

**ANNUAL REPORT of the
GREAT LAKES REGIONAL WATER USE
DATA BASE REPOSITORY**

Representing 1989 Water Use Data

Prepared by:
Great Lakes Commission

Prepared for:
Water Resources Management Committee

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ACKNOWLEDGMENTS

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PREFACE

The Great Lakes Regional Water Use Data Base, housed at the Great Lakes Commission, provides a centralized source of information on water withdrawal, diversion and consumptive use throughout the U.S.-Canada Great Lakes Basin. The Commission prepares an annual report, based upon data submitted by the eight Great Lakes states and two Great Lakes provinces. Such data is organized on the basis of political jurisdiction, lake sub-basin and category of water use.

This report presents 1989 water use data, as submitted by the states and provinces. It is organized into three principal sections:

- o An introduction section, which describes the structure and operation of the Data Base Repository; the role of state and provincial members of the Water Resources Management Committee; and issues associated with data reporting and analysis.
- o A Great Lakes Basin Summary section that provides an overview of basin water use by jurisdiction, sub-basin and use category. Much of this information is presented via pie charts to facilitate review.
- o An extensive set of appendices, comprised of computer print-outs, that present water use data as submitted by the states and provinces.

The Great Lakes Commission welcomes all inquiries concerning the Great Lakes Regional Water Use Data Base Repository.

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SECTION ONE

BACKGROUND ON THE GREAT LAKES REGIONAL WATER USE DATA BASE REPOSITORY

The Regional Water Use Data Base became operational in the summer of 1988, following a multi-year cooperative effort in the design and development of the data base system. This included input from, and involvement of, numerous state, provincial and federal agencies. Much of the leadership on this effort was provided by the U.S. Geological Survey. Also, in the fall of 1987, the Great Lakes Commission contracted Acres International Ltd. of Niagara Falls, Ontario to develop, design and install the system and to provide state, provincial, and Commission staff training.

The operation and use of this data base system represents one of several ongoing activities on behalf of the Great Lakes states and provinces to fulfill the obligations of the Great Lakes Charter, signed in 1985 by the Great Lakes governors and premiers. Continued state/provincial interest in refining and expanding the data base is necessary to ensure that the data base can support other ongoing Charter initiatives, such as the development of a Basin Water Resources Management Program, demand forecasting techniques and regional water conservation programs.

ISSUES REGARDING THE OPERATION OF THE DATA BASE

Substantial progress has been made in addressing the various issues and problems encountered in the preparation of the first two annual reports of the Regional Water Use Data Base Repository, representing water use data for 1987 and 1988.

The single largest challenge at present relates to each jurisdiction's ability to provide complete water use data that coincides with the calendar year that the annual report represents.

The following are jurisdiction-specific issues and problems that require priority attention by the WRMC during 1991-1992.

The water use data collecting and reporting situation has not yet been rectified in Michigan, despite legislation passed in December 1990 designed to strengthen the state's water management efforts through a mandatory reporting program. Michigan was unable to submit complete water use data for calendar year 1989. The summary data presented for the Michigan Great Lakes Basin is therefore the same data submitted for the first two annual reports.

The base year of this data is 1985 and represents only five categories of use: public water supply (category 1); self supply - irrigation (category 4); self supply - industrial (category 6); self supply - thermoelectric (fossil fuel plants) (category 7); and self supply - thermoelectric (nuclear plants) (category 8). Complete data were provided only for the last two categories. According to the Michigan Department of Natural Resources, categories 7 and 8 represent about 75 percent of the total water withdrawals from the Michigan Great Lakes Basin.

Also, the withdrawal and consumptive use data provided for public water supply (category 1), self supply - irrigation (category 4), and self supply - industrial (category 6) cannot presently be reported by individual sub-basin or water withdrawal type.

Incorporation of jurisdiction-wide summary data represents a considerable problem for the repository when data submittals do not comply with the parameters of the data base. Statewide totals that cannot be "broken down" by sub-basin or withdrawal type must be inserted into the summary tables by the Repository prior to printing. Since these total figures cannot be entered in the data base program, automatic generation of multiple tables or summary reports with different units of measurements is not possible. Due to the incomplete nature of the data stored, the repository is prevented from mailing diskette copies of the yearly data to jurisdictions for their own use.

Pennsylvania indicates that its data collection and reporting operations are constrained by the number of personnel available. Data reported by various water users is not added to the Commonwealth's computerized data base annually. As a result, some of the data submitted to the Great Lakes Commission for this 1991 annual report are drawn from earlier reports. Public water suppliers complete and submit an annual water supply report, but only half of the reports are entered into the system each year. Some 16,000 industrial water users are surveyed on a cycle, which totally updates the data files every third year. Other water users are added to the system on a recurring, but not necessarily annual basis. With the extremely limited number of users and withdrawals in the Great Lakes Basin area of Pennsylvania, manual tracking may be the best answer to provide the overview necessary to ensure that appropriate information is furnished annually.

STATE AND PROVINCIAL ACTIVITIES

In October 1988, the Water Resources Management Committee asked the Great Lakes Commission to convene a Technical Work Group to begin developing uniform estimation procedures for water withdrawal and consumptive use information, and to address a series of regional priority issues regarding the operation of the Regional Water Use Data Base. These issues were identified in the February 1989 Report of the Water Resources Management Committee to the Great Lakes Governors and Premiers and appeared in the First Annual Report of the Regional Water Use Data Base.

The Technical Work Group met via telephone conference call on numerous occasions from late 1988 through 1989 to begin addressing the above mentioned issues. Work Group participants represent various state, provincial, and federal agencies and are listed in the acknowledgments of this report.

The Work Group has concentrated its efforts on ensuring that each jurisdiction will be able to report the most complete, uniform data possible to the Repository. To do this, the group focused its early attention on refining and expanding the definitions of the nine active categories of use in the Regional Water Use Data Base.

A starting point for discussion was provided by review of the December 1986 U.S. Geological Survey (U.S.G.S.) report, *Water Use Data Collection Programs and Regional Data Base in the Great Lakes - St. Lawrence River States and Provinces* (open File Report 86-546), and the February 1987 Water Resources Management Committee report, *Managing the Waters of the Great Lakes Basin*.

The water use categories for the Regional Water Use Data Base are shown in Table 1.

Table 1
Water Use Categories

Number	Name
1	Public Supply
2	Reserved for Future Use
3	Self Supply - Domestic (Residential, Commercial, Institutional)
4	Self Supply - Irrigation
5	Self Supply - Livestock
6	Self Supply - Industrial (Manufacturing and Mining)
7	Self Supply - Thermoelectric Power - Fossil Fuel Plants
8	Self Supply - Thermoelectric Power - Nuclear Plants
9	Self Supply - Hydroelectric Power
10	Other (Navigation, Water Quality, Environmental)

The original definitions of these categories appear in *Managing the Waters of the Great Lakes Basin* (pp. 21-22; French version pp. 23-24). Table 2 incorporates the Technical Work Group's revisions. The descriptions appearing in normal type represent the original definitions. Italics highlight the revisions or expansions that were arrived at through extended discussion.

TABLE 2

CATEGORIES OF USE FOR THE REGIONAL WATER USE DATA BASE

Final Definitions

1. Public Water Supply - Water withdrawn for all uses by public and private water suppliers and delivered to users that do not supply their own water. (Water suppliers provide water for a variety of uses such as residential, commercial, industrial and public water use.)
2. Reserved for Future Use - (This category represents unused capacity on the data base system.)
3. Self Supply - Domestic (residential, commercial, institutional) - Water used for normal household purposes. Also referred to as residential water use, this category includes water used for drinking, food preparation, bathing, washing clothes and dishes, flushing toilets, and watering lawns. *Commercial uses include water used by motels, hotels, restaurants, office buildings and institutions, both civilian and military. This category also includes water for mobile homes, hospitals, schools, fire fighting, air conditioning and other similar uses that are not covered under a public supply. In addition, this category includes amusement and recreational services and activities for uses such as snowmaking and water slides. The coefficient for domestic per capita water use is 75 gallons per day (U.S.) unless otherwise indicated by the reporting state or province.*
4. 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.
5. Self Supply - Livestock - *Water used by horses, cattle, sheep, goats, hogs, poultry, and other commercially important animals. Water used in fish hatchery operation is also included under this category.*
6. 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; 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 uses in a closed cycle (recirculation) will not be reported as a withdrawal. Other situations should be evaluated on a case-by-case basis.*
7. 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.*
8. Self Supply - Thermoelectric Power (nuclear plants) - *Water used by plants fueled by nuclear generation. Withdrawals and consumptive uses already recorded under another category (e.g., public supply) will not be reported here.*
9. 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.

10. Other - Water used for purposes not reported in categories one through nine. Examples include, but are not limited to, withdrawals and consumption for fish/wildlife, environmental, recreation, navigation, and water quality purposes. Specifically, water used to maintain levels for navigation, for recreation, for fish and wildlife habitat creation and enhancement (excluding fish hatchery operations included under Category 5), for flow augmentation (or diversion), for sanitation, pollution confinement, and other water quality purposes and agricultural activities (services) other than those directly related to irrigation such as field drainage are included. Water used in temporary or intermediate emergency situations (e.g., fighting forest or peat fires) is also reported here.

Summarized Work Group discussion on withdrawals and consumptive uses for self-supply irrigation and livestock is presented in tabular form as Table 3-1, Appendix A-3. Water use coefficient information for self-supply irrigation and self-supply livestock appear in Appendix A-3 as Tables 3-2 and 3-3.

Principal Facilities: Definition

The question has been raised by the Technical Work Group as to whether principal facilities should be defined by single source withdrawals (i.e., Great Lakes surface water) in excess of the Charter trigger level of 100,000 U.S. gal/day average (380,000 L/day) over a 30-day period, or whether the total withdrawal (all sources combined) should determine a principal facility. The Work Group agreed that the total withdrawal should determine whether or not a facility is a principal facility.

The following represents the revised definition of a principal facility as developed by the Technical Work Group:

Principal Facilities - facilities withdrawing (or consuming) in excess of the Great Lakes Charter uniform trigger level of 100,000 US gal/day (380,000 L/day) average over a 30-day period. A principal facility is determined by the total withdrawal (or consumption) of all sources combined (Great Lakes surface water, other surface water and groundwater) rather than a single source. The combined withdrawals (or consumption) of separate wells or operations undertaken by the same facility or company will be evaluated separately for the purpose of determining principal facility status unless those operations are covered under the same registration (or permit) or are physically contiguous.

DATA BASE DESCRIPTION AND DEFINITIONS

The Great Lakes Regional Water Use Data Base has been established for use on IBM PC-compatible microcomputers in conjunction with the dBASE III Plus commercial data base software package. The data base is housed at the offices of the Great Lakes Commission in Ann Arbor, Michigan. Routine data base operations are controlled by a customized program prepared using dBASE III Plus capabilities. This program includes standard data entry, retrieval and report generation options.

The Great Lakes Regional Water Use Data Base serves as a common repository of data and information on water use in the Great Lakes Basin as described in the Great Lakes Charter. The data base catalogs the annual data on withdrawals and consumptive uses of Great Lakes water by water-use category, subbasin and jurisdiction, as specified by the Water Resources Management Committee.

The 1989 water use data presented in this report were submitted to the Regional Water Use Data Base Repository by the Great Lakes states and provinces between September 30 and November 29, 1990. Data submitted to the Regional Water Use Data Base Repository are provided in one of two units: million gallons (U.S.) per day (mgd) or million litres per day (mld). Each jurisdiction is required to select one of these on a consistent basis for all data submissions. The data base records corresponding to the jurisdictions are maintained in the selected units.

All values in the data base are initially set to zero. Numeric values are required for all active categories of use. A zero value implies either zero water use or water use not meeting the Charter trigger level of 100,000 gallons (380,000 litres) per day average over a 30 day period. All nonzero values in the summary tables are positive except for incoming diversion values which are negative.

There are two measures of the quality of data provided for each data entry: level of accuracy and level of aggregation. The level of accuracy indicates whether withdrawals are measured or estimated. The level of aggregation provides an indication as to whether the withdrawal data originate from site-specific sources or from higher level aggregate sources such as county or census data bases.

Each type of water-use category includes three withdrawal/discharge types. These types are as follows:

Great Lakes Surface Water (GLSW) - defined as 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.

Other Surface Water (OSW) - defined as tributary streams, lakes, ponds, and reservoirs within the Great Lakes Basin.

Groundwater (GW) - defined as all subsurface water distinct from surface water.

The following is a list of other important definitions pertaining to the use of the Great Lakes Regional Water Use Data Base summary tables:

Withdrawal Amount - The amount of water removed or taken from surface or groundwater.

Intrabasin Diversion - The amount of water transferred from the watershed of one of the Great Lakes into that of another.

Interbasin Diversion: - The amount of water transferred from the Great Lakes Basin into another watershed.

Consumptive Use: - That portion of water withdrawn or withheld from the Great Lakes and assumed to be lost or otherwise not returned to the Great Lakes Basin due to evaporation, incorporation into products or other processes.

SECTION TWO

GREAT LAKES BASIN SUMMARY

OVERVIEW

The following tables and figures present 1989 Great Lakes water use data submitted to the Regional Water Use Data Base Repository from the ten Great Lakes states and provinces for the nine active categories of use.

The State of Michigan was unable to provide data to the repository for this annual report. Water use data submitted for the past two Annual Reports of the Regional Water Use Data Base Repository have again been included by Michigan's request. A similar procedure was used for Pennsylvania, as discussed earlier.

In total, water withdrawals in the Great Lakes Basin for 1989 were approximately 1.05 trillion gallons per day (bgd) or approximately 4.0 trillion litres per day (tld). Of this, 62 percent (645 bgd; 2.4 tld) is used directly from/in the Great Lakes, their connecting channels, or the St. Lawrence River.

Daily water withdrawal of 1.05 trillion gallons is the equivalent of approximately 28,400 gallons of water per Great Lakes Basin resident per day (assuming a population of 37 million). Put another way, 1.05 trillion gallons of water per day is more than seven times the average annual outflow of Lake Ontario (238,000 cfs; 154 bgd). For purposes of this report, it is important to note that the term "withdrawal" is used broadly and encompasses hydroelectric water use, more typically defined as an "instream use." Instream use as defined by the U.S.G.S. is water that is used but not withdrawn from a ground or surface water source for such purposes as hydroelectric power generation, navigation, water quality improvement, fish propagation and recreation. In the Great Lakes Basin (and for the U.S. and Canada as a whole) fresh surface water provides virtually all of the water for hydroelectric power and virtually all of the water is returned to Great Lakes Basin rivers and streams. (U.S.G.S., Estimated Use of Water in the U.S. in 1985, circular 1004).

Self supply - hydroelectric, as noted in all the previous Annual Reports of the Repository, continues to be the largest single category of use and represents more than 95 percent (989 bgd; 3.7 tld) of the total amount of water used per day (Figure 1). For this report, it is important to note the definitions of water withdrawal and water use. *Withdrawal* is water removed from the ground or diverted from a surface water source for use. *Water Use* is the combination of self supplied withdrawals plus public supply deliveries. It refers to water that is actually used for a specific purpose such as for domestic use, irrigation or industrial processing. (U.S.G.S., National Water Information Program, 1992).

Figure 2 presents the ten jurisdictions' total 1989 withdrawals. However, subtracting hydroelectric uses from the total gives a clearer picture of the true water use in the Great Lakes (Figures 3 and 4). Water withdrawals from the remaining eight categories of use for 1989 were approximately 57.25 bgd or 216.7 billion litres per day (bld) (Figure 5). This would be equivalent to about 1,550 gallons per day for every person living in the Basin. Of the 57.25 bgd (216.7 bld) actually withdrawn from the Great Lakes, approximately 97 percent of the reported amount (about 55.4 bgd; 209.7 bld) is returned.

Reported consumptive uses of Great Lakes water for 1989 were approximately 1.84 bgd (6.9 bld). Combined, Ontario and Michigan account for about 60 percent (1.1 bgd; 4.2 bld) of the total amount of water consumed per day in the Great Lakes Basin.

Outgoing interbasin diversions were 1.4 bgd (5.3 bld), with about 81 percent (1.1 bgd) of that total diverted from the Illinois Lake Michigan Basin. Incoming interbasin diversions reported to the data base were 5.2 bgd (19.5 bld), almost all into the Ontario Lake Superior Basin (the Ogoki and Long Lac diversions), with a small percentage diverted into Lake Erie.

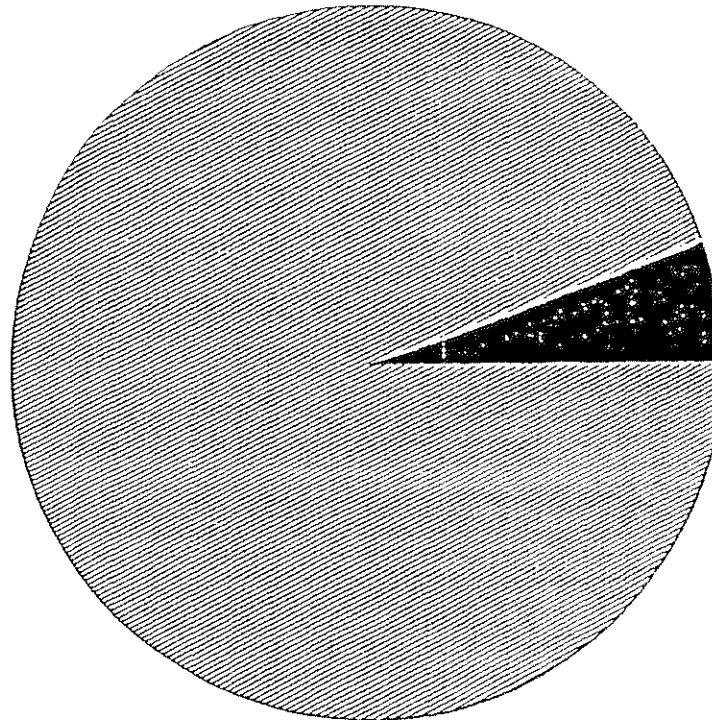
FIGURE 1

1989 GREAT LAKES BASIN WATER USE Hydroelectric vs. All Other Categories

Self-supply Hydroelectric

989 BGal(U.S.)/day*

3,744 BL/day*



Other Categories of Use

57.25 BGal(U.S.)/day*

216.70 BL/day*

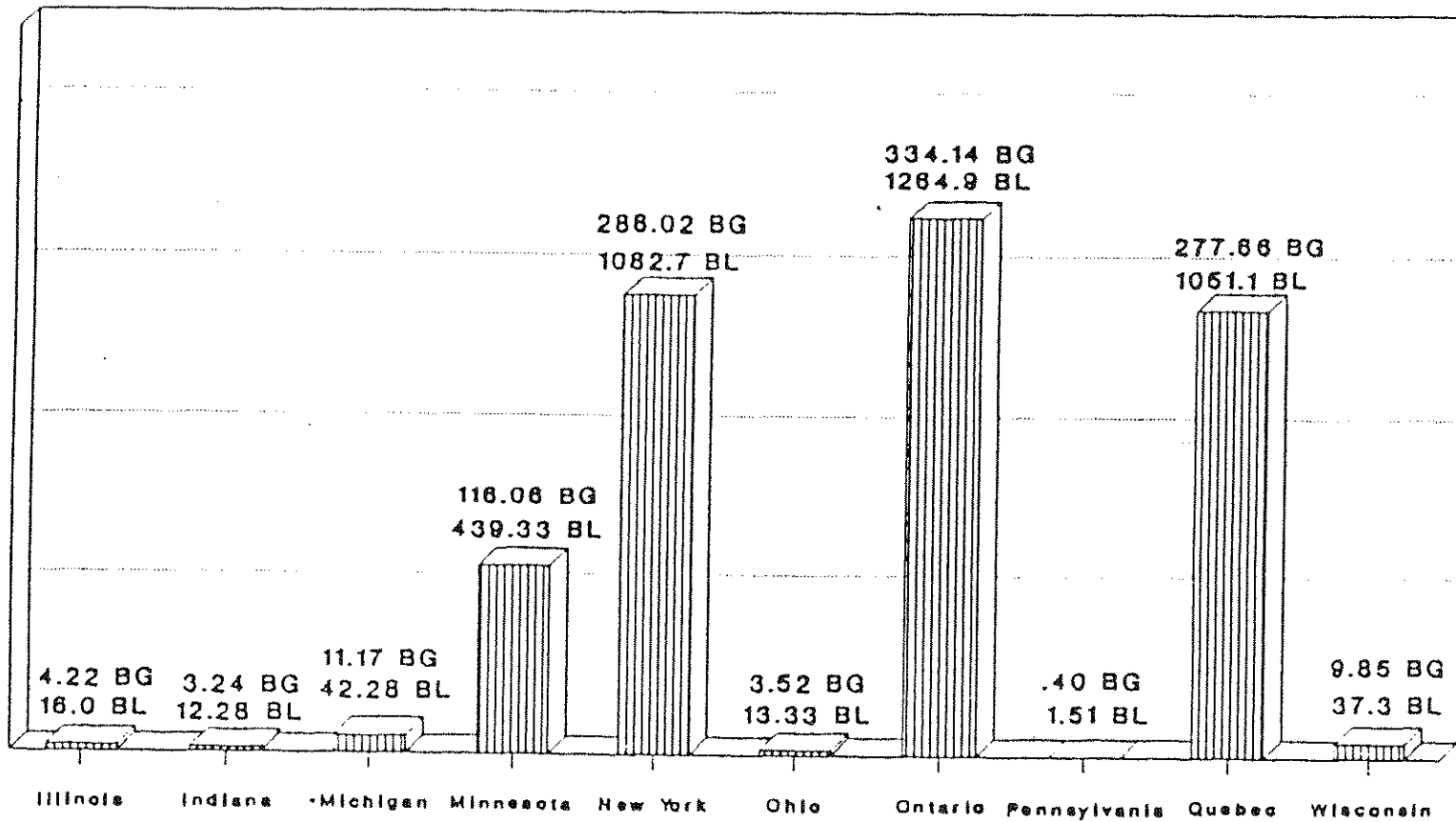
Self-Supply Hydroelectric represents
94.5% of water withdrawals in the Basin.

*1989 State of Michigan data incomplete.

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FIGURE 2

TOTAL 1989 GREAT LAKES BASIN WATER USE BY JURISDICTION



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BG-Billion gallons(U.S.)/day
BL-Billion litres/day

 Total Water Use

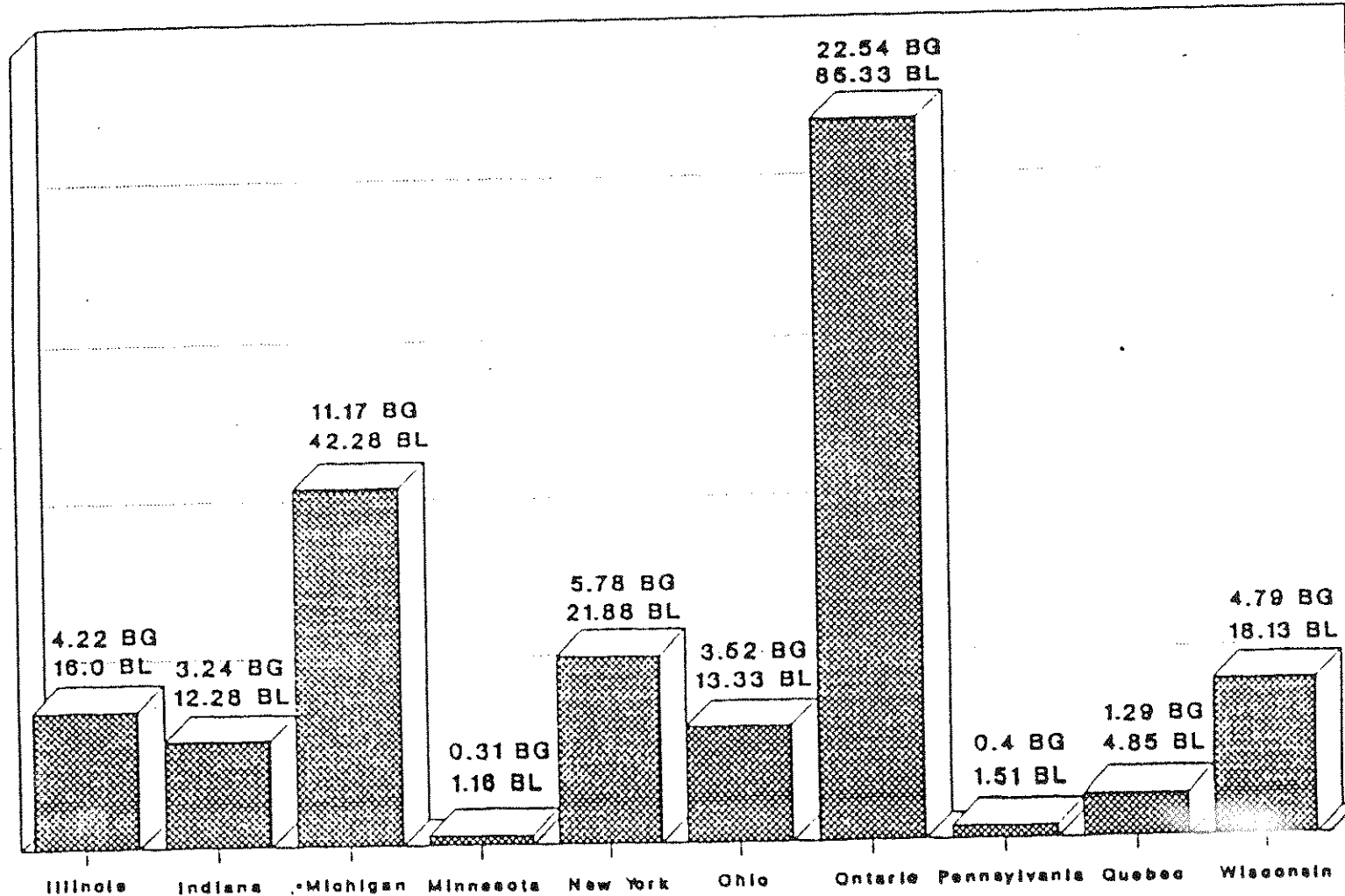
*1989 State of Michigan data incomplete.

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FIGURE 3

1989 GREAT LAKES BASIN WATER USE (EXCLUDING HYDRO) BY JURISDICTION

BG-Billion gallons (U.S.)/day BL-Billion litres/day



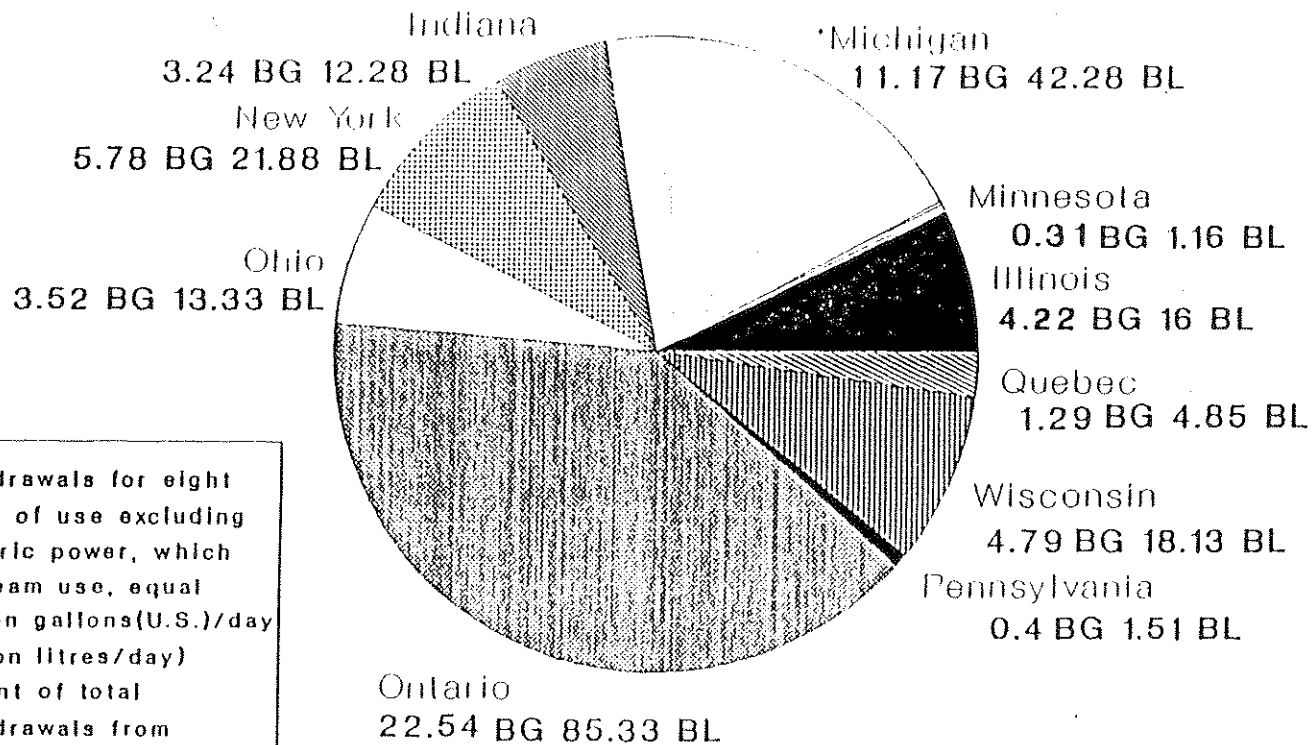
*1989 State of Michigan data incomplete.

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FIGURE 4

1989 GREAT LAKES BASIN WATER USE (EXCLUDING HYDRO) BY JURISDICTION

BG=Billion gallons (U.S.)/day BL=Billion litres/day



Total withdrawals for eight categories of use excluding hydroelectric power, which is an instream use, equal 57.25 Billion gallons(U.S.)/day (216.7 Billion litres/day) or 5 percent of total water withdrawals from the Great Lakes Basin.

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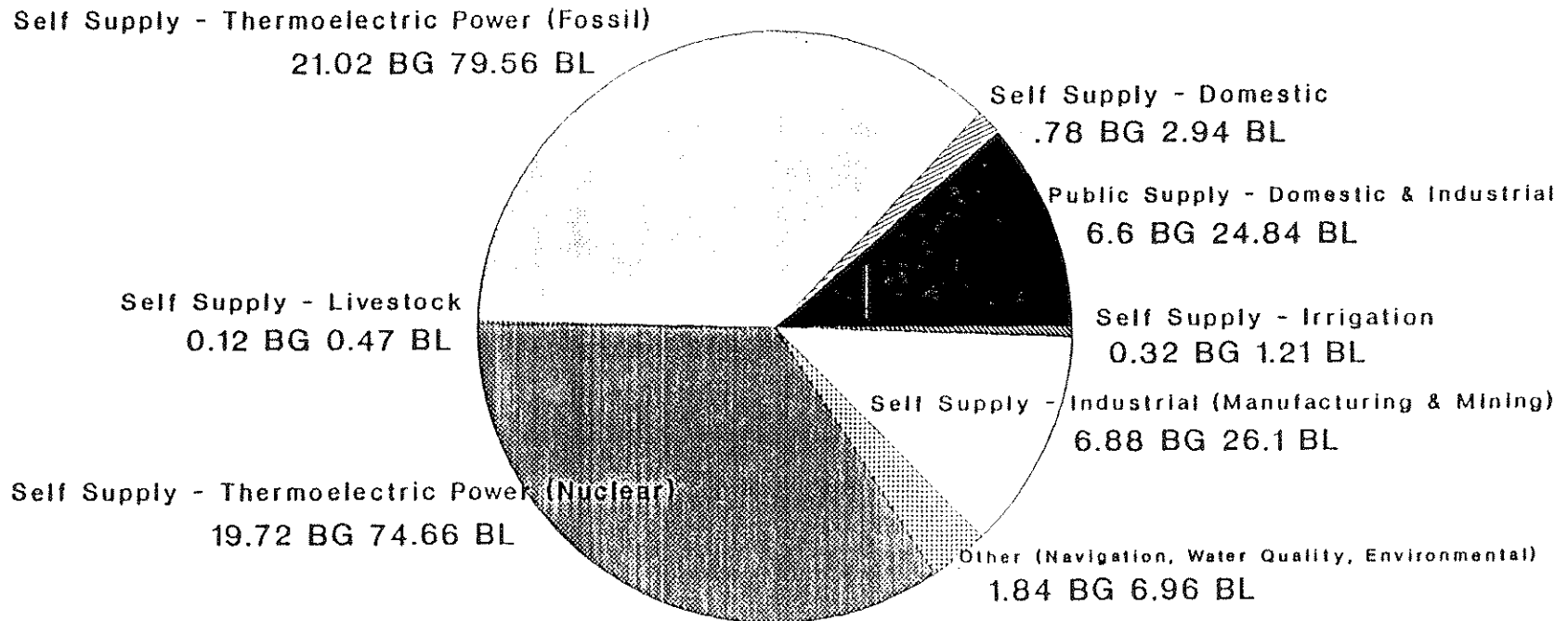
• 1989 State of Michigan data incomplete

FIGURE 5

1989 GREAT LAKES BASIN WATER USE

All Categories of Use Except Hydro*

BG=Billion gallons (U.S.)/day BL=Billion litres/day



Non-Hydro uses [57.25 BGal(U.S.)/day 216.70 BL/day]
equal 5% of total water withdrawals in the Great Lakes Basin

*1989 State of Michigan data incomplete

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JURISDICTION REPORTS

Following are summaries of individual state and provincial water uses for 1989.

Questions on individual data collection and reporting programs or for specific categories of use should be directed to the appropriate jurisdiction. Appendices A-1 and A-2 present the subbasin reports and individual water use category reports in summary table form.

ILLINOIS

The water-use data collection activities in Illinois are undertaken by two state agencies: the Department of Transportation - Division of Water Resources and the Department of Energy and Natural Resources - State Water Survey.

The data submitted to the Regional Water Use Data Base for calendar year 1989 were provided by the Illinois Department of Transportation - Division of Water Resources.

Total withdrawals from the Lake Michigan Basin of Illinois were 4.22 bgd (Figure 6). Combined, withdrawals for public supply and for thermoelectric power (nuclear plants) represent about 78 percent of this total (3.27 bgd).

Consumptive uses for the Lake Michigan Basin of Illinois total 2.0 mgd, all attributed to self supply - industrial uses.

Diversions from the Lake Michigan Basin of Illinois totaled approximately 1.4 bgd. Of this amount, approximately 79% or 1.1 bgd are for public water supply. All diversions for Illinois are outgoing interbasin diversions; that is, water transferred from the Great Lakes Basin into another watershed.

The withdrawal data submitted by the Illinois DOT to the Repository were 34 percent measured and 66 percent calculated and 100 percent site-specific.

INDIANA

Data for 1989 submitted to the Regional Water Use Data Base for the Lake Michigan and Lake Erie Basins of Indiana were provided by the Department of Natural Resources - Division of Water.

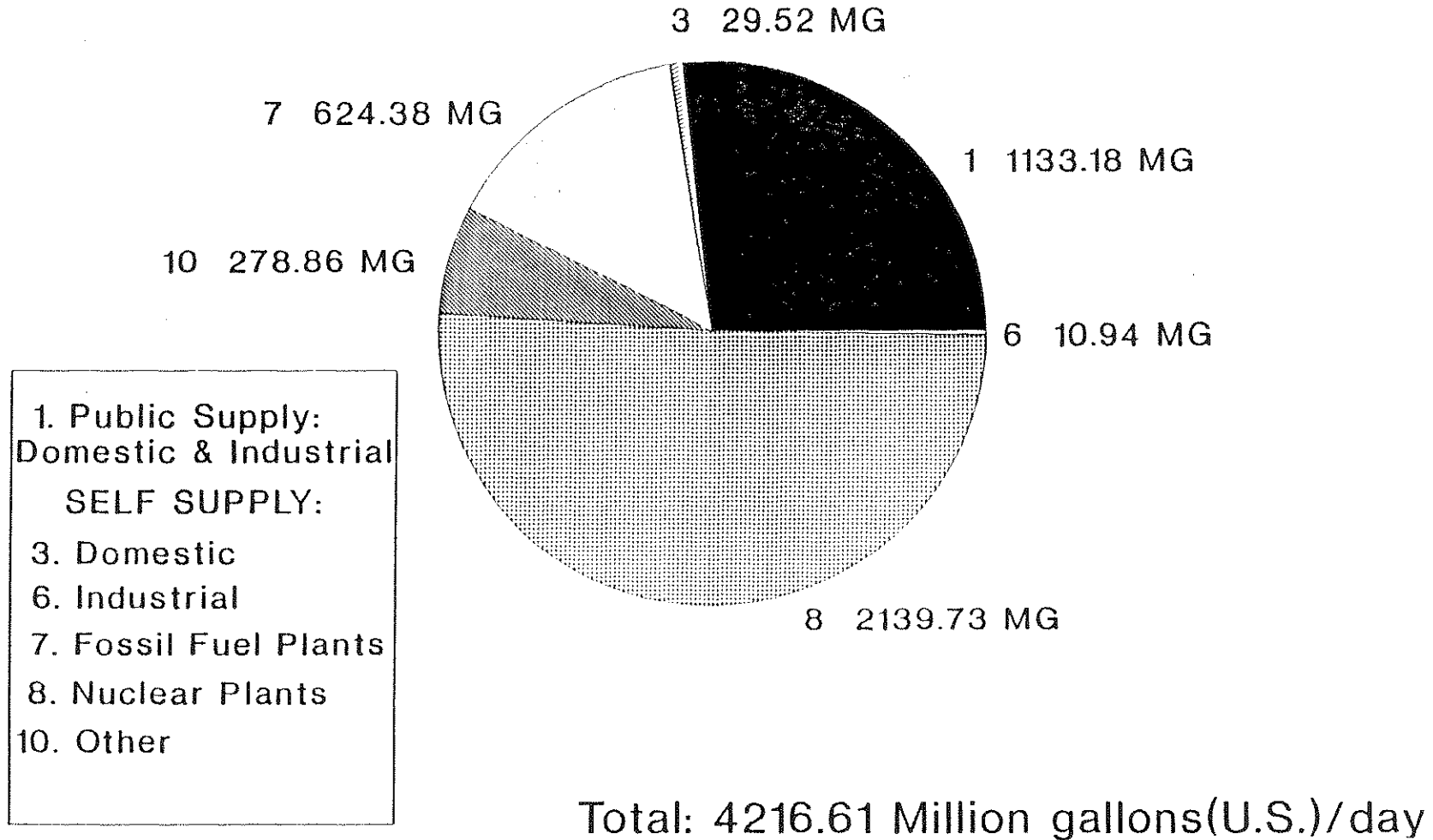
Total withdrawals from the two basins were more than 3.2 bgd (Figure 7). More than 98 percent (about 3.18 bgd) of the total volume was from the Lake Michigan Basin, with slightly less than 2 percent (56 mgd) from the Lake Erie Basin.

More than 93 percent (about 2.98 bgd) of the total volume of water withdrawals from the Indiana Lake Michigan Basin were for two categories of use: self supply - industrial and self supply - thermoelectric (fossil fuel plants). More than 66 percent of the total Indiana Lake Erie Basin withdrawal volume was for public water supply (about 37.5 mgd).

Consumptive uses for the two basins totaled more than 195 mgd. Of this amount, about 185 mgd (almost 95 percent) of the total volume were from the Lake Michigan Basin and approximately 9.6 mgd (about 5 percent) of the total volume were from the Lake Erie Basin.

FIGURE 6

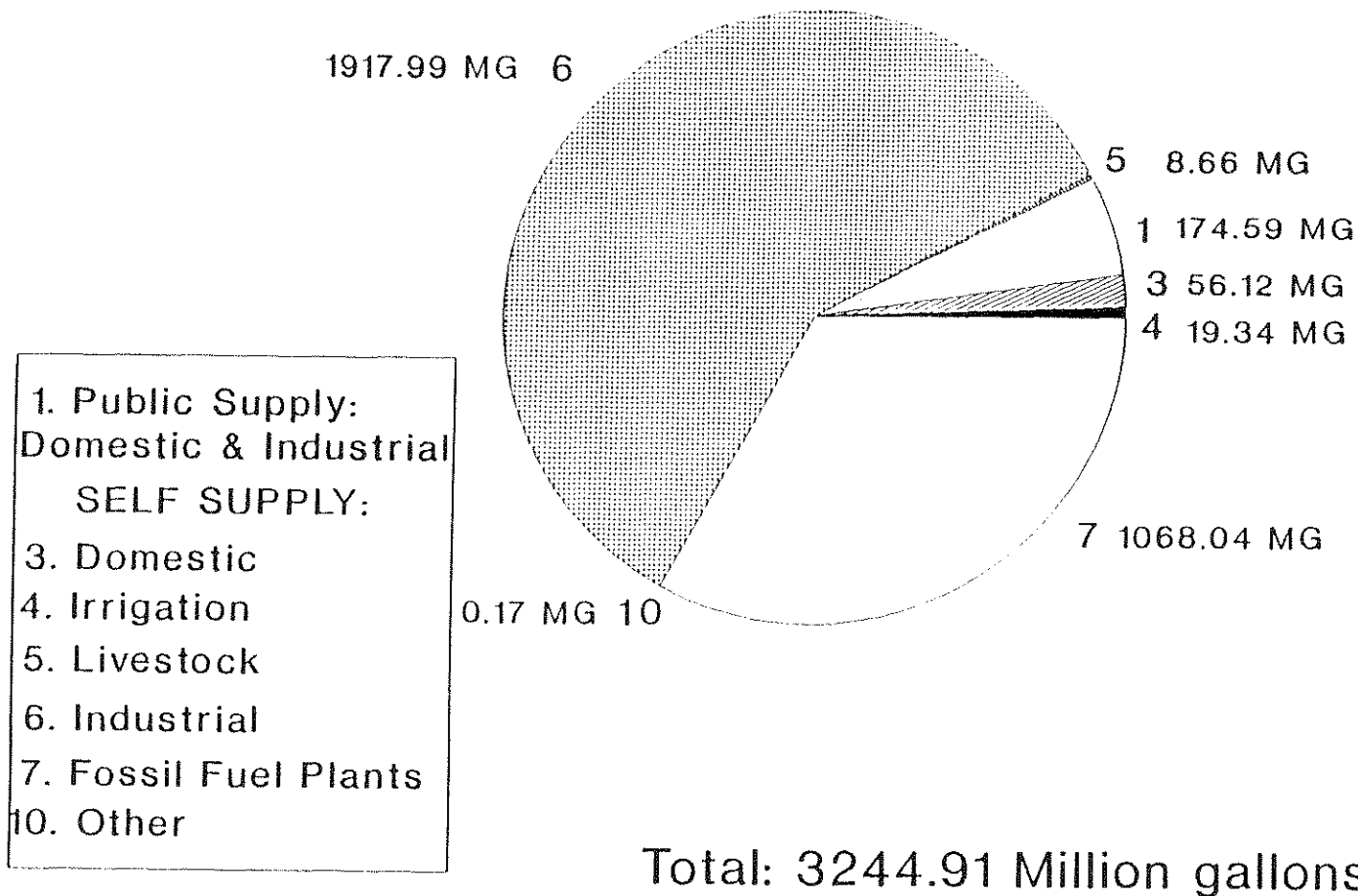
1989 GREAT LAKES BASIN WATER USE ILLINOIS (Million gallons(U.S.)/day)



- 1. Public Supply: Domestic & Industrial
- SELF SUPPLY:
- 3. Domestic
- 6. Industrial
- 7. Fossil Fuel Plants
- 8. Nuclear Plants
- 10. Other

FIGURE 7

1989 GREAT LAKES BASIN WATER USE INDIANA (Million gallons(U.S.)/day)



15

Self supply - industrial is the major category for consumptive use in the Indiana Lake Michigan Basin, representing 114.6 mgd, almost 62 percent of the total. For Lake Erie, public water supply uses consumed 5.6 mgd, representing nearly 58 percent of the total.

There are no interbasin or intrabasin diversions in the Indiana Great Lakes Basin that meet the Charter trigger level of 100,000 gallons (380,000 litres) per day average over a 30 day period.

Indiana's data were 5.4 percent measured, 92 percent partially measured, 2.6 percent estimated and 98 percent site-specific.

MICHIGAN

Water use data collection activities in Michigan are undertaken by the Departments of Natural Resources, Public Health, and the U.S. Geological Survey.

Michigan was unable to submit current water use data to the Regional Water Use Data Base Repository for calendar year 1989.

Public Acts 326 and 327 enacted by the Michigan legislature in 1990, should remedy this problem when fully implemented. These laws will require industries, power plants, and agricultural irrigators with the capacity to withdrawal over 100,000 gallons a day average in any 30-day period to report their water use annually. The state is charged with developing a "formula or model" over the next five years to estimate agricultural water use in the future.

The data presented in this report were provided by the Michigan Department of Natural Resources (DNR) and are the same data appearing in the last two Annual Reports of the Great Lakes Regional Water Use Data Base Repository.

The base year of this data is 1985. The information provided is from Michigan's water management plan (*Water Resources for the Future: Technical Document, Great Lakes and Water Resources Planning Commission, September, 1987*).

The Michigan data represent only five categories of use: public water supply (category 1); self supply - irrigation (category 4); self supply - industrial (category 6); self supply - thermoelectric (fossil fuel plants) (category 7); and self supply - thermoelectric (nuclear plants) (category 8). Complete 1985 data were provided for these last two categories which, according to the Michigan DNR, represent about 75 percent of the total water withdrawals from the Michigan Great Lakes Basin.

Withdrawal and consumptive use data provided for categories 1, 4 and 6 cannot presently be reported by individual subbasin or water withdrawal type. The available data were added to the state totals for the appropriate category to reflect more accurately the aggregate water withdrawals and uses in the state. The Michigan DNR estimates that the five water use categories combined represent about 98 percent of the state's total water withdrawals.

Reported water withdrawals for the Lake Superior, Lake Michigan, Lake Huron and Lake Erie Basins of Michigan were approximately 11.2 billion gallons per day (bgd).

Withdrawals from the Lake Erie Basin account for at least 38 percent (4.2 bgd) of the total volume.

Self supply - thermoelectric (fossil fuel plants) withdrawals represent the largest single category accounting for almost 56 percent (6.2 bgd) of the total.

Consumptive uses in the Michigan Great Lakes Basin were approximately 589 million gallons per day with self supply - irrigation accounting for more than 38 percent of the total. From the base year (1985) data, Michigan reported consumption of 589.04 mgd for the five categories of use (where data were available).

There are no reported interbasin or intrabasin diversions in the Michigan Great Lakes Basin that meet the Charter trigger level of 100,000 gallons per day (380,000 litres per day) average over a 30 day period.

The Michigan data provided to the Repository is 11 percent measured, 87 percent partially measured, 2 percent estimated and 98 percent site-specific.

MINNESOTA

Water use data submitted to the Regional Water Use Data Base for the Lake Superior Basin of Minnesota were provided by the Department of Natural Resources, Division of Waters.

Withdrawals from the Minnesota Lake Superior Basin for 1989 were approximately 116 bgd. One category, self supply - hydroelectric, represents more than 99 percent of the total (115.75 bgd). Hydropower water use was derived by the U.S.G.S. from power generation data supplied by the Minnesota Department of Energy. Figure 8 presents Minnesota's total water use (excluding hydroelectric) for 1989.

Consumptive uses for the Minnesota Lake Superior Basin totaled about 48 mgd. Self supply - industrial and public water supply uses combined represented more than 94 percent of the total (45.6 mgd).

Minnesota has no intrabasin or interbasin diversions that meet the Charter trigger level requirement of 100,000 gallons per day (380,000 litres per day) average over a 30 day period.

The data reported for the Lake Superior Basin of Minnesota were 99.7 percent measured, 0.2 percent partially measured, 0.1 percent estimated and 99.9 percent site-specific.

NEW YORK

Water use data collection in New York is undertaken by the Departments of Environmental Conservation, Health, and the U.S. Geological Survey. The 1989 data provided to the Regional Water Use Data Base for the Lake Erie, Lake Ontario and St. Lawrence River Basins were provided by the New York State Department of Environmental Conservation - Division of Water.

Withdrawals from the Great Lakes Basin for 1989 were 286 bgd; Lake Erie represented about .4 percent (1.39 bgd) of the total; Lake Ontario represented 52 percent (148 bgd) and the St. Lawrence River represented about 47.6 percent (136 bgd). Figure 9 presents New York's water use (excluding hydroelectric) for 1989.

Withdrawals for self supply - hydroelectric purposes were by far the largest use for all three basins representing almost 98 percent of the total volume (280.2 bgd).

New York reported total consumptive uses of 11.26 mgd; .16 mgd for the Lake Erie basin, 11.08 mgd for the Lake Ontario basin, and .02 mgd for the St. Lawrence River basin.

There are no interbasin or intrabasin diversions in the New York Great Lakes Basin meeting the Charter trigger level of 100,000 gallons (380,000 litres) per day average over a 30-day period.

For New York, the data reported were 1.4 percent measured, 47.8 percent partially measured and 50.8 percent calculated or estimated. The level of aggregation for New York was 48.8 percent site-specific and 51.2 percent aggregated.

OHIO

Collection of water use data in Ohio is undertaken by the Ohio Department of Natural Resources - Division of Water; the Ohio Environmental Protection Agency and the U.S. Geological Survey. Data for the Ohio Lake Erie Basin for 1989 were provided to the Regional Water Use Data Base by the Department of Natural Resources - Division of Water.

Total water use from the Ohio Lake Erie Basin for 1989 were approximately 3.52 billion gallons per day (bgd) (Figure 10).

Two categories combined, public water supply and self supply - thermoelectric (fossil fuel plants) represented almost 93 percent of total volume of water withdrawals (3.26 bgd).

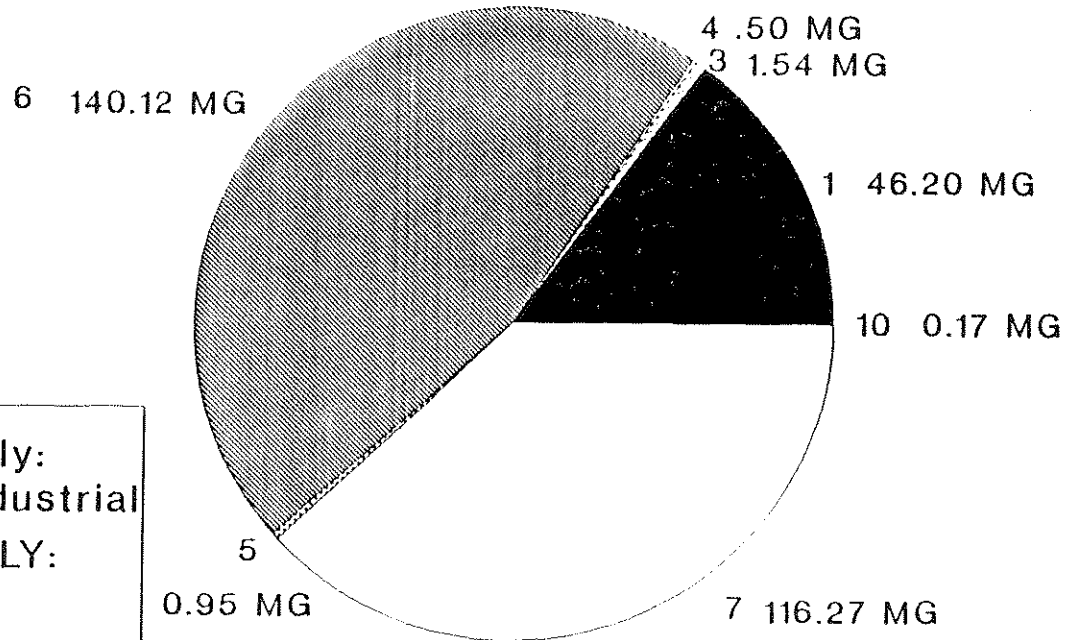
Consumptive uses for the Ohio Lake Erie Basin were 144.5 mgd; with public water supply responsible for two-thirds (96.7 mgd) of the total consumption.

Interbasin diversions (outgoing) were .18 mgd for the Lake Erie Basin of Ohio, all used for public water supply. Interbasin diversions (incoming) were 28.06 mgd, as represented in category 10 (Other Uses). Ohio has no intrabasin diversions meeting the Charter trigger level of 100,000 million gallons (380,000 litres) per day average over a 30 day period.

The water use data reported for 1990 were 100 percent estimated and 97.8 percent site-specific.

FIGURE 8

1989 GREAT LAKES BASIN WATER USE MINNESOTA (Million gallons(U.S.)/day) EXCLUDING HYDRO*



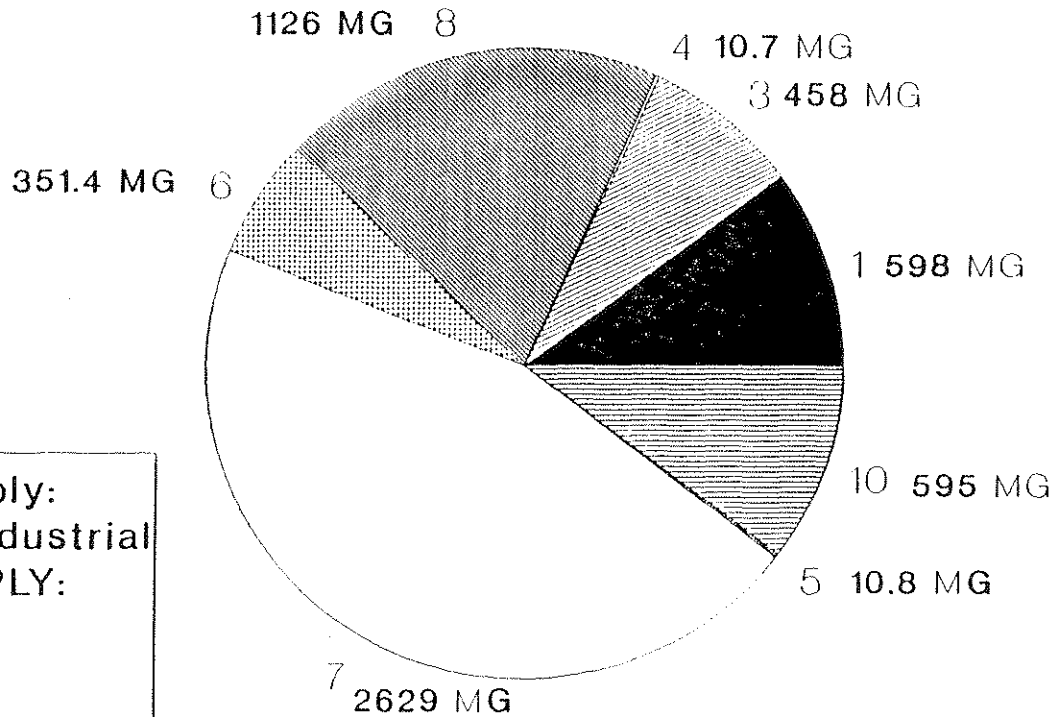
- 1. Public Supply: Domestic & Industrial
- SELF SUPPLY:
- 3. Domestic
- 4. Irrigation
- 5. Livestock
- 6. Industrial
- 7. Fossil Fuel Plants
- 10. Other

Total Withdrawal: 116059.8 MG/D
Withdrawal excluding Hydro: 305.8 MG/D

MN withdraws 115.754 million gallons per day for Hydroelectric > 99% of their total water withdrawal.

FIGURE 9

1989 GREAT LAKES BASIN WATER USE NEW YORK (Million gallons(U.S.)/day) EXCLUDING HYDRO*

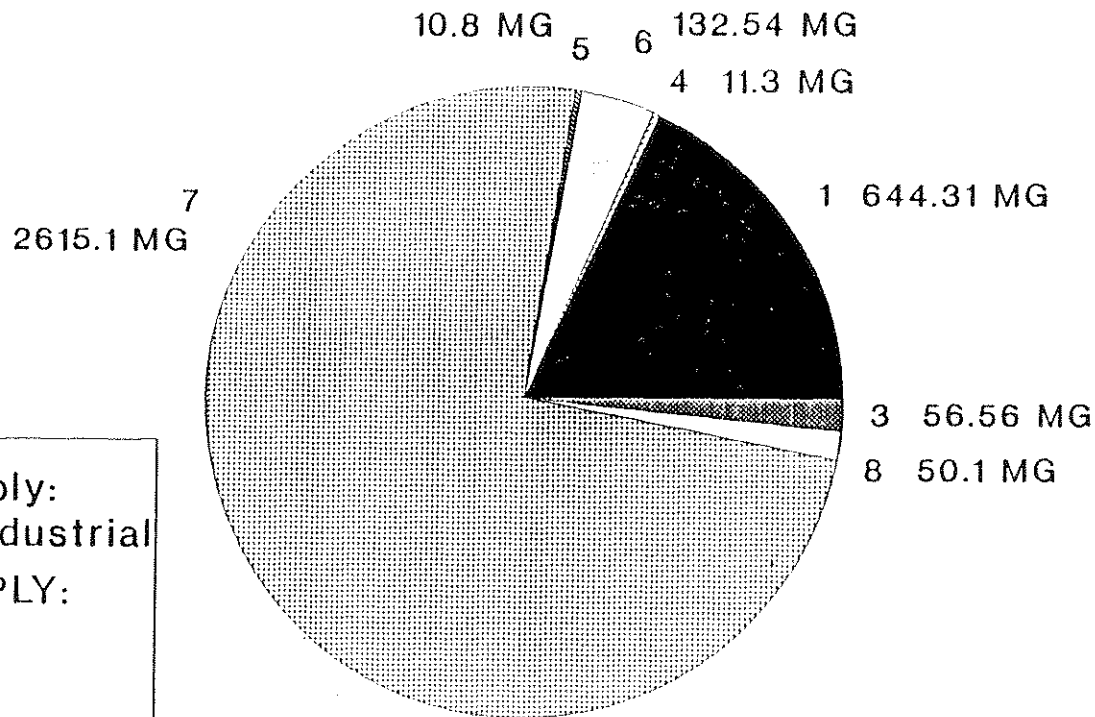


- 1. Public Supply: Domestic & Industrial SELF SUPPLY:
- 3. Domestic
- 4. Irrigation
- 5. Livestock
- 6. Industrial
- 7. Fossil Fuel Plants
- 8. Nuclear Plants
- 10. Other

TOTAL Withdrawal: 286,016 MG/D
Total excluding Hydro: 5,779 MG/D

NY withdraws 280,237 million gallons per day for Hydroelectric - 98% of their total water use.

FIGURE 10
1989 GREAT LAKES BASIN WATER USE
OHIO (Million gallons(U.S.)/day)



Total: 3520.71 MG(U.S.)/D

- 1. Public Supply: Domestic & Industrial
- 2. SELF SUPPLY:
- 3. Domestic
- 4. Irrigation
- 5. Livestock
- 6. Industrial
- 7. Fossil Fuel Plants
- 8. Nuclear Plants

ONTARIO

For Ontario, water use data collection activities are undertaken by the Ontario Ministry of the Environment and Environment Canada. The 1989 water use data for the Ontario Great Lakes Basin, which includes Lakes Superior, Huron, Erie, Ontario, and the St. Lawrence River, were provided by the Ontario Ministry of Natural Resources - Lands and Waters Policy Branch.

Total 1989 Great Lakes water withdrawals for Ontario were approximately 1.26 trillion litres per day (tld) or 334 billion gallons per day (bgd). Of this, self supply - hydroelectric uses represented more than 93 percent (1.18 tld; 312 bgd) of the total volume. Figure 11 presents Ontario's total water use (excluding hydroelectric) for 1989.

Water use for the individual lake basins in Ontario are shown in Table 3.

Table 3
Withdrawal Amount

<u>Basin</u>	<u>[billion litres per day; (bld)]</u>	<u>Percent of Total</u>
Superior	154.3	12.0
Huron	201.7	16.0
Erie	32.8	2.5
Ontario	246.3	19.5
St. Lawrence	<u>629.7</u>	<u>50.0</u>
TOTAL	1264.5	100.0

Ontario reported incoming interbasin diversions for Lake Superior and intrabasin diversions (incoming or outgoing) for Lakes Huron, Erie and Ontario, as presented in Table 4. Incoming diversion values are negative.

Table 4

<u>Basin</u>	<u>Interbasin Diversion (bld)</u>	<u>Intrabasin Diversion (bld)</u>
Superior	-19.52	---
Huron		.17
Erie		19.07
Ontario		-19.24
TOTAL	-19.52	

The incoming diversion of 19.52 bld, (representing the Ogoki and Long Lac diversions) to the Ontario Lake Superior watershed is used for hydroelectric purposes. This is almost 45 percent higher than the recent averages of the two diversions of about 5,600 cubic feet per second (cfs) or 13.7 bld (3.6 bgd).

Consumptive uses for the Ontario Great Lakes Basin were approximately 2.0 bld with public water supply and self supply - thermoelectric together representing almost 60 percent of the total volume (1.2 bld).

Approximate consumptive uses for the individual lake basins in Ontario appear in Table 5.

<u>Basin</u>	<u>Consumptive Uses (mld)</u>	<u>Approximate percent of Total</u>
Superior	52.6	3
Huron	466.8	23
Erie	410.2	21
Ontario	793.9	40
St. Lawrence	<u>264.8</u>	<u>13</u>
TOTAL	1988.3	100

Ontario's withdrawal data for 1989 were 5.9 percent measured, 94 percent partially measured and 99.9 percent site-specific.

PENNSYLVANIA

Data for 1989 for the Lake Erie and Lake Ontario Basins of Pennsylvania were submitted to the Regional Water Use Data Base by the Department of Environmental Resources - Bureau of Water Resources Management.

Total withdrawals from the two basins were 398 million gallons per day (mgd) (Figure 12). Almost 100 percent (397.7 mgd) of the withdrawal volume was from the Lake Erie Basin. Only about .16 mgd, or approximately .1 percent, was from the Lake Ontario Basin. For the Lake Erie Basin, withdrawals for self supply - thermoelectric (fossil fuel plants) were 300.1 mgd, more than 75 percent of the total volume.

Consumptive uses for the two basins were 18.15 mgd; with consumption from Lake Ontario representing only about .1 percent, or 20,000 gallons per day, of this total. For Lake Erie, public water supply and self supply - industrial uses represented in combination almost 83 percent of the 18.13 mgd consumed (14.74 mgd).

There are no interbasin or intrabasin diversions in the Pennsylvania Great Lakes Basin that meet the Charter trigger level of 100,000 gallons (380,000 litres) per day average over a 30 day period.

The Pennsylvania data were .1 percent measured, 23.3 percent partially measured, 76.6 percent estimated and 99.9 percent site-specific.

QUEBEC

Data for calendar year 1989 were provided by the Ministere de l'Environnement - Direction du milieu hydrique.

Withdrawals in the St. Lawrence River Basin of Quebec were approximately 1.05 tld or 277 bgd. Nearly 100 percent of the total (1.04 tld) was withdrawn for self supply - hydroelectric power purposes. Figure 13 presents Quebec's 1989 water use (excluding hydroelectric).

Consumptive uses for the Quebec-St. Lawrence River Basin were 531.5 mld (140.5 mgd); with public water supply representing more than 72 percent of the total volume (384 mld).

There are no interbasin or intrabasin diversions of water in the Quebec St. Lawrence River Basin that meet the Charter trigger level of 380,000 litres (100,000 gpd) per day average over a 30 day period.

The Quebec data were 99.9 percent measured, .1 percent estimated and 100 percent site-specific.

WISCONSIN

Data for 1989 for the Lake Michigan and Lake Superior Basins of Wisconsin were submitted to the Regional Water Use Data Base by the Department of Natural Resources-Bureau of Water Resources Management.

Total withdrawals from the two basins for 1989 were approximately 9.85 billion gallons per day (bgd) (Figure 14). More than 96 percent of the total volume (9.5 bgd) was from the Lake Michigan Basin, with just under 4 percent (305.9 mgd) from the Lake Superior Basin.

About 50 percent (4.8 bgd) of the water used in the Lake Michigan Basin was for self supply - hydroelectric power, with more than 88 percent (270.65 mgd) of the water used from Lake Superior for the same purpose.

Consumptive uses for the two basins totaled 163 mgd. This included 160.2 mgd (98 percent) from the Lake Michigan Basin and about 2.8 mgd (2 percent) from the Lake Superior Basin. Public water supply is the major category for consumptive use in the Lake Michigan Basin, representing 55.2 mgd, more than one-third of the total use.

There are no interbasin or intrabasin diversions in the Wisconsin Lake Superior Basin meeting the Charter trigger level of 100,000 gallons (380,000 litres) per day average over a 30 day period.

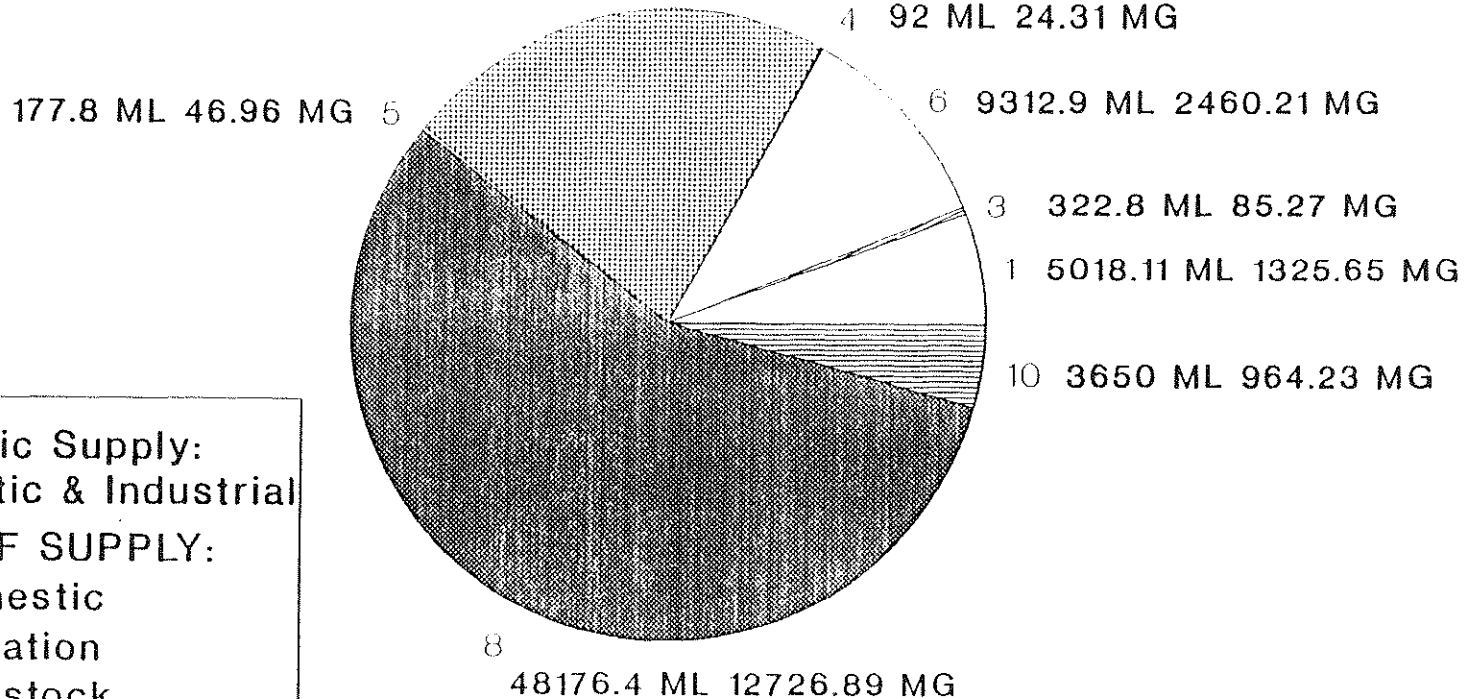
For the Wisconsin Lake Michigan Basin, outgoing interbasin diversions total 0.1 mgd, reported under public water supply.

The data reported by Wisconsin were 3.8 percent measured, .2 percent partially measured, 96 percent estimated, with 23 percent site-specific sources and 77 percent aggregated sources.

FIGURE 11

1989 GREAT LAKES BASIN WATER USE ONTARIO EXCLUDING HYDRO*

Total Withdrawal: 1264865.2 ML 334142.74 MG
Withdrawal excluding Hydro: 85331.8 ML 22542.33 MG
185.81.8 ML 4908.81 MG 7



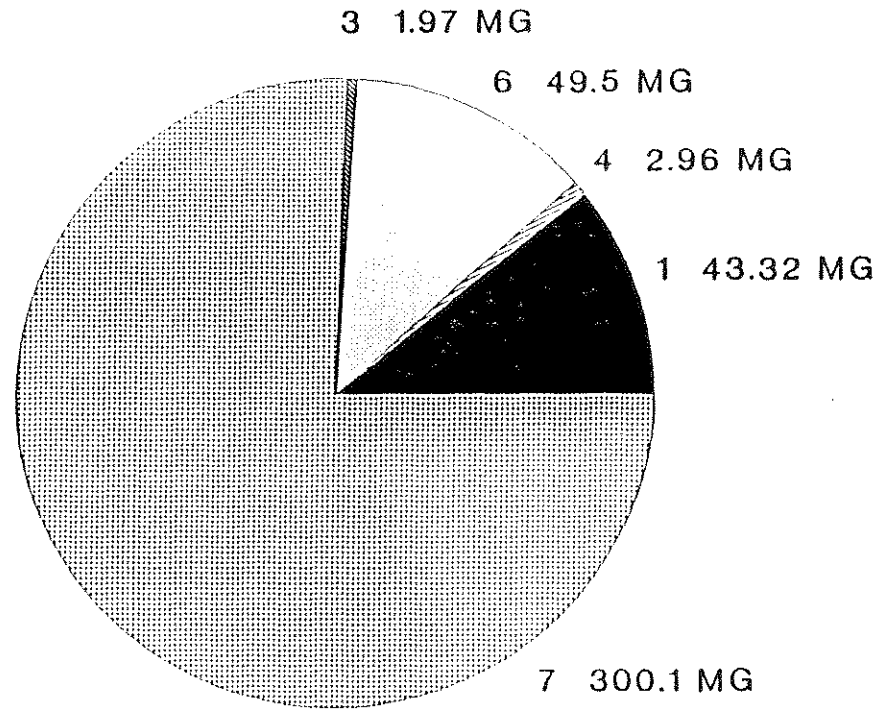
- 1. Public Supply: Domestic & Industrial
- SELF SUPPLY:
- 3. Domestic
- 4. Irrigation
- 5. Livestock
- 6. Industrial
- 7. Fossil Fuel Plants
- 8. Nuclear Plants
- 10. Other

MG=Million gallons (U.S.)/day
ML=Million litres/day

Ontario withdraws 1,179,533.4 million litres per day for Hydroelectric - 93% of their total water use.

FIGURE 12

1989 GREAT LAKES BASIN WATER USE PENNSYLVANIA (Million gallons(U.S.)/day)



1. Public Supply:
Domestic & Industrial
SELF SUPPLY:
3. Domestic
4. Irrigation
6. Industrial
7. Fossil Fuel Plants

Total: 397.85 MG(U.S.)/D

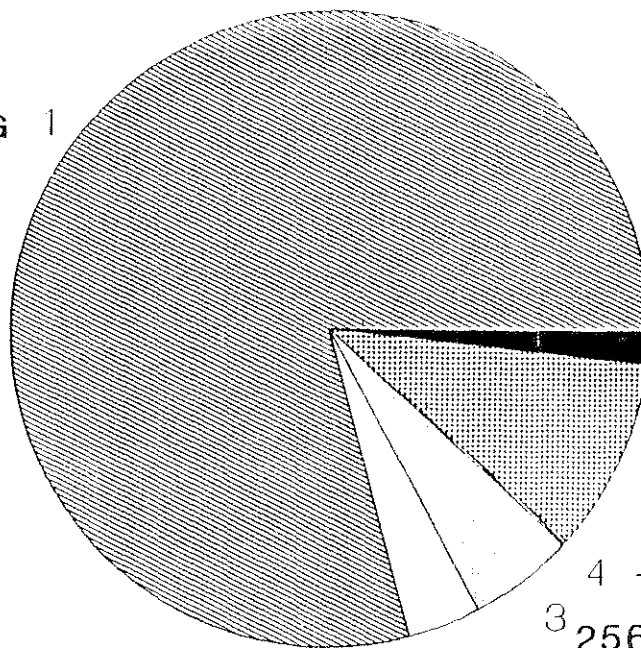
FIGURE 13

1989 GREAT LAKES BASIN WATER USE QUEBEC EXCLUDING HYDRO*

Total Withdrawal: 1051072 ML 277664.42 MG

Total Excluding Hydro: 4854 ML 1285.45 MG

3847 ML 1019.45 MG 1



5 84 ML 22.19 MG

6 475 ML 125.48 MG

4 14 ML 3.7 MG

3 256 ML 67.63 MG

7 178 ML 47 MG

1. Public Supply:
Domestic & Industrial

SELF SUPPLY:

3. Domestic

4. Irrigation

5. Livestock

6. Industrial

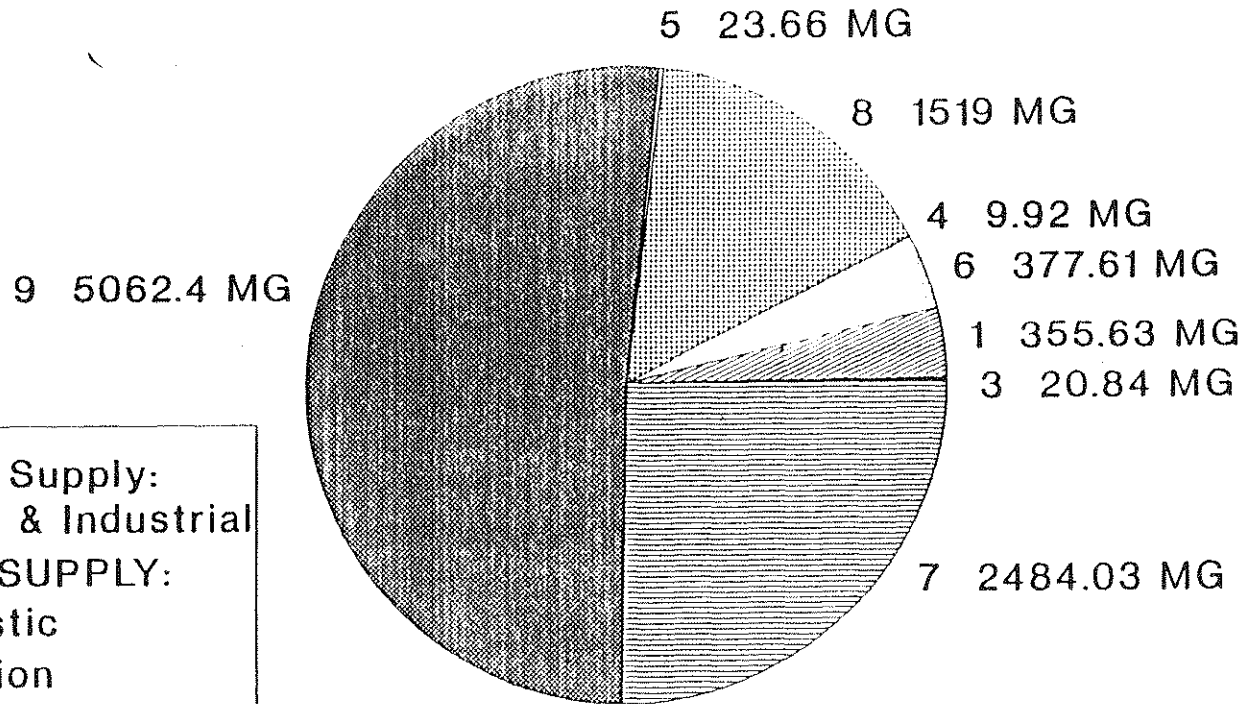
7. Fossil Fuel Plants

MG=Million gallons (U.S.)/day
ML=Million litres/day

Quebec withdraws 46,218 million litres per day for Hydroelectric > 99% of their total water use.

GREAT LAKES COMMISSION
The Argus II Building
400 Fourth Street
Ann Arbor, Michigan 48103-4816

FIGURE 14
1989 GREAT LAKES BASIN WATER USE
WISCONSIN (Million gallons(U.S.)/day)



Total: 9853.09 MGal(U.S.)/day

- 1. Public Supply: Domestic & Industrial
- 2. SELF SUPPLY:
- 3. Domestic
- 4. Irrigation
- 5. Livestock
- 6. Industrial
- 7. Fossil Fuel Plants
- 8. Nuclear Plants
- 9. Hydroelectric

Appendix A-1

1989 GREAT LAKES BASIN SUMMARY REPORT

1989 JURISDICTION REPORTS
(Million Gallons (U.S.) Per Day)

1. ILLINOIS
2. INDIANA
3. MICHIGAN
4. MINNESOTA
5. NEW YORK
6. OHIO
7. ONTARIO
8. QUEBEC
9. PENNSYLVANIA
10. WISCONSIN

1989 BASIN SUMMARY REPORT

1. LAKE SUPERIOR BASIN
2. LAKE MICHIGAN BASIN
3. LAKE HURON BASIN
4. LAKE ERIE BASIN
5. LAKE ONTARIO BASIN
6. ST. LAWRENCE RIVER BASIN

1989 WATER USE CATEGORY REPORTS
(Million Gallons (U.S.) Per Day)

1. Public Supply
3. Self Supply - Domestic (Residential, Commercial, Institutional)
4. Self Supply - Irrigation
5. Self Supply - Livestock
6. Self Supply - Industrial (Manufacturing and Mining)
7. Self Supply - Thermoelectric Power - Fossil Fuel Plants
8. Self Supply - Thermoelectric Power - Nuclear Plants
9. Self Supply - Hydroelectric Power
10. Other (Navigation, Water Quality, Environmental, etc.)

SUMMARY REPORT - GREAT LAKES BASIN

DATE: 01/01/01
 SYSTEM: MGA01MS1.0
 YEAR OF DATA: 1999

a) Water-Use by Category - All Basins, All Jurisdictions

Water-Use Category	All Facilities								Grouped Facilities									
	Withdrawals				Diversions				Consumptive Use	Withdrawals				Diversions				Consumptive Use
	GLSW	GSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	GLSW		GSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL			
1	371.27	371.13	380.75	654.15*	0.00	1122.46	380.19	616.34*	380.19	779.34	238.12	1539.19	0.00	1122.46	1133.36	187.12		
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
3	762.54	145.36	139.25	777.15	0.00	5.14	5.14	17.31	36.21	19.29	18.92	142.91	0.00	5.32	5.32	9.47		
4	9.23	32.32	49.61	313.73*	0.00	0.00	0.00	244.52*	0.00	5.76	17.88	33.64	0.00	0.00	0.00	13.37		
5	1.66	4.25	115.30	124.03	0.00	0.00	0.00	90.02	0.29	1.38	1.48	3.54	0.00	0.00	0.00	2.29		
6	4453.00	1662.54	109.95	6343.79*	0.00	7.12	7.12	428.43*	4147.66	224.78	54.12	4436.56	0.00	7.92	7.92	229.15		
7	26538.56	117.21	2.37	21019.75	0.00	0.00	0.00	181.67	14495.40	292.19	0.27	14792.27	0.00	0.00	0.00	169.73		
8	19723.01	0.00	0.00	19723.01	0.00	0.00	1.93	187.12	19541.72	0.00	0.00	17581.72	0.00	0.00	0.00	139.80		
9	244513.26	214622.67	0.00	289635.93	0.00	-5156.54	-5156.54	0.00	440728.08	224122.67	0.00	83245.33	0.00	-5156.54	-5156.54	0.00		
10	1653.96	198.21	0.26	1638.43	0.00	25.32	25.32	28.10	1638.96	198.21	0.26	1638.43	0.00	259.29	259.29	0.01		
Total	645113.58	297239.50	1091.09	1646282.27*	0.00	-3758.92	-3758.92	1836.92*	492224.13	396755.01	427.89	879467.12	0.00	-3759.14	-3759.14	1047.61		

b) Water-Use by Basin - All Categories, All Jurisdictions

Basin	All Facilities								Grouped Facilities									
	Withdrawals				Diversions				Consumptive Use	Withdrawals				Diversions				Consumptive Use
	GLSW	GSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	GLSW		GSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL			
Lake Superior	582.19	152497.38	20.45	153099.92	0.00	-5156.54	-5156.54	63.25	589.13	152496.90	11.35	153107.38	0.00	-5156.54	-5156.54	61.25		
Lake Michigan	14534.51	5376.57	244.16	20295.24	0.00	1425.28	1425.28	390.36	11458.09	5196.09	161.97	16816.15	0.00	1125.28	1425.28	310.29		
Lake Huron	32575.33	21265.10	95.14	53935.58	44.53	0.00	44.53	131.02	31925.51	21253.39	52.39	53231.29	44.53	0.00	44.53	132.66		
Lake Erie	17339.50	542.25	321.77	18203.52	5026.15	-27.88	5106.27	335.19	12947.97	465.67	126.68	13540.12	5026.15	-27.88	5110.07	217.13		
Lake Ontario	202367.75	16817.57	224.09	213309.41	-5082.68	0.00	-5082.68	226.63	165421.56	16616.23	18.43	182056.22	-5082.68	0.00	-5082.68	226.63		
St. Lawrence River	377268.30	322761.65	185.17	580305.11	0.00	0.00	0.00	210.33	319771.12	262186.26	56.07	522584.06	0.00	0.00	0.00	147.29		
Total	645113.58	297239.50	1091.09	1646282.27*	0.00	-3758.92	-3758.92	1836.92*	492224.13	396755.01	427.89	879467.12	0.00	-3759.14	-3759.14	1047.61		

c) Water-Use by Jurisdiction - All Categories, All Basins

Jurisdiction	All Facilities								Grouped Facilities									
	Withdrawals				Diversions				Consumptive Use	Withdrawals				Diversions				Consumptive Use
	GLSW	GSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	GLSW		GSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL			
Illinois	4216.48	0.04	0.09	4216.61	0.00	1425.28	1425.28	2.01	4216.35	0.00	0.00	4216.35	0.00	1425.28	1425.28	2.01		
Indiana	3029.22	75.05	140.64	3244.91	0.00	0.00	0.00	195.41	3029.22	74.65	107.47	3211.34	0.00	0.00	0.00	186.09		
Michigan	8260.45	124.56	2.28	11168.29*	0.00	0.00	0.00	589.04*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Minnesota	41.75	116009.89	8.05	116059.75	0.00	0.00	0.00	48.33	41.74	116009.69	7.65	116059.08	0.00	0.00	0.00	48.00		
New York	285422.20	311.00	282.70	286015.90	0.00	0.00	0.00	11.26	130797.00	0.00	0.00	130797.00	0.00	0.00	0.00	11.00		
Ohio	3024.60	326.08	108.03	3520.71	0.00	-27.88	-27.88	144.53	3024.60	371.88	32.30	3428.78	0.00	-27.88	-27.88	115.60		
Ontario	173659.06	160160.55	323.12	334142.74	0.00	-5156.54	-5156.54	525.24	173658.11	160131.35	168.39	333957.85	0.00	-5156.54	-5156.54	423.61		
Pennsylvania	387.54	5.12	5.19	397.85	0.00	0.00	0.00	17.70	387.54	2.84	1.31	391.69	0.00	0.00	0.00	14.89		
Quebec	162831.50	114739.41	93.52	277664.42	0.00	0.00	0.00	140.41	162330.97	114735.44	47.55	277613.97	0.00	0.00	0.00	116.98		
Wisconsin	4240.78	5484.84	127.47	9853.09	0.00	0.10	0.10	163.00	4238.60	5429.15	63.32	9731.07	0.00	0.00	0.00	129.44		
Total	645113.58	297239.50	1091.09	1646282.27*	0.00	-3758.92	-3758.92	1836.92*	492224.13	396755.01	427.89	879467.12	0.00	-3759.14	-3759.14	1047.61		

*The total presented is larger than the sum of water use categories. This is due to the addition of statewide data from Michigan. Michigan's withdrawals and consumptive uses for this category cannot presently be reported by individual sub basin or water withdrawal type.

JURISDICTION REPORT - Illinois

a) Withdrawals, Diversions and Consumptive Use - All facilities

DATE: 1/1/91
 UNITS: Mgal(US)/d
 YEAR OF DATA: 1989

Water- Use Categ.	LAKE MICHIGAN			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	1133.18	1133.18	0.00	1133.18	1133.18	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	29.52	5.44	0.00	29.52	5.44	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00
6	10.94	7.92	2.01	10.94	7.92	2.01
7	624.38	0.00	0.00	624.38	0.00	0.00
8	2139.73	0.00	0.00	2139.73	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00
10	278.86	278.86	0.00	278.86	278.86	0.00
Total	4216.61	1425.40	2.01	4216.61	1425.40	2.01

b) Withdrawals by Source - All facilities

Water- Use Categ.	LAKE MICHIGAN			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW
1	1133.18	0.00	0.00	1133.18	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	29.39	0.04	0.09	29.39	0.04	0.09
4	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00
6	10.94	0.00	0.00	10.94	0.00	0.00
7	624.38	0.00	0.00	624.38	0.00	0.00
8	2139.73	0.00	0.00	2139.73	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00
10	278.86	0.00	0.00	278.86	0.00	0.00
Total	4216.48	0.04	0.09	4216.48	0.04	0.09

c) Diversions by Type - All facilities

Water- Use Categ.	LAKE MICHIGAN		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	1133.18	0.00	1133.18
2	0.00	0.00	0.00	0.00
3	0.00	5.44	0.00	5.44
4	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00
6	0.00	7.92	0.00	7.92
7	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00
10	0.00	278.86	0.00	278.86
Total	0.00	1425.40	0.00	1425.40

Level of Accuracy of Withdrawal Data: 34% Measured 0% Partially Measured 66% Calculated or Estimated
 Level of Aggregation of Withdrawal Data Source: 100% Site-specific 0% Aggregated

JURISDICTION REPORT - Illinois

DATE: 1/1/91

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1989

Water- Use Categ.	LAKE MICHIGAN			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	1133.18	1133.18	0.00	1133.18	1133.18	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	29.26	5.32	0.00	29.26	5.32	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00
6	10.94	7.92	2.01	10.94	7.92	2.01
7	624.38	0.00	0.00	624.38	0.00	0.00
8	2139.73	0.00	0.00	2139.73	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00
10	278.86	278.86	0.00	278.86	278.86	0.00
Total	4216.35	1425.28	2.01	4216.35	1425.28	2.01

b) Withdrawals by Source - Principal facilities

Water- Use Categ.	LAKE MICHIGAN			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW
1	1133.18	0.00	0.00	1133.18	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	29.26	0.00	0.00	29.26	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00
6	10.94	0.00	0.00	10.94	0.00	0.00
7	624.38	0.00	0.00	624.38	0.00	0.00
8	2139.73	0.00	0.00	2139.73	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00
10	278.86	0.00	0.00	278.86	0.00	0.00
Total	4216.35	0.00	0.00	4216.35	0.00	0.00

c) Diversions by Type - Principal facilities

Water- Use Categ.	LAKE MICHIGAN		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	1133.18	0.00	1133.18
2	0.00	0.00	0.00	0.00
3	0.00	5.32	0.00	5.32
4	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00
6	0.00	7.92	0.00	7.92
7	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00
10	0.00	278.86	0.00	278.86
Total	0.00	1425.28	0.00	1425.28

JURISDICTION REPORT - Indiana

DATE: 1/1/91
 UNITS: Mgal(US)/d
 YEAR OF DATA: 1989

a) Withdrawals, Diversions and Consumptive Use - All facilities

Water- Use Categ.	LAKE MICHIGAN			LAKE ERIE			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	137.10	0.00	20.56	37.49	0.00	5.62	174.59	0.00	26.18
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	47.60	0.00	7.14	8.52	0.00	1.27	56.12	0.00	8.41
4	18.48	0.00	16.64	0.86	0.00	0.78	19.34	0.00	17.42
5	6.85	0.00	5.48	1.81	0.00	1.45	8.66	0.00	6.93
6	1910.48	0.00	114.63	7.51	0.00	0.45	1917.99	0.00	115.08
7	1067.77	0.00	21.36	0.27	0.00	0.01	1068.04	0.00	21.37
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.17	0.00	0.02	0.00	0.00	0.00	0.17	0.00	0.02
Total	3188.45	0.00	185.83	56.46	0.00	9.58	3244.91	0.00	195.41

b) Withdrawals by Source - All facilities

Water- Use Categ.	LAKE MICHIGAN			LAKE ERIE			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	84.85	0.00	52.15	0.00	32.34	5.15	84.85	32.34	57.30
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	19.25	25.35	0.00	0.03	5.49	0.00	19.28	36.84
4	0.00	5.33	13.15	0.00	0.37	0.49	0.00	5.70	13.64
5	0.00	1.38	5.47	0.00	0.00	1.81	0.00	1.38	7.28
6	1876.50	11.88	22.10	0.00	4.39	3.12	1876.50	16.27	25.22
7	1067.77	0.00	0.00	0.00	0.00	0.27	1067.77	0.00	0.27
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.08	0.08	0.00	0.00	0.00	0.00	0.08	0.08
Total	3029.22	37.92	121.31	0.00	37.13	18.33	3029.22	75.05	140.64

c) Diversions by Type - All facilities

Water- Use Categ.	LAKE MICHIGAN		LAKE ERIE		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00

Level of Accuracy of Withdrawal Data: 5.4% Measured 92% Partially Measured 2.6% Calculated or Estimated
 Level of Aggregation of Withdrawal Data Source: 98% Site-specific 2% Aggregated

JURISDICTION REPORT - Michigan

DATE: 2/1/91

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1989

Water-Use Categ.	LAKE SUPERIOR			LAKE MICHIGAN			LAKE HURON			LAKE ERIE			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	1224*	NR	123*
2	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR
3	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	237*	0.00	225*
4	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR
5	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR
6	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	1318*	0.00	132*
7	260.77	0.00	3.39	1091.72	0.00	14.20	652.47	0.00	8.48	4221.04	0.00	54.87	6226.00	0.00	80.94
8	0.00	0.00	0.00	2161.29	0.00	28.10	0.00	0.00	0.00	0.00	0.00	0.00	2161.29	0.00	28.10
9	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR
10	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR
Total	260.77	0.00	3.39	3253.01	0.00	42.30	652.47	0.00	8.48	4221.04	0.00	54.87	11166.29*	0.00	589.04*

b) Withdrawals by Source - All facilities

Water-Use Categ.	LAKE SUPERIOR			LAKE MICHIGAN			LAKE HURON			LAKE ERIE			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
2	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
3	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
6	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
7	260.77	0.00	0.00	965.00	124.44	2.28	652.44	0.03	0.00	4220.95	0.09	0.00	6099.16	124.56	2.28
8	0.00	0.00	0.00	2161.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2161.29	0.00	0.00
9	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
10	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Total	260.77	0.00	0.00	3126.29	124.44	2.28	652.44	0.03	0.00	4220.95	0.09	0.00	8260.45	124.56	2.28

c) Diversions by Type - All facilities

Water-Use Categ.	LAKE SUPERIOR		LAKE MICHIGAN		LAKE HURON		LAKE ERIE		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	NR	0.00	NR	0.00	NR	0.00	NR	0.00	NR	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* This total figure cannot presently be reported by individual subbasin or water withdrawal type.

NR = Not Reporting

JURISDICTION REPORT - Michigan

DATE: 2/1/91

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1989

Water-Use Categ.	LAKE SUPERIOR			LAKE MICHIGAN			LAKE HURON			LAKE ERIE			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
2	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR
3	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR
4	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR
5	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR
6	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR
10	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

b) Withdrawals by Source - Principal facilities

Water-Use Categ.	LAKE SUPERIOR			LAKE MICHIGAN			LAKE HURON			LAKE ERIE			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
2	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
3	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
6	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
10	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

c) Diversions by Type - Principal facilities

Water-Use Categ.	LAKE SUPERIOR		LAKE MICHIGAN		LAKE HURON		LAKE ERIE		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	NR	0.00	NR	0.00	NR	0.00	NR	0.00	NR	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NR = Not Reported

JURISDICTION REPORT - Minnesota

DATE: 1/1/91

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1989

Water- Use Categ.	LAKE SUPERIOR			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	46.20	0.00	9.70	46.20	0.00	9.70
2	0.00	0.00	0.00	0.00	0.00	0.00
3	1.54	0.00	0.12	1.54	0.00	0.12
4	0.50	0.00	0.09	0.50	0.00	0.09
5	0.95	0.00	0.21	0.95	0.00	0.21
6	140.12	0.00	35.88	140.12	0.00	35.88
7	116.27	0.00	2.33	116.27	0.00	2.33
8	0.00	0.00	0.00	0.00	0.00	0.00
9	115754.00	0.00	0.00	115754.00	0.00	0.00
10	0.17	0.00	0.00	0.17	0.00	0.00
Total	116059.75	0.00	48.33	116059.75	0.00	48.33

b) Withdrawals by Source - All facilities

Water- Use Categ.	LAKE SUPERIOR			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW
1	33.46	5.31	7.43	33.46	5.31	7.43
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.95	0.54	0.05	0.95	0.54	0.05
4	0.00	0.48	0.02	0.00	0.48	0.02
5	0.68	0.04	0.23	0.68	0.04	0.23
6	5.84	134.14	0.14	5.84	134.14	0.14
7	0.82	115.44	0.01	0.82	115.44	0.01
8	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	115754.00	0.00	0.00	115754.00	0.00
10	0.00	0.00	0.17	0.00	0.00	0.17
Total	41.75	116009.95	8.05	41.75	116009.95	8.05

c) Diversions by Type - All facilities

Water- Use Categ.	LAKE SUPERIOR		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00

Level of Accuracy of Withdrawal Data: 99.7% Measured .2% Partially Measured .1% Calculated or Estimated
 0.0% Aggregated 0.0% Site-specific 0.0% Aggregated

JURISDICTION REPORT - Minnesota

DATE: 1/1/91

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1989

Water- Use Categ.	LAKE SUPERIOR			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	46.09	0.00	9.67	46.09	0.00	9.67
2	0.00	0.00	0.00	0.00	0.00	0.00
3	1.46	0.00	0.12	1.46	0.00	0.12
4	0.39	0.00	0.00	0.39	0.00	0.00
5	0.68	0.00	0.00	0.68	0.00	0.00
6	140.09	0.00	35.88	140.09	0.00	35.88
7	116.20	0.00	2.33	116.20	0.00	2.33
8	0.00	0.00	0.00	0.00	0.00	0.00
9	115754.00	0.00	0.00	115754.00	0.00	0.00
10	0.17	0.00	0.00	0.17	0.00	0.00
Total	116059.08	0.00	48.00	116059.08	0.00	48.00

b) Withdrawals by Source - Principal facilities

Water- Use Categ.	LAKE SUPERIOR			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW
1	33.46	5.27	7.36	33.46	5.27	7.36
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.95	0.51	0.00	0.95	0.51	0.00
4	0.00	0.39	0.00	0.00	0.39	0.00
5	0.68	0.00	0.00	0.68	0.00	0.00
6	5.83	134.14	0.12	5.83	134.14	0.12
7	0.82	115.38	0.00	0.82	115.38	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	115754.00	0.00	0.00	115754.00	0.00
10	0.00	0.00	0.17	0.00	0.00	0.17
Total	41.74	116009.69	7.65	41.74	116009.69	7.65

c) Diversions by Type - Principal facilities

Water- Use Categ.	LAKE SUPERIOR		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1989

Water- Use Categ.	LAKE ERIE			LAKE ONTARIO			ST. LAWRENCE RIVER			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	206.00	0.00	0.00	266.00	0.00	0.00	126.00	0.00	0.00	598.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	79.00	0.00	0.00	290.00	0.00	0.00	90.00	0.00	0.00	459.00	0.00	0.00
4	1.60	0.00	0.16	8.00	0.00	0.00	1.10	0.00	0.02	10.70	0.00	0.26
5	1.40	0.00	0.00	6.40	0.00	0.00	3.00	0.00	0.00	10.80	0.00	0.00
6	58.40	0.00	0.00	220.00	0.00	0.00	73.00	0.00	0.00	351.40	0.00	0.00
7	480.00	0.00	0.00	2149.00	0.00	0.00	0.00	0.00	0.00	2629.00	0.00	0.00
8	0.00	0.00	0.00	1126.00	0.00	3.00	0.00	0.00	0.00	1126.00	0.00	3.00
9	560.00	0.00	0.00	143835.00	0.00	0.00	135842.00	0.00	0.00	280237.00	0.00	0.00
10	0.00	0.00	0.00	415.00	0.00	0.00	180.00	0.00	0.00	595.00	0.00	0.00
Total	1385.40	0.00	0.16	148315.40	0.00	11.08	136315.10	0.00	0.02	286015.90	0.00	11.26

b) Withdrawals by Source - All facilities

Water- Use Categ.	LAKE ERIE			LAKE ONTARIO			ST. LAWRENCE RIVER			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	160.00	46.00	0.00	96.00	139.00	31.00	101.00	0.00	25.00	357.00	185.00	56.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	10.00	10.00	58.00	101.00	96.00	93.00	51.00	20.00	19.00	162.00	126.00	170.00
4	1.20	0.00	0.40	7.00	0.00	1.00	1.00	0.00	0.10	9.20	0.00	1.50
5	0.50	0.00	0.90	2.50	0.00	3.90	1.00	0.00	2.00	4.00	0.00	6.80
6	55.00	0.00	3.40	180.00	0.00	40.00	68.00	0.00	5.00	303.00	0.00	48.40
7	480.00	0.00	0.00	2149.00	0.00	0.00	0.00	0.00	0.00	2629.00	0.00	0.00
8	0.00	0.00	0.00	1126.00	0.00	0.00	0.00	0.00	0.00	1126.00	0.00	0.00
9	560.00	0.00	0.00	143835.00	0.00	0.00	135842.00	0.00	0.00	280237.00	0.00	0.00
10	0.00	0.00	0.00	415.00	0.00	0.00	180.00	0.00	0.00	595.00	0.00	0.00
Total	1266.70	56.00	62.70	147911.50	235.00	168.90	136244.00	20.00	51.10	285422.20	311.00	282.70

c) Diversions by Type - All facilities

Water- Use Categ.	LAKE ERIE		LAKE ONTARIO		ST. LAWRENCE RIVER		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1989

Water- Use Categ.	LAKE ERIE			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	644.31	0.18	96.65	644.31	0.18	96.65
2	0.00	0.00	0.00	0.00	0.00	0.00
3	56.56	0.00	8.49	56.56	0.00	8.49
4	11.30	0.00	10.17	11.30	0.00	10.17
5	10.80	0.00	8.64	10.80	0.00	8.64
6	132.54	0.00	13.26	132.54	0.00	13.26
7	2615.10	0.00	0.22	2615.10	0.00	0.22
8	50.10	0.00	7.10	50.10	0.00	7.10
9	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	-28.06	0.00	0.00	-28.06	0.00
Total	3520.71	-27.88	144.53	3520.71	-27.88	144.53

b) Withdrawals by Source - All facilities

Water- Use Categ.	LAKE ERIE			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW
1	495.89	110.52	37.90	495.89	110.52	37.90
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	56.56	0.00	0.00	56.56
4	0.00	7.10	4.20	0.00	7.10	4.20
5	0.00	1.60	9.20	0.00	1.60	9.20
6	24.11	108.26	0.17	24.11	108.26	0.17
7	2454.50	160.60	0.00	2454.50	160.60	0.00
8	50.10	0.00	0.00	50.10	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00
Total	3024.60	388.08	108.03	3024.60	388.08	108.03

c) Diversions by Type - All facilities

Water- Use Categ.	LAKE ERIE		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.18	0.00	0.18
2	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00
10	0.00	-28.06	0.00	-28.06
Total	0.00	-27.88	0.00	-27.88

JURISDICTION REPORT - Ohio

DATE: 1/1/91

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1989

Water- Use Categ.	LAKE ERIE			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	638.47	0.18	95.77	638.47	0.18	95.77
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00
6	125.11	0.00	12.51	125.11	0.00	12.51
7	2615.10	0.00	0.22	2615.10	0.00	0.22
8	50.10	0.00	7.10	50.10	0.00	7.10
9	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	-28.06	0.00	0.00	-28.06	0.00
Total	3428.78	-27.88	115.60	3428.78	-27.88	115.60

b) Withdrawals by Source - Principal facilities

Water- Use Categ.	LAKE ERIE			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW
1	495.89	110.28	32.30	495.89	110.28	32.30
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00
6	24.11	101.00	0.00	24.11	101.00	0.00
7	2454.50	160.60	0.00	2454.50	160.60	0.00
8	50.10	0.00	0.00	50.10	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00
Total	3024.60	371.88	32.30	3024.60	371.88	32.30

c) Diversions by Type - Principal facilities

Water- Use Categ.	LAKE ERIE		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.18	0.00	0.18
2	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00
10	0.00	-28.06	0.00	-28.06

JURISDICTION REPORT - Ontario

DATE: 01/05/91

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: Mg/L(US)/d
YEAR OF DATA: 1989

Water-Use Categ.	LAKE SUPERIOR			LAKE MICHIGAN			LAKE ERIE			LAKE ONTARIO			ST. LAWRENCE RIVER			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	21.35	0.00	3.20	151.85	44.53	22.78	205.60	-44.53	30.84	193.33	0.00	119.00	153.52	0.00	23.03	1325.65	0.00	198.85
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	1.09	0.00	0.16	19.62	0.00	2.94	19.68	0.00	2.92	23.19	0.00	3.48	21.89	0.00	3.28	85.27	0.00	12.79
4	0.03	0.00	0.03	3.42	0.00	2.67	16.44	0.00	12.83	3.73	0.00	2.91	0.68	0.00	0.53	24.31	0.00	18.96
5	0.28	0.00	0.22	15.01	0.00	12.00	15.22	0.00	12.18	7.56	0.00	6.37	8.30	0.00	6.80	16.36	0.00	17.58
6	178.51	0.00	6.73	768.64	0.00	16.99	494.43	0.00	23.99	664.40	0.00	15.22	158.24	0.00	7.95	2160.21	0.00	70.93
7	352.50	0.00	3.48	236.96	0.00	1.20	2844.48	0.00	25.60	1474.87	0.00	13.30	0.00	0.00	0.00	4908.81	0.00	43.58
8	0.00	0.00	0.00	7191.29	0.00	64.72	0.00	0.00	0.00	5494.79	0.00	49.45	40.81	0.00	0.37	12726.89	0.00	114.54
9	40203.82	-5156.54	0.00	44857.17	0.00	0.00	4316.58	4316.58	0.00	56281.89	-4316.58	0.00	145940.94	0.00	0.00	311600.41	-5156.54	0.00
10	0.00	0.00	0.00	40.15	0.00	0.00	766.10	766.10	0.00	129.97	-766.10	0.00	28.00	0.00	28.00	964.23	0.00	28.00
Total	40753.58	-5156.54	13.88	53284.11	44.53	123.31	8678.32	5038.15	108.36	65074.14	-5082.68	309.73	166752.58	0.00	69.96	334142.74	-5156.54	525.24

b) Withdrawals by Source - All facilities

Water-Use Categ.	LAKE SUPERIOR			LAKE MICHIGAN			LAKE ERIE			LAKE ONTARIO			ST. LAWRENCE RIVER			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	16.93	2.61	1.92	65.51	38.76	47.59	108.87	19.09	77.64	736.46	36.89	19.98	38.55	110.01	4.96	966.22	207.35	152.08
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	1.09	0.00	0.00	19.62	0.00	0.00	19.68	0.00	0.00	23.19	0.00	0.00	21.89	0.00	0.00	85.27
4	0.00	0.00	0.03	0.00	2.88	0.54	0.00	11.11	5.33	0.00	2.63	1.10	0.00	0.49	0.18	0.00	17.13	7.18
5	0.00	0.00	0.28	0.00	0.00	15.01	0.00	0.00	15.22	0.00	0.00	7.96	0.00	0.00	8.30	0.00	0.00	46.96
6	162.12	10.28	2.11	681.22	75.01	12.39	459.69	25.73	9.01	755.01	106.30	3.09	124.95	28.27	5.02	2182.99	245.60	31.62
7	352.46	0.04	0.00	236.96	0.00	0.00	2844.48	0.00	0.00	1474.87	0.00	0.00	0.00	0.00	0.00	4908.77	0.04	0.00
8	0.00	0.00	0.00	7191.29	0.00	0.00	0.00	0.00	0.00	5494.79	0.00	0.00	40.81	0.00	0.00	12726.89	0.00	0.00
9	0.00	40203.82	0.00	23750.91	21106.25	0.00	4316.58	0.00	0.00	45935.12	10346.17	0.00	78105.48	87825.46	0.00	152108.10	139492.31	0.00
10	0.00	0.00	0.00	40.15	0.00	0.00	766.10	0.00	0.00	129.97	0.00	0.00	28.00	0.00	0.00	766.10	198.13	0.00
Total	531.41	40216.76	5.41	31925.89	21263.07	95.14	8495.71	55.93	126.68	54396.25	10622.57	55.33	78309.80	88002.23	40.56	173659.06	160160.55	323.12

c) Diversions by Type - All facilities

Water-Use Categ.	LAKE SUPERIOR		LAKE MICHIGAN		LAKE ERIE		LAKE ONTARIO		ST. LAWRENCE RIVER		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	44.53	0.00	-44.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	-5156.54	0.00	0.00	4316.58	0.00	-4316.58	0.00	0.00	0.00	0.00	-5156.54
10	0.00	0.00	0.00	0.00	766.10	0.00	-766.10	0.00	0.00	0.00	0.00	0.00
Total	0.00	-5156.54	44.53	0.00	5038.15	0.00	-5082.68	0.00	0.00	0.00	0.00	-5156.54

Level of Accuracy of Withdrawal Data: 38% Measured 22% Partially Measured 30% Calculated or Estimated
 Level of Aggregation of Withdrawal Data Source: 60% Site-specific 30% Aggregated

JURISDICTION REPORT - Ontario

DATE: 01/05/91

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1989

Water-Use Categ.	LAKE SUPERIOR			LAKE HURON			LAKE ERIE			LAKE ONTARIO			ST. LAWRENCE RIVER			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	21.23	0.00	3.17	139.61	44.53	20.94	204.13	-44.53	30.62	789.70	0.00	118.46	152.52	0.00	22.88	1307.00	0.00	196.06
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	176.38	0.00	6.76	767.21	0.00	16.80	492.73	0.00	23.70	859.30	0.00	14.40	156.81	0.00	7.77	2450.44	0.00	69.42
7	352.50	0.00	3.48	236.96	0.00	1.20	2844.48	0.00	25.60	1474.87	0.00	13.30	0.00	0.00	0.00	4908.81	0.00	43.58
8	0.00	0.00	0.00	7191.29	0.00	64.72	0.00	0.00	0.00	5494.79	0.00	49.45	40.81	0.00	0.37	12726.89	0.00	114.54
9	40203.82	-5156.54	0.00	44857.17	0.00	0.00	4316.58	4316.58	0.00	56281.89	-4316.58	0.00	165940.94	0.00	0.00	111600.41	-5156.54	0.00
10	0.00	0.00	0.00	40.15	0.00	0.00	766.10	766.10	0.00	129.97	-766.10	0.00	28.00	0.00	0.00	964.23	0.00	0.00
Total	40751.82	-5156.54	13.41	33232.39	44.53	103.66	8624.02	5038.15	79.92	65030.52	-5082.68	195.61	166319.09	0.00	31.01	333957.85	-5156.54	423.61

b) Withdrawals by Source - Principal facilities

Water-Use Categ.	LAKE SUPERIOR			LAKE HURON			LAKE ERIE			LAKE ONTARIO			ST. LAWRENCE RIVER			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	16.76	2.45	1.92	65.15	33.22	41.24	108.87	19.00	76.25	736.38	36.40	16.92	38.55	109.72	4.24	965.71	200.80	140.57
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	162.18	10.25	2.03	681.20	74.26	11.76	459.61	24.89	8.24	754.74	103.05	1.51	124.90	27.63	4.28	2182.54	240.08	27.82
7	352.46	0.04	0.00	236.96	0.00	0.00	2844.48	0.00	0.00	1474.87	0.00	0.00	0.00	0.00	0.00	4908.77	0.04	0.00
8	0.00	0.00	0.00	7191.29	0.00	0.00	0.00	0.00	0.00	5494.79	0.00	0.00	40.81	0.00	0.00	12726.89	0.00	0.00
9	0.00	40203.82	0.00	23750.91	21108.25	0.00	4316.58	0.00	0.00	45935.12	10316.77	0.00	78105.48	97835.46	0.00	152100.18	159492.31	0.00
10	0.00	0.00	0.00	0.00	40.15	0.00	766.10	0.00	0.00	0.00	129.97	0.00	0.00	28.00	0.00	766.10	198.13	0.00
Total	531.31	40216.56	3.95	31925.51	21253.89	52.99	8495.63	43.89	84.50	54395.90	10616.20	18.43	18309.75	88000.82	8.52	171658.11	160171.35	168.39

c) Diversions by Type - Principal facilities

Water-Use Categ.	LAKE SUPERIOR		LAKE HURON		LAKE ERIE		LAKE ONTARIO		ST. LAWRENCE RIVER		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	44.53	0.00	-44.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	-5156.54	0.00	0.00	4316.58	0.00	-4316.58	0.00	0.00	0.00	0.00	-5156.54
10	0.00	0.00	0.00	0.00	766.10	0.00	-766.10	0.00	0.00	0.00	0.00	0.00
Total	0.00	-5156.54	44.53	0.00	5038.15	0.00	-5082.68	0.00	0.00	0.00	0.00	-5156.54

JURISDICTION REPORT - Pennsylvania

DATE: 1/1/91
 UNITS: Mgal(US)/d
 YEAR OF DATA: 1989

a) Withdrawals, Diversions and Consumptive Use - All Facilities

Water- Use Categ.	LAKE ERIE			LAKE ONTARIO			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	43.16	0.00	4.32	0.16	0.00	0.02	43.32	0.00	4.34
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	1.97	0.00	0.20	0.00	0.00	0.00	1.97	0.00	0.20
4	2.96	0.00	2.79	0.00	0.00	0.00	2.96	0.00	2.79
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	49.50	0.00	10.42	0.00	0.00	0.00	49.50	0.00	10.42
7	300.10	0.00	0.40	0.00	0.00	0.00	300.10	0.00	0.40
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	397.69	0.00	17.68	0.16	0.00	0.02	397.85	0.00	17.70

b) Withdrawals by Source - All facilities

Water- Use Categ.	LAKE ERIE			LAKE ONTARIO			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	39.70	1.48	1.98	0.00	0.00	0.16	39.70	1.48	2.14
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	1.97	0.00	0.00	0.00	0.00	0.00	1.97
4	0.00	2.16	0.80	0.00	0.00	0.00	0.00	2.16	0.80
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	47.74	1.48	0.28	0.00	0.00	0.00	47.74	1.48	0.28
7	300.10	0.00	0.00	0.00	0.00	0.00	300.10	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	387.54	5.12	5.03	0.00	0.00	0.16	387.54	5.12	5.19

c) Diversions by Type - All facilities

Water- Use Categ.	LAKE ERIE		LAKE ONTARIO		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00

Level of Accuracy of Withdrawal Data: .1% Measured 23.3% Partially Measured 76.6% Calculated or Estimated
 Level of Aggregation of Withdrawal Data Source: 99.9% Site-specific .1% Aggregated

JURISDICTION REPORT - Quebec

DATE: 11/20/90

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1989

Water- Use Categ.	ST. LAWRENCE RIVER			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	1016.27	0.00	101.44	1016.27	0.00	101.44
2	0.00	0.00	0.00	0.00	0.00	0.00
3	67.63	0.00	6.87	67.63	0.00	6.87
4	3.70	0.00	3.33	3.70	0.00	3.33
5	22.19	0.00	17.70	22.19	0.00	17.70
6	125.48	0.00	11.07	125.48	0.00	11.07
7	47.02	0.00	0.00	47.02	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00
9	276382.13	0.00	0.00	276382.13	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00
Total	277664.42	0.00	140.41	277664.42	0.00	140.41

b) Withdrawals by Source - All facilities

Water- Use Categ.	ST. LAWRENCE RIVER			TOTAL		
	GLSW	OSW	CW	GLSW	OSW	CW
1	624.24	392.03	0.00	624.24	392.03	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	67.63	0.00	0.00	67.63
4	0.00	0.00	3.70	0.00	0.00	3.70
5	0.00	0.00	22.19	0.00	0.00	22.19
6	0.00	125.48	0.00	0.00	125.48	0.00
7	39.10	7.93	0.00	39.10	7.93	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00
9	162168.16	114213.97	0.00	162168.16	114213.97	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00
Total	162831.50	114739.41	93.52	162831.50	114739.41	93.52

c) Diversions by Type - All facilities

Water- Use Categ.	ST. LAWRENCE RIVER		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00

Level of Accuracy of Withdrawal Data: 99.91 Measured 03 Partially Measured 13 Calculated or Estimated
Level of Aggregation of Withdrawal Data Source: 100% Site-specific 03 Aggregated

JURISDICTION REPORT - Quebec

DATE: 11/20/90

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1989

Water- Use Categ.	ST. LAWRENCE RIVER			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	1012.31	0.00	101.18	1012.31	0.00	101.18
2	0.00	0.00	0.00	0.00	0.00	0.00
3	47.55	0.00	4.76	47.55	0.00	4.76
4	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00
6	124.95	0.00	11.04	124.95	0.00	11.04
7	47.02	0.00	0.00	47.02	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00
9	276382.13	0.00	0.00	276382.13	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00
Total	277613.97	0.00	116.98	277613.97	0.00	116.98

b) Withdrawals by Source - Principal facilities

Water- Use Categ.	ST. LAWRENCE RIVER			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW
1	623.71	388.60	0.00	623.71	388.60	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	47.55	0.00	0.00	47.55
4	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	124.95	0.00	0.00	124.95	0.00
7	39.10	7.93	0.00	39.10	7.93	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00
9	162168.16	114213.97	0.00	162168.16	114213.97	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00
Total	162830.97	114735.44	47.55	162830.97	114735.44	47.55

c) Diversions by Type - Principal facilities

Water- Use Categ.	ST. LAWRENCE RIVER		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1989

Water- Use Categ.	LAKE SUPERIOR			LAKE MICHIGAN			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	6.31	0.00	0.94	349.32	0.10	55.24	355.63	0.10	56.18
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.14	0.00	0.02	20.70	0.00	3.11	20.84	0.00	3.13
4	0.00	0.00	0.00	9.92	0.00	6.95	9.92	0.00	6.95
5	1.65	0.00	1.35	22.01	0.00	17.61	23.66	0.00	18.96
6	2.20	0.00	0.22	375.41	0.00	37.54	377.61	0.00	37.76
7	24.97	0.00	0.25	2459.06	0.00	24.55	2484.03	0.00	24.53
8	0.00	0.00	0.00	1519.00	0.00	15.19	1519.00	0.00	15.19
9	270.65	0.00	0.00	4791.75	0.00	0.00	5062.40	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	305.92	0.00	2.78	9547.17	0.10	160.22	9853.09	0.10	163.00

b) Withdrawals by Source - All facilities

Water- Use Categ.	LAKE SUPERIOR			LAKE MICHIGAN			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	1.11	0.00	5.20	243.52	41.10	64.70	244.63	41.10	69.90
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.14	0.00	0.00	20.70	0.00	0.00	20.84
4	0.00	0.00	0.00	0.00	0.35	9.57	0.00	0.35	9.57
5	0.00	0.02	1.63	0.00	1.01	21.00	0.00	1.03	22.63
6	2.18	0.00	0.02	0.00	371.31	4.10	2.18	371.31	4.12
7	24.97	0.00	0.00	2450.00	6.65	0.41	2474.97	6.65	0.41
8	0.00	0.00	0.00	1519.00	0.00	0.00	1519.00	0.00	0.00
9	0.00	270.65	0.00	0.00	4791.75	0.00	0.00	5062.40	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	25.26	270.67	6.99	4212.52	5214.17	120.48	4240.75	5464.84	127.47

c) Diversions by Type - All facilities

Water- Use Categ.	LAKE SUPERIOR		LAKE MICHIGAN		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	0.00	0.10	0.00	0.10
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.10	0.00	0.10

BASIN REPORT - Lake Superior

DATE: 2/22/91

a) Withdrawals, Diversions and Consumptive Use - All Facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1989

Water- Use Categ.	MICHIGAN*			MINNESOTA			ONTARIO			WISCONSIN			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	0.00	0.00	0.00	46.20	0.00	9.70	21.35	0.00	3.20	6.31	0.00	0.94	73.88	0.00	13.84
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	1.54	0.00	0.12	1.08	0.00	0.16	0.14	0.00	0.02	2.77	0.00	0.30
4	0.00	0.00	0.00	0.50	0.00	0.09	0.03	0.00	0.03	0.00	0.00	0.00	0.53	0.00	0.12
5	0.00	0.00	0.00	0.95	0.00	0.21	0.28	0.00	0.22	1.65	0.00	1.35	2.88	0.00	1.78
6	0.00	0.00	0.00	140.12	0.00	35.88	174.51	0.00	8.79	2.20	0.00	0.22	318.83	0.00	42.89
7	260.77	0.00	3.39	118.27	0.00	2.33	352.50	0.00	3.48	24.97	0.00	0.25	754.51	0.00	9.45
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	115754.00	0.00	0.00	40203.82	-5156.54	0.00	270.85	0.00	0.00	156228.47	-5156.54	0.00
10	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00
Total	260.77	0.00	3.39	118059.75	0.00	48.33	40753.58	-5156.54	13.88	305.92	0.00	2.78	157380.02	-5156.54	68.38

b) Withdrawals by Source - All Facilities

Water- Use Categ.	MICHIGAN*			MINNESOTA			ONTARIO			WISCONSIN			TOTAL		
	QLSW	OSW	GW	QLSW	OSW	GW	QLSW	OSW	GW	QLSW	OSW	GW	QLSW	OSW	GW
1	0.00	0.00	0.00	33.48	5.31	7.43	18.83	2.81	1.92	1.11	0.00	5.20	51.40	7.82	14.55
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.95	0.54	0.05	0.00	0.00	1.09	0.00	0.00	0.14	0.85	0.54	1.28
4	0.00	0.00	0.00	0.00	0.48	0.02	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.50	0.04
5	0.00	0.00	0.00	0.68	0.04	0.23	0.00	0.00	0.28	0.00	0.02	1.63	0.68	0.06	2.14
6	0.00	0.00	0.00	5.84	134.14	0.14	162.12	10.28	2.11	2.18	0.00	0.02	170.14	144.42	2.27
7	260.77	0.00	0.00	0.82	115.44	0.01	352.46	0.04	0.00	24.97	0.00	0.00	639.02	115.48	0.01
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	115754.00	0.00	0.00	40203.82	0.00	0.00	270.85	0.00	0.00	156228.47	0.00
10	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17
Total	260.77	0.00	0.00	41.75	118009.95	8.05	531.41	40216.76	5.41	28.26	270.67	6.99	862.19	158497.38	20.45

c) Diversions by Type - All Facilities

Water- Use Categ.	MICHIGAN*		MINNESOTA		ONTARIO		WISCONSIN		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	-5156.54	0.00	0.00	0.00	-5156.54
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	-5156.54	0.00	0.00	0.00	-5156.54

*The State of Michigan was unable to report by subbasin for most categories of use.

a) Withdrawals, Diversions and Consumptive Use - Principal Facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1989

Water-Use Categ.	MICHIGAN*			MINNESOTA			ONTARIO			WISCONSIN			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	0.00	0.00	0.00	46.03	0.00	9.67	21.12	0.00	3.17	1.36	0.00	0.19	88.57	0.00	13.03
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	1.46	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	1.46	0.00	0.12
4	0.00	0.00	0.00	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.00	0.00
5	0.00	0.00	0.00	0.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.00	0.00
6	0.00	0.00	0.00	140.09	0.00	35.88	174.38	0.00	6.78	0.00	0.00	0.00	314.47	0.00	42.64
7	0.00	0.00	0.00	118.20	0.00	2.33	352.50	0.00	3.48	24.97	0.00	0.25	493.67	0.00	6.06
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	115754.00	0.00	0.00	40203.82	-5158.54	0.00	270.65	0.00	0.00	156228.47	-5158.54	0.00
10	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00
Total	0.00	0.00	0.00	116059.08	0.00	48.00	40751.82	-5158.54	13.41	296.98	0.00	0.44	157107.88	-5158.54	81.85

b) Withdrawals by Source - Principal Facilities

Water-Use Categ.	MICHIGAN*			MINNESOTA			ONTARIO			WISCONSIN			TOTAL		
	QLSW	OSW	GW	QLSW	OSW	GW	QLSW	OSW	GW	QLSW	OSW	GW	QLSW	OSW	GW
1	0.00	0.00	0.00	33.48	5.27	7.38	16.78	2.45	1.92	1.11	0.00	0.25	51.33	7.72	9.53
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.95	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.00
4	0.00	0.00	0.00	0.00	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.00	0.00
6	0.00	0.00	0.00	5.83	134.14	0.12	162.10	10.25	2.03	0.00	0.00	0.00	167.93	144.39	2.15
7	0.00	0.00	0.00	0.82	115.38	0.00	352.46	0.04	0.00	24.97	0.00	0.00	378.25	115.42	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	115754.00	0.00	0.00	40203.82	0.00	0.00	270.65	0.00	0.00	156228.47	0.00
10	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17
Total	0.00	0.00	0.00	41.74	116009.89	7.65	531.31	40216.56	3.95	26.08	270.65	0.25	599.13	156496.90	11.85

c) Diversions by Type - Principal Facilities

Water-Use Categ.	MICHIGAN*		MINNESOTA		ONTARIO		WISCONSIN		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	-5158.54	0.00	0.00	0.00	-5158.54
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	-5158.54	0.00	0.00	0.00	-5158.54

*The State of Michigan was unable to report by subbasin for most categories of use.

BASIN REPORT - Lake Michigan

DATE: 2/22/91

a) Withdrawals, Diversions and Consumptive Use - All Facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1989

Water- Use Categ.	ILLINOIS			INDIANA			MICHIGAN*			WISCONSIN			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	1133.18	1133.18	0.00	137.10	0.00	20.58	0.00	0.00	0.00	349.32	0.10	55.24	1819.80	1133.28	75.80
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	28.52	5.44	0.00	47.80	0.00	7.14	0.00	0.00	0.00	20.70	0.00	3.11	97.82	5.44	10.25
4	0.00	0.00	0.00	18.48	0.00	16.64	0.00	0.00	0.00	8.92	0.00	6.95	28.40	0.00	23.59
5	0.00	0.00	0.00	6.85	0.00	5.48	0.00	0.00	0.00	22.01	0.00	17.61	28.86	0.00	23.09
6	10.94	7.92	2.01	1910.48	0.00	114.63	0.00	0.00	0.00	375.41	0.00	37.54	2296.83	7.92	154.18
7	624.38	0.00	0.00	1067.77	0.00	21.36	1091.72	0.00	14.20	2459.06	0.00	24.58	5242.83	0.00	80.14
8	2139.73	0.00	0.00	0.00	0.00	0.00	2161.29	0.00	28.10	1519.00	0.00	15.19	5820.02	0.00	43.29
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4791.75	0.00	0.00	4791.75	0.00	0.00
10	278.86	278.86	0.00	0.17	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	279.03	278.86	0.02
Total	4218.81	1425.40	2.01	3188.45	0.00	185.83	3253.01	0.00	42.30	9547.17	0.10	160.22	20205.24	1425.50	390.38

b) Withdrawals by Source - All Facilities

Water- Use Categ.	ILLINOIS			INDIANA			MICHIGAN*			WISCONSIN			TOTAL		
	QLSW	OSW	GW	QLSW	OSW	GW	QLSW	OSW	GW	QLSW	OSW	GW	QLSW	OSW	GW
1	1133.18	0.00	0.00	84.95	0.00	52.15	0.00	0.00	0.00	243.52	41.10	64.70	1481.85	41.10	116.85
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	28.39	0.04	0.09	0.00	19.25	28.35	0.00	0.00	0.00	0.00	0.00	20.70	29.39	19.29	49.14
4	0.00	0.00	0.00	0.00	5.33	13.15	0.00	0.00	0.00	0.00	0.35	9.57	0.00	5.68	22.72
5	0.00	0.00	0.00	0.00	1.38	5.47	0.00	0.00	0.00	0.00	1.01	21.00	0.00	2.39	26.47
6	10.94	0.00	0.00	1876.50	11.88	22.10	0.00	0.00	0.00	0.00	371.31	4.10	1887.44	383.19	26.20
7	624.38	0.00	0.00	1067.77	0.00	0.00	965.00	124.44	2.28	2450.00	8.65	0.41	5107.15	133.09	2.69
8	2139.73	0.00	0.00	0.00	0.00	0.00	2161.29	0.00	0.00	1519.00	0.00	0.00	5820.02	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4791.75	0.00	0.00	4791.75	0.00
10	278.86	0.00	0.00	0.00	0.08	0.09	0.00	0.00	0.00	0.00	0.00	0.00	278.86	0.08	0.09
Total	4218.48	0.04	0.09	3029.22	37.92	121.31	3126.29	124.44	2.28	4212.52	5214.17	120.48	14584.51	5376.57	244.18

c) Diversions by Type - All Facilities

Water- Use Categ.	ILLINOIS		INDIANA		MICHIGAN*		WISCONSIN		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	1133.18	0.00	0.00	0.00	0.00	0.00	0.10	0.00	1133.28
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	5.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.44
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	7.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.92
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	278.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	278.86
Total	0.00	1425.40	0.00	0.00	0.00	0.00	0.00	0.10	0.00	1425.50

*The State of Michigan was unable to report by subbasin for most categories of use.

BASIN REPORT - Lake Michigan

DATE: 2/22/91

a) Withdrawals, Diversions and Consumptive Use - Principal Facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1989

Water-Use Categ.	ILLINOIS			INDIANA			MICHIGAN*			WISCONSIN			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	1133.18	1133.18	0.00	136.76	0.00	20.51	0.00	0.00	0.00	341.15	0.00	54.08	1611.09	1133.18	74.59
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	28.26	5.32	0.00	30.54	0.00	4.58	0.00	0.00	0.00	0.00	0.00	0.00	59.80	5.32	4.58
4	0.00	0.00	0.00	17.82	0.00	16.04	0.00	0.00	0.00	4.68	0.00	3.26	22.50	0.00	19.30
5	0.00	0.00	0.00	2.86	0.00	2.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.86	2.28
6	10.94	7.92	2.01	1909.86	0.00	114.59	0.00	0.00	0.00	318.88	0.00	31.89	2239.66	7.92	148.49
7	824.38	0.00	0.00	1067.77	0.00	21.38	0.00	0.00	0.00	2458.85	0.00	24.58	4150.60	0.00	45.94
8	2139.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1519.00	0.00	15.19	3658.73	0.00	15.19
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4791.75	0.00	0.00	4791.75	0.00	0.00
10	278.86	278.86	0.00	0.10	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	278.86	278.86	0.01
Total	4216.35	1425.28	2.01	3165.71	0.00	179.37	0.00	0.00	0.00	8434.09	0.00	129.00	10816.15	1425.28	310.36

b) Withdrawals by Source - Principal Facilities

Water-Use Categ.	ILLINOIS			INDIANA			MICHIGAN*			WISCONSIN			TOTAL		
	QLSW	OSW	GW	QLSW	OSW	GW	QLSW	OSW	GW	QLSW	OSW	GW	QLSW	OSW	GW
1	1133.18	0.00	0.00	84.95	0.00	51.81	0.00	0.00	0.00	243.52	41.10	56.53	1461.65	41.10	108.34
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	28.26	0.00	0.00	0.00	19.24	11.30	0.00	0.00	0.00	0.00	0.00	0.00	28.26	19.24	11.30
4	0.00	0.00	0.00	0.00	5.04	12.78	0.00	0.00	0.00	0.00	0.00	4.68	0.00	5.04	17.46
5	0.00	0.00	0.00	0.00	1.36	1.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.36	1.48
6	10.94	0.00	0.00	1876.50	11.66	21.50	0.00	0.00	0.00	0.00	317.00	1.86	1887.44	328.86	23.36
7	824.38	0.00	0.00	1067.77	0.00	0.00	0.00	0.00	0.00	2450.00	8.85	0.00	4142.15	8.85	0.00
8	2139.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1519.00	0.00	0.00	3658.73	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4791.75	0.00	0.00	4791.75	0.00
10	278.86	0.00	0.00	0.00	0.07	0.03	0.00	0.00	0.00	0.00	0.00	0.00	278.86	0.07	0.03
Total	4216.35	0.00	0.00	3029.22	37.59	98.90	0.00	0.00	0.00	4212.52	5158.50	63.07	11458.09	5196.09	161.87

c) Diversions by Type - Principal Facilities

Water-Use Categ.	ILLINOIS		INDIANA		MICHIGAN*		WISCONSIN		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	1133.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1133.18
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	5.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.32
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	7.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.92
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	278.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	278.86
Total	0.00	1425.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1425.28

* Data not available to report by subbasin for most categories of use.

BASIN REPORT - Lake Huron

DATE: 2/22/91

a) Withdrawals, Diversions and Consumptive Use - All Facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1989

Water- Use Categ.	MICHIGAN*			ONTARIO			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	0.00	0.00	0.00	151.85	44.53	22.78	151.85	44.53	22.78
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	19.82	0.00	2.94	19.82	0.00	2.94
4	0.00	0.00	0.00	3.42	0.00	2.67	3.42	0.00	2.67
5	0.00	0.00	0.00	15.01	0.00	12.00	15.01	0.00	12.00
6	0.00	0.00	0.00	768.84	0.00	18.99	768.84	0.00	18.99
7	652.47	0.00	8.48	236.88	0.00	1.20	889.43	0.00	9.68
8	0.00	0.00	0.00	7191.29	0.00	64.72	7191.29	0.00	64.72
9	0.00	0.00	0.00	44857.17	0.00	0.00	44857.17	0.00	0.00
10	0.00	0.00	0.00	40.15	0.00	0.00	40.15	0.00	0.00
Total	652.47	0.00	8.48	53284.11	44.53	123.31	53936.58	44.53	131.79

b) Withdrawals by Source - All Facilities

Water- Use Categ.	MICHIGAN*			ONTARIO			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	0.00	0.00	0.00	85.51	38.78	47.59	85.51	38.78	47.59
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	18.82	0.00	0.00	18.82
4	0.00	0.00	0.00	0.00	2.88	0.54	0.00	2.88	0.54
5	0.00	0.00	0.00	0.00	0.00	15.01	0.00	0.00	15.01
6	0.00	0.00	0.00	681.22	75.03	12.39	681.22	75.03	12.39
7	652.44	0.03	0.00	236.96	0.00	0.00	889.40	0.03	0.00
8	0.00	0.00	0.00	7191.29	0.00	0.00	7191.29	0.00	0.00
9	0.00	0.00	0.00	23750.91	21108.25	0.00	23750.91	21108.25	0.00
10	0.00	0.00	0.00	0.00	40.15	0.00	0.00	40.15	0.00
Total	652.44	0.03	0.00	31825.89	21263.07	95.14	32578.33	21263.10	95.14

c) Diversions by Type - All Facilities

Water- Use Categ.	MICHIGAN*		ONTARIO		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	44.53	0.00	44.53	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	44.53	0.00	44.53	0.00

*The State of Michigan was unable to report by subbasin for most categories of use.

BASIN REPORT - Lake Huron

DATE: 2/22/91

a) Withdrawals, Diversions and Consumptive Use - Principal Facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1989

Water- Use Categ.	MICHIGAN*			ONTARIO			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	0.00	0.00	0.00	139.81	54.31	11.17	139.81	54.31	11.17
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	767.21	0.00	18.80	767.21	0.00	18.80
7	0.00	0.00	0.00	236.96	0.00	1.20	236.96	0.00	1.20
8	0.00	0.00	0.00	7191.29	0.00	64.72	7191.29	0.00	64.72
9	0.00	0.00	0.00	44857.17	0.00	0.00	44857.17	0.00	0.00
10	0.00	0.00	0.00	40.15	0.00	0.00	40.15	0.00	0.00
Total	0.00	0.00	0.00	53232.39	54.31	93.89	53232.39	54.31	93.89

b) Withdrawals by Source - Principal Facilities

Water- Use Categ.	MICHIGAN*			ONTARIO			TOTAL		
	GLSW	OSW	OW	GLSW	OSW	OW	GLSW	OSW	OW
1	0.00	0.00	0.00	65.15	33.22	41.24	65.15	33.22	41.24
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	681.20	74.26	11.78	681.20	74.26	11.78
7	0.00	0.00	0.00	236.96	0.00	0.00	236.96	0.00	0.00
8	0.00	0.00	0.00	7191.29	0.00	0.00	7191.29	0.00	0.00
9	0.00	0.00	0.00	23750.91	21106.25	0.00	23750.91	21106.25	0.00
10	0.00	0.00	0.00	0.00	40.15	0.00	0.00	40.15	0.00
Total	0.00	0.00	0.00	31925.51	21253.89	52.99	31925.51	21253.89	52.99

c) Diversions by Type - Principal Facilities

Water- Use Categ.	MICHIGAN*		ONTARIO		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	44.53	9.77	44.53	9.77
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	44.53	9.77	44.53	9.77

BASIN REPORT - Lake Erie

DATE: 2/20/91
 UNITS: MGAL/DAY
 YEAR OF DATA: 1989

a) Withdrawals, Diversions and Consumptive use - All Facilities

Water-Use Categ.	INDIANA			MICHIGAN*			NEW YORK			OHIO			ONTARIO			PENNSYLVANIA			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	37.49	0.00	5.62	0.00	0.00	0.00	266.00	0.00	0.00	644.01	0.18	32.65	205.60	-44.53	50.84	43.16	0.00	4.32	1136.56	-44.35	137.43
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.52	0.00	1.27	0.00	0.00	0.00	78.00	0.00	0.00	16.56	0.00	8.49	19.48	0.00	2.92	1.97	0.00	0.20	164.53	0.00	12.88
4	0.86	0.00	0.73	0.00	0.00	0.00	1.60	0.00	0.16	11.30	0.00	10.17	16.44	0.00	12.83	2.96	0.00	2.79	33.16	0.00	26.73
5	1.81	0.00	1.45	0.00	0.00	0.00	1.49	0.00	0.00	10.80	0.00	8.64	15.22	0.00	12.14	0.00	0.00	0.00	29.23	0.00	22.27
6	7.51	0.00	0.45	0.00	0.00	0.00	58.40	0.00	0.00	132.54	0.00	13.26	494.43	0.00	23.59	49.50	0.00	10.42	742.38	0.00	48.12
7	0.27	0.00	0.01	4221.04	0.00	54.87	480.00	0.00	0.00	2615.10	0.00	0.22	2844.43	0.00	25.60	300.10	0.00	0.40	10460.99	0.00	81.10
8	0.00	0.00	0.00	0.00	0.00	0.00	9.69	0.00	0.00	59.10	0.00	7.10	0.00	0.00	0.00	0.00	0.00	0.00	50.10	0.00	7.10
9	0.00	0.00	0.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	4316.58	4316.58	0.00	0.00	0.00	0.00	4876.58	4316.58	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-28.06	0.00	766.10	766.10	0.00	0.00	0.00	0.00	766.10	738.04	0.00
Total	56.46	0.00	9.36	4221.04	0.00	54.87	1265.40	0.00	0.16	959.71	-27.88	144.53	3672.32	5038.15	109.36	347.63	0.00	14.13	18259.62	5010.27	235.63

b) Withdrawals by Source - All Facilities

Water-Use Categ.	INDIANA			MICHIGAN*			NEW YORK			OHIO			ONTARIO			PENNSYLVANIA			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	0.00	32.34	5.15	0.00	0.00	0.00	160.00	56.00	0.00	495.89	110.52	37.50	108.87	19.09	17.64	29.70	1.48	1.98	804.46	209.43	122.67
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.03	8.49	0.00	0.00	0.00	16.00	16.00	25.00	0.00	0.00	56.56	0.00	0.00	19.48	0.00	0.00	1.97	10.00	10.00	144.50
4	0.00	0.37	0.49	0.00	0.00	0.00	1.29	0.00	0.40	0.00	7.10	4.20	0.00	11.11	5.33	0.00	2.16	0.80	1.20	26.74	11.22
5	0.00	0.00	1.81	0.00	0.00	0.00	0.50	0.00	0.90	0.00	1.60	9.20	0.00	0.00	15.22	0.00	0.00	0.00	0.50	1.60	27.13
6	0.00	4.39	3.12	0.00	0.00	0.00	55.00	0.00	3.40	24.11	168.26	0.17	459.69	25.73	9.01	47.74	1.48	0.28	586.54	139.66	15.93
7	0.00	0.00	0.27	4220.95	0.00	0.00	480.00	0.00	0.00	2454.50	160.00	0.00	2844.48	0.00	0.00	300.10	0.00	0.00	10300.03	160.59	0.27
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.10	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	4316.58	0.00	0.00	0.00	0.00	0.00	4876.58	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	766.10	0.00	0.00	0.00	0.00	0.00	766.10	0.00	0.00
Total	0.00	37.13	19.33	4220.95	0.00	0.00	1266.70	56.00	62.70	3024.50	385.08	108.03	8495.71	55.93	126.48	367.54	5.12	5.03	17395.50	542.35	321.77

c) Diversions by Type - All Facilities

Water-Use Categ.	INDIANA		MICHIGAN*		NEW YORK		OHIO		ONTARIO		PENNSYLVANIA		TOTAL		
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	-44.53	0.00	0.00	0.00	0.00	-44.53	0.18
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-28.06	766.10	0.00	0.00	0.00	766.10	-28.06
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-27.88	5038.15	0.00	0.00	0.00	0.00	5038.15	-27.88

*The State of Michigan was unable to report by subbasin for most categories of use.

b) Withdrawals, Diversions and Consumptive Use - Principal Facilities

st-	INDIANA			MICHIGAN*			NEW YORK			OHIO			ONTARIO			PENNSYLVANIA			TOTAL		
	Withdr.	Liver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Liver.	Consum.	Withdr.	Liver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	37.33	0.00	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	204.13	-44.53	50.02	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00
3	0.10	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00
4	0.75	0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	7.18	0.00	6.43	0.00	0.00	0.00	0.00	0.00	0.00	425.11	0.00	12.51	452.73	0.00	23.70	49.13	0.00	10.57	674.15	0.00	47.01
7	0.27	0.00	0.01	0.00	0.00	0.00	450.00	0.00	0.00	2612.10	0.00	6.22	2844.48	0.00	21.56	300.10	0.00	6.40	4233.55	0.00	26.23
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.10	0.00	7.10	0.00	0.00	0.00	0.00	0.00	0.00	50.10	0.00	7.10
9	0.00	0.00	0.00	0.00	0.00	0.00	570.00	0.00	0.00	0.00	0.00	0.00	4316.58	4316.58	0.00	0.00	0.00	0.00	4376.58	4316.58	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-15.05	0.00	766.10	766.10	0.00	0.00	0.00	0.00	766.10	766.10	0.00
Total	45.63	0.00	6.72	0.00	0.00	0.00	1040.00	0.00	0.00	3420.70	-27.85	110.66	6024.02	5303.16	70.56	351.69	0.00	14.59	10430.12	5010.27	217.13

b) Withdrawals by Source - Principal Facilities

leg-	INDIANA			MICHIGAN*			NEW YORK			OHIO			ONTARIO			PENNSYLVANIA			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	0.00	32.34	4.99	0.00	0.00	0.00	0.00	0.00	0.00	408.89	110.24	22.00	168.67	19.00	76.25	23.70	1.45	1.31	641.46	103.07	114.55
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.07
3	0.00	0.03	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.42
4	0.00	0.33	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	4.36	2.82	0.00	0.00	0.00	0.00	0.00	0.00	14.11	101.00	0.00	429.67	24.29	8.24	47.74	1.39	0.00	531.46	131.64	11.05
7	0.00	0.00	0.27	0.00	0.00	0.00	450.00	0.00	0.00	2414.10	160.00	0.00	2844.48	0.00	0.00	300.10	0.00	0.00	6073.63	165.60	0.27
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.10	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	570.00	0.00	0.00	0.00	0.00	0.00	4316.58	0.00	0.00	0.00	0.00	0.00	4376.58	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	766.10	0.00	0.00	0.00	0.00	0.00	766.10	0.00	0.00
Total	0.00	37.66	6.57	0.00	0.00	0.00	1040.00	0.00	0.00	3024.10	271.25	22.00	8475.03	45.89	84.10	337.44	2.84	1.31	12047.70	452.07	125.65

c) Diversions by Type - Principal Facilities

leg-	INDIANA		MICHIGAN*		NEW YORK		OHIO		ONTARIO		PENNSYLVANIA		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-44.53	0.00	0.00	0.00	-44.53	0.18
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4316.58	0.00	0.00	0.00	4316.58	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-27.85	766.10	0.00	0.00	0.00	766.10	-27.85
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-27.85	5303.16	0.00	0.00	0.00	5303.16	-27.85

The State of Michigan was unable to report by subbasin for most categories of use.

BASIN REPORT - Lake Ontario

DATE: 2/22/91

a) Withdrawals, Diversions and Consumptive Use - Principal Facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1989

Water- Use Categ.	NEW YORK			ONTARIO			PENNSYLVANIA			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	0.00	0.00	0.00	789.70	0.00	118.48	0.00	0.00	0.00	789.70	0.00	118.48
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	859.30	0.00	14.40	0.00	0.00	0.00	859.30	0.00	14.40
7	2149.00	0.00	8.00	1474.87	0.00	13.30	0.00	0.00	0.00	3623.87	0.00	21.30
8	1126.00	0.00	3.00	5494.79	0.00	49.45	0.00	0.00	0.00	6620.79	0.00	52.45
9	47436.00	0.00	0.00	56281.89	-4316.58	0.00	0.00	0.00	0.00	103717.89	-4316.58	0.00
10	415.00	0.00	0.00	129.97	-766.10	0.00	0.00	0.00	0.00	544.87	-766.10	0.00
Total	51126.00	0.00	11.00	85030.52	-5082.68	185.61	0.00	0.00	0.00	116156.52	-5082.68	206.61

b) Withdrawals by Source - Principal Facilities

Water- Use Categ.	NEW YORK			ONTARIO			PENNSYLVANIA			TOTAL		
	QLSW	OSW	GW	QLSW	OSW	GW	QLSW	OSW	GW	QLSW	OSW	GW
1	0.00	0.00	0.00	736.38	36.40	16.92	0.00	0.00	0.00	736.38	36.40	16.92
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	754.74	103.05	1.51	0.00	0.00	0.00	754.74	103.05	1.51
7	2149.00	0.00	0.00	1474.87	0.00	0.00	0.00	0.00	0.00	3623.87	0.00	0.00
8	1126.00	0.00	0.00	5494.79	0.00	0.00	0.00	0.00	0.00	6620.79	0.00	0.00
9	47436.00	0.00	0.00	45935.12	10346.77	0.00	0.00	0.00	0.00	93371.12	10346.77	0.00
10	415.00	0.00	0.00	0.00	129.97	0.00	0.00	0.00	0.00	415.00	129.97	0.00
Total	51126.00	0.00	0.00	54395.90	10616.20	18.43	0.00	0.00	0.00	105521.90	10616.20	18.43

c) Diversions by Type - Principal Facilities

Water- Use Categ.	NEW YORK		ONTARIO		PENNSYLVANIA		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	-4316.58	0.00	0.00	0.00	-4316.58	0.00
10	0.00	0.00	-766.10	0.00	0.00	0.00	-766.10	0.00
Total	0.00	0.00	-5082.68	0.00	0.00	0.00	-5082.68	0.00

BASIN REPORT - Lake Ontario

DATE: 2/22/91

a) Withdrawals, Diversions and Consumptive Use - All Facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1989

Water-Use Categ.	NEW YORK			ONTARIO			PENNSYLVANIA			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	266.00	0.00	0.00	793.33	0.00	119.00	0.16	0.00	0.02	1059.49	0.00	119.02
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	290.00	0.00	0.00	23.19	0.00	3.48	0.00	0.00	0.00	313.19	0.00	3.48
4	8.00	0.00	0.08	3.73	0.00	2.91	0.00	0.00	0.00	11.73	0.00	2.99
5	0.40	0.00	0.00	7.96	0.00	6.37	0.00	0.00	0.00	14.36	0.00	6.37
6	220.00	0.00	0.00	864.40	0.00	15.22	0.00	0.00	0.00	1084.40	0.00	15.22
7	2149.00	0.00	8.00	1474.87	0.00	13.30	0.00	0.00	0.00	3623.87	0.00	21.30
8	1126.00	0.00	3.00	5494.79	0.00	49.45	0.00	0.00	0.00	6620.79	0.00	52.45
9	143835.00	0.00	0.00	56281.89	-4316.58	0.00	0.00	0.00	0.00	200118.89	-4316.58	0.00
10	415.00	0.00	0.00	129.97	-766.10	0.00	0.00	0.00	0.00	544.87	-766.10	0.00
Total	148315.40	0.00	11.08	65074.14	-5082.68	209.73	0.16	0.00	0.02	213369.70	-5082.68	220.83

b) Withdrawals by Source - All Facilities

Water-Use Categ.	NEW YORK			ONTARIO			PENNSYLVANIA			TOTAL		
	QLSW	OSW	GW	QLSW	OSW	GW	QLSW	OSW	GW	QLSW	OSW	GW
1	96.00	139.00	31.00	736.46	36.89	19.98	0.00	0.00	0.16	832.46	175.89	51.14
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	101.00	96.00	93.00	0.00	0.00	23.19	0.00	0.00	0.00	101.00	96.00	116.19
4	7.00	0.00	1.00	0.00	2.63	1.10	0.00	0.00	0.00	7.00	2.63	2.10
5	2.50	0.00	3.90	0.00	0.00	7.96	0.00	0.00	0.00	2.50	0.00	11.86
6	180.00	0.00	40.00	755.01	106.30	3.09	0.00	0.00	0.00	935.01	106.30	43.09
7	2149.00	0.00	0.00	1474.87	0.00	0.00	0.00	0.00	0.00	3623.87	0.00	0.00
8	1126.00	0.00	0.00	5494.79	0.00	0.00	0.00	0.00	0.00	6620.79	0.00	0.00
9	143835.00	0.00	0.00	45935.12	10346.77	0.00	0.00	0.00	0.00	189770.12	10346.77	0.00
10	415.00	0.00	0.00	0.00	129.97	0.00	0.00	0.00	0.00	415.00	129.97	0.00
Total	147911.50	235.00	188.90	54396.25	10622.57	55.33	0.00	0.00	0.16	202307.75	10857.57	224.39

c) Diversions by Type - All Facilities

Water-Use Categ.	NEW YORK		ONTARIO		PENNSYLVANIA		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	-4316.58	0.00	0.00	0.00	-4316.58	0.00
10	0.00	0.00	-766.10	0.00	0.00	0.00	-766.10	0.00
Total	0.00	0.00	-5082.68	0.00	0.00	0.00	-5082.68	0.00

WATER-USE CATEGORY REPORT - Public Supply

DATE: 01/04/91

a) Water-Use by Basin - All Jurisdictions

UNITS: Mgal(US)/d
YEAR OF DATA: 1989

Basin	All Facilities								Principal Facilities							
	Withdrawals				Diversions			Consumptive Use	Withdrawals				Diversions			Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL		GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	
Lake Superior	51.40	7.92	14.55	73.86	0.00	0.00	0.00	13.84	51.33	7.72	9.53	68.57	0.00	0.00	0.00	13.03
Lake Michigan	1461.65	41.10	116.85	1619.60	0.00	1133.28	1133.28	75.80	1461.65	41.10	108.34	1611.09	0.00	1133.18	1133.18	74.59
Lake Huron	65.51	38.76	47.59	151.85	44.53	0.00	44.53	22.78	65.15	33.22	47.24	139.61	44.53	9.17	54.31	11.17
Lake Erie	804.46	209.43	122.67	1136.56	-44.53	0.18	-44.35	137.43	844.46	163.07	114.85	922.39	-44.53	0.18	-44.35	136.11
Lake Ontario	832.46	175.89	51.14	1059.49	0.00	0.00	0.00	119.02	736.38	36.40	16.92	789.70	0.00	0.00	0.00	118.46
St. Lawrence River	763.79	502.04	29.96	1295.79	0.00	0.00	0.00	124.47	662.26	498.32	4.24	1164.83	0.00	0.00	0.00	124.06
Total	3979.27	975.13	382.75	6561.15*	0.00	1133.46	1133.46	616.35*	3621.23	779.84	295.12	4696.19	0.00	1143.13	1143.13	477.41

b) Water-Use by Jurisdiction - All Basins

Jurisdiction	All Facilities								Principal Facilities							
	Withdrawals				Diversions			Consumptive Use	Withdrawals				Diversions			Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL		GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	
Illinois	1133.18	0.00	0.00	1133.18	0.00	1133.18	1133.18	0.00	1133.18	0.00	0.00	1133.18	0.00	1133.18	1133.18	0.00
Indiana	84.95	32.34	57.30	174.59	0.00	0.00	0.00	26.18	84.95	32.34	56.80	174.09	0.00	0.00	0.00	26.11
Michigan	0.00	0.00	0.00	1224.00	0.00	0.00	0.00	123.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Minnesota	33.46	5.31	7.43	46.20	0.00	0.00	0.00	9.70	33.46	5.27	7.36	46.09	0.00	0.00	0.00	9.67
New York	357.00	185.00	56.00	598.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ohio	495.89	110.52	37.90	644.31	0.00	0.18	0.18	96.65	495.89	110.23	32.30	638.47	0.00	0.18	0.18	95.77
Ontario	966.22	207.35	152.08	1325.65	0.00	0.00	0.00	198.85	965.71	200.80	140.57	1307.08	0.00	9.17	9.17	186.29
Pennsylvania	39.70	1.45	2.14	43.32	0.00	0.00	0.00	4.34	39.70	1.45	1.31	42.46	0.00	0.00	0.00	4.12
Quebec	624.24	392.03	0.00	1016.27	0.00	0.00	0.00	101.44	623.71	388.60	0.00	1012.31	0.00	0.00	0.00	101.18
Wisconsin	244.63	41.10	69.90	355.63	0.00	0.10	0.10	56.18	244.63	41.10	56.78	342.51	0.00	0.00	0.00	54.27
Total	3979.27	975.13	382.75	6561.15*	0.00	1133.46	1133.46	616.35*	3621.23	779.84	295.12	4696.19	0.00	1143.13	1143.13	477.41

*The total presented is larger than the sum of the individual sub-basins. This is due to the addition of statewide data from Michigan. Michigan's withdrawals and consumptive uses for this category cannot presently be reported by individual sub-basin or withdrawal type.

WATER-USE CATEGORY REPORT - Self-supply - domestic (residential, commercial, institutional)

DATE: 01/01/91

UNITS: Mgal(US)/d
YEAR OF DATA: 1989

a) Water-Use by Basin - All Jurisdictions

Basin	All Facilities								Principal Facilities							
	Withdrawals				Diversions				Consumptive Use	Withdrawals				Diversions		
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	GLSW		OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	
Lake Superior	0.95	0.54	1.28	2.77	0.00	0.00	0.00	0.30	0.95	0.51	0.00	1.46	0.00	0.00	0.00	0.13
Lake Michigan	29.39	19.29	49.14	97.82	0.00	5.44	5.44	10.25	29.26	19.24	11.30	59.80	0.00	5.32	5.32	4.58
Lake Huron	0.00	0.00	19.62	19.62	0.00	0.00	0.00	2.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Erie	10.00	10.03	144.50	164.53	0.00	0.00	0.00	12.88	0.00	0.03	0.07	0.10	0.00	0.00	0.00	0.01
Lake Ontario	101.00	96.00	116.19	313.19	0.00	0.00	0.00	3.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Lawrence River	51.00	20.00	108.52	179.52	0.00	0.00	0.00	10.15	0.00	0.00	47.55	47.55	0.00	0.00	0.00	4.76
Total	192.34	145.86	439.25	777.45	0.00	5.44	5.44	40.00	30.21	19.78	58.92	108.91	0.00	5.32	5.32	9.47

b) Water-Use by Jurisdiction - All Basins

Jurisdiction	All Facilities								Principal Facilities							
	Withdrawals				Diversions				Consumptive Use	Withdrawals				Diversions		
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	GLSW		OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	
Illinois	29.39	0.04	0.09	29.52	0.00	5.44	5.44	0.00	29.26	0.00	0.00	29.26	0.00	5.32	5.32	0.00
Indiana	0.00	19.28	36.84	56.12	0.00	0.00	0.00	8.41	0.00	19.27	11.37	30.64	0.00	0.00	0.00	4.59
Michigan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Minnesota	0.95	0.54	0.05	1.54	0.00	0.00	0.00	0.12	0.95	0.51	0.00	1.46	0.00	0.00	0.00	0.13
New York	162.00	126.00	170.00	458.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ohio	0.00	0.00	56.56	56.56	0.00	0.00	0.00	8.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ontario	0.00	0.00	85.27	85.27	0.00	0.00	0.00	12.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania	0.00	0.00	1.97	1.97	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quebec	0.00	0.00	67.63	67.63	0.00	0.00	0.00	6.87	0.00	0.00	47.55	47.55	0.00	0.00	0.00	4.76
Wisconsin	0.00	0.00	20.84	20.84	0.00	0.00	0.00	3.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	192.34	145.86	439.25	777.45	0.00	5.44	5.44	40.00	30.21	19.78	58.92	108.91	0.00	5.32	5.32	9.47

a) Water-Use by Basin - All Jurisdictions

Basin	All Facilities								Principal Facilities									
	Withdrawals				Diversions				Consumptive Use	Withdrawals				Diversions				Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	GLSW		OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL			
Lake Superior	0.00	0.50	0.04	0.53	0.00	0.00	0.00	0.12	0.00	0.39	0.00	0.39	0.00	0.00	0.00	0.00	0.00	
Lake Michigan	0.00	5.68	22.72	28.40	0.00	0.00	0.00	23.59	0.00	5.04	17.46	22.50	0.00	0.00	0.00	0.00	19.30	
Lake Huron	0.00	2.88	0.54	3.42	0.00	0.00	0.00	2.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Lake Erie	1.20	20.74	11.22	33.16	0.00	0.00	0.00	26.73	0.00	0.33	0.42	0.75	0.00	0.00	0.00	0.00	0.67	
Lake Ontario	7.00	2.53	2.10	11.73	0.00	0.00	0.00	2.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
St. Lawrence River	1.00	0.49	3.98	5.47	0.00	0.00	0.00	3.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total	9.20	32.92	40.61	319.73*	0.00	0.00	0.00	251.07*	0.00	5.76	17.58	23.64	0.00	0.00	0.00	0.00	19.37	

b) Water-Use by Jurisdiction - All Basins

Jurisdiction	All Facilities								Principal Facilities									
	Withdrawals				Diversions				Consumptive Use	Withdrawals				Diversions				Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	GLSW		OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL			
Illinois	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Indiana	0.00	5.70	13.64	19.34	0.00	0.00	0.00	17.42	0.00	5.37	13.20	18.57	0.00	0.00	0.00	0.00	16.71	
Michigan	0.00	0.00	0.00	237.00	0.00	0.00	0.00	237.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Minnesota	0.00	0.48	0.02	0.50	0.00	0.00	0.00	0.09	0.00	0.39	0.00	0.39	0.00	0.00	0.00	0.00	0.00	
New York	9.20	0.00	1.50	10.70	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Ohio	0.00	7.10	4.20	11.30	0.00	0.00	0.00	10.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Ontario	0.00	17.13	7.18	24.31	0.00	0.00	0.00	18.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Pennsylvania	0.00	2.16	0.80	2.96	0.00	0.00	0.00	2.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Quebec	0.00	0.00	3.70	3.70	0.00	0.00	0.00	3.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Wisconsin	0.00	0.35	9.57	9.92	0.00	0.00	0.00	6.95	0.00	0.00	4.68	4.68	0.00	0.00	0.00	0.00	2.26	
Total	9.20	32.92	40.61	319.73*	0.00	0.00	0.00	251.07*	0.00	5.76	17.58	23.64	0.00	0.00	0.00	0.00	19.37	

*The total presented is larger than the sum of the individual sub-basins. This is due to the inclusion of statewide data from Michigan. Michigan's withdrawals and consumptive uses for this category cannot presently be reported by individual sub-basin or withdrawal type.

WATER-USE CATEGORY REPORT - Self-supply - livestock

DATE: 01/04/91

UNITS: Mgal(US)/d
YEAR OF DATA: 1989

a) Water-Use by Basin - All Jurisdictions

Basin	All Facilities							
	Withdrawals				Diversions			Consumptive Use
	GLSW	OSW	CW	TOTAL	Intrabasin	Interbasin	TOTAL	
Lake Superior	0.68	0.06	2.14	2.88	0.00	0.00	0.00	1.78
Lake Michigan	0.00	2.39	16.47	18.86	0.00	0.00	0.00	23.09
Lake Huron	0.00	0.00	15.01	15.01	0.00	0.00	0.00	12.09
Lake Erie	0.50	1.60	27.33	29.43	0.00	0.00	0.00	22.29
Lake Ontario	2.50	0.00	11.86	14.36	0.00	0.00	0.00	6.33
St. Lawrence River	1.00	0.00	33.69	34.69	0.00	0.00	0.00	24.58
Total	4.68	4.05	115.30	124.03	0.00	0.00	0.00	90.02

Principal Facilities							
Withdrawals				Diversions			Consumptive Use
GLSW	OSW	CW	TOTAL	Intrabasin	Interbasin	TOTAL	
0.68	0.00	0.00	0.68	0.00	0.00	0.00	0.00
0.00	1.38	1.46	2.86	0.00	0.00	0.00	2.38
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.68	1.38	1.46	3.54	0.00	0.00	0.00	2.28

b) Water-Use by Jurisdiction - All Basins

Jurisdiction	All Facilities							
	Withdrawals				Diversions			Consumptive Use
	GLSW	OSW	CW	TOTAL	Intrabasin	Interbasin	TOTAL	
Illinois	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indiana	0.00	1.38	1.38	2.66	0.00	0.00	0.00	6.93
Michigan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Minnesota	0.68	0.04	0.23	0.95	0.00	0.00	0.00	0.21
New York	0.00	0.00	6.90	10.80	0.00	0.00	0.00	0.00
Ohio	0.00	1.60	9.20	10.80	0.00	0.00	0.00	8.44
Ontario	0.00	0.00	46.96	46.96	0.00	0.00	0.00	27.38
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quebec	0.00	0.00	22.19	22.19	0.00	0.00	0.00	17.19
Wisconsin	0.00	1.03	22.63	23.66	0.00	0.00	0.00	18.96
Total	4.68	4.05	115.30	124.03	0.00	0.00	0.00	90.02

Principal Facilities							
Withdrawals				Diversions			Consumptive Use
GLSW	OSW	CW	TOTAL	Intrabasin	Interbasin	TOTAL	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1.38	1.46	2.86	0.00	0.00	0.00	2.38
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.68	0.00	0.00	0.68	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.68	1.38	1.46	3.54	0.00	0.00	0.00	2.28

WATER-USE CATEGORY REPORT - Self-supply - industrial (manufacturing and mining)

DATE: 01/04/91

a) Water-Use by Basin - All Jurisdictions

UNITS: Mgal(US)/d
YEAR OF DATA: 1989

Basin	All Facilities								Principal Facilities									
	Withdrawals				Diversions				Consumptive Use	Withdrawals				Diversions				Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	GLSW		OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL			
Lake Superior	170.14	144.42	2.27	316.83	0.00	0.00	0.00	42.89	167.93	144.39	2.15	314.47	0.00	0.00	0.00	42.64		
Lake Michigan	1887.44	383.19	26.20	2296.83	0.00	7.92	7.92	154.18	1887.44	328.86	23.36	2239.66	0.00	7.92	7.92	148.49		
Lake Huron	681.22	75.03	12.39	768.64	0.00	0.00	0.00	16.99	681.20	74.26	11.76	767.21	0.00	0.00	0.00	16.80		
Lake Erie	586.64	139.86	15.98	742.38	0.00	0.00	0.00	48.12	531.46	131.64	11.06	674.15	0.00	0.00	0.00	47.01		
Lake Ontario	935.01	106.30	43.09	1084.40	0.00	0.00	0.00	15.22	754.74	103.05	1.51	859.30	0.00	0.00	0.00	14.40		
St. Lawrence River	96.27	123.48	10.02	356.77	0.00	0.00	0.00	19.02	27.63	124.95	4.28	156.87	0.00	0.00	0.00	12.50		
Total	4356.61	974.28	109.95	5440.84	0.00	7.92	7.92	290.10	4050.39	907.15	54.12	5011.66	0.00	7.92	7.92	281.83		

b) Water-Use by Jurisdiction - All Basins

Jurisdiction	All Facilities								Principal Facilities									
	Withdrawals				Diversions				Consumptive Use	Withdrawals				Diversions				Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	GLSW		OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL			
Illinois	10.94	0.00	0.00	10.94	0.00	7.92	7.92	2.01	10.94	0.00	0.00	10.94	0.00	7.92	7.92	2.01		
Indiana	1876.50	16.27	25.22	1917.99	0.00	0.00	0.00	115.08	1876.50	16.22	24.32	1917.04	0.00	0.00	0.00	115.02		
Michigan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Minnesota	5.84	134.14	0.14	140.12	0.00	0.00	0.00	35.88	5.83	134.14	0.12	140.09	0.00	0.00	0.00	35.88		
New York	303.00	0.00	48.40	351.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Ohio	24.11	108.26	0.17	132.54	0.00	0.00	0.00	13.26	24.11	101.00	0.00	125.11	0.00	0.00	0.00	12.51		
Ontario	2086.30	217.33	31.62	2335.26	0.00	0.00	0.00	64.62	2085.27	212.45	27.82	2325.54	0.00	0.00	0.00	63.11		
Pennsylvania	47.74	1.48	0.28	49.50	0.00	0.00	0.00	10.42	47.74	1.39	0.00	49.13	0.00	0.00	0.00	10.37		
Quebec	0.00	123.48	0.00	123.48	0.00	0.00	0.00	11.07	0.00	124.95	0.00	124.95	0.00	0.00	0.00	11.04		
Wisconsin	2.18	371.31	4.12	377.61	0.00	0.00	0.00	31.76	0.00	377.00	1.86	378.86	0.00	0.00	0.00	31.89		
Total	4356.61	974.28	109.95	5440.84	0.00	7.92	7.92	290.10	4050.39	907.15	54.12	5011.66	0.00	7.92	7.92	281.83		

WATER-USE CATEGORY REPORT - Self-supply - Thermoelectric power - fossil-fuel plants

DATE: 11/29/90

a) Water-Use by Basin - All Jurisdictions

UNITS: Mgal(US)/d
YEAR OF DATA: 1989

Basin	All Facilities								Principal Facilities									
	Withdrawals				Diversions				Consumptive Use	Withdrawals				Diversions				Consumptive Use
	GLSM	OSM	GW	TOTAL	Intrabasin	Interbasin	TOTAL	GLSM		OSM	GW	TOTAL	Intrabasin	Interbasin	TOTAL			
Lake Superior	639.02	115.40	0.01	754.51	0.00	0.00	0.00	9.45	378.25	115.42	0.00	493.67	0.00	0.00	0.00	6.86		
Lake Michigan	5107.15	133.00	2.69	5242.83	0.00	0.00	0.00	60.14	4142.15	8.65	0.00	4150.80	0.00	0.00	0.00	45.94		
Lake Huron	889.40	0.03	0.00	889.43	0.00	0.00	0.00	8.68	236.96	0.00	0.00	236.96	0.00	0.00	0.00	1.20		
Lake Erie	10300.03	160.60	0.27	10460.90	0.00	0.00	0.00	91.10	6079.08	160.60	0.27	6239.95	0.00	0.00	0.00	26.23		
Lake Ontario	3623.87	0.00	0.00	3623.87	0.00	0.00	0.00	21.30	3623.87	0.00	0.00	3623.87	0.00	0.00	0.00	21.30		
St.Lawrence River	39.10	7.93	0.00	47.02	0.00	0.00	0.00	0.00	39.10	7.93	0.00	47.02	0.00	0.00	0.00	0.00		
Total	20598.56	417.21	2.97	21018.75	0.00	0.00	0.00	181.67	14499.40	292.59	0.27	14792.27	0.00	0.00	0.00	100.73		

b) Water-Use by Jurisdiction - All Basins

Jurisdiction	All Facilities								Principal Facilities									
	Withdrawals				Diversions				Consumptive Use	Withdrawals				Diversions				Consumptive Use
	GLSM	OSM	GW	TOTAL	Intrabasin	Interbasin	TOTAL	GLSM		OSM	GW	TOTAL	Intrabasin	Interbasin	TOTAL			
Illinois	624.38	0.00	0.00	624.38	0.00	0.00	0.00	0.00	624.38	0.00	0.00	624.38	0.00	0.00	0.00	0.00		
Indiana	1067.77	0.00	0.27	1068.04	0.00	0.00	0.00	21.37	1067.77	0.00	0.27	1068.04	0.00	0.00	0.00	21.37		
Michigan	6099.16	124.56	2.28	6226.00	0.00	0.00	0.00	80.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Minnesota	0.82	115.44	0.01	116.27	0.00	0.00	0.00	2.33	0.82	115.38	0.00	116.20	0.00	0.00	0.00	2.33		
New York	2629.00	0.00	0.00	2629.00	0.00	0.00	0.00	8.00	2629.00	0.00	0.00	2629.00	0.00	0.00	0.00	8.00		
Ohio	2454.50	160.60	0.00	2615.10	0.00	0.00	0.00	0.22	2454.50	160.60	0.00	2615.10	0.00	0.00	0.00	0.22		
Ontario	4908.77	0.04	0.00	4908.81	0.00	0.00	0.00	43.58	4908.77	0.04	0.00	4908.81	0.00	0.00	0.00	43.58		
Pennsylvania	300.10	0.00	0.00	300.10	0.00	0.00	0.00	0.40	300.10	0.00	0.00	300.10	0.00	0.00	0.00	0.40		
Quebec	39.10	7.93	0.00	47.02	0.00	0.00	0.00	0.00	39.10	7.93	0.00	47.02	0.00	0.00	0.00	0.00		
Wisconsin	2474.97	8.65	0.41	2484.03	0.00	0.00	0.00	24.83	2474.97	8.65	0.00	2483.62	0.00	0.00	0.00	24.83		
Total	20598.56	417.21	2.97	21018.75	0.00	0.00	0.00	181.67	14499.40	292.59	0.27	14792.27	0.00	0.00	0.00	100.73		

WATER-USE CATEGORY REPORT - Self-supply - thermoelectric power - nuclear plants

DATE: 11/29/90

a) Water-Use by Basin - All Jurisdictions

UNITS: Mgal(US)/d
YEAR OF DATA: 1989

Basin	All Facilities								Principal Facilities									
	Withdrawals				Diversions				Consumptive Use	Withdrawals				Diversions				Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	GLSW		OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL			
Lake Superior	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Lake Michigan	5820.02	0.00	0.00	5820.02	0.00	0.00	0.00	43.29	3658.73	0.00	0.00	3658.73	0.00	0.00	0.00	15.19		
Lake Huron	7191.29	0.00	0.00	7191.29	0.00	0.00	0.00	64.72	7191.29	0.00	0.00	7191.29	0.00	0.00	0.00	64.72		
Lake Erie	50.10	0.00	0.00	50.10	0.00	0.00	0.00	7.10	50.10	0.00	0.00	50.10	0.00	0.00	0.00	7.10		
Lake Ontario	6620.79	0.00	0.00	6620.79	0.00	0.00	0.00	52.45	6620.79	0.00	0.00	6620.79	0.00	0.00	0.00	52.45		
St. Lawrence River	40.81	0.00	0.00	40.81	0.00	0.00	0.00	0.37	40.81	0.00	0.00	40.81	0.00	0.00	0.00	0.37		
Total	19723.01	0.00	0.00	19723.01	0.00	0.00	0.00	167.93	17561.72	0.00	0.00	17561.72	0.00	0.00	0.00	139.83		

b) Water-Use by Jurisdiction - All Basins

Jurisdiction	All Facilities								Principal Facilities									
	Withdrawals				Diversions				Consumptive Use	Withdrawals				Diversions				Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	GLSW		OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL			
Illinois	2139.73	0.00	0.00	2139.73	0.00	0.00	0.00	0.00	2139.73	0.00	0.00	2139.73	0.00	0.00	0.00	0.00		
Indiana	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Michigan	2161.29	0.00	0.00	2161.29	0.00	0.00	0.00	28.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Minnesota	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
New York	1126.00	0.00	0.00	1126.00	0.00	0.00	0.00	3.00	1126.00	0.00	0.00	1126.00	0.00	0.00	0.00	3.00		
Ohio	50.10	0.00	0.00	50.10	0.00	0.00	0.00	7.10	50.10	0.00	0.00	50.10	0.00	0.00	0.00	7.10		
Ontario	12726.89	0.00	0.00	12726.89	0.00	0.00	0.00	114.54	12726.89	0.00	0.00	12726.89	0.00	0.00	0.00	114.54		
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Wisconsin	1519.00	0.00	0.00	1519.00	0.00	0.00	0.00	15.19	1519.00	0.00	0.00	1519.00	0.00	0.00	0.00	15.19		
Total	19723.01	0.00	0.00	19723.01	0.00	0.00	0.00	167.93	17561.72	0.00	0.00	17561.72	0.00	0.00	0.00	139.83		

WATER-USE CATEGORY REPORT - Self-supply - hydroelectric power

DATE: 11/29/90

a) Water-Use by Basin - All Jurisdictions

UNITS: Mgal(US)/d
YEAR OF DATA: 1989

Basin	All Facilities							
	Withdrawals				Diversions			Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	
Lake Superior	0.00	156228.47	0.00	156228.47	0.00	-5156.54	-5156.54	0.00
Lake Michigan	0.00	4791.75	0.00	4791.75	0.00	0.00	0.00	0.00
Lake Huron	23750.91	21106.25	0.00	44857.17	0.00	0.00	0.00	0.00
Lake Erie	4876.58	0.00	0.00	4876.58	4316.58	0.00	4316.58	0.00
Lake Ontario	189770.12	10346.77	0.00	200116.89	-4316.58	0.00	-4316.58	0.00
St. Lawrence River	376115.64	202049.43	0.00	578165.07	0.00	0.00	0.00	0.00
Total	594513.26	394522.67	0.00	989035.93	0.00	-5156.54	-5156.54	0.00

	Principal Facilities							
	Withdrawals				Diversions			Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	
	0.00	156228.47	0.00	156228.47	0.00	-5156.54	-5156.54	0.00
	0.00	4791.75	0.00	4791.75	0.00	0.00	0.00	0.00
	23750.91	21106.25	0.00	44857.17	0.00	0.00	0.00	0.00
	4876.58	0.00	0.00	4876.58	4316.58	0.00	4316.58	0.00
	93371.12	10346.77	0.00	103717.89	-4316.58	0.00	-4316.58	0.00
	318724.64	202049.43	0.00	520774.07	0.00	0.00	0.00	0.00
Total	440723.26	394522.67	0.00	835245.93	0.00	-5156.54	-5156.54	0.00

b) Water-Use by Jurisdiction - All Basins

Jurisdiction	All Facilities							
	Withdrawals				Diversions			Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	
Illinois	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indiana	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Michigan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Minnesota	0.00	115754.00	0.00	115754.00	0.00	0.00	0.00	0.00
New York	280237.00	0.00	0.00	280237.00	0.00	0.00	0.00	0.00
Ohio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ontario	152108.10	159492.31	0.00	311600.41	0.00	-5156.54	-5156.54	0.00
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quebec	162168.16	114213.97	0.00	276382.13	0.00	0.00	0.00	0.00
Wisconsin	0.00	5062.40	0.00	5062.40	0.00	0.00	0.00	0.00
Total	594513.26	394522.67	0.00	989035.93	0.00	-5156.54	-5156.54	0.00

	Principal Facilities							
	Withdrawals				Diversions			Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	115754.00	0.00	115754.00	0.00	0.00	0.00	0.00
	126447.00	0.00	0.00	126447.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	152108.10	159492.31	0.00	311600.41	0.00	-5156.54	-5156.54	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	162168.16	114213.97	0.00	276382.13	0.00	0.00	0.00	0.00
	0.00	5062.40	0.00	5062.40	0.00	0.00	0.00	0.00
Total	440723.26	394522.67	0.00	835245.93	0.00	-5156.54	-5156.54	0.00

WATER-USE CATEGORY REPORT - Other (navigation, sanitation, environmental)

DATE: 11/29/90

a) Water-Use by Basin - All Jurisdictions

UNITS: Mgal[US]/d
YEAR OF DATA: 1989

Basin	All Facilities								Principal Facilities								
	Withdrawals				Diversions			Consumptive Use	Withdrawals				Diversions			Consumptive Use	
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL		GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL		
Lake Superior	0.00	0.00	0.17	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.17	0.00	0.00	0.00	0.00	0.00
Lake Michigan	278.86	0.00	0.00	278.86	0.00	278.86	278.86	0.02	278.86	0.07	0.03	278.96	0.00	278.86	278.86	0.01	0.01
Lake Huron	0.00	40.15	0.00	40.15	0.00	0.00	0.00	0.00	0.00	40.15	0.00	40.15	0.00	0.00	0.00	0.00	0.00
Lake Erie	766.10	0.00	0.00	766.10	766.10	-28.06	738.04	0.00	766.10	0.00	0.00	766.10	766.10	-28.06	738.04	0.00	0.00
Lake Ontario	815.00	129.97	0.00	944.97	-766.10	0.00	-766.10	0.00	815.00	129.97	0.00	944.97	-766.10	0.00	-766.10	0.00	0.00
St. Lawrence River	180.00	28.00	0.00	208.00	0.00	0.00	0.00	28.00	180.00	28.00	0.00	208.00	0.00	0.00	0.00	0.00	0.00
Total	1639.96	198.21	0.26	1838.43	0.00	250.80	250.80	28.02	1639.96	198.20	0.20	1838.36	0.00	250.80	250.80	0.01	

b) Water-Use by Jurisdiction - All Basins

Jurisdiction	All Facilities								Principal Facilities								
	Withdrawals				Diversions			Consumptive Use	Withdrawals				Diversions			Consumptive Use	
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL		GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL		
Illinois	278.86	0.00	0.00	278.86	0.00	278.86	278.86	0.00	278.86	0.00	0.00	278.86	0.00	278.86	278.86	0.00	0.00
Indiana	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.07	0.03	0.10	0.00	0.00	0.00	0.00	0.01
Michigan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Minnesota	0.00	0.00	0.17	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.17	0.00	0.00	0.00	0.00	0.00
New York	595.00	0.00	0.00	595.00	0.00	0.00	0.00	0.00	595.00	0.00	0.00	595.00	0.00	0.00	0.00	0.00	0.00
Ohio	0.00	0.00	0.00	0.00	0.00	-28.06	-28.06	0.00	0.00	0.00	0.00	0.00	0.00	-28.06	-28.06	0.00	0.00
Ontario	766.10	198.13	0.00	964.23	0.00	0.00	0.00	28.00	766.10	198.13	0.00	964.23	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	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wisconsin	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	1639.96	198.21	0.26	1838.43	0.00	250.80	250.80	28.02	1639.96	198.20	0.20	1838.36	0.00	250.80	250.80	0.01	

Appendix A-2

1989 GREAT LAKES BASIN SUMMARY REPORT

1989 JURISDICTION REPORTS
(Million Litres Per Day)

1. ILLINOIS
2. INDIANA
3. MICHIGAN
4. MINNESOTA
5. NEW YORK
6. OHIO
7. ONTARIO
8. QUEBEC
9. PENNSYLVANIA
10. WISCONSIN

1989 BASIN SUMMARY REPORT

1. LAKE SUPERIOR BASIN
2. LAKE MICHIGAN BASIN
3. LAKE HURON BASIN
4. LAKE ERIE BASIN
5. LAKE ONTARIO BASIN
6. ST. LAWRENCE RIVER BASIN

1989 WATER USE CATEGORY REPORTS
(Million Litres Per Day)

1. Public Supply
3. Self Supply - Domestic (Residential, Commercial, Institutional)
4. Self Supply - Irrigation
5. Self Supply - Livestock
6. Self Supply - Industrial (Manufacturing and Mining)
7. Self Supply - Thermoelectric Power - Fossil Fuel Plants
8. Self Supply - Thermoelectric Power - Nuclear Plants
9. Self Supply - Hydroelectric Power
10. Other (Navigation, Water Quality, Environmental, etc.)

a) Water-use by Category - All Basins, All Jurisdictions

Water-Use Category	All Facilities							Principal Facilities								
	Withdrawals				Diversions			Consumptive Use	Withdrawals				Diversions			Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL		GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	
1	15065.11	2651.25	1448.86	19165.22*	0.00	4298.00	4298.00	2038.10*	15707.83	2651.00	1117.14	19475.97	0.00	4298.00	4298.00	1844.17
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	728.03	512.14	5442.74	6482.91	0.00	26.89	26.89	111.45	114.36	74.89	223.64	412.25	0.00	26.14	26.14	55.43
4	54.83	124.51	153.72	332.06*	0.00	0.00	0.00	1078.72*	0.00	21.80	67.68	89.49	0.00	0.00	0.00	75.59
5	17.75	15.30	420.44	453.49	0.00	0.00	0.00	340.74	3.57	5.22	8.00	13.40	0.00	0.00	0.00	8.63
6	16857.55	3795.63	416.21	21069.39*	0.00	29.99	29.99	1021.70*	16766.58	3528.53	284.87	19480.98	0.00	29.99	29.99	1050.75
7	77973.78	1279.02	11.24	79264.04	0.00	0.00	0.00	687.89	54398.03	1107.59	1.00	55994.64	0.00	0.00	0.00	381.30
8	74639.51	0.00	0.00	74639.51	0.00	0.00	0.00	631.69	68478.17	0.00	0.00	68478.17	0.00	0.00	0.00	629.32
9	2250470.96	1491410.86	0.00	3741881.82	0.00	-19519.58	-19519.58	0.00	1763211.72	1431420.86	0.00	3194631.58	0.00	-19519.58	-19519.58	0.00
10	6667.91	750.00	0.00	7417.91	0.00	949.38	949.38	100.00	6107.91	750.00	0.76	6858.67	0.00	949.38	949.38	0.04
Total	1442819.41	1513304.35	4160.21	2956123.97*	0.00	-14298.58	-14298.58	2933.10*	1203410.10	1521877.15	162.10	2725349.35	0.00	-14298.58	-14298.58	3963.60

b) Water-use by Basin - All Categories, All Jurisdictions

Basin	All Facilities							Principal Facilities								
	Withdrawals				Diversions			Consumptive Use	Withdrawals				Diversions			Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL		GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	
Lake Superior	3279.73	58240.00	77.42	61596.15	0.00	-19519.58	-19519.58	238.58	2207.96	58240.15	41.25	60489.36	0.00	-19519.58	-19519.58	234.11
Lake Michigan	41266.16	26562.43	524.24	68352.83	0.00	4398.00	4398.00	1877.07	40722.42	19639.26	613.12	60974.81	0.00	4398.00	4398.00	1174.91
Lake Huron	103620.34	6828.42	563.16	104791.92	728.59	0.00	728.59	459.20	103620.34	6828.42	296.00	104791.91	122.36	0.00	122.36	392.40
Lake Erie	65446.92	2420.59	1018.04	67485.55	19071.42	-110.54	18960.88	1270.47	49310.12	1724.89	479.22	51515.24	19071.42	-110.54	18960.88	821.91
Lake Ontario	78225.34	41100.27	819.23	119144.84	-19240.00	0.00	-19240.00	200.90	59445.68	41100.59	25.72	100571.99	-19240.00	0.00	-19240.00	782.10
St. Lawrence River	1428854.89	727534.69	700.50	2156090.08	0.00	0.00	0.00	790.41	1218401.60	727538.65	210.12	1946150.37	0.00	0.00	0.00	560.19
Total	2432919.42	1521877.15	4160.21	3956123.78*	0.00	-14298.58	-14298.58	3963.60*	1203410.10	1521877.15	162.10	2725349.35	0.00	-14298.58	-14298.58	3963.60

c) Water-use by Jurisdiction - All Categories, All Basins

Jurisdiction	All Facilities							Principal Facilities								
	Withdrawals				Diversions			Consumptive Use	Withdrawals				Diversions			Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL		GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	
Illinois	15961.65	0.15	0.34	15962.14	0.00	0.00	0.00	7.61	15960.56	0.00	0.00	15960.56	0.00	0.00	0.00	0.00
Indiana	11460.80	274.09	120.78	12855.67	0.00	0.00	0.00	739.70	11460.80	274.09	4.62	12739.51	0.00	0.00	0.00	764.42
Michigan	31269.08	471.71	8.25	31749.04*	0.00	0.00	0.00	2229.73*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Minnesota	105.04	43143.71	56.47	43204.22	0.00	0.00	0.00	182.53	105.04	43143.70	28.96	43277.70	0.00	0.00	0.00	181.78
New York	1638450.40	1177.26	1670.10	1639627.76	0.00	0.00	0.00	42.62	1638450.00	0.00	0.00	1638450.00	0.00	0.00	0.00	41.24
Ohio	11445.31	1469.04	163.54	12977.89	0.00	-110.54	-110.54	549.10	11449.31	1467.71	122.27	12979.29	0.00	-110.54	-110.54	437.69
Ontario	657699.70	603270.58	2223.10	1260993.38	0.00	-19519.58	-19519.58	1736.23	657660.09	603171.86	637.41	1261469.36	0.00	-19519.58	-19519.58	1665.22
Pennsylvania	1460.59	19.18	19.72	1499.49	0.00	0.00	0.00	68.79	1460.59	19.18	4.97	1484.74	0.00	0.00	0.00	50.56
Quebec	16831.00	42135.00	324.00	59290.00	0.00	0.00	0.00	211.56	16831.00	42436.00	150.00	59417.00	0.00	0.00	0.00	442.80
Wisconsin	17028.04	27720.00	430.00	45178.04	0.00	0.00	0.00	510.00	17028.04	27551.44	289.29	44868.77	0.00	0.00	0.00	459.93
Total	2432919.42	1521877.15	4160.21	3956123.78*	0.00	-14298.58	-14298.58	3963.60*	1203410.10	1521877.15	162.10	2725349.35	0.00	-14298.58	-14298.58	3963.60

*The total presented is larger than the sum of water use categories. This is due to the addition of statewide withdrawals into Michigan. Michigan's withdrawals and consumptive uses for this category cannot presently be reported by individual subsector water withdrawal types.

JURISDICTION REPORT - Illinois

DATE: 01/04/80

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: ML/d
YEAR OF DATA: 1989

Water- Use Categ.	LAKE MICHIGAN			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	4289.54	4289.54	0.00	4289.54	4289.54	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	111.74	20.59	0.00	111.74	20.59	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00
6	41.41	29.98	7.61	41.41	29.98	7.61
7	2363.53	0.00	0.00	2363.53	0.00	0.00
8	8099.73	0.00	0.00	8099.73	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00
10	1055.60	1055.60	0.00	1055.60	1055.60	0.00
Total	15961.54	5395.71	7.61	15961.54	5395.71	7.61

b) Withdrawals by Source - All facilities

Water- Use Categ.	LAKE MICHIGAN			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW
1	4289.54	0.00	0.00	4289.54	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	111.25	0.15	0.34	111.25	0.15	0.34
4	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00
6	41.41	0.00	0.00	41.41	0.00	0.00
7	2363.53	0.00	0.00	2363.53	0.00	0.00
8	8099.73	0.00	0.00	8099.73	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00
10	1055.60	0.00	0.00	1055.60	0.00	0.00
Total	15961.05	0.15	0.34	15961.05	0.15	0.34

c) Diversions by Type - All facilities

Water- Use Categ.	LAKE MICHIGAN		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	4289.54	0.00	4289.54
2	0.00	0.00	0.00	0.00
3	0.00	20.59	0.00	20.59
4	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00
6	0.00	29.98	0.00	29.98
7	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00
10	0.00	1055.60	0.00	1055.60
Total	0.00	5395.71	0.00	5395.71

JURISDICTION REPORT - Illinois

DATE: 01/04/80

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: ML/d
YEAR OF DATA: 1989

Water- Use Categ.	LAKE MICHIGAN			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	4289.54	4289.54	0.00	4289.54	4289.54	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	110.76	20.14	0.00	110.76	20.14	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00
6	41.41	29.98	7.61	41.41	29.98	7.61
7	2363.53	0.00	0.00	2363.53	0.00	0.00
8	8099.73	0.00	0.00	8099.73	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00
10	1055.60	1055.60	0.00	1055.60	1055.60	0.00
Total	15960.56	5395.25	7.61	15960.56	5395.25	7.61

b) Withdrawals by Source - Principal facilities

Water- Use Categ.	LAKE MICHIGAN			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW
1	4289.54	0.00	0.00	4289.54	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	110.76	0.00	0.00	110.76	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00
6	41.41	0.00	0.00	41.41	0.00	0.00
7	2363.53	0.00	0.00	2363.53	0.00	0.00
8	8099.73	0.00	0.00	8099.73	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00
10	1055.60	0.00	0.00	1055.60	0.00	0.00
Total	15960.56	0.00	0.00	15960.56	0.00	0.00

c) Diversions by Type - Principal facilities

Water- Use Categ.	LAKE MICHIGAN		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	4289.54	0.00	4289.54
2	0.00	0.00	0.00	0.00
3	0.00	20.14	0.00	20.14
4	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00
6	0.00	29.98	0.00	29.98
7	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00
10	0.00	1055.60	0.00	1055.60
Total	0.00	5395.25	0.00	5395.25

JURISDICTION REPORT - Indiana

DATE: 01/04/80

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: ML/d
YEAR OF DATA: 1989

Water- Use Categ.	LAKE MICHIGAN			LAKE ERIE			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	518.98	0.00	77.83	141.81	0.00	21.27	660.89	0.00	99.10
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	180.18	0.00	27.03	32.25	0.00	4.81	212.44	0.00	31.84
4	69.95	0.00	62.99	3.26	0.00	2.95	73.21	0.00	65.94
5	25.93	0.00	20.74	6.85	0.00	5.49	32.78	0.00	26.23
6	7231.93	0.00	433.92	28.43	0.00	1.70	7260.35	0.00	435.62
7	4041.93	0.00	80.86	1.02	0.00	0.04	4042.96	0.00	80.89
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.64	0.00	0.08	0.00	0.00	0.00	0.64	0.00	0.08
Total	12069.55	0.00	703.44	213.72	0.00	36.26	12283.27	0.00	739.70

b) Withdrawals by Source - All facilities

Water- Use Categ.	LAKE MICHIGAN			LAKE ERIE			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	321.57	0.00	197.41	0.00	122.42	19.49	321.57	122.42	216.90
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	72.87	107.32	0.00	0.11	32.14	0.00	72.98	139.45
4	0.00	20.18	49.78	0.00	1.40	1.85	0.00	21.58	51.63
5	0.00	5.22	20.71	0.00	0.00	6.85	0.00	5.22	27.56
6	7103.30	44.97	83.66	0.00	16.62	11.81	7103.30	61.59	95.47
7	4041.93	0.00	0.00	0.00	0.00	1.02	4041.93	0.00	1.02
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.30	0.34	0.00	0.00	0.00	0.00	0.30	0.34
Total	11866.80	143.54	459.21	0.00	140.55	73.17	11466.80	284.09	532.38

c) Diversions by Type - All facilities

Water- Use Categ.	LAKE MICHIGAN		LAKE ERIE		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00

Level of Accuracy of Withdrawal Data: 5.4% Measured 92% Partially Measured 2.6% Calculated or Estimated
Level of Aggregation of Withdrawal Data Source: 98% Site-specific 2% Aggregated

JURISDICTION REPORT - Michigan

DATE: 1/29/91

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: ML/d
YEAR OF DATA: 1988

Water-Use Categ.	LAKE SUPERIOR			LAKE MICHIGAN			LAKE HURON			LAKE ERIE			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	4633.33*	NR	463.59*
3	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR
4	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	897.14*	0.00	851.71*
5	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR
6	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	4989.16*	0.00	499.87*
7	587.12	0.00	12.83	4132.59	0.00	53.75	2469.86	0.00	32.10	15978.31	0.00	207.70	23567.80	0.00	306.39
8	0.00	0.00	0.00	8181.34	0.00	106.37	0.00	0.00	0.00	0.00	0.00	0.00	8181.34	0.00	106.37
9	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	0.00
10	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	0.00
Total	587.12	0.00	12.83	12313.93	0.00	160.12	2469.86	0.00	32.10	15978.31	0.00	207.70	42268.85*	0.00	2229.73*

b) Withdrawals by Source - All facilities

Water-Use Categ.	LAKE SUPERIOR			LAKE MICHIGAN			LAKE HURON			LAKE ERIE			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
3	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
6	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
7	587.12	0.00	0.00	3652.91	471.05	8.63	2469.74	0.11	0.00	15977.97	0.34	0.00	23087.74	471.51	8.63
8	0.00	0.00	0.00	8181.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8181.34	0.00	0.00
9	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
10	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Total	587.12	0.00	0.00	11834.25	471.05	8.63	2469.74	0.11	0.00	15977.97	0.34	0.00	31269.08	471.51	8.63

c) Diversions by Type - All facilities

Water-Use Categ.	LAKE SUPERIOR		LAKE MICHIGAN		LAKE HURON		LAKE ERIE		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	NR	0.00	NR	0.00	NR	0.00	NR	0.00	NR	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* This total figure cannot be presently reported by individual subbasin or water withdrawal type.

NR = Not Reported

Level of Accuracy of Withdrawal Data: 11% Measured 81% Partially Measured 2% Calculated or Estimated

Level of Aggregation of Withdrawal Data Source: 98% Site-specific 2% Aggregated

JURISDICTION REPORT - Michigan

DATE: 11/20/89

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: ML/d

YEAR OF DATA: 1988

Water-Use Categ.	LAKE SUPERIOR			LAKE MICHIGAN			LAKE HURON			LAKE ERIE			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
2	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR
3	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR
4	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR
5	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR
6	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR
10	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR	NR	0.00	NR
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

b) Withdrawals by Source - Principal facilities

Water-Use Categ.	LAKE SUPERIOR			LAKE MICHIGAN			LAKE HURON			LAKE ERIE			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
2	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
3	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
4	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
6	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
10	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

c) Diversions by Type - Principal facilities

Water-Use Categ.	LAKE SUPERIOR		LAKE MICHIGAN		LAKE HURON		LAKE ERIE		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	NR	0.00	NR	0.00	NR	0.00	NR	0.00	NR	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NR = Not Reported

JURISDICTION REPORT - Minnesota

DATE: 01/04/80

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: ML/d
YEAR OF DATA: 1989

Water- Use Categ.	LAKE SUPERIOR			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	174.89	0.00	36.72	174.89	0.00	36.72
2	0.00	0.00	0.00	0.00	0.00	0.00
3	5.83	0.00	0.45	5.83	0.00	0.45
4	1.89	0.00	0.34	1.89	0.00	0.34
5	3.60	0.00	0.79	3.60	0.00	0.79
6	530.41	0.00	135.82	530.41	0.00	135.82
7	440.13	0.00	8.82	440.13	0.00	8.82
8	0.00	0.00	0.00	0.00	0.00	0.00
9	438174.87	0.00	0.00	438174.87	0.00	0.00
10	0.64	0.00	0.00	0.64	0.00	0.00
Total	439332.25	0.00	182.95	439332.25	0.00	182.95

b) Withdrawals by Source - All facilities

Water- Use Categ.	LAKE SUPERIOR			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW
1	126.66	20.10	28.13	126.66	20.10	28.13
2	0.00	0.00	0.00	0.00	0.00	0.00
3	3.60	2.04	0.19	3.60	2.04	0.19
4	0.00	1.82	0.08	0.00	1.82	0.08
5	2.57	0.15	0.87	2.57	0.15	0.87
6	22.11	507.77	0.53	22.11	507.77	0.53
7	3.10	436.99	0.04	3.10	436.99	0.04
8	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	438174.87	0.00	0.00	438174.87	0.00
10	0.00	0.00	0.64	0.00	0.00	0.64
Total	158.04	439143.74	30.47	158.04	439143.74	30.47

c) Diversions by Type - All facilities

Water- Use Categ.	LAKE SUPERIOR		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00

JURISDICTION REPORT - Minnesota

DATE: 01/04/80

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: ML/d
YEAR OF DATA: 1989

Water- Use Categ.	LAKE SUPERIOR			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	174.47	0.00	36.60	174.47	0.00	36.60
2	0.00	0.00	0.00	0.00	0.00	0.00
3	5.53	0.00	0.45	5.53	0.00	0.45
4	1.48	0.00	0.00	1.48	0.00	0.00
5	2.57	0.00	0.00	2.57	0.00	0.00
6	530.30	0.00	135.82	530.30	0.00	135.82
7	439.86	0.00	8.82	439.86	0.00	8.82
8	0.00	0.00	0.00	0.00	0.00	0.00
9	438174.87	0.00	0.00	438174.87	0.00	0.00
10	0.64	0.00	0.00	0.64	0.00	0.00
Total	439329.72	0.00	181.70	439329.72	0.00	181.70

b) Withdrawals by Source - Principal facilities

Water- Use Categ.	LAKE SUPERIOR			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW
1	126.66	19.95	27.86	126.66	19.95	27.86
2	0.00	0.00	0.00	0.00	0.00	0.00
3	3.60	1.93	0.00	3.60	1.93	0.00
4	0.00	1.48	0.00	0.00	1.48	0.00
5	2.57	0.00	0.00	2.57	0.00	0.00
6	22.07	507.77	0.45	22.07	507.77	0.45
7	3.10	436.76	0.00	3.10	436.76	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	438174.87	0.00	0.00	438174.87	0.00
10	0.00	0.00	0.64	0.00	0.00	0.64
Total	158.00	439142.76	28.96	158.00	439142.76	28.96

c) Diversions by Type - Principal facilities

Water- Use Categ.	LAKE SUPERIOR		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00

JURISDICTION REPORT - New York

DATE: 01/04/80

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: ML/d
YEAR OF DATA: 1989

Water- Use Categ.	LAKE ERIE			LAKE ONTARIO			ST. LAWRENCE RIVER			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	779.79	0.00	0.00	1006.92	0.00	0.00	476.96	0.00	0.00	2263.67	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	295.26	0.00	0.00	1097.77	0.00	0.00	340.69	0.00	0.00	1733.71	0.00	0.00
4	6.06	0.00	0.61	30.28	0.00	0.30	4.16	0.00	0.08	40.50	0.00	0.98
5	5.30	0.00	0.00	24.23	0.00	0.00	11.36	0.00	0.00	40.88	0.00	0.00
6	221.07	0.00	0.00	832.79	0.00	0.00	276.33	0.00	0.00	1330.19	0.00	0.00
7	1816.99	0.00	0.00	8134.82	0.00	30.28	0.00	0.00	0.00	9951.81	0.00	30.28
8	0.00	0.00	0.00	4262.36	0.00	11.36	0.00	0.00	0.00	4262.36	0.00	11.36
9	2119.82	0.00	0.00	54472.61	0.00	0.00	514215.93	0.00	0.00	1060808.4	0.00	0.00
10	0.00	0.00	0.00	1570.94	0.00	0.00	681.37	0.00	0.00	2252.31	0.00	0.00
Total	5244.29	0.00	0.61	56142.70	0.00	41.94	516006.80	0.00	0.08	1082683.8	0.00	42.62

b) Withdrawals by Source - All facilities

Water- Use Categ.	LAKE ERIE			LAKE ONTARIO			ST. LAWRENCE RIVER			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	605.66	174.13	0.00	363.40	526.17	117.35	382.33	0.00	94.63	1351.39	700.30	211.98
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	37.85	37.85	219.55	382.33	363.40	352.04	193.06	75.71	71.92	613.23	476.96	643.52
4	4.54	0.00	1.51	26.50	0.00	3.79	3.79	0.00	0.38	34.83	0.00	5.68
5	1.89	0.00	3.41	9.46	0.00	14.76	3.79	0.00	7.57	15.14	0.00	25.74
6	204.20	0.00	12.87	681.37	0.00	151.42	257.41	0.00	18.93	1146.98	0.00	183.21
7	1816.99	0.00	0.00	8134.82	0.00	0.00	0.00	0.00	0.00	9951.81	0.00	0.00
8	0.00	0.00	0.00	4262.36	0.00	0.00	0.00	0.00	0.00	4262.36	0.00	0.00
9	2119.82	0.00	0.00	54472.61	0.00	0.00	514215.93	0.00	0.00	1060808.4	0.00	0.00
10	0.00	0.00	0.00	1570.94	0.00	0.00	681.37	0.00	0.00	2252.31	0.00	0.00
Total	4794.96	211.98	237.34	559903.78	889.57	639.35	515737.66	75.71	193.43	1080436.4	1177.26	1070.13

c) Diversions by Type - All facilities

Water- Use Categ.	LAKE ERIE		LAKE ONTARIO		ST. LAWRENCE RIVER		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Level of Accuracy of Withdrawal Data: 1.4% Measured 47.8% Partially Measured 50.8% Calculated or Estimated
Level of Aggregation of Withdrawal Data Source: 48.8% Site-specific 51.2% Aggregated

JURISDICTION REPORT - Ohio

DATE: 01/04/80

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: ML/d
YEAR OF DATA: 1989

Water- Use Categ.	LAKE ERIE			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	2438.97	0.68	365.86	2438.97	0.68	365.86
2	0.00	0.00	0.00	0.00	0.00	0.00
3	214.10	0.00	32.14	214.10	0.00	32.14
4	42.77	0.00	38.50	42.77	0.00	38.50
5	40.88	0.00	32.71	40.88	0.00	32.71
6	501.72	0.00	50.19	501.72	0.00	50.19
7	9899.19	0.00	0.83	9899.19	0.00	0.83
8	189.65	0.00	26.88	189.65	0.00	26.88
9	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	-106.22	0.00	0.00	-106.22	0.00
Total	13327.29	-105.54	547.10	13327.29	-105.54	547.10

b) Withdrawals by Source - All facilities

Water- Use Categ.	LAKE ERIE			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW
1	1877.14	418.36	143.47	1877.14	418.36	143.47
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	214.10	0.00	0.00	214.10
4	0.00	26.88	15.90	0.00	26.88	15.90
5	0.00	6.06	34.83	0.00	6.06	34.83
6	91.27	409.81	0.64	91.27	409.81	0.64
7	9291.26	607.93	0.00	9291.26	607.93	0.00
8	189.65	0.00	0.00	189.65	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00
Total	11449.31	1469.04	408.94	11449.31	1469.04	408.94

c) Diversions by Type - All facilities

Water- Use Categ.	LAKE ERIE		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.68	0.00	0.68
2	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00
10	0.00	-106.22	0.00	-106.22
Total	0.00	-105.54	0.00	-105.54

JURISDICTION REPORT - Ohio

DATE: 01/04/80

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: ML/d
YEAR OF DATA: 1989

Water- Use Categ.	LAKE ERIE			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	2416.86	0.68	362.53	2416.86	0.68	362.53
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00
6	473.59	0.00	47.36	473.59	0.00	47.36
7	9899.19	0.00	0.83	9899.19	0.00	0.83
8	189.65	0.00	26.88	189.65	0.00	26.88
9	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	-106.22	0.00	0.00	-106.22	0.00
Total	12979.29	-105.54	437.59	12979.29	-105.54	437.59

b) Withdrawals by Source - Principal facilities

Water- Use Categ.	LAKE ERIE			TOTAL		
	GLSW	OSW	CW	GLSW	OSW	CW
1	1877.14	417.45	122.27	1877.14	417.45	122.27
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00
6	91.27	382.33	0.00	91.27	382.33	0.00
7	9291.26	607.93	0.00	9291.26	607.93	0.00
8	189.65	0.00	0.00	189.65	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00
Total	11449.31	1407.71	122.27	11449.31	1407.71	122.27

c) Diversions by Type - Principal facilities

Water- Use Categ.	LAKE ERIE		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.68	0.00	0.68
2	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00
10	0.00	-106.22	0.00	-106.22
Total	0.00	-105.54	0.00	-105.54

JURISDICTION REPORT - Ontario

DATE: 01/18/91

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: ML/d

YEAR OF DATA: 1989

Water-Use Categ.	LAKE SUPERIOR			LAKE HURON			LAKE ERIE			LAKE ONTARIO			ST. LAWRENCE RIVER			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	00.00	0.00	12.13	571.82	168.58	86.23	778.27	-168.58	116.75	3001.07	0.00	450.16	581.13	0.00	87.17	5018.11	0.00	152.74
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	4.12	0.00	0.62	14.27	0.00	11.74	13.73	0.00	11.06	87.80	0.00	13.17	82.87	0.00	12.43	322.79	0.00	48.42
4	0.13	0.00	0.10	12.96	0.00	10.11	62.24	0.00	48.55	14.13	0.00	11.02	2.56	0.00	2.00	92.02	0.00	21.78
5	1.06	0.00	0.85	56.80	0.00	45.44	57.62	0.00	46.10	30.13	0.00	24.11	32.17	0.00	25.74	177.78	0.00	142.24
6	660.60	0.00	25.70	2909.60	0.00	64.30	1871.60	0.00	30.80	2272.10	0.00	57.60	599.00	0.00	10.10	5312.50	0.00	268.50
7	1334.35	0.00	13.16	897.00	0.00	4.54	10767.50	0.00	56.91	5582.96	0.00	50.35	0.00	0.00	0.00	18581.81	0.00	164.96
8	0.00	0.00	0.00	27221.92	0.00	245.00	0.00	0.00	20800.00	0.00	187.20	154.50	0.00	1.39	48176.42	0.00	0.00	633.59
9	152187.70	-19519.58	0.00	169802.50	0.00	0.00	16340.00	16340.00	0.00	213049.70	-16340.00	0.00	628153.50	0.00	0.00	1179533.4	-19519.58	0.00
10	0.00	0.00	0.00	152.00	0.00	0.00	2900.00	2900.00	0.00	492.00	-2900.00	0.00	106.00	0.00	106.00	3650.00	0.00	106.00
Total	151268.78	-19519.58	52.56	201701.87	168.58	466.76	22850.96	19071.42	410.17	246321.89	-19240.00	793.91	629111.73	0.00	264.83	1264865.2	-19519.58	1988.23

b) Withdrawals by Source - All facilities

Water-Use Categ.	LAKE SUPERIOR			LAKE HURON			LAKE ERIE			LAKE ONTARIO			ST. LAWRENCE RIVER			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	63.70	9.87	7.25	217.98	146.71	180.13	412.11	72.25	233.91	2787.80	139.64	75.63	145.93	416.42	18.78	3657.52	784.89	575.70
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	4.12	0.00	0.00	14.27	0.00	0.00	73.73	0.00	0.00	82.87	0.00	82.87	0.00	0.00	122.79
4	0.00	0.07	0.06	0.00	10.90	2.06	0.00	42.05	20.19	0.00	9.96	4.17	0.00	1.86	0.70	0.00	64.84	27.18
5	0.00	0.00	1.06	0.00	0.00	56.80	0.00	0.00	57.62	0.00	0.00	30.13	0.00	0.00	32.17	0.00	0.00	177.78
6	613.70	38.30	8.00	2578.70	284.00	46.30	1740.10	57.40	34.10	2858.00	402.40	11.70	473.00	107.00	19.00	8263.50	929.70	119.70
7	1334.20	0.15	0.00	897.00	0.00	0.00	10767.50	0.00	0.00	5582.96	0.00	0.00	0.00	0.00	0.00	18581.66	0.15	0.00
8	0.00	0.00	0.00	27221.92	0.00	0.00	0.00	0.00	0.00	20800.00	0.00	0.00	154.50	0.00	0.00	48176.42	0.00	0.00
9	0.00	152187.70	0.00	89906.80	79895.70	0.00	16340.00	0.00	0.00	173883.00	39166.70	0.00	295660.80	332452.70	0.00	575790.60	603742.80	0.00
10	0.00	0.00	0.00	0.00	152.00	0.00	2900.00	0.00	0.00	492.00	0.00	0.00	106.00	0.00	0.00	2900.00	750.00	0.00
Total	2011.60	152236.69	20.49	120852.40	80489.31	360.16	32159.71	211.70	479.55	205911.76	40210.70	209.13	296434.23	333123.98	153.52	657369.70	606272.38	1223.15

c) Diversions by Type - All facilities

Water-Use Categ.	LAKE SUPERIOR		LAKE HURON		LAKE ERIE		LAKE ONTARIO		ST. LAWRENCE RIVER		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	168.58	0.00	-168.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	-19519.58	0.00	0.00	16340.00	0.00	-16340.00	0.00	0.00	0.00	0.00	-19519.58
10	0.00	0.00	0.00	0.00	2900.00	0.00	-2900.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	-19519.58	168.58	0.00	19071.42	0.00	-19240.00	0.00	0.00	0.00	0.00	-19519.58

JURISDICTION REPORT - Ontario

DATE: 01/18/91

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: ML/d
YEAR OF DATA: 1989

Water-Use Categ.	LAKE SUPERIOR			LAKE MICHIGAN			LAKE ERIE			LAKE ONTARIO			ST. LAWRENCE RIVER			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	79.95	0.00	11.99	528.49	168.58	79.26	772.70	-168.58	115.91	2989.34	0.00	448.41	577.34	0.00	85.60	4947.82	0.00	742.17
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	660.10	0.00	23.60	2904.20	0.00	63.60	1865.20	0.00	89.70	3252.80	0.00	54.50	593.60	0.00	29.40	9275.90	0.00	262.00
7	1334.35	0.00	13.16	897.00	0.00	4.54	10767.50	0.00	96.91	5582.96	0.00	50.35	0.00	0.00	0.00	18581.81	0.00	164.96
8	0.00	0.00	0.00	27221.92	0.00	245.00	0.00	0.00	0.00	20800.00	0.00	187.20	154.50	0.00	1.39	48176.42	0.00	433.59
9	152187.70	-19519.58	0.00	169802.50	0.00	0.00	16340.00	16340.00	0.00	213049.70	-16340.00	0.00	528153.50	0.00	0.00	1175533.4	-19519.58	0.00
10	0.00	0.00	0.00	152.00	0.00	0.00	2900.00	2900.00	0.00	492.00	-2900.00	0.00	106.00	0.00	0.00	3650.00	0.00	0.00
Total	154262.10	-19519.58	50.75	201506.11	168.58	292.40	32645.40	19071.42	302.52	246166.80	-19240.00	740.46	625584.94	0.00	117.39	1264165.4	-19519.58	1603.52

b) Withdrawals by Source - Principal facilities

Water-Use Categ.	LAKE SUPERIOR			LAKE MICHIGAN			LAKE ERIE			LAKE ONTARIO			ST. LAWRENCE RIVER			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	63.43	9.27	7.25	246.63	125.76	156.10	412.11	71.94	288.65	2787.50	137.79	64.05	145.93	415.35	16.06	3655.60	760.11	532.11
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	613.60	38.80	7.70	2578.60	281.10	44.50	1739.80	54.20	11.20	2847.00	350.10	5.70	472.80	104.60	16.20	8261.80	908.80	105.30
7	1334.28	0.15	0.00	897.00	0.00	0.00	10767.50	0.00	0.00	5582.96	0.00	0.00	0.00	0.00	0.00	18581.66	0.15	0.00
8	0.00	0.00	0.00	27221.92	0.00	0.00	0.00	0.00	0.00	20800.00	0.00	0.00	154.50	0.00	0.00	48176.42	0.00	0.00
9	0.00	152187.70	0.00	169806.80	19635.70	0.00	16340.00	0.00	0.00	173883.00	29166.70	0.00	295660.80	332452.70	0.00	175190.80	603742.80	0.00
10	0.00	0.00	0.00	0.00	152.00	0.00	2900.00	0.00	0.00	492.00	-2900.00	0.00	0.00	106.00	0.00	2900.00	150.00	0.00
Total	2011.23	152235.92	14.95	120850.95	80454.56	200.60	32159.41	166.14	319.85	205910.46	40186.59	69.75	296434.03	333118.65	32.26	651366.08	606161.86	637.41

c) Diversions by Type - Principal facilities

Water-Use Categ.	LAKE SUPERIOR		LAKE MICHIGAN		LAKE ERIE		LAKE ONTARIO		ST. LAWRENCE RIVER		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	168.58	0.00	-168.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	-19519.58	0.00	0.00	16340.00	0.00	-16340.00	0.00	0.00	0.00	0.00	-19519.58
10	0.00	0.00	0.00	0.00	2900.00	0.00	-2900.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	-19519.58	168.58	0.00	19071.42	0.00	-19240.00	0.00	0.00	0.00	0.00	-19519.58

JURISDICTION REPORT - Pennsylvania

DATE: 01/01/80

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: ML/d

YEAR OF DATA: 1989

Water-Use Categ.	LAKE ERIE			LAKE ONTARIO			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	163.38	0.00	16.35	0.61	0.00	0.08	163.98	0.00	16.43
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	7.46	0.00	0.76	0.00	0.00	0.00	7.46	0.00	0.76
4	11.20	0.00	8.86	0.00	0.00	0.00	11.20	0.00	8.86
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	187.38	0.00	39.44	0.00	0.00	0.00	187.38	0.00	39.44
7	1136.00	0.00	1.51	0.00	0.00	0.00	1136.00	0.00	1.51
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	1505.41	0.00	66.93	0.61	0.00	0.08	1506.02	0.00	67.00

b) Withdrawals by Source - All facilities

Water-Use Categ.	LAKE ERIE			LAKE ONTARIO			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	150.28	5.60	7.50	0.00	0.00	0.61	150.28	5.60	8.10
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	7.46	0.00	0.00	0.00	0.00	0.00	7.46
4	0.00	8.18	3.03	0.00	0.00	0.00	0.00	8.18	3.03
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	180.71	5.60	1.06	0.00	0.00	0.00	180.71	5.60	1.06
7	1136.00	0.00	0.00	0.00	0.00	0.00	1136.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	1466.99	19.38	19.01	0.00	0.00	0.61	1466.99	19.38	19.65

c) Diversions by Type - All facilities

Water-Use Categ.	LAKE ERIE		LAKE ONTARIO		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00

Level of Accuracy of Withdrawal Data: .1% Measured 23.3% Partially Measured 76.6% Calculated or Estimated
 Level of Aggregation of Withdrawal Data Source: 99.0% Site-specific .1% Aggregated

JURISDICTION REPORT - Quebec

DATE: 1/4/91

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: MLD
YEAR OF DATA: 1989

Water- Use Categ.	ST. LAWRENCE RIVER			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	3547.00	0.00	384.00	3547.00	0.00	384.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	256.00	0.00	26.00	256.00	0.00	26.00
4	14.00	0.00	12.60	14.00	0.00	12.60
5	54.00	0.00	67.00	54.00	0.00	67.00
6	475.00	0.00	41.90	475.00	0.00	41.90
7	178.00	0.00	0.00	178.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00
9	1046215.0	0.00	0.00	1046215.0	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00
Total	1051072.0	0.00	531.50	1051072.0	0.00	531.50

b) Withdrawals by Source - All facilities

Water- Use Categ.	ST. LAWRENCE RIVER			TOTAL		
	GLSW	OSW	CW	GLSW	OSW	CW
1	2363.00	1494.00	0.00	2363.00	1494.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	256.00	0.00	0.00	256.00
4	0.00	0.00	14.00	0.00	0.00	14.00
5	0.00	0.00	54.00	0.00	0.00	54.00
6	0.00	475.00	0.00	0.00	475.00	0.00
7	148.00	30.00	0.00	148.00	30.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00
9	613672.00	432346.00	0.00	613672.00	432346.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00
Total	616383.00	434335.00	354.00	616383.00	434335.00	354.00

c) Diversions by Type - All facilities

Water- Use Categ.	ST. LAWRENCE RIVER		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00

JURISDICTION REPORT - Quebec

DATE: 1/1/91

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: ML/d
YEAR OF DATA: 1989

Water- Use Categ.	ST. LAWRENCE RIVER			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	3832.00	0.00	383.00	3832.00	0.00	383.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	180.00	0.00	18.00	180.00	0.00	18.00
4	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00
6	473.00	0.00	41.80	473.00	0.00	11.50
7	178.00	0.00	0.00	178.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00
9	1046215.0	0.00	0.00	1046215.0	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00
Total	1050881.0	0.00	442.80	1050881.0	0.00	442.80

b) Withdrawals by Source - Principal facilities

Water- Use Categ.	ST. LAWRENCE RIVER			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW
1	2361.00	1471.00	0.00	2361.00	1471.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	180.00	0.00	0.00	180.00
4	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	473.00	0.00	0.00	473.00	0.00
7	178.00	30.00	0.00	178.00	30.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00
9	613872.00	432346.00	0.00	613872.00	432346.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00
Total	616381.00	434320.00	180.00	616381.00	434320.00	180.00

c) Diversions by Type - Principal facilities

Water- Use Categ.	ST. LAWRENCE RIVER		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00

JURISDICTION REPORT - Wisconsin

DATE: 01/04/90

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: ML/d
YEAR OF DATA: 1989

Water- Use Categ.	LAKE SUPERIOR			LAKE MICHIGAN			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	23.89	0.00	3.56	1322.31	0.38	209.11	1346.20	0.38	212.66
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.53	0.00	0.08	78.36	0.00	11.77	78.89	0.00	11.85
4	0.00	0.00	0.00	37.55	0.00	26.31	37.55	0.00	26.31
5	6.25	0.00	5.11	83.32	0.00	66.66	89.56	0.00	71.77
6	8.33	0.00	0.63	1421.08	0.00	142.10	1429.40	0.00	142.94
7	94.52	0.00	0.95	9308.52	0.00	93.05	9403.04	0.00	93.99
8	0.00	0.00	0.00	5750.02	0.00	57.50	5750.02	0.00	57.50
9	1024.52	0.00	0.00	18138.68	0.00	0.00	18163.19	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	1158.03	0.00	10.52	36139.83	0.38	606.50	37297.86	0.38	617.02

b) Withdrawals by Source - All facilities

Water- Use Categ.	LAKE SUPERIOR			LAKE MICHIGAN			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	4.20	0.00	19.68	921.82	155.58	244.92	926.02	155.58	264.60
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.53	0.00	0.00	78.36	0.00	0.00	78.89
4	0.00	0.00	0.00	0.00	1.32	36.23	0.00	1.32	36.23
5	0.00	0.08	6.17	0.00	3.82	79.49	0.00	3.90	85.66
6	8.25	0.00	0.08	0.00	1405.56	15.52	8.25	1405.56	15.60
7	94.52	0.00	0.00	9274.22	32.74	1.55	9368.74	32.74	1.55
8	0.00	0.00	0.00	5750.02	0.00	0.00	5750.02	0.00	0.00
9	0.00	1024.52	0.00	0.00	18138.68	0.00	0.00	19163.19	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	106.98	1024.59	26.46	15946.06	19737.70	456.06	16053.04	20762.30	482.52

c) Diversions by Type - All facilities

Water- Use Categ.	LAKE SUPERIOR		LAKE MICHIGAN		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	0.00	0.38	0.00	0.38
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.38	0.00	0.38

BASIN REPORT - Lake Superior

DATE: 2/22/91

a) Withdrawals, Diversions and Consumptive Use - All Facilities

UNITS: ML/d
YEAR OF DATA: 1989

Water-Use Categ.	MICHIGAN*			MINNESOTA			ONTARIO			WISCONSIN			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	0.00	0.00	0.00	174.89	0.00	36.72	80.82	0.00	12.13	23.89	0.00	3.58	279.59	0.00	52.41
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	5.83	0.00	0.45	4.12	0.00	0.82	0.53	0.00	0.08	10.48	0.00	1.15
4	0.00	0.00	0.00	1.89	0.00	0.34	0.13	0.00	0.10	0.00	0.00	0.00	2.02	0.00	0.44
5	0.00	0.00	0.00	3.80	0.00	0.79	1.08	0.00	0.85	8.25	0.00	5.11	10.80	0.00	6.76
6	0.00	0.00	0.00	530.41	0.00	135.82	660.80	0.00	25.70	8.33	0.00	0.83	1199.34	0.00	162.35
7	987.12	0.00	12.83	440.13	0.00	8.82	1334.35	0.00	13.18	84.52	0.00	0.85	2856.12	0.00	35.76
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	438174.87	0.00	0.00	152187.70	-19519.58	0.00	1024.52	0.00	0.00	591387.09	-19519.58	0.00
10	0.00	0.00	0.00	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.00	0.00
Total	987.12	0.00	12.83	439332.25	0.00	182.95	154288.78	-19519.58	52.56	1158.03	0.00	10.52	595748.18	-19519.58	258.86

b) Withdrawals by Source - All Facilities

Water-Use Categ.	MICHIGAN*			MINNESOTA			ONTARIO			WISCONSIN			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	0.00	0.00	0.00	128.88	20.10	28.13	83.70	9.87	7.25	4.20	0.00	19.88	194.58	29.87	55.08
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	3.60	2.04	0.19	0.00	0.00	4.12	0.00	0.00	0.53	3.60	2.04	4.84
4	0.00	0.00	0.00	0.00	1.82	0.08	0.00	0.07	0.08	0.00	0.00	0.00	0.00	1.89	0.14
5	0.00	0.00	0.00	2.57	0.15	0.87	0.00	0.00	1.08	0.00	0.08	8.17	2.57	0.23	8.10
6	0.00	0.00	0.00	22.11	507.77	0.53	813.70	38.80	8.00	8.25	0.00	0.08	844.06	548.67	8.61
7	987.12	0.00	0.00	3.10	436.99	0.04	1334.20	0.15	0.00	84.52	0.00	0.00	2418.84	437.14	0.04
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	438174.87	0.00	0.00	152187.70	0.00	0.00	1024.52	0.00	0.00	591387.09	0.00
10	0.00	0.00	0.00	0.00	0.00	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84
Total	987.12	0.00	0.00	158.04	439143.74	30.47	2011.80	152236.89	20.49	106.98	1024.59	26.46	3263.73	592405.02	77.42

c) Diversions by Type - All Facilities

Water-Use Categ.	MICHIGAN*		MINNESOTA		ONTARIO		WISCONSIN		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	-19519.58	0.00	0.00	0.00	-19519.58
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	-19519.58	0.00	0.00	0.00	-19519.58

*The State of Michigan was unable to report by subbasin for most categories of use.

BASIN REPORT - Lake Superior

DATE: 2/22/91

a) Withdrawals, Diversions and Consumptive Use - Principal Facilities

UNITS: ML/d

YEAR OF DATA: 1989

Water- Use Categ.	MICHIGAN*			MINNESOTA			ONTARIO			WISCONSIN			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	0.00	0.00	0.00	174.47	0.00	36.60	79.95	0.00	11.99	5.15	0.00	0.72	259.57	0.00	49.31
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	5.53	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	5.53	0.00	0.45
4	0.00	0.00	0.00	1.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.48	0.00	0.00
5	0.00	0.00	0.00	2.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.57	0.00	0.00
6	0.00	0.00	0.00	530.30	0.00	135.82	660.10	0.00	25.60	0.00	0.00	0.00	1190.40	0.00	161.42
7	0.00	0.00	0.00	439.86	0.00	6.82	1334.35	0.00	13.16	94.52	0.00	0.95	1868.73	0.00	22.93
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	438174.87	0.00	0.00	152187.70	-19519.58	0.00	1024.52	0.00	0.00	591387.09	-19519.58	0.00
10	0.00	0.00	0.00	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.00	0.00
Total	0.00	0.00	0.00	439329.72	0.00	161.70	154282.10	-19519.58	50.75	1124.19	0.00	1.87	594718.00	-19519.58	234.11

b) Withdrawals by Source - Principal Facilities

Water- Use Categ.	MICHIGAN*			MINNESOTA			ONTARIO			WISCONSIN			TOTAL		
	QLSW	OSW	GW	QLSW	OSW	GW	QLSW	OSW	GW	QLSW	OSW	GW	QLSW	OSW	GW
1	0.00	0.00	0.00	126.66	19.95	27.86	83.43	9.27	7.25	4.20	0.00	0.95	194.29	29.22	36.06
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	3.60	1.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.60	1.93	0.00
4	0.00	0.00	0.00	0.00	1.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.48	0.00
5	0.00	0.00	0.00	2.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.57	0.00	0.00
6	0.00	0.00	0.00	22.07	507.77	0.45	613.60	38.80	7.70	0.00	0.00	0.00	635.87	546.57	8.15
7	0.00	0.00	0.00	3.10	436.76	0.00	1334.20	0.15	0.00	94.52	0.00	0.00	1431.83	436.91	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	438174.87	0.00	0.00	152187.70	0.00	0.00	1024.52	0.00	0.00	591387.09	0.00
10	0.00	0.00	0.00	0.00	0.00	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84
Total	0.00	0.00	0.00	158.00	438142.76	28.96	2011.23	152235.92	14.95	98.72	1024.52	0.95	2267.86	592403.19	44.85

c) Diversions by Type - Principal Facilities

Water- Use Categ.	MICHIGAN*		MINNESOTA		ONTARIO		WISCONSIN		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	-19519.58	0.00	0.00	0.00	-19519.58
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	-19519.58	0.00	0.00	0.00	-19519.58

BASIN REPORT - Lake Michigan

DATE: 2/22/91

a) Withdrawals, Diversions and Consumptive Use - All Facilities

UNITS: ML/d
YEAR OF DATA: 1989

Water-Use Categ.	ILLINOIS			INDIANA			MICHIGAN*			WISCONSIN			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	4289.54	4289.54	0.00	518.98	0.00	77.83	0.00	0.00	0.00	1322.31	0.38	209.11	8130.83	4289.91	285.93
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	111.74	20.59	0.00	180.18	0.00	27.03	0.00	0.00	0.00	78.36	0.00	11.77	370.29	20.59	38.80
4	0.00	0.00	0.00	89.95	0.00	82.99	0.00	0.00	0.00	37.55	0.00	28.31	107.51	0.00	89.30
5	0.00	0.00	0.00	25.83	0.00	20.74	0.00	0.00	0.00	83.32	0.00	86.86	109.25	0.00	87.40
6	11.41	28.98	7.61	7231.83	0.00	493.92	0.00	0.00	0.00	1421.08	0.00	142.10	8694.41	29.98	583.63
7	2363.53	0.00	0.00	4041.83	0.00	80.88	4132.59	0.00	53.75	9308.52	0.00	93.05	19846.57	0.00	227.65
8	8099.73	0.00	0.00	0.00	0.00	0.00	8181.34	0.00	106.37	5750.02	0.00	57.50	22031.09	0.00	163.87
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18138.68	0.00	0.00	18138.68	0.00	0.00
10	1055.80	1055.80	0.00	0.64	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	1058.24	1055.80	0.08
Total	15981.54	5395.71	7.61	12089.55	0.00	703.44	12313.93	0.00	160.12	36139.83	0.38	606.50	76484.86	5396.08	1477.67

b) Withdrawals by Source - All Facilities

Water-Use Categ.	ILLINOIS			INDIANA			MICHIGAN*			WISCONSIN			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	4289.54	0.00	0.00	321.57	0.00	197.41	0.00	0.00	0.00	921.82	155.58	244.92	5532.93	155.58	442.32
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	111.25	0.15	0.34	0.00	72.87	107.32	0.00	0.00	0.00	0.00	0.00	78.36	111.25	73.02	186.01
4	0.00	0.00	0.00	0.00	20.18	49.78	0.00	0.00	0.00	0.00	1.32	38.23	0.00	21.50	88.00
5	0.00	0.00	0.00	0.00	5.22	20.71	0.00	0.00	0.00	0.00	3.82	78.49	0.00	9.05	100.20
6	11.41	0.00	0.00	7103.30	44.97	83.86	0.00	0.00	0.00	0.00	1405.58	15.52	7144.71	1450.53	99.18
7	2363.53	0.00	0.00	4041.83	0.00	0.00	3852.91	471.05	8.63	9274.22	32.74	1.55	19332.59	503.80	10.18
8	8099.73	0.00	0.00	0.00	0.00	0.00	8181.34	0.00	0.00	5750.02	0.00	0.00	22031.09	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18138.68	0.00	0.00	18138.68	0.00
10	1055.80	0.00	0.00	0.00	0.30	0.34	0.00	0.00	0.00	0.00	0.00	0.00	1055.80	0.30	0.34
Total	15981.05	0.15	0.34	11488.80	143.54	459.21	11834.25	471.05	8.63	15948.06	19737.70	456.06	55208.16	20352.45	924.24

c) Diversions by Type - All Facilities

Water-Use Categ.	ILLINOIS		INDIANA		MICHIGAN*		WISCONSIN		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	4289.54	0.00	0.00	0.00	0.00	0.00	0.38	0.00	4289.91
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	20.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.59
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	28.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.98
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	1055.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1055.80
Total	0.00	5395.71	0.00	0.00	0.00	0.00	0.38	0.00	0.00	5396.08

*The State of Michigan was unable to report by subbasin for most categories of use.

BASIN REPORT - Lake Michigan

DATE: 2/22/91

a) Withdrawals, Diversions and Consumptive Use - Principal Facilities

UNITS: ML/d
YEAR OF DATA: 1989

Water- Use Categ.	ILLINOIS			INDIANA			MICHIGAN*			WISCONSIN			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	4289.54	4289.54	0.00	517.69	0.00	77.84	0.00	0.00	0.00	1291.39	0.00	204.71	6098.82	4289.54	282.35
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	110.78	20.14	0.00	115.81	0.00	17.34	0.00	0.00	0.00	0.00	0.00	0.00	226.37	20.14	17.34
4	0.00	0.00	0.00	67.46	0.00	60.72	0.00	0.00	0.00	17.72	0.00	12.34	85.17	0.00	73.06
5	0.00	0.00	0.00	10.83	0.00	8.63	0.00	0.00	0.00	0.00	0.00	0.00	10.83	0.00	8.63
6	41.41	29.98	7.61	7229.58	0.00	433.77	0.00	0.00	0.00	1207.01	0.00	120.72	8478.00	29.98	562.09
7	2383.53	0.00	0.00	4041.93	0.00	80.86	0.00	0.00	0.00	9308.97	0.00	93.05	15712.43	0.00	173.90
8	8099.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5750.02	0.00	57.50	13849.75	0.00	57.50
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18138.68	0.00	0.00	18138.68	0.00	0.00
10	1055.80	1055.80	0.00	0.38	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	1055.97	1055.80	0.04
Total	15980.58	5395.25	7.61	11983.47	0.00	678.99	0.00	0.00	0.00	35711.78	0.00	488.32	63655.81	5395.25	1174.91

b) Withdrawals by Source - Principal Facilities

Water- Use Categ.	ILLINOIS			INDIANA			MICHIGAN*			WISCONSIN			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	4289.54	0.00	0.00	321.57	0.00	198.12	0.00	0.00	0.00	921.82	155.58	213.99	5532.93	155.58	410.11
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	110.78	0.00	0.00	0.00	72.83	42.77	0.00	0.00	0.00	0.00	0.00	0.00	110.78	72.83	42.77
4	0.00	0.00	0.00	0.00	19.08	48.38	0.00	0.00	0.00	0.00	0.00	17.72	0.00	19.08	66.09
5	0.00	0.00	0.00	0.00	5.22	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.22	5.80
6	41.41	0.00	0.00	7103.30	44.89	81.39	0.00	0.00	0.00	0.00	1199.97	7.04	7144.71	1244.87	88.43
7	2383.53	0.00	0.00	4041.93	0.00	0.00	0.00	0.00	0.00	9274.22	32.74	0.00	15879.68	32.74	0.00
8	8099.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5750.02	0.00	0.00	13849.75	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18138.68	0.00	0.00	18138.68	0.00
10	1055.80	0.00	0.00	0.00	0.28	0.11	0.00	0.00	0.00	0.00	0.00	0.00	1055.80	0.28	0.11
Total	15980.58	0.00	0.00	11466.80	142.29	374.38	0.00	0.00	0.00	15946.06	19526.97	238.75	43373.42	19869.28	613.12

c) Diversions by Type - Principal Facilities

Water- Use Categ.	ILLINOIS		INDIANA		MICHIGAN*		WISCONSIN		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	4289.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4289.54
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	20.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.14
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	29.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.98
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	1055.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1055.80
Total	0.00	5395.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5395.25

*The State of Michigan was unable to report by subbasin for most categories of use.

BASIN REPORT - Lake Huron

DATE: 2/22/91

a) Withdrawals, Diversions and Consumptive Use - All Facilities

UNITS: ML/d
YEAR OF DATA: 1989

Water- Use Categ.	MICHIGAN*			ONTARIO			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	0.00	0.00	0.00	574.82	168.58	86.23	574.82	168.58	86.23
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	74.27	0.00	11.14	74.27	0.00	11.14
4	0.00	0.00	0.00	12.98	0.00	10.11	12.98	0.00	10.11
5	0.00	0.00	0.00	58.80	0.00	45.44	58.80	0.00	45.44
6	0.00	0.00	0.00	2909.80	0.00	64.30	2909.80	0.00	64.30
7	2469.88	0.00	32.10	897.00	0.00	4.54	3366.86	0.00	36.64
8	0.00	0.00	0.00	27221.92	0.00	245.00	27221.92	0.00	245.00
9	0.00	0.00	0.00	169802.50	0.00	0.00	169802.50	0.00	0.00
10	0.00	0.00	0.00	152.00	0.00	0.00	152.00	0.00	0.00
Total	2469.88	0.00	32.10	201701.87	168.58	485.78	204171.73	168.58	498.88

b) Withdrawals by Source - All Facilities

Water- Use Categ.	MICHIGAN*			ONTARIO			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	0.00	0.00	0.00	247.98	146.71	180.13	247.98	146.71	180.13
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	74.27	0.00	0.00	74.27
4	0.00	0.00	0.00	0.00	10.90	2.06	0.00	10.90	2.06
5	0.00	0.00	0.00	0.00	0.00	58.80	0.00	0.00	58.80
6	0.00	0.00	0.00	2578.70	284.00	48.90	2578.70	284.00	48.90
7	2469.74	0.11	0.00	897.00	0.00	0.00	3366.74	0.11	0.00
8	0.00	0.00	0.00	27221.92	0.00	0.00	27221.92	0.00	0.00
9	0.00	0.00	0.00	89806.80	79895.70	0.00	89806.80	79895.70	0.00
10	0.00	0.00	0.00	0.00	152.00	0.00	0.00	152.00	0.00
Total	2469.74	0.11	0.00	120852.40	80489.31	360.16	123322.14	80489.42	360.16

c) Diversions by Type - All Facilities

Water- Use Categ.	MICHIGAN*		ONTARIO		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	168.58	0.00	168.58	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	168.58	0.00	168.58	0.00

*The State of Michigan was unable to report by subbasin for most categories of use.

BASIN REPORT - Lake Huron

DATE: 2/22/91

a) Withdrawals, Diversions and Consumptive Use - Principal Facilities

UNITS: ML/d
YEAR OF DATA: 1989

Water- Use Categ.	MICHIGAN*			ONTARIO			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	0.00	0.00	0.00	528.48	205.57	42.27	528.48	205.57	42.27
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	2904.20	0.00	63.80	2904.20	0.00	63.80
7	0.00	0.00	0.00	897.00	0.00	4.54	897.00	0.00	4.54
8	0.00	0.00	0.00	27221.92	0.00	245.00	27221.92	0.00	245.00
9	0.00	0.00	0.00	189802.50	0.00	0.00	189802.50	0.00	0.00
10	0.00	0.00	0.00	152.00	0.00	0.00	152.00	0.00	0.00
Total	0.00	0.00	0.00	201506.11	205.57	355.41	201506.11	205.57	355.41

b) Withdrawals by Source - Principal Facilities

Water- Use Categ.	MICHIGAN*			ONTARIO			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	0.00	0.00	0.00	246.63	125.78	156.10	246.63	125.78	156.10
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	2578.80	281.10	44.50	2578.80	281.10	44.50
7	0.00	0.00	0.00	897.00	0.00	0.00	897.00	0.00	0.00
8	0.00	0.00	0.00	27221.92	0.00	0.00	27221.92	0.00	0.00
9	0.00	0.00	0.00	89906.80	79895.70	0.00	89906.80	79895.70	0.00
10	0.00	0.00	0.00	0.00	152.00	0.00	0.00	152.00	0.00
Total	0.00	0.00	0.00	120850.95	80454.58	200.60	120850.95	80454.58	200.60

c) Diversions by Type - Principal Facilities

Water- Use Categ.	MICHIGAN*		ONTARIO		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	168.58	36.99	168.58	36.99
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	168.58	36.99	168.58	36.99

*The State of Michigan was unable to report by subbasin for most categories of use.

BASIN REPORT - Lake Erie

DATE: 2/22/91
 UNITS: ML/D
 YEAR OF DATA: 1989

a) Withdrawals, Diversions and Consumptive Use - All Facilities

Water-Use Categ.	INDIANA			MICHIGAN*			NEW YORK			OHIO			ONTARIO			PENNSYLVANIA			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	141.91	0.00	21.27	0.00	0.00	0.00	779.79	0.00	0.00	2432.97	0.68	305.86	778.27	-168.58	116.75	153.28	0.00	16.35	4302.32	-167.90	520.24
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	32.23	0.00	4.81	0.00	0.00	0.00	295.26	0.00	0.00	214.10	0.00	32.14	73.73	0.00	11.06	7.46	6.00	0.70	652.80	0.00	48.76
4	3.26	0.00	2.95	0.00	0.00	0.00	6.06	0.00	0.61	42.77	0.00	38.50	62.24	0.00	48.52	11.20	6.00	10.56	125.53	0.00	101.16
5	6.85	0.00	5.49	0.00	0.00	0.00	5.30	0.00	0.06	40.86	0.00	32.71	57.62	0.00	45.10	0.00	0.00	0.00	110.65	0.00	84.29
6	28.42	0.00	1.70	0.00	0.00	0.00	221.07	0.00	0.06	501.72	0.00	50.19	1871.60	0.00	90.80	187.38	0.00	39.44	2810.19	0.00	182.14
7	1.02	0.00	0.04	15978.31	0.00	207.70	1816.99	0.00	0.00	5899.19	0.00	0.83	10767.50	0.00	96.91	1136.00	0.00	1.51	39599.02	0.00	387.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	189.65	0.00	26.88	0.00	0.00	0.00	0.00	0.00	0.00	129.65	0.00	26.88
9	0.00	0.00	0.00	0.00	0.00	0.00	2119.82	0.00	0.00	0.00	0.00	0.00	16340.00	16340.00	0.00	0.00	0.00	0.00	18459.82	16340.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	-106.22	0.00	2900.00	2900.00	0.00	0.00	0.00	0.00	2900.00	2793.78	0.00
Total	313.72	0.00	36.26	15978.31	0.00	207.70	5244.25	0.00	0.61	15927.09	-105.54	547.10	32250.90	19071.42	410.17	1505.41	0.00	65.63	69119.99	18965.88	1270.47

b) Withdrawals by Source - All Facilities

Water-Use Categ.	INDIANA			MICHIGAN*			NEW YORK			OHIO			ONTARIO			PENNSYLVANIA			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	0.00	122.42	19.49	0.00	0.00	0.00	605.66	174.13	0.00	1677.14	418.36	143.47	412.11	72.25	293.91	150.28	5.60	7.50	3045.19	782.76	164.37
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.11	32.14	0.00	0.00	0.00	37.85	37.85	219.55	0.00	0.00	214.10	0.00	0.00	73.73	0.00	0.00	7.46	37.85	37.97	546.98
4	0.00	1.10	1.85	0.00	0.00	0.00	4.54	0.00	1.51	0.00	26.88	15.90	0.00	42.05	20.19	0.00	8.18	3.03	4.54	78.50	42.49
5	0.00	0.00	6.85	0.00	0.00	0.00	1.69	0.00	3.41	0.00	6.06	34.83	0.00	0.00	57.62	0.00	0.00	0.00	1.69	6.06	102.70
6	0.00	16.62	13.81	0.00	0.00	0.00	265.20	0.00	12.67	31.27	409.81	0.64	1740.10	97.40	51.10	180.71	5.60	1.06	2220.28	529.43	60.48
7	0.00	0.00	1.02	15977.97	0.34	0.00	1816.99	0.00	0.00	5891.26	607.93	0.00	10767.50	0.00	0.00	1135.00	0.00	0.00	38989.72	608.28	1.02
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	189.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	189.65	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	2119.82	0.00	0.00	0.00	0.00	0.00	16340.00	0.00	0.00	0.00	0.00	0.00	18459.82	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2900.00	0.00	0.00	0.00	0.00	0.00	2900.00	0.00	0.00
Total	0.00	140.55	73.17	15977.97	0.34	0.00	4794.56	211.96	237.54	11449.24	1469.04	409.94	32159.71	211.70	475.55	1466.59	19.36	19.04	65848.90	2052.99	1218.64

c) Diversions by Type - All Facilities

Water-Use Categ.	INDIANA		MICHIGAN*		NEW YORK		OHIO		ONTARIO		PENNSYLVANIA		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	-168.58	0.00	0.00	0.00	0.68	
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16340.00	0.00	0.00	0.00	16340.00	
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-105.54	19671.42	0.00	0.00	0.00	-105.54	

*The State of Michigan was unable to report by subbasin for most categories of use.

BASIN REPORT - Lake Erie

DATE: 2/22/91

UNITS: ML/D

YEAR OF DATA: 1989

a) Withdrawals, Diversions and Consumptive Use - Principal Facilities

Water-Use Categ.	INDIANA			MICHIGAN*			NEW YORK			OHIO			ONTARIO			PENNSYLVANIA			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	141.31	0.00	21.20	0.00	0.00	0.00	0.00	0.00	0.00	2416.86	0.68	362.53	772.70	-168.58	115.91	160.75	0.00	15.60	3491.60	-107.90	515.23
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.38	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.00	0.04
4	2.84	0.00	2.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.84	0.00	2.54
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	27.18	0.00	1.63	0.00	0.00	0.00	0.00	0.00	0.00	473.59	0.60	47.36	1865.20	0.00	29.70	165.98	0.00	39.25	2551.95	0.00	177.94
7	1.02	0.00	0.04	0.00	0.00	0.00	1816.99	0.00	0.00	5899.19	0.00	0.83	10767.50	0.00	96.91	1136.00	0.00	1.51	23620.70	0.00	99.29
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	189.65	0.00	26.88	0.00	0.00	0.00	0.00	0.00	0.00	189.65	0.00	26.88
9	0.00	0.00	0.00	0.00	0.00	0.00	3119.82	0.00	0.00	0.00	0.00	0.00	16340.00	16340.00	0.00	0.00	0.00	0.00	16459.82	16340.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-106.22	0.00	2900.00	2900.00	0.00	0.00	0.00	2900.00	2793.78	0.00
Total	172.73	0.00	25.44	0.00	0.00	0.00	3936.81	0.00	0.00	12975.29	-106.54	437.53	20045.40	15071.42	360.52	1401.73	0.00	56.56	51216.94	18965.68	821.91

b) Withdrawals by Source - Principal Facilities

Water-Use Categ.	INDIANA			MICHIGAN*			NEW YORK			OHIO			ONTARIO			PENNSYLVANIA			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	0.00	122.42	18.89	0.00	0.00	0.00	0.00	0.00	0.00	1877.14	419.45	122.27	415.11	71.94	238.65	150.29	5.49	4.96	2435.53	617.30	424.77
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.25
3	0.00	0.11	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.25	1.59
4	0.00	1.25	1.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	16.50	10.67	0.00	0.00	0.00	0.00	0.00	0.00	91.27	382.23	0.00	1739.80	54.20	31.20	180.71	5.26	0.00	2011.78	498.29	41.87
7	0.00	0.00	1.02	0.00	0.00	0.00	1816.99	0.00	0.00	5291.28	607.93	0.00	10767.50	0.00	0.00	1136.00	0.00	0.00	189.65	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	189.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	3119.82	0.00	0.00	0.00	0.00	0.00	16340.00	16340.00	0.00	0.00	0.00	0.00	16459.82	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2900.00	2900.00	0.00	0.00	0.00	0.00	2900.00	0.00	0.00
Total	0.00	140.29	32.44	0.00	0.00	0.00	3936.81	0.00	0.00	11445.31	1407.71	122.27	32159.41	160.14	319.25	1400.99	10.75	4.96	43012.53	1724.29	472.55

c) Diversions by Type - Principal Facilities

Water-Use Categ.	INDIANA		MICHIGAN*		NEW YORK		OHIO		ONTARIO		PENNSYLVANIA		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	-168.58	0.00	0.00	0.00	-168.58	0.68
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16340.00	0.00	0.00	0.00	16340.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-106.22	2900.00	0.00	0.00	0.00	2900.00	-106.22
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-106.54	19071.42	0.00	0.00	0.00	15071.42	-106.54

*The State of Michigan was unable to report by subbasin for most categories of use.

BASIN REPORT - Lake Ontario

DATE: 2/22/91

a) Withdrawals, Diversions and Consumptive Use - All Facilities

UNITS: ML/d
YEAR OF DATA: 1989

Water- Use Categ.	NEW YORK			ONTARIO			PENNSYLVANIA			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	1008.92	0.00	0.00	3003.07	0.00	450.46	0.61	0.00	0.08	4010.59	0.00	450.54
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	1097.77	0.00	0.00	87.80	0.00	13.17	0.00	0.00	0.00	1185.57	0.00	13.17
4	30.28	0.00	0.30	14.13	0.00	11.02	0.00	0.00	0.00	44.41	0.00	11.32
5	24.23	0.00	0.00	30.13	0.00	24.11	0.00	0.00	0.00	54.36	0.00	24.11
6	832.78	0.00	0.00	3272.10	0.00	57.80	0.00	0.00	0.00	4104.89	0.00	57.80
7	8134.82	0.00	30.28	5582.98	0.00	50.35	0.00	0.00	0.00	13717.78	0.00	80.83
8	4262.38	0.00	11.38	20800.00	0.00	187.20	0.00	0.00	0.00	25062.36	0.00	198.58
9	544472.81	0.00	0.00	213049.70	-16340.00	0.00	0.00	0.00	0.00	757522.31	-16340.00	0.00
10	1570.94	0.00	0.00	492.00	-2900.00	0.00	0.00	0.00	0.00	2062.94	-2900.00	0.00
Total	561432.70	0.00	41.94	246331.89	-19240.00	793.91	0.61	0.00	0.08	807765.20	-19240.00	835.93

b) Withdrawals by Source - All Facilities

Water- Use Categ.	NEW YORK			ONTARIO			PENNSYLVANIA			TOTAL		
	QLSW	OSW	GW	QLSW	OSW	GW	QLSW	OSW	GW	QLSW	OSW	GW
1	363.40	528.17	117.35	2787.80	139.84	75.63	0.00	0.00	0.61	3151.20	665.81	193.58
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	382.33	363.40	352.04	0.00	0.00	87.80	0.00	0.00	0.00	382.33	363.40	439.84
4	28.50	0.00	3.79	0.00	9.96	4.17	0.00	0.00	0.00	28.50	9.96	7.96
5	9.46	0.00	14.78	0.00	0.00	30.13	0.00	0.00	0.00	9.46	0.00	44.89
6	681.37	0.00	151.42	2858.00	402.40	11.70	0.00	0.00	0.00	3539.37	402.40	163.12
7	8134.82	0.00	0.00	5582.98	0.00	0.00	0.00	0.00	0.00	13717.78	0.00	0.00
8	4262.38	0.00	0.00	20800.00	0.00	0.00	0.00	0.00	0.00	25062.36	0.00	0.00
9	544472.81	0.00	0.00	173883.00	39166.70	0.00	0.00	0.00	0.00	718355.61	39166.70	0.00
10	1570.94	0.00	0.00	0.00	492.00	0.00	0.00	0.00	0.00	1570.94	492.00	0.00
Total	559903.78	889.57	639.35	205911.76	40210.70	209.43	0.00	0.00	0.61	765815.54	41100.27	849.39

c) Diversions by Type - All Facilities

Water- Use Categ.	NEW YORK		ONTARIO		PENNSYLVANIA		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	-16340.00	0.00	0.00	0.00	-16340.00	0.00
10	0.00	0.00	-2900.00	0.00	0.00	0.00	-2900.00	0.00
Total	0.00	0.00	-19240.00	0.00	0.00	0.00	-19240.00	0.00

BASIN REPORT - Lake Ontario

DATE: 2/22/91

a) Withdrawals, Diversions and Consumptive Use - Principal Facilities

UNITS: ML/d
YEAR OF DATA: 1989

Water- Use Categ.	NEW YORK			ONTARIO			PENNSYLVANIA			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	0.00	0.00	0.00	2989.34	0.00	448.41	0.00	0.00	0.00	2989.34	0.00	448.41
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	3252.80	0.00	54.50	0.00	0.00	0.00	3252.80	0.00	54.50
7	8134.82	0.00	30.28	5582.98	0.00	50.35	0.00	0.00	0.00	13717.78	0.00	80.63
8	4282.38	0.00	11.38	20800.00	0.00	187.20	0.00	0.00	0.00	25062.36	0.00	198.58
9	178564.10	0.00	0.00	213049.70	-16340.00	0.00	0.00	0.00	0.00	392613.80	-16340.00	0.00
10	1570.94	0.00	0.00	492.00	-2900.00	0.00	0.00	0.00	0.00	2062.94	-2900.00	0.00
Total	193532.22	0.00	41.64	246186.80	-19240.00	740.48	0.00	0.00	0.00	439699.02	-19240.00	782.10

b) Withdrawals by Source - Principal Facilities

Water- Use Categ.	NEW YORK			ONTARIO			PENNSYLVANIA			TOTAL		
	QLSW	OSW	GW	QLSW	OSW	GW	QLSW	OSW	GW	QLSW	OSW	GW
1	0.00	0.00	0.00	2787.50	137.78	64.05	0.00	0.00	0.00	2787.50	137.78	64.05
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	2857.00	390.10	5.70	0.00	0.00	0.00	2857.00	390.10	5.70
7	8134.82	0.00	0.00	5582.98	0.00	0.00	0.00	0.00	0.00	13717.78	0.00	0.00
8	4282.38	0.00	0.00	20800.00	0.00	0.00	0.00	0.00	0.00	25062.36	0.00	0.00
9	178564.10	0.00	0.00	173863.00	39166.70	0.00	0.00	0.00	0.00	353447.10	39166.70	0.00
10	1570.94	0.00	0.00	0.00	492.00	0.00	0.00	0.00	0.00	1570.94	492.00	0.00
Total	193532.22	0.00	0.00	205910.48	40186.59	69.75	0.00	0.00	0.00	399442.68	40186.59	69.75

c) Diversions by Type - Principal Facilities

Water- Use Categ.	NEW YORK		ONTARIO		PENNSYLVANIA		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	-16340.00	0.00	0.00	0.00	-16340.00	0.00
10	0.00	0.00	-2900.00	0.00	0.00	0.00	-2900.00	0.00
Total	0.00	0.00	-19240.00	0.00	0.00	0.00	-19240.00	0.00

WATER-USE CATEGORY REPORT - Public Supply

DATE: 11/29/90

a) Water-Use by Basin - All Jurisdictions

UNITS: ML/d
YEAR OF DATA: 1989

Basin	All Facilities								Principal Facilities							
	Withdrawals				Diversions			Consumptive Use	Withdrawals				Diversions			Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL		GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	
Lake Superior	194.56	29.97	55.06	279.59	0.00	0.00	0.00	52.41	194.29	29.22	36.06	259.57	0.00	0.00	0.00	49.31
Lake Michigan	5532.93	155.58	482.32	6170.83	0.00	4289.91	4289.91	286.93	5532.93	155.58	470.11	6098.62	0.00	4289.94	4289.94	282.35
Lake Huron	247.98	146.71	180.13	574.82	168.58	0.00	168.58	86.23	246.63	125.76	156.10	528.49	168.58	36.99	205.57	47.27
Lake Erie	1045.19	792.76	464.37	2302.32	-168.58	0.68	-167.90	520.24	2439.53	619.30	434.77	3491.60	-168.58	0.68	-167.90	515.23
Lake Ontario	3151.28	665.81	193.58	4010.67	0.00	0.00	0.00	450.54	2787.50	137.79	64.05	2989.34	0.00	0.00	0.00	448.41
St. Lawrence River	2891.26	1900.42	113.41	4905.09	0.00	0.00	0.00	471.17	2506.93	1886.35	16.06	4409.34	0.00	0.00	0.00	469.60
Total	15063.11	3691.25	1448.88	24836.45*	0.00	4290.60	4290.60	2333.10*	13707.81	2952.00	1117.14	17776.95	0.00	4327.21	4327.21	1807.18

b) Water-Use by Jurisdiction - All Basins

Jurisdiction	All Facilities								Principal Facilities							
	Withdrawals				Diversions			Consumptive Use	Withdrawals				Diversions			Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL		GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	
Illinois	4289.54	0.00	0.00	4289.54	0.00	4289.54	4289.54	0.00	4289.54	0.00	0.00	4289.54	0.00	4289.54	4289.54	0.00
Indiana	321.57	122.42	216.90	660.89	0.00	0.00	0.00	99.10	321.57	122.42	215.01	659.00	0.00	0.00	0.00	98.84
Michigan	0.00	0.00	0.00	633.20	0.00	0.00	0.00	465.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Minnesota	126.66	20.10	28.17	174.93	0.00	0.00	0.00	36.72	126.66	19.95	27.86	174.47	0.00	0.00	0.00	36.60
New York	1351.39	700.30	211.98	2263.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ohio	1877.14	418.36	113.47	2408.97	0.00	0.68	0.68	265.86	1877.14	417.45	122.27	2416.86	0.00	0.68	0.68	362.53
Ontario	3657.52	784.89	575.70	5018.11	0.00	0.00	0.00	752.74	3655.60	760.11	532.11	4947.82	0.00	36.99	36.99	705.18
Pennsylvania	150.28	5.60	8.10	163.98	0.00	0.00	0.00	16.43	150.28	5.49	4.96	160.73	0.00	0.00	0.00	15.60
Quebec	2363.00	1484.00	0.00	3847.00	0.00	0.00	0.00	384.00	2361.00	1471.00	0.00	3832.00	0.00	0.00	0.00	383.00
Wisconsin	926.02	155.58	264.60	1346.20	0.00	0.38	0.38	212.66	926.02	155.58	214.93	1296.54	0.00	0.00	0.00	205.43
Total	15063.11	3691.25	1448.88	24836.45*	0.00	4290.60	4290.60	2333.10	13707.81	2952.00	1117.14	17776.95	0.00	4327.21	4327.21	1807.18

*The total presented is larger than the sum of water use categories. This is due to the addition of statewide data from Michigan. Michigan's withdrawals and consumptive uses for this category cannot presently be reported by individual sub-basin or water withdrawal type.

WATER-USE CATEGORY REPORT - Self-supply - domestic (residential, commercial, institutional)

DATE: 11/29/90

UNITS: ML/d
YEAR OF DATA: 1989

a) Water-Use by Basin - All Jurisdictions

Basin	All Facilities								Principal Facilities							
	Withdrawals				Diversions			Consumptive Use	Withdrawals				Diversions			Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL		GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	
Lake Superior	3.60	2.04	4.84	10.48	0.00	0.00	0.00	1.15	3.60	1.93	0.00	5.53	0.00	0.00	0.00	0.45
Lake Michigan	111.25	73.02	186.01	370.29	0.00	20.59	20.59	38.80	110.76	72.83	42.77	226.37	0.00	20.14	20.14	17.34
Lake Huron	0.00	0.00	74.27	74.27	0.00	0.00	0.00	11.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Erie	37.85	37.97	546.98	622.80	0.00	0.00	0.00	48.76	0.00	0.11	0.26	0.38	0.00	0.00	0.00	0.00
Lake Ontario	382.33	363.60	439.84	1185.57	0.00	0.00	0.00	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Lawrence River	193.06	75.71	410.79	679.56	0.00	0.00	0.00	38.43	0.00	0.00	180.00	180.00	0.00	0.00	0.00	18.00
Total	128.08	552.14	1662.74	2942.96	0.00	20.59	20.59	139.45	114.36	74.88	223.04	412.27	0.00	20.14	20.14	35.83

b) Water-Use by Jurisdiction - All Basins

Jurisdiction	All Facilities								Principal Facilities							
	Withdrawals				Diversions			Consumptive Use	Withdrawals				Diversions			Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL		GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	
Illinois	111.25	0.15	0.34	111.74	0.00	20.59	20.59	0.00	110.76	0.00	0.00	110.76	0.00	20.14	20.14	0.00
Indiana	0.00	72.98	139.45	212.44	0.00	0.00	0.00	31.84	0.00	72.94	43.04	115.98	0.00	0.00	0.00	12.37
Michigan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Minnesota	3.60	2.04	0.19	5.83	0.00	0.00	0.00	0.45	3.60	1.93	0.00	5.53	0.00	0.00	0.00	0.45
New York	613.23	676.96	643.52	1933.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ohio	0.00	0.00	214.10	214.10	0.00	0.00	0.00	32.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ontario	0.00	0.00	322.79	322.79	0.00	0.00	0.00	36.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania	0.00	0.00	7.46	7.46	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quebec	0.00	0.00	256.00	256.00	0.00	0.00	0.00	26.00	0.00	0.00	180.00	180.00	0.00	0.00	0.00	18.00
Wisconsin	0.00	0.00	78.89	78.89	0.00	0.00	0.00	11.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	128.08	552.14	1662.74	2942.96	0.00	20.59	20.59	139.45	114.36	74.88	223.04	412.27	0.00	20.14	20.14	35.83

WATER-USE CATEGORY REPORT - Self-supply - Irrigation

DATE: 11/29/90
 UNIT: MGD
 YEAR OR DATA: 1989

a) Water-Use by Basin - All Jurisdictions

Basin	All Facilities								Principal Facilities							
	Withdrawals				Diversions			Consumptive Use	Withdrawals				Diversions			Consumptive Use
	GLSW	GSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL		GLSW	GSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	
Lake Superior	0.00	1.89	0.14	2.02	0.00	0.00	0.00	0.44	0.00	1.48	0.00	1.48	0.00	0.00	0.00	0.00
Lake Michigan	0.00	21.50	06.00	27.51	0.00	0.00	0.00	29.50	0.00	19.08	06.09	25.17	0.00	0.00	0.00	73.06
Lake Huron	0.00	10.90	2.06	12.96	0.00	0.00	0.00	10.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Erie	4.54	78.50	42.49	125.53	0.00	0.00	0.00	101.16	0.00	1.25	1.59	2.84	0.00	0.00	0.00	2.51
Lake Ontario	26.50	9.96	7.96	44.41	0.00	0.00	0.00	11.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Lawrence River	5.79	1.86	15.08	22.72	0.00	0.00	0.00	14.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	34.83	124.61	153.72	1210.28*	0.00	0.00	0.00	1076.04*	0.00	21.80	07.68	29.48	0.00	0.00	0.00	75.59

b) Water-Use by Jurisdiction - All Basins

Jurisdiction	All Facilities								Principal Facilities							
	Withdrawals				Diversions			Consumptive Use	Withdrawals				Diversions			Consumptive Use
	GLSW	GSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL		GLSW	GSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	
Illinois	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indiana	0.00	21.50	51.63	73.13	0.00	0.00	0.00	25.54	0.00	20.33	49.97	70.29	0.00	0.00	0.00	63.21
Michigan	0.00	0.00	0.00	857.12	0.00	0.00	0.00	251.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Minnesota	0.00	1.82	0.08	1.89	0.00	0.00	0.00	0.34	0.00	1.48	0.00	1.48	0.00	0.00	0.00	0.00
New York	34.83	0.00	5.69	40.50	0.00	0.00	0.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ohio	0.00	26.86	15.96	42.77	0.00	0.00	0.00	16.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ontario	0.00	64.84	27.18	92.02	0.00	0.00	1.00	71.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania	0.00	8.18	5.03	13.20	0.00	0.00	0.00	10.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quebec	0.00	0.00	14.00	14.00	0.00	0.00	0.00	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wisconsin	0.00	1.32	36.23	37.55	0.00	0.00	0.00	26.31	0.00	0.00	17.72	17.72	0.00	0.00	0.00	12.54
Total	34.83	124.61	153.72	1210.28	0.00	0.00	0.00	1076.70	0.00	21.80	07.68	29.48	0.00	0.00	0.00	75.59

*The total presented is larger than the sum of water use categories. This is due to the addition of statewide data from Michigan. Michigan's withdrawals and consumptive use for this category cannot presently be reported by individual sub-basin or water withdrawal type.

PER-USE CATEGORY REPORT - Self-supply - livestock

DATE: 11/29/90

UNITS: ML/d

YEAR OF DATA: 1989

Water-Use by Basin - All Jurisdictions

Basin	All Facilities							
	Withdrawals				Diversions			Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	
Lake Superior	2.57	0.23	8.10	10.90	0.00	0.00	0.00	6.76
Lake Michigan	0.00	9.05	100.20	109.25	0.00	0.00	0.00	87.40
Lake Huron	0.00	0.00	56.80	56.80	0.00	0.00	0.00	45.44
Lake Erie	1.89	6.06	102.70	110.65	0.00	0.00	0.00	84.25
Lake Ontario	9.46	0.00	44.89	54.36	0.00	0.00	0.00	24.11
St. Lawrence River	3.79	0.00	123.74	127.53	0.00	0.00	0.00	92.74
Total	17.72	15.33	436.44	469.48	0.00	0.00	0.00	340.74

Principal Facilities							
Withdrawals				Diversions			Consumptive Use
GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	
2.57	0.00	0.00	2.57	0.00	0.00	0.00	0.00
0.00	5.22	5.60	10.83	0.00	0.00	0.00	8.63
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.57	5.22	5.60	13.40	0.00	0.00	0.00	8.63

b) Water-Use by Jurisdiction - All Basins

Jurisdiction	All Facilities							
	Withdrawals				Diversions			Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	
Illinois	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indiana	0.00	5.22	27.56	32.78	0.00	0.00	0.00	26.23
Michigan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Minnesota	2.57	0.15	0.87	3.60	0.00	0.00	0.00	0.79
New York	15.11	0.00	25.71	40.88	0.00	0.00	0.00	0.00
Ohio	0.00	6.06	34.83	40.88	0.00	0.00	0.00	32.71
Ontario	0.00	0.00	177.78	177.78	0.00	0.00	0.00	142.24
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quebec	0.00	0.00	84.00	84.00	0.00	0.00	0.00	67.00
Wisconsin	0.00	3.90	85.66	89.56	0.00	0.00	0.00	71.77
Total	17.72	15.33	436.44	469.48	0.00	0.00	0.00	340.74

Principal Facilities							
Withdrawals				Diversions			Consumptive Use
GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	5.22	5.60	10.83	0.00	0.00	0.00	8.63
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.57	0.00	0.00	2.57	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.57	5.22	5.60	13.40	0.00	0.00	0.00	8.63

WATER-USE CATEGORY REPORT - Self-supply - industrial (manufacturing and mining)

DATE: 11/29/90

a) Water-Use by Basin - All Jurisdictions

UNITS: ML/d
YEAR OF DATA: 1989

Basin	All Facilities								Principal Facilities									
	Withdrawals				Diversions				Consumptive Use	Withdrawals				Diversions				Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	GLSW		OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL			
Lake Superior	644.06	546.67	0.61	1191.34	0.00	0.00	0.00	162.35	625.67	546.67	8.15	1190.40	0.00	0.00	0.00	161.42		
Lake Michigan	7144.71	1450.53	99.78	8694.41	0.00	29.98	29.98	583.63	7144.71	1344.87	88.43	8478.00	0.00	29.98	29.98	562.09		
Lake Huron	2578.70	284.00	46.90	2909.60	0.00	0.00	0.00	64.30	2578.60	281.10	46.50	2904.20	0.00	0.00	0.00	63.60		
Lake Erie	2220.28	529.43	60.48	2810.19	0.00	0.00	0.00	182.14	2011.78	498.29	41.87	2551.95	0.00	0.00	0.00	177.94		
Lake Ontario	3539.37	402.10	163.12	4104.59	0.00	0.00	0.00	57.60	2857.00	390.10	5.70	3252.80	0.00	0.00	0.00	54.50		
St. Lawrence River	364.41	475.00	37.93	877.33	0.00	0.00	0.00	48.10	104.60	473.00	16.20	593.80	0.00	0.00	0.00	47.30		
Total	16491.53	3688.03	416.21	25584.78*	0.00	29.98	29.98	1597.79*	15332.36	3433.93	204.86	18971.15	0.00	29.98	29.98	1066.85		

b) Water-Use by Jurisdiction - All Basins

Jurisdiction	All Facilities								Principal Facilities									
	Withdrawals				Diversions				Consumptive Use	Withdrawals				Diversions				Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	GLSW		OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL			
Illinois	41.41	0.00	0.00	41.41	0.00	29.98	29.98	7.61	41.41	0.00	0.00	41.41	0.00	29.98	29.98	7.61		
Indiana	7103.30	61.59	95.47	7260.35	0.00	0.00	0.00	435.62	7103.30	61.40	92.06	7256.76	0.00	0.00	0.00	415.40		
Michigan	0.00	0.00	0.00	4989.02	0.00	0.00	0.00	499.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Minnesota	22.11	507.77	0.33	530.41	0.00	0.00	0.00	135.82	22.07	507.77	0.45	530.30	0.00	0.00	0.00	135.82		
New York	1146.98	0.00	183.21	1330.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Ohio	91.27	409.81	0.64	501.72	0.00	0.00	0.00	50.19	91.27	382.33	0.00	473.59	0.00	0.00	0.00	47.36		
Ontario	7897.50	822.70	119.78	8839.90	0.00	0.00	0.00	244.60	7893.60	804.20	105.30	8803.10	0.00	0.00	0.00	238.90		
Pennsylvania	180.71	5.60	1.06	187.38	0.00	0.00	0.00	39.44	180.71	5.26	0.00	185.98	0.00	0.00	0.00	39.25		
Quebec	0.00	473.00	0.00	473.00	0.00	0.00	0.00	47.30	0.00	473.00	0.00	473.00	0.00	0.00	0.00	47.30		
Wisconsin	8.25	1405.56	15.60	1429.40	0.00	0.00	0.00	142.94	0.00	1399.97	7.04	1407.01	0.00	0.00	0.00	120.72		
Total	16491.53	3688.03	416.21	25584.78*	0.00	29.98	29.98	1597.79*	15332.36	3433.93	204.86	18971.15	0.00	29.98	29.98	1066.85		

*The total presented is larger than the sum of water use categories. This is due to the addition of statewide data from Michigan. Michigan's withdrawals and consumptive uses for this category cannot presently be reported by individual sub-basin or water withdrawal type.

WATER-USE CATEGORY REPORT - Self-supply - thermoelectric power - fossil-fuel plants

DATE: 11/29/90

a) Water-Use by Basin - All Jurisdictions

UNITS: ML/d
YEAR OF DATA: 1989

Basin	All Facilities								Principal Facilities									
	Withdrawals				Diversions				Consumptive Use	Withdrawals				Diversions				Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	GLSW		OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL			
Lake Superior	2418.94	437.14	0.04	2856.12	0.00	0.00	0.00	35.76	1431.83	436.91	0.00	1868.73	0.00	0.00	0.00	22.93		
Lake Michigan	19332.59	503.80	10.18	19846.57	0.00	0.00	0.00	227.65	15679.68	32.74	0.00	15712.43	0.00	0.00	0.00	173.90		
Lake Huron	3366.74	0.11	0.00	3366.86	0.00	0.00	0.00	36.64	897.00	0.00	0.00	897.00	0.00	0.00	0.00	4.54		
Lake Erie	38989.12	608.28	1.02	39599.02	0.00	0.00	0.00	307.00	23011.75	607.93	1.02	23620.70	0.00	0.00	0.00	99.29		
Lake Ontario	13717.78	0.00	0.00	13717.78	0.00	0.00	0.00	80.63	13717.78	0.00	0.00	13717.78	0.00	0.00	0.00	80.63		
St. Lawrence River	148.00	30.00	0.00	178.00	0.00	0.00	0.00	0.00	148.00	30.00	0.00	178.00	0.00	0.00	0.00	0.00		
Total	77973.78	1579.32	11.24	79564.34	0.00	0.00	0.00	687.69	54886.03	1107.59	1.02	55994.64	0.00	0.00	0.00	381.30		

b) Water-Use by Jurisdiction - All Basins

Jurisdiction	All Facilities								Principal Facilities									
	Withdrawals				Diversions				Consumptive Use	Withdrawals				Diversions				Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	GLSW		OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL			
Illinois	2363.53	0.00	0.00	2363.53	0.00	0.00	0.00	0.00	2363.53	0.00	0.00	2363.53	0.00	0.00	0.00	0.00		
Indiana	4041.93	0.00	1.02	4042.96	0.00	0.00	0.00	80.89	4041.93	0.00	1.02	4042.96	0.00	0.00	0.00	80.89		
Michigan	23087.74	471.51	8.63	23567.88	0.00	0.00	0.00	306.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Minnesota	3.10	436.99	0.04	440.13	0.00	0.00	0.00	8.82	3.10	436.76	0.00	439.86	0.00	0.00	0.00	8.82		
New York	9951.81	0.00	0.00	9951.81	0.00	0.00	0.00	30.28	9951.81	0.00	0.00	9951.81	0.00	0.00	0.00	30.28		
Ohio	9291.26	607.93	0.00	9899.19	0.00	0.00	0.00	0.83	9291.26	607.93	0.00	9899.19	0.00	0.00	0.00	0.83		
Ontario	18581.66	0.15	0.00	18581.81	0.00	0.00	0.00	164.96	18581.66	0.15	0.00	18581.81	0.00	0.00	0.00	164.96		
Pennsylvania	1136.00	0.00	0.00	1136.00	0.00	0.00	0.00	1.51	1136.00	0.00	0.00	1136.00	0.00	0.00	0.00	1.51		
Quebec	148.00	30.00	0.00	178.00	0.00	0.00	0.00	0.00	148.00	30.00	0.00	178.00	0.00	0.00	0.00	0.00		
Wisconsin	9368.74	32.74	1.55	9403.04	0.00	0.00	0.00	93.99	9368.74	32.74	0.00	9401.49	0.00	0.00	0.00	93.99		
Total	77973.78	1579.32	11.24	79564.34	0.00	0.00	0.00	687.69	54886.03	1107.59	1.02	55994.64	0.00	0.00	0.00	381.30		

WATER-USE CATEGORY REPORT - Self-supply - thermal electric power - nuclear plants

DATE: 01/04/91

a) Water-Use by Basin - All Jurisdictions

UNITS: ML/d
YEAR OF DATA: 1989

Basin	All Facilities							Consumptive Use	Principal Facilities								
	Withdrawals				Diversions				Withdrawals				Diversions			Consumptive Use	
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL		GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL		
Lake Superior	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Michigan	22031.09	0.00	0.00	22031.09	0.00	0.00	0.00	163.87	13849.75	0.00	0.00	13849.75	0.00	0.00	0.00	0.00	57.50
Lake Huron	27221.92	0.00	0.00	27221.92	0.00	0.00	0.00	245.00	27221.92	0.00	0.00	27221.92	0.00	0.00	0.00	0.00	245.00
Lake Erie	189.65	0.00	0.00	189.65	0.00	0.00	0.00	26.88	189.65	0.00	0.00	189.65	0.00	0.00	0.00	0.00	26.88
Lake Ontario	25062.36	0.00	0.00	25062.36	0.00	0.00	0.00	198.56	25062.36	0.00	0.00	25062.36	0.00	0.00	0.00	0.00	198.56
St. Lawrence River	154.50	0.00	0.00	154.50	0.00	0.00	0.00	1.39	154.50	0.00	0.00	154.50	0.00	0.00	0.00	0.00	1.39
Total	74659.51	0.00	0.00	74659.51	0.00	0.00	0.00	635.69	66478.17	0.00	0.00	66478.17	0.00	0.00	0.00	0.00	529.32

b) Water-Use by Jurisdiction - All Basins

Jurisdiction	All Facilities							Consumptive Use	Principal Facilities								
	Withdrawals				Diversions				Withdrawals				Diversions			Consumptive Use	
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL		GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL		
Illinois	8099.73	0.00	0.00	8099.73	0.00	0.00	0.00	0.00	8099.73	0.00	0.00	8099.73	0.00	0.00	0.00	0.00	0.00
Indiana	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Michigan	8181.34	0.00	0.00	8181.34	0.00	0.00	0.00	106.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Minnesota	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York	4262.36	0.00	0.00	4262.36	0.00	0.00	0.00	11.36	4262.36	0.00	0.00	4262.36	0.00	0.00	0.00	0.00	11.36
Ohio	189.65	0.00	0.00	189.65	0.00	0.00	0.00	26.88	189.65	0.00	0.00	189.65	0.00	0.00	0.00	0.00	26.88
Ontario	48176.42	0.00	0.00	48176.42	0.00	0.00	0.00	433.59	48176.42	0.00	0.00	48176.42	0.00	0.00	0.00	0.00	433.59
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wisconsin	5750.02	0.00	0.00	5750.02	0.00	0.00	0.00	57.50	5750.02	0.00	0.00	5750.02	0.00	0.00	0.00	0.00	57.50
Total	74659.51	0.00	0.00	74659.51	0.00	0.00	0.00	635.69	66478.17	0.00	0.00	66478.17	0.00	0.00	0.00	0.00	529.32

WATER-USE CATEGORY REPORT - Self-supply - hydroelectric power

DATE: 01/04/91

a) Water-Use by Basin - All Jurisdictions

UNITS: ML/d
YEAR OF DATA: 1989

Basin	All Facilities							Consumptive Use	Principal Facilities							
	Withdrawals				Diversions				Withdrawals				Diversions			Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL		GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	
Lake Superior	0.00	591387.09	0.00	591387.09	0.00	-19519.58	-19519.58	0.00	0.00	591387.09	0.00	591387.09	0.00	-19519.58	-19519.58	0.00
Lake Michigan	0.00	18138.68	0.00	18138.68	0.00	0.00	0.00	0.00	0.00	18138.68	0.00	18138.68	0.00	0.00	0.00	0.00
Lake Huron	69966.80	19895.70	0.00	169862.50	0.00	0.00	0.00	0.00	69966.80	19895.70	0.00	169862.50	0.00	0.00	0.00	0.00
Lake Erie	18459.82	0.00	0.00	18459.82	16340.00	0.00	16340.00	0.00	18459.82	0.00	0.00	16340.00	16340.00	0.00	16340.00	0.00
Lake Ontario	718355.81	39166.70	0.00	757522.51	-16340.00	0.00	-16340.00	0.00	353447.10	39166.70	0.00	392613.80	-16340.00	0.00	-16340.00	0.00
St. Lawrence River	1623740.73	164838.70	0.00	2188587.43	0.00	0.00	0.00	0.00	1266501.00	164838.70	0.00	1971339.70	0.00	0.00	0.00	0.00
Total	2250470.36	1493426.86	0.00	3743897.82	0.00	-19519.58	-19519.58	0.00	1668314.72	1493426.86	0.00	3161741.58	0.00	-19519.58	-19519.58	0.00

b) Water-Use by Jurisdiction - All Basins

Jurisdiction	All Facilities							Consumptive Use	Principal Facilities							
	Withdrawals				Diversions				Withdrawals				Diversions			Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL		GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	
Illinois	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indiana	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Michigan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Minnesota	0.00	438174.87	0.00	438174.87	0.00	0.00	0.00	0.00	0.00	438174.87	0.00	438174.87	0.00	0.00	0.00	0.00
New York	1060808.36	0.00	0.00	1060808.36	0.00	0.00	0.00	0.00	478652.12	0.00	0.00	478652.12	0.00	0.00	0.00	0.00
Ohio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ontario	575790.60	603742.80	0.00	1179533.40	0.00	-19519.58	-19519.58	0.00	575790.60	603742.80	0.00	1179533.40	0.00	-19519.58	-19519.58	0.00
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quebec	613872.00	432346.00	0.00	1046218.00	0.00	0.00	0.00	0.00	613872.00	432346.00	0.00	1046218.00	0.00	0.00	0.00	0.00
Wisconsin	0.00	19163.19	0.00	19163.19	0.00	0.00	0.00	0.00	0.00	19163.19	0.00	19163.19	0.00	0.00	0.00	0.00
Total	2250470.36	1493426.86	0.00	3743897.82	0.00	-19519.58	-19519.58	0.00	1668314.72	1493426.86	0.00	3161741.58	0.00	-19519.58	-19519.58	0.00

WATER-USE CATEGORY REPORT - Other (navigation, sanitation, environmental)

DATE: 01/04/91

a) Water-Use by Basin - All Jurisdictions

UNITS: ML/d
YEAR OF DATA: 1989

Basin	All Facilities								Principal Facilities									
	Withdrawals				Diversions				Consumptive Use	Withdrawals				Diversions				Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	GLSW		OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL			
Lake Superior	0.00	0.00	0.64	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.64	0.00	0.00	0.00	0.00		
Lake Michigan	1055.60	0.30	0.34	1056.24	0.00	1055.60	1055.60	0.08	1055.60	0.26	0.11	1055.97	0.00	1055.60	1055.60	0.04		
Lake Huron	0.00	152.00	0.00	152.00	0.00	0.00	0.00	0.00	0.00	152.00	0.00	152.00	0.00	0.00	0.00	0.00		
Lake Erie	2900.00	0.00	0.00	2900.00	2900.00	-106.22	2793.78	0.00	2900.00	0.00	0.00	2900.00	2900.00	-106.22	2793.78	0.00		
Lake Ontario	1570.94	492.00	0.00	2062.94	-2900.00	0.00	-2900.00	0.00	1570.94	492.00	0.00	2062.94	-2900.00	0.00	-2900.00	0.00		
St. Lawrence River	681.37	106.00	0.00	787.37	0.00	0.00	0.00	106.00	681.37	106.00	0.00	787.37	0.00	0.00	0.00	0.00		
Total	6207.91	750.30	0.98	6959.19	0.00	949.38	949.38	106.08	6207.91	750.26	0.76	6958.93	0.00	949.38	949.38	0.04		

b) Water-Use by Jurisdiction - All Basins

Jurisdiction	All Facilities								Principal Facilities									
	Withdrawals				Diversions				Consumptive Use	Withdrawals				Diversions				Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	GLSW		OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL			
Illinois	1055.60	0.00	0.00	1055.60	0.00	1055.60	1055.60	0.00	1055.60	0.00	0.00	1055.60	0.00	1055.60	1055.60	0.00		
Indiana	0.00	0.30	0.34	0.64	0.00	0.00	0.00	0.08	0.00	0.26	0.11	0.38	0.00	0.00	0.00	0.04		
Michigan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Minnesota	0.00	0.00	0.64	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.64	0.00	0.00	0.00	0.00		
New York	2252.31	0.00	0.00	2252.31	0.00	0.00	0.00	0.00	2252.31	0.00	0.00	2252.31	0.00	0.00	0.00	0.00		
Ohio	0.00	0.00	0.00	0.00	0.00	-106.22	-106.22	0.00	0.00	0.00	0.00	0.00	0.00	-106.22	-106.22	0.00		
Ontario	2900.00	750.00	0.00	3650.00	0.00	0.00	0.00	106.00	2900.00	750.00	0.00	3650.00	0.00	0.00	0.00	0.00		
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Wisconsin	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Total	6207.91	750.30	0.98	6959.19	0.00	949.38	949.38	106.08	6207.91	750.26	0.76	6958.93	0.00	949.38	949.38	0.04		

Appendix A-3

TABLE 3-1
STATE & PROVINCIAL WATER USE DATA SUMMARY: IRRIGATION & LIVESTOCK

<u>JURISDICTION</u>	<u>IRRIGATION</u>	<u>LIVESTOCK</u>
ILLINOIS	Weekly rainfall deficits and number of acres irrigated Ill. State Water Survey (ILWS)	Fixed amount of H ₂ O used per head for each type of animal and population of each of six types. Pop. data obtained through census.
INDIANA	Mandatory registration/reporting for capability exceeding 100,000 gal/day	Mandatory registration/reporting for capability exceeding 100,000 gal/day Estimate non-registered Livestock Pop. X Water Consumption values. Consumption derived from several sources. Each source is based on different variables using a range for computation.
MICHIGAN	(Involves data collection and intermittent surveying) Sample populations from 1977 survey of irrigators used to project withdrawal amounts.	Livestock Pop. X Per Cap. Consump. Data supplied by MDA and MSU. Six categories represent 99% of all MI livestock.
MINNESOTA	Appropriation permits with monthly use reports. Permits required for all users withdrawing more than 10,000 gal/day or 1 mil. gal/year.	(No. of animals in each of 17 classes X Per Capita Water Use) Data supplied by U.S.G.S., MDA, U.S. Census Bureau
NEW YORK	(# acres irr. X amount H ₂ O applied in acre-feet). Figures derived by county values range 0.2-2.0 acre ft./acre. Values can be applied to Census data when only the # of acres irrigated is available.	(# animals by county X fixed consumption values) Livestock data obtained by U.S.G.S. from census.
OHIO	U.S.G.S. estimates irrigation water used and farm acreages. Data provided by OSU and Extension, Census of Agric. - Crop reporting estimates. Golf course - use average model to predict.	U.S.G.S. estimates; # of animals X Coefficient for each animal type.
ONTARIO	OMNR estimates using area irrigated (Statistics Canada Census data: 1985 most recent year) X calculated annual growing season soil moisture deficit. Permits required over 50,000 litres/day by OMOE.	OMNR estimates using annual OMAF livestock numbers and per animal withdrawal coefficients. Permits are not required for livestock watering.
PENNSYLVANIA	Calculated from # of acres irrigated times assumed application rate of 1/2 inch per week during freeze-free period minus six weeks. Estimates based on 1987 survey and census of agriculture data. Golf courses surveyed individually, not estimated.	Withdrawals estimated by # of livestock by county X per head withdrawal values. Data provided by PaDA and USDA.
QUEBEC	Estimated by Environment Quebec. No methods given. No permit required. Data acquired through survey.	Estimated by Environment Quebec. No methods given. No permit required. Data acquired through survey.
WISCONSIN	WDNR collects water use data on groundwater withdrawals exceeding 100,000 gal/day and all surface water withdrawals.	Withdrawals estimated by # of farm animals per county X standard consump. value for each type. Data provided by USDA.

TABLE 3-2
 WATER USE COEFFICIENTS FOR SELF SUPPLY - LIVESTOCK
 (Withdrawal Estimates per Animal by Jurisdiction - gallons per day)

Self Supply Livestock	<u>IL</u>	<u>IN</u>	<u>MI</u>	<u>MN</u>	<u>NY</u>	<u>OH</u>	<u>ONT</u>	<u>PA</u>	<u>QUE</u>	<u>WI</u>
Dairy Cattle (milk cows)	35	15-30	12	18.4	10.5	35	35	20		
Beef Cattle	(12)	8-15	12	8.7	10.5	12	11	12	12	
Horse, Mule, Pony Burro, Donkey	12		10	12	10		11	12		
Hogs, Pigs	4	2-6	3	2.6	2	4	3	4	4	
Sheep, Lamb	2	10-12	1	2	.05	2	1.5	2	2	
Chicken L Laying N Non-Laying C Chicks B Broilers * Not Classified	.06	*.05-.15 *(.05-.26)	.03 N .039	L .061 N .027 C .03 B 0.37	L .065 C .035 B .05	.06	.05	0.1 C .059	L .06	
Turkey	.12		.12	.12	.008		.12	0.1		
Goats M Milk goats O Other				M 6 O 1				1.5	2.0	
Ducks				.04						
Geese				.04						
Other Poultry				.04						
Mink				.01			.01			
Rabbits, Chinchillas				.05			.05			
All Fowl								0.1		

TABLE 3-3
 WATER USE COEFFICIENTS FOR SELF SUPPLY - LIVESTOCK
 (Withdrawal Estimates per Animal by Jurisdiction - litres per day)

<u>Self Supply Livestock</u>	<u>IL</u>	<u>IN</u>	<u>MI</u>	<u>MN</u>	<u>NY</u>	<u>OH</u>	<u>ONT</u>	<u>PA</u>	<u>QUE</u>	<u>WI</u>
Dairy Cattle (milk cows)	132	57-114	45	69.6	39.7	132	132	132	75.7	
Beef Cattle	45	30-57	45	33	39.7	45	42	45	45	
Horse, Mule, Pony Burro, Donkey	45		38	45	38		42	45		
Hogs, Pigs	15	7.5-20	11	9.8	7.5	15	11	15	15	
Sheep, Lamb	7.5	38-45	3.8	7.5	.19	7.5	5.7	7.5	7.5	
Chicken L Laying N Non-Laying C Chicks B Broilers * Not Classified	.2	*.19-57 *(.57-.98)	11 N .15	L .23 N .10 C .11 B 1.4	L .25 C .13 B .19	20	19	38 C .22	L .20	
Turkey	.45		.45	.45	.30		.45	.38		
Goats M Milk goats O Other				M 20 O 3.8			5.7	7.5		
Ducks				.15						
Geese				.15						
Other Poultry				15						
Mink				.038			.05			
Rabbits, Chin- chillas				.19			.2			
All Fowl								.1		

TABLE 3-4
CONSUMPTIVE USE COEFFICIENTS

Water Use Category	Illinois	Indiana	Michigan	Minnesota	New York	Ohio	Ontario	Pennsylvania	Quebec	Wisconsin	U.S.G.S. (NY Dist.)
Public Supply	(range for all states and provinces: 10-15%)										
Self Supply Domestic	(range for all states and provinces: 10-15%)										
Self Supply Irrigation	90%	90%	90%	90%	90%	90%	78%	90%	90%	70%	100%
	(coefficient for states and provinces without studies supporting other figures: 90%)										
Self Supply Livestock	(coefficient for all states and provinces: 80%)										
Self Supply Industrial	For both mfg. and mining varies by plant and SIC Code	6%	10%	For both mfg. and mining varies by plant and SIC Code	10% for mfg. and mining except for salt mines. est. @ 90%	33%	6.3%	For both mfg. and mining varies by plant and SIC Code	10% for pulp and paper in- dustry	10-20% for both mfg. and mining	10%
Self Supply Thermo-electric (Fossil Fuel)	Varies with individual plants; est. using make-up water for each system	2%	1% for plants using once-through cooling; plant by plant analysis for wet cooling towers	measured; varies by indiv. plant	—	negligible estimates based on plant-specific design considerations	0.9%	Varies with individual plants	10%* estimates obtained from USGS report	0.5-1%	10%
Self Supply Thermo-electric (Nuclear)	varies with individual plants; est. using make-up water for each system	2%		measured; varies by individual plant	—	14% estimates based on plant-specific design considerations	0.9%	Varies with individual plants	10%* estimates obtained from USGS report	0.5-1%	10%
Self Supply Hydro	(coefficient for all states and provinces: 0%)										
Other	(Varies among states and provinces. Based on individual evaluations and best information available.)										