36  | 0.00       | 0.00       | 28.19           |
| Fossil Fuel Power   | 2753.61     | 650.76 | 0.00   | 3404.37 | 0.00       | 0.00       | 17.02           |
| Nuclear Power       | 1828.09     | 0.00   | 0.80   | 1828.89 | 0.00       | 0.00       | 9.14            |
| Hydroelectric Power | 0.00        | 0.00   | 0.00   | 0.00    | 0.00       | 0.00       | 0.00            |
| Other               | 0.00        | 0.00   | 0.00   | 0.00    | 0.00       | -25.85     |                 |

## Total Report - Principal Facilities

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



## Basin Tables

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

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

# BASIN REPORT- Lake Erie

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2008

| Jurisdiction    | Category            | All Facilities  |                    |               | Principal Facilities |                    |               |
|-----------------|---------------------|-----------------|--------------------|---------------|----------------------|--------------------|---------------|
|                 |                     | Withdr.         | Inter-Basin Diver. | Consum.       | Withdr.              | Inter-Basin Diver. | Consum.       |
| <b>Indiana</b>  |                     |                 |                    |               |                      |                    |               |
|                 | Public Supply       | 40.22           | 6.59               | 6.03          | 40.18                | 0.00               | 6.03          |
|                 | Domestic Supply     | 6.57            | 0.00               | 0.99          | 0.56                 | 0.00               | 0.08          |
|                 | Irrigation          | 1.31            | 0.00               | 1.18          | 1.20                 | 0.00               | 1.08          |
|                 | Livestock           | 0.95            | 0.00               | 0.76          | 0.00                 | 0.00               | 0.00          |
|                 | Industrial          | 8.30            | 0.00               | 0.49          | 8.11                 | 0.00               | 0.48          |
|                 | Fossil Fuel Power   | 0.27            | 0.00               | 0.01          | 0.27                 | 0.00               | 0.01          |
|                 | Nuclear Power       | 0.00            | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00          |
|                 | Hydroelectric Power | 0.00            | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00          |
|                 | Other               | 0.00            | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00          |
|                 | <b>Total</b>        | <b>57.62</b>    | <b>6.59</b>        | <b>9.46</b>   | <b>50.32</b>         | <b>0.00</b>        | <b>7.68</b>   |
| <b>Michigan</b> |                     |                 |                    |               |                      |                    |               |
|                 | Public Supply       | 682.76          |                    | 85.35         | 679.86               |                    | 84.98         |
|                 | Domestic Supply     | 0.18            |                    | 0.02          | 0.13                 |                    | 0.02          |
|                 | Irrigation          | 18.07           |                    | 16.26         | 15.67                |                    | 14.11         |
|                 | Livestock           | 0.57            |                    | 0.46          | 0.15                 |                    | 0.12          |
|                 | Industrial          | 192.99          |                    | 19.30         | 192.43               |                    | 19.24         |
|                 | Fossil Fuel Power   | 4286.15         |                    | 51.43         | 4286.15              |                    | 51.43         |
|                 | Nuclear Power       | 52.67           |                    | 1.00          | 52.67                |                    | 1.00          |
|                 | Hydroelectric Power |                 |                    |               |                      |                    |               |
|                 | Other               | 2.80            |                    | 0.00          | 2.80                 |                    | 0.00          |
|                 | <b>Total</b>        | <b>5236.18</b>  |                    | <b>173.82</b> | <b>5229.85</b>       |                    | <b>170.90</b> |
| <b>New York</b> |                     |                 |                    |               |                      |                    |               |
|                 | Public Supply       | 263.95          | 0.00               | 26.40         | 4.00                 | 0.00               |               |
|                 | Domestic Supply     | 43.87           | 0.00               | 4.40          | 0.00                 | 0.00               |               |
|                 | Irrigation          | 0.16            | 0.00               | 0.14          | 0.16                 | 0.00               | 0.14          |
|                 | Livestock           | 8.86            | 0.00               | 7.98          |                      | 0.00               |               |
|                 | Industrial          | 167.75          | 0.00               | 41.92         | 167.66               | 0.00               | 41.92         |
|                 | Fossil Fuel Power   | 793.58          | 0.00               | 15.87         | 793.58               | 0.00               | 15.87         |
|                 | Nuclear Power       | 0.00            | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00          |
|                 | Hydroelectric Power | 45584.00        | 0.00               | 0.00          | 45584.00             | 0.00               | 0.00          |
|                 | Other               | 0.00            | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00          |
|                 | <b>Total</b>        | <b>46862.17</b> | <b>0.00</b>        | <b>96.71</b>  | <b>46549.40</b>      | <b>0.00</b>        | <b>57.93</b>  |

| Jurisdiction        | Category            | All Facilities  |                    |               | Principal Facilities |                    |               |
|---------------------|---------------------|-----------------|--------------------|---------------|----------------------|--------------------|---------------|
|                     |                     | Withdr.         | Inter-Basin Diver. | Consum.       | Withdr.              | Inter-Basin Diver. | Consum.       |
| <b>Ohio</b>         |                     |                 |                    |               |                      |                    |               |
|                     | Public Supply       | 554.61          | 0.32               | 83.20         | 551.13               | 0.32               | 82.67         |
|                     | Domestic Supply     | 58.86           | 0.00               | 8.83          | 0.30                 | 0.00               | 0.05          |
|                     | Irrigation          | 18.49           | 0.00               | 16.64         | 15.89                | 0.00               | 14.28         |
|                     | Livestock           | 12.45           | 0.00               | 9.96          | 0.35                 | 0.00               | 0.28          |
|                     | Industrial          | 262.64          | 0.00               | 22.46         | 262.12               | 0.00               | 22.41         |
|                     | Fossil Fuel Power   | 2427.62         | 0.00               | 24.28         | 2427.62              | 0.00               | 24.28         |
|                     | Nuclear Power       | 148.95          | 0.00               | 14.90         | 148.95               | 0.00               | 14.90         |
|                     | Hydroelectric Power | 0.00            | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00          |
|                     | Other               | 8.17            | -12.80             | 2.05          | 8.06                 | -12.80             | 2.00          |
|                     | <b>Total</b>        | <b>3491.79</b>  | <b>-12.48</b>      | <b>182.32</b> | <b>3414.42</b>       | <b>-12.48</b>      | <b>160.87</b> |
| <b>Ontario</b>      |                     |                 |                    |               |                      |                    |               |
|                     | Public Supply       | 93.89           | 0.00               | 14.08         | 92.84                | 0.00               | 13.92         |
|                     | Domestic Supply     | 19.94           | 0.00               | 2.99          | 0.00                 | 0.00               | 0.00          |
|                     | Irrigation          | 31.85           | 0.00               |               |                      | 0.00               |               |
|                     | Livestock           | 13.22           | 0.00               |               |                      | 0.00               |               |
|                     | Industrial          | 180.45          | 0.00               | 11.37         | 0.00                 | 0.00               | 0.00          |
|                     | Fossil Fuel Power   | 463.20          | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00          |
|                     | Nuclear Power       | 0.00            | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00          |
|                     | Hydroelectric Power | 0.00            | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00          |
|                     | Other               |                 | 0.00               |               |                      | 0.00               |               |
|                     | <b>Total</b>        | <b>802.56</b>   | <b>0.00</b>        | <b>28.44</b>  | <b>92.84</b>         | <b>0.00</b>        | <b>13.92</b>  |
| <b>Pennsylvania</b> |                     |                 |                    |               |                      |                    |               |
|                     | Public Supply       | 30.10           | 0.00               | 3.01          | 30.10                | 0.00               | 3.01          |
|                     | Domestic Supply     | 0.00            | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00          |
|                     | Irrigation          | 1.07            | 0.00               | 0.96          | 1.07                 | 0.00               | 0.96          |
|                     | Livestock           | 2.10            | 0.00               | 1.68          | 2.10                 | 0.00               | 1.68          |
|                     | Industrial          | 6.81            | 0.00               | 0.68          | 6.81                 | 0.00               | 0.68          |
|                     | Fossil Fuel Power   | 0.00            | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00          |
|                     | Nuclear Power       | 0.00            | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00          |
|                     | Hydroelectric Power | 0.00            | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00          |
|                     | Other               | 0.00            | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00          |
|                     | <b>Total</b>        | <b>40.08</b>    | <b>0.00</b>        | <b>6.33</b>   | <b>40.08</b>         | <b>0.00</b>        | <b>6.33</b>   |
| <b>Grand Total:</b> |                     | <b>56490.40</b> | <b>-5.89</b>       | <b>497.08</b> | <b>55376.91</b>      | <b>-12.48</b>      | <b>417.64</b> |

# BASIN REPORT- Lake Erie

Units: Mgal(US)/d  
Withdrawals by Source  
Year Of Data: 2008

| Jurisdiction    | Category            | All Facilities  |               |              | Principle Facilities |               |              |
|-----------------|---------------------|-----------------|---------------|--------------|----------------------|---------------|--------------|
|                 |                     | GLSW            | OSW           | GW           | GLSW                 | OSW           | GW           |
| <b>Indiana</b>  |                     |                 |               |              |                      |               |              |
|                 | Public Supply       | 0.00            | 33.06         | 7.16         | 0.00                 | 33.06         | 7.12         |
|                 | Domestic Supply     | 0.00            | 0.00          | 6.57         | 0.00                 | 0.00          | 0.56         |
|                 | Irrigation          | 0.00            | 0.34          | 0.97         | 0.00                 | 0.29          | 0.91         |
|                 | Livestock           | 0.00            | 0.00          | 0.95         | 0.00                 | 0.00          | 0.00         |
|                 | Industrial          | 0.00            | 3.56          | 4.74         | 0.00                 | 3.56          | 4.55         |
|                 | Fossil Fuel Power   | 0.00            | 0.00          | 0.27         | 0.00                 | 0.00          | 0.27         |
|                 | Nuclear Power       | 0.00            | 0.00          | 0.00         | 0.00                 | 0.00          | 0.00         |
|                 | Hydroelectric Power | 0.00            | 0.00          | 0.00         | 0.00                 | 0.00          | 0.00         |
|                 | Other               | 0.00            | 0.00          | 0.00         | 0.00                 | 0.00          | 0.00         |
|                 | <b>TOTAL</b>        | <b>0.00</b>     | <b>36.96</b>  | <b>20.66</b> | <b>0.00</b>          | <b>36.91</b>  | <b>13.41</b> |
| <b>Michigan</b> |                     |                 |               |              |                      |               |              |
|                 | Public Supply       | 628.23          | 19.52         | 35.00        | 628.23               | 19.46         | 32.17        |
|                 | Domestic Supply     | 0.00            | 0.00          | 0.18         | 0.00                 | 0.00          | 0.13         |
|                 | Irrigation          | 0.33            | 9.27          | 8.47         | 0.28                 | 8.15          | 7.25         |
|                 | Livestock           | 0.00            | 0.28          | 0.30         | 0.00                 | 0.15          | 0.00         |
|                 | Industrial          | 148.37          | 17.79         | 26.83        | 148.37               | 17.65         | 26.41        |
|                 | Fossil Fuel Power   | 4168.38         | 117.64        | 0.13         | 4168.38              | 117.64        | 0.13         |
|                 | Nuclear Power       | 52.67           | 0.00          | 0.00         | 52.67                | 0.00          | 0.00         |
|                 | Hydroelectric Power |                 |               |              |                      |               |              |
|                 | Other               | 0.00            | 1.45          | 1.35         | 0.00                 | 1.45          | 1.35         |
|                 | <b>TOTAL</b>        | <b>4997.98</b>  | <b>165.96</b> | <b>72.25</b> | <b>4997.93</b>       | <b>164.49</b> | <b>67.43</b> |
| <b>New York</b> |                     |                 |               |              |                      |               |              |
|                 | Public Supply       | 184.50          | 72.12         | 7.33         | 4.00                 | 0.00          | 0.00         |
|                 | Domestic Supply     | 22.96           | 3.36          | 17.55        | 0.00                 | 0.00          | 0.00         |
|                 | Irrigation          | 0.08            | 0.08          | 0.00         | 0.08                 | 0.08          | 0.00         |
|                 | Livestock           | 0.91            | 2.92          | 5.03         |                      |               |              |
|                 | Industrial          | 166.69          | 0.94          | 0.12         | 166.60               | 0.94          | 0.12         |
|                 | Fossil Fuel Power   | 793.58          | 0.00          | 0.00         | 793.58               | 0.00          | 0.00         |
|                 | Nuclear Power       | 0.00            | 0.00          | 0.00         | 0.00                 | 0.00          | 0.00         |
|                 | Hydroelectric Power | 45584.00        | 0.00          | 0.00         | 45584.00             | 0.00          | 0.00         |
|                 | Other               | 0.00            | 0.00          | 0.00         | 0.00                 | 0.00          | 0.00         |
|                 | <b>TOTAL</b>        | <b>46752.72</b> | <b>79.42</b>  | <b>30.03</b> | <b>46548.26</b>      | <b>1.02</b>   | <b>0.12</b>  |

| Jurisdiction        | Category            | All Facilities  |                |               | Principle Facilities |                |               |
|---------------------|---------------------|-----------------|----------------|---------------|----------------------|----------------|---------------|
|                     |                     | GLSW            | OSW            | GW            | GLSW                 | OSW            | GW            |
| <b>Ohio</b>         |                     |                 |                |               |                      |                |               |
|                     | Public Supply       | 415.98          | 103.71         | 34.92         | 415.98               | 103.59         | 31.56         |
|                     | Domestic Supply     | 0.30            | 0.07           | 58.49         | 0.30                 | 0.00           | 0.00          |
|                     | Irrigation          | 0.31            | 15.22          | 2.96          | 0.29                 | 13.41          | 2.19          |
|                     | Livestock           | 0.00            | 1.76           | 10.69         | 0.00                 | 0.00           | 0.35          |
|                     | Industrial          | 56.94           | 160.37         | 45.33         | 56.94                | 160.22         | 44.96         |
|                     | Fossil Fuel Power   | 1692.95         | 734.67         | 0.00          | 1692.95              | 734.67         | 0.00          |
|                     | Nuclear Power       | 148.95          | 0.00           | 0.00          | 148.95               | 0.00           | 0.00          |
|                     | Hydroelectric Power | 0.00            | 0.00           | 0.00          | 0.00                 | 0.00           | 0.00          |
|                     | Other               | 0.69            | 7.16           | 0.32          | 0.69                 | 7.15           | 0.22          |
|                     | <b>TOTAL</b>        | <b>2316.12</b>  | <b>1022.96</b> | <b>152.71</b> | <b>2316.10</b>       | <b>1019.04</b> | <b>79.28</b>  |
| <b>Ontario</b>      |                     |                 |                |               |                      |                |               |
|                     | Public Supply       | 8.97            | 29.26          | 55.66         | 8.97                 | 29.23          | 54.64         |
|                     | Domestic Supply     | 0.00            | 0.00           | 19.94         | 0.00                 | 0.00           | 0.00          |
|                     | Irrigation          | 0.59            | 12.11          | 19.15         |                      |                |               |
|                     | Livestock           | 0.02            | 0.89           | 12.31         |                      |                |               |
|                     | Industrial          | 173.24          | 0.00           | 7.21          | 0.00                 | 0.00           | 0.00          |
|                     | Fossil Fuel Power   | 463.20          | 0.00           | 0.00          | 0.00                 | 0.00           | 0.00          |
|                     | Nuclear Power       | 0.00            | 0.00           | 0.00          | 0.00                 | 0.00           | 0.00          |
|                     | Hydroelectric Power | 0.00            | 0.00           | 0.00          | 0.00                 | 0.00           | 0.00          |
|                     | Other               |                 |                |               |                      |                |               |
|                     | <b>TOTAL</b>        | <b>646.02</b>   | <b>42.26</b>   | <b>114.27</b> | <b>8.97</b>          | <b>29.23</b>   | <b>54.64</b>  |
| <b>Pennsylvania</b> |                     |                 |                |               |                      |                |               |
|                     | Public Supply       | 28.77           | 0.10           | 1.23          | 28.77                | 0.10           | 1.23          |
|                     | Domestic Supply     | 0.00            | 0.00           | 0.00          | 0.00                 | 0.00           | 0.00          |
|                     | Irrigation          | 0.18            | 0.89           | 0.00          | 0.18                 | 0.89           | 0.00          |
|                     | Livestock           | 0.00            | 1.93           | 0.17          | 0.00                 | 1.93           | 0.17          |
|                     | Industrial          | 5.37            | 1.44           | 0.00          | 5.37                 | 1.44           | 0.00          |
|                     | Fossil Fuel Power   | 0.00            | 0.00           | 0.00          | 0.00                 | 0.00           | 0.00          |
|                     | Nuclear Power       | 0.00            | 0.00           | 0.00          | 0.00                 | 0.00           | 0.00          |
|                     | Hydroelectric Power | 0.00            | 0.00           | 0.00          | 0.00                 | 0.00           | 0.00          |
|                     | Other               | 0.00            | 0.00           | 0.00          | 0.00                 | 0.00           | 0.00          |
|                     | <b>TOTAL</b>        | <b>34.32</b>    | <b>4.36</b>    | <b>1.40</b>   | <b>34.32</b>         | <b>4.36</b>    | <b>1.40</b>   |
| <b>Grand Total:</b> |                     | <b>54747.16</b> | <b>1351.92</b> | <b>391.32</b> | <b>53905.57</b>      | <b>1255.04</b> | <b>216.29</b> |

# BASIN REPORT- Lake Erie

Basin Totals

Units: Mgal(US)/d

Year Of Data: 2008

## Total Report - All Facilities

| Category            | Withdrawals |        |        | TOTAL    | Diversions |            | Consumptive Use |
|---------------------|-------------|--------|--------|----------|------------|------------|-----------------|
|                     | GLSW        | OSW    | GW     |          | Intrabasin | Interbasin |                 |
| Public Supply       | 1266.45     | 257.78 | 141.30 | 1665.53  | -0.10      | 6.91       | 218.07          |
| Domestic Supply     | 23.26       | 3.43   | 102.73 | 129.42   | 0.00       | 0.00       | 17.23           |
| Irrigation          | 1.48        | 37.91  | 31.55  | 70.95    | 0.00       | 0.00       | 35.18           |
| Livestock           | 0.93        | 7.77   | 29.45  | 38.15    | 0.00       | 0.00       | 20.84           |
| Industrial          | 550.61      | 184.10 | 84.23  | 818.94   | 0.00       | 0.00       | 96.22           |
| Fossil Fuel Power   | 7118.11     | 852.31 | 0.40   | 7970.82  | 0.00       | 0.00       | 91.59           |
| Nuclear Power       | 201.62      | 0.00   | 0.00   | 201.62   | 0.00       | 0.00       | 15.90           |
| Hydroelectric Power | 45584.00    | 0.00   | 0.00   | 45584.00 | 0.00       | 0.00       | 0.00            |
| Other               | 0.69        | 8.61   | 1.67   | 10.97    | 5816.39    | -12.80     | 2.05            |

## Total Report - Principal Facilities

| Category            | Withdrawals |        |        | TOTAL    | Diversions |            | Consumptive Use |
|---------------------|-------------|--------|--------|----------|------------|------------|-----------------|
|                     | GLSW        | OSW    | GW     |          | Intrabasin | Interbasin |                 |
| Public Supply       | 1085.95     | 185.43 | 126.73 | 1398.11  | -0.10      | 0.32       | 190.62          |
| Domestic Supply     | 0.30        | 0.00   | 0.69   | 0.99     | 0.00       | 0.00       | 0.15            |
| Irrigation          | 0.83        | 22.82  | 10.35  | 33.99    | 0.00       | 0.00       | 30.57           |
| Livestock           | 0.00        | 2.08   | 0.52   | 2.60     | 0.00       | 0.00       | 2.08            |
| Industrial          | 377.28      | 183.81 | 76.04  | 637.13   | 0.00       | 0.00       | 84.73           |
| Fossil Fuel Power   | 6654.91     | 852.31 | 0.40   | 7507.62  | 0.00       | 0.00       | 91.59           |
| Nuclear Power       | 201.62      | 0.00   | 0.00   | 201.62   | 0.00       | 0.00       | 15.90           |
| Hydroelectric Power | 45584.00    | 0.00   | 0.00   | 45584.00 | 0.00       | 0.00       | 0.00            |
| Other               | 0.69        | 8.60   | 1.57   | 10.86    | 5816.39    | -12.80     | 2.00            |

# BASIN REPORT- Lake Huron

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2008

| Jurisdiction        | Category            | All Facilities  |                    |               | Principal Facilities |                    |              |
|---------------------|---------------------|-----------------|--------------------|---------------|----------------------|--------------------|--------------|
|                     |                     | Withdr.         | Inter-Basin Diver. | Consum.       | Withdr.              | Inter-Basin Diver. | Consum.      |
| <b>Michigan</b>     |                     |                 |                    |               |                      |                    |              |
|                     | Public Supply       | 122.53          |                    | 15.32         | 119.50               |                    | 14.94        |
|                     | Domestic Supply     | 0.02            |                    | 0.00          |                      |                    |              |
|                     | Irrigation          | 22.37           |                    | 20.14         | 20.10                |                    | 18.09        |
|                     | Livestock           | 2.26            |                    | 1.81          | 1.27                 |                    | 1.01         |
|                     | Industrial          | 61.26           |                    | 6.13          | 60.86                |                    | 6.09         |
|                     | Fossil Fuel Power   | 657.42          |                    | 7.89          | 657.42               |                    | 7.89         |
|                     | Nuclear Power       |                 |                    |               |                      |                    |              |
|                     | Hydroelectric Power |                 |                    |               |                      |                    |              |
|                     | Other               |                 |                    |               |                      |                    |              |
|                     | <b>Total</b>        | <b>865.85</b>   |                    | <b>51.28</b>  | <b>859.14</b>        |                    | <b>48.01</b> |
| <b>Ontario</b>      |                     |                 |                    |               |                      |                    |              |
|                     | Public Supply       | 84.37           | 0.00               | 12.65         | 81.66                | 0.00               | 12.25        |
|                     | Domestic Supply     | 10.61           | 0.00               | 1.59          | 0.00                 | 0.00               | 0.00         |
|                     | Irrigation          | 20.91           | 0.00               |               |                      | 0.00               |              |
|                     | Livestock           | 12.41           | 0.00               |               |                      | 0.00               |              |
|                     | Industrial          | 190.19          | 0.00               | 11.98         | 0.00                 | 0.00               | 0.00         |
|                     | Fossil Fuel Power   | 0.00            | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00         |
|                     | Nuclear Power       | 4697.20         | 0.00               | 42.28         | 0.00                 | 0.00               | 0.00         |
|                     | Hydroelectric Power | 33608.07        | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00         |
|                     | Other               | 47.97           | 0.00               | 0.00          | 47.97                | 0.00               | 0.00         |
|                     | <b>Total</b>        | <b>38671.73</b> | <b>0.00</b>        | <b>68.50</b>  | <b>129.63</b>        | <b>0.00</b>        | <b>12.25</b> |
| <b>Grand Total:</b> |                     | <b>39537.59</b> | <b>0.00</b>        | <b>119.78</b> | <b>988.77</b>        | <b>0.00</b>        | <b>60.26</b> |

# BASIN REPORT- Lake Huron

Units: Mgal(US)/d  
 Withdrawals by Source  
 Year Of Data: 2008

| Jurisdiction        | Category            | All Facilities  |                 |               | Principle Facilities |               |              |
|---------------------|---------------------|-----------------|-----------------|---------------|----------------------|---------------|--------------|
|                     |                     | GLSW            | OSW             | GW            | GLSW                 | OSW           | GW           |
| <b>Michigan</b>     |                     |                 |                 |               |                      |               |              |
|                     | Public Supply       | 98.66           | 1.04            | 22.83         | 98.53                | 1.04          | 19.93        |
|                     | Domestic Supply     | 0.00            | 0.00            | 0.02          |                      |               |              |
|                     | Irrigation          | 0.16            | 8.98            | 13.24         | 0.09                 | 7.77          | 12.23        |
|                     | Livestock           | 0.00            | 0.75            | 1.51          | 0.00                 | 0.71          | 0.56         |
|                     | Industrial          | 2.95            | 35.21           | 23.10         | 2.95                 | 35.16         | 22.75        |
|                     | Fossil Fuel Power   | 180.11          | 476.19          | 1.11          | 180.11               | 476.19        | 1.11         |
|                     | Nuclear Power       |                 |                 |               |                      |               |              |
|                     | Hydroelectric Power |                 |                 |               |                      |               |              |
|                     | Other               |                 |                 |               |                      |               |              |
|                     | <b>TOTAL</b>        | <b>281.88</b>   | <b>522.18</b>   | <b>61.80</b>  | <b>281.68</b>        | <b>520.88</b> | <b>56.58</b> |
| <b>Ontario</b>      |                     |                 |                 |               |                      |               |              |
|                     | Public Supply       | 42.66           | 23.57           | 18.14         | 42.02                | 23.23         | 16.40        |
|                     | Domestic Supply     | 0.00            | 0.00            | 10.61         | 0.00                 | 0.00          | 0.00         |
|                     | Irrigation          | 0.15            | 15.41           | 5.35          |                      |               |              |
|                     | Livestock           | 2.93            | 3.07            | 6.41          |                      |               |              |
|                     | Industrial          | 187.41          | 0.00            | 2.78          | 0.00                 | 0.00          | 0.00         |
|                     | Fossil Fuel Power   | 0.00            | 0.00            | 0.00          | 0.00                 | 0.00          | 0.00         |
|                     | Nuclear Power       | 4697.20         | 0.00            | 0.00          | 0.00                 | 0.00          | 0.00         |
|                     | Hydroelectric Power | 20000.41        | 13607.66        | 0.00          | 0.00                 | 0.00          | 0.00         |
|                     | Other               | 0.00            | 47.97           | 0.00          | 0.00                 | 47.97         | 0.00         |
|                     | <b>TOTAL</b>        | <b>24930.76</b> | <b>13697.68</b> | <b>43.29</b>  | <b>42.02</b>         | <b>71.20</b>  | <b>16.40</b> |
| <b>Grand Total:</b> |                     | <b>25212.64</b> | <b>14219.86</b> | <b>105.09</b> | <b>323.71</b>        | <b>592.08</b> | <b>72.99</b> |



# BASIN REPORT- Lake Huron

Basin Totals

Units: Mgal(US)/d

Year Of Data: 2008

## Total Report - All Facilities

| Category            | Withdrawals |          |       |          | Diversions |            | Consumptive Use |
|---------------------|-------------|----------|-------|----------|------------|------------|-----------------|
|                     | GLSW        | OSW      | GW    | TOTAL    | Intrabasin | Interbasin |                 |
| Public Supply       | 141.32      | 24.61    | 40.97 | 206.90   | 0.00       | 0.00       | 27.97           |
| Domestic Supply     | 0.00        | 0.00     | 10.62 | 10.62    | 0.00       | 0.00       | 1.59            |
| Irrigation          | 0.31        | 24.39    | 18.59 | 43.29    | 0.00       | 0.00       | 20.14           |
| Livestock           | 2.93        | 3.82     | 7.92  | 14.67    | 0.00       | 0.00       | 1.81            |
| Industrial          | 190.36      | 35.21    | 25.88 | 251.45   | 0.00       | 0.00       | 18.11           |
| Fossil Fuel Power   | 180.11      | 476.19   | 1.11  | 657.42   | 0.00       | 0.00       | 7.89            |
| Nuclear Power       | 4697.20     | 0.00     | 0.00  | 4697.20  | 0.00       | 0.00       | 42.28           |
| Hydroelectric Power | 20000.41    | 13607.66 | 0.00  | 33608.07 | 0.00       | 0.00       | 0.00            |
| Other               | 0.00        | 47.97    | 0.00  | 47.97    | 47.97      | 0.00       | 0.00            |

## Total Report - Principal Facilities

| Category            | Withdrawals |        |       |        | Diversions |            | Consumptive Use |
|---------------------|-------------|--------|-------|--------|------------|------------|-----------------|
|                     | GLSW        | OSW    | GW    | TOTAL  | Intrabasin | Interbasin |                 |
| Public Supply       | 140.55      | 24.28  | 36.34 | 201.16 | 0.00       | 0.00       | 27.19           |
| Domestic Supply     | 0.00        | 0.00   | 0.00  | 0.00   | 0.00       | 0.00       | 0.00            |
| Irrigation          | 0.09        | 7.77   | 12.23 | 20.10  | 0.00       | 0.00       | 18.09           |
| Livestock           | 0.00        | 0.71   | 0.56  | 1.27   | 0.00       | 0.00       | 1.01            |
| Industrial          | 2.95        | 35.16  | 22.75 | 60.86  | 0.00       | 0.00       | 6.09            |
| Fossil Fuel Power   | 180.11      | 476.19 | 1.11  | 657.42 | 0.00       | 0.00       | 7.89            |
| Nuclear Power       | 0.00        | 0.00   | 0.00  | 0.00   | 0.00       | 0.00       | 0.00            |
| Hydroelectric Power | 0.00        | 0.00   | 0.00  | 0.00   | 0.00       | 0.00       | 0.00            |
| Other               | 0.00        | 47.97  | 0.00  | 47.97  | 47.97      | 0.00       | 0.00            |

# BASIN REPORT- Lake Michigan

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2008

| Jurisdiction    | Category            | All Facilities |                    |               | Principal Facilities |                    |               |
|-----------------|---------------------|----------------|--------------------|---------------|----------------------|--------------------|---------------|
|                 |                     | Withdr.        | Inter-Basin Diver. | Consum.       | Withdr.              | Inter-Basin Diver. | Consum.       |
| <b>Illinois</b> |                     |                |                    |               |                      |                    |               |
|                 | Public Supply       | 956.07         | 956.07             | 0.00          | 956.07               | 956.07             | 0.00          |
|                 | Domestic Supply     | 2.63           | 2.62               | 0.00          | 2.63                 | 2.62               | 0.00          |
|                 | Irrigation          | 0.11           | 0.00               | 0.00          | 0.11                 | 0.00               | 0.00          |
|                 | Livestock           |                |                    |               |                      |                    |               |
|                 | Industrial          | 19.61          | 0.02               | 0.17          | 19.61                | 0.02               | 0.17          |
|                 | Fossil Fuel Power   | 917.95         | 0.00               | 0.00          | 917.95               | 0.00               | 0.00          |
|                 | Nuclear Power       | 31.68          | 0.00               | 0.00          | 31.68                | 0.00               | 0.00          |
|                 | Hydroelectric Power |                |                    |               |                      |                    |               |
|                 | Other               | 557.87         | 557.87             | 0.00          | 557.87               | 557.87             | 0.00          |
|                 | <b>Total</b>        | <b>2485.92</b> | <b>1516.58</b>     | <b>0.17</b>   | <b>2485.92</b>       | <b>1516.58</b>     | <b>0.17</b>   |
| <b>Indiana</b>  |                     |                |                    |               |                      |                    |               |
|                 | Public Supply       | 142.44         | -3.79              | 21.36         | 142.16               | 0.00               | 21.32         |
|                 | Domestic Supply     | 53.50          | 0.00               | 8.02          | 30.75                | 0.00               | 4.61          |
|                 | Irrigation          | 37.51          | 0.00               | 33.76         | 36.79                | 0.00               | 33.11         |
|                 | Livestock           | 5.91           | 0.00               | 4.74          | 3.83                 | 0.00               | 3.07          |
|                 | Industrial          | 1586.15        | 0.00               | 95.17         | 1585.65              | 0.00               | 95.14         |
|                 | Fossil Fuel Power   | 767.22         | 0.00               | 15.34         | 767.22               | 0.00               | 15.34         |
|                 | Nuclear Power       | 0.00           | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00          |
|                 | Hydroelectric Power | 1930.50        | 0.00               | 0.00          | 1930.50              | 0.00               | 0.00          |
|                 | Other               | 0.04           | 0.00               | 0.01          | 0.00                 | 0.00               | 0.00          |
|                 | <b>Total</b>        | <b>4523.27</b> | <b>-3.79</b>       | <b>178.40</b> | <b>4496.90</b>       | <b>0.00</b>        | <b>172.59</b> |
| <b>Michigan</b> |                     |                |                    |               |                      |                    |               |
|                 | Public Supply       | 281.30         |                    | 35.16         | 273.98               |                    | 34.25         |
|                 | Domestic Supply     | 4.20           |                    | 0.53          | 3.96                 |                    | 0.50          |
|                 | Irrigation          | 246.60         |                    | 221.94        | 229.75               |                    | 206.77        |
|                 | Livestock           | 6.07           |                    | 4.85          | 2.82                 |                    | 2.26          |
|                 | Industrial          | 208.04         |                    | 20.80         | 206.08               |                    | 20.61         |
|                 | Fossil Fuel Power   | 1179.28        |                    | 14.15         | 1179.28              |                    | 14.15         |
|                 | Nuclear Power       | 2066.54        |                    | 39.26         | 2066.54              |                    | 39.26         |
|                 | Hydroelectric Power |                |                    |               |                      |                    |               |
|                 | Other               |                |                    |               |                      |                    |               |
|                 | <b>Total</b>        | <b>3992.04</b> |                    | <b>336.70</b> | <b>3962.41</b>       |                    | <b>317.80</b> |

| Jurisdiction        | Category            | All Facilities  |                    |               | Principal Facilities |                    |               |
|---------------------|---------------------|-----------------|--------------------|---------------|----------------------|--------------------|---------------|
|                     |                     | Withdr.         | Inter-Basin Diver. | Consum.       | Withdr.              | Inter-Basin Diver. | Consum.       |
| <b>Wisconsin</b>    |                     |                 |                    |               |                      |                    |               |
|                     | Public Supply       | 294.36          | 0.49               | 29.43         |                      |                    |               |
|                     | Domestic Supply     | 31.22           | 0.00               | 3.12          |                      |                    |               |
|                     | Irrigation          | 113.88          | 0.00               | 79.02         |                      |                    |               |
|                     | Livestock           | 20.40           | 0.00               | 18.36         |                      |                    |               |
|                     | Industrial          | 257.73          | 0.00               | 26.29         |                      |                    |               |
|                     | Fossil Fuel Power   | 3353.37         | 0.00               | 16.77         |                      |                    |               |
|                     | Nuclear Power       | 1828.89         | 0.00               | 9.14          |                      |                    |               |
|                     | Hydroelectric Power | 0.00            | 0.00               | 0.00          |                      |                    |               |
|                     | Other               |                 | 0.00               |               |                      |                    |               |
|                     | <b>Total</b>        | <b>5899.85</b>  | <b>0.49</b>        | <b>182.13</b> |                      |                    |               |
| <b>Grand Total:</b> |                     | <b>16901.08</b> | <b>1513.28</b>     | <b>697.40</b> | <b>10945.23</b>      | <b>1516.58</b>     | <b>490.55</b> |

# BASIN REPORT- Lake Michigan

Units: Mgal(US)/d  
 Withdrawals by Source  
 Year Of Data: 2008

| Jurisdiction    | Category            | All Facilities |                |               | Principle Facilities |                |               |
|-----------------|---------------------|----------------|----------------|---------------|----------------------|----------------|---------------|
|                 |                     | GLSW           | OSW            | GW            | GLSW                 | OSW            | GW            |
| <b>Illinois</b> |                     |                |                |               |                      |                |               |
|                 | Public Supply       | 956.07         | 0.00           | 0.00          | 956.07               | 0.00           | 0.00          |
|                 | Domestic Supply     | 2.62           | 0.00           | 0.00          | 2.62                 | 0.00           | 0.00          |
|                 | Irrigation          | 0.00           | 0.00           | 0.11          | 0.00                 | 0.00           | 0.11          |
|                 | Livestock           |                |                |               |                      |                |               |
|                 | Industrial          | 19.61          | 0.00           | 0.00          | 19.61                | 0.00           | 0.00          |
|                 | Fossil Fuel Power   | 917.95         | 0.00           | 0.00          | 917.95               | 0.00           | 0.00          |
|                 | Nuclear Power       | 31.68          | 0.00           | 0.00          | 31.68                | 0.00           | 0.00          |
|                 | Hydroelectric Power |                |                |               |                      |                |               |
|                 | Other               | 557.87         | 0.00           | 0.00          | 557.87               | 0.00           | 0.00          |
|                 | <b>TOTAL</b>        | <b>2485.80</b> | <b>0.00</b>    | <b>0.12</b>   | <b>2485.80</b>       | <b>0.00</b>    | <b>0.12</b>   |
| <b>Indiana</b>  |                     |                |                |               |                      |                |               |
|                 | Public Supply       | 94.57          | 0.00           | 47.87         | 94.57                | 0.00           | 47.59         |
|                 | Domestic Supply     | 0.00           | 23.76          | 29.74         | 0.00                 | 23.74          | 7.01          |
|                 | Irrigation          | 0.00           | 7.08           | 30.43         | 0.00                 | 6.80           | 29.99         |
|                 | Livestock           | 0.00           | 1.28           | 4.63          | 0.00                 | 1.28           | 2.55          |
|                 | Industrial          | 1576.44        | 3.39           | 6.32          | 1576.42              | 3.39           | 5.84          |
|                 | Fossil Fuel Power   | 767.22         | 0.00           | 0.00          | 767.22               | 0.00           | 0.00          |
|                 | Nuclear Power       | 0.00           | 0.00           | 0.00          | 0.00                 | 0.00           | 0.00          |
|                 | Hydroelectric Power | 0.00           | 1930.50        | 0.00          | 0.00                 | 1930.50        | 0.00          |
|                 | Other               | 0.00           | 0.00           | 0.04          | 0.00                 | 0.00           | 0.00          |
|                 | <b>TOTAL</b>        | <b>2438.23</b> | <b>1966.01</b> | <b>119.03</b> | <b>2438.21</b>       | <b>1965.71</b> | <b>92.98</b>  |
| <b>Michigan</b> |                     |                |                |               |                      |                |               |
|                 | Public Supply       | 134.19         | 0.00           | 147.12        | 134.19               | 0.00           | 139.79        |
|                 | Domestic Supply     | 0.05           | 2.33           | 1.82          | 0.05                 | 2.31           | 1.61          |
|                 | Irrigation          | 0.19           | 61.60          | 184.81        | 0.18                 | 56.08          | 173.48        |
|                 | Livestock           | 0.00           | 1.08           | 4.98          | 0.00                 | 1.07           | 1.75          |
|                 | Industrial          | 23.94          | 126.33         | 57.77         | 23.94                | 126.25         | 55.88         |
|                 | Fossil Fuel Power   | 701.95         | 474.67         | 2.65          | 701.95               | 474.67         | 2.65          |
|                 | Nuclear Power       | 2066.54        | 0.00           | 0.00          | 2066.54              | 0.00           | 0.00          |
|                 | Hydroelectric Power |                |                |               |                      |                |               |
|                 | Other               |                |                |               |                      |                |               |
|                 | <b>TOTAL</b>        | <b>2926.87</b> | <b>666.02</b>  | <b>399.15</b> | <b>2926.86</b>       | <b>660.39</b>  | <b>375.16</b> |

| Jurisdiction        | Category            | All Facilities  |                |               | Principle Facilities |                |               |
|---------------------|---------------------|-----------------|----------------|---------------|----------------------|----------------|---------------|
|                     |                     | GLSW            | OSW            | GW            | GLSW                 | OSW            | GW            |
| <b>Wisconsin</b>    |                     |                 |                |               |                      |                |               |
|                     | Public Supply       | 216.86          | 21.44          | 56.06         |                      |                |               |
|                     | Domestic Supply     | 0.00            | 0.00           | 31.22         |                      |                |               |
|                     | Irrigation          | 0.00            | 3.90           | 109.98        |                      |                |               |
|                     | Livestock           | 0.00            | 2.04           | 18.36         |                      |                |               |
|                     | Industrial          | 1.84            | 211.65         | 44.24         |                      |                |               |
|                     | Fossil Fuel Power   | 2703.05         | 650.32         | 0.00          |                      |                |               |
|                     | Nuclear Power       | 1828.09         | 0.00           | 0.80          |                      |                |               |
|                     | Hydroelectric Power | 0.00            | 0.00           | 0.00          |                      |                |               |
|                     | Other               |                 |                |               |                      |                |               |
|                     | <b>TOTAL</b>        | <b>4749.84</b>  | <b>889.35</b>  | <b>260.66</b> |                      |                |               |
| <b>Grand Total:</b> |                     | <b>12600.74</b> | <b>3521.38</b> | <b>778.96</b> | <b>7850.87</b>       | <b>2626.10</b> | <b>468.25</b> |

# BASIN REPORT- Lake Michigan

Basin Totals

Units: Mgal(US)/d

Year Of Data: 2008

## Total Report - All Facilities

| Category            | Withdrawals |         |        |         | Diversions |            | Consumptive Use |
|---------------------|-------------|---------|--------|---------|------------|------------|-----------------|
|                     | GLSW        | OSW     | GW     | TOTAL   | Intrabasin | Interbasin |                 |
| Public Supply       | 1401.69     | 21.44   | 251.05 | 1674.17 | 0.41       | 952.77     | 85.95           |
| Domestic Supply     | 2.67        | 26.09   | 62.79  | 91.55   | 0.00       | 2.62       | 11.67           |
| Irrigation          | 0.19        | 72.58   | 325.33 | 398.10  | 0.00       | 0.00       | 334.72          |
| Livestock           | 0.00        | 4.40    | 27.97  | 32.38   | 0.00       | 0.00       | 27.95           |
| Industrial          | 1621.84     | 341.37  | 108.33 | 2071.53 | 0.00       | 0.02       | 142.43          |
| Fossil Fuel Power   | 5090.17     | 1124.99 | 2.65   | 6217.82 | 0.00       | 0.00       | 46.26           |
| Nuclear Power       | 3926.31     | 0.00    | 0.80   | 3927.11 | 0.00       | 0.00       | 48.40           |
| Hydroelectric Power | 0.00        | 1930.50 | 0.00   | 1930.50 | 0.00       | 0.00       | 0.00            |
| Other               | 557.87      | 0.00    | 0.04   | 557.91  | 0.00       | 557.87     | 0.01            |

## Total Report - Principal Facilities

| Category            | Withdrawals |         |        |         | Diversions |            | Consumptive Use |
|---------------------|-------------|---------|--------|---------|------------|------------|-----------------|
|                     | GLSW        | OSW     | GW     | TOTAL   | Intrabasin | Interbasin |                 |
| Public Supply       | 1184.83     | 0.00    | 187.38 | 1372.21 | 0.41       | 956.07     | 55.57           |
| Domestic Supply     | 2.67        | 26.05   | 8.62   | 37.34   | 0.00       | 2.62       | 5.11            |
| Irrigation          | 0.18        | 62.88   | 203.58 | 266.65  | 0.00       | 0.00       | 239.88          |
| Livestock           | 0.00        | 2.35    | 4.30   | 6.65    | 0.00       | 0.00       | 5.33            |
| Industrial          | 1619.98     | 129.64  | 61.72  | 1811.34 | 0.00       | 0.02       | 115.91          |
| Fossil Fuel Power   | 2387.12     | 474.67  | 2.65   | 2864.45 | 0.00       | 0.00       | 29.49           |
| Nuclear Power       | 2098.22     | 0.00    | 0.00   | 2098.22 | 0.00       | 0.00       | 39.26           |
| Hydroelectric Power | 0.00        | 1930.50 | 0.00   | 1930.50 | 0.00       | 0.00       | 0.00            |
| Other               | 557.87      | 0.00    | 0.00   | 557.87  | 0.00       | 557.87     | 0.00            |

# BASIN REPORT- Lake Ontario

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2008

| Jurisdiction        | Category            | All Facilities   |                    |               | Principal Facilities |                    |               |
|---------------------|---------------------|------------------|--------------------|---------------|----------------------|--------------------|---------------|
|                     |                     | Withdr.          | Inter-Basin Diver. | Consum.       | Withdr.              | Inter-Basin Diver. | Consum.       |
| <b>New York</b>     |                     |                  |                    |               |                      |                    |               |
|                     | Public Supply       | 390.73           | 9.59               | 39.08         |                      | 9.59               | 0.00          |
|                     | Domestic Supply     | 135.69           | 0.00               | 13.57         | 65.67                | 0.00               | 6.57          |
|                     | Irrigation          | 3.71             | 0.00               | 3.34          | 3.71                 | 0.00               | 3.34          |
|                     | Livestock           | 21.27            | 0.00               | 19.14         |                      | 0.00               |               |
|                     | Industrial          | 63.08            | 0.00               | 15.77         | 63.08                | 0.00               | 15.77         |
|                     | Fossil Fuel Power   | 691.77           | 0.00               | 13.84         | 691.77               | 0.00               | 13.84         |
|                     | Nuclear Power       | 1403.04          | 0.00               | 70.15         | 1403.04              | 0.00               | 70.15         |
|                     | Hydroelectric Power | 80908.00         | 0.00               | 0.00          | 0.00                 | 0.00               |               |
|                     | Other               | 39.57            | 32.00              | 32.78         | 39.46                | 32.00              | 32.78         |
|                     | <b>Total</b>        | <b>83656.86</b>  | <b>41.59</b>       | <b>207.67</b> | <b>2266.73</b>       | <b>41.59</b>       | <b>142.45</b> |
| <b>Ontario</b>      |                     |                  |                    |               |                      |                    |               |
|                     | Public Supply       | 465.93           | 0.00               | 69.89         | 464.62               | 0.00               | 69.69         |
|                     | Domestic Supply     | 64.17            | 0.00               | 9.63          | 0.00                 | 0.00               | 0.00          |
|                     | Irrigation          | 17.73            | 0.00               |               |                      | 0.00               |               |
|                     | Livestock           | 5.40             | 0.00               |               |                      | 0.00               |               |
|                     | Industrial          | 229.64           | 0.00               | 14.47         | 0.00                 | 0.00               | 0.00          |
|                     | Fossil Fuel Power   | 708.95           | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00          |
|                     | Nuclear Power       | 5428.19          | 0.00               | 48.85         | 0.00                 | 0.00               | 0.00          |
|                     | Hydroelectric Power | 41542.31         | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00          |
|                     | Other               | 132.35           | 0.00               | 0.00          | 132.35               | 0.00               | 0.00          |
|                     | <b>Total</b>        | <b>48594.67</b>  | <b>0.00</b>        | <b>142.84</b> | <b>596.97</b>        | <b>0.00</b>        | <b>69.69</b>  |
| <b>Grand Total:</b> |                     | <b>132251.53</b> | <b>41.59</b>       | <b>350.51</b> | <b>2863.70</b>       | <b>41.59</b>       | <b>212.14</b> |

# BASIN REPORT- Lake Ontario

Units: Mgal(US)/d  
 Withdrawals by Source  
 Year Of Data: 2008

| Jurisdiction        | Category            | All Facilities  |                 |               | Principle Facilities |               |              |
|---------------------|---------------------|-----------------|-----------------|---------------|----------------------|---------------|--------------|
|                     |                     | GLSW            | OSW             | GW            | GLSW                 | OSW           | GW           |
| <b>New York</b>     |                     |                 |                 |               |                      |               |              |
|                     | Public Supply       | 187.28          | 170.27          | 33.18         |                      |               |              |
|                     | Domestic Supply     | 29.33           | 65.67           | 40.69         | 0.00                 | 65.67         | 0.00         |
|                     | Irrigation          | 0.00            | 3.57            | 0.14          | 0.00                 | 3.57          | 0.14         |
|                     | Livestock           | 3.91            | 7.56            | 9.80          |                      |               |              |
|                     | Industrial          | 18.47           | 38.84           | 5.77          | 18.47                | 38.84         | 5.77         |
|                     | Fossil Fuel Power   | 334.88          | 356.89          | 0.00          | 334.88               | 356.89        | 0.00         |
|                     | Nuclear Power       | 1403.04         | 0.00            | 0.00          | 1403.04              | 0.00          | 0.00         |
|                     | Hydroelectric Power | 0.00            | 80908.00        | 0.00          | 0.00                 | 0.00          | 0.00         |
|                     | Other               | 0.00            | 39.33           | 0.24          | 0.00                 | 39.33         | 0.13         |
|                     | <b>TOTAL</b>        | <b>1976.91</b>  | <b>81590.13</b> | <b>89.82</b>  | <b>1756.39</b>       | <b>504.30</b> | <b>6.04</b>  |
| <b>Ontario</b>      |                     |                 |                 |               |                      |               |              |
|                     | Public Supply       | 401.52          | 52.86           | 11.56         | 401.47               | 52.68         | 10.47        |
|                     | Domestic Supply     | 0.00            | 0.00            | 64.17         | 0.00                 | 0.00          | 0.00         |
|                     | Irrigation          | 1.08            | 9.53            | 7.12          |                      |               |              |
|                     | Livestock           | 0.00            | 0.94            | 4.46          |                      |               |              |
|                     | Industrial          | 218.17          | 0.00            | 11.46         | 0.00                 | 0.00          | 0.00         |
|                     | Fossil Fuel Power   | 708.95          | 0.00            | 0.00          | 0.00                 | 0.00          | 0.00         |
|                     | Nuclear Power       | 5428.19         | 0.00            | 0.00          | 0.00                 | 0.00          | 0.00         |
|                     | Hydroelectric Power | 33861.04        | 7681.26         | 0.00          | 0.00                 | 0.00          | 0.00         |
|                     | Other               | 0.00            | 132.35          | 0.00          | 0.00                 | 132.35        | 0.00         |
|                     | <b>TOTAL</b>        | <b>40618.96</b> | <b>7876.94</b>  | <b>98.77</b>  | <b>401.47</b>        | <b>185.03</b> | <b>10.47</b> |
| <b>Grand Total:</b> |                     | <b>42595.87</b> | <b>89467.07</b> | <b>188.59</b> | <b>2157.86</b>       | <b>689.33</b> | <b>16.51</b> |



# BASIN REPORT- Lake Ontario

Basin Totals

Units: Mgal(US)/d

Year Of Data: 2008

## Total Report - All Facilities

| Category            | Withdrawals |          |        |           | Diversions |            | Consumptive Use |
|---------------------|-------------|----------|--------|-----------|------------|------------|-----------------|
|                     | GLSW        | OSW      | GW     | TOTAL     | Intrabasin | Interbasin |                 |
| Public Supply       | 588.80      | 223.13   | 44.74  | 856.66    | 0.00       | 9.59       | 108.97          |
| Domestic Supply     | 29.33       | 65.67    | 104.86 | 199.86    | 0.00       | 0.00       | 23.20           |
| Irrigation          | 1.08        | 13.10    | 7.26   | 21.44     | 0.00       | 0.00       | 3.34            |
| Livestock           | 3.91        | 8.50     | 14.26  | 26.67     | 0.00       | 0.00       | 19.14           |
| Industrial          | 236.64      | 38.84    | 17.23  | 292.72    | 0.00       | 0.00       | 30.24           |
| Fossil Fuel Power   | 1043.83     | 356.89   | 0.00   | 1400.72   | 0.00       | 0.00       | 13.84           |
| Nuclear Power       | 6831.23     | 0.00     | 0.00   | 6831.23   | 0.00       | 0.00       | 119.00          |
| Hydroelectric Power | 33861.04    | 88589.26 | 0.00   | 122450.31 | 0.00       | 0.00       | 0.00            |
| Other               | 0.00        | 171.68   | 0.24   | 171.92    | -5802.39   | 32.00      | 32.78           |

## Total Report - Principal Facilities

| Category            | Withdrawals |        |       |         | Diversions |            | Consumptive Use |
|---------------------|-------------|--------|-------|---------|------------|------------|-----------------|
|                     | GLSW        | OSW    | GW    | TOTAL   | Intrabasin | Interbasin |                 |
| Public Supply       | 401.47      | 52.68  | 10.47 | 464.62  | 0.00       | 9.59       | 69.69           |
| Domestic Supply     | 0.00        | 65.67  | 0.00  | 65.67   | 0.00       | 0.00       | 6.57            |
| Irrigation          | 0.00        | 3.57   | 0.14  | 3.71    | 0.00       | 0.00       | 3.34            |
| Livestock           |             |        |       |         | 0.00       | 0.00       |                 |
| Industrial          | 18.47       | 38.84  | 5.77  | 63.08   | 0.00       | 0.00       | 15.77           |
| Fossil Fuel Power   | 334.88      | 356.89 | 0.00  | 691.77  | 0.00       | 0.00       | 13.84           |
| Nuclear Power       | 1403.04     | 0.00   | 0.00  | 1403.04 | 0.00       | 0.00       | 70.15           |
| Hydroelectric Power | 0.00        | 0.00   | 0.00  | 0.00    | 0.00       | 0.00       | 0.00            |
| Other               | 0.00        | 171.68 | 0.13  | 171.81  | -5802.39   | 32.00      | 32.78           |

# BASIN REPORT- St. Lawrence River

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2008

| Jurisdiction        | Category            | All Facilities   |                    |               | Principal Facilities |                    |               |
|---------------------|---------------------|------------------|--------------------|---------------|----------------------|--------------------|---------------|
|                     |                     | Withdr.          | Inter-Basin Diver. | Consum.       | Withdr.              | Inter-Basin Diver. | Consum.       |
| <b>New York</b>     |                     |                  |                    |               |                      |                    |               |
|                     | Public Supply       | 44.02            | 0.00               | 4.40          |                      | 0.00               |               |
|                     | Domestic Supply     | 22.35            | 0.00               | 2.21          | 8.61                 | 0.00               | 0.86          |
|                     | Irrigation          | 0.07             | 0.00               | 0.06          | 0.07                 | 0.00               | 0.06          |
|                     | Livestock           | 15.03            | 0.00               | 13.52         |                      | 0.00               |               |
|                     | Industrial          | 30.15            | 0.00               | 7.54          | 30.15                | 0.00               | 7.54          |
|                     | Fossil Fuel Power   | 0.02             | 0.00               | 0.00          | 0.02                 | 0.00               | 0.00          |
|                     | Nuclear Power       | 0.00             | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00          |
|                     | Hydroelectric Power | 181798.00        | 0.00               | 0.00          | 83106.00             | 0.00               | 0.00          |
|                     | Other               | 4.46             | 0.00               | 0.45          | 4.46                 | 0.00               | 0.45          |
|                     | <b>Total</b>        | <b>181914.10</b> | <b>0.00</b>        | <b>28.18</b>  | <b>83149.31</b>      | <b>0.00</b>        | <b>8.91</b>   |
| <b>Ontario</b>      |                     |                  |                    |               |                      |                    |               |
|                     | Public Supply       | 73.03            | 0.00               | 10.96         | 72.08                | 0.00               | 10.82         |
|                     | Domestic Supply     | 11.45            | 0.00               | 1.72          | 0.00                 | 0.00               | 0.00          |
|                     | Irrigation          | 2.35             | 0.00               |               |                      | 0.00               |               |
|                     | Livestock           | 5.91             | 0.00               |               |                      | 0.00               |               |
|                     | Industrial          | 160.81           | 0.00               | 10.13         | 0.00                 | 0.00               | 0.00          |
|                     | Fossil Fuel Power   | 0.00             | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00          |
|                     | Nuclear Power       | 0.00             | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00          |
|                     | Hydroelectric Power | 76235.15         | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00          |
|                     | Other               | 19.28            | 0.00               | 0.00          | 19.28                | 0.00               | 0.00          |
|                     | <b>Total</b>        | <b>76507.99</b>  | <b>0.00</b>        | <b>22.80</b>  | <b>91.37</b>         | <b>0.00</b>        | <b>10.82</b>  |
| <b>Quebec</b>       |                     |                  |                    |               |                      |                    |               |
|                     | Public Supply       | 1100.01          | 0.00               | 109.90        | 1096.05              | 0.00               | 109.63        |
|                     | Domestic Supply     | 71.59            | 0.00               | 7.13          | 48.61                | 0.00               | 4.76          |
|                     | Irrigation          | 9.22             | 0.00               | 8.30          |                      | 0.00               |               |
|                     | Livestock           | 19.10            | 0.00               | 15.28         |                      | 0.00               |               |
|                     | Industrial          | 125.48           | 0.00               | 12.55         | 124.95               | 0.00               | 12.50         |
|                     | Fossil Fuel Power   | 47.02            | 0.00               | 4.70          | 47.02                | 0.00               | 4.70          |
|                     | Nuclear Power       | 0.00             | 0.00               | 0.00          | 0.00                 | 0.00               | 0.00          |
|                     | Hydroelectric Power | 303895.85        | 0.00               | 0.00          | 303895.85            | 0.00               | 0.00          |
|                     | Other               |                  | 0.00               |               |                      | 0.00               |               |
|                     | <b>Total</b>        | <b>305268.28</b> | <b>0.00</b>        | <b>157.86</b> | <b>305212.48</b>     | <b>0.00</b>        | <b>131.58</b> |
| <b>Grand Total:</b> |                     | <b>563690.36</b> | <b>0.00</b>        | <b>208.84</b> | <b>388453.16</b>     | <b>0.00</b>        | <b>151.31</b> |

# BASIN REPORT- St. Lawrence River

Units: Mgal(US)/d  
 Withdrawals by Source  
 Year Of Data: 2008

| Jurisdiction        | Category            | All Facilities   |                  |               | Principle Facilities |                  |              |
|---------------------|---------------------|------------------|------------------|---------------|----------------------|------------------|--------------|
|                     |                     | GLSW             | OSW              | GW            | GLSW                 | OSW              | GW           |
| <b>New York</b>     |                     |                  |                  |               |                      |                  |              |
|                     | Public Supply       | 2.80             | 35.71            | 5.51          |                      |                  |              |
|                     | Domestic Supply     | 0.00             | 8.61             | 13.74         | 0.00                 | 8.61             | 0.00         |
|                     | Irrigation          | 0.00             | 0.07             | 0.00          | 0.00                 | 0.07             | 0.00         |
|                     | Livestock           | 0.38             | 10.56            | 4.09          |                      |                  |              |
|                     | Industrial          | 4.59             | 21.79            | 3.77          | 4.59                 | 21.79            | 3.77         |
|                     | Fossil Fuel Power   | 0.02             | 0.00             | 0.00          | 0.02                 | 0.00             | 0.00         |
|                     | Nuclear Power       | 0.00             | 0.00             | 0.00          | 0.00                 | 0.00             | 0.00         |
|                     | Hydroelectric Power | 83106.00         | 98692.00         | 0.00          | 83106.00             | 0.00             | 0.00         |
|                     | Other               | 0.00             | 4.46             | 0.00          | 0.00                 | 4.46             | 0.00         |
|                     | <b>TOTAL</b>        | <b>83113.79</b>  | <b>98773.20</b>  | <b>27.11</b>  | <b>83110.61</b>      | <b>34.93</b>     | <b>3.77</b>  |
| <b>Ontario</b>      |                     |                  |                  |               |                      |                  |              |
|                     | Public Supply       | 10.64            | 58.84            | 3.56          | 10.64                | 58.52            | 2.93         |
|                     | Domestic Supply     | 0.00             | 0.00             | 11.45         | 0.00                 | 0.00             | 0.00         |
|                     | Irrigation          | 0.01             | 2.04             | 0.30          |                      |                  |              |
|                     | Livestock           | 0.00             | 3.63             | 2.28          |                      |                  |              |
|                     | Industrial          | 159.76           | 0.00             | 1.05          | 0.00                 | 0.00             | 0.00         |
|                     | Fossil Fuel Power   | 0.00             | 0.00             | 0.00          | 0.00                 | 0.00             | 0.00         |
|                     | Nuclear Power       | 0.00             | 0.00             | 0.00          | 0.00                 | 0.00             | 0.00         |
|                     | Hydroelectric Power | 76149.02         | 86.13            | 0.00          | 0.00                 | 0.00             | 0.00         |
|                     | Other               | 0.00             | 19.28            | 0.00          | 0.00                 | 19.28            | 0.00         |
|                     | <b>TOTAL</b>        | <b>76319.43</b>  | <b>169.91</b>    | <b>18.65</b>  | <b>10.64</b>         | <b>77.80</b>     | <b>2.93</b>  |
| <b>Quebec</b>       |                     |                  |                  |               |                      |                  |              |
|                     | Public Supply       | 602.84           | 497.17           | 0.00          | 602.58               | 493.47           | 0.00         |
|                     | Domestic Supply     | 0.00             | 0.00             | 71.59         | 0.00                 | 0.00             | 48.61        |
|                     | Irrigation          | 0.00             | 0.00             | 9.22          |                      |                  |              |
|                     | Livestock           | 0.00             | 0.00             | 19.10         |                      |                  |              |
|                     | Industrial          | 0.00             | 125.48           | 0.00          | 0.00                 | 124.95           | 0.00         |
|                     | Fossil Fuel Power   | 39.10            | 7.93             | 0.00          | 39.10                | 7.93             | 0.00         |
|                     | Nuclear Power       | 0.00             | 0.00             | 0.00          | 0.00                 | 0.00             | 0.00         |
|                     | Hydroelectric Power | 170946.25        | 132949.60        | 0.00          | 170946.25            | 132949.60        | 0.00         |
|                     | Other               |                  |                  |               |                      |                  |              |
|                     | <b>TOTAL</b>        | <b>171588.19</b> | <b>133580.18</b> | <b>99.91</b>  | <b>171587.93</b>     | <b>133575.95</b> | <b>48.61</b> |
| <b>Grand Total:</b> |                     | <b>331021.41</b> | <b>232523.29</b> | <b>145.67</b> | <b>254709.18</b>     | <b>133688.68</b> | <b>55.30</b> |

# BASIN REPORT- St. Lawrence River

Basin Totals

Units: Mgal(US)/d

Year Of Data: 2008

## Total Report - All Facilities

| Category            | Withdrawals |           |       |           | Diversions |            | Consumptive Use |
|---------------------|-------------|-----------|-------|-----------|------------|------------|-----------------|
|                     | GLSW        | OSW       | GW    | TOTAL     | Intrabasin | Interbasin |                 |
| Public Supply       | 616.28      | 591.72    | 9.07  | 1217.06   | 0.00       | 0.00       | 125.25          |
| Domestic Supply     | 0.00        | 8.61      | 96.78 | 105.39    | 0.00       | 0.00       | 11.06           |
| Irrigation          | 0.01        | 2.11      | 9.52  | 11.64     | 0.00       | 0.00       | 8.36            |
| Livestock           | 0.38        | 14.19     | 25.47 | 40.04     | 0.00       | 0.00       | 28.80           |
| Industrial          | 164.35      | 147.27    | 4.82  | 316.44    | 0.00       | 0.00       | 30.22           |
| Fossil Fuel Power   | 39.12       | 7.93      | 0.00  | 47.04     | 0.00       | 0.00       | 4.70            |
| Nuclear Power       | 0.00        | 0.00      | 0.00  | 0.00      | 0.00       | 0.00       | 0.00            |
| Hydroelectric Power | 330201.28   | 231727.72 | 0.00  | 561929.00 | 0.00       | 0.00       | 0.00            |
| Other               | 0.00        | 23.74     | 0.00  | 23.74     | 0.00       | 0.00       | 0.45            |

## Total Report - Principal Facilities

| Category            | Withdrawals |           |       |           | Diversions |            | Consumptive Use |
|---------------------|-------------|-----------|-------|-----------|------------|------------|-----------------|
|                     | GLSW        | OSW       | GW    | TOTAL     | Intrabasin | Interbasin |                 |
| Public Supply       | 613.22      | 551.99    | 2.93  | 1168.13   | 0.00       | 0.00       | 120.45          |
| Domestic Supply     | 0.00        | 8.61      | 48.61 | 57.22     | 0.00       | 0.00       | 5.62            |
| Irrigation          | 0.00        | 0.07      | 0.00  | 0.07      | 0.00       | 0.00       | 0.06            |
| Livestock           |             |           |       |           | 0.00       | 0.00       |                 |
| Industrial          | 4.59        | 146.74    | 3.77  | 155.10    | 0.00       | 0.00       | 20.04           |
| Fossil Fuel Power   | 39.12       | 7.93      | 0.00  | 47.04     | 0.00       | 0.00       | 4.70            |
| Nuclear Power       | 0.00        | 0.00      | 0.00  | 0.00      | 0.00       | 0.00       | 0.00            |
| Hydroelectric Power | 254052.25   | 132949.60 | 0.00  | 387001.85 | 0.00       | 0.00       | 0.00            |
| Other               | 0.00        | 23.74     | 0.00  | 23.74     | 0.00       | 0.00       | 0.45            |

# BASIN REPORT- Lake Superior

Withdrawals, Diversions  
and Consumptive Uses

Units: Mgal(US)/d  
Year Of Data: 2008

| Jurisdiction     | Category            | All Facilities  |                    |              | Principal Facilities |                    |              |
|------------------|---------------------|-----------------|--------------------|--------------|----------------------|--------------------|--------------|
|                  |                     | Withdr.         | Inter-Basin Diver. | Consum.      | Withdr.              | Inter-Basin Diver. | Consum.      |
| <b>Michigan</b>  |                     |                 |                    |              |                      |                    |              |
|                  | Public Supply       | 14.41           |                    | 1.80         | 13.63                |                    | 1.70         |
|                  | Domestic Supply     |                 |                    |              |                      |                    |              |
|                  | Irrigation          | 0.93            |                    | 0.84         | 0.86                 |                    | 0.78         |
|                  | Livestock           |                 |                    |              |                      |                    |              |
|                  | Industrial          | 12.18           |                    | 1.22         | 12.06                |                    | 1.21         |
|                  | Fossil Fuel Power   | 256.86          |                    | 3.08         | 256.86               |                    | 3.08         |
|                  | Nuclear Power       |                 |                    |              |                      |                    |              |
|                  | Hydroelectric Power |                 |                    |              |                      |                    |              |
|                  | Other               |                 |                    |              |                      |                    |              |
|                  | <b>Total</b>        | <b>284.38</b>   |                    | <b>6.94</b>  | <b>283.42</b>        |                    | <b>6.77</b>  |
| <b>Minnesota</b> |                     |                 |                    |              |                      |                    |              |
|                  | Public Supply       | 39.99           | 0.00               | 3.99         | 39.04                | 0.00               | 3.91         |
|                  | Domestic Supply     | 1.19            | 0.00               | 0.12         | 1.14                 | 0.00               | 0.11         |
|                  | Irrigation          | 0.43            | 0.00               | 0.38         | 0.11                 | 0.00               | 0.01         |
|                  | Livestock           | 0.82            | 0.00               | 0.74         | 0.76                 | 0.00               | 0.68         |
|                  | Industrial          | 389.88          | 7.06               | 38.99        | 387.91               | 7.06               | 38.79        |
|                  | Fossil Fuel Power   | 199.54          | 0.00               | 3.99         | 199.44               | 0.00               | 3.99         |
|                  | Nuclear Power       | 0.00            | 0.00               | 0.00         | 0.00                 | 0.00               | 0.00         |
|                  | Hydroelectric Power | 3899.08         | 0.00               | 0.00         | 3899.08              | 0.00               | 0.00         |
|                  | Other               | 0.04            | 0.00               | 0.00         | 0.00                 | 0.00               | 0.00         |
|                  | <b>Total</b>        | <b>4530.97</b>  | <b>7.06</b>        | <b>48.21</b> | <b>4527.48</b>       | <b>7.06</b>        | <b>47.49</b> |
| <b>Ontario</b>   |                     |                 |                    |              |                      |                    |              |
|                  | Public Supply       | 45.77           | 0.00               | 6.87         | 45.58                | 0.00               | 6.84         |
|                  | Domestic Supply     | 1.75            | 0.00               | 0.26         | 0.00                 | 0.00               | 0.00         |
|                  | Irrigation          | 0.37            | 0.00               |              |                      | 0.00               |              |
|                  | Livestock           | 0.14            | 0.00               |              |                      | 0.00               |              |
|                  | Industrial          | 162.12          | 0.00               | 10.21        | 0.00                 | 0.00               | 0.00         |
|                  | Fossil Fuel Power   | 295.52          | 0.00               | 0.00         | 0.00                 | 0.00               | 0.00         |
|                  | Nuclear Power       | 0.00            | 0.00               | 0.00         | 0.00                 | 0.00               | 0.00         |
|                  | Hydroelectric Power | 38156.31        | -4007.75           | 0.00         | 0.00                 | 0.00               | 0.00         |
|                  | Other               |                 | 0.00               |              |                      | 0.00               |              |
|                  | <b>Total</b>        | <b>38661.99</b> | <b>-4007.75</b>    | <b>17.34</b> | <b>45.58</b>         | <b>0.00</b>        | <b>6.84</b>  |

| Jurisdiction        | Category            | All Facilities  |                    |              | Principal Facilities |                    |              |
|---------------------|---------------------|-----------------|--------------------|--------------|----------------------|--------------------|--------------|
|                     |                     | Withdr.         | Inter-Basin Diver. | Consum.      | Withdr.              | Inter-Basin Diver. | Consum.      |
| <b>Wisconsin</b>    |                     |                 |                    |              |                      |                    |              |
|                     | Public Supply       | 4.31            | 0.00               | 0.43         |                      |                    |              |
|                     | Domestic Supply     | 1.12            | 0.00               | 0.11         |                      |                    |              |
|                     | Irrigation          | 0.77            | 0.00               | 0.54         |                      |                    |              |
|                     | Livestock           | 0.33            | 0.00               | 0.30         |                      |                    |              |
|                     | Industrial          | 18.63           | 0.00               | 1.90         |                      |                    |              |
|                     | Fossil Fuel Power   | 51.00           | 0.00               | 0.25         |                      |                    |              |
|                     | Nuclear Power       | 0.00            | 0.00               | 0.00         |                      |                    |              |
|                     | Hydroelectric Power | 0.00            | 0.00               | 0.00         |                      |                    |              |
|                     | Other               | 0.00            | -25.85             |              |                      |                    |              |
|                     | <b>Total</b>        | <b>76.16</b>    | <b>-25.85</b>      | <b>3.53</b>  |                      |                    |              |
| <b>Grand Total:</b> |                     | <b>43553.51</b> | <b>-4026.54</b>    | <b>76.02</b> | <b>4856.47</b>       | <b>7.06</b>        | <b>61.09</b> |

# BASIN REPORT- Lake Superior

Units: Mgal(US)/d  
 Withdrawals by Source  
 Year Of Data: 2008

| Jurisdiction     | Category            | All Facilities |                 |              | Principle Facilities |                |             |
|------------------|---------------------|----------------|-----------------|--------------|----------------------|----------------|-------------|
|                  |                     | GLSW           | OSW             | GW           | GLSW                 | OSW            | GW          |
| <b>Michigan</b>  |                     |                |                 |              |                      |                |             |
|                  | Public Supply       | 5.14           | 0.00            | 9.27         | 5.14                 | 0.00           | 8.49        |
|                  | Domestic Supply     |                |                 |              |                      |                |             |
|                  | Irrigation          | 0.00           | 0.32            | 0.62         | 0.00                 | 0.27           | 0.59        |
|                  | Livestock           |                |                 |              |                      |                |             |
|                  | Industrial          | 12.06          | 0.00            | 0.12         | 12.06                | 0.00           | 0.00        |
|                  | Fossil Fuel Power   | 256.86         | 0.00            | 0.00         | 256.86               | 0.00           | 0.00        |
|                  | Nuclear Power       |                |                 |              |                      |                |             |
|                  | Hydroelectric Power |                |                 |              |                      |                |             |
|                  | Other               |                |                 |              |                      |                |             |
|                  | <b>TOTAL</b>        | <b>274.07</b>  | <b>0.32</b>     | <b>10.00</b> | <b>274.07</b>        | <b>0.27</b>    | <b>9.08</b> |
| <b>Minnesota</b> |                     |                |                 |              |                      |                |             |
|                  | Public Supply       | 31.84          | 2.00            | 6.15         | 31.47                | 1.97           | 5.60        |
|                  | Domestic Supply     | 0.79           | 0.39            | 0.01         | 0.75                 | 0.39           | 0.00        |
|                  | Irrigation          | 0.00           | 0.39            | 0.04         | 0.00                 | 0.11           | 0.00        |
|                  | Livestock           | 0.82           | 0.00            | 0.00         | 0.76                 | 0.00           | 0.00        |
|                  | Industrial          | 308.69         | 81.16           | 0.03         | 308.60               | 79.31          | 0.00        |
|                  | Fossil Fuel Power   | 39.84          | 159.60          | 0.10         | 39.84                | 159.60         | 0.00        |
|                  | Nuclear Power       | 0.00           | 0.00            | 0.00         | 0.00                 | 0.00           | 0.00        |
|                  | Hydroelectric Power | 0.00           | 3899.08         | 0.00         | 0.00                 | 3899.08        | 0.00        |
|                  | Other               | 0.00           | 0.00            | 0.04         | 0.00                 | 0.00           | 0.00        |
|                  | <b>TOTAL</b>        | <b>381.98</b>  | <b>4142.62</b>  | <b>6.37</b>  | <b>381.42</b>        | <b>4140.46</b> | <b>5.60</b> |
| <b>Ontario</b>   |                     |                |                 |              |                      |                |             |
|                  | Public Supply       | 30.10          | 13.03           | 2.65         | 30.07                | 12.96          | 2.55        |
|                  | Domestic Supply     | 0.00           | 0.00            | 1.75         | 0.00                 | 0.00           | 0.00        |
|                  | Irrigation          | 0.02           | 0.31            | 0.05         |                      |                |             |
|                  | Livestock           | 0.00           | 0.14            | 0.00         |                      |                |             |
|                  | Industrial          | 162.12         | 0.00            | 0.00         | 0.00                 | 0.00           | 0.00        |
|                  | Fossil Fuel Power   | 295.52         | 0.00            | 0.00         | 0.00                 | 0.00           | 0.00        |
|                  | Nuclear Power       | 0.00           | 0.00            | 0.00         | 0.00                 | 0.00           | 0.00        |
|                  | Hydroelectric Power | 0.00           | 38156.31        | 0.00         | 0.00                 | 0.00           | 0.00        |
|                  | Other               |                |                 |              |                      |                |             |
|                  | <b>TOTAL</b>        | <b>487.76</b>  | <b>38169.79</b> | <b>4.44</b>  | <b>30.07</b>         | <b>12.96</b>   | <b>2.55</b> |

| Jurisdiction        | Category            | All Facilities |                 |              | Principle Facilities |                |              |
|---------------------|---------------------|----------------|-----------------|--------------|----------------------|----------------|--------------|
|                     |                     | GLSW           | OSW             | GW           | GLSW                 | OSW            | GW           |
| <b>Wisconsin</b>    |                     |                |                 |              |                      |                |              |
|                     | Public Supply       | 3.57           | 0.00            | 0.74         |                      |                |              |
|                     | Domestic Supply     | 0.00           | 0.00            | 1.12         |                      |                |              |
|                     | Irrigation          | 0.00           | 0.15            | 0.62         |                      |                |              |
|                     | Livestock           | 0.00           | 0.03            | 0.30         |                      |                |              |
|                     | Industrial          | 13.80          | 0.10            | 4.73         |                      |                |              |
|                     | Fossil Fuel Power   | 50.56          | 0.44            | 0.00         |                      |                |              |
|                     | Nuclear Power       | 0.00           | 0.00            | 0.00         |                      |                |              |
|                     | Hydroelectric Power | 0.00           | 0.00            | 0.00         |                      |                |              |
|                     | Other               | 0.00           | 0.00            | 0.00         |                      |                |              |
|                     | <b>TOTAL</b>        | <b>67.93</b>   | <b>0.72</b>     | <b>7.51</b>  |                      |                |              |
| <b>Grand Total:</b> |                     | <b>1211.73</b> | <b>42313.44</b> | <b>28.33</b> | <b>685.56</b>        | <b>4153.68</b> | <b>17.23</b> |



# BASIN REPORT- Lake Superior

Basin Totals

Units: Mgal(US)/d

Year Of Data: 2008

## Total Report - All Facilities

| Category            | Withdrawals |          |       |          | Diversions |            | Consumptive Use |
|---------------------|-------------|----------|-------|----------|------------|------------|-----------------|
|                     | GLSW        | OSW      | GW    | TOTAL    | Intrabasin | Interbasin |                 |
| Public Supply       | 70.65       | 15.03    | 18.81 | 104.48   | -0.31      | 0.00       | 13.09           |
| Domestic Supply     | 0.79        | 0.39     | 2.88  | 4.06     | 0.00       | 0.00       | 0.49            |
| Irrigation          | 0.02        | 1.16     | 1.32  | 2.51     | 0.00       | 0.00       | 1.76            |
| Livestock           | 0.82        | 0.17     | 0.30  | 1.29     | 0.00       | 0.00       | 1.04            |
| Industrial          | 496.67      | 81.26    | 4.88  | 582.81   | 0.00       | 7.06       | 52.32           |
| Fossil Fuel Power   | 642.78      | 160.04   | 0.10  | 802.92   | 0.00       | 0.00       | 7.32            |
| Nuclear Power       | 0.00        | 0.00     | 0.00  | 0.00     | 0.00       | 0.00       | 0.00            |
| Hydroelectric Power | 0.00        | 42055.39 | 0.00  | 42055.39 | 0.00       | -4007.75   | 0.00            |
| Other               | 0.00        | 0.00     | 0.04  | 0.04     | 0.00       | -25.85     | 0.00            |

## Total Report - Principal Facilities

| Category            | Withdrawals |         |       |         | Diversions |            | Consumptive Use |
|---------------------|-------------|---------|-------|---------|------------|------------|-----------------|
|                     | GLSW        | OSW     | GW    | TOTAL   | Intrabasin | Interbasin |                 |
| Public Supply       | 66.68       | 14.93   | 16.64 | 98.25   | -0.31      | 0.00       | 12.45           |
| Domestic Supply     | 0.75        | 0.39    | 0.00  | 1.14    | 0.00       | 0.00       | 0.11            |
| Irrigation          | 0.00        | 0.38    | 0.59  | 0.97    | 0.00       | 0.00       | 0.79            |
| Livestock           | 0.76        | 0.00    | 0.00  | 0.76    | 0.00       | 0.00       | 0.68            |
| Industrial          | 320.66      | 79.31   | 0.00  | 399.97  | 0.00       | 7.06       | 40.00           |
| Fossil Fuel Power   | 296.70      | 159.60  | 0.00  | 456.30  | 0.00       | 0.00       | 7.07            |
| Nuclear Power       | 0.00        | 0.00    | 0.00  | 0.00    | 0.00       | 0.00       | 0.00            |
| Hydroelectric Power | 0.00        | 3899.08 | 0.00  | 3899.08 | 0.00       | 0.00       | 0.00            |
| Other               | 0.00        | 0.00    | 0.00  | 0.00    | 0.00       | 0.00       | 0.00            |

## Water Use Category Tables

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

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

# WATER-USE CATEGORY REPORT - Public Supply

Units: Mgal(US)/d

Year Of Data: 2008

## Water-Use by Jurisdiction - All Facilities

| Jurisdiction | Withdrawals |        |        | TOTAL   | Diversions |            | Consumptive Use |
|--------------|-------------|--------|--------|---------|------------|------------|-----------------|
|              | GLSW        | OSW    | GW     |         | Intrabasin | Interbasin |                 |
| Illinois     | 956.07      | 0.00   | 0.00   | 956.07  | 0.00       | 956.07     | 0.00            |
| Indiana      | 94.57       | 33.06  | 55.03  | 182.66  | 0.00       | 2.80       | 27.39           |
| Michigan     | 866.22      | 20.57  | 214.21 | 1101.00 | 0.00       |            | 137.62          |
| Minnesota    | 31.84       | 2.00   | 6.15   | 39.99   | 0.00       | 0.00       | 3.99            |
| New York     | 374.58      | 278.10 | 46.02  | 698.70  | 0.00       | 9.59       | 69.88           |
| Ohio         | 415.98      | 103.71 | 34.92  | 554.61  | 0.00       | 0.32       | 83.20           |
| Ontario      | 493.88      | 177.55 | 91.57  | 763.00  | 0.00       | 0.00       | 114.45          |
| Pennsylvania | 28.77       | 0.10   | 1.23   | 30.10   | 0.00       | 0.00       | 3.01            |
| Quebec       | 602.84      | 497.17 | 0.00   | 1100.01 | 0.00       | 0.00       | 109.90          |
| Wisconsin    | 220.43      | 21.44  | 56.80  | 298.67  | 0.00       | 0.49       | 29.86           |

## Water-Use by Jurisdiction - Principal Facilities

| Jurisdiction | Withdrawals |        |        | TOTAL   | Diversions |            | Consumptive Use |
|--------------|-------------|--------|--------|---------|------------|------------|-----------------|
|              | GLSW        | OSW    | GW     |         | Intrabasin | Interbasin |                 |
| Illinois     | 956.07      | 0.00   | 0.00   | 956.07  | 0.00       | 956.07     | 0.00            |
| Indiana      | 94.57       | 33.06  | 54.71  | 182.34  | 0.00       | 0.00       | 27.35           |
| Michigan     | 866.09      | 20.50  | 200.39 | 1086.98 | 0.00       |            | 135.87          |
| Minnesota    | 31.47       | 1.97   | 5.60   | 39.04   | 0.00       | 0.00       | 3.91            |
| New York     | 4.00        | 0.00   | 0.00   | 4.00    | 0.00       | 9.59       | 0.00            |
| Ohio         | 415.98      | 103.59 | 31.56  | 551.13  | 0.00       | 0.32       | 82.67           |
| Ontario      | 493.17      | 176.61 | 87.00  | 756.78  | 0.00       | 0.00       | 113.52          |
| Pennsylvania | 28.77       | 0.10   | 1.23   | 30.10   | 0.00       | 0.00       | 3.01            |
| Quebec       | 602.58      | 493.47 | 0.00   | 1096.05 | 0.00       | 0.00       | 109.63          |
| Wisconsin    |             |        |        |         |            |            |                 |

# WATER-USE CATEGORY REPORT - Public Supply

Units: Mgal(US)/d

Year Of Data: 2008

## Water-Use by Basin - All Facilities

| Basin              | Withdrawals |        |        |         | Diversions |            | Consumptive Use |
|--------------------|-------------|--------|--------|---------|------------|------------|-----------------|
|                    | GLSW        | OSW    | GW     | TOTAL   | Intrabasin | Interbasin |                 |
| Lake Superior      | 70.65       | 15.03  | 18.81  | 104.48  | -0.31      | 0.00       | 13.09           |
| Lake Michigan      | 1401.69     | 21.44  | 251.05 | 1674.17 | 0.41       | 952.77     | 85.95           |
| Lake Huron         | 141.32      | 24.61  | 40.97  | 206.90  | 0.00       | 0.00       | 27.97           |
| Lake Erie          | 1266.45     | 257.78 | 141.30 | 1665.53 | -0.10      | 6.91       | 218.07          |
| Lake Ontario       | 588.80      | 223.13 | 44.74  | 856.66  | 0.00       | 9.59       | 108.97          |
| St. Lawrence River | 616.28      | 591.72 | 9.07   | 1217.06 | 0.00       | 0.00       | 125.25          |

## Water-Use by Basin - Principal Facilities

| Basin              | Withdrawals |        |        |         | Diversions |            | Consumptive Use |
|--------------------|-------------|--------|--------|---------|------------|------------|-----------------|
|                    | GLSW        | OSW    | GW     | TOTAL   | Intrabasin | Interbasin |                 |
| Lake Superior      | 66.68       | 14.93  | 16.64  | 98.25   | -0.31      | 0.00       | 12.45           |
| Lake Michigan      | 1184.83     | 0.00   | 187.38 | 1372.21 | 0.41       | 956.07     | 55.57           |
| Lake Huron         | 140.55      | 24.28  | 36.34  | 201.16  | 0.00       | 0.00       | 27.19           |
| Lake Erie          | 1085.95     | 185.43 | 126.73 | 1398.11 | -0.10      | 0.32       | 190.62          |
| Lake Ontario       | 401.47      | 52.68  | 10.47  | 464.62  | 0.00       | 9.59       | 69.69           |
| St. Lawrence River | 613.22      | 551.99 | 2.93   | 1168.13 | 0.00       | 0.00       | 120.45          |

# WATER-USE CATEGORY REPORT- Domestic Supply

Units: Mgal(US)/d

Year Of Data: 2008

## Water-Use by Jurisdiction - All Facilities

| Jurisdiction | Withdrawals |       |        | TOTAL  | Diversions |            | Consumptive Use |
|--------------|-------------|-------|--------|--------|------------|------------|-----------------|
|              | GLSW        | OSW   | GW     |        | Intrabasin | Interbasin |                 |
| Illinois     | 2.62        | 0.00  | 0.00   | 2.63   | 0.00       | 2.62       | 0.00            |
| Indiana      | 0.00        | 23.76 | 36.31  | 60.07  | 0.00       | 0.00       | 9.01            |
| Michigan     | 0.05        | 2.33  | 2.02   | 4.40   |            |            | 0.55            |
| Minnesota    | 0.79        | 0.39  | 0.01   | 1.19   | 0.00       | 0.00       | 0.12            |
| New York     | 52.29       | 77.64 | 71.98  | 201.91 | 0.00       | 0.00       | 20.18           |
| Ohio         | 0.30        | 0.07  | 58.49  | 58.86  | 0.00       | 0.00       | 8.83            |
| Ontario      | 0.00        | 0.00  | 107.91 | 107.91 | 0.00       | 0.00       | 16.19           |
| Pennsylvania | 0.00        | 0.00  | 0.00   | 0.00   | 0.00       | 0.00       | 0.00            |
| Quebec       | 0.00        | 0.00  | 71.59  | 71.59  | 0.00       | 0.00       | 7.13            |
| Wisconsin    | 0.00        | 0.00  | 32.34  | 32.34  | 0.00       | 0.00       | 3.23            |

## Water-Use by Jurisdiction - Principal Facilities

| Jurisdiction | Withdrawals |       |       | TOTAL | Diversions |            | Consumptive Use |
|--------------|-------------|-------|-------|-------|------------|------------|-----------------|
|              | GLSW        | OSW   | GW    |       | Intrabasin | Interbasin |                 |
| Illinois     | 2.62        | 0.00  | 0.00  | 2.63  | 0.00       | 2.62       | 0.00            |
| Indiana      | 0.00        | 23.74 | 7.57  | 31.31 | 0.00       | 0.00       | 4.69            |
| Michigan     | 0.05        | 2.31  | 1.73  | 4.09  |            |            | 0.51            |
| Minnesota    | 0.75        | 0.39  | 0.00  | 1.14  | 0.00       | 0.00       | 0.11            |
| New York     | 0.00        | 74.28 | 0.00  | 74.28 | 0.00       | 0.00       | 7.43            |
| Ohio         | 0.30        | 0.00  | 0.00  | 0.30  | 0.00       | 0.00       | 0.05            |
| Ontario      | 0.00        | 0.00  | 0.00  | 0.00  | 0.00       | 0.00       | 0.00            |
| Pennsylvania | 0.00        | 0.00  | 0.00  | 0.00  | 0.00       | 0.00       | 0.00            |
| Quebec       | 0.00        | 0.00  | 48.61 | 48.61 | 0.00       | 0.00       | 4.76            |
| Wisconsin    |             |       |       |       |            |            |                 |

# WATER-USE CATEGORY REPORT - Domestic Supply

Units: Mgal(US)/d

Year Of Data: 2008

## Water-Use by Basin - All Facilities

| Basin              | Withdrawals |       |        |        | Diversions |            | Consumptive Use |
|--------------------|-------------|-------|--------|--------|------------|------------|-----------------|
|                    | GLSW        | OSW   | GW     | TOTAL  | Intrabasin | Interbasin |                 |
| Lake Superior      | 0.79        | 0.39  | 2.88   | 4.06   | 0.00       | 0.00       | 0.49            |
| Lake Michigan      | 2.67        | 26.09 | 62.79  | 91.55  | 0.00       | 2.62       | 11.67           |
| Lake Huron         | 0.00        | 0.00  | 10.62  | 10.62  | 0.00       | 0.00       | 1.59            |
| Lake Erie          | 23.26       | 3.43  | 102.73 | 129.42 | 0.00       | 0.00       | 17.23           |
| Lake Ontario       | 29.33       | 65.67 | 104.86 | 199.86 | 0.00       | 0.00       | 23.20           |
| St. Lawrence River | 0.00        | 8.61  | 96.78  | 105.39 | 0.00       | 0.00       | 11.06           |

## Water-Use by Basin - Principal Facilities

| Basin              | Withdrawals |       |       |       | Diversions |            | Consumptive Use |
|--------------------|-------------|-------|-------|-------|------------|------------|-----------------|
|                    | GLSW        | OSW   | GW    | TOTAL | Intrabasin | Interbasin |                 |
| Lake Superior      | 0.75        | 0.39  | 0.00  | 1.14  | 0.00       | 0.00       | 0.11            |
| Lake Michigan      | 2.67        | 26.05 | 8.62  | 37.34 | 0.00       | 2.62       | 5.11            |
| Lake Huron         | 0.00        | 0.00  | 0.00  | 0.00  | 0.00       | 0.00       | 0.00            |
| Lake Erie          | 0.30        | 0.00  | 0.69  | 0.99  | 0.00       | 0.00       | 0.15            |
| Lake Ontario       | 0.00        | 65.67 | 0.00  | 65.67 | 0.00       | 0.00       | 6.57            |
| St. Lawrence River | 0.00        | 8.61  | 48.61 | 57.22 | 0.00       | 0.00       | 5.62            |

# WATER-USE CATEGORY REPORT- Irrigation

Units: Mgal(US)/d

Year Of Data: 2008

## Water-Use by Jurisdiction - All Facilities

| Jurisdiction | Withdrawals |       |        |        | Diversions |            | Consumptive Use |
|--------------|-------------|-------|--------|--------|------------|------------|-----------------|
|              | GLSW        | OSW   | GW     | TOTAL  | Intrabasin | Interbasin |                 |
| Illinois     | 0.00        | 0.00  | 0.11   | 0.11   | 0.00       | 0.00       | 0.00            |
| Indiana      | 0.00        | 7.42  | 31.40  | 38.82  | 0.00       | 0.00       | 34.94           |
| Michigan     | 0.67        | 80.17 | 207.13 | 287.97 |            |            | 259.18          |
| Minnesota    | 0.00        | 0.39  | 0.04   | 0.43   | 0.00       | 0.00       | 0.38            |
| New York     | 0.08        | 3.72  | 0.14   | 3.94   | 0.00       | 0.00       | 3.54            |
| Ohio         | 0.31        | 15.22 | 2.96   | 18.49  | 0.00       | 0.00       | 16.64           |
| Ontario      | 1.86        | 39.39 | 31.97  | 73.22  | 0.00       | 0.00       |                 |
| Pennsylvania | 0.18        | 0.89  | 0.00   | 1.07   | 0.00       | 0.00       | 0.96            |
| Quebec       | 0.00        | 0.00  | 9.22   | 9.22   | 0.00       | 0.00       | 8.30            |
| Wisconsin    | 0.00        | 4.05  | 110.60 | 114.65 | 0.00       | 0.00       | 79.56           |

## Water-Use by Jurisdiction - Principal Facilities

| Jurisdiction | Withdrawals |       |        |        | Diversions |            | Consumptive Use |
|--------------|-------------|-------|--------|--------|------------|------------|-----------------|
|              | GLSW        | OSW   | GW     | TOTAL  | Intrabasin | Interbasin |                 |
| Illinois     | 0.00        | 0.00  | 0.11   | 0.11   | 0.00       | 0.00       | 0.00            |
| Indiana      | 0.00        | 7.09  | 30.90  | 37.99  | 0.00       | 0.00       | 34.19           |
| Michigan     | 0.56        | 72.27 | 193.55 | 266.38 |            |            | 239.74          |
| Minnesota    | 0.00        | 0.11  | 0.00   | 0.11   | 0.00       | 0.00       | 0.01            |
| New York     | 0.08        | 3.72  | 0.14   | 3.94   | 0.00       | 0.00       | 3.54            |
| Ohio         | 0.29        | 13.41 | 2.19   | 15.89  | 0.00       | 0.00       | 14.28           |
| Ontario      |             |       |        |        | 0.00       | 0.00       |                 |
| Pennsylvania | 0.18        | 0.89  | 0.00   | 1.07   | 0.00       | 0.00       | 0.96            |
| Quebec       |             |       |        |        | 0.00       | 0.00       |                 |
| Wisconsin    |             |       |        |        |            |            |                 |

# WATER-USE CATEGORY REPORT- Irrigation

Units: Mgal(US)/d

Year Of Data: 2008

## Water-Use by Basin - All Facilities

| Basin              | Withdrawals |       |        |        | Diversions |            | Consumptive Use |
|--------------------|-------------|-------|--------|--------|------------|------------|-----------------|
|                    | GLSW        | OSW   | GW     | TOTAL  | Intrabasin | Interbasin |                 |
| Lake Superior      | 0.02        | 1.16  | 1.32   | 2.51   | 0.00       | 0.00       | 1.76            |
| Lake Michigan      | 0.19        | 72.58 | 325.33 | 398.10 | 0.00       | 0.00       | 334.72          |
| Lake Huron         | 0.31        | 24.39 | 18.59  | 43.29  | 0.00       | 0.00       | 20.14           |
| Lake Erie          | 1.48        | 37.91 | 31.55  | 70.95  | 0.00       | 0.00       | 35.18           |
| Lake Ontario       | 1.08        | 13.10 | 7.26   | 21.44  | 0.00       | 0.00       | 3.34            |
| St. Lawrence River | 0.01        | 2.11  | 9.52   | 11.64  | 0.00       | 0.00       | 8.36            |

## Water-Use by Basin - Principal Facilities

| Basin              | Withdrawals |       |        |        | Diversions |            | Consumptive Use |
|--------------------|-------------|-------|--------|--------|------------|------------|-----------------|
|                    | GLSW        | OSW   | GW     | TOTAL  | Intrabasin | Interbasin |                 |
| Lake Superior      | 0.00        | 0.38  | 0.59   | 0.97   | 0.00       | 0.00       | 0.79            |
| Lake Michigan      | 0.18        | 62.88 | 203.58 | 266.65 | 0.00       | 0.00       | 239.88          |
| Lake Huron         | 0.09        | 7.77  | 12.23  | 20.10  | 0.00       | 0.00       | 18.09           |
| Lake Erie          | 0.83        | 22.82 | 10.35  | 33.99  | 0.00       | 0.00       | 30.57           |
| Lake Ontario       | 0.00        | 3.57  | 0.14   | 3.71   | 0.00       | 0.00       | 3.34            |
| St. Lawrence River | 0.00        | 0.07  | 0.00   | 0.07   | 0.00       | 0.00       | 0.06            |



# WATER-USE CATEGORY REPORT- Livestock

Units: Mgal(US)/d

Year Of Data: 2008

## Water-Use by Jurisdiction - All Facilities

| Jurisdiction | Withdrawals |       |       |       | Diversions |            | Consumptive Use |
|--------------|-------------|-------|-------|-------|------------|------------|-----------------|
|              | GLSW        | OSW   | GW    | TOTAL | Intrabasin | Interbasin |                 |
| Illinois     |             |       |       |       |            |            |                 |
| Indiana      | 0.00        | 1.28  | 5.58  | 6.86  | 0.00       | 0.00       | 5.50            |
| Michigan     | 0.00        | 2.11  | 6.79  | 8.90  |            |            | 7.12            |
| Minnesota    | 0.82        | 0.00  | 0.00  | 0.82  | 0.00       | 0.00       | 0.74            |
| New York     | 5.20        | 21.04 | 18.92 | 45.16 | 0.00       | 0.00       | 40.64           |
| Ohio         | 0.00        | 1.76  | 10.69 | 12.45 | 0.00       | 0.00       | 9.96            |
| Ontario      | 2.95        | 8.67  | 25.47 | 37.09 | 0.00       | 0.00       |                 |
| Pennsylvania | 0.00        | 1.93  | 0.17  | 2.10  | 0.00       | 0.00       | 1.68            |
| Quebec       | 0.00        | 0.00  | 19.10 | 19.10 | 0.00       | 0.00       | 15.28           |
| Wisconsin    | 0.00        | 2.07  | 18.66 | 20.73 | 0.00       | 0.00       | 18.66           |

## Water-Use by Jurisdiction - Principal Facilities

| Jurisdiction | Withdrawals |      |      |       | Diversions |            | Consumptive Use |
|--------------|-------------|------|------|-------|------------|------------|-----------------|
|              | GLSW        | OSW  | GW   | TOTAL | Intrabasin | Interbasin |                 |
| Illinois     |             |      |      |       |            |            |                 |
| Indiana      | 0.00        | 1.28 | 2.55 | 3.83  | 0.00       | 0.00       | 3.07            |
| Michigan     | 0.00        | 1.93 | 2.30 | 4.24  |            |            | 3.39            |
| Minnesota    | 0.76        | 0.00 | 0.00 | 0.76  | 0.00       | 0.00       | 0.68            |
| New York     |             |      |      |       | 0.00       | 0.00       |                 |
| Ohio         | 0.00        | 0.00 | 0.35 | 0.35  | 0.00       | 0.00       | 0.28            |
| Ontario      |             |      |      |       | 0.00       | 0.00       |                 |
| Pennsylvania | 0.00        | 1.93 | 0.17 | 2.10  | 0.00       | 0.00       | 1.68            |
| Quebec       |             |      |      |       | 0.00       | 0.00       |                 |
| Wisconsin    |             |      |      |       |            |            |                 |

# WATER-USE CATEGORY REPORT- Livestock

Units: Mgal(US)/d

Year Of Data: 2008

## Water-Use by Basin - All Facilities

| Basin              | Withdrawals |       |       |       | Diversions |            | Consumptive Use |
|--------------------|-------------|-------|-------|-------|------------|------------|-----------------|
|                    | GLSW        | OSW   | GW    | TOTAL | Intrabasin | Interbasin |                 |
| Lake Superior      | 0.82        | 0.17  | 0.30  | 1.29  | 0.00       | 0.00       | 1.04            |
| Lake Michigan      | 0.00        | 4.40  | 27.97 | 32.38 | 0.00       | 0.00       | 27.95           |
| Lake Huron         | 2.93        | 3.82  | 7.92  | 14.67 | 0.00       | 0.00       | 1.81            |
| Lake Erie          | 0.93        | 7.77  | 29.45 | 38.15 | 0.00       | 0.00       | 20.84           |
| Lake Ontario       | 3.91        | 8.50  | 14.26 | 26.67 | 0.00       | 0.00       | 19.14           |
| St. Lawrence River | 0.38        | 14.19 | 25.47 | 40.04 | 0.00       | 0.00       | 28.80           |

## Water-Use by Basin - Principal Facilities

| Basin              | Withdrawals |      |      |       | Diversions |            | Consumptive Use |
|--------------------|-------------|------|------|-------|------------|------------|-----------------|
|                    | GLSW        | OSW  | GW   | TOTAL | Intrabasin | Interbasin |                 |
| Lake Superior      | 0.76        | 0.00 | 0.00 | 0.76  | 0.00       | 0.00       | 0.68            |
| Lake Michigan      | 0.00        | 2.35 | 4.30 | 6.65  | 0.00       | 0.00       | 5.33            |
| Lake Huron         | 0.00        | 0.71 | 0.56 | 1.27  | 0.00       | 0.00       | 1.01            |
| Lake Erie          | 0.00        | 2.08 | 0.52 | 2.60  | 0.00       | 0.00       | 2.08            |
| Lake Ontario       |             |      |      |       | 0.00       | 0.00       |                 |
| St. Lawrence River |             |      |      |       | 0.00       | 0.00       |                 |

# WATER-USE CATEGORY REPORT- Industrial

Units: Mgal(US)/d

Year Of Data: 2008

## Water-Use by Jurisdiction - All Facilities

| Jurisdiction | Withdrawals |        |        | TOTAL   | Diversions |            | Consumptive Use |
|--------------|-------------|--------|--------|---------|------------|------------|-----------------|
|              | GLSW        | OSW    | GW     |         | Intrabasin | Interbasin |                 |
| Illinois     | 19.61       | 0.00   | 0.00   | 19.61   | 0.00       | 0.02       | 0.17            |
| Indiana      | 1576.44     | 6.95   | 11.06  | 1594.45 | 0.00       | 0.00       | 95.66           |
| Michigan     | 187.32      | 179.33 | 107.81 | 474.47  |            |            | 47.45           |
| Minnesota    | 308.69      | 81.16  | 0.03   | 389.88  | 0.00       | 7.06       | 38.99           |
| New York     | 189.75      | 61.57  | 9.66   | 260.98  | 0.00       | 0.00       | 65.23           |
| Ohio         | 56.94       | 160.37 | 45.33  | 262.64  | 0.00       | 0.00       | 22.46           |
| Ontario      | 900.71      | 0.00   | 22.51  | 923.22  | 0.00       | 0.00       | 58.16           |
| Pennsylvania | 5.37        | 1.44   | 0.00   | 6.81    | 0.00       | 0.00       | 0.68            |
| Quebec       | 0.00        | 125.48 | 0.00   | 125.48  | 0.00       | 0.00       | 12.55           |
| Wisconsin    | 15.64       | 211.75 | 48.97  | 276.36  | 0.00       | 0.00       | 28.19           |

## Water-Use by Jurisdiction - Principal Facilities

| Jurisdiction | Withdrawals |        |        | TOTAL   | Diversions |            | Consumptive Use |
|--------------|-------------|--------|--------|---------|------------|------------|-----------------|
|              | GLSW        | OSW    | GW     |         | Intrabasin | Interbasin |                 |
| Illinois     | 19.61       | 0.00   | 0.00   | 19.61   | 0.00       | 0.02       | 0.17            |
| Indiana      | 1576.42     | 6.95   | 10.39  | 1593.76 | 0.00       | 0.00       | 95.62           |
| Michigan     | 187.32      | 179.06 | 105.05 | 471.42  |            |            | 47.14           |
| Minnesota    | 308.60      | 79.31  | 0.00   | 387.91  | 0.00       | 7.06       | 38.79           |
| New York     | 189.66      | 61.57  | 9.66   | 260.89  | 0.00       | 0.00       | 65.23           |
| Ohio         | 56.94       | 160.22 | 44.96  | 262.12  | 0.00       | 0.00       | 22.41           |
| Ontario      | 0.00        | 0.00   | 0.00   | 0.00    | 0.00       | 0.00       | 0.00            |
| Pennsylvania | 5.37        | 1.44   | 0.00   | 6.81    | 0.00       | 0.00       | 0.68            |
| Quebec       | 0.00        | 124.95 | 0.00   | 124.95  | 0.00       | 0.00       | 12.50           |
| Wisconsin    |             |        |        |         |            |            |                 |

# WATER-USE CATEGORY REPORT- Industrial

Units: Mgal(US)/d

Year Of Data: 2008

## Water-Use by Basin - All Facilities

| Basin              | Withdrawals |        |        |         | Diversions |            | Consumptive Use |
|--------------------|-------------|--------|--------|---------|------------|------------|-----------------|
|                    | GLSW        | OSW    | GW     | TOTAL   | Intrabasin | Interbasin |                 |
| Lake Superior      | 496.67      | 81.26  | 4.88   | 582.81  | 0.00       | 7.06       | 52.32           |
| Lake Michigan      | 1621.84     | 341.37 | 108.33 | 2071.53 | 0.00       | 0.02       | 142.43          |
| Lake Huron         | 190.36      | 35.21  | 25.88  | 251.45  | 0.00       | 0.00       | 18.11           |
| Lake Erie          | 550.61      | 184.10 | 84.23  | 818.94  | 0.00       | 0.00       | 96.22           |
| Lake Ontario       | 236.64      | 38.84  | 17.23  | 292.72  | 0.00       | 0.00       | 30.24           |
| St. Lawrence River | 164.35      | 147.27 | 4.82   | 316.44  | 0.00       | 0.00       | 30.22           |

## Water-Use by Basin - Principal Facilities

| Basin              | Withdrawals |        |       |         | Diversions |            | Consumptive Use |
|--------------------|-------------|--------|-------|---------|------------|------------|-----------------|
|                    | GLSW        | OSW    | GW    | TOTAL   | Intrabasin | Interbasin |                 |
| Lake Superior      | 320.66      | 79.31  | 0.00  | 399.97  | 0.00       | 7.06       | 40.00           |
| Lake Michigan      | 1619.98     | 129.64 | 61.72 | 1811.34 | 0.00       | 0.02       | 115.91          |
| Lake Huron         | 2.95        | 35.16  | 22.75 | 60.86   | 0.00       | 0.00       | 6.09            |
| Lake Erie          | 377.28      | 183.81 | 76.04 | 637.13  | 0.00       | 0.00       | 84.73           |
| Lake Ontario       | 18.47       | 38.84  | 5.77  | 63.08   | 0.00       | 0.00       | 15.77           |
| St. Lawrence River | 4.59        | 146.74 | 3.77  | 155.10  | 0.00       | 0.00       | 20.04           |

# WATER-USE CATEGORY REPORT- Fossil Fuel Power

Units: Mgal(US)/d

Year Of Data: 2008

## Water-Use by Jurisdiction - All Facilities

| Jurisdiction | Withdrawals |         |      | TOTAL   | Diversions |            | Consumptive Use |
|--------------|-------------|---------|------|---------|------------|------------|-----------------|
|              | GLSW        | OSW     | GW   |         | Intrabasin | Interbasin |                 |
| Illinois     | 917.95      | 0.00    | 0.00 | 917.95  | 0.00       | 0.00       | 0.00            |
| Indiana      | 767.22      | 0.00    | 0.27 | 767.49  | 0.00       | 0.00       | 15.35           |
| Michigan     | 5307.31     | 1068.51 | 3.89 | 6379.71 |            |            | 76.56           |
| Minnesota    | 39.84       | 159.60  | 0.10 | 199.54  | 0.00       | 0.00       | 3.99            |
| New York     | 1128.48     | 356.89  | 0.00 | 1485.37 | 0.00       | 0.00       | 29.71           |
| Ohio         | 1692.95     | 734.67  | 0.00 | 2427.62 | 0.00       | 0.00       | 24.28           |
| Ontario      | 1467.67     | 0.00    | 0.00 | 1467.67 | 0.00       | 0.00       | 0.00            |
| Pennsylvania | 0.00        | 0.00    | 0.00 | 0.00    | 0.00       | 0.00       | 0.00            |
| Quebec       | 39.10       | 7.93    | 0.00 | 47.02   | 0.00       | 0.00       | 4.70            |
| Wisconsin    | 2753.61     | 650.76  | 0.00 | 3404.37 | 0.00       | 0.00       | 17.02           |

## Water-Use by Jurisdiction - Principal Facilities

| Jurisdiction | Withdrawals |         |      | TOTAL   | Diversions |            | Consumptive Use |
|--------------|-------------|---------|------|---------|------------|------------|-----------------|
|              | GLSW        | OSW     | GW   |         | Intrabasin | Interbasin |                 |
| Illinois     | 917.95      | 0.00    | 0.00 | 917.95  | 0.00       | 0.00       | 0.00            |
| Indiana      | 767.22      | 0.00    | 0.27 | 767.49  | 0.00       | 0.00       | 15.35           |
| Michigan     | 5307.31     | 1068.51 | 3.89 | 6379.71 |            |            | 76.56           |
| Minnesota    | 39.84       | 159.60  | 0.00 | 199.44  | 0.00       | 0.00       | 3.99            |
| New York     | 1128.48     | 356.89  | 0.00 | 1485.37 | 0.00       | 0.00       | 29.71           |
| Ohio         | 1692.95     | 734.67  | 0.00 | 2427.62 | 0.00       | 0.00       | 24.28           |
| Ontario      | 0.00        | 0.00    | 0.00 | 0.00    | 0.00       | 0.00       | 0.00            |
| Pennsylvania | 0.00        | 0.00    | 0.00 | 0.00    | 0.00       | 0.00       | 0.00            |
| Quebec       | 39.10       | 7.93    | 0.00 | 47.02   | 0.00       | 0.00       | 4.70            |
| Wisconsin    |             |         |      |         |            |            |                 |

# WATER-USE CATEGORY REPORT - Fossil Fuel Power

Units: Mgal(US)/d

Year Of Data: 2008

## Water-Use by Basin - All Facilities

| Basin              | Withdrawals |         |      |         | Diversions |            | Consumptive Use |
|--------------------|-------------|---------|------|---------|------------|------------|-----------------|
|                    | GLSW        | OSW     | GW   | TOTAL   | Intrabasin | Interbasin |                 |
| Lake Superior      | 642.78      | 160.04  | 0.10 | 802.92  | 0.00       | 0.00       | 7.32            |
| Lake Michigan      | 5090.17     | 1124.99 | 2.65 | 6217.82 | 0.00       | 0.00       | 46.26           |
| Lake Huron         | 180.11      | 476.19  | 1.11 | 657.42  | 0.00       | 0.00       | 7.89            |
| Lake Erie          | 7118.11     | 852.31  | 0.40 | 7970.82 | 0.00       | 0.00       | 91.59           |
| Lake Ontario       | 1043.83     | 356.89  | 0.00 | 1400.72 | 0.00       | 0.00       | 13.84           |
| St. Lawrence River | 39.12       | 7.93    | 0.00 | 47.04   | 0.00       | 0.00       | 4.70            |

## Water-Use by Basin - Principal Facilities

| Basin              | Withdrawals |        |      |         | Diversions |            | Consumptive Use |
|--------------------|-------------|--------|------|---------|------------|------------|-----------------|
|                    | GLSW        | OSW    | GW   | TOTAL   | Intrabasin | Interbasin |                 |
| Lake Superior      | 296.70      | 159.60 | 0.00 | 456.30  | 0.00       | 0.00       | 7.07            |
| Lake Michigan      | 2387.12     | 474.67 | 2.65 | 2864.45 | 0.00       | 0.00       | 29.49           |
| Lake Huron         | 180.11      | 476.19 | 1.11 | 657.42  | 0.00       | 0.00       | 7.89            |
| Lake Erie          | 6654.91     | 852.31 | 0.40 | 7507.62 | 0.00       | 0.00       | 91.59           |
| Lake Ontario       | 334.88      | 356.89 | 0.00 | 691.77  | 0.00       | 0.00       | 13.84           |
| St. Lawrence River | 39.12       | 7.93   | 0.00 | 47.04   | 0.00       | 0.00       | 4.70            |

# WATER-USE CATEGORY REPORT- Nuclear Power

Units: Mgal(US)/d

Year Of Data: 2008

## Water-Use by Jurisdiction - All Facilities

| Jurisdiction | Withdrawals |      |      | TOTAL    | Diversions |            | Consumptive Use |
|--------------|-------------|------|------|----------|------------|------------|-----------------|
|              | GLSW        | OSW  | GW   |          | Intrabasin | Interbasin |                 |
| Illinois     | 31.68       | 0.00 | 0.00 | 31.68    | 0.00       | 0.00       | 0.00            |
| Indiana      | 0.00        | 0.00 | 0.00 | 0.00     | 0.00       | 0.00       | 0.00            |
| Michigan     | 2119.21     | 0.00 | 0.00 | 2119.21  |            |            | 40.26           |
| Minnesota    | 0.00        | 0.00 | 0.00 | 0.00     | 0.00       | 0.00       | 0.00            |
| New York     | 1403.04     | 0.00 | 0.00 | 1403.04  | 0.00       | 0.00       | 70.15           |
| Ohio         | 148.95      | 0.00 | 0.00 | 148.95   | 0.00       | 0.00       | 14.90           |
| Ontario      | 10125.39    | 0.00 | 0.00 | 10125.39 | 0.00       | 0.00       | 91.13           |
| Pennsylvania | 0.00        | 0.00 | 0.00 | 0.00     | 0.00       | 0.00       | 0.00            |
| Quebec       | 0.00        | 0.00 | 0.00 | 0.00     | 0.00       | 0.00       | 0.00            |
| Wisconsin    | 1828.09     | 0.00 | 0.80 | 1828.89  | 0.00       | 0.00       | 9.14            |

## Water-Use by Jurisdiction - Principal Facilities

| Jurisdiction | Withdrawals |      |      | TOTAL   | Diversions |            | Consumptive Use |
|--------------|-------------|------|------|---------|------------|------------|-----------------|
|              | GLSW        | OSW  | GW   |         | Intrabasin | Interbasin |                 |
| Illinois     | 31.68       | 0.00 | 0.00 | 31.68   | 0.00       | 0.00       | 0.00            |
| Indiana      | 0.00        | 0.00 | 0.00 | 0.00    | 0.00       | 0.00       | 0.00            |
| Michigan     | 2119.21     | 0.00 | 0.00 | 2119.21 |            |            | 40.26           |
| Minnesota    | 0.00        | 0.00 | 0.00 | 0.00    | 0.00       | 0.00       | 0.00            |
| New York     | 1403.04     | 0.00 | 0.00 | 1403.04 | 0.00       | 0.00       | 70.15           |
| Ohio         | 148.95      | 0.00 | 0.00 | 148.95  | 0.00       | 0.00       | 14.90           |
| Ontario      | 0.00        | 0.00 | 0.00 | 0.00    | 0.00       | 0.00       | 0.00            |
| Pennsylvania | 0.00        | 0.00 | 0.00 | 0.00    | 0.00       | 0.00       | 0.00            |
| Quebec       | 0.00        | 0.00 | 0.00 | 0.00    | 0.00       | 0.00       | 0.00            |
| Wisconsin    |             |      |      |         |            |            |                 |

# WATER-USE CATEGORY REPORT- Nuclear Power

Units: Mgal(US)/d

Year Of Data: 2008

## Water-Use by Basin - All Facilities

| Basin              | Withdrawals |      |      |         | Diversions |            | Consumptive Use |
|--------------------|-------------|------|------|---------|------------|------------|-----------------|
|                    | GLSW        | OSW  | GW   | TOTAL   | Intrabasin | Interbasin |                 |
| Lake Superior      | 0.00        | 0.00 | 0.00 | 0.00    | 0.00       | 0.00       | 0.00            |
| Lake Michigan      | 3926.31     | 0.00 | 0.80 | 3927.11 | 0.00       | 0.00       | 48.40           |
| Lake Huron         | 4697.20     | 0.00 | 0.00 | 4697.20 | 0.00       | 0.00       | 42.28           |
| Lake Erie          | 201.62      | 0.00 | 0.00 | 201.62  | 0.00       | 0.00       | 15.90           |
| Lake Ontario       | 6831.23     | 0.00 | 0.00 | 6831.23 | 0.00       | 0.00       | 119.00          |
| St. Lawrence River | 0.00        | 0.00 | 0.00 | 0.00    | 0.00       | 0.00       | 0.00            |

## Water-Use by Basin - Principal Facilities

| Basin              | Withdrawals |      |      |         | Diversions |            | Consumptive Use |
|--------------------|-------------|------|------|---------|------------|------------|-----------------|
|                    | GLSW        | OSW  | GW   | TOTAL   | Intrabasin | Interbasin |                 |
| Lake Superior      | 0.00        | 0.00 | 0.00 | 0.00    | 0.00       | 0.00       | 0.00            |
| Lake Michigan      | 2098.22     | 0.00 | 0.00 | 2098.22 | 0.00       | 0.00       | 39.26           |
| Lake Huron         | 0.00        | 0.00 | 0.00 | 0.00    | 0.00       | 0.00       | 0.00            |
| Lake Erie          | 201.62      | 0.00 | 0.00 | 201.62  | 0.00       | 0.00       | 15.90           |
| Lake Ontario       | 1403.04     | 0.00 | 0.00 | 1403.04 | 0.00       | 0.00       | 70.15           |
| St. Lawrence River | 0.00        | 0.00 | 0.00 | 0.00    | 0.00       | 0.00       | 0.00            |



# WATER-USE CATEGORY REPORT - Hydroelectric Power

Units: Mgal(US)/d

Year Of Data: 2008

## Water-Use by Jurisdiction - All Facilities

| Jurisdiction | Withdrawals |           |      |           | Diversions |            | Consumptive Use |
|--------------|-------------|-----------|------|-----------|------------|------------|-----------------|
|              | GLSW        | OSW       | GW   | TOTAL     | Intrabasin | Interbasin |                 |
| Illinois     |             |           |      |           |            |            |                 |
| Indiana      | 0.00        | 1930.50   | 0.00 | 1930.50   | 0.00       | 0.00       | 0.00            |
| Michigan     |             |           |      |           |            |            |                 |
| Minnesota    | 0.00        | 3899.08   | 0.00 | 3899.08   | 0.00       | 0.00       | 0.00            |
| New York     | 128690.00   | 179600.00 | 0.00 | 308290.00 | 0.00       | 0.00       | 0.00            |
| Ohio         | 0.00        | 0.00      | 0.00 | 0.00      | 0.00       | 0.00       | 0.00            |
| Ontario      | 130010.47   | 59531.37  | 0.00 | 189541.84 | 0.00       | -4007.75   | 0.00            |
| Pennsylvania | 0.00        | 0.00      | 0.00 | 0.00      | 0.00       | 0.00       | 0.00            |
| Quebec       | 170946.25   | 132949.60 | 0.00 | 303895.85 | 0.00       | 0.00       | 0.00            |
| Wisconsin    | 0.00        | 0.00      | 0.00 | 0.00      | 0.00       | 0.00       | 0.00            |

## Water-Use by Jurisdiction - Principal Facilities

| Jurisdiction | Withdrawals |           |      |           | Diversions |            | Consumptive Use |
|--------------|-------------|-----------|------|-----------|------------|------------|-----------------|
|              | GLSW        | OSW       | GW   | TOTAL     | Intrabasin | Interbasin |                 |
| Illinois     |             |           |      |           |            |            |                 |
| Indiana      | 0.00        | 1930.50   | 0.00 | 1930.50   | 0.00       | 0.00       | 0.00            |
| Michigan     |             |           |      |           |            |            |                 |
| Minnesota    | 0.00        | 3899.08   | 0.00 | 3899.08   | 0.00       | 0.00       | 0.00            |
| New York     | 128690.00   | 0.00      | 0.00 | 128690.00 | 0.00       | 0.00       | 0.00            |
| Ohio         | 0.00        | 0.00      | 0.00 | 0.00      | 0.00       | 0.00       | 0.00            |
| Ontario      | 0.00        | 0.00      | 0.00 | 0.00      | 0.00       | 0.00       | 0.00            |
| Pennsylvania | 0.00        | 0.00      | 0.00 | 0.00      | 0.00       | 0.00       | 0.00            |
| Quebec       | 170946.25   | 132949.60 | 0.00 | 303895.85 | 0.00       | 0.00       | 0.00            |
| Wisconsin    |             |           |      |           |            |            |                 |

# WATER-USE CATEGORY REPORT - Hydroelectric Power

Units: Mgal(US)/d

Year Of Data: 2008

## Water-Use by Basin - All Facilities

| Basin              | Withdrawals |           |      |           | Diversions |            | Consumptive Use |
|--------------------|-------------|-----------|------|-----------|------------|------------|-----------------|
|                    | GLSW        | OSW       | GW   | TOTAL     | Intrabasin | Interbasin |                 |
| Lake Superior      | 0.00        | 42055.39  | 0.00 | 42055.39  | 0.00       | -4007.75   | 0.00            |
| Lake Michigan      | 0.00        | 1930.50   | 0.00 | 1930.50   | 0.00       | 0.00       | 0.00            |
| Lake Huron         | 20000.41    | 13607.66  | 0.00 | 33608.07  | 0.00       | 0.00       | 0.00            |
| Lake Erie          | 45584.00    | 0.00      | 0.00 | 45584.00  | 0.00       | 0.00       | 0.00            |
| Lake Ontario       | 33861.04    | 88589.26  | 0.00 | 122450.31 | 0.00       | 0.00       | 0.00            |
| St. Lawrence River | 330201.28   | 231727.72 | 0.00 | 561929.00 | 0.00       | 0.00       | 0.00            |

## Water-Use by Basin - Principal Facilities

| Basin              | Withdrawals |           |      |           | Diversions |            | Consumptive Use |
|--------------------|-------------|-----------|------|-----------|------------|------------|-----------------|
|                    | GLSW        | OSW       | GW   | TOTAL     | Intrabasin | Interbasin |                 |
| Lake Superior      | 0.00        | 3899.08   | 0.00 | 3899.08   | 0.00       | 0.00       | 0.00            |
| Lake Michigan      | 0.00        | 1930.50   | 0.00 | 1930.50   | 0.00       | 0.00       | 0.00            |
| Lake Huron         | 0.00        | 0.00      | 0.00 | 0.00      | 0.00       | 0.00       | 0.00            |
| Lake Erie          | 45584.00    | 0.00      | 0.00 | 45584.00  | 0.00       | 0.00       | 0.00            |
| Lake Ontario       | 0.00        | 0.00      | 0.00 | 0.00      | 0.00       | 0.00       | 0.00            |
| St. Lawrence River | 254052.25   | 132949.60 | 0.00 | 387001.85 | 0.00       | 0.00       | 0.00            |

# WATER-USE CATEGORY REPORT- Other

Units: Mgal(US)/d

Year Of Data: 2008

## Water-Use by Jurisdiction - All Facilities

| Jurisdiction | Withdrawals |        |      | TOTAL  | Diversions |            | Consumptive Use |
|--------------|-------------|--------|------|--------|------------|------------|-----------------|
|              | GLSW        | OSW    | GW   |        | Intrabasin | Interbasin |                 |
| Illinois     | 557.87      | 0.00   | 0.00 | 557.87 | 0.00       | 557.87     | 0.00            |
| Indiana      | 0.00        | 0.00   | 0.04 | 0.04   | 0.00       | 0.00       | 0.01            |
| Michigan     | 0.00        | 1.45   | 1.35 | 2.80   |            |            | 0.00            |
| Minnesota    | 0.00        | 0.00   | 0.04 | 0.04   | 0.00       | 0.00       | 0.00            |
| New York     | 0.00        | 43.79  | 0.24 | 44.03  | 0.00       | 32.00      | 33.23           |
| Ohio         | 0.69        | 7.16   | 0.32 | 8.17   | 0.00       | -12.80     | 2.05            |
| Ontario      | 0.00        | 199.61 | 0.00 | 199.61 | 61.97      | 0.00       | 0.00            |
| Pennsylvania | 0.00        | 0.00   | 0.00 | 0.00   | 0.00       | 0.00       | 0.00            |
| Quebec       |             |        |      |        | 0.00       | 0.00       |                 |
| Wisconsin    | 0.00        | 0.00   | 0.00 | 0.00   | 0.00       | -25.85     |                 |

## Water-Use by Jurisdiction - Principal Facilities

| Jurisdiction | Withdrawals |        |      | TOTAL  | Diversions |            | Consumptive Use |
|--------------|-------------|--------|------|--------|------------|------------|-----------------|
|              | GLSW        | OSW    | GW   |        | Intrabasin | Interbasin |                 |
| Illinois     | 557.87      | 0.00   | 0.00 | 557.87 | 0.00       | 557.87     | 0.00            |
| Indiana      | 0.00        | 0.00   | 0.00 | 0.00   | 0.00       | 0.00       | 0.00            |
| Michigan     | 0.00        | 1.45   | 1.35 | 2.80   |            |            | 0.00            |
| Minnesota    | 0.00        | 0.00   | 0.00 | 0.00   | 0.00       | 0.00       | 0.00            |
| New York     | 0.00        | 43.79  | 0.13 | 43.92  | 0.00       | 32.00      | 33.23           |
| Ohio         | 0.69        | 7.15   | 0.22 | 8.06   | 0.00       | -12.80     | 2.00            |
| Ontario      | 0.00        | 199.61 | 0.00 | 199.61 | 61.97      | 0.00       | 0.00            |
| Pennsylvania | 0.00        | 0.00   | 0.00 | 0.00   | 0.00       | 0.00       | 0.00            |
| Quebec       |             |        |      |        | 0.00       | 0.00       |                 |
| Wisconsin    |             |        |      |        |            |            |                 |

# WATER-USE CATEGORY REPORT - Public Supply

Units: Mgal(US)/d

Year Of Data: 2008

## Water-Use by Basin - All Facilities

| Basin              | Withdrawals |        |        |         | Diversions |            | Consumptive Use |
|--------------------|-------------|--------|--------|---------|------------|------------|-----------------|
|                    | GLSW        | OSW    | GW     | TOTAL   | Intrabasin | Interbasin |                 |
| Lake Superior      | 70.65       | 15.03  | 18.81  | 104.48  | -0.31      | 0.00       | 13.09           |
| Lake Michigan      | 1401.69     | 21.44  | 251.05 | 1674.17 | 0.41       | 952.77     | 85.95           |
| Lake Huron         | 141.32      | 24.61  | 40.97  | 206.90  | 0.00       | 0.00       | 27.97           |
| Lake Erie          | 1266.45     | 257.78 | 141.30 | 1665.53 | -0.10      | 6.91       | 218.07          |
| Lake Ontario       | 588.80      | 223.13 | 44.74  | 856.66  | 0.00       | 9.59       | 108.97          |
| St. Lawrence River | 616.28      | 591.72 | 9.07   | 1217.06 | 0.00       | 0.00       | 125.25          |

## Water-Use by Basin - Principal Facilities

| Basin              | Withdrawals |        |        |         | Diversions |            | Consumptive Use |
|--------------------|-------------|--------|--------|---------|------------|------------|-----------------|
|                    | GLSW        | OSW    | GW     | TOTAL   | Intrabasin | Interbasin |                 |
| Lake Superior      | 66.68       | 14.93  | 16.64  | 98.25   | -0.31      | 0.00       | 12.45           |
| Lake Michigan      | 1184.83     | 0.00   | 187.38 | 1372.21 | 0.41       | 956.07     | 55.57           |
| Lake Huron         | 140.55      | 24.28  | 36.34  | 201.16  | 0.00       | 0.00       | 27.19           |
| Lake Erie          | 1085.95     | 185.43 | 126.73 | 1398.11 | -0.10      | 0.32       | 190.62          |
| Lake Ontario       | 401.47      | 52.68  | 10.47  | 464.62  | 0.00       | 9.59       | 69.69           |
| St. Lawrence River | 613.22      | 551.99 | 2.93   | 1168.13 | 0.00       | 0.00       | 120.45          |