

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

Representing 1990 Water Use Data

Prepared by:
Great Lakes Commission

Prepared for:
Water Resources Management Committee

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PREFACE

The Great Lakes Regional Water Use Data Base Repository, 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 Canadian provinces. Such data is organized on the basis of political jurisdiction, lake sub-basin and category of water use.

This 1992 report presents 1990 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

Extensive background information on the establishment of the Regional Water Use Data Base Repository appears in the February 1989 report of the Water Resources Management Committee to the Great Lakes Governors and Premiers. Copies are available upon request from the Great Lakes Commission.

The Regional Water Use Data Base has been operational since 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, document 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 Plan, 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 three annual reports of the Regional Water Use Data Base Repository, representing water use data for 1987-89.

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 1992-93.

- o 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 1990. The summary data presented for the Michigan Great Lakes Basin is therefore the same data submitted for the first three 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 subbasin 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 subbasin 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 measurement 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.

- o 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 1992 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. The group met once in 1990 and once in 1991 to continue its work and to discuss problem areas related to the state/provincial data submittals and operation of the data base. 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. Additional expansion of the category of use definitions was recommended during the July 1990 work group meeting.

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.

In 1991, the Commission was asked to undertake an analysis of reported consumption based on data submitted by the jurisdictions to the Repository versus the anticipated consumption derived from the use of the uniform estimation procedures developed by the Technical Work Group in 1988-89. The consumptive use coefficients for the nine categories of use are represented in Table 3. Numerical comparison of reported consumption versus anticipated estimated consumption for each jurisdiction and category of use is shown in Table 4. The narrative comparison of reported consumption versus anticipated estimated consumption appears in the individual jurisdiction and lake basin reports.

TABLE 3
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: 10-15x)										
Self Supply Domestic	(range for all states and provinces: 10-15x)										
Self Supply Irrigation	90x	90x	90x	90x	90x	90x	78x	90x	90x	70x	100x
	(coefficient for states and provinces without studies supporting other figures: 90x)										
Self Supply Livestock	(coefficient for all states and provinces: 80x)										
Self Supply Industrial	For both mfg. and mining varies by plant and SIC Code	6x	10x	For both mfg. and mining varies by plant and SIC Code	10x for mfg. and mining except for salt mines, est. @ 90x	33x	6.3x	For both mfg. and mining varies by plant and SIC Code	10x for pulp and paper industry	10-20x for both mfg. and mining	10x
Self Supply Thermo-electric (Fossil Fuel)	Varies with individual plants; est. using make-up water for each system	2x	1x 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	0.9x	Varies with individual plants	10x* estimates obtained from USGS report	0.5-1x	10x
Self Supply Thermo-electric (Nuclear)	varies with individual plants; est. using make-up water for each system	2x		measured; varies by individual plant	--	1x estimates based on plant-specific design considerations	0.9x	Varies with individual plants	10x* estimates obtained from USGS report	0.5-1x	10x
Self Supply Hydro	(coefficient for all states and provinces: 0x)										
Other	(Varies among states and provinces. Based on individual evaluations and best information available.)										

TABLE 4

COMPARISON OF WATER CONSUMPTION IN THE GREAT LAKES BASIN
(Reported values versus anticipated estimated values)(All values shown in million gallons per day [mgd], except values for Ontario and Quebec
shown as million litres per day [mld])

Water Use Category	JURISDICTION																			
	Illinois		Indiana		Michigan		Minnesota		New York		Ohio		ONTARIO		Pennsylvania		Quebec		Miscellaneous	
	Rep.	Est.	Rep.	Est.	Rep.	Est.	Rep.	Est.	Rep.	Est.	Rep.	Est.	Rep.	Est.	Rep.	Est.	Rep.	Est.	Rep.	Est.
1	0	110.3 to 185.5	25.37	18.9 to 25.4	123	122.4 to 183.0	8.98	4.3 to 6.4	59.8	59.8 to 89.7	92.77	61.85 to 92.77	752.74	501.6 to 752.4	4.34	4.34 to 6.5	428	426.4 to 839.6	53.9	33.65 to 50.76
3	0	2.7 to 4	6.38	4.7 to 7	NR	NA	.16	.2 to .31	45.8	45.8 to 68.7	9.08	6.04 to 9.06	73.08	48.7 to 73.09	.2	.2 to .3	27	27.1 to 40.65	2.01	2.11 to 3.18
4	0	0	11.97	11.96	225	213.3	.34	.36	1.07	9.63	10.17	10.17	548.61	549.61	2.79	2.66	11.97	11.97	7.08	7.7
5	0	0	8.88	6.88	NR	NA	2.4	2.46	6.8	8.64	10.21	10.21	159.47	159.47	0	0	70.48	70.48	5.10	18
6	5.07	Varies by plant & SIC code	114.16	114.16	132	131.8	45.7	Varies by plant & SIC code	35.1	35.1	25.4	63.8	268.5	566.7	10.4	Varies by plant & SIC code	41.9	47.5	37.04	37.04 to 74.08
7	0	Varies by plant	22.58	22.58	60.94	62.3	.26	Varies by plant	9	NA	.22	Varies by plant	182.75	185.04	.28	Varies by plant	0	17.6	20.9	10.37 to 20.76
8	0	Varies by plant	0	0	28.10	NA	0	Varies by plant	3	NA	6.3	6.3	386.06	386.05	0	0	0	0	15.10	7.55 to 15.1
9	0	0	0	0	NR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	Varies by juris- diction	.01	Varies by juris- diction	NR	NA	0	Varies by juris- diction	0	Varies by juris- diction	0	Varies by juris- diction	0	Varies by juris- diction	0	Varies by juris- diction	0	Varies by juris- diction	0	Varies by juris- diction
TOTAL	5.07	113 to 189.5	187.95	177.18 to 187.96	589.04	557.9 to 619.1	57.84	53.28 to 55.48	160.57	170.97 to 211.77	154.13	178.58 to 212.53	2372.21	2417.17 to 2892.36	18.01	17.90 to 20.14	577.35	601.25 to 828	141.13	113.62 to 190.16

Rep. = Reported values

Est. = Expected estimated values

NR = Not reporting

NA = Not applicable

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 set of 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 1990 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, 1991. 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 1990 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 three 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 1990 were approximately 969 billion gallons per day (bgd) or approximately 3.7 trillion litres per day (tld). Of this, 68 percent (662 bgd; 2.51 tld) is used directly from/in the Great Lakes, their connecting channels, or the St. Lawrence River.

Daily water withdrawal of 969 billion gallons is the equivalent of approximately 26,200 gallons of water per Great Lakes Basin resident per day (assuming a population of 37 million). Put another way, 969 billion gallons of water per day is more than six 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 94 percent (912 bgd; 3.45 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 1990 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 1990 were approximately 56.49 bgd or 213.9 billion litres per day (bld) (Figure 5). This would be equivalent to about 1,520 gallons per day for every person living in the Basin. Of the 56.49 bgd (213.9 bld) actually withdrawn from the Great Lakes, approximately 97 percent of the reported amount (about 54.54 bgd; 206.5 bld) is returned.

Reported consumptive uses of Great Lakes water for 1990 were approximately 2.09 bgd (7.92 bld). Table 5 compares the reported consumption with the anticipated estimated consumption (both low and high range). Based on this comparison, the estimated range of 2.19 bgd - 2.61 bgd is 4% to 20% higher than the reported consumption for 1990.

Combined, Ontario and Michigan account for about 58 percent (1.2 bgd; 4.6 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 virtually all of that total diverted from the Illinois Lake Michigan Basin. Incoming interbasin diversions reported to the data base were 2.96 bgd (11.1 bld), almost all into the Ontario Lake Superior Basin (the Ogoki and Long Lac diversions), with a small percentage diverted into Lake Erie. The Ogoki and Long Lac diversions were about 17 percent lower in 1990 than the long-term average, which is about 5,600 cfs (3.6 bgd; 13.7 bld). In comparison, the incoming interbasin values for 1990 (2.96 bgd, 11.2 bld) were 43 percent lower than those reported for 1989 (5.2 bgd, 19.5 bld).

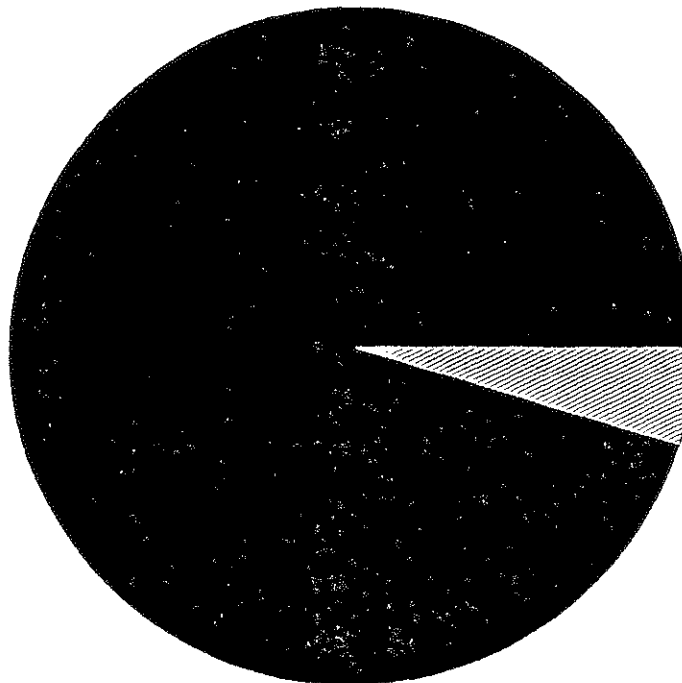
Figure 1

1990 GREAT LAKES BASIN WATER USE Hydroelectric vs. All Other Categories

Self-supply Hydroelectric

912 BGal/(U.S.)/day*

3,454 BL/day*



Other Categories of Use

56.49 BGal(U.S.)/day*

213.85 BL/day*

Self-Supply Hydroelectric represents
94.2% of withdrawals in the Basin

*1990 State of Michigan data incomplete

TABLE 5

Reported 1990 Water Consumption versus
Anticipated Estimated Consumption
for the Great Lakes Basin (in mgd)

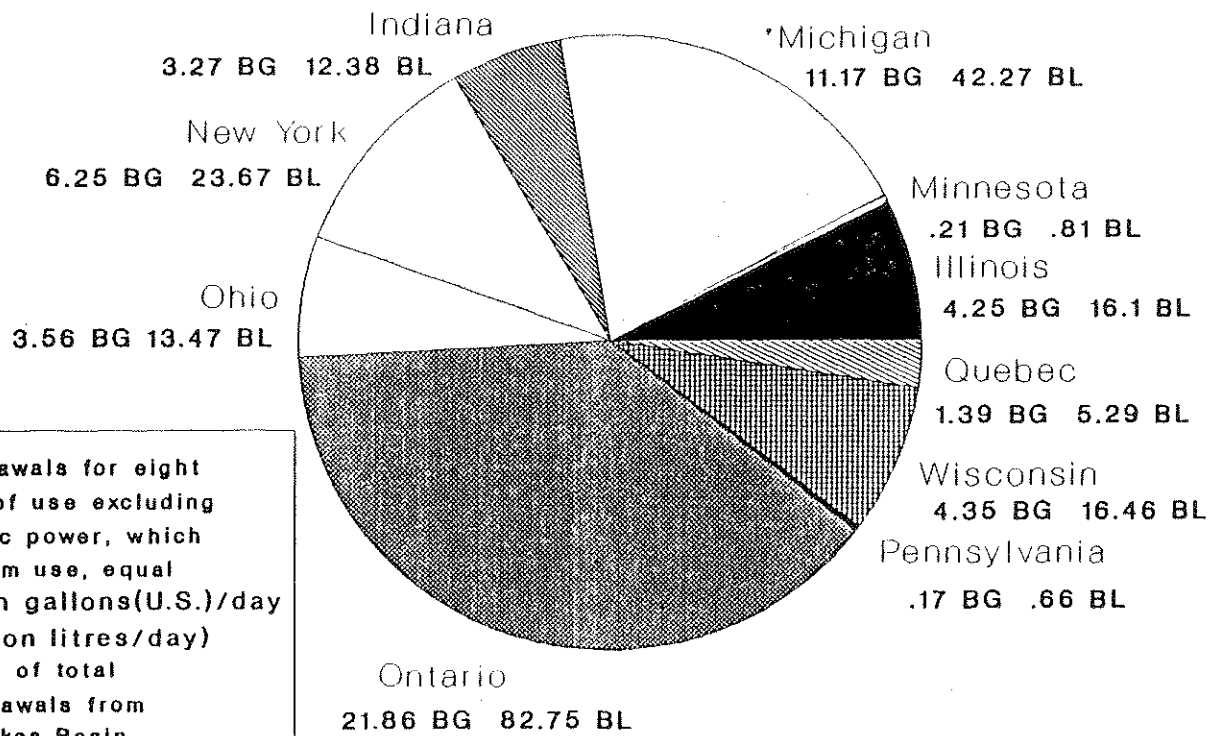
<u>Water Use Category</u>	<u>Reported</u>	<u>Estimated Low Range</u>	<u>Estimated High Range</u>
Public Supply	679.55	658.90	988.32
Self Supply-Domestic	90.65	81.78	122.58
Self Supply-Irrigation	406.77	404.14	404.14
Self Supply-Livestock	92.14	106.94	106.94
Self Supply-Industrial	486.87	630.62	667.66
Self Supply-Thermoelectric-Fossil Fuel	182.46	158.60	168.97
Self Supply-Thermoelectric-Nuclear	<u>154.49</u>	<u>146.95</u>	<u>154.50</u>
TOTAL	2092.93	2187.93	2613.11

(Source: Great Lakes Commission, 1992)

Figure 2

1990 GREAT LAKES BASIN WATER USE (EXCLUDING HYDRO) BY JURISDICTION

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

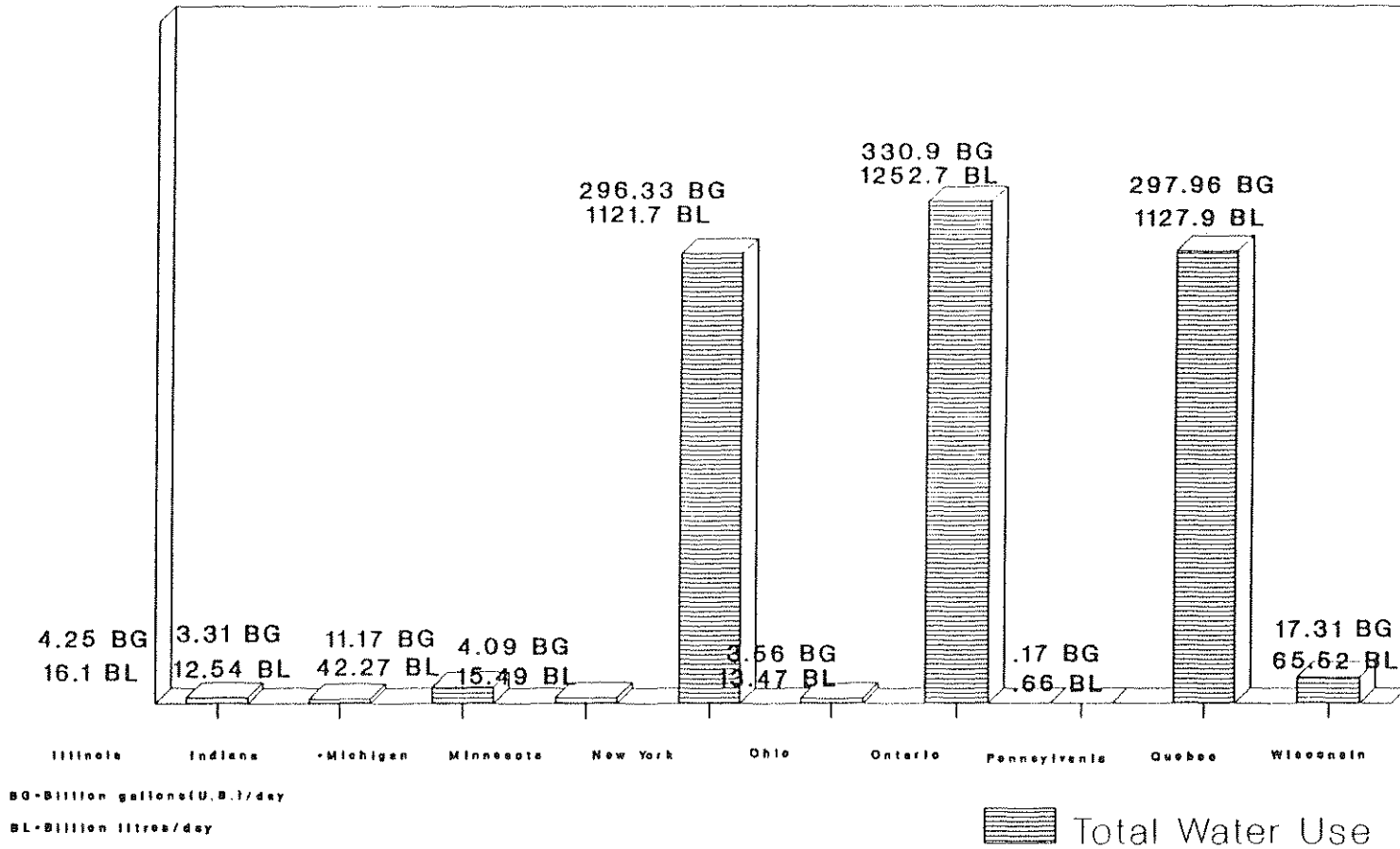


Total withdrawals for eight categories of use excluding hydroelectric power, which is an instream use, equal 56.49 Billion gallons(U.S.)/day (213.85 Billion litres/day) or 5 percent of total water withdrawals from the Great Lakes Basin.

*1990 State of Michigan data incomplete

Figure 3

TOTAL 1990 GREAT LAKES BASIN WATER USE BY JURISDICTION



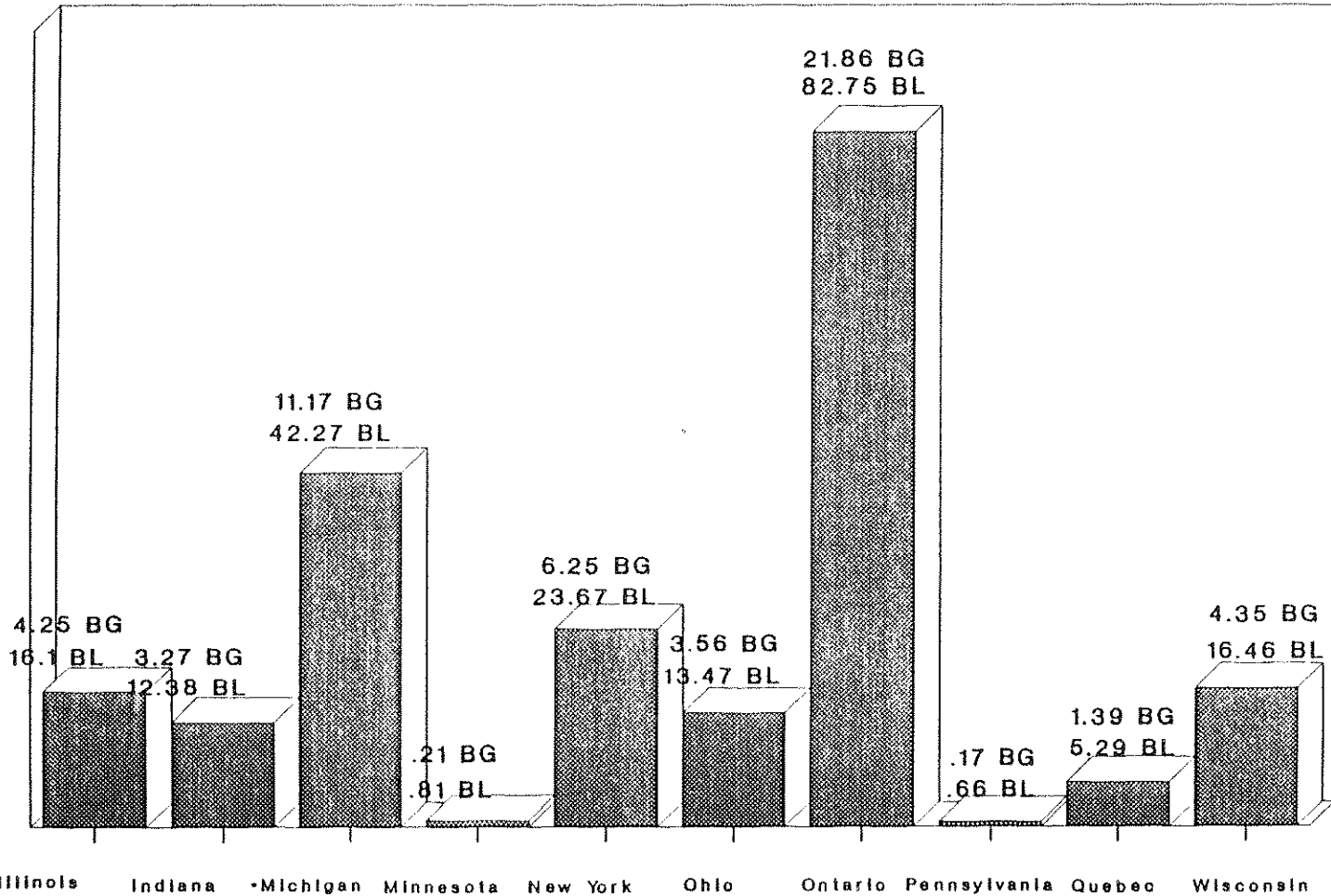
13

* 1990 State of Michigan data incomplete

Figure 4

1990 GREAT LAKES BASIN WATER USE (EXCLUDING HYDRO) BY JURISDICTION

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

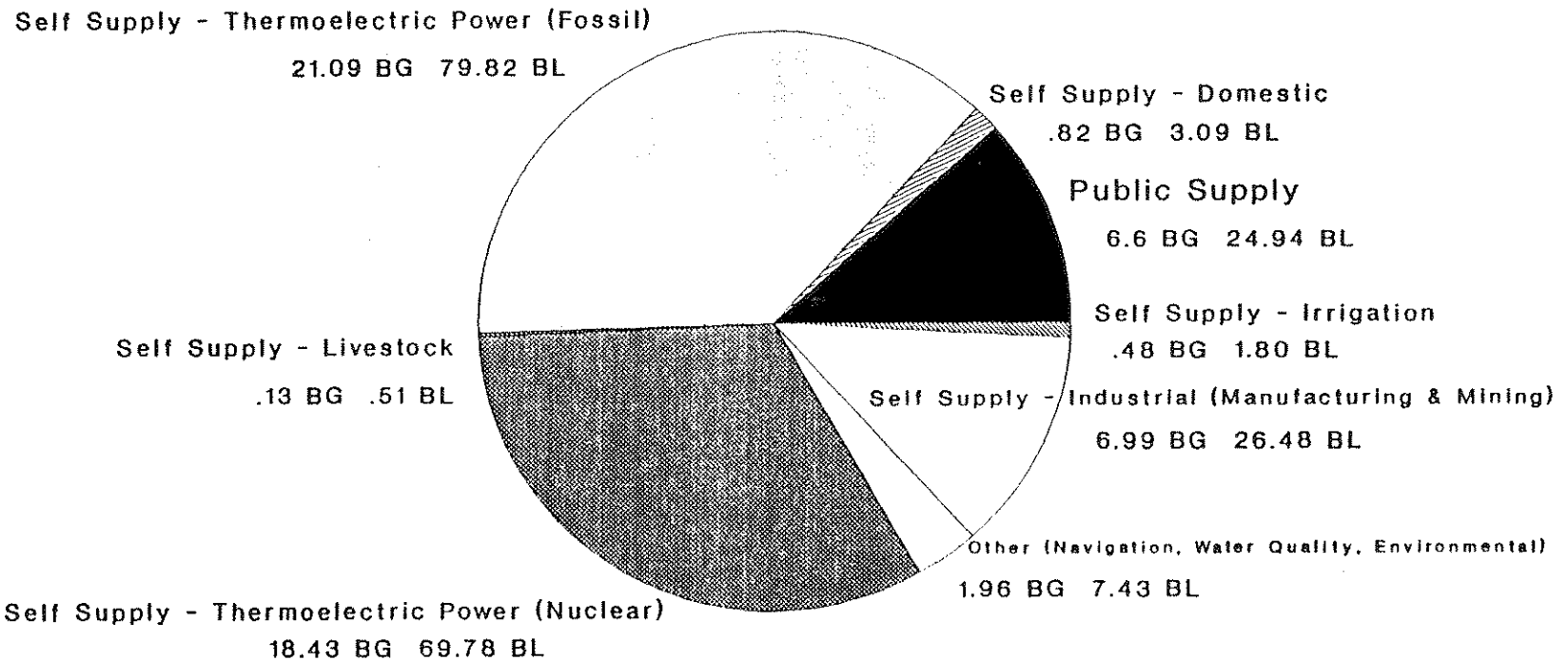


* 1990 State of Michigan data incomplete

Figure 5

1990 GREAT LAKES BASIN WATER USE All Categories of Use Except Hydro*

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



Non-Hydro uses [56.49 BGal(U.S.)/day 213.85 BL/day]
equal 5% of total water withdrawals in the Great Lakes Basin

*1990 State of Michigan data incomplete

JURISDICTION REPORTS

Following are summaries of individual state and provincial water uses for 1990.

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 1990 were provided by the Illinois Department of Transportation - Division of Water Resources.

Total withdrawals from the Lake Michigan Basin of Illinois were 4.25 bgd (Figure 6). Combined, withdrawals for public supply and for thermoelectric power (nuclear plants) represent about 76 percent of this total (3.24 bgd).

Consumptive uses for the Lake Michigan Basin of Illinois total 5.07 mgd, all attributed to self supply - industrial uses.

Illinois reported consumption in only one water use category, self supply - industrial. For public supply and self supply - domestic, Illinois reported no consumption although the Technical Work Group agreed upon a coefficient of 10% to 15% for each category. An estimated 10% to 15% consumption would be approximately 110.3 mgd - 165.5 mgd and 2.7 mgd - 4 mgd, respectively for these categories. Illinois's total estimated consumption would be 113 mgd - 169.5 mgd.

Diversions from the Lake Michigan Basin of Illinois totaled roughly approximately 1.4 bgd. Of this amount, approximately 78% or 1.1 gbd 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 100 percent measured and 100 percent site-specific.

INDIANA

Data for 1990 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 3.3 bgd (Figure 7). More than 98 percent (about 3.26 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 91 percent (about 3.03 bgd) of the total volume of water withdrawals from the Indiana Lake Michigan Basin was for two categories of use: self supply - industrial and self supply - thermoelectric (fossil fuel plants). More than 63 percent of the total Indiana Lake Erie Basin withdrawal volume was for public water supply, about 35.9 mgd.

Consumptive uses for the two basins totaled more than 187 mgd. Of this amount, about 178 mgd (almost 95 percent) of the total volume were from the Lake Michigan Basin and approximately 9.5 mgd (about 5 percent) of the total volume were from the Lake Erie Basin.

Figure 6

1990 GREAT LAKES BASIN WATER USE ILLINOIS (Million gallons(U.S.)/day)

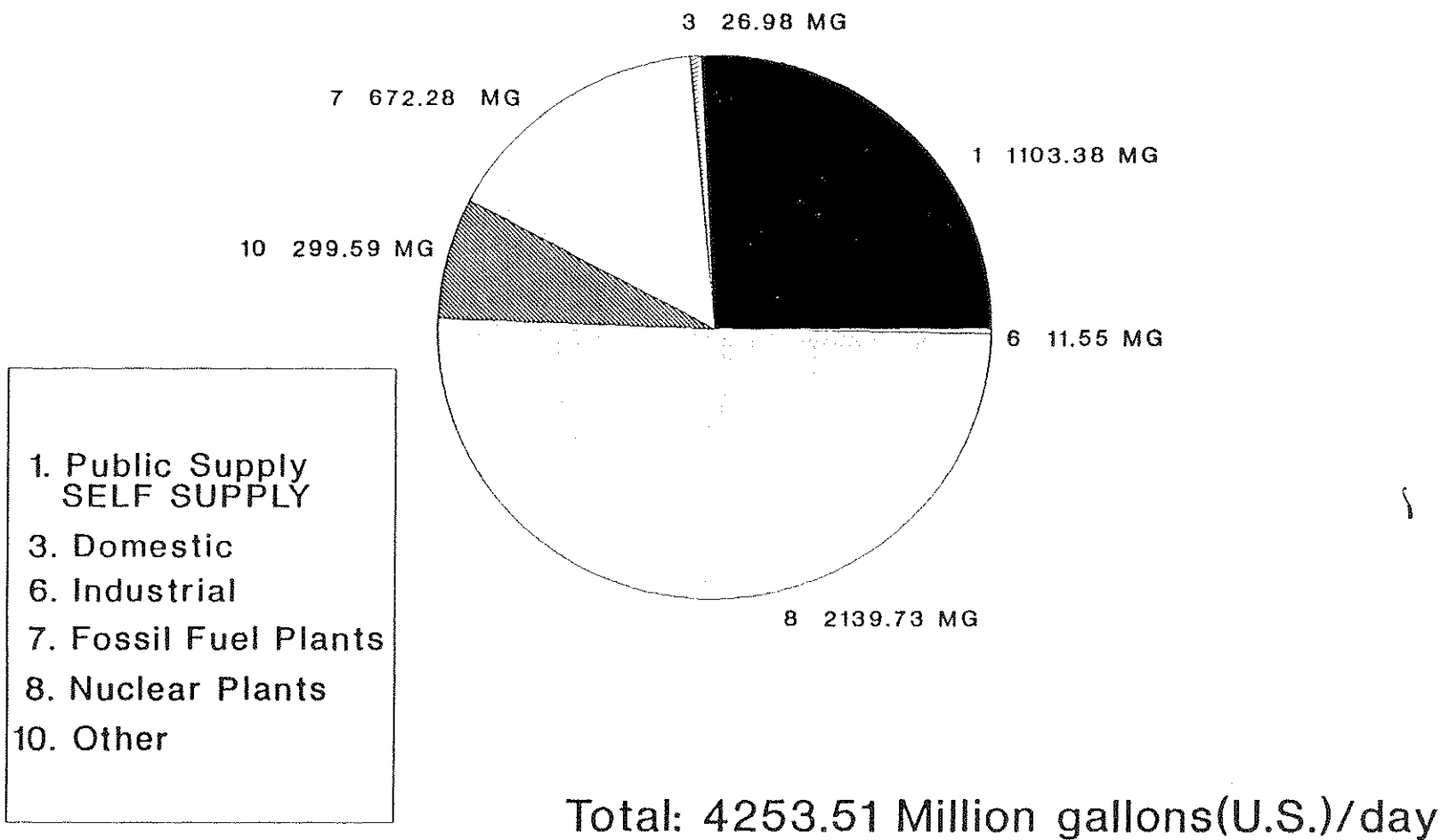
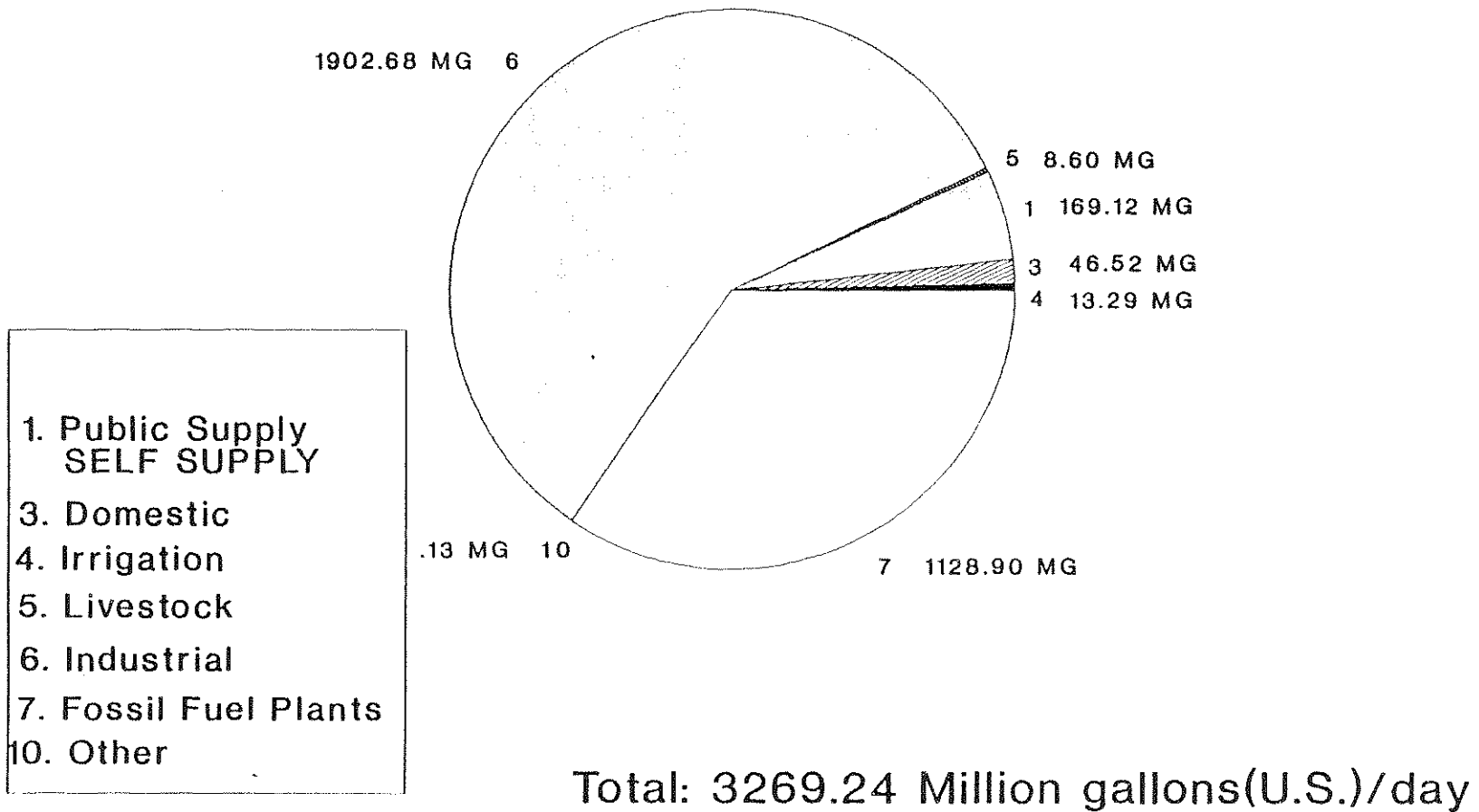


Figure 7

1990 GREAT LAKES BASIN WATER USE INDIANA (Million gallons(U.S.)/day) EXCLUDING HYDRO *



Self supply - industrial is the major category for consumptive use in the Indiana Lake Michigan Basin, representing 113.6 mgd, almost 64 percent of the total. For Lake Erie, public water supply uses consumed 5.4 mgd, representing nearly 57 percent of the total.

Indiana's reported consumption of 187.95 mgd falls within the estimated range of 177.18 mgd to 187.98 mgd.

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 5.1 percent measured, 92.8 percent partially measured, 2.1 percent estimated and 98.3 percent site-specific. The remaining 1.7 percent was aggregated.

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 1990.

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 three 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). This falls within the estimated range of 557.9 mgd to 619.1 mgd.

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 1990 were approximately 4.09 bgd. One category, self supply - hydroelectric, represents more than 94.8 percent of the total (3.88 bgd). Hydropower water use was derived by the U.S.G.S. from power generation data supplied by the Minnesota Department of Energy. (The total withdrawal for 1990 is considerably less than the previous years due to erroneous data provided to the Commission in previous years). Figure 8 presents Minnesota's total withdrawals (excluding hydroelectric) for 1990.

Consumptive uses for the Minnesota Lake Superior Basin totaled about 57.8 mgd. Self supply - industrial and public water supply uses combined represented more than 94 percent of the total (54.7 mgd).

Each of the reported consumption values presented in the first four water use categories vary somewhat from their anticipated estimated values. Both public supply and self supply - domestic--which have a consumptive use coefficient range of 10% to 15%--reported consumption of 40% and 25% lower, respectively, of the estimated amount. For self supply - irrigation, Minnesota reported consumption just .02 mgd less than the anticipated estimated amount and for self supply - livestock, reported consumption of .06 mgd less than the anticipated estimated value. Minnesota's total reported consumption was higher than the estimated range of 53.28 mgd to 55.49 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 97 percent measured, 2.6 percent partially measured, 0.4 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 and Health, and the U.S. Geological Survey. The 1990 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 1990 were 296 bgd; Lake Erie represented about .4 percent (1.37 bgd) of the total; Lake Ontario represented 51 percent (151 bgd) and the St. Lawrence River represented about 48.4 percent (143 bgd). Figure 9 presents New York's withdrawals (excluding hydroelectric) for 1990.

Withdrawals for self supply - hydroelectric purposes were by far the largest use for all three basins representing almost 98 percent of the total volume (290.1 bgd).

New York reported total consumptive uses of 160.57 mgd; 36.46 mgd for Lake Erie basin, 92.7 mgd for the Lake Ontario basin, and 31.41 mgd for the St. Lawrence River basin.

New York reported consumption in all categories except Self Supply - Hydroelectric Power and Other (Navigation, Water Quality, Environmental). New York's reported consumption of 160.57 fell short of the estimated range of 170.97 to 211.77.

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 1.6 percent measured, 48.4 percent partially measured, and 50 percent estimated, while 49.8 percent were site-specific and 50.2 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 1990 were provided to the Regional Water Use Data Base by the Department of Natural Resources - Division of Water.

Total water withdrawals from the Ohio Lake Erie Basin for 1990 were approximately 3.56 billion gallons per day (bgd) (Figure 10).

Two categories combined, public water supply and self supply - thermoelectric (fossil fuel plants) represented almost 89 percent of total volume of water withdrawals (3.17 bgd).

Consumptive uses for the Ohio Lake Erie Basin were 154.13 mgd; with public water supply responsible for two-thirds (92.8 mgd) of the total consumption.

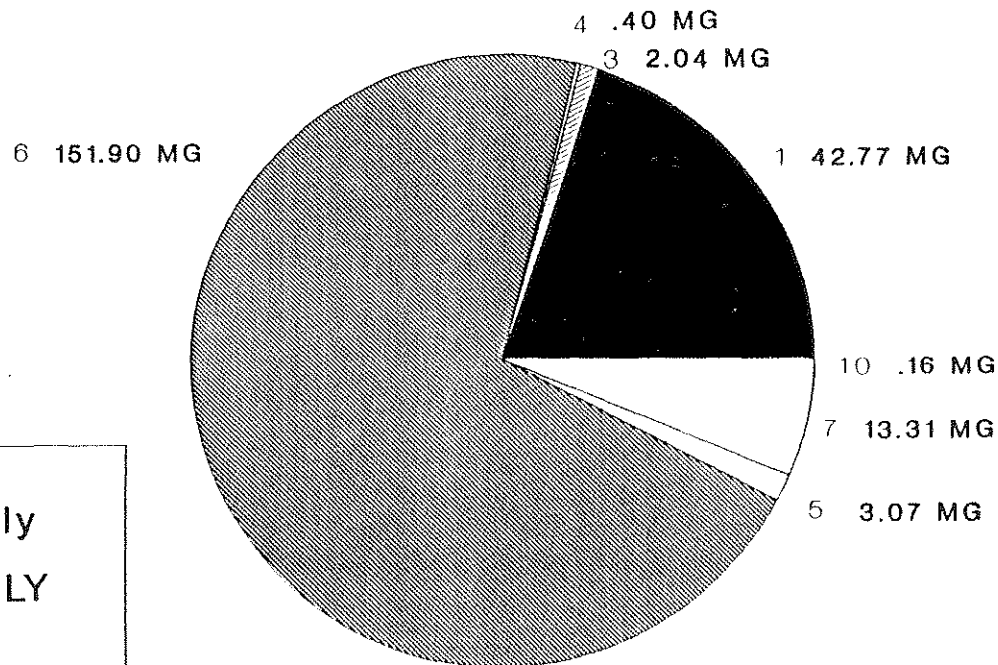
Ohio's reported consumption was exactly the same as the anticipated estimated consumption for all categories except self supply - industrial. Ohio reported consumption in this category of 25.4 mgd, about one-third of the anticipated estimated amount of 83.83 mgd. The total reported consumption of 154.13 mgd is therefore lower than the range of estimated consumption of 178.59 mgd to 212.53 mgd.

Interbasin diversions (outgoing) were .19 mgd for the Lake Erie Basin of Ohio, all used for public water supply. Interbasin diversions (incoming) were 18.35 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 100 percent site-specific.

Figure 8

1990 GREAT LAKES BASIN WATER USE MINNESOTA (Million gallons(U.S.)/day) EXCLUDING HYDRO*



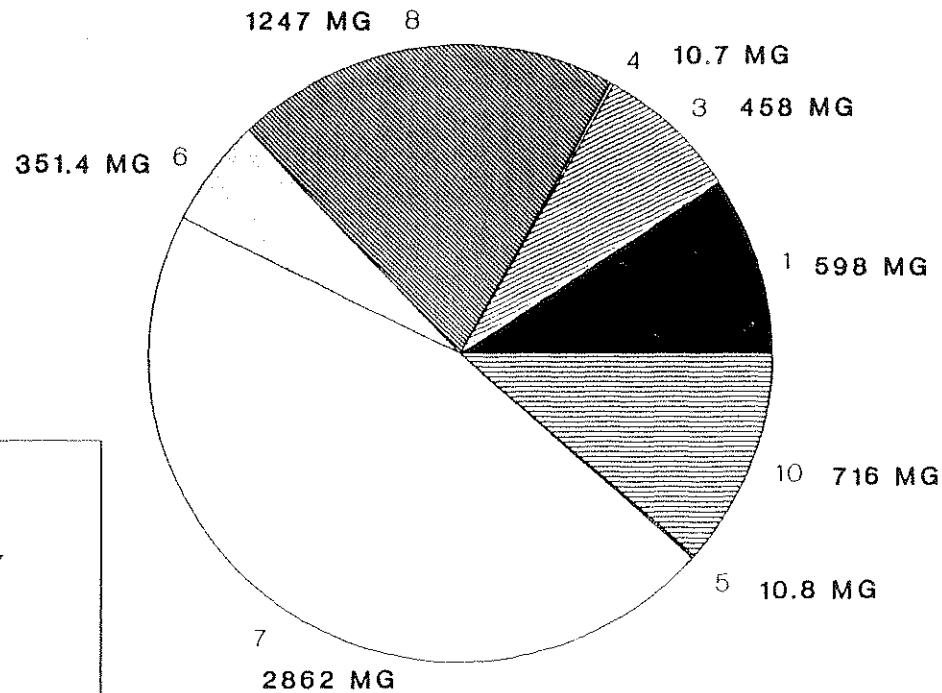
- 1. Public Supply
- SELF SUPPLY
- 3. Domestic
- 4. Irrigation
- 5. Livestock
- 6. Industrial
- 7. Fossil Fuel Plants
- 10. Other

Total Withdrawal: 4094.65 MG/D
Withdrawal excluding Hydro: 213.65 MG/D

MN withdraws 3881.00 million gallons per day for Hydroelectric > 95% of their total water withdrawal.

Figure 9

1990 GREAT LAKES BASIN WATER USE NEW YORK (Million gallons(U.S.)/day) EXCLUDING HYDRO*



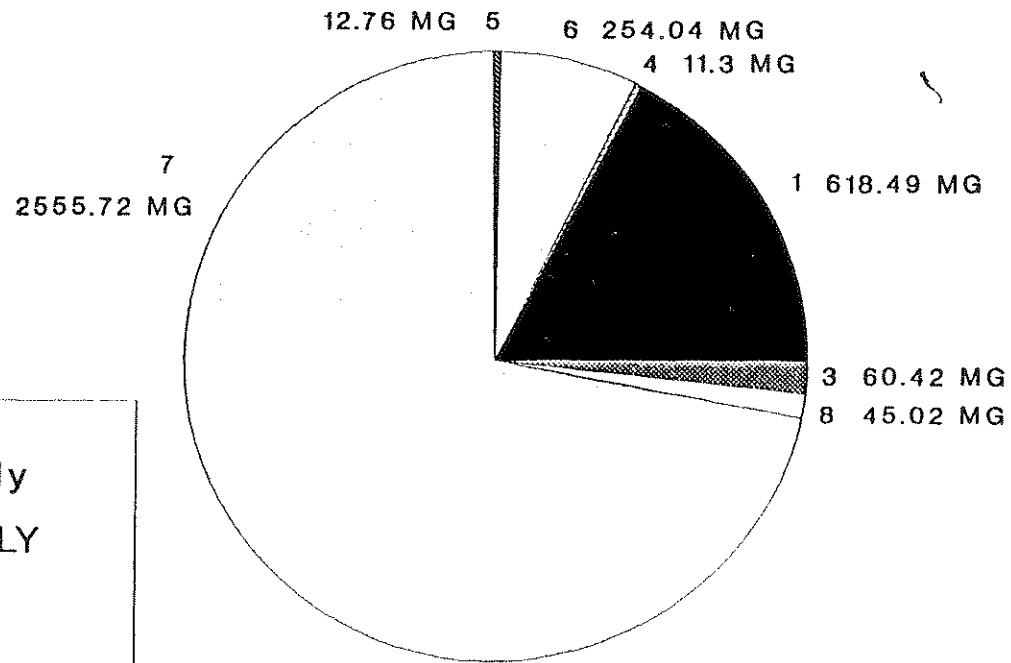
- 1. Public Supply
SELF SUPPLY
- 3. Domestic
- 4. Irrigation
- 5. Livestock
- 6. Industrial
- 7. Fossil Fuel Plants
- 8. Nuclear Plants
- 10. Other

Total Withdrawal: 296,325 MG/D
Total excluding Hydro: 6,253 MG/D

NY withdraws 290,072 million gallons per day for Hydroelectric - 98% of their total water use.

Figure 10

1990 GREAT LAKES BASIN WATER USE OHIO (Million gallons(U.S.)/day)



Total: 3557.75 MG(U.S.)/D

- 1. Public Supply
- 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 1990 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 1990 Great Lakes water withdrawals for Ontario were approximately 1.25 trillion litres per day (tld) or 330.9 billion gallons per day (bgd). Of this, self supply - hydroelectric uses represented more than 93 percent (1.17 tld; 309 bgd) of the total volume. Figure 11 presents Ontario's total water withdrawals (excluding hydroelectric) for 1990.

Water withdrawals for the individual lake basins in Ontario are shown in Table 6.

<u>Basin</u>	<u>Withdrawal Amount</u> <u>[billion litres per day; (bld)]</u>	<u>Percent of Total</u>
Superior	146.1	11.7
Huron	197.1	15.7
Erie	33.3	2.7
Ontario	246.4	19.7
St. Lawrence	<u>629.8</u>	<u>50.2</u>
TOTAL	1252.7	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 7. Incoming diversion values are negative.

<u>Basin</u>	<u>Interbasin Diversion (bld)</u>	<u>Intrabasin Diversion (bld)</u>
Superior	-11.12	---
Huron		.17
Erie		18.37
Ontario		-18.54
TOTAL	-11.12	

The incoming diversion of 11.12 bld, (representing the Ogoki and Long Lac diversions) to the Ontario Lake Superior watershed is used for hydroelectric purposes. This is almost 19 percent lower 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 2.4 bld with public water supply and self supply - thermoelectric together representing almost 56 percent of the total volume (1.3 bld).

Approximate consumptive uses for the individual lake basins in Ontario appear in Table 8.

Table 8

<u>Basin</u>	<u>Consumptive Uses (bld)</u>	<u>Approximate percent of Total</u>
Superior	.06	2.3
Huron	.50	21.2
Erie	.75	31.7
Ontario	.88	37.2
St. Lawrence	<u>.18</u>	<u>7.6</u>
TOTAL	2.37	100

Ontario reported consumption in seven out of nine water use categories. Out of these seven, only one (self-supply - industrial) was inconsistent with the anticipated estimated amounts arrived at through the use of the coefficients. The anticipated estimated consumption for self supply - industrial should have been approximately 586.7 mld. The reported amount of 268.5 mld is less than half of the estimated amount. Ontario's reported consumption of 2.372 bld is therefore lower than the estimated range of 2.417 to 2.692 bld.

Ontario's withdrawal data for 1990 were 7.0 percent measured, 93 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 173.2 million gallons per day (mgd) (Figure 12). Almost 100 percent (173.02 mgd) of the withdrawal volume was from the Lake Erie Basin. Only about .18 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 74.62 mgd, more than 43 percent of the total volume.

Consumptive uses for the two basins were 18.01 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 82 percent of the 18.01 mgd consumed (14.72 mgd).

Pennsylvania's reported consumption falls within the estimated range of 17.9 to 20.14 mgd. The only variation was for self supply - livestock, where the reported value of 2.79 mgd was about 7% higher than the expected estimated value of 2.66 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 25 percent measured, 29 percent partially measured, 46 percent estimated and 98.9 percent site-specific.

QUEBEC

Data for calendar year 1990 were provided by the Ministère de l'Environnement - Direction du milieu hydrique.

Withdrawals in the St. Lawrence River Basin of Quebec were approximately 1.13 tld or 297 bgd. Nearly 100 percent of the total (1.12 tld) was withdrawn for self supply - hydroelectric power purposes. Figure 13 presents

Quebec's 1990 water withdrawals (excluding hydroelectric).

Consumptive uses for the Quebec-St. Lawrence River Basin were 577.4 mld (152.5 mgd); with public water supply representing more than 73 percent of the total volume (426 mld).

Quebec's reported consumption was consistent with the estimated values for the first four categories: public supply, self supply - domestic, self supply - irrigation, and self supply - livestock. For self supply - thermoelectric (fossil fuel), Quebec reported no consumption, but the anticipated estimated amount would be 17.8 mld. For self supply - industrial, Quebec reported consumption of 41.9 mld, compared with an anticipated estimated amount of 47.5 mld. Therefore, Quebec's total reported consumption of 577.35 mld was slightly lower than the expected estimated range of 601.25 to 828 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.

By volume, the Quebec data were 99.9 percent measured, .1 percent estimated and 100 percent site-specific.

WISCONSIN

Data for 1990 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 1990 were approximately 17.3 billion gallons per day (bgd) (Figure 14). More than 98.5 percent of the total volume (17.05 bgd) was from the Lake Michigan Basin, with just under 1.5 percent (259 mgd) from the Lake Superior Basin.

About 75 percent (12.7 bgd) of the water used in the Lake Michigan Basin was for self supply - hydroelectric power, with more than 82 percent (212.84 mgd) of the water used from Lake Superior for the same purpose.

Consumptive uses for the two basins totaled 141.13 mgd. This included 137.9 mgd (98 percent) from the Lake Michigan Basin and about 3.23 mgd (2 percent) from the Lake Superior Basin. Public water supply is the major category for consumptive use in the Lake Michigan Basin, representing 53.0 mgd (approximately 38 percent) of the total use.

Wisconsin reported consumption data for both self supply - irrigation and self supply - livestock that were less than the amounts expected by estimation. For self supply - irrigation, the reported value of 7.08 mgd is .62 mgd less than the expected estimated amount. A greater difference appears for self supply - livestock; the reported consumption is 5.10 mgd compared to the anticipated estimated consumption of 18 mgd. Wisconsin's total reported consumption of 141.13 mgd does fall within the expected estimated range of 116.62 to 190.16 mgd.

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.

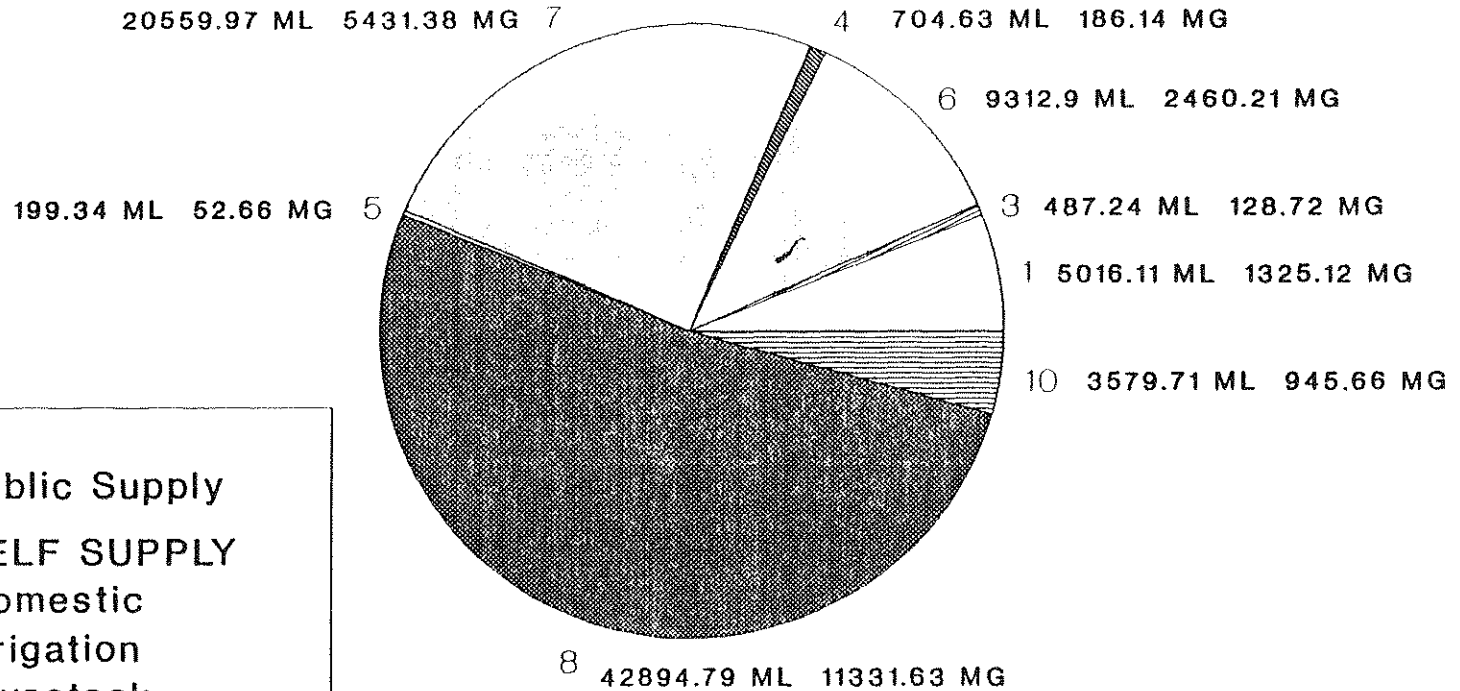
For the Wisconsin Lake Michigan Basin, outgoing interbasin diversions total 3.2 mgd, reported under public water supply.

The data reported by Wisconsin were 2.1 percent measured, .1 percent partially measured, 97.8 percent estimated, with 10.7 percent site-specific sources and 89.3 percent aggregated sources.

Figure 11

1990 GREAT LAKES BASIN WATER USE ONTARIO EXCLUDING HYDRO*

Total Withdrawal: 1252695.4 ML 330927.81 MG
Withdrawal excluding Hydro: 82724.6 ML 21861.52 MG



- 1. Public Supply
- 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 1,169,940.8 million litres per day for Hydroelectric - 93% of their total water use.

Figure 12

1990 GREAT LAKES BASIN WATER USE PENNSYLVANIA (Million gallons(U.S.)/day)

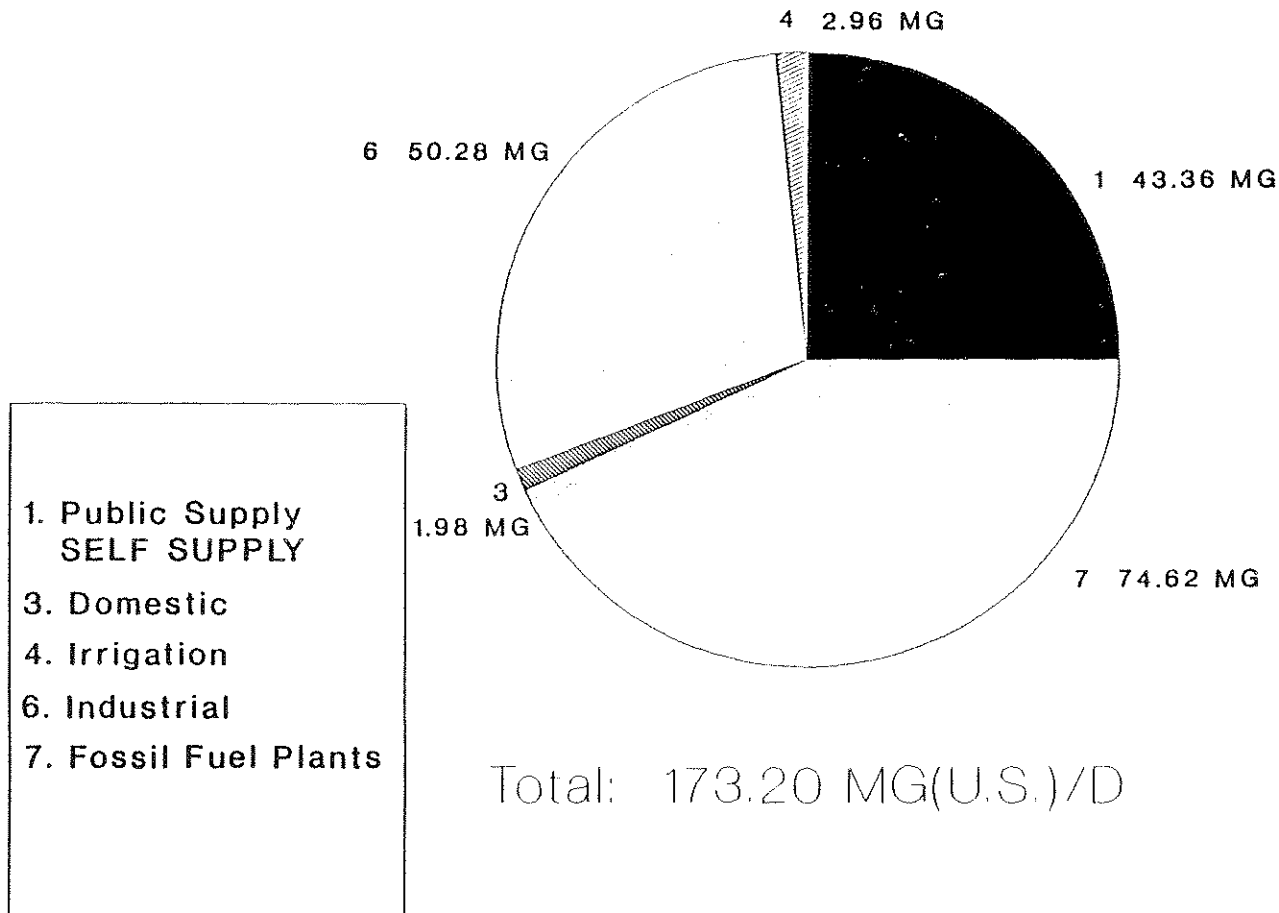


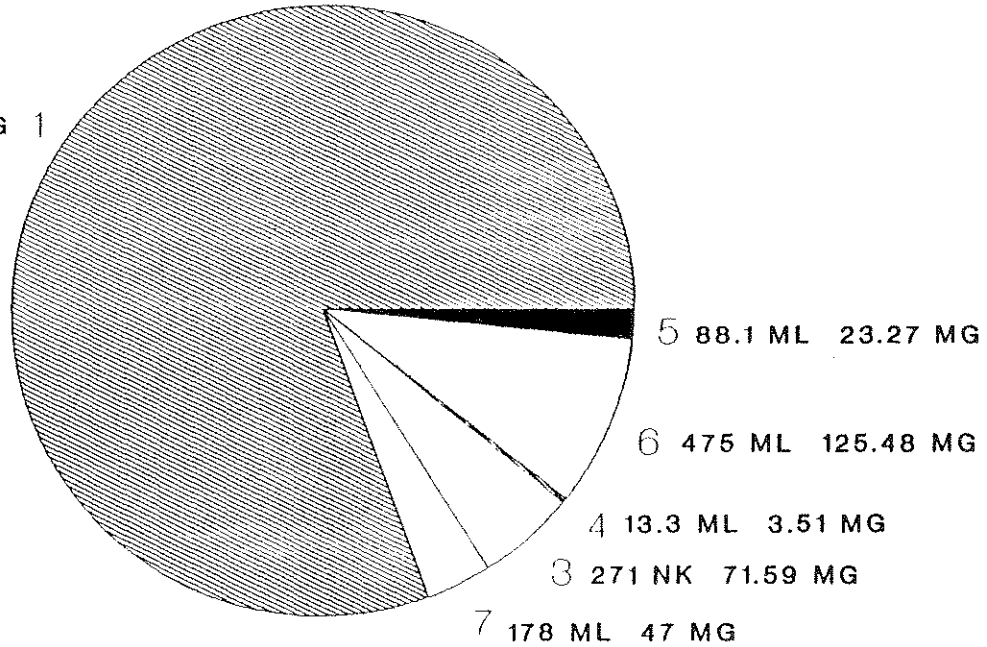
Figure 13

1990 GREAT LAKES BASIN WATER USE QUEBEC EXCLUDING HYDRO*

Total Withdrawal: 1127884.4 ML 297956.15 MG

Total Excluding Hydro: 5289.4 ML 1397.31 MG

4264 ML 1126.43 MG 1



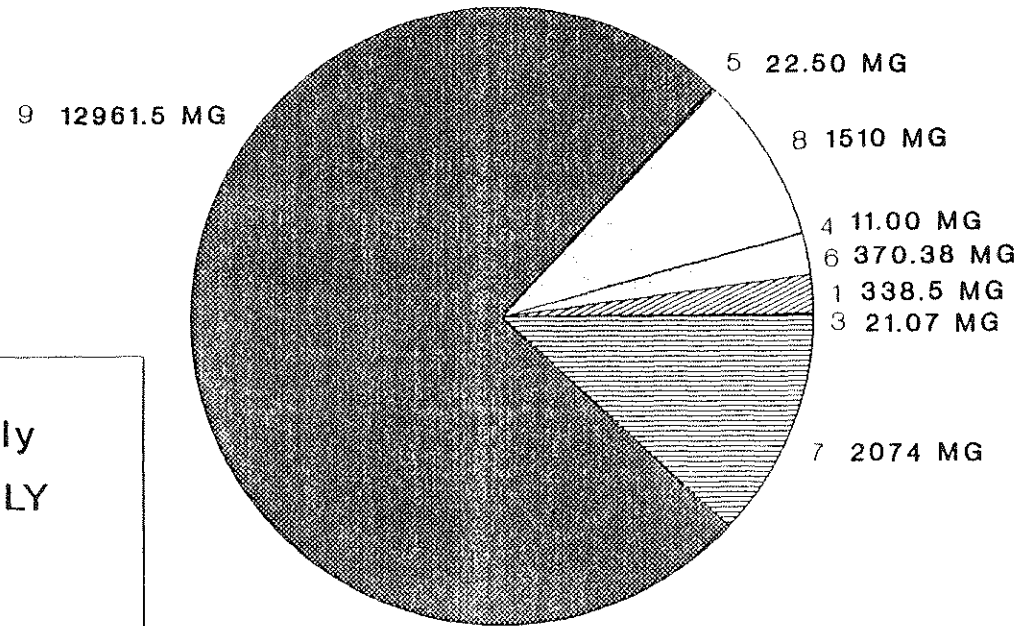
- 1. Public Supply
SELF SUPPLY
- 3. Domestic
- 4. Irrigation
- 5. Livestock
- 6. Industrial
- 7. Fossil Fuel Plants

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

Quebec withdraws 1,122,595 million litres per day for Hydroelectric > 99% of their total water use.

Figure 14

1990 GREAT LAKES BASIN WATER USE WISCONSIN (Million gallons(U.S.)/day)



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

Total: 17308.99 MGal(U.S.)/day

Appendix A-1

1990 GREAT LAKES BASIN SUMMARY REPORT

1990 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

1990 BASIN SUMMARY REPORTS

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

SUMMARY REPORT - GREAT LAKES BASIN

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

DATE: 01/17/92
 UNITS: Mgal(US)/d
 YEAR OF DATA: 1990

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	3992.07	998.85	374.25	6589.17*	0.00	1106.77	1106.77	679.55*	3615.70	801.93	295.83	4712.66	44.53	1106.77	1151.20	491.56
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	190.40	144.54	482.38	817.32	0.00	5.51	5.51	90.65	28.27	18.47	52.68	99.42	0.00	5.51	5.51	8.20
4	9.20	151.69	78.42	476.31*	0.00	0.00	0.00	406.77*	0.00	10.22	15.26	25.48	0.00	0.00	0.00	22.01
5	4.67	5.01	123.98	133.66	0.00	0.00	0.00	92.14	0.67	2.06	2.70	5.43	0.00	0.00	0.00	3.81
6	4552.41	986.01	139.50	6995.92*	0.00	5.63	5.63	486.87*	4248.85	949.48	74.92	5273.25	0.00	5.63	5.63	314.03
7	20814.27	268.00	2.96	21085.23	0.00	0.00	0.00	182.46	12681.11	143.36	0.27	12824.74	0.00	0.00	0.00	81.02
8	18434.67	0.00	0.00	18434.67	0.00	0.00	0.00	154.49	14763.38	0.00	0.00	14763.38	0.00	0.00	0.00	111.29
9	612661.24	239922.90	0.00	912584.14	0.00	-2937.06	-2937.06	0.00	458871.24	299923.90	0.00	758795.14	0.00	-2937.06	-2937.06	0.00
10	1753.78	207.51	0.25	1961.54	716.00	281.24	997.24	0.01	1753.78	207.50	0.18	1961.46	716.00	281.24	997.24	0.00
Total	662412.71	302684.52	1201.74	969077.97*	716.00	-1537.91	-821.91	2092.93*	495963.01	302056.92	441.03	798460.96	760.53	-1537.91	-777.38	1031.91

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	1010.85	42172.94	19.93	43203.72	0.00	-2937.06	-2937.06	79.06	731.03	42172.84	9.09	42912.96	0.00	-2937.06	-2937.06	70.35
Lake Michigan	14225.68	13352.20	235.75	27813.63	0.00	1417.31	1417.31	363.73	7555.39	13196.15	153.12	20904.66	0.00	1417.31	1417.31	265.73
Lake Huron	31322.02	21279.54	112.50	52714.05	44.53	0.00	44.53	141.23	30669.19	21253.05	52.99	51975.24	44.53	0.00	44.53	92.35
Lake Erie	17144.50	654.00	386.70	18185.20	4852.92	-18.16	4834.76	471.29	12696.36	499.11	150.28	13345.75	4897.46	-18.16	4879.30	236.79
Lake Ontario	205381.47	10878.59	243.49	216503.55	-4342.46	0.00	-4342.46	325.69	108595.63	10618.61	18.43	119232.66	-4342.46	0.00	-4342.46	207.87
St. Lawrence River	393328.18	214347.25	203.37	607878.81	161.00	0.00	161.00	231.93	335715.40	214317.17	57.13	550089.69	161.00	0.00	161.00	158.82
Total	662412.71	302684.52	1201.74	969077.97*	716.00	-1537.91	-821.91	2092.93*	495963.01	302056.92	441.03	798460.96	760.53	-1537.91	-777.38	1031.91

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	4253.37	0.04	0.10	4253.51	0.00	1414.11	1414.11	5.07	4253.37	0.00	0.00	4253.37	0.00	1414.11	1414.11	5.07
Indiana	3070.16	116.61	126.94	3313.71	0.00	0.00	0.00	187.95	3070.16	116.09	93.68	3279.93	0.00	0.00	0.00	178.39
Michigan	8260.45	124.56	2.28	11166.29*	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	124.65	3962.70	7.30	4094.65	0.00	0.00	0.00	57.84	105.70	3961.92	4.89	4072.51	0.00	0.00	0.00	55.26
New York	295732.20	311.00	282.70	296325.90	716.00	0.00	716.00	160.57	141107.00	0.00	0.00	141107.00	716.00	0.00	716.00	12.00
Ohio	3007.14	417.80	132.81	3557.75	0.00	-18.16	-18.16	154.13	3006.73	412.84	55.31	3474.88	0.00	-18.16	-18.16	130.13
Ontario	172443.31	158071.18	413.32	330927.81	0.00	-2937.06	-2937.06	626.67	172442.88	157921.21	168.39	330532.48	44.53	-2937.06	-2892.53	415.75
Pennsylvania	162.06	5.12	6.02	173.20	0.00	0.00	0.00	18.01	162.06	4.74	2.21	169.01	0.00	0.00	0.00	17.43
Quebec	171543.91	126313.86	98.38	297956.15	0.00	0.00	0.00	152.52	171543.65	126308.58	48.61	297900.84	0.00	0.00	0.00	127.81
Wisconsin	3815.46	13361.64	131.89	17308.99	0.00	3.20	3.20	141.13	271.46	13331.54	67.95	13670.95	0.00	3.20	3.20	90.07
Total	662412.71	302684.52	1201.74	969077.97*	716.00	-1537.91	-821.91	2092.93*	495963.01	302056.92	441.03	798460.96	760.53	-1537.91	-777.38	1031.91

*The total presented is larger than the sum of water use categories. This is due to the addition of state-wide 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

DATE: 11/07/91

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

Water- Use Categ.	LAKE MICHIGAN			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	1103.38	1103.38	0.00	1103.38	1103.38	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	26.98	5.51	0.00	26.98	5.51	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	11.55	5.63	5.07	11.55	5.63	5.07
7	672.28	0.00	0.00	672.28	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	299.59	299.59	0.00	299.59	299.59	0.00
Total	4253.51	1414.11	5.07	4253.51	1414.11	5.07

b) Withdrawals by Source - All facilities

Water- Use Categ.	LAKE MICHIGAN			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW
1	1103.38	0.00	0.00	1103.38	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	26.84	0.04	0.10	26.84	0.04	0.10
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	11.55	0.00	0.00	11.55	0.00	0.00
7	672.28	0.00	0.00	672.28	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	299.59	0.00	0.00	299.59	0.00	0.00
Total	4253.37	0.04	0.10	4253.37	0.04	0.10

c) Diversions by Type - All facilities

Water- Use Categ.	LAKE MICHIGAN		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	1103.38	0.00	1103.38
2	0.00	0.00	0.00	0.00
3	0.00	5.51	0.00	5.51
4	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00
6	0.00	5.63	0.00	5.63
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	299.59	0.00	299.59
Total	0.00	1414.11	0.00	1414.11

Level of Accuracy of Withdrawal Data:

100% Measured

0% Partially Measured

0% Calculated or Estimated

Level of Aggregation of Withdrawal Data Source: 100% Site-specific

0% Aggregated

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

Water- Use Categ.	LAKE MICHIGAN			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	1103.38	1103.38	0.00	1103.38	1103.38	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	26.84	5.51	0.00	26.84	5.51	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	11.55	5.63	5.07	11.55	5.63	5.07
7	672.28	0.00	0.00	672.28	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	299.59	299.59	0.00	299.59	299.59	0.00
Total	4253.37	1414.11	5.07	4253.37	1414.11	5.07

b) Withdrawals by Source - Principal facilities

Water- Use Categ.	LAKE MICHIGAN			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW
1	1103.38	0.00	0.00	1103.38	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	26.84	0.00	0.00	26.84	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	11.55	0.00	0.00	11.55	0.00	0.00
7	672.28	0.00	0.00	672.28	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	299.59	0.00	0.00	299.59	0.00	0.00
Total	4253.37	0.00	0.00	4253.37	0.00	0.00

c) Diversions by Type - Principal facilities

Water- Use Categ.	LAKE MICHIGAN		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	1103.38	0.00	1103.38
2	0.00	0.00	0.00	0.00
3	0.00	5.51	0.00	5.51
4	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00
6	0.00	5.63	0.00	5.63
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	299.59	0.00	299.59
Total	0.00	1414.11	0.00	1414.11

Level of Accuracy of Withdrawal Data:

100% Measured

0% Partially Measured

0% Calculated or Estimated

Level of Aggregation of Withdrawal Data Source: 100% Site-specific

0% Aggregated

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

Water- Use Categ.	LAKE MICHIGAN			LAKE ERIE			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	133.16	0.00	19.97	35.96	0.00	5.40	169.12	0.00	25.37
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	38.06	0.00	5.71	8.46	0.00	1.27	46.52	0.00	6.98
4	12.41	0.00	11.17	0.88	0.00	0.80	13.29	0.00	11.97
5	6.79	0.00	5.43	1.81	0.00	1.45	8.60	0.00	6.88
6	1893.50	0.00	113.60	9.18	0.00	0.56	1902.68	0.00	114.16
7	1128.63	0.00	22.57	0.27	0.00	0.01	1128.90	0.00	22.58
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	44.47	0.00	0.00	0.00	0.00	0.00	44.47	0.00	0.00
10	0.13	0.00	0.01	0.00	0.00	0.00	0.13	0.00	0.01
Total	3257.15	0.00	178.46	56.56	0.00	9.49	3313.71	0.00	187.95

b) Withdrawals by Source - All facilities

Water- Use Categ.	LAKE MICHIGAN			LAKE ERIE			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	82.81	0.00	50.35	0.00	30.91	5.05	82.81	30.91	55.40
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	17.91	20.15	0.00	0.03	8.43	0.00	17.94	28.58
4	0.00	3.70	8.71	0.00	0.33	0.55	0.00	4.03	9.26
5	0.00	1.57	5.22	0.00	0.00	1.81	0.00	1.57	7.03
6	1858.72	11.23	23.55	0.00	6.42	2.76	1858.72	17.65	26.31
7	1128.63	0.00	0.00	0.00	0.00	0.27	1128.63	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	44.47	0.00	0.00	0.00	0.00	0.00	44.47	0.00
10	0.00	0.04	0.09	0.00	0.00	0.00	0.00	0.04	0.09
Total	3070.16	78.92	108.07	0.00	37.69	18.87	3070.16	116.61	126.94

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

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

Water- Use Categ.	LAKE MICHIGAN			LAKE ERIE			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	132.72	0.00	19.91	35.89	0.00	5.39	168.61	0.00	25.30
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	20.99	0.00	3.14	0.07	0.00	0.01	21.06	0.00	3.15
4	11.51	0.00	10.35	0.75	0.00	0.67	12.26	0.00	11.02
5	2.80	0.00	2.24	0.00	0.00	0.00	2.80	0.00	2.24
6	1892.86	0.00	113.57	8.92	0.00	0.53	1901.78	0.00	114.10
7	1128.63	0.00	22.57	0.27	0.00	0.01	1128.90	0.00	22.58
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	44.47	0.00	0.00	0.00	0.00	0.00	44.47	0.00	0.00
10	0.05	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00
Total	3234.03	0.00	171.78	45.90	0.00	6.61	3279.93	0.00	178.39

b) Withdrawals by Source - Principal facilities

Water- Use Categ.	LAKE MICHIGAN			LAKE ERIE			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	82.81	0.00	49.91	0.00	30.91	4.98	82.81	30.91	54.89
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	17.90	3.09	0.00	0.03	0.04	0.00	17.93	3.13
4	0.00	3.28	8.23	0.00	0.29	0.46	0.00	3.57	8.69
5	0.00	1.57	1.23	0.00	0.00	0.00	0.00	1.57	1.23
6	1858.72	11.20	22.94	0.00	6.41	2.51	1858.72	17.61	25.45
7	1128.63	0.00	0.00	0.00	0.00	0.27	1128.63	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	44.47	0.00	0.00	0.00	0.00	0.00	44.47	0.00
10	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.03	0.02
Total	3070.16	78.45	85.42	0.00	37.64	8.26	3070.16	116.09	93.68

c) Diversions by Type - Principal 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: 5.1% Measured 92.8% Partially Measured 2.1% Calculated or Estimated
 Level of Aggregation of Withdrawal Data Source: 98.3% Site-specific 1.7% Aggregated

JURISDICTION REPORT - Michigan

a) Withdrawals, Diversions and Consumptive Use - All facilities

DATE: 12/02/91
 UNITS: Mgal(US)/d
 YEAR OF DATA: 1990

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*
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	237*	0.00	236*
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	11160.29*	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	945.00	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

Level of Accuracy of Withdrawal Data: 11% Measured 37% Partially Measured 2% Calculated or Estimated

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

JURISDICTION REPORT - Michigan

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

DATE: 12/02/91
 UNITS: Mgal(US)/d
 YEAR OF DATA: 1990

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

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: Hgal(US)/d
YEAR OF DATA: 1990

Water- Use Categ.	LAKE SUPERIOR			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	42.77	0.00	8.98	42.77	0.00	8.98
2	0.00	0.00	0.00	0.00	0.00	0.00
3	2.04	0.00	0.16	2.04	0.00	0.16
4	0.40	0.00	0.34	0.40	0.00	0.34
5	3.07	0.00	2.40	3.07	0.00	2.40
6	151.90	0.00	45.70	151.90	0.00	45.70
7	13.31	0.00	0.26	13.31	0.00	0.26
8	0.00	0.00	0.00	0.00	0.00	0.00
9	3881.00	0.00	0.00	3881.00	0.00	0.00
10	0.16	0.00	0.00	0.16	0.00	0.00
Total	4094.65	0.00	57.84	4094.65	0.00	57.84

b) Withdrawals by Source - All facilities

Water- Use Categ.	LAKE SUPERIOR			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW
1	33.59	4.28	4.90	33.59	4.28	4.90
2	0.00	0.00	0.00	0.00	0.00	0.00
3	1.43	0.56	0.05	1.43	0.56	0.05
4	0.00	0.40	0.00	0.00	0.40	0.00
5	0.67	0.35	2.05	0.67	0.35	2.05
6	88.21	63.56	0.13	88.21	63.56	0.13
7	0.75	12.55	0.01	0.75	12.55	0.01
8	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	3881.00	0.00	0.00	3881.00	0.00
10	0.00	0.00	0.16	0.00	0.00	0.16
Total	124.65	3962.70	7.30	124.65	3962.70	7.30

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

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

Water- Use Categ.	LAKE SUPERIOR			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	23.50	0.00	8.91	23.50	0.00	8.91
2	0.00	0.00	0.00	0.00	0.00	0.00
3	1.97	0.00	0.15	1.97	0.00	0.15
4	0.31	0.00	0.27	0.31	0.00	0.27
5	0.67	0.00	0.00	0.67	0.00	0.00
6	151.68	0.00	45.67	151.68	0.00	45.67
7	13.22	0.00	0.26	13.22	0.00	0.26
8	0.00	0.00	0.00	0.00	0.00	0.00
9	3881.00	0.00	0.00	3881.00	0.00	0.00
10	0.16	0.00	0.00	0.16	0.00	0.00
Total	4072.51	0.00	55.26	4072.51	0.00	55.26

b) Withdrawals by Source - Principal facilities

Water- Use Categ.	LAKE SUPERIOR			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW
1	14.65	4.23	4.62	14.65	4.23	4.62
2	0.00	0.00	0.00	0.00	0.00	0.00
3	1.43	0.54	0.00	1.43	0.54	0.00
4	0.00	0.31	0.00	0.00	0.31	0.00
5	0.67	0.00	0.00	0.67	0.00	0.00
6	88.20	63.37	0.11	88.20	63.37	0.11
7	0.75	12.47	0.00	0.75	12.47	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	3881.00	0.00	0.00	3881.00	0.00
10	0.00	0.00	0.16	0.00	0.00	0.16
Total	105.70	3961.92	4.89	105.70	3961.92	4.89

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

Level of Accuracy of Withdrawal Data: 97% Measured 2.6% Partially Measured .4% Calculated or Estimated
 Level of Aggregation of Withdrawal Data Source: 99.9% Site-specific .1% Aggregated

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

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	20.60	266.00	0.00	26.60	126.00	0.00	12.60	598.00	0.00	59.80
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
3	78.00	0.00	7.80	290.00	0.00	29.00	90.00	0.00	9.00	458.00	0.00	45.80
4	1.60	0.00	0.16	8.00	0.00	0.80	1.10	0.00	0.11	10.70	0.00	1.07
5	1.40	0.00	1.10	6.40	0.00	3.30	3.00	0.00	2.40	10.80	0.00	6.80
6	58.40	0.00	5.80	220.00	0.00	22.00	73.00	0.00	7.30	351.40	0.00	35.10
7	468.00	0.00	1.00	2394.00	0.00	8.00	0.00	0.00	0.00	2862.00	0.00	9.00
8	0.00	0.00	0.00	1247.00	0.00	3.00	0.00	0.00	0.00	1247.00	0.00	3.00
9	560.00	0.00	0.00	146420.00	0.00	0.00	143092.00	0.00	0.00	290072.00	0.00	0.00
10	0.00	0.00	0.00	555.00	555.00	0.00	161.00	161.00	0.00	716.00	716.00	0.00
Total	1373.40	0.00	36.46	151406.40	555.00	92.70	143546.10	161.00	31.41	296325.90	716.00	160.57

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	468.00	0.00	0.00	2394.00	0.00	0.00	0.00	0.00	0.00	2862.00	0.00	0.00
8	0.00	0.00	0.00	1247.00	0.00	0.00	0.00	0.00	0.00	1247.00	0.00	0.00
9	560.00	0.00	0.00	146420.00	0.00	0.00	143092.00	0.00	0.00	290072.00	0.00	0.00
10	0.00	0.00	0.00	555.00	0.00	0.00	161.00	0.00	0.00	716.00	0.00	0.00
Total	1254.70	56.00	62.70	151002.50	235.00	168.90	143475.00	20.00	51.10	295732.20	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	555.00	0.00	161.00	0.00	716.00	0.00
Total	0.00	0.00	555.00	0.00	161.00	0.00	716.00	0.00

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

Water-Use Categ.	LAKE ERIE			LAKE ONTARIO			ST. LAWRENCE RIVER			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	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	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	468.00	0.00	1.00	2394.00	0.00	8.00	0.00	0.00	0.00	2862.00	0.00	9.00
8	0.00	0.00	0.00	1247.00	0.00	3.00	0.00	0.00	0.00	1247.00	0.00	3.00
9	560.00	0.00	0.00	50021.00	0.00	0.00	85701.00	0.00	0.00	136282.00	0.00	0.00
10	0.00	0.00	0.00	555.00	555.00	0.00	161.00	161.00	0.00	716.00	716.00	0.00
Total	1028.00	0.00	1.00	54217.00	555.00	11.00	85862.00	161.00	0.00	141107.00	716.00	12.00

b) Withdrawals by Source - Principal 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	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	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	468.00	0.00	0.00	2394.00	0.00	0.00	0.00	0.00	0.00	2862.00	0.00	0.00
8	0.00	0.00	0.00	1247.00	0.00	0.00	0.00	0.00	0.00	1247.00	0.00	0.00
9	560.00	0.00	0.00	50021.00	0.00	0.00	85701.00	0.00	0.00	136282.00	0.00	0.00
10	0.00	0.00	0.00	555.00	0.00	0.00	161.00	0.00	0.00	716.00	0.00	0.00
Total	1028.00	0.00	0.00	54217.00	0.00	0.00	85862.00	0.00	0.00	141107.00	0.00	0.00

c) Diversions by Type - Principal 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	555.00	0.00	161.00	0.00	716.00	0.00
Total	0.00	0.00	555.00	0.00	161.00	0.00	716.00	0.00

Level of Accuracy of Withdrawal Data:

1.6% Measured

48.4% Partially Measured

50% Calculated or Estimated

JURISDICTION REPORT - Ohio

DATE: 11/11/91

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

Water- Use Categ.	LAKE ERIE			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	618.49	0.19	92.77	618.49	0.19	92.77
2	0.00	0.00	0.00	0.00	0.00	0.00
3	60.42	0.00	9.06	60.42	0.00	9.06
4	11.30	0.00	10.17	11.30	0.00	10.17
5	12.76	0.00	10.21	12.76	0.00	10.21
6	254.04	0.00	25.40	254.04	0.00	25.40
7	2555.72	0.00	0.22	2555.72	0.00	0.22
8	45.02	0.00	6.30	45.02	0.00	6.30
9	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	-18.35	0.00	0.00	-18.35	0.00
Total	3557.75	-18.16	154.13	3557.75	-18.16	154.13

b) Withdrawals by Source - All facilities

Water- Use Categ.	LAKE ERIE			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW
1	469.36	111.44	37.69	469.36	111.44	37.69
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.13	0.00	60.29	0.13	0.00	60.29
4	0.00	7.10	4.20	0.00	7.10	4.20
5	0.00	2.09	10.67	0.00	2.09	10.67
6	51.84	182.24	19.96	51.84	182.24	19.96
7	2440.79	114.93	0.00	2440.79	114.93	0.00
8	45.02	0.00	0.00	45.02	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	3007.14	417.80	132.81	3007.14	417.80	132.81

c) Diversions by Type - All facilities

Water- Use Categ.	LAKE ERIE		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.19	0.00	0.19
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	-18.35	0.00	-18.35
Total	0.00	-18.16	0.00	-18.16

Level of Accuracy of Withdrawal Data:

0% Measured

0% Partially Measured

100% Calculated or Estimated

Level of Aggregation of Withdrawal Data Source: 100% Site-specific

0% Aggregated

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

Water- Use Categ.	LAKE ERIE			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	612.37	0.19	91.85	612.37	0.19	91.85
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.94	0.00	0.14	0.94	0.00	0.14
4	5.21	0.00	4.69	5.21	0.00	4.69
5	1.96	0.00	1.57	1.96	0.00	1.57
6	253.66	0.00	25.36	253.66	0.00	25.36
7	2555.72	0.00	0.22	2555.72	0.00	0.22
8	45.02	0.00	6.30	45.02	0.00	6.30
9	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	-18.35	0.00	0.00	-18.35	0.00
Total	3474.88	-18.16	130.13	3474.88	-18.16	130.13

b) Withdrawals by Source - Principal facilities

Water- Use Categ.	LAKE ERIE			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW
1	469.08	110.90	32.39	469.08	110.90	32.39
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.94	0.00	0.00	0.94
4	0.00	4.44	0.77	0.00	4.44	0.77
5	0.00	0.49	1.47	0.00	0.49	1.47
6	51.84	182.08	19.74	51.84	182.08	19.74
7	2440.79	114.93	0.00	2440.79	114.93	0.00
8	45.02	0.00	0.00	45.02	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	3006.73	412.84	55.31	3006.73	412.84	55.31

c) Diversions by Type - Principal facilities

Water- Use Categ.	LAKE ERIE		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.19	0.00	0.19
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	-18.35	0.00	-18.35
Total	0.00	-18.16	0.00	-18.16

Level of Accuracy of Withdrawal Data:

0% Measured

0% Partially Measured

100% Calculated or Estimated

Level of Aggregation of Withdrawal Data Source: 100% Site-specific

0% Aggregated

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

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	21.35	0.00	3.20	151.85	44.53	22.78	205.60	-44.53	30.84	793.33	0.00	119.00	152.99	0.00	23.03	1325.12	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	1.64	0.00	0.25	29.62	0.00	4.44	29.40	0.00	4.41	35.01	0.00	5.25	33.05	0.00	4.96	128.72	0.00	19.31
4	0.19	0.00	0.15	26.25	0.00	20.47	125.83	0.00	98.15	28.67	0.00	22.36	5.21	0.00	4.06	186.14	0.00	145.19
5	0.32	0.00	0.25	16.81	0.00	13.45	17.08	0.00	13.66	8.91	0.00	7.13	9.54	0.00	7.63	52.66	0.00	42.13
6	174.51	0.00	6.79	768.64	0.00	16.99	494.43	0.00	73.99	864.40	0.00	15.22	158.24	0.00	7.95	2460.21	0.00	70.93
7	406.92	0.00	3.97	236.96	0.00	1.20	3033.64	0.00	27.30	1753.86	0.00	15.81	0.00	0.00	0.00	5431.38	0.00	48.28
8	0.00	0.00	0.00	5934.97	0.00	53.42	0.00	0.00	0.00	5355.85	0.00	48.20	40.81	0.00	0.37	11331.63	0.00	101.99
9	37984.34	-2937.06	0.00	44857.17	0.00	0.00	4159.26	4159.26	0.00	56124.58	-4159.26	0.00	165940.94	0.00	0.00	309066.29	-2937.06	0.00
10	0.00	0.00	0.00	39.32	0.00	0.00	738.19	738.19	0.00	132.38	-738.19	0.00	35.77	0.00	0.00	945.66	0.00	0.00
Total	38589.27	-2937.06	14.60	52861.58	44.53	132.75	8803.43	4852.92	198.35	65096.97	-4897.46	232.97	166376.56	0.00	48.00	330927.81	-2937.06	626.67

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	16.83	2.61	1.92	65.51	38.76	47.59	108.87	19.09	77.64	736.46	36.89	19.98	38.02	110.01	4.96	965.69	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	1.64	0.00	0.00	29.62	0.00	0.00	29.40	0.00	0.00	35.01	0.00	0.00	33.05	0.00	0.00	128.72
4	0.00	0.13	0.06	0.00	20.16	6.09	0.00	92.49	33.35	0.00	21.24	7.42	0.00	3.88	1.33	0.00	137.90	48.24
5	0.00	0.00	0.32	0.00	0.00	16.81	0.00	0.00	17.08	0.00	0.00	8.91	0.00	0.00	9.54	0.00	0.00	52.66
6	162.12	10.28	2.11	681.22	75.03	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	406.88	0.04	0.00	236.96	0.00	0.00	3033.64	0.00	0.00	1753.86	0.00	0.00	0.00	0.00	0.00	5431.34	0.04	0.00
8	0.00	0.00	0.00	5934.97	0.00	0.00	0.00	0.00	0.00	5355.85	0.00	0.00	40.81	0.00	0.00	11331.63	0.00	0.00
9	0.00	37984.34	0.00	23750.91	21106.25	0.00	4159.26	0.00	0.00	45777.81	10346.77	0.00	78105.48	87835.46	0.00	151795.47	157272.82	0.00
10	0.00	0.00	0.00	0.00	39.32	0.00	738.19	0.00	0.00	0.00	132.38	0.00	0.00	35.77	0.00	738.19	207.47	0.00
Total	585.83	37997.40	6.04	30669.58	21279.51	112.50	8499.65	137.30	166.48	54378.97	10643.59	74.41	78309.27	88013.39	53.90	172443.31	158071.18	413.32

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	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	-2937.06	0.00	0.00	4159.26	0.00	-4159.26	0.00	0.00	0.00	0.00	-2937.06
10	0.00	0.00	0.00	0.00	738.19	0.00	-738.19	0.00	0.00	0.00	0.00	0.00
Total	0.00	-2937.06	44.53	0.00	4852.92	0.00	-4897.46	0.00	0.00	0.00	0.00	-2937.06

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

Water-Use Categ.	LAKE SUPERIOR			LAKE HURON			LAKE ERIE			LAKE ONTARIO			ST. LAWRENCE RIVER			TOTAL		
	Withdr.	Diver.	Consua.	Withdr.	Diver.	Consua.	Withdr.	Diver.	Consua.	Withdr.	Diver.	Consua.	Withdr.	Diver.	Consua.	Withdr.	Diver.	Consua.
1	21.12	0.00	3.17	139.61	44.53	20.94	204.13	0.00	30.62	789.70	0.00	118.46	152.52	0.00	22.88	1307.08	44.53	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	174.38	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	406.92	0.00	3.97	236.96	0.00	1.20	3033.64	0.00	27.30	1753.86	0.00	15.81	0.00	0.00	0.00	5431.38	0.00	48.28
8	0.00	0.00	0.00	5934.97	0.00	53.42	0.00	0.00	0.00	5355.85	0.00	48.20	40.81	0.00	0.37	11331.63	0.00	101.99
9	37984.34	-2937.06	0.00	44857.17	0.00	0.00	4159.26	4159.26	0.00	56124.58	-4159.26	0.00	165940.94	0.00	0.00	309066.29	-2937.06	0.00
10	0.00	0.00	0.00	39.32	0.00	0.00	738.19	738.19	0.00	132.38	-738.19	0.00	35.77	0.00	0.00	945.66	0.00	0.00
Total	38586.76	-2937.06	13.90	51975.24	44.53	92.35	8627.96	4897.46	81.62	65015.66	-4897.46	196.87	166326.86	0.00	31.01	330532.48	-2892.53	415.75

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	74.25	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	162.10	10.25	2.03	681.70	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	406.88	0.04	0.00	236.96	0.00	0.00	3033.64	0.00	0.00	1753.86	0.00	0.00	0.00	0.00	0.00	5431.34	0.04	0.00
8	0.00	0.00	0.00	5934.97	0.00	0.00	0.00	0.00	0.00	5355.85	0.00	0.00	40.81	0.00	0.00	11331.63	0.00	0.00
9	0.00	37984.34	0.00	23750.91	21106.25	0.00	4159.26	0.00	0.00	45777.81	10346.77	0.00	78105.48	87835.46	0.00	151793.47	157272.82	0.00
10	0.00	0.00	0.00	0.00	39.32	0.00	738.19	0.00	0.00	0.00	132.38	0.00	0.00	35.77	0.00	738.19	207.47	0.00
Total	585.73	37997.08	3.95	30669.19	21253.05	52.99	8499.57	43.89	84.50	54378.63	10618.61	18.43	78309.75	88008.59	8.52	172442.88	157921.21	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	0.00	0.00	0.00	0.00	0.00	0.00	44.53	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	-2937.06	0.00	0.00	4159.26	0.00	-4159.26	0.00	0.00	0.00	0.00	-2937.06
10	0.00	0.00	0.00	0.00	738.19	0.00	-738.19	0.00	0.00	0.00	0.00	0.00
Total	0.00	-2937.06	44.53	0.00	4897.46	0.00	-4897.46	0.00	0.00	0.00	44.53	-2937.06

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

Water- Use Categ.	LAKE ERIE			LAKE ONTARIO			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	43.19	0.00	4.32	0.17	0.00	0.02	43.36	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	0.01	0.00	0.00	1.98	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	50.28	0.00	10.40	0.00	0.00	0.00	50.28	0.00	10.40
7	74.62	0.00	0.28	0.00	0.00	0.00	74.62	0.00	0.28
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	173.02	0.00	17.99	0.18	0.00	0.02	173.20	0.00	18.01

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	2.01	0.00	0.00	0.17	39.70	1.48	2.18
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	0.01	0.00	0.00	1.98
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	1.06	0.00	0.00	0.00	47.74	1.48	1.06
7	74.62	0.00	0.00	0.00	0.00	0.00	74.62	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	162.06	5.12	5.84	0.00	0.00	0.18	162.06	5.12	6.02

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: 25% Measured 29% Partially Measured 46% Calculated or Estimated
 Level of Aggregation of Withdrawal Data Source: 98.9% Site-specific 1.1% Aggregated

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

Water- Use Categ.	LAKE ERIE			LAKE ONTARIO			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	42.46	0.00	4.25	0.00	0.00	0.00	42.46	0.00	4.25
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	2.70	0.00	2.53	0.00	0.00	0.00	2.70	0.00	2.53
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	49.23	0.00	10.37	0.00	0.00	0.00	49.23	0.00	10.37
7	74.62	0.00	0.28	0.00	0.00	0.00	74.62	0.00	0.28
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	169.01	0.00	17.43	0.00	0.00	0.00	169.01	0.00	17.43

b) Withdrawals by Source - Principal facilities

Water- Use Categ.	LAKE ERIE			LAKE ONTARIO			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	39.70	1.45	1.31	0.00	0.00	0.00	39.70	1.45	1.31
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	1.90	0.80	0.00	0.00	0.00	0.00	1.90	0.80
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	47.74	1.39	0.10	0.00	0.00	0.00	47.74	1.39	0.10
7	74.62	0.00	0.00	0.00	0.00	0.00	74.62	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	162.06	4.74	2.21	0.00	0.00	0.00	162.06	4.74	2.21

c) Diversions by Type - Principal 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: 25% Measured 29% Partially Measured 46% Calculated or Estimated
 Level of Aggregation of Withdrawal Data Source: 98.9% Site-specific 1.1% Aggregated

DATE: 11/21/91

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

Water- Use Categ.	ST. LAWRENCE RIVER			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	1126.43	0.00	112.54	1126.43	0.00	112.54
2	0.00	0.00	0.00	0.00	0.00	0.00
3	71.59	0.00	7.13	71.59	0.00	7.13
4	3.51	0.00	3.16	3.51	0.00	3.16
5	23.27	0.00	18.62	23.27	0.00	18.62
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	296558.84	0.00	0.00	296558.84	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00
Total	297956.15	0.00	152.52	297956.15	0.00	152.52

b) Withdrawals by Source - All facilities

Water- Use Categ.	ST. LAWRENCE RIVER			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW
1	709.04	417.39	0.00	709.04	417.39	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	71.59	0.00	0.00	71.59
4	0.00	0.00	3.51	0.00	0.00	3.51
5	0.00	0.00	23.27	0.00	0.00	23.27
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	170795.78	125763.06	0.00	170795.78	125763.06	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00
Total	171543.91	126313.86	98.38	171543.91	126313.86	98.38

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:

99.9% Measured

0% Partially Measured

.1% Calculated or Estimated

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

Water-Use Categ.	ST. LAWRENCE RIVER			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	1121.41	0.00	112.01	1121.41	0.00	112.01
2	0.00	0.00	0.00	0.00	0.00	0.00
3	48.61	0.00	4.76	48.61	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	296558.84	0.00	0.00	296558.84	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00
Total	297900.84	0.00	127.81	297900.84	0.00	127.81

b) Withdrawals by Source - Principal facilities

Water-Use Categ.	ST. LAWRENCE RIVER			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW
1	708.78	412.64	0.00	708.78	412.64	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	48.61	0.00	0.00	48.61
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	170795.78	125763.06	0.00	170795.78	125763.06	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00
Total	171543.65	126308.58	48.61	171543.65	126308.58	48.61

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

Level of Accuracy of Withdrawal Data: 99.9% Measured 0% Partially Measured .1% Calculated or Estimated
 Level of Aggregation of Withdrawal Data Source: 100% Site-specific 0% Aggregated

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

Water- Use Categ.	LAKE SUPERIOR			LAKE MICHIGAN			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	6.00	0.00	0.90	332.50	3.20	53.00	338.50	3.20	53.90
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.07	0.00	0.01	21.00	0.00	2.00	21.07	0.00	2.01
4	0.00	0.00	0.00	11.00	0.00	7.08	11.00	0.00	7.08
5	1.50	0.00	1.30	21.00	0.00	3.80	22.50	0.00	5.10
6	7.02	0.00	0.70	363.36	0.00	36.34	370.38	0.00	37.04
7	31.60	0.00	0.32	2042.40	0.00	20.58	2074.00	0.00	20.90
8	0.00	0.00	0.00	1510.00	0.00	15.10	1510.00	0.00	15.10
9	212.84	0.00	0.00	12748.70	0.00	0.00	12961.54	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	259.03	0.00	3.23	17049.96	3.20	137.90	17308.99	3.20	141.13

b) Withdrawals by Source - All facilities

Water- Use Categ.	LAKE SUPERIOR			LAKE MICHIGAN			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	1.00	0.00	5.00	230.50	41.00	61.00	231.50	41.00	66.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.07	0.00	0.00	21.00	0.00	0.00	21.07
4	0.00	0.00	0.00	0.00	0.10	10.90	0.00	0.10	10.90
5	0.00	0.00	1.50	0.00	1.00	20.00	0.00	1.00	21.50
6	7.00	0.00	0.02	1.36	350.00	12.00	8.36	350.00	12.02
7	31.60	0.00	0.00	2034.00	8.00	0.40	2065.60	8.00	0.40
8	0.00	0.00	0.00	1510.00	0.00	0.00	1510.00	0.00	0.00
9	0.00	212.84	0.00	0.00	12748.70	0.00	0.00	12961.54	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	39.60	212.84	6.59	3775.86	13148.80	125.30	3815.46	13361.64	131.89

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	3.20	0.00	3.20
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	3.20	0.00	3.20

Level of Accuracy of Withdrawal Data: 2.1% Measured .1% Partially Measured 97.8% Calculated or Estimated
 Level of Aggregation of Withdrawal Data Source: 10.7% Site-specific 89.3% Aggregated

DATE: 11/18/91

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

Water- Use Categ.	LAKE SUPERIOR			LAKE MICHIGAN			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	1.35	0.00	0.18	332.50	3.20	53.00	333.85	3.20	53.18
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	5.00	0.00	3.50	5.00	0.00	3.50
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	6.90	0.00	0.69	323.06	0.00	32.30	329.96	0.00	32.99
7	31.60	0.00	0.32	8.00	0.00	0.08	39.60	0.00	0.40
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	213.84	0.00	0.00	12748.70	0.00	0.00	12962.54	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	253.69	0.00	1.19	13417.26	3.20	88.88	13670.95	3.20	90.07

b) Withdrawals by Source - Principal facilities

Water- Use Categ.	LAKE SUPERIOR			LAKE MICHIGAN			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	1.10	0.00	0.25	230.50	41.00	61.00	231.60	41.00	61.25
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	5.00	0.00	0.00	5.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	6.90	0.00	0.00	1.36	320.00	1.70	8.26	320.00	1.70
7	31.60	0.00	0.00	0.00	8.00	0.00	31.60	8.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	213.84	0.00	0.00	12748.70	0.00	0.00	12962.54	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	39.60	213.84	0.25	231.86	13117.70	67.70	271.46	13331.54	67.95

c) Diversions by Type - Principal facilities

Water- Use Categ.	LAKE SUPERIOR		LAKE MICHIGAN		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	0.00	3.20	0.00	3.20
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	3.20	0.00	3.20

Level of Accuracy of Withdrawal Data:

2.1% Measured

.1% Partially Measured

97.8% Calculated or Estimated

Level of Aggregation of Withdrawal Data Source:

10.7% Site-specific

89.3% Aggregated

a) Withdrawals, Diversions and Consumptive Use - All Facilities

UNITS: Mgal(US)/d

YEAR OF DATA: 1990

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	42.77	0.00	2.98	21.35	0.00	3.20	6.00	0.00	0.90	70.12	0.00	13.08
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	2.04	0.00	0.16	1.64	0.00	0.25	0.07	0.00	0.01	3.75	0.00	0.42
4	0.00	0.00	0.00	0.40	0.00	0.34	0.19	0.00	0.15	0.00	0.00	0.00	0.59	0.00	0.49
5	0.00	0.00	0.00	3.07	0.00	2.40	0.32	0.00	0.25	1.50	0.00	1.30	4.89	0.00	3.95
6	0.00	0.00	0.00	151.90	0.00	45.70	174.51	0.00	6.79	7.02	0.00	0.70	333.43	0.00	53.19
7	260.77	0.00	3.39	13.31	0.00	0.26	406.92	0.00	3.97	31.60	0.00	0.32	712.60	0.00	7.94
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	3881.00	0.00	0.00	37984.34	-2937.06	0.00	212.84	0.00	0.00	42078.18	-2937.06	0.00
10	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00
Total	260.77	0.00	3.39	4094.65	0.00	57.84	38589.27	-2937.06	14.60	259.03	0.00	3.23	43203.72	-2937.06	79.06

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	33.59	4.28	4.90	16.83	2.61	1.92	1.00	0.00	5.00	51.42	6.89	11.82
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	1.43	0.56	0.05	0.00	0.00	1.64	0.00	0.00	0.07	1.43	0.56	1.76
4	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.13	0.06	0.00	0.00	0.00	0.00	0.53	0.06
5	0.00	0.00	0.00	0.67	0.35	2.05	0.00	0.00	0.32	0.00	0.00	1.50	0.67	0.35	3.27
6	0.00	0.00	0.00	88.21	43.56	0.13	162.12	10.28	2.11	7.00	0.00	0.02	257.33	73.84	2.26
7	260.77	0.00	0.00	0.75	12.55	0.01	406.88	0.04	0.00	31.60	0.00	0.00	700.00	12.59	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	3881.00	0.00	0.00	37984.34	0.00	0.00	212.84	0.00	0.00	42078.18	0.00
10	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
Total	260.77	0.00	0.00	124.65	3962.70	7.30	585.83	37997.40	6.04	39.60	212.84	6.59	1010.85	42172.94	19.93

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	-2937.06	0.00	0.00	0.00	-2937.06
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	-2937.06	0.00	0.00	0.00	-2937.06

*The State of Michigan was unable to report by sub-basin for most categories of use.

a) Withdrawals, Diversions and Consumptive Use - Principal Facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

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	23.50	0.00	8.91	21.12	0.00	3.17	1.35	0.00	0.18	45.97	0.00	12.26
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	1.97	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	1.97	0.00	0.15
4	0.00	0.00	0.00	0.31	0.00	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.00	0.27
5	0.00	0.00	0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.00	0.00
6	0.00	0.00	0.00	151.68	0.00	45.67	174.38	0.00	6.76	6.90	0.00	0.69	332.96	0.00	53.12
7	0.00	0.00	0.00	13.22	0.00	0.26	406.92	0.00	3.97	31.60	0.00	0.32	451.74	0.00	4.55
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	3881.00	0.00	0.00	37984.34	-2937.06	0.00	213.84	0.00	0.00	42079.18	-2937.06	0.00
10	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00
Total	0.00	0.00	0.00	4072.51	0.00	55.26	38586.76	-2937.06	13.90	253.69	0.00	1.19	42912.96	-2937.06	70.35

b) Withdrawals by Source - Principal 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	14.65	4.23	4.62	16.76	2.45	1.92	1.10	0.00	0.25	32.51	6.68	6.79
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	1.43	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.43	0.54	0.00
4	0.00	0.00	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.00
5	0.00	0.00	0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.00	0.00
6	0.00	0.00	0.00	88.70	63.37	0.11	162.10	10.25	2.03	6.90	0.00	0.00	257.20	75.62	2.14
7	0.00	0.00	0.00	0.75	12.47	0.00	406.88	0.04	0.00	31.60	0.00	0.00	439.23	12.51	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	3881.00	0.00	0.00	37984.34	0.00	0.00	213.84	0.00	0.00	42079.18	0.00
10	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
Total	0.00	0.00	0.00	105.70	3961.92	4.89	585.73	37997.08	3.95	39.60	213.84	0.25	731.03	42172.84	9.09

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	-2937.06	0.00	0.00	0.00	-2937.06
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	-2937.06	0.00	0.00	0.00	-2937.06

*The State of Michigan was unable to report by sub-basin for most categories of use.

a) Withdrawals, Diversions and Consumptive Use - All Facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

Water- Use Categ.	ILLINOIS			INDIANA			MICHIGAN*			WISCONSIN			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	1103.38	1103.38	0.00	133.16	0.00	19.97	0.00	0.00	0.00	332.50	3.20	53.00	1569.04	1106.58	72.97
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	26.98	5.51	0.00	38.06	0.00	5.71	0.00	0.00	0.00	21.00	0.00	2.00	86.04	5.51	7.71
4	0.00	0.00	0.00	12.41	0.00	11.17	0.00	0.00	0.00	11.00	0.00	7.08	23.41	0.00	18.25
5	0.00	0.00	0.00	6.79	0.00	5.43	0.00	0.00	0.00	21.00	0.00	3.80	27.79	0.00	9.23
6	11.55	5.63	5.07	1893.50	0.00	113.60	0.00	0.00	0.00	363.36	0.00	36.34	2268.41	5.63	155.01
7	672.28	0.00	0.00	1128.63	0.00	22.57	1091.72	0.00	14.20	2042.40	0.00	20.58	4935.03	0.00	57.35
8	2139.73	0.00	0.00	0.00	0.00	0.00	2161.29	0.00	28.10	1510.00	0.00	15.10	5811.02	0.00	43.20
9	0.00	0.00	0.00	44.47	0.00	0.00	0.00	0.00	0.00	12748.70	0.00	0.00	12793.17	0.00	0.00
10	299.59	299.59	0.00	0.13	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	299.72	299.59	0.01
Total	4253.51	1414.11	5.07	3257.15	0.00	178.46	3253.01	0.00	42.30	17049.96	3.20	137.90	27813.63	1417.31	363.73

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	1103.38	0.00	0.00	82.81	0.00	50.35	0.00	0.00	0.00	230.50	41.00	61.00	1416.69	41.00	111.35
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	26.84	0.04	0.10	0.00	17.91	20.15	0.00	0.00	0.00	0.00	0.00	21.00	26.84	17.95	41.25
4	0.00	0.00	0.00	0.00	3.70	8.71	0.00	0.00	0.00	0.00	0.10	10.90	0.00	3.80	19.61
5	0.00	0.00	0.00	0.00	1.57	5.22	0.00	0.00	0.00	0.00	1.00	20.00	0.00	2.57	25.22
6	11.55	0.00	0.00	1858.72	11.23	23.55	0.00	0.00	0.00	1.36	350.00	12.00	1871.63	361.23	35.55
7	672.28	0.00	0.00	1128.63	0.00	0.00	965.00	124.44	2.28	2034.00	8.00	0.40	4799.91	132.44	2.68
8	2139.73	0.00	0.00	0.00	0.00	0.00	2161.29	0.00	0.00	1510.00	0.00	0.00	5811.02	0.00	0.00
9	0.00	0.00	0.00	0.00	44.47	0.00	0.00	0.00	0.00	0.00	12748.70	0.00	0.00	12793.17	0.00
10	299.59	0.00	0.00	0.00	0.04	0.09	0.00	0.00	0.00	0.00	0.00	0.00	299.59	0.04	0.09
Total	4253.37	0.04	0.10	3070.16	78.92	108.07	3126.29	124.44	2.28	3775.86	13148.80	125.30	14225.68	13352.20	235.75

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	1103.38	0.00	0.00	0.00	0.00	0.00	3.20	0.00	1106.58
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	5.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.51
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	5.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.63
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	299.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	299.59
Total	0.00	1414.11	0.00	0.00	0.00	0.00	0.00	3.20	0.00	1417.31

*The State of Michigan was unable to report by sub-basin for most categories of use.

a) Withdrawals, Diversions and Consumptive Use - Principal Facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

Water- Use Categ.	ILLINOIS			INDIANA			MICHIGAN*			WISCONSIN			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	1103.38	1103.38	0.00	132.72	0.00	19.91	0.00	0.00	0.00	332.50	3.20	53.00	1568.60	1106.58	72.91
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	26.84	5.51	0.00	20.99	0.00	3.14	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	11.51	0.00	10.35	0.00	0.00	0.00	0.00	0.00	0.00	47.83	5.51	3.14
5	0.00	0.00	0.00	2.80	0.00	2.24	0.00	0.00	0.00	5.00	0.00	3.50	16.51	0.00	13.85
6	11.55	5.63	5.07	1892.86	0.00	113.57	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	2.24
7	672.28	0.00	0.00	1128.63	0.00	22.57	0.00	0.00	0.00	323.06	0.00	32.30	2227.47	5.63	150.94
8	2139.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.08	1808.91	0.00	22.65
9	0.00	0.00	0.00	44.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2139.73	0.00	0.00
10	299.59	299.59	0.00	0.05	0.00	0.00	0.00	0.00	0.00	12748.70	0.00	0.00	12793.17	0.00	0.00
Total	4253.37	1414.11	5.07	3234.03	0.00	171.78	0.00	0.00	0.00	13417.26	3.20	88.88	20904.66	1417.31	265.73

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	1103.38	0.00	0.00	82.81	0.00	49.91	0.00	0.00	0.00	230.50	41.00	61.00	1416.69	41.00	110.91
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	26.84	0.00	0.00	0.00	17.90	3.09	0.00	0.00	0.00	0.00	0.00	0.00	26.84	17.90	3.09
4	0.00	0.00	0.00	0.00	3.28	8.23	0.00	0.00	0.00	0.00	0.00	5.00	0.00	3.28	13.23
5	0.00	0.00	0.00	0.00	1.57	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.57	1.23
6	11.55	0.00	0.00	1858.72	11.20	22.94	0.00	0.00	0.00	1.36	320.00	1.70	1871.63	331.20	24.64
7	672.28	0.00	0.00	1128.63	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	1800.91	8.00	0.00
8	2139.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2139.73	0.00	0.00
9	0.00	0.00	0.00	0.00	44.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	299.59	0.00	0.00	0.00	0.03	0.02	0.00	0.00	0.00	0.00	12748.70	0.00	0.00	12793.17	0.00
Total	4253.37	0.00	0.00	3070.16	78.45	85.42	0.00	0.00	0.00	231.86	13117.70	67.70	7555.39	13196.15	153.12

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	1103.38	0.00	0.00	0.00	0.00	0.00	3.20	0.00	1106.58
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	5.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.51
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	5.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.63
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	299.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	299.59
Total	0.00	1414.11	0.00	0.00	0.00	0.00	0.00	3.20	0.00	1417.31

*The State of Michigan was unable to report by sub-basin for most categories of use.

BASIN REPORT - Lake Huron

DATE: 1/20/92

a) Withdrawals, Diversions and Consumptive Use - All Facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

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	29.62	0.00	4.44	29.62	0.00	4.44
4	0.00	0.00	0.00	26.25	0.00	20.47	26.25	0.00	20.47
5	0.00	0.00	0.00	16.81	0.00	13.45	16.81	0.00	13.45
6	0.00	0.00	0.00	768.64	0.00	16.99	768.64	0.00	16.99
7	652.47	0.00	0.48	236.96	0.00	1.70	889.43	0.00	9.68
8	0.00	0.00	0.00	5934.97	0.00	53.42	5934.97	0.00	53.42
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	39.32	0.00	0.00	39.32	0.00	0.00
Total	652.47	0.00	0.48	52061.58	44.53	132.75	52714.05	44.53	141.23

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	65.51	36.76	47.59	65.51	36.76	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	29.62	0.00	0.00	29.62
4	0.00	0.00	0.00	0.00	20.16	6.09	0.00	20.16	6.09
5	0.00	0.00	0.00	0.00	0.00	16.81	0.00	0.00	16.81
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	5934.97	0.00	0.00	5934.97	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	39.32	0.00	0.00	39.32	0.00
Total	652.44	0.03	0.00	30669.58	21279.51	112.50	31322.02	21279.54	112.50

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 sub-basin for most categories of use.

a) Withdrawals, Diversions and Consumptive Use - Principal Facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

Water- Use Categ.	MICHIGAN*			ONTARIO			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	0.00	0.00	0.00	139.61	44.53	20.94	139.61	44.53	20.94
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	16.80	767.21	0.00	16.80
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	5934.97	0.00	53.42	5934.97	0.00	53.42
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	39.32	0.00	0.00	39.32	0.00	0.00
Total	0.00	0.00	0.00	51975.24	44.53	92.35	51975.24	44.53	92.35

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	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	11.76	681.20	74.26	11.76
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	5934.97	0.00	0.00	5934.97	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	39.32	0.00	0.00	39.32	0.00
Total	0.00	0.00	0.00	30669.19	21253.05	52.99	30669.19	21253.05	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	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 sub-basin for most categories of use.

a) Withdrawals, Diversions and Consumptive Use - All Facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

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	35.96	0.00	5.40	0.00	0.00	0.00	206.00	0.00	20.60	618.49	0.19	92.77	205.60	-44.53	30.84	43.19	0.00	4.32	1109.24	-44.34	153.93
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	0.00	0.00	0.00	0.00	0.00	0.00
3	8.46	0.00	1.27	0.00	0.00	0.00	78.00	0.00	7.80	60.42	0.00	9.06	29.40	0.00	4.41	1.97	0.00	0.20	178.25	0.00	22.74
4	0.88	0.00	0.80	0.00	0.00	0.00	1.60	0.00	0.16	11.30	0.00	10.17	125.83	0.00	98.15	2.96	0.00	2.79	142.57	0.00	112.07
5	1.81	0.00	1.45	0.00	0.00	0.00	1.40	0.00	1.10	12.76	0.00	10.21	17.08	0.00	13.66	0.00	0.00	0.00	33.05	0.00	26.42
6	9.18	0.00	0.56	0.00	0.00	0.00	58.40	0.00	5.80	254.04	0.00	25.40	494.43	0.00	23.99	50.28	0.00	10.40	866.33	0.00	66.15
7	0.27	0.00	0.01	4221.04	0.00	54.87	468.00	0.00	1.00	2555.72	0.00	0.22	3033.64	0.00	27.30	74.62	0.00	0.28	10353.29	0.00	83.68
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.02	0.00	6.30	0.00	0.00	0.00	0.00	0.00	0.00	45.02	0.00	6.30
9	0.00	0.00	0.00	0.00	0.00	0.00	560.00	0.00	0.00	0.00	0.00	0.00	4159.26	4159.26	0.00	0.00	0.00	0.00	4719.26	4159.26	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-18.35	0.00	738.19	738.19	0.00	0.00	0.00	0.00	738.19	738.19	0.00
Total	56.56	0.00	9.49	4221.04	0.00	54.87	1373.40	0.00	36.46	3557.75	-18.16	154.13	8803.43	4852.92	198.35	173.02	0.00	17.99	18185.20	4834.76	471.29

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	30.91	5.05	0.00	0.00	0.00	160.00	46.00	0.00	469.36	111.44	37.69	108.87	19.09	77.64	39.70	1.48	2.01	777.93	208.92	123.39
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	8.43	0.00	0.00	0.00	10.00	10.00	58.00	0.13	0.00	60.29	0.00	29.40	0.00	0.00	1.97	10.13	10.03	158.09	
4	0.00	0.33	0.55	0.00	0.00	0.00	1.20	0.00	0.40	0.00	7.10	4.20	0.00	92.49	33.35	0.00	2.16	0.80	1.20	102.08	39.30
5	0.00	0.00	1.81	0.00	0.00	0.00	0.50	0.00	0.90	0.00	2.09	10.67	0.00	0.00	17.08	0.00	0.00	0.50	2.09	30.46	
6	0.00	6.42	2.76	0.00	0.00	0.00	55.00	0.00	3.40	51.84	182.24	19.96	459.69	25.73	9.01	47.74	1.48	1.06	614.27	215.87	36.19
7	0.00	0.00	0.27	4220.95	0.09	0.00	468.00	0.00	0.00	2440.79	114.93	0.00	3033.64	0.00	0.00	74.62	0.00	0.00	10238.00	115.02	0.27
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.02	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	560.00	0.00	0.00	0.00	0.00	0.00	4159.26	0.00	0.00	0.00	0.00	0.00	4719.26	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	738.19	0.00	0.00	0.00	0.00	0.00	738.19	0.00	0.00
Total	0.00	37.69	18.87	4220.95	0.09	0.00	1254.70	56.00	62.70	3097.14	417.80	132.81	8499.65	137.30	166.48	162.06	5.12	5.84	17144.50	654.00	386.70

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	0.19	-44.53	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	
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	4159.26	0.00	0.00	0.00	4159.26	
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-18.35	738.19	0.00	0.00	0.00	738.19	
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-18.16	4852.92	0.00	0.00	0.00	4852.92	

*The State of Michigan was unable to report by sub-basin for most categories of use.

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

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	35.89	0.00	5.39	0.00	0.00	0.00	0.00	0.00	0.00	612.37	0.19	91.85	204.13	0.00	30.62	42.46	0.00	4.25	894.85	0.19	132.11
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	0.00	0.00	0.00
3	0.07	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.94	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	1.01	0.00	0.15
4	0.75	0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.00	5.21	0.00	4.69	0.00	0.00	0.00	2.70	0.00	2.53	8.66	0.00	7.89
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.96	0.00	1.57	0.00	0.00	0.00	0.00	0.00	0.00	1.96	0.00	1.57
6	8.92	0.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00	253.66	0.00	25.36	492.73	0.00	23.70	49.23	0.00	10.37	804.54	0.00	59.96
7	0.27	0.00	0.01	0.00	0.00	0.00	468.00	0.00	1.00	2555.72	0.00	0.22	3033.64	0.00	27.30	74.62	0.00	0.28	6132.25	0.00	28.81
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.02	0.00	6.30	0.00	0.00	0.00	0.00	0.00	0.00	45.02	0.00	6.30
9	0.00	0.00	0.00	0.00	0.00	0.00	560.00	0.00	0.00	0.00	0.00	0.00	4159.26	4159.26	0.00	0.00	0.00	0.00	4719.26	4159.26	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-18.35	0.00	738.19	738.19	0.00	0.00	0.00	0.00	738.19	719.84	0.00
Total	45.90	0.00	6.61	0.00	0.00	0.00	1028.00	0.00	1.00	3474.88	-18.16	130.13	6627.96	4897.46	81.62	169.01	0.00	17.43	13345.75	4879.30	236.79

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	30.91	4.98	0.00	0.00	0.00	0.00	0.00	0.00	469.08	110.90	32.39	108.87	19.00	76.25	39.70	1.45	1.31	617.65	162.26	114.93
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	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.03	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.98
4	0.00	0.29	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.44	0.77	0.00	0.00	0.00	0.00	1.90	0.80	0.00	6.63	2.03
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	1.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	1.47
6	0.00	6.41	2.51	0.00	0.00	0.00	0.00	0.00	0.00	51.84	182.08	19.74	459.61	24.89	8.24	47.74	1.39	0.10	559.19	214.77	30.59
7	0.00	0.00	0.27	0.00	0.00	0.00	468.00	0.00	0.00	2446.79	114.93	0.00	3033.64	0.00	0.00	74.62	0.00	0.00	6017.05	114.93	0.27
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.02	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	560.00	0.00	0.00	0.00	0.00	0.00	4159.26	0.00	0.00	0.00	0.00	0.00	4719.26	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	738.19	0.00	0.00	0.00	0.00	0.00	738.19	0.00	0.00
Total	0.00	37.64	8.26	0.00	0.00	0.00	1028.00	0.00	0.00	3006.73	412.84	55.31	8499.57	43.89	84.50	162.66	4.74	2.21	12496.36	499.11	150.28

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	0.19	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	
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	4159.26	0.00	0.00	0.00	4159.26	
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-18.35	738.19	0.00	0.00	0.00	738.19	
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-18.16	4897.46	0.00	0.00	0.00	4879.30	

*The State of Michigan was unable to report by sub-basin for most categories of use.

DATE: 1/20/92

a) Withdrawals, Diversions and Consumptive Use - All Facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

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	26.60	793.33	0.00	119.00	0.17	0.00	0.02	1059.50	0.00	145.62
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	29.00	35.01	0.00	5.25	0.01	0.00	0.00	0.00	0.00	0.00
4	8.00	0.00	0.80	28.67	0.00	22.36	0.00	0.00	0.00	325.02	0.00	34.25
5	6.40	0.00	3.30	8.91	0.00	7.13	0.00	0.00	0.00	36.67	0.00	23.16
6	220.00	0.00	22.00	864.40	0.00	15.22	0.00	0.00	0.00	15.31	0.00	10.43
7	2394.00	0.00	8.00	1753.86	0.00	15.81	0.00	0.00	0.00	1084.40	0.00	37.22
8	1247.00	0.00	3.00	5355.85	0.00	48.20	0.00	0.00	0.00	4147.86	0.00	23.81
9	146420.00	0.00	0.00	56124.58	-4159.26	0.00	0.00	0.00	0.00	6602.85	0.00	51.20
10	555.00	555.00	0.00	132.38	-738.19	0.00	0.00	0.00	0.00	202544.58	-4159.26	0.00
Total	151406.40	555.00	92.70	65096.97	-4897.46	232.97	0.18	0.00	0.02	216503.55	-4342.46	325.89

b) Withdrawals by Source - All Facilities

Water- Use Categ.	NEW YORK			ONTARIO			PENNSYLVANIA			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	96.00	139.00	31.00	736.46	36.89	19.98	0.00	0.00	0.17	832.46	175.89	51.15
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	35.01	0.00	0.00	0.01	101.00	96.00	128.02
4	7.00	0.00	1.00	0.00	21.24	7.42	0.00	0.00	0.00	7.00	21.24	8.42
5	2.50	0.00	3.90	0.00	0.00	8.91	0.00	0.00	0.00	2.50	0.00	12.81
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	2394.00	0.00	0.00	1753.86	0.00	0.00	0.00	0.00	0.00	4147.86	0.00	0.00
8	1247.00	0.00	0.00	5355.85	0.00	0.00	0.00	0.00	0.00	6602.85	0.00	0.00
9	146420.00	0.00	0.00	45777.81	10346.77	0.00	0.00	0.00	0.00	192197.81	10346.77	0.00
10	555.00	0.00	0.00	0.00	132.38	0.00	0.00	0.00	0.00	555.00	132.38	0.00
Total	151002.50	235.00	168.90	54378.97	10643.59	74.41	0.00	0.00	0.18	205381.47	10878.59	243.49

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	-4159.26	0.00	0.00	0.00	0.00	0.00
10	555.00	0.00	-738.19	0.00	0.00	0.00	-4159.26	0.00
Total	555.00	0.00	-4897.46	0.00	0.00	0.00	-4342.46	0.00

a) Withdrawals, Diversions and Consumptive Use - Principal Facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

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	118.46	0.00	0.00	0.00	789.70	0.00	118.46
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	359.30	0.00	14.40	0.00	0.00	0.00	359.30	0.00	14.40
7	2394.00	0.00	8.00	1753.86	0.00	15.81	0.00	0.00	0.00	4147.86	0.00	23.81
8	1247.00	0.00	3.00	5355.85	0.00	48.20	0.00	0.00	0.00	6602.85	0.00	51.20
9	50021.00	0.00	0.00	56124.58	-4159.26	0.00	0.00	0.00	0.00	106145.58	-4159.26	0.00
10	555.00	555.00	0.00	132.38	-738.19	0.00	0.00	0.00	0.00	687.38	-183.19	0.00
Total	54217.00	555.00	11.00	65015.66	-4897.46	196.87	0.00	0.00	0.00	119232.66	-4342.46	207.87

b) Withdrawals by Source - Principal Facilities

Water- Use Categ.	NEW YORK			ONTARIO			PENNSYLVANIA			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	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	2394.00	0.00	0.00	1753.86	0.00	0.00	0.00	0.00	0.00	4147.86	0.00	0.00
8	1247.00	0.00	0.00	5355.85	0.00	0.00	0.00	0.00	0.00	6602.85	0.00	0.00
9	50021.00	0.00	0.00	45777.81	10346.77	0.00	0.00	0.00	0.00	95798.81	10346.77	0.00
10	555.00	0.00	0.00	0.00	132.38	0.00	0.00	0.00	0.00	555.00	132.38	0.00
Total	54217.00	0.00	0.00	54378.63	10618.61	18.43	0.00	0.00	0.00	108595.63	10618.61	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	-4159.26	0.00	0.00	0.00	-4159.26	0.00
10	555.00	0.00	-738.19	0.00	0.00	0.00	-183.19	0.00
Total	555.00	0.00	-4897.46	0.00	0.00	0.00	-4342.46	0.00

a) Withdrawals, Diversions and Consumptive Use - All Facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

Water- Use Categ.	NEW YORK			ONTARIO			QUEBEC			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	126.00	0.00	12.60	152.99	0.00	23.03	1126.43	0.00	112.54	1405.42	0.00	148.17
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
3	90.00	0.00	9.00	33.05	0.00	4.96	71.59	0.00	7.13	194.64	0.00	21.09
4	1.10	0.00	0.11	5.21	0.00	4.06	3.51	0.00	3.16	9.83	0.00	7.34
5	3.00	0.00	2.40	9.54	0.00	7.63	23.27	0.00	18.62	35.82	0.00	28.65
6	73.00	0.00	7.30	158.24	0.00	7.95	125.48	0.00	11.07	356.72	0.00	26.32
7	0.00	0.00	0.00	0.00	0.00	0.00	47.02	0.00	0.00	47.02	0.00	0.00
8	0.00	0.00	0.00	40.81	0.00	0.37	0.00	0.00	0.00	40.81	0.00	0.37
9	143092.00	0.00	0.00	165940.94	0.00	0.00	296558.84	0.00	0.00	605591.78	0.00	0.00
10	161.00	161.00	0.00	35.77	0.00	0.00	0.00	0.00	0.00	196.77	161.00	0.00
Total	143546.10	161.00	31.41	166376.56	0.00	48.00	297956.15	0.00	152.52	607878.81	161.00	231.94

b) Withdrawals by Source - All Facilities

Water- Use Categ.	NEW YORK			ONTARIO			QUEBEC			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	101.00	0.00	25.00	38.02	110.01	4.96	709.04	417.39	0.00	848.06	527.40	29.96
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	51.00	20.00	19.00	0.00	0.00	33.05	0.00	0.00	71.59	51.00	20.00	123.64
4	1.00	0.00	0.10	0.00	3.88	1.33	0.00	0.00	3.51	1.00	3.88	4.94
5	1.00	0.00	2.00	0.00	0.00	9.54	0.00	0.00	23.27	1.00	0.00	34.82
6	68.00	0.00	5.00	124.95	28.27	5.02	0.00	125.48	0.00	192.95	153.75	10.02
7	0.00	0.00	0.00	0.00	0.00	0.00	39.10	7.93	0.00	39.10	7.93	0.00
8	0.00	0.00	0.00	40.81	0.00	0.00	0.00	0.00	0.00	40.81	0.00	0.00
9	143092.00	0.00	0.00	78105.48	87835.46	0.00	170795.78	125763.06	0.00	391993.26	213598.53	0.00
10	161.00	0.00	0.00	0.00	35.77	0.00	0.00	0.00	0.00	161.00	35.77	0.00
Total	143475.00	20.00	51.10	78309.27	88013.39	53.90	171543.91	126313.86	98.38	393328.18	214347.25	203.37

c) Diversions by Type - All Facilities

Water- Use Categ.	NEW YORK		ONTARIO		QUEBEC		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	161.00	0.00	0.00	0.00	0.00	0.00	161.00	0.00
Total	161.00	0.00	0.00	0.00	0.00	0.00	161.00	0.00

a) Withdrawals, Diversions and Consumptive Use - Principal Facilities

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

Water- Use Categ.	NEW YORK			ONTARIO			QUEBEC			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	0.00	0.00	0.00	152.52	0.00	22.88	1123.41	0.00	112.01	1273.93	0.00	134.89
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	48.61	0.00	4.76	48.61	0.00	4.76
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	156.81	0.00	7.77	124.95	0.00	11.04	281.77	0.00	18.81
7	0.00	0.00	0.00	0.00	0.00	0.00	47.02	0.00	0.00	47.02	0.00	0.00
8	0.00	0.00	0.00	40.81	0.00	0.37	0.00	0.00	0.00	40.81	0.00	0.37
9	85701.00	0.00	0.00	165940.94	0.00	0.00	296558.84	0.00	0.00	548200.78	0.00	0.00
10	161.00	161.00	0.00	35.77	0.00	0.00	0.00	0.00	0.00	196.77	161.00	0.00
Total	85662.00	161.00	0.00	166326.86	0.00	31.01	297900.84	0.00	127.81	550089.89	161.00	158.82

b) Withdrawals by Source - Principal Facilities

Water- Use Categ.	NEW YORK			ONTARIO			QUEBEC			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	0.00	0.00	0.00	38.55	109.72	4.24	708.78	412.64	0.00	747.33	522.36	4.24
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
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	48.61	0.00	0.00	48.61
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	124.90	27.63	4.28	0.00	124.95	0.00	124.90	152.59	4.28
7	0.00	0.00	0.00	0.00	0.00	0.00	39.10	7.93	0.00	39.10	7.93	0.00
8	0.00	0.00	0.00	40.81	0.00	0.00	0.00	0.00	0.00	40.81	0.00	0.00
9	85701.00	0.00	0.00	78105.48	87835.46	0.00	170795.78	125763.06	0.00	334602.26	213598.53	0.00
10	161.00	0.00	0.00	0.00	35.77	0.00	0.00	0.00	0.00	161.00	35.77	0.00
Total	85662.00	0.00	0.00	78309.75	88008.59	8.52	171543.65	126208.58	48.61	335715.40	214317.17	57.13

c) Diversions by Type - Principal Facilities

Water- Use Categ.	NEW YORK		ONTARIO		QUEBEC		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	161.00	0.00	0.00	0.00	0.00	0.00	161.00	0.00
Total	161.00	0.00	0.00	0.00	0.00	0.00	161.00	0.00

DATE: 1/20/92

UNITS: Mgal(US)/d

YEAR OF DATA: 1990

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	51.42	6.89	11.82	70.12	0.00	0.00	0.00	13.08	32.51	6.68	6.79	45.97	0.00	0.00	0.00	12.26		
Lake Michigan	1416.69	41.00	111.35	1569.04	0.00	1106.58	1106.58	72.97	1416.69	41.00	110.91	1568.60	0.00	1106.58	1106.58	72.91		
Lake Huron	65.51	38.76	47.59	151.85	44.53	0.00	44.53	22.78	65.15	33.22	41.24	139.61	44.53	0.00	44.53	20.94		
Lake Erie	777.93	208.92	122.39	1109.24	-44.53	0.19	-44.34	153.93	617.65	162.26	114.93	894.85	0.00	0.19	0.19	132.11		
Lake Ontario	832.46	175.89	51.15	1059.50	0.00	0.00	0.00	145.62	736.38	36.40	16.92	789.70	0.00	0.00	0.00	118.46		
St. Lawrence River	848.06	527.40	29.96	1405.42	0.00	0.00	0.00	148.17	747.33	522.36	4.24	1273.93	0.00	0.00	0.00	134.89		
Total	3992.07	998.85	374.25	6589.17*	0.00	1106.77	1106.77	679.55*	3615.70	801.93	295.03	4712.66	44.53	1106.77	1151.30	491.56		

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	1103.38	0.00	0.00	1103.38	0.00	1103.38	1103.38	0.00	1103.38	0.00	0.00	1103.38	0.00	1103.38	1103.38	0.00		
Indiana	82.81	30.91	55.40	169.12	0.00	0.00	0.00	25.37	82.81	30.91	54.89	168.61	0.00	0.00	0.00	25.30		
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	33.59	4.28	4.90	42.77	0.00	0.00	0.00	8.98	14.65	4.23	4.62	23.50	0.00	0.00	0.00	8.91		
New York	357.00	185.00	56.00	598.00	0.00	0.00	0.00	59.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Ohio	469.36	111.44	37.59	618.49	0.00	0.19	0.19	92.77	469.08	110.90	32.39	612.37	0.00	0.19	0.19	91.85		
Ontario	965.69	207.35	152.08	1325.12	0.00	0.00	0.00	198.85	965.71	200.80	140.57	1307.08	44.53	0.00	44.53	196.06		
Pennsylvania	39.70	1.48	2.18	43.36	0.00	0.00	0.00	4.34	39.70	1.45	1.31	42.46	0.00	0.00	0.00	4.25		
Quebec	709.04	417.39	0.00	1126.43	0.00	0.00	0.00	112.54	708.78	412.64	0.00	1121.41	0.00	0.00	0.00	112.01		
Wisconsin	231.50	41.00	66.00	338.50	0.00	3.20	3.20	53.90	231.60	41.00	61.25	333.85	0.00	3.20	3.20	53.18		
Total	3992.07	998.85	374.25	6589.17*	0.00	1106.77	1106.77	679.55*	3615.70	801.93	295.03	4712.66	44.53	1106.77	1151.30	491.56		

*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.

a) Water-Use by Basin - All Jurisdictions

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

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	1.43	0.56	1.76	3.75	0.00	0.00	0.00	0.42	1.43	0.54	0.00	1.97	0.00	0.00	0.00	0.15
Lake Michigan	26.84	17.95	41.25	86.04	0.00	5.51	5.51	7.71	26.84	17.90	3.09	47.83	0.00	5.51	5.51	3.14
Lake Huron	0.00	0.00	29.62	29.62	0.00	0.00	0.00	4.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Erie	10.13	10.03	158.09	178.25	0.00	0.00	0.00	22.74	0.00	0.03	0.98	1.01	0.00	0.00	0.00	0.15
Lake Ontario	101.00	96.00	128.02	325.02	0.00	0.00	0.00	34.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Lawrence River	51.00	20.00	123.64	194.64	0.00	0.00	0.00	21.09	0.00	0.00	48.61	48.61	0.00	0.00	0.00	4.76
Total	190.40	144.54	482.38	817.32	0.00	5.51	5.51	90.65	28.27	18.47	52.68	99.42	0.00	5.51	5.51	8.20

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	26.84	0.04	0.10	26.98	0.00	5.51	5.51	0.00	26.84	0.00	0.00	26.84	0.00	5.51	5.51	0.00
Indiana	0.00	17.94	28.58	46.52	0.00	0.00	0.00	6.98	0.00	17.93	3.13	21.06	0.00	0.00	0.00	3.15
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	1.43	0.56	0.05	2.04	0.00	0.00	0.00	0.16	1.43	0.54	0.00	1.97	0.00	0.00	0.00	0.15
New York	162.00	126.00	170.00	458.00	0.00	0.00	0.00	45.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ohio	0.13	0.00	60.29	60.42	0.00	0.00	0.00	9.06	0.00	0.00	0.94	0.94	0.00	0.00	0.00	0.14
Ontario	0.00	0.00	128.72	128.72	0.00	0.00	0.00	19.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania	0.00	0.00	1.98	1.98	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	71.59	71.59	0.00	0.00	0.00	7.13	0.00	0.00	48.61	48.61	0.00	0.00	0.00	4.76
Wisconsin	0.00	0.00	21.07	21.07	0.00	0.00	0.00	2.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	190.40	144.54	482.38	817.32	0.00	5.51	5.51	90.65	28.27	18.47	52.68	99.42	0.00	5.51	5.51	8.20

a) Water-Use by Basin - All Jurisdictions

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

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	0.53	0.06	0.59	0.00	0.00	0.00	0.49	0.00	0.31	0.00	0.31	0.00	0.00	0.00	0.27		
Lake Michigan	0.00	3.80	19.61	23.41	0.00	0.00	0.00	18.25	0.00	3.28	13.23	16.51	0.00	0.00	0.00	13.85		
Lake Huron	0.00	20.16	6.09	26.25	0.00	0.00	0.00	20.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Lake Erie	1.20	102.08	39.30	142.57	0.00	0.00	0.00	112.07	0.00	6.63	2.03	8.66	0.00	0.00	0.00	7.89		
Lake Ontario	7.00	21.24	8.42	36.67	0.00	0.00	0.00	23.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
St.Lawrence River	1.00	3.88	4.94	9.83	0.00	0.00	0.00	7.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Total	9.20	151.69	78.42	476.31*	0.00	0.00	0.00	406.77*	0.00	10.22	15.26	25.48	0.00	0.00	0.00	22.01		

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	0.00	0.00	0.00	0.00	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	4.03	9.26	13.29	0.00	0.00	0.00	11.97	0.00	3.57	8.69	12.26	0.00	0.00	0.00	11.02		
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			
Minnesota	0.00	0.40	0.00	0.40	0.00	0.00	0.00	0.34	0.00	0.31	0.00	0.31	0.00	0.00	0.00	0.27		
New York	9.20	0.00	1.50	10.70	0.00	0.00	0.00	1.07	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	4.44	0.77	5.21	0.00	0.00	0.00	4.69		
Ontario	0.00	137.90	48.24	186.14	0.00	0.00	0.00	145.19	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	1.90	0.80	2.70	0.00	0.00	0.00	2.53		
Quebec	0.00	0.00	3.51	3.51	0.00	0.00	0.00	3.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Wisconsin	0.00	0.10	10.90	11.00	0.00	0.00	0.00	7.08	0.00	0.00	5.00	5.00	0.00	0.00	0.00	3.50		
Total	9.20	151.69	78.42	476.31*	0.00	0.00	0.00	406.77*	0.00	10.22	15.26	25.48	0.00	0.00	0.00	22.01		

*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.

a) Water-Use by Basin - All Jurisdictions

UNITS: Mgal(US)/d

YEAR OF DATA: 1990

Basin	All Facilities							Consumptive Use
	Withdrawals				Diversions			
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	
Lake Superior	0.67	0.35	3.87	4.89	0.00	0.00	0.00	3.95
Lake Michigan	0.00	2.57	25.22	27.79	0.00	0.00	0.00	9.23
Lake Huron	0.00	0.00	16.81	16.81	0.00	0.00	0.00	13.45
Lake Erie	0.50	2.09	30.46	33.05	0.00	0.00	0.00	26.42
Lake Ontario	2.50	0.00	12.81	15.31	0.00	0.00	0.00	10.43
St. Lawrence River	1.00	0.00	34.82	35.82	0.00	0.00	0.00	28.65
Total	4.67	5.01	123.98	133.66	0.00	0.00	0.00	92.13

Basin	Principal Facilities							Consumptive Use
	Withdrawals				Diversions			
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	
Lake Superior	0.67	0.00	0.00	0.67	0.00	0.00	0.00	0.00
Lake Michigan	0.00	1.57	1.23	2.80	0.00	0.00	0.00	2.24
Lake Huron	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Erie	0.00	0.49	1.47	1.96	0.00	0.00	0.00	1.57
Lake Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Lawrence River	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.67	2.06	2.70	5.43	0.00	0.00	0.00	3.81

b) Water-Use by Jurisdiction - All Basins

Jurisdiction	All Facilities							Consumptive Use
	Withdrawals				Diversions			
	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	1.57	7.03	8.60	0.00	0.00	0.00	6.88
Michigan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Minnesota	0.57	0.35	2.05	3.07	0.00	0.00	0.00	2.40
New York	4.00	0.00	6.80	10.80	0.00	0.00	0.00	6.80
Ohio	0.00	2.09	10.67	12.76	0.00	0.00	0.00	10.21
Ontario	0.00	0.00	52.66	52.66	0.00	0.00	0.00	42.13
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quebec	0.00	0.00	23.27	23.27	0.00	0.00	0.00	18.62
Wisconsin	0.00	1.00	21.50	22.50	0.00	0.00	0.00	5.10
Total	4.67	5.01	123.98	133.66	0.00	0.00	0.00	92.13

Jurisdiction	Principal Facilities							Consumptive Use
	Withdrawals				Diversions			
	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	1.57	1.23	2.80	0.00	0.00	0.00	2.24
Michigan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Minnesota	0.67	0.00	0.00	0.67	0.00	0.00	0.00	0.00
New York	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ohio	0.00	0.49	1.47	1.96	0.00	0.00	0.00	1.57
Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quebec	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
Total	0.67	2.06	2.70	5.43	0.00	0.00	0.00	3.81

DATE: 1/20/92

a) Water-Use by Basin - All Jurisdictions

UNITS: Mgal(US)/d

YEAR OF DATA: 1990

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	257.33	73.84	2.26	333.43	0.00	0.00	0.00	53.19	257.20	73.62	2.14	332.96	0.00	0.00	0.00	53.12		
Lake Michigan	1871.63	361.23	35.55	2268.41	0.00	5.63	5.63	155.01	1871.63	331.20	24.64	2227.47	0.00	5.63	5.63	150.94		
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	614.27	215.87	36.19	866.33	0.00	0.00	0.00	66.15	559.19	214.77	30.59	804.54	0.00	0.00	0.00	59.96		
Lake Ontario	935.01	106.30	43.09	1084.40	0.00	0.00	0.00	37.22	754.74	103.05	1.51	859.30	0.00	0.00	0.00	14.40		
St. Lawrence River	192.95	153.75	10.02	356.72	0.00	0.00	0.00	26.32	124.90	152.59	4.28	281.77	0.00	0.00	0.00	18.81		
Total	4552.41	986.01	139.50	6995.92*	0.00	5.63	5.63	486.87*	4248.85	949.48	74.92	5273.25	0.00	5.63	5.63	314.03		

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	11.55	0.00	0.00	11.55	0.00	5.63	5.63	5.07	11.55	0.00	0.00	11.55	0.00	5.63	5.63	5.07		
Indiana	1858.72	17.65	26.31	1902.68	0.00	0.00	0.00	114.16	1858.72	17.61	25.45	1901.78	0.00	0.00	0.00	114.10		
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	88.21	63.56	0.13	151.90	0.00	0.00	0.00	45.70	88.20	63.37	0.11	151.68	0.00	0.00	0.00	45.67		
New York	303.00	0.00	48.40	351.40	0.00	0.00	0.00	35.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Ohio	51.84	182.24	19.96	254.04	0.00	0.00	0.00	25.40	51.84	182.08	19.74	253.66	0.00	0.00	0.00	25.36		
Ontario	2182.99	245.60	31.62	2460.21	0.00	0.00	0.00	70.93	2182.54	240.08	27.82	2450.44	0.00	0.00	0.00	69.42		
Pennsylvania	47.74	1.48	1.06	50.28	0.00	0.00	0.00	10.40	47.74	1.39	0.10	49.23	0.00	0.00	0.00	10.37		
Quebec	0.00	125.48	0.00	125.48	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	8.36	350.00	12.02	370.38	0.00	0.00	0.00	37.04	8.26	320.00	1.70	329.96	0.00	0.00	0.00	32.99		
Total	4552.41	986.01	139.50	6995.92*	0.00	5.63	5.63	486.87*	4248.85	949.48	74.92	5273.25	0.00	5.63	5.63	314.03		

*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.

a) Water-Use by Basin - All Jurisdictions

UNITS: Mgal(US)/d

YEAR OF DATA: 1990

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	700.00	12.59	0.01	712.60	0.00	0.00	0.00	7.94	439.23	12.51	0.00	451.74	0.00	0.00	0.00	4.55		
Lake Michigan	4799.91	132.44	2.68	4935.03	0.00	0.00	0.00	57.35	1800.91	8.00	0.00	1808.91	0.00	0.00	0.00	22.65		
Lake Huron	889.40	0.03	0.00	889.43	0.00	0.00	0.00	9.68	236.96	0.00	0.00	236.96	0.00	0.00	0.00	1.20		
Lake Erie	10238.00	115.02	0.27	10353.29	0.00	0.00	0.00	83.68	6017.05	114.93	0.27	6132.25	0.00	0.00	0.00	28.81		
Lake Ontario	4147.86	0.00	0.00	4147.86	0.00	0.00	0.00	23.81	4147.86	0.00	0.00	4147.86	0.00	0.00	0.00	23.81		
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	20814.27	268.00	2.96	21085.23	0.00	0.00	0.00	182.46	12681.11	143.36	0.27	12824.74	0.00	0.00	0.00	81.02		

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	672.28	0.00	0.00	672.28	0.00	0.00	0.00	0.00	672.28	0.00	0.00	672.28	0.00	0.00	0.00	0.00		
Indiana	1128.63	0.00	0.27	1128.90	0.00	0.00	0.00	22.58	1128.63	0.00	0.27	1128.90	0.00	0.00	0.00	22.58		
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	0.75	12.55	0.01	13.31	0.00	0.00	0.00	0.26	0.75	12.47	0.00	13.22	0.00	0.00	0.00	0.26		
New York	2862.00	0.00	0.00	2862.00	0.00	0.00	0.00	9.00	2862.00	0.00	0.00	2862.00	0.00	0.00	0.00	9.00		
Ohio	2440.79	114.93	0.00	2555.72	0.00	0.00	0.00	0.22	2440.79	114.93	0.00	2555.72	0.00	0.00	0.00	0.22		
Ontario	5431.34	0.04	0.00	5431.38	0.00	0.00	0.00	48.28	5431.34	0.04	0.00	5431.38	0.00	0.00	0.00	48.28		
Pennsylvania	74.62	0.00	0.00	74.62	0.00	0.00	0.00	0.28	74.62	0.00	0.00	74.62	0.00	0.00	0.00	0.28		
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	2065.60	8.00	0.40	2074.00	0.00	0.00	0.00	20.90	31.60	8.00	0.00	39.60	0.00	0.00	0.00	0.40		
Total	20814.27	268.00	2.96	21085.23	0.00	0.00	0.00	182.46	12681.11	143.36	0.27	12824.74	0.00	0.00	0.00	81.02		

a) Water-Use by Basin - All Jurisdictions

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

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	5811.02	0.00	0.00	5811.02	0.00	0.00	0.00	43.20	2139.73	0.00	0.00	2139.73	0.00	0.00	0.00	0.00	0.00	
Lake Huron	5934.97	0.00	0.00	5934.97	0.00	0.00	0.00	53.42	5934.97	0.00	0.00	5934.97	0.00	0.00	0.00	0.00	53.42	
Lake Erie	45.02	0.00	0.00	45.02	0.00	0.00	0.00	6.30	45.02	0.00	0.00	45.02	0.00	0.00	0.00	0.00	6.30	
Lake Ontario	6602.85	0.00	0.00	6602.85	0.00	0.00	0.00	51.20	6602.85	0.00	0.00	6602.85	0.00	0.00	0.00	0.00	51.20	
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	0.00	0.37	
Total	18434.67	0.00	0.00	18434.67	0.00	0.00	0.00	154.49	14763.38	0.00	0.00	14763.38	0.00	0.00	0.00	0.00	111.29	

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	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	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	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	1247.00	0.00	0.00	1247.00	0.00	0.00	0.00	3.00	1247.00	0.00	0.00	1247.00	0.00	0.00	0.00	0.00	3.00	
Ohio	45.02	0.00	0.00	45.02	0.00	0.00	0.00	6.30	45.02	0.00	0.00	45.02	0.00	0.00	0.00	0.00	6.30	
Ontario	11331.63	0.00	0.00	11331.63	0.00	0.00	0.00	101.99	11331.63	0.00	0.00	11331.63	0.00	0.00	0.00	0.00	101.99	
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	1510.00	0.00	0.00	1510.00	0.00	0.00	0.00	15.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total	18434.67	0.00	0.00	18434.67	0.00	0.00	0.00	154.49	14763.38	0.00	0.00	14763.38	0.00	0.00	0.00	0.00	111.29	

a) Water-Use by Basin - All Jurisdictions

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

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	42078.18	0.00	42078.18	0.00	-2937.06	-2937.06	0.00	0.00	42079.18	0.00	42079.18	0.00	-2937.06	-2937.06	0.00		
Lake Michigan	0.00	12793.17	0.00	12793.17	0.00	0.00	0.00	0.00	0.00	12793.17	0.00	12793.17	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	23750.91	21106.25	0.00	44857.17	0.00	0.00	0.00	0.00		
Lake Erie	4719.26	0.00	0.00	4719.26	4159.26	0.00	4159.26	0.00	4719.26	0.00	0.00	4719.26	4159.26	0.00	4159.26	0.00		
Lake Ontario	192197.81	10346.77	0.00	202544.58	-4159.26	0.00	-4159.26	0.00	95798.81	10346.77	0.00	106145.58	-4159.26	0.00	-4159.26	0.00		
St. Lawrence River	391993.26	213598.53	0.00	605591.78	0.00	0.00	0.00	0.00	334602.26	213598.53	0.00	548200.78	0.00	0.00	0.00	0.00		
Total	612661.24	299922.90	0.00	912584.14	0.00	-2937.06	-2937.06	0.00	458871.24	299923.90	0.00	758795.14	0.00	-2937.06	-2937.06	0.00		

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		
Indiana	0.00	44.47	0.00	44.47	0.00	0.00	0.00	0.00	0.00	44.47	0.00	44.47	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	3881.00	0.00	3881.00	0.00	0.00	0.00	0.00	0.00	3881.00	0.00	3881.00	0.00	0.00	0.00	0.00		
New York	290072.00	0.00	0.00	290072.00	0.00	0.00	0.00	0.00	136282.00	0.00	0.00	136282.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Ontario	151793.47	157272.82	0.00	309066.29	0.00	-2937.06	-2937.06	0.00	151793.47	157272.82	0.00	309066.29	0.00	-2937.06	-2937.06	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	170795.78	125763.06	0.00	296558.84	0.00	0.00	0.00	0.00	170795.78	125763.06	0.00	296558.84	0.00	0.00	0.00	0.00		
Wisconsin	0.00	12961.54	0.00	12961.54	0.00	0.00	0.00	0.00	0.00	12962.54	0.00	12749.70	0.00	0.00	0.00	0.00		
Total	612661.24	299922.90	0.00	912584.14	0.00	-2937.06	-2937.06	0.00	458871.24	299923.90	0.00	758795.14	0.00	-2937.06	-2937.06	0.00		

a) Water-Use by Basin - All Jurisdictions

UNITS: Mgal(US)/d
YEAR OF DATA: 1990

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	0.16	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.16	0.00	0.00	0.00	0.00		
Lake Michigan	299.59	0.04	0.09	299.72	0.00	299.59	299.59	0.01	299.59	0.03	0.02	299.64	0.00	299.59	299.59	0.00		
Lake Huron	0.00	39.32	0.00	39.32	0.00	0.00	0.00	0.00	0.00	39.32	0.00	39.32	0.00	0.00	0.00	0.00		
Lake Erie	738.19	0.00	0.00	738.19	738.19	-18.35	719.84	0.00	738.19	0.00	0.00	738.19	738.19	-18.35	719.84	0.00		
Lake Ontario	555.00	132.38	0.00	687.38	-183.19	0.00	-183.19	0.00	555.00	132.38	0.00	687.38	-183.19	0.00	-183.19	0.00		
St. Lawrence River	161.00	35.77	0.00	196.77	161.00	0.00	161.00	0.00	161.00	35.77	0.00	196.77	161.00	0.00	161.00	0.00		
Total	1753.78	207.51	0.25	1961.54	716.00	281.24	997.24	0.01	1753.78	207.50	0.18	1961.46	716.00	281.24	997.24	0.00		

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	299.59	0.00	0.00	299.59	0.00	299.59	299.59	0.00	299.59	0.00	0.00	299.59	0.00	299.59	299.59	0.00		
Indiana	0.00	0.04	0.09	0.13	0.00	0.00	0.00	0.01	0.00	0.03	0.02	0.05	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	0.00	0.16	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.16	0.00	0.00	0.00	0.00		
New York	716.00	0.00	0.00	716.00	716.00	0.00	716.00	0.00	716.00	0.00	0.00	716.00	716.00	0.00	716.00	0.00		
Ohio	0.00	0.00	0.00	0.00	0.00	-18.35	-18.35	0.00	0.00	0.00	0.00	0.00	0.00	-18.35	-18.35	0.00		
Ontario	738.19	207.47	0.00	945.66	0.00	0.00	0.00	0.00	738.19	207.47	0.00	945.66	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	1753.78	207.51	0.25	1961.54	716.00	281.24	997.24	0.01	1753.78	207.50	0.18	1961.46	716.00	281.24	997.24	0.00		

Appendix A-2

1990 GREAT LAKES BASIN SUMMARY REPORT

1990 JURISDICTION REPORTS
(Million Litres Per Day)

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

1990 BASIN SUMMARY REPORTS

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

SUMMARY REPORT - GREAT LAKES BASIN

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

DATE: 01/17/92
 UNITS: ML/d
 YEAR OF DATA: 1990

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	15111.57	3781.04	1416.70	24942.65*	0.00	4189.56	4189.56	2572.36*	13686.89	3035.62	1116.80	17839.31	168.58	4189.56	4358.14	1860.75		
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	720.74	547.14	1825.99	3093.87	0.00	20.86	20.86	343.15	107.01	69.92	199.41	376.34	0.00	20.86	20.86	31.02		
4	34.83	574.21	296.84	1803.01*	0.00	0.00	0.00	1539.80*	0.00	38.69	57.77	96.45	0.00	0.00	0.00	83.32		
5	17.68	18.96	469.33	505.97	0.00	0.00	0.00	348.85	2.54	7.80	10.22	20.55	0.00	0.00	0.00	14.42		
6	17232.70	3732.45	528.07	26482.38*	0.00	21.31	21.31	1843.14*	16083.60	3594.18	283.59	19961.37	0.00	21.31	21.31	1188.72		
7	78790.31	1014.50	11.20	79816.02	0.00	0.00	0.00	690.67	48003.07	542.69	1.02	48546.78	0.00	0.00	0.00	306.68		
8	69782.62	0.00	0.00	69782.62	0.00	0.00	0.00	584.79	55885.33	0.00	0.00	55885.33	0.00	0.00	0.00	421.26		
9	2319168.32	1135329.21	0.00	3454497.53	0.00	-11117.95	-11117.95	0.00	1737012.08	1135332.99	0.00	2872345.07	0.00	-11117.95	-11117.95	0.00		
10	6638.77	785.50	0.95	7425.22	2710.34	1064.61	3774.95	0.04	6638.77	785.46	0.68	7424.92	2710.34	1064.61	3774.95	0.00		
Total	2507497.53	1145783.03	4549.08	3668349.27*	2710.34	-5821.61	-3111.27	7922.81*	1877419.29	1143407.34	1669.49	3022496.13	2878.92	-5821.61	-2942.69	3906.18		

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	3826.48	159641.57	75.46	163543.51	0.00	-11117.95	-11117.95	299.29	2767.26	159641.20	34.41	162442.86	0.00	-11117.95	-11117.95	266.29		
Lake Michigan	53849.85	50547.38	892.41	105285.64	0.00	5365.08	5365.08	1376.87	28600.15	49952.67	579.62	79132.44	0.00	5365.08	5365.08	1005.89		
Lake Huron	118566.47	80551.65	425.84	199543.97	168.58	0.00	168.58	534.61	116095.28	80451.39	200.60	196747.27	168.58	0.00	168.58	349.60		
Lake Erie	64898.81	2475.66	1463.80	68838.28	18370.27	-68.74	18301.53	1784.27	48060.84	1889.33	568.85	50519.02	18538.85	-68.74	18470.11	896.34		
Lake Ontario	777450.82	41179.84	921.71	819552.37	-16437.95	0.00	-16437.95	1232.85	411077.96	40195.71	69.75	451343.42	-16437.95	0.00	-16437.95	786.87		
St. Lawrence River	1488905.09	811390.93	769.85	2301065.88	609.45	0.00	609.45	877.94	1270817.80	811277.05	216.26	2082311.11	609.45	0.00	609.45	601.19		
Total	2507497.53	1145783.03	4549.08	3668349.27*	2710.34	-5821.61	-3111.26	7922.81*	1877419.29	1143407.34	1669.49	3022496.13	2878.93	-5821.61	-2942.68	3906.18		

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	16100.69	0.15	0.38	16101.22	0.00	5352.97	5352.97	19.19	16100.69	0.00	0.00	16100.69	0.00	5352.97	5352.97	19.19		
Indiana	11621.78	441.42	480.52	12543.71	0.00	0.00	0.00	711.47	11621.78	439.45	354.62	12415.84	0.00	0.00	0.00	675.28		
Michigan	31269.08	471.51	8.63	42268.85*	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	471.85	15000.39	27.63	15499.88	0.00	0.00	0.00	218.95	400.12	14997.44	18.51	15416.07	0.00	0.00	0.00	209.18		
New York	1119463.84	1177.26	1070.13	1121711.23	2710.34	0.00	2710.34	688.06	534146.04	0.00	0.00	534146.04	2710.34	0.00	2710.34	45.42		
Ohio	11383.22	1581.54	502.74	13467.50	0.00	-68.74	-68.74	583.44	11381.67	1562.76	209.37	13153.80	0.00	-68.74	-68.74	492.59		
Ontario	652767.57	598263.27	1564.60	1252635.44	0.00	-11117.95	-11117.95	2372.21	652765.95	597795.58	0.00	1251198.94	168.58	-11117.95	-10949.37	1573.78		
Pennsylvania	613.46	19.38	22.79	655.63	0.00	0.00	0.00	68.18	613.46	17.94	8.37	639.77	0.00	0.00	0.00	65.98		
Quebec	649363.00	478149.00	372.40	1127884.40	0.00	0.00	0.00	577.35	649362.00	478129.00	184.00	1127675.00	0.00	0.00	0.00	483.80		
Wisconsin	14443.03	50579.11	499.26	65521.40	0.00	12.11	12.11	534.24	1027.58	50465.17	257.22	51749.97	0.00	12.11	12.11	340.95		
Total	2507497.53	1145783.03	4549.08	3668349.27*	2710.34	-5821.61	-3111.26	7922.81*	1877419.29	1143407.34	1669.49	3022496.13	2878.93	-5821.61	-2942.68	3906.18		

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

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: ML/d
YEAR OF DATA: 1990

Water- Use Categ.	LAKE MICHIGAN			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	4176.73	4176.73	0.00	4176.73	4176.73	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	102.13	20.86	0.00	102.13	20.86	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	43.72	21.31	19.19	43.72	21.31	19.19
7	2544.85	0.00	0.00	2544.85	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	1134.07	1134.07	0.00	1134.07	1134.07	0.00
Total	16101.22	5352.97	19.19	16101.22	5352.97	19.19

b) Withdrawals by Source - All facilities

Water- Use Categ.	LAKE MICHIGAN			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW
1	4176.73	0.00	0.00	4176.73	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	101.60	0.15	0.38	101.60	0.15	0.38
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	43.72	0.00	0.00	43.72	0.00	0.00
7	2544.85	0.00	0.00	2544.85	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	1134.07	0.00	0.00	1134.07	0.00	0.00
Total	16100.69	0.15	0.38	16100.69	0.15	0.38

c) Diversions by Type - All facilities

Water- Use Categ.	LAKE MICHIGAN		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	4176.73	0.00	4176.73
2	0.00	0.00	0.00	0.00
3	0.00	20.86	0.00	20.86
4	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00
6	0.00	21.31	0.00	21.31
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	1134.07	0.00	1134.07
Total	0.00	5352.97	0.00	5352.97

Level of Accuracy of Withdrawal Data:

Level of Aggregation of Withdrawal Data Source:

100% Measured

100% Site-Specific

0% Partially Measured

0% Aggregated

0% Calculated or Estimated

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: ML/d
YEAR OF DATA: 1990

Water- Use Categ.	LAKE MICHIGAN			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	4176.73	4176.73	0.00	4176.73	4176.73	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	101.60	20.86	0.00	101.60	20.86	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	43.72	21.31	19.19	43.72	21.31	19.19
7	2544.85	0.00	0.00	2544.85	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	1134.07	1134.07	0.00	1134.07	1134.07	0.00
Total	16100.69	5352.97	19.19	16100.69	5352.97	19.19

b) Withdrawals by Source - Principal facilities

Water- Use Categ.	LAKE MICHIGAN			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW
1	4176.73	0.00	0.00	4176.73	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	101.60	0.00	0.00	101.60	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	43.72	0.00	0.00	43.72	0.00	0.00
7	2544.85	0.00	0.00	2544.85	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	1134.07	0.00	0.00	1134.07	0.00	0.00
Total	16100.69	0.00	0.00	16100.69	0.00	0.00

c) Diversions by Type - Principal facilities

Water- Use Categ.	LAKE MICHIGAN		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	4176.73	0.00	4176.73
2	0.00	0.00	0.00	0.00
3	0.00	20.86	0.00	20.86
4	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00
6	0.00	21.31	0.00	21.31
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	1134.07	0.00	1134.07
Total	0.00	5352.97	0.00	5352.97

Level of Accuracy of Withdrawal Data: 100% Measured
Level of Aggregation of Withdrawal Data Source: 100% Site-specific

0% Partially Measured 0% Calculated or Estimated
0% Aggregated

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: ML/d
YEAR OF DATA: 1990

Water- Use Categ.	LAKE MICHIGAN			LAKE ERIE			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	504.06	0.00	75.59	136.12	0.00	20.44	640.19	0.00	96.04
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	144.07	0.00	21.61	32.02	0.00	4.81	176.10	0.00	26.42
4	46.98	0.00	42.28	3.33	0.00	3.03	50.31	0.00	45.31
5	25.70	0.00	20.55	6.85	0.00	5.49	32.55	0.00	26.04
6	7167.65	0.00	430.02	34.75	0.00	2.12	7202.40	0.00	432.14
7	4272.31	0.00	85.44	1.02	0.00	0.04	4273.33	0.00	85.47
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	168.34	0.00	0.00	0.00	0.00	0.00	168.34	0.00	0.00
10	0.49	0.00	0.04	0.00	0.00	0.00	0.49	0.00	0.04
Total	12329.61	0.00	675.54	214.10	0.00	35.92	12543.71	0.00	711.47

b) Withdrawals by Source - All facilities

Water- Use Categ.	LAKE MICHIGAN			LAKE ERIE			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	313.47	0.00	190.59	0.00	117.01	19.12	313.47	117.01	209.71
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	67.80	76.28	0.00	0.11	31.91	0.00	67.91	108.19
4	0.00	14.01	32.97	0.00	1.25	2.08	0.00	15.26	35.05
5	0.00	5.94	19.76	0.00	0.00	6.85	0.00	5.94	26.61
6	7035.99	42.51	89.15	0.00	24.30	10.45	7035.99	66.81	99.59
7	4272.31	0.00	0.00	0.00	0.00	1.02	4272.31	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	168.34	0.00	0.00	0.00	0.00	0.00	168.34	0.00
10	0.00	0.15	0.34	0.00	0.00	0.00	0.00	0.15	0.34
Total	11621.78	298.74	409.09	0.00	142.67	71.43	11621.78	441.42	480.52

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: 5.1% Measured 92.8% Partially Measured 2.1% Calculated or Estimated
 Level of Aggregation of Withdrawal Data Source: 98.3% Site-specific 1.7% Aggregated

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: ML/d
YEAR OF DATA: 1990

Water- Use Categ.	LAKE MICHIGAN			LAKE ERIE			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	502.40	0.00	75.37	135.86	0.00	20.40	638.26	0.00	95.77
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	79.46	0.00	11.89	0.26	0.00	0.04	79.72	0.00	11.92
4	43.57	0.00	39.18	2.84	0.00	2.54	46.41	0.00	41.72
5	10.60	0.00	8.48	0.00	0.00	0.00	10.60	0.00	8.48
6	7165.23	0.00	429.91	33.77	0.00	2.01	7198.99	0.00	431.91
7	4272.31	0.00	85.44	1.02	0.00	0.04	4273.33	0.00	85.47
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	168.34	0.00	0.00	0.00	0.00	0.00	168.34	0.00	0.00
10	0.19	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
Total	12242.09	0.00	650.26	173.75	0.00	25.02	12415.84	0.00	675.28

b) Withdrawals by Source - Principal facilities

Water- Use Categ.	LAKE MICHIGAN			LAKE ERIE			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	313.47	0.00	188.93	0.00	117.01	18.85	313.47	117.01	207.78
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	67.76	11.70	0.00	0.11	0.15	0.00	67.87	11.85
4	0.00	12.42	31.15	0.00	1.10	1.74	0.00	13.51	32.90
5	0.00	5.94	4.66	0.00	0.00	0.00	0.00	5.94	4.66
6	7035.99	42.40	86.84	0.00	24.26	9.50	7035.99	66.66	96.34
7	4272.31	0.00	0.00	0.00	0.00	1.02	4272.31	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	168.34	0.00	0.00	0.00	0.00	0.00	168.34	0.00
10	0.00	0.11	0.08	0.00	0.00	0.00	0.00	0.11	0.08
Total	11621.78	296.96	323.35	0.00	142.48	31.27	11621.78	439.45	354.62

c) Diversions by Type - Principal 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:

5.1% Measured

92.8% Partially Measured

2.1% Calculated or Estimated

Level of Aggregation of Withdrawal Data Source:

98.3% Site-specific

1.7% Aggregated

JURISDICTION REPORT - Michigan

a) Withdrawals, Diversions and Consumptive Use - All facilities

DATE: 12/02/91
 UNITS: ML/d
 YEAR OF DATA: 1990

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	465.59*
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	499.67*
7	987.12	0.00	12.83	4132.59	0.00	53.75	2469.86	0.00	32.10	15978.31	0.00	207.70	23567.88	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	987.12	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	987.12	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	987.12	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 87% Partially Measured 2% Calculated or Estimated

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

JURISDICTION REPORT - Michigan

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

DATE: 12/09/91
 UNITS: ML/d
 YEAR OF DATA: 1990

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
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
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

DATE: 12/02/91

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: ML/d
YEAR OF DATA: 1990

Water- Use Categ.	LAKE SUPERIOR			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	161.90	0.00	33.99	161.90	0.00	33.99
2	0.00	0.00	0.00	0.00	0.00	0.00
3	7.72	0.00	0.61	7.72	0.00	0.61
4	1.51	0.00	1.29	1.51	0.00	1.29
5	11.62	0.00	9.08	11.62	0.00	9.08
6	575.00	0.00	172.99	575.00	0.00	172.99
7	50.38	0.00	0.98	50.38	0.00	0.98
8	0.00	0.00	0.00	0.00	0.00	0.00
9	14691.13	0.00	0.00	14691.13	0.00	0.00
10	0.61	0.00	0.00	0.61	0.00	0.00
Total	15499.88	0.00	218.95	15499.88	0.00	218.95

b) Withdrawals by Source - All facilities

Water- Use Categ.	LAKE SUPERIOR			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW
1	127.15	16.20	18.55	127.15	16.20	18.55
2	0.00	0.00	0.00	0.00	0.00	0.00
3	5.41	2.12	0.19	5.41	2.12	0.19
4	0.00	1.51	0.00	0.00	1.51	0.00
5	2.54	1.32	7.76	2.54	1.32	7.76
6	333.91	240.60	0.49	333.91	240.60	0.49
7	2.84	47.51	0.04	2.84	47.51	0.04
8	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	14691.13	0.00	0.00	14691.13	0.00
10	0.00	0.00	0.61	0.00	0.00	0.61
Total	471.85	15000.39	27.63	471.85	15000.39	27.63

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: 97% Measured 2.6% Partially Measured .4% Calculated or Estimated
 Level of Aggregation of Withdrawal Data Source: 99.9% Site-specific .1% Aggregated

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: ML/d
YEAR OF DATA: 1990

Water- Use Categ.	LAKE SUPERIOR			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	88.96	0.00	33.73	88.96	0.00	33.73
2	0.00	0.00	0.00	0.00	0.00	0.00
3	7.46	0.00	0.57	7.46	0.00	0.57
4	1.17	0.00	1.02	1.17	0.00	1.02
5	2.54	0.00	0.00	2.54	0.00	0.00
6	574.17	0.00	172.88	574.17	0.00	172.88
7	50.04	0.00	0.98	50.04	0.00	0.98
8	0.00	0.00	0.00	0.00	0.00	0.00
9	14691.13	0.00	0.00	14691.13	0.00	0.00
10	0.61	0.00	0.00	0.61	0.00	0.00
Total	15416.07	0.00	209.18	15416.07	0.00	209.18

b) Withdrawals by Source - Principal facilities

Water- Use Categ.	LAKE SUPERIOR			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW
1	55.46	16.01	17.49	55.46	16.01	17.49
2	0.00	0.00	0.00	0.00	0.00	0.00
3	5.41	2.04	0.00	5.41	2.04	0.00
4	0.00	1.17	0.00	0.00	1.17	0.00
5	2.54	0.00	0.00	2.54	0.00	0.00
6	333.87	239.88	0.42	333.87	239.88	0.42
7	2.84	47.20	0.00	2.84	47.20	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	14691.13	0.00	0.00	14691.13	0.00
10	0.00	0.00	0.61	0.00	0.00	0.61
Total	400.12	14997.44	18.51	400.12	14997.44	18.51

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

Level of Accuracy of Withdrawal Data: 97% Measured 2.6% Partially Measured .4% Calculated or Estimated
 Level of Aggregation of Withdrawal Data Source: 99.9% Site-specific .1% Aggregated

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: ML/d
YEAR OF DATA: 1990

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	3.03	4.16	0.00	0.42	40.50	0.00	4.05
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	1771.57	0.00	3.79	9062.24	0.00	30.28	0.00	0.00	0.00	10833.81	0.00	34.07
8	0.00	0.00	0.00	4720.39	0.00	11.36	0.00	0.00	0.00	4720.39	0.00	11.36
9	2119.82	0.00	0.00	554257.86	0.00	0.00	541660.06	0.00	0.00	1098037.7	0.00	0.00
10	0.00	0.00	0.00	2100.90	2100.90	0.00	609.45	609.45	0.00	2710.34	2710.34	0.00
Total	5198.86	0.00	4.39	573133.36	2100.90	44.67	543379.01	609.45	0.42	1121711.2	2710.34	49.48

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	208.20	0.00	12.87	681.37	0.00	151.42	257.41	0.00	18.93	1146.98	0.00	183.21
7	1771.57	0.00	0.00	9062.24	0.00	0.00	0.00	0.00	0.00	10833.81	0.00	0.00
8	0.00	0.00	0.00	4720.39	0.00	0.00	0.00	0.00	0.00	4720.39	0.00	0.00
9	2119.82	0.00	0.00	554257.86	0.00	0.00	541660.06	0.00	0.00	1098037.7	0.00	0.00
10	0.00	0.00	0.00	2100.90	0.00	0.00	609.45	0.00	0.00	2710.34	0.00	0.00
Total	4749.54	211.98	237.34	571604.44	889.57	639.35	543109.86	75.71	193.43	1119463.8	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	2100.90	0.00	609.45	0.00	2710.34	0.00
Total	0.00	0.00	2100.90	0.00	609.45	0.00	2710.34	0.00

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: ML/d
YEAR OF DATA: 1990

Water-Use Categ.	LAKE ERIE			LAKE ONTARIO			ST. LAWRENCE RIVER			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	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	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	1771.57	0.00	3.79	9062.24	0.00	30.28	0.00	0.00	0.00	10833.81	0.00	34.07
8	0.00	0.00	0.00	4720.39	0.00	11.36	0.00	0.00	0.00	4720.39	0.00	11.36
9	2119.82	0.00	0.00	189349.35	0.00	0.00	324412.33	0.00	0.00	515881.50	0.00	0.00
10	0.00	0.00	0.00	2100.90	2100.90	0.00	609.45	609.45	0.00	2710.34	2710.34	0.00
Total	3891.39	0.00	3.79	205232.88	2100.90	41.64	325021.77	609.45	0.00	534146.04	2710.34	45.42

b) Withdrawals by Source - Principal 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	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	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	1771.57	0.00	0.00	9062.24	0.00	0.00	0.00	0.00	0.00	10833.81	0.00	0.00
8	0.00	0.00	0.00	4720.39	0.00	0.00	0.00	0.00	0.00	4720.39	0.00	0.00
9	2119.82	0.00	0.00	189349.35	0.00	0.00	324412.33	0.00	0.00	515881.50	0.00	0.00
10	0.00	0.00	0.00	2100.90	0.00	0.00	609.45	0.00	0.00	2710.34	0.00	0.00
Total	3891.39	0.00	0.00	205232.88	0.00	0.00	325021.77	0.00	0.00	534146.04	0.00	0.00

c) Diversions by Type - Principal 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	2100.90	0.00	609.45	0.00	2710.34	0.00
Total	0.00	0.00	2100.90	0.00	609.45	0.00	2710.34	0.00

Level of Accuracy of Withdrawal Data:

1.6% Measured

48.4% Partially Measured

50% Calculated or Estimated

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: ML/d
YEAR OF DATA: 1990

Water- Use Categ.	LAKE ERIE			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	2341.23	0.72	351.17	2341.23	0.72	351.17
2	0.00	0.00	0.00	0.00	0.00	0.00
3	228.71	0.00	34.30	228.71	0.00	34.30
4	42.77	0.00	38.50	42.77	0.00	38.50
5	48.30	0.00	38.65	48.30	0.00	38.65
6	961.64	0.00	96.15	961.64	0.00	96.15
7	9674.42	0.00	0.83	9674.42	0.00	0.83
8	170.42	0.00	23.85	170.42	0.00	23.85
9	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	-69.46	0.00	0.00	-69.46	0.00
Total	13467.50	-68.74	583.44	13467.50	-68.74	583.44

b) Withdrawals by Source - All facilities

Water- Use Categ.	LAKE ERIE			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW
1	1776.71	421.84	142.67	1776.71	421.84	142.67
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.49	0.00	228.22	0.49	0.00	228.22
4	0.00	26.88	15.90	0.00	26.88	15.90
5	0.00	7.91	40.39	0.00	7.91	40.39
6	196.23	689.85	75.56	196.23	689.85	75.56
7	9239.36	435.06	0.00	9239.36	435.06	0.00
8	170.42	0.00	0.00	170.42	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	11383.22	1581.54	502.74	11383.22	1581.54	502.74

c) Diversions by Type - All facilities

Water- Use Categ.	LAKE ERIE		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.72	0.00	0.72
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	-69.46	0.00	-69.46
Total	0.00	-68.74	0.00	-68.74

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

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: ML/d
YEAR OF DATA: 1990

Water- Use Categ.	LAKE ERIE			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	2318.06	0.72	347.69	2318.06	0.72	347.69
2	0.00	0.00	0.00	0.00	0.00	0.00
3	3.56	0.00	0.53	3.56	0.00	0.53
4	19.72	0.00	17.75	19.72	0.00	17.75
5	7.42	0.00	5.94	7.42	0.00	5.94
6	960.20	0.00	96.00	960.20	0.00	96.00
7	9674.42	0.00	0.83	9674.42	0.00	0.83
8	170.42	0.00	23.85	170.42	0.00	23.85
9	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	-69.46	0.00	0.00	-69.46	0.00
Total	13153.80	-68.74	492.59	13153.80	-68.74	492.59

b) Withdrawals by Source - Principal facilities

Water- Use Categ.	LAKE ERIE			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW
1	1775.65	419.80	122.61	1775.65	419.80	122.61
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	3.56	0.00	0.00	3.56
4	0.00	16.81	2.91	0.00	16.81	2.91
5	0.00	1.85	5.56	0.00	1.85	5.56
6	196.23	689.25	74.72	196.23	689.25	74.72
7	9239.36	435.06	0.00	9239.36	435.06	0.00
8	170.42	0.00	0.00	170.42	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	11381.67	1562.76	209.37	11381.67	1562.76	209.37

c) Diversions by Type - Principal facilities

Water- Use Categ.	LAKE ERIE		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.72	0.00	0.72
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	-69.46	0.00	-69.46
Total	0.00	-68.74	0.00	-68.74

Level of Accuracy of Withdrawal Data:

0% Measured

0% Partially Measured

100% Calculated or Estimated

Level of Aggregation of Withdrawal Data Source: 100% Site-specific

0% Aggregated

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: ML/d
YEAR OF DATA: 1990

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	80.82	0.00	12.13	574.87	168.58	86.23	778.27	168.58	116.75	3003.07	0.00	450.46	579.13	0.00	87.17	5016.11	0.00	752.74
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	6.22	0.00	0.93	112.11	0.00	16.82	111.29	0.00	16.49	132.53	0.00	19.88	125.09	0.00	18.76	487.24	0.00	73.08
4	0.71	0.00	0.55	99.35	0.00	77.50	476.33	0.00	371.54	108.51	0.00	84.64	19.73	0.00	15.38	704.63	0.00	549.61
5	1.20	0.00	0.96	63.65	0.00	50.92	64.65	0.00	51.72	33.72	0.00	26.98	36.12	0.00	28.89	199.34	0.00	159.47
6	660.60	0.00	25.70	2909.60	0.00	64.30	1871.60	0.00	90.80	3772.10	0.00	57.60	599.00	0.00	30.10	9312.90	0.00	268.50
7	1540.36	0.00	15.01	897.00	0.00	4.54	11483.56	0.00	103.35	6639.05	0.00	59.85	0.00	0.00	0.00	20559.97	0.00	182.75
8	0.00	0.00	0.00	22466.25	0.00	202.20	0.00	0.00	0.00	20274.04	0.00	182.47	154.50	0.00	1.39	42894.79	0.00	386.06
9	143786.07	-11117.95	0.00	169802.50	0.00	0.00	15744.49	15744.49	0.00	212454.19	-15744.49	0.00	628153.50	0.00	0.00	1169940.8	-11117.95	0.00
10	0.00	0.00	0.00	148.83	0.00	0.00	2794.36	2794.36	0.00	501.12	-2794.36	0.00	135.40	0.00	0.00	3579.71	0.00	0.00
Total	146075.98	-11117.95	55.28	197074.11	168.58	502.51	33324.55	18370.27	750.85	246418.33	-18538.85	881.88	629802.47	0.00	181.69	1252695.4	-11117.95	2372.21

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	247.98	146.71	180.13	412.11	72.25	293.91	2787.80	139.64	75.63	143.93	416.42	18.78	3655.52	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	6.22	0.00	0.00	112.11	0.00	0.00	111.29	0.00	0.00	132.53	0.00	0.00	125.09	0.00	0.00	487.24
4	0.00	0.50	0.21	0.00	76.30	23.05	0.00	350.10	126.23	0.00	80.41	28.10	0.00	14.70	5.03	0.00	522.01	182.62
5	0.00	0.00	1.20	0.00	0.00	63.65	0.00	0.00	64.65	0.00	0.00	33.72	0.00	0.00	36.12	0.00	0.00	199.34
6	613.70	38.90	8.00	2578.70	284.00	46.90	1740.10	97.40	34.10	2858.00	402.40	11.70	473.00	107.00	19.00	8263.50	929.70	119.70
7	1540.21	0.15	0.00	897.00	0.00	0.00	11483.56	0.00	0.00	6639.05	0.00	0.00	0.00	0.00	0.00	20559.82	0.15	0.00
8	0.00	0.00	0.00	22466.25	0.00	0.00	0.00	0.00	0.00	20274.04	0.00	0.00	154.50	0.00	0.00	42894.79	0.00	0.00
9	0.00	143786.07	0.00	89966.80	79895.70	0.00	15744.49	0.00	0.00	173787.49	39166.70	0.00	295660.80	332492.70	0.00	574599.58	595341.17	0.00
10	0.00	0.00	0.00	0.00	148.83	0.00	2794.36	0.00	0.00	0.00	501.12	0.00	0.00	135.40	0.00	2794.36	785.35	0.00
Total	2217.61	143815.49	22.88	116096.73	80551.54	425.84	32174.62	519.75	630.18	205846.38	40290.27	781.68	296432.23	333166.22	204.02	652767.57	598363.27	1564.60

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	-11117.95	0.00	0.00	15744.49	0.00	-15744.49	0.00	0.00	0.00	0.00	-11117.95
10	0.00	0.00	0.00	0.00	2794.36	0.00	-2794.36	0.00	0.00	0.00	0.00	0.00
Total	0.00	-11117.95	168.58	0.00	18370.27	0.00	-18538.85	0.00	0.00	0.00	0.00	-11117.95

Level of Accuracy of Withdrawal Data: 7% Measured 93% Partially Measured 0% Calculated or Estimated
 Level of Aggregation of Withdrawal Data Source: 99.9% Site-specific .1% Aggregated

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: ML/d
YEAR OF DATA: 1990

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	79.95	0.00	11.99	528.49	168.58	79.26	772.70	0.00	115.91	2989.34	0.00	448.41	577.34	0.00	86.60	4947.82	168.58	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	25.60	2904.70	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	262.80
7	1540.36	0.00	15.01	897.00	0.00	4.54	11483.56	0.00	103.35	6639.05	0.00	59.85	0.00	0.00	0.00	20559.97	0.00	182.75
8	0.00	0.00	0.00	22466.25	0.00	282.20	0.00	0.00	0.00	20274.04	0.00	182.47	154.50	0.00	1.39	42894.79	0.00	386.06
9	143786.07	-11117.95	0.00	169802.50	0.00	0.00	15744.49	15744.49	0.00	212454.19	-15744.49	0.00	628153.50	0.00	0.00	1169940.8	-11117.95	0.00
10	0.00	0.00	0.00	148.83	0.00	0.00	2794.36	2794.36	0.00	501.12	-2794.36	0.00	135.40	0.00	0.00	3579.71	0.00	0.00
Total	146066.48	-11117.95	52.60	196747.27	168.58	349.60	32660.31	18538.85	308.96	246110.54	-18538.85	745.73	629614.34	0.00	117.39	1251198.9	-10949.37	1573.78

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	63.43	9.27	7.25	246.63	125.76	156.10	412.11	71.94	288.65	2781.50	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	94.20	31.20	2857.80	390.10	5.70	472.80	104.60	16.20	8261.80	908.80	105.30
7	1540.21	0.15	0.00	897.00	0.00	0.00	11483.56	0.00	0.00	6639.05	0.00	0.00	0.00	0.00	0.00	20559.82	0.15	0.00
8	0.00	0.00	0.00	22466.25	0.00	0.00	0.00	0.00	0.00	20274.04	0.00	0.00	154.50	0.00	0.00	42894.79	0.00	0.00
9	0.00	143786.07	0.00	89906.80	29895.70	0.00	15744.49	0.00	0.00	173287.49	39166.70	0.00	295660.80	332492.70	0.00	574599.58	595341.17	0.00
10	0.00	0.00	0.00	0.00	148.83	0.00	2794.36	0.00	0.00	0.00	501.12	0.00	0.00	135.40	0.00	2794.36	785.35	0.00
Total	2217.24	143834.29	14.95	116095.28	80451.39	200.60	32174.32	166.14	319.85	205845.08	40195.71	69.75	296434.03	333148.05	32.26	652765.95	597795.58	637.41

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	168.58	0.00	-168.58	0.00	0.00	0.00	0.00	0.00	168.58	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	-11117.95	0.00	0.00	15744.49	0.00	-15744.49	0.00	0.00	0.00	0.00	-11117.95
10	0.00	0.00	0.00	0.00	2794.36	0.00	-2794.36	0.00	0.00	0.00	0.00	0.00
Total	0.00	-11117.95	168.58	0.00	18370.27	0.00	-18538.85	0.00	0.00	0.00	168.58	-11117.95

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: ML/d
YEAR OF DATA: 1990

Water- Use Categ.	LAKE ERIE			LAKE ONTARIO			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	163.49	0.00	16.35	0.64	0.00	0.08	164.13	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	0.04	0.00	0.00	7.50	0.00	0.76
4	11.20	0.00	10.56	0.00	0.00	0.00	11.20	0.00	10.56
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	190.33	0.00	39.37	0.00	0.00	0.00	190.33	0.00	39.37
7	282.47	0.00	1.06	0.00	0.00	0.00	282.47	0.00	1.06
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	654.95	0.00	68.10	0.68	0.00	0.08	655.63	0.00	68.18

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	7.61	0.00	0.00	0.64	150.28	5.60	8.25
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	0.04	0.00	0.00	7.50
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	4.01	0.00	0.00	0.00	180.71	5.60	4.01
7	282.47	0.00	0.00	0.00	0.00	0.00	282.47	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	613.46	19.38	22.11	0.00	0.00	0.68	613.46	19.38	22.79

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

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: ML/d
YEAR OF DATA: 1990

Water- Use Categ.	LAKE ERIE			LAKE ONTARIO			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	160.73	0.00	16.09	0.00	0.00	0.00	160.73	0.00	16.09
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	10.22	0.00	9.58	0.00	0.00	0.00	10.22	0.00	9.58
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	186.36	0.00	39.25	0.00	0.00	0.00	186.36	0.00	39.25
7	282.47	0.00	1.06	0.00	0.00	0.00	282.47	0.00	1.06
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	639.77	0.00	65.98	0.00	0.00	0.00	639.77	0.00	65.98

b) Withdrawals by Source - Principal facilities

Water- Use Categ.	LAKE ERIE			LAKE ONTARIO			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	150.28	5.49	4.96	0.00	0.00	0.00	150.28	5.49	4.96
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	7.19	3.03	0.00	0.00	0.00	0.00	7.19	3.03
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	180.71	5.26	0.38	0.00	0.00	0.00	180.71	5.26	0.38
7	282.47	0.00	0.00	0.00	0.00	0.00	282.47	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	613.46	17.94	8.37	0.00	0.00	0.00	613.46	17.94	8.37

c) Diversions by Type - Principal 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: 25% Measured 29% Partially Measured 46% Calculated or Estimated
 Level of Aggregation of Withdrawal Data Source: 98.8% Site-specific 1.1% Aggregated

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: ML/d
YEAR OF DATA: 1990

Water- Use Categ.	ST. LAWRENCE RIVER			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	4264.00	0.00	426.00	4264.00	0.00	426.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	271.00	0.00	27.00	271.00	0.00	27.00
4	13.30	0.00	11.97	13.30	0.00	11.97
5	88.10	0.00	70.48	88.10	0.00	70.48
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	1122595.0	0.00	0.00	1122595.0	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00
Total	1127884.4	0.00	577.35	1127884.4	0.00	577.35

b) Withdrawals by Source - All facilities

Water- Use Categ.	ST. LAWRENCE RIVER			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW
1	2684.00	1580.00	0.00	2684.00	1580.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	271.00	0.00	0.00	271.00
4	0.00	0.00	13.30	0.00	0.00	13.30
5	0.00	0.00	88.10	0.00	0.00	88.10
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	646531.00	476064.00	0.00	646531.00	476064.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00
Total	649363.00	478149.00	372.40	649363.00	478149.00	372.40

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: 99.9% Measured 0% Partially Measured .1% Calculated or Estimated
 Level of Aggregation of Withdrawal Data Source: 100% Site-specific 0% Aggregated

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: ML/d
YEAR OF DATA: 1990

Water- Use Categ.	ST. LAWRENCE RIVER			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	4245.00	0.00	424.00	4245.00	0.00	424.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	184.00	0.00	18.00	184.00	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	41.80
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	1122595.0	0.00	0.00	1122595.0	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00
Total	1127675.0	0.00	483.80	1127675.0	0.00	483.80

b) Withdrawals by Source - Principal facilities

Water- Use Categ.	ST. LAWRENCE RIVER			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW
1	2683.00	1562.00	0.00	2683.00	1562.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	184.00	0.00	0.00	184.00
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	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	646531.00	476064.00	0.00	646531.00	476064.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00
Total	649362.00	478129.00	184.00	649362.00	478129.00	184.00

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

Level of Accuracy of Withdrawal Data: 99.9% Measured 0% Partially Measured .1% Calculated or Estimated
 Level of Aggregation of Withdrawal Data Source: 100% Site-specific 0% Aggregated

a) Withdrawals, Diversions and Consumptive Use - All facilities

UNITS: ML/d
YEAR OF DATA: 1990

Water- Use Categ.	LAKE SUPERIOR			LAKE MICHIGAN			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	22.71	0.00	3.41	1258.64	12.11	200.63	1281.36	12.11	204.04
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.26	0.00	0.04	79.49	0.00	7.57	79.76	0.00	7.61
4	0.00	0.00	0.00	41.64	0.00	26.80	41.64	0.00	26.80
5	5.68	0.00	4.92	79.49	0.00	14.38	85.17	0.00	19.31
6	26.57	0.00	2.65	1375.46	0.00	137.56	1402.04	0.00	140.21
7	119.62	0.00	1.21	7731.30	0.00	77.90	7850.91	0.00	79.11
8	0.00	0.00	0.00	5715.95	0.00	57.16	5715.95	0.00	57.16
9	805.68	0.00	0.00	48258.89	0.00	0.00	49064.58	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	980.53	0.00	12.23	64540.87	12.11	522.01	65521.40	12.11	534.24

b) Withdrawals by Source - All facilities

Water- Use Categ.	LAKE SUPERIOR			LAKE MICHIGAN			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	3.79	0.00	18.93	872.53	155.20	230.91	876.32	155.20	249.84
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.26	0.00	0.00	79.49	0.00	0.00	79.76
4	0.00	0.00	0.00	0.00	0.38	41.26	0.00	0.38	41.26
5	0.00	0.00	5.68	0.00	3.79	75.71	0.00	3.79	81.39
6	26.50	0.00	0.08	5.15	1324.89	45.42	31.65	1324.89	45.50
7	119.62	0.00	0.00	7699.50	30.28	1.51	7819.12	30.28	1.51
8	0.00	0.00	0.00	5715.95	0.00	0.00	5715.95	0.00	0.00
9	0.00	805.68	0.00	0.00	48258.89	0.00	0.00	49064.58	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	149.90	805.68	24.95	14293.13	49773.43	474.31	14443.03	50579.11	499.26

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	12.11	0.00	12.11
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	12.11	0.00	12.11

Level of Accuracy of Withdrawal Data:

2.1% Measured

.1% Partially Measured

97.8% Calculated or Estimated

DATE: 12/02/91

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: ML/d
YEAR OF DATA: 1990

Water- Use Categ.	LAKE SUPERIOR			LAKE MICHIGAN			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	5.11	0.00	0.68	1258.64	12.11	200.63	1263.75	12.11	201.31
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	18.93	0.00	13.25	18.93	0.00	13.25
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	26.12	0.00	2.61	1222.91	0.00	122.27	1249.03	0.00	124.88
7	119.62	0.00	1.21	30.28	0.00	0.30	149.90	0.00	1.51
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	809.47	0.00	0.00	48258.89	0.00	0.00	49068.36	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	960.32	0.00	4.50	50789.66	12.11	336.45	51749.97	12.11	340.95

b) Withdrawals by Source - Principal facilities

Water- Use Categ.	LAKE SUPERIOR			LAKE MICHIGAN			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	4.16	0.00	0.95	872.53	155.20	230.91	876.70	155.20	231.86
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	18.93	0.00	0.00	18.93
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	26.12	0.00	0.00	5.15	1211.33	6.44	31.27	1211.33	6.44
7	119.62	0.00	0.00	0.00	30.28	0.00	119.62	30.28	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	809.47	0.00	0.00	48258.89	0.00	0.00	49068.36	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	149.90	809.47	0.95	877.68	49655.70	256.27	1027.58	50465.17	257.22

c) Diversions by Type - Principal facilities

Water- Use Categ.	LAKE SUPERIOR		LAKE MICHIGAN		TOTAL	
	Intrabasin	Interbasin	Intrabasin	Interbasin	Intrabasin	Interbasin
1	0.00	0.00	0.00	12.11	0.00	12.11
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	12.11	0.00	12.11

Level of Accuracy of Withdrawal Data:

2.1% Measured

.1% Partially Measured

97.8% Calculated or Estimated

Level of Aggregation of Withdrawal Data Source:

10.7% Site-specific

89.3% Aggregated

a) Withdrawals, Diversions and Consumptive Use - All Facilities

UNITS: ML/d
YEAR OF DATA: 1990

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	161.90	0.00	33.99	80.82	0.00	12.13	22.71	0.00	3.41	265.43	0.00	49.53
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	7.72	0.00	0.61	6.22	0.00	0.93	0.26	0.00	0.04	14.21	0.00	1.57
4	0.00	0.00	0.00	1.51	0.00	1.29	0.71	0.00	0.55	0.00	0.00	0.00	2.22	0.00	1.84
5	0.00	0.00	0.00	11.62	0.00	9.08	1.20	0.00	0.96	5.68	0.00	4.92	18.50	0.00	14.97
6	0.00	0.00	0.00	575.00	0.00	172.99	660.60	0.00	25.70	26.57	0.00	2.65	1262.18	0.00	201.34
7	987.12	0.00	12.83	50.38	0.00	0.98	1540.36	0.00	15.01	119.62	0.00	1.21	2697.48	0.00	30.04
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	14691.13	0.00	0.00	143786.07	-11117.95	0.00	805.68	0.00	0.00	159282.88	-11117.95	0.00
10	0.00	0.00	0.00	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61	0.00	0.00
Total	987.12	0.00	12.83	15499.88	0.00	218.95	146075.98	-11117.95	55.28	980.53	0.00	12.23	163543.51	-11117.95	299.29

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	127.15	16.20	18.55	63.78	9.87	7.25	3.79	0.00	18.93	194.64	26.07	44.73
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	5.41	2.12	0.19	0.00	0.00	6.22	0.00	0.00	0.26	5.41	2.12	6.67
4	0.00	0.00	0.00	0.00	1.51	0.00	0.00	0.50	0.21	0.00	0.00	0.00	0.00	2.01	0.21
5	0.00	0.00	0.00	2.54	1.32	2.26	0.00	0.00	1.20	0.00	0.00	5.68	2.54	1.32	14.64
6	0.00	0.00	0.00	323.93	240.60	0.49	613.70	38.90	8.00	26.50	0.00	0.08	974.11	279.50	8.57
7	987.12	0.00	0.00	2.84	47.51	0.04	1540.21	0.15	0.00	119.62	0.00	0.00	2649.79	47.66	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	14691.13	0.00	0.00	143786.07	0.00	0.00	805.68	0.00	0.00	159282.88	0.00
10	0.00	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
Total	987.12	0.00	0.00	471.65	15000.19	27.63	2217.61	143635.49	27.88	149.90	805.68	24.95	3826.48	159641.57	75.46

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	-11117.95	0.00	0.00	0.00	-11117.95
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	-11117.95	0.00	0.00	0.00	-11117.95

*The State of Michigan was unable to report by sub-basin for most categories of use.

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: M/d
YEAR OF DATA: 1990

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	88.96	0.00	33.73	79.95	0.00	11.99	5.11	0.00	0.00	174.02	0.00	46.40
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	7.46	0.00	0.57	0.00	0.00	0.00	0.00	0.00	0.00	7.46	0.00	0.57
4	0.00	0.00	0.00	1.17	0.00	1.02	0.00	0.00	0.00	0.00	0.00	0.00	1.17	0.00	1.02
5	0.00	0.00	0.00	2.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.54	0.00	0.00
6	0.00	0.00	0.00	574.17	0.00	172.88	660.10	0.00	25.60	26.12	0.00	2.61	1260.39	0.00	201.09
7	0.00	0.00	0.00	50.04	0.00	0.98	1540.36	0.00	15.01	119.62	0.00	1.21	1710.02	0.00	17.21
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	14691.13	0.00	0.00	143786.07	-11117.95	0.00	809.47	0.00	0.00	159286.66	-11117.95	0.00
10	0.00	0.00	0.00	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61	0.00	0.00
Total	0.00	0.00	0.00	15416.07	0.00	209.18	146066.48	-11117.95	52.60	960.32	0.00	4.50	162442.86	-11117.95	266.29

b) Withdrawals by Source - Principal 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	55.46	16.01	17.49	63.43	9.27	7.25	4.16	0.00	0.95	123.05	25.28	25.68
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	0.00
3	0.00	0.00	0.00	5.41	2.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.41	2.04	0.00
4	0.00	0.00	0.00	0.00	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17	0.00
5	0.00	0.00	0.00	2.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.54	0.00	0.00
6	0.00	0.00	0.00	333.87	239.88	0.42	613.60	38.80	7.70	26.12	0.00	0.00	973.59	278.68	8.12
7	0.00	0.00	0.00	2.84	47.20	0.00	1540.21	0.15	0.00	119.62	0.00	0.00	1662.67	47.35	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	14691.13	0.00	0.00	143786.07	0.00	0.00	809.47	0.00	0.00	159290.45	0.00
10	0.00	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
Total	0.00	0.00	0.00	400.12	14997.44	18.51	2217.24	143834.29	14.95	149.90	809.47	0.95	2767.26	159641.20	34.41

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	-11117.95	0.00	0.00	0.00	-11117.95
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	-11117.95	0.00	0.00	0.00	-11117.95

*The State of Michigan was unable to report by sub-basin for most categories of use.

a) Withdrawals, Diversions and Consumptive Use - All Facilities

UNITS: ML/d
YEAR OF DATA: 1990

Water-Use Categ.	ILLINOIS			INDIANA			MICHIGAN*			WISCONSIN			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	4176.73	4176.73	0.00	504.06	0.00	75.59	0.00	0.00	0.00	1258.64	12.11	209.63	5939.44	4188.84	276.23
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
3	102.13	20.86	0.00	144.07	0.00	21.61	0.00	0.00	0.00	79.49	0.00	7.57	325.70	20.86	29.19
4	0.00	0.00	0.00	46.98	0.00	42.28	0.00	0.00	0.00	41.64	0.00	26.80	88.62	0.00	69.08
5	0.00	0.00	0.00	25.70	0.00	20.55	0.00	0.00	0.00	79.49	0.00	14.38	105.20	0.00	14.94
6	43.72	21.31	19.19	7167.65	0.00	430.02	0.00	0.00	0.00	1375.46	0.00	137.56	8586.83	21.31	586.77
7	2544.85	0.00	0.00	4272.31	0.00	85.44	4132.59	0.00	53.75	7731.30	0.00	77.90	18681.05	0.00	217.09
8	8099.73	0.00	0.00	0.00	0.00	0.00	8181.34	0.00	106.37	5715.95	0.00	57.16	21997.02	0.00	163.53
9	0.00	0.00	0.00	168.34	0.00	0.00	0.00	0.00	0.00	48258.89	0.00	0.00	48427.23	0.00	0.00
10	1134.07	1134.07	0.00	0.49	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	1134.56	1134.07	0.04
Total	16101.22	5352.97	19.19	12329.61	0.00	675.54	12313.93	0.00	160.12	64540.87	12.11	522.01	105285.64	5365.08	1376.83

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	4176.73	0.00	0.00	313.47	0.00	190.59	0.00	0.00	0.00	872.53	155.20	230.91	5362.73	155.20	421.50
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	101.60	0.15	0.38	0.00	67.80	76.28	0.00	0.00	0.00	0.00	0.00	79.49	101.60	67.95	156.15
4	0.00	0.00	0.00	0.00	14.01	32.97	0.00	0.00	0.00	0.00	0.38	41.26	0.00	14.38	74.23
5	0.00	0.00	0.00	0.00	5.94	19.76	0.00	0.00	0.00	0.00	3.79	75.71	0.00	9.73	95.47
6	43.72	0.00	0.00	7035.99	42.51	89.15	0.00	0.00	0.00	5.15	1324.89	45.42	7084.86	1367.40	134.57
7	2544.85	0.00	0.00	4272.31	0.00	0.00	3652.91	471.05	8.63	7699.50	30.28	1.51	18169.57	501.34	10.14
8	8099.73	0.00	0.00	0.00	0.00	0.00	8181.34	0.00	0.00	5715.95	0.00	0.00	21997.02	0.00	0.00
9	0.00	0.00	0.00	0.00	168.34	0.00	0.00	0.00	0.00	48258.89	0.00	0.00	48427.23	0.00	0.00
10	1134.07	0.00	0.00	0.00	0.15	0.34	0.00	0.00	0.00	0.00	0.00	0.00	1134.07	0.15	0.34
Total	16100.69	0.15	0.38	11621.78	298.74	409.09	11834.25	471.05	8.63	14293.13	49773.43	474.31	53849.85	50543.38	892.41

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	4176.73	0.00	0.00	0.00	0.00	0.00	12.11	0.00	4188.84
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	20.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.86
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	21.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.31
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	1134.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1134.07
Total	0.00	5352.97	0.00	0.00	0.00	0.00	0.00	12.11	0.00	5365.08

*The State of Michigan was unable to report by sub-basin for most categories of use.

a) Withdrawals, Diversions and Consumptive Use - Principal Facilities

UNITS: MG/d
YEAR OF DATA: 1990

Water-Use Categ.	ILLINOIS			INDIANA			MICHIGAN*			WISCONSIN			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	4176.73	4176.73	0.00	502.40	0.00	75.37	0.00	0.00	0.00	1258.64	12.11	200.63	5937.77	4188.84	275.99
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	101.60	20.86	0.00	79.46	0.00	11.89	0.00	0.00	0.00	0.00	0.00	0.00	181.06	20.86	11.89
4	0.00	0.00	0.00	43.57	0.00	39.18	0.00	0.00	0.00	18.93	0.00	13.25	62.50	0.00	52.43
5	0.00	0.00	0.00	10.60	0.00	8.18	0.00	0.00	0.00	0.00	0.00	0.00	10.60	0.00	8.48
6	43.72	21.31	19.19	7165.23	0.00	429.91	0.00	0.00	0.00	1222.91	0.00	122.27	8431.86	21.31	571.37
7	2544.85	0.00	0.00	4272.31	0.00	85.44	0.00	0.00	0.00	30.28	0.00	0.30	6847.44	0.00	85.74
8	8099.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8099.73	0.00	0.00
9	0.00	0.00	0.00	168.34	0.00	0.00	0.00	0.00	0.00	48258.89	0.00	0.00	48427.23	0.00	0.00
10	1134.07	1134.07	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1134.25	1134.07	0.00
Total	16100.69	5352.97	19.19	12242.09	0.00	650.26	0.00	0.00	0.00	50789.66	12.11	336.45	79132.44	5365.08	1005.89

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	4176.73	0.00	0.00	313.47	0.00	188.93	0.00	0.00	0.00	872.53	155.20	230.91	5362.73	155.20	419.84
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	101.60	0.00	0.00	0.00	0.00	67.76	11.70	0.00	0.00	0.00	0.00	0.00	101.60	67.76	11.70
4	0.00	0.00	0.00	0.00	12.42	31.15	0.00	0.00	0.00	0.00	0.00	18.93	0.00	12.42	50.08
5	0.00	0.00	0.00	0.00	5.94	4.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.94	4.66
6	43.72	0.00	0.00	7035.99	42.40	86.84	0.00	0.00	0.00	5.15	1211.33	6.44	7084.86	1253.72	93.27
7	2544.85	0.00	0.00	4272.31	0.00	0.00	0.00	0.00	0.00	0.00	30.28	0.00	6817.16	30.28	0.00
8	8099.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8099.73	0.00	0.00
9	0.00	0.00	0.00	0.00	168.34	0.00	0.00	0.00	0.00	0.00	48258.89	0.00	0.00	48427.23	0.00
10	1134.07	0.00	0.00	0.00	0.11	0.08	0.00	0.00	0.00	0.00	0.00	0.00	1134.07	0.11	0.08
Total	16100.69	0.00	0.00	11621.78	296.96	323.35	0.00	0.00	0.00	877.68	49655.70	256.27	28600.15	49952.67	579.62

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	4176.73	0.00	0.00	0.00	0.00	0.00	12.11	0.00	4188.84
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	20.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.86
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	21.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.31
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	1134.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1134.07
Total	0.00	5352.97	0.00	0.00	0.00	0.00	0.00	12.11	0.00	5365.08

*The State of Michigan was unable to report by sub-basin for most categories of use.

a) Withdrawals, Diversions and Consumptive Use - All Facilities

UNITS: ML/d
YEAR OF DATA: 1990

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	112.11	0.00	16.82	112.11	0.00	16.82
4	0.00	0.00	0.00	99.35	0.00	77.50	99.35	0.00	77.50
5	0.00	0.00	0.00	63.65	0.00	50.92	63.65	0.00	50.92
6	0.00	0.00	0.00	2909.60	0.00	64.30	2909.60	0.00	64.30
7	2469.86	0.00	32.10	897.00	0.00	4.54	3366.86	0.00	36.64
8	0.00	0.00	0.00	22466.25	0.00	202.20	22466.25	0.00	202.20
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	148.83	0.00	0.00	148.83	0.00	0.00
Total	2469.86	0.00	32.10	197074.11	168.58	502.51	199543.97	168.58	534.61

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	112.11	0.00	0.00	112.11
4	0.00	0.00	0.00	0.00	76.30	23.05	0.00	76.30	23.05
5	0.00	0.00	0.00	0.00	0.00	63.65	0.00	0.00	63.65
6	0.00	0.00	0.00	2578.70	284.00	46.90	2578.70	284.00	46.90
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	22466.25	0.00	0.00	22466.25	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	148.83	0.00	0.00	148.83	0.00	0.00
Total	2469.74	0.11	0.00	116096.73	80551.54	425.84	118566.47	80551.65	425.84

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 sub-basin for most categories of use.

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: ML/d
YEAR OF DATA: 1990

Water- Use Categ.	MICHIGAN*			ONTARIO			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	0.00	0.00	0.00	528.49	168.58	79.24	528.49	168.58	79.24
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	2904.20	0.00	63.60	2904.20	0.00	63.60
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	22466.25	0.00	202.20	22466.25	0.00	202.20
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	148.83	0.00	0.00	148.83	0.00	0.00
Total	0.00	0.00	0.00	196747.27	168.58	349.60	196747.27	168.58	349.60

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	125.76	156.10	246.63	125.76	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	2578.60	281.10	44.50	2578.60	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	22466.25	0.00	0.00	22466.25	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	148.83	0.00	0.00	148.83	0.00
Total	0.00	0.00	0.00	116095.28	80451.39	200.60	116095.28	80451.39	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	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 sub-basin for most categories of use.

a) Withdrawals, Diversions and Consumptive Use - All Facilities

UNITS: ML/d
YEAR OF DATA: 1990

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	136.12	0.00	20.44	0.00	0.00	0.00	779.79	0.00	77.98	2341.23	0.72	351.17	778.27	-168.58	116.75	163.49	0.00	16.35	4198.91	-167.86	582.70
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	0.00	0.00	0.00
3	32.02	0.00	4.81	0.00	0.00	0.00	295.26	0.00	29.53	228.71	0.00	34.30	111.29	0.00	16.69	7.46	0.00	0.76	674.75	0.00	86.08
4	3.33	0.00	3.03	0.00	0.00	0.00	6.06	0.00	0.61	42.77	0.00	38.50	476.33	0.00	371.54	11.20	0.00	10.56	539.70	0.00	424.23
5	6.85	0.00	5.49	0.00	0.00	0.00	5.30	0.00	4.24	48.30	0.00	38.65	64.65	0.00	51.72	0.00	0.00	0.00	125.10	0.00	100.10
6	34.75	0.00	2.12	0.00	0.00	0.00	221.07	0.00	22.11	961.64	0.00	96.15	1871.60	0.00	90.80	190.33	0.00	39.37	3279.39	0.00	250.55
7	1.02	0.00	0.04	15978.31	0.00	207.70	1771.57	0.00	3.79	9674.42	0.00	0.83	11483.56	0.00	183.35	282.47	0.00	1.06	39191.34	0.00	316.77
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.42	0.00	23.85	0.00	0.00	0.00	0.00	0.00	0.00	170.42	0.00	23.85
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	15744.49	15744.49	0.00	0.00	0.00	0.00	17864.31	15744.49	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-69.46	0.00	2794.36	2794.36	0.00	0.00	0.00	0.00	2794.36	2724.90	0.00
Total	214.10	0.00	35.92	15978.31	0.00	207.70	5198.86	0.00	138.25	13467.50	-68.74	583.44	33324.55	18370.27	750.85	654.95	0.00	68.10	68838.28	18301.53	1784.27

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	117.01	19.12	0.00	0.00	0.00	605.66	174.13	0.00	1776.71	421.84	142.67	412.11	72.25	293.91	150.28	5.60	7.61	2944.77	790.83	463.31
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	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.11	31.91	0.00	0.00	0.00	37.85	37.85	219.55	0.49	0.00	228.22	0.00	0.00	111.29	0.00	0.00	7.46	38.35	37.97	598.43
4	0.00	1.25	2.08	0.00	0.00	0.00	4.54	0.00	1.51	0.00	26.88	15.90	0.00	350.10	126.23	0.00	8.18	3.03	4.54	386.40	148.75
5	0.00	0.00	6.85	0.00	0.00	0.00	1.89	0.00	3.41	0.00	7.91	40.39	0.00	0.00	64.65	0.00	0.00	0.00	1.89	7.91	115.30
6	0.00	24.30	10.45	0.00	0.00	0.00	208.20	0.00	12.87	196.23	689.85	75.56	1740.10	97.40	34.10	180.71	5.60	4.01	2325.25	817.16	136.99
7	0.00	0.00	1.02	15977.97	0.34	0.00	1771.57	0.00	0.00	9239.36	435.06	0.00	11483.56	0.00	0.00	282.47	0.00	0.00	38754.92	435.40	1.02
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.42	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	15744.49	0.00	0.00	0.00	0.00	0.00	17864.31	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	2794.36	0.00	0.00	0.00	0.00	0.00	2794.36	0.00	0.00
Total	0.00	142.67	71.43	15977.97	0.34	0.00	4749.54	211.98	237.34	11383.22	1581.54	502.74	32174.62	519.75	630.18	613.46	19.38	22.11	64898.81	2475.66	1463.80

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	0.72	-168.58	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	
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	15744.49	0.00	0.00	0.00	15744.49	
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-69.46	2794.36	0.00	0.00	0.00	2794.36	
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	65.74	18370.27	0.00	0.00	0.00	18370.27	

*The State of Michigan was unable to report by sub-basin for most categories of use.

a) Withdrawals, Diversions and Consumptive Use - Principal facilities

UNITS: Ml/d
YEAR OF DATA: 1990

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	9067.24	0.00	30.78	6639.05	0.00	59.85	0.00	0.00	0.00	15701.29	0.00	90.13
8	4720.39	0.00	11.36	20274.04	0.00	182.47	0.00	0.00	0.00	24994.43	0.00	193.83
9	189349.35	0.00	0.00	212454.19	-15744.49	0.00	0.00	0.00	0.00	401803.54	-15744.49	0.00
10	2100.90	2100.90	0.00	501.12	-2794.36	0.00	0.00	0.00	0.00	2602.02	-693.46	0.00
Total	205232.88	2100.90	41.64	246110.54	-18538.85	745.23	0.00	0.00	0.00	451343.42	-16437.95	786.87

b) Withdrawals by Source - Principal facilities

Water- Use Categ.	NEW YORK			ONTARIO			PENNSYLVANIA			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	0.00	0.00	0.00	2787.50	137.79	64.05	0.00	0.00	0.00	2787.50	137.79	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	9067.24	0.00	0.00	6639.05	0.00	0.00	0.00	0.00	0.00	15701.29	0.00	0.00
8	4720.39	0.00	0.00	20274.04	0.00	0.00	0.00	0.00	0.00	24994.43	0.00	0.00
9	189349.35	0.00	0.00	173287.49	39166.70	0.00	0.00	0.00	0.00	362636.84	39166.70	0.00
10	2100.90	0.00	0.00	0.00	501.12	0.00	0.00	0.00	0.00	2100.90	501.12	0.00
Total	205232.88	0.00	0.00	205845.08	40195.71	69.75	0.00	0.00	0.00	411077.96	40195.71	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	-15744.49	0.00	0.00	0.00	-15744.49	0.00
10	2100.90	0.00	-2794.36	0.00	0.00	0.00	-693.46	0.00
Total	2100.90	0.00	-18538.85	0.00	0.00	0.00	-16437.95	0.00

a) Withdrawals, Diversions and Consumptive Use - Principal Facilities

UNITS: ML/d
YEAR OF DATA: 1990

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	135.86	0.00	20.40	0.00	0.00	0.00	0.00	0.00	0.00	2318.06	0.72	347.69	772.70	0.00	115.91	140.73	0.00	16.09	3387.35	0.72	500.09
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	0.26	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	3.56	0.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00	3.62	0.00	0.57
4	2.84	0.00	2.54	0.00	0.00	0.00	0.00	0.00	0.00	19.72	0.00	17.75	0.00	0.00	0.00	10.22	0.00	9.58	32.78	0.00	29.87
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.42	0.00	5.94	0.00	0.00	0.00	0.00	0.00	0.00	7.42	0.00	5.94
6	33.77	0.00	2.01	0.00	0.00	0.00	0.00	0.00	0.00	960.20	0.00	96.00	1865.20	0.00	89.70	186.36	0.00	39.25	3045.52	0.00	226.96
7	1.02	0.00	0.04	0.00	0.00	0.00	1771.57	0.00	3.79	8674.42	0.00	0.83	11483.56	0.00	103.35	282.47	0.00	1.06	23213.03	0.00	109.07
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.42	0.00	23.85	0.00	0.00	0.00	0.00	0.00	0.00	170.42	0.00	23.85
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	15744.49	15744.49	0.00	0.00	0.00	0.00	17864.31	15744.49	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-69.46	0.00	2794.36	2794.36	0.00	0.00	0.00	0.00	2794.36	2724.90	0.00
Total	173.75	0.00	25.02	0.00	0.00	0.00	3891.39	0.00	3.79	13152.80	-69.74	492.59	32660.31	18538.85	308.96	659.77	0.00	65.98	50519.02	18470.11	896.34

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	117.01	18.85	0.00	0.00	0.00	0.00	0.00	0.00	1775.65	419.80	122.61	412.11	71.94	288.65	150.28	5.49	4.96	2338.04	614.24	435.07
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	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.56	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.11	3.71
4	0.00	1.10	1.74	0.00	0.00	0.00	0.00	0.00	0.00	16.81	2.91	0.00	0.00	0.00	0.00	7.19	3.03	0.00	25.10	0.00	7.68
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.85	5.56	0.00	0.00	0.00	0.00	0.00	0.00	1.85	1.85	5.56
6	0.00	24.26	9.50	0.00	0.00	0.00	0.00	0.00	0.00	196.23	689.25	74.72	1739.80	94.20	31.20	180.71	5.26	0.38	2116.75	812.97	115.80
7	0.00	0.00	1.02	0.00	0.00	0.00	1771.57	0.00	0.00	9239.36	435.06	0.00	11483.56	0.00	0.00	282.47	0.00	0.00	2776.95	435.06	1.02
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.42	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	15744.49	15744.49	0.00	0.00	0.00	0.00	17864.31	15744.49	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	2794.36	2794.36	0.00	0.00	0.00	0.00	2794.36	2724.90	0.00
Total	0.00	142.48	31.27	0.00	0.00	0.00	3891.39	0.00	0.00	11381.67	1562.76	209.37	32174.32	166.14	319.85	613.46	17.94	8.37	48060.84	1889.33	568.85

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	0.72	0.00	0.00	0.00	0.00	0.00	0.72
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	15744.49	15744.49	0.00	0.00	0.00	15744.49
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-69.46	2794.36	2794.36	0.00	0.00	0.00	-69.46
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-68.74	18538.85	18538.85	0.00	0.00	0.00	-68.74

*The State of Michigan was unable to report by sub-basin for most categories of use.

a) Withdrawals, Diversions and Consumptive Use - All Facilities

UNITS: ML/d
YEAR OF DATA: 1990

Water-Use Categ.	NEW YORK			ONTARIO			PENNSYLVANIA			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	1006.92	0.00	100.69	3003.07	0.00	450.46	0.64	0.00	0.00	4010.63	0.00	551.23
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
3	1097.77	0.00	109.78	132.53	0.00	19.88	0.04	0.00	0.00	1230.33	0.00	129.66
4	30.28	0.00	3.03	108.51	0.00	84.64	0.00	0.00	0.00	138.79	0.00	87.67
5	24.23	0.00	12.49	33.72	0.00	26.98	0.00	0.00	0.00	57.95	0.00	39.47
6	832.79	0.00	83.28	3272.10	0.00	57.60	0.00	0.00	0.00	4104.89	0.00	140.88
7	9062.24	0.00	30.28	6639.05	0.00	59.85	0.00	0.00	0.00	15701.29	0.00	90.13
8	4720.39	0.00	11.36	20274.04	0.00	182.47	0.00	0.00	0.00	24994.43	0.00	193.83
9	554257.86	0.00	0.00	212454.19	-15744.49	0.00	0.00	0.00	0.00	766712.05	-15744.49	0.00
10	2100.90	2100.90	0.00	501.12	-2794.36	0.00	0.00	0.00	0.00	2602.02	-693.46	0.00
Total	573133.36	2100.90	350.91	246418.33	-18538.85	881.88	0.68	0.00	0.00	819552.37	-16437.95	1232.86

b) Withdrawals by Source - All Facilities

Water-Use Categ.	NEW YORK			ONTARIO			PENNSYLVANIA			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	363.40	526.17	117.35	2787.80	139.64	75.63	0.00	0.00	0.64	3151.20	665.81	193.62
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	132.53	0.00	0.00	0.04	382.33	363.40	484.61
4	26.50	0.00	3.79	0.00	80.41	28.18	0.00	0.00	0.00	26.50	80.41	31.89
5	9.46	0.00	14.76	0.00	0.00	33.72	0.00	0.00	0.00	9.46	0.00	48.48
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	9062.24	0.00	0.00	6639.05	0.00	0.00	0.00	0.00	0.00	15701.29	0.00	0.00
8	4720.39	0.00	0.00	20274.04	0.00	0.00	0.00	0.00	0.00	24994.43	0.00	0.00
9	554257.86	0.00	0.00	173287.49	39166.70	0.00	0.00	0.00	0.00	727545.35	39166.70	0.00
10	2100.90	0.00	0.00	0.00	501.12	0.00	0.00	0.00	0.00	2100.90	501.12	0.00
Total	571604.44	889.57	639.35	205846.38	40290.27	281.68	0.00	0.00	0.68	777450.82	41179.84	921.71

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	-15744.49	0.00	0.00	0.00	-15744.49	0.00
10	2100.90	0.00	-2794.36	0.00	0.00	0.00	-693.46	0.00
Total	2100.90	0.00	-18538.85	0.00	0.00	0.00	-16437.95	0.00

WATER-USE CATEGORY REPORT - Public Supply

DATE: 1/20/92

a) Water-Use by Basin - All Jurisdictions

UNITS: ML/d
YEAR OF DATA: 1990

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	194.64	26.07	44.73	265.43	0.00	0.00	0.00	49.53	123.05	25.28	25.68	174.02	0.00	0.00	0.00	46.40		
Lake Michigan	5362.73	155.20	421.50	5939.44	0.00	4188.84	4188.84	276.23	5362.73	155.20	419.84	5937.77	0.00	4188.84	4188.84	275.99		
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	0.00	168.58	79.26		
Lake Erie	2944.77	790.83	463.31	4198.91	-168.58	0.72	-167.86	582.70	2338.04	614.24	435.07	3387.35	0.00	0.72	0.72	500.09		
Lake Ontario	3151.20	665.81	193.62	4010.63	0.00	0.00	0.00	551.23	2787.50	137.79	64.05	2989.34	0.00	0.00	0.00	448.41		
St. Lawrence River	3210.26	1996.42	113.41	5320.09	0.00	0.00	0.00	560.86	2828.93	1977.35	16.06	4822.34	0.00	0.00	0.00	510.60		
Total	15111.57	3781.04	1416.70	24942.65*	0.00	4189.56	4189.56	2572.36*	13686.89	3035.62	1116.80	17839.31	168.58	4189.56	4358.14	1860.75		

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	4176.73	0.00	0.00	4176.73	0.00	4176.73	4176.73	0.00	4176.73	0.00	0.00	4176.73	0.00	4176.73	4176.73	0.00		
Indiana	313.47	117.01	209.71	640.19	0.00	0.00	0.00	96.04	313.47	117.01	207.78	638.26	0.00	0.00	0.00	95.77		
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	127.15	16.20	18.55	161.90	0.00	0.00	0.00	33.99	55.46	16.01	17.49	88.96	0.00	0.00	0.00	33.73		
New York	1351.39	700.30	211.98	2263.67	0.00	0.00	0.00	226.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Ohio	1776.71	421.84	142.67	2341.23	0.00	0.72	0.72	351.17	1775.65	419.80	122.61	2318.06	0.00	0.72	0.72	347.69		
Ontario	3655.52	784.89	575.70	5016.11	0.00	0.00	0.00	752.74	3655.60	760.11	532.11	4947.82	168.58	0.00	168.58	742.17		
Pennsylvania	150.28	5.60	8.25	164.13	0.00	0.00	0.00	16.43	150.28	5.49	4.96	160.73	0.00	0.00	0.00	16.09		
Quebec	2684.00	1580.00	0.00	4264.00	0.00	0.00	0.00	426.00	2683.00	1562.00	0.00	4245.00	0.00	0.00	0.00	424.00		
Wisconsin	876.32	155.20	249.84	1281.36	0.00	12.11	12.11	204.04	876.70	155.20	231.86	1263.75	0.00	12.11	12.11	201.31		
Total	15111.57	3781.04	1416.70	24942.65*	0.00	4189.56	4189.56	2572.36*	13686.89	3035.62	1116.80	17839.31	168.58	4189.56	4358.14	1860.75		

*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.

a) Withdrawals, Diversions and Consumptive Use - Principal Facilities

UNITS: ML/d
YEAR OF DATA: 1990

Water- Use Categ.	NEW YORK			ONTARIO			QUEBEC			TOTAL		
	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.	Withdr.	Diver.	Consum.
1	0.00	0.00	0.00	577.34	0.00	86.60	4245.00	0.00	424.00	4822.34	0.00	510.60
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	184.00	0.00	18.00	184.00	0.00	18.00
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	593.60	0.00	29.40	473.00	0.00	41.80	1066.60	0.00	71.20
7	0.00	0.00	0.00	0.00	0.00	0.00	178.00	0.00	0.00	178.00	0.00	0.00
8	0.00	0.00	0.00	154.50	0.00	1.39	0.00	0.00	0.00	154.50	0.00	1.39
9	324412.33	0.00	0.00	628153.50	0.00	0.00	1127595.0	0.00	0.00	2075160.8	0.00	0.00
10	609.45	609.45	0.00	135.40	0.00	0.00	0.00	0.00	0.00	744.85	609.45	0.00
Total	325021.77	609.45	0.00	629614.34	0.00	117.39	1127675.0	0.00	483.80	2087311.1	609.45	601.19

b) Withdrawals by Source - Principal Facilities

Water- Use Categ.	NEW YORK			ONTARIO			QUEBEC			TOTAL		
	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW	GLSW	OSW	GW
1	0.00	0.00	0.00	145.93	415.35	16.06	2683.00	1562.00	0.00	2828.93	1977.35	16.06
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
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	184.00	0.00	0.00	184.00
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	472.80	104.60	16.20	0.00	473.00	0.00	472.80	577.60	16.20
7	0.00	0.00	0.00	0.00	0.00	0.00	148.00	30.00	0.00	148.00	30.00	0.00
8	0.00	0.00	0.00	154.50	0.00	0.00	0.00	0.00	0.00	154.50	0.00	0.00
9	324412.33	0.00	0.00	295660.80	332497.70	0.00	646531.00	476064.00	0.00	1266604.1	808556.70	0.00
10	609.45	0.00	0.00	0.00	135.40	0.00	0.00	0.00	0.00	609.45	135.40	0.00
Total	325021.77	0.00	0.00	296434.03	333148.05	32.26	649362.00	478129.00	184.00	1270817.8	811277.05	216.26

c) Diversions by Type - Principal Facilities

Water- Use Categ.	NEW YORK		ONTARIO		QUEBEC		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	609.45	0.00	0.00	0.00	0.00	0.00	609.45	0.00
Total	609.45	0.00	0.00	0.00	0.00	0.00	609.45	0.00

a) Water-Use by Basin - All Jurisdictions

UNITS: ML/d
YEAR OF DATA: 1990

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	2.01	0.21	2.22	0.00	0.00	0.00	1.84	0.00	1.17	0.00	1.17	0.00	0.00	0.00	1.02		
Lake Michigan	0.00	14.38	74.23	88.62	0.00	0.00	0.00	69.08	0.00	12.42	50.08	62.50	0.00	0.00	0.00	52.43		
Lake Huron	0.00	76.30	23.05	99.35	0.00	0.00	0.00	77.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Lake Erie	4.54	386.40	148.75	539.70	0.00	0.00	0.00	424.23	0.00	25.10	7.68	32.78	0.00	0.00	0.00	29.87		
Lake Ontario	26.50	80.41	31.89	138.79	0.00	0.00	0.00	87.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
St. Lawrence River	3.79	14.70	18.71	37.19	0.00	0.00	0.00	27.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Total	34.83	574.21	296.84	1803.01*	0.00	0.00	0.00	1539.80*	0.00	38.69	57.77	96.45	0.00	0.00	0.00	83.32		

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		
Indiana	0.00	15.26	35.05	50.31	0.00	0.00	0.00	45.31	0.00	13.51	32.90	46.41	0.00	0.00	0.00	41.72		
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	1.51	0.00	1.51	0.00	0.00	0.00	1.29	0.00	1.17	0.00	1.17	0.00	0.00	0.00	1.02		
New York	34.83	0.00	5.68	40.50	0.00	0.00	0.00	4.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Ohio	0.00	26.88	15.90	42.77	0.00	0.00	0.00	38.50	0.00	16.81	2.91	19.72	0.00	0.00	0.00	17.75		
Ontario	0.00	522.01	182.62	704.63	0.00	0.00	0.00	549.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Pennsylvania	0.00	8.18	3.03	11.20	0.00	0.00	0.00	10.56	0.00	7.19	3.03	10.22	0.00	0.00	0.00	9.58		
Quebec	0.00	0.00	13.30	13.30	0.00	0.00	0.00	11.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Wisconsin	0.00	0.38	41.26	41.64	0.00	0.00	0.00	26.80	0.00	0.00	18.93	18.93	0.00	0.00	0.00	13.25		
Total	34.83	574.21	296.84	1803.01*	0.00	0.00	0.00	1539.80*	0.00	38.69	57.77	96.45	0.00	0.00	0.00	83.32		

*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: 1/20/92

a) Water-Use by Basin - All Jurisdictions

UNITS: ML/d
YEAR OF DATA: 1990

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	5.41	2.12	6.67	14.21	0.00	0.00	0.00	1.57	5.41	2.04	0.00	7.46	0.00	0.00	0.00	0.57		
Lake Michigan	101.60	67.95	156.15	325.70	0.00	20.86	20.86	29.19	101.60	67.76	11.70	181.06	0.00	20.86	20.86	11.89		
Lake Huron	0.00	0.00	112.11	112.11	0.00	0.00	0.00	16.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Lake Erie	38.35	37.97	598.43	674.75	0.00	0.00	0.00	86.08	0.00	0.11	3.71	3.82	0.00	0.00	0.00	0.57		
Lake Ontario	382.33	363.40	484.61	1230.33	0.00	0.00	0.00	129.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
St. Lawrence River	193.06	75.71	468.01	736.78	0.00	0.00	0.00	79.83	0.00	0.00	184.00	184.00	0.00	0.00	0.00	18.00		
Total	720.74	547.14	1825.99	3093.87	0.00	20.86	20.86	343.15	107.01	69.92	199.41	376.34	0.00	20.86	20.86	31.02		

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	101.60	0.15	0.38	102.13	0.00	20.86	20.86	0.00	101.60	0.00	0.00	101.60	0.00	20.86	20.86	0.00		
Indiana	0.00	67.91	108.19	176.10	0.00	0.00	0.00	26.42	0.00	67.87	11.85	79.72	0.00	0.00	0.00	11.92		
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	5.41	2.12	0.19	7.72	0.00	0.00	0.00	0.61	5.41	2.04	0.00	7.46	0.00	0.00	0.00	0.57		
New York	613.23	476.96	643.52	1733.71	0.00	0.00	0.00	173.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Ohio	0.49	0.00	228.22	228.71	0.00	0.00	0.00	34.30	0.00	0.00	3.56	3.56	0.00	0.00	0.00	0.53		
Ontario	0.00	0.00	487.24	487.24	0.00	0.00	0.00	73.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Pennsylvania	0.00	0.00	7.50	7.50	0.00	0.00	0.00	0.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Quebec	0.00	0.00	271.00	271.00	0.00	0.00	0.00	27.00	0.00	0.00	184.00	184.00	0.00	0.00	0.00	18.00		
Wisconsin	0.00	0.00	79.76	79.76	0.00	0.00	0.00	7.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Total	720.74	547.14	1825.99	3093.87	0.00	20.86	20.86	343.15	107.01	69.92	199.41	376.34	0.00	20.86	20.86	31.02		

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

DATE: 1/20/92

a) Water-Use by Basin - All Jurisdictions

UNITS: ML/d
YEAR OF DATA: 1990

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	974.11	279.50	8.57	1262.18	0.00	0.00	0.00	201.34	973.59	278.68	8.12	1260.39	0.00	0.00	0.00	201.09		
Lake Michigan	7084.86	1367.40	134.57	8586.83	0.00	21.31	21.31	586.77	7084.86	1253.72	93.27	8431.86	0.00	21.31	21.31	571.37		
Lake Huron	2578.70	284.00	46.90	2909.60	0.00	0.00	0.00	64.30	2578.60	281.10	44.50	2904.20	0.00	0.00	0.00	63.60		
Lake Erie	2325.25	817.16	136.99	3279.39	0.00	0.00	0.00	250.55	2116.75	812.97	115.80	3045.52	0.00	0.00	0.00	226.96		
Lake Ontario	3539.37	402.40	163.12	4104.89	0.00	0.00	0.00	140.88	2857.00	390.10	5.70	3252.80	0.00	0.00	0.00	54.50		
St. Lawrence River	730.41	582.00	37.93	1350.33	0.00	0.00	0.00	99.63	472.80	577.60	16.20	1066.60	0.00	0.00	0.00	71.20		
Total	17232.70	3732.45	528.07	26482.38*	0.00	21.31	21.31	1843.14*	16083.60	3594.18	283.59	19961.37	0.00	21.31	21.31	1188.72		

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	43.72	0.00	0.00	43.72	0.00	21.31	21.31	19.19	43.72	0.00	0.00	43.72	0.00	21.31	21.31	19.19		
Indiana	7035.99	66.81	99.59	7202.40	0.00	0.00	0.00	432.14	7035.99	66.66	96.34	7198.99	0.00	0.00	0.00	431.91		
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	333.91	240.60	0.49	575.00	0.00	0.00	0.00	172.99	333.87	239.88	0.42	574.17	0.00	0.00	0.00	172.88		
New York	1146.98	0.00	183.21	1330.19	0.00	0.00	0.00	133.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Ohio	196.23	689.85	75.56	961.64	0.00	0.00	0.00	96.15	196.23	689.25	74.72	960.20	0.00	0.00	0.00	96.00		
Ontario	8263.50	929.70	119.70	9312.90	0.00	0.00	0.00	268.50	8261.80	908.80	105.30	9275.90	0.00	0.00	0.00	262.80		
Pennsylvania	180.71	5.60	4.01	190.33	0.00	0.00	0.00	39.37	180.71	5.26	0.38	186.36	0.00	0.00	0.00	39.25		
Quebec	0.00	475.00	0.00	475.00	0.00	0.00	0.00	41.90	0.00	473.00	0.00	473.00	0.00	0.00	0.00	41.80		
Wisconsin	31.65	1324.89	45.50	1402.04	0.00	0.00	0.00	140.21	31.27	1211.33	6.44	1249.03	0.00	0.00	0.00	124.88		
Total	17232.70	3732.45	528.07	26482.38*	0.00	21.31	21.31	1843.14*	16083.60	3594.18	283.59	19961.37	0.00	21.31	21.31	1188.72		

*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.

PER-USE CATEGORY REPORT - Self-supply - livestock

DATE: 1/20/92

Water-Use by Basin - All Jurisdictions

UNITS: ML/d
YEAR OF DATA: 1990

All Facilities

Principal Facilities

Basin	Withdrawals				Diversions			Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	
	Lake Superior	2.54	1.32	14.64	18.50	0.00	0.00	
Lake Michigan	0.00	9.73	95.47	105.20	0.00	0.00	0.00	34.94
Lake Huron	0.00	0.00	63.65	63.65	0.00	0.00	0.00	50.92
Lake Erie	1.89	7.91	115.30	125.10	0.00	0.00	0.00	100.10
Lake Ontario	9.46	0.00	48.48	57.95	0.00	0.00	0.00	39.47
St. Lawrence River	3.79	0.00	131.79	135.58	0.00	0.00	0.00	108.46
Total	17.68	18.96	469.33	505.97	0.00	0.00	0.00	348.85

	Withdrawals				Diversions			Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	
		2.54	0.00	0.00	2.54	0.00	0.00	
	0.00	5.94	4.66	10.60	0.00	0.00	0.00	8.48
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	1.85	5.56	7.42	0.00	0.00	0.00	5.94
	0.00	0.00	0.00	0.00	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	2.54	7.80	10.22	20.55	0.00	0.00	0.00	14.42

Water-Use by Jurisdiction - All Basins

All Facilities

Principal Facilities

Jurisdiction	Withdrawals				Diversions			Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	TOTAL	
	Illinois	0.00	0.00	0.00	0.00	0.00	0.00	
Indiana	0.00	5.94	26.61	32.55	0.00	0.00	0.00	26.04
Michigan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Minnesota	2.54	1.32	7.76	11.62	0.00	0.00	0.00	9.08
New York	15.14	0.00	25.74	40.88	0.00	0.00	0.00	25.82
Ohio	0.00	7.91	40.39	48.30	0.00	0.00	0.00	38.65
Ontario	0.00	0.00	199.34	199.34	0.00	0.00	0.00	159.47
Pennsylvania	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quebec	0.00	0.00	88.10	88.10	0.00	0.00	0.00	70.48
Wisconsin	0.00	3.79	81.39	85.17	0.00	0.00	0.00	19.31
Total	17.68	18.96	469.33	505.97	0.00	0.00	0.00	348.85

	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	5.94	4.66	10.60	0.00	0.00	0.00	8.48
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2.54	0.00	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	1.85	5.56	7.42	0.00	0.00	0.00	5.94
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	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	2.54	7.80	10.22	20.55	0.00	0.00	0.00	14.42

a) Water-Use by Basin - All Jurisdictions

UNITS: ML/d
YEAR OF DATA: 1990

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	21997.02	0.00	0.00	21997.02	0.00	0.00	0.00	163.53	8099.73	0.00	0.00	8099.73	0.00	0.00	0.00	0.00	0.00	
Lake Huron	22466.25	0.00	0.00	22466.25	0.00	0.00	0.00	202.20	22466.25	0.00	0.00	22466.25	0.00	0.00	0.00	202.20	0.00	
Lake Erie	170.42	0.00	0.00	170.42	0.00	0.00	0.00	23.85	170.42	0.00	0.00	170.42	0.00	0.00	0.00	23.85	0.00	
Lake Ontario	24994.43	0.00	0.00	24994.43	0.00	0.00	0.00	193.83	24994.43	0.00	0.00	24994.43	0.00	0.00	0.00	193.83	0.00	
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	1.39	0.00	
Total	69782.62	0.00	0.00	69782.62	0.00	0.00	0.00	584.79	55885.33	0.00	0.00	55885.33	0.00	0.00	0.00	421.26		

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	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	4720.39	0.00	0.00	4720.39	0.00	0.00	0.00	11.36	4720.39	0.00	0.00	4720.39	0.00	0.00	0.00	11.36	0.00	
Ohio	170.42	0.00	0.00	170.42	0.00	0.00	0.00	23.85	170.42	0.00	0.00	170.42	0.00	0.00	0.00	23.85	0.00	
Ontario	42894.79	0.00	0.00	42894.79	0.00	0.00	0.00	386.06	42894.79	0.00	0.00	42894.79	0.00	0.00	0.00	386.06	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	5715.95	0.00	0.00	5715.95	0.00	0.00	0.00	57.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total	69782.62	0.00	0.00	69782.62	0.00	0.00	0.00	584.79	55885.33	0.00	0.00	55885.33	0.00	0.00	0.00	421.26		

a) Water-Use by Basin - All Jurisdictions

UNITS: ML/d
YEAR OF DATA: 1990

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	2649.79	47.66	0.04	2697.48	0.00	0.00	0.00	30.04	1662.67	47.35	0.00	1710.02	0.00	0.00	0.00	17.21		
Lake Michigan	18169.57	501.34	10.14	18681.05	0.00	0.00	0.00	217.09	6817.16	30.28	0.00	6847.44	0.00	0.00	0.00	85.74		
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	38754.92	435.40	1.02	39191.34	0.00	0.00	0.00	316.77	22776.95	435.06	1.02	23213.03	0.00	0.00	0.00	109.07		
Lake Ontario	15701.29	0.00	0.00	15701.29	0.00	0.00	0.00	90.13	15701.29	0.00	0.00	15701.29	0.00	0.00	0.00	90.13		
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	78790.31	1014.50	11.20	79816.02	0.00	0.00	0.00	690.67	48003.07	542.69	1.02	48546.78	0.00	0.00	0.00	306.68		

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	2544.85	0.00	0.00	2544.85	0.00	0.00	0.00	0.00	2544.85	0.00	0.00	2544.85	0.00	0.00	0.00	0.00		
Indiana	4272.31	0.00	1.02	4273.33	0.00	0.00	0.00	85.47	4272.31	0.00	1.02	4273.33	0.00	0.00	0.00	85.47		
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	0.00		
Minnesota	2.84	47.51	0.04	50.38	0.00	0.00	0.00	0.98	2.84	47.20	0.00	50.04	0.00	0.00	0.00	0.98		
New York	10833.81	0.00	0.00	10833.81	0.00	0.00	0.00	34.07	10833.81	0.00	0.00	10833.81	0.00	0.00	0.00	34.07		
Ohio	9239.36	435.06	0.00	9674.42	0.00	0.00	0.00	0.83	9239.36	435.06	0.00	9674.42	0.00	0.00	0.00	0.83		
Ontario	20559.82	0.15	0.00	20559.97	0.00	0.00	0.00	182.75	20559.82	0.15	0.00	20559.97	0.00	0.00	0.00	182.75		
Pennsylvania	282.47	0.00	0.00	282.47	0.00	0.00	0.00	1.06	282.47	0.00	0.00	282.47	0.00	0.00	0.00	1.06		
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	7819.12	30.28	1.51	7850.91	0.00	0.00	0.00	79.11	119.62	30.28	0.00	149.90	0.00	0.00	0.00	1.51		
Total	78790.31	1014.50	11.20	79816.02	0.00	0.00	0.00	690.67	48003.07	542.69	1.02	48546.78	0.00	0.00	0.00	306.68		

a) Water-Use by Basin - All Jurisdictions

UNITS: ML/d
YEAR OF DATA: 1990

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	0.61	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.61	0.61	0.00	0.00	0.00	0.00		
Lake Michigan	1134.07	0.15	0.34	1134.56	0.00	1134.07	1134.07	0.04	1134.07	0.11	0.08	1134.26	0.00	1134.07	1134.07	0.00		
Lake Huron	0.00	148.83	0.00	148.83	0.00	0.00	0.00	0.00	0.00	148.83	0.00	148.83	0.00	0.00	0.00	0.00		
Lake Erie	2794.36	0.00	0.00	2794.36	2794.36	-69.46	2724.90	0.00	2794.36	0.00	0.00	2794.36	2794.36	-69.46	2724.90	0.00		
Lake Ontario	2100.90	501.12	0.00	2602.02	-693.46	0.00	-693.46	0.00	2100.90	501.12	0.00	2602.02	-693.46	0.00	-693.46	0.00		
St. Lawrence River	609.45	135.40	0.00	744.85	609.45	0.00	609.45	0.00	609.45	135.40	0.00	744.85	609.45	0.00	609.45	0.00		
Total	6638.77	785.50	0.95	7425.22	2710.34	1064.61	3774.95	0.04	6638.77	785.46	0.68	7424.92	2710.34	1064.61	3774.95	0.00		

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	1134.07	0.00	0.00	1134.07	0.00	1134.07	1134.07	0.00	1134.07	0.00	0.00	1134.07	0.00	1134.07	1134.07	0.00		
Indiana	0.00	0.15	0.34	0.49	0.00	0.00	0.00	0.04	0.00	0.11	0.08	0.19	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	0.00	0.61	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.61	0.61	0.00	0.00	0.00	0.00		
New York	2710.34	0.00	0.00	2710.34	2710.34	0.00	2710.34	0.00	2710.34	0.00	0.00	2710.34	2710.34	0.00	2710.34	0.00		
Ohio	0.00	0.00	0.00	0.00	0.00	-69.46	-69.46	0.00	0.00	0.00	0.00	0.00	0.00	-69.46	-69.46	0.00		
Ontario	2794.36	785.35	0.00	3579.71	0.00	0.00	0.00	0.00	2794.36	785.35	0.00	3579.71	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	6638.77	785.50	0.95	7425.22	2710.34	1064.61	3774.95	0.04	6638.77	785.46	0.68	7424.92	2710.34	1064.61	3774.95	0.00		

a) Water-Use by Basin - All Jurisdictions

UNITS: ML/d
YEAR OF DATA: 1990

All Facilities

Principal Facilities

Basin	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	159282.88	0.00	159282.88	0.00	-11117.95	-11117.95	0.00	0.00	159286.66	0.00	159286.66	0.00	-11117.95	-11117.95	0.00
Lake Michigan	0.00	48427.23	0.00	48427.23	0.00	0.00	0.00	0.00	0.00	48427.23	0.00	48427.23	0.00	0.00	0.00	0.00
Lake Huron	89906.80	79895.70	0.00	169802.50	0.00	0.00	0.00	0.00	89906.80	79895.70	0.00	169802.50	0.00	0.00	0.00	0.00
Lake Erie	17864.31	0.00	0.00	17864.31	15744.49	0.00	15744.49	0.00	17864.31	0.00	0.00	17864.31	15744.49	0.00	15744.49	0.00
Lake Ontario	727545.35	39166.70	0.00	766712.05	-15744.49	0.00	-15744.49	0.00	362636.84	39166.70	0.00	401803.54	-15744.49	0.00	-15744.49	0.00
St.lawrence River	1483851.86	808556.70	0.00	2292408.56	0.00	0.00	0.00	0.00	1266604.13	808556.70	0.00	2075160.83	0.00	0.00	0.00	0.00
Total	2319168.32	1135329.21	0.00	3454497.53	0.00	-11117.95	-11117.95	0.00	1737012.08	1135332.99	0.00	2872345.07	0.00	-11117.95	-11117.95	0.00

b) Water-Use by Jurisdiction - All Basins

All Facilities

Principal Facilities

Jurisdiction	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
Indiana	0.00	168.34	0.00	168.34	0.00	0.00	0.00	0.00	0.00	168.34	0.00	168.34	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	14691.13	0.00	14691.13	0.00	0.00	0.00	0.00	0.00	14691.13	0.00	14691.13	0.00	0.00	0.00	0.00
New York	1098037.74	0.00	0.00	1098037.74	0.00	0.00	0.00	0.00	515881.50	0.00	0.00	515881.50	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	574599.58	595341.17	0.00	1169940.75	0.00	-11117.95	-11117.95	0.00	574599.58	595341.17	0.00	1169940.75	0.00	-11117.95	-11117.95	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	646531.00	476064.00	0.00	1122595.00	0.00	0.00	0.00	0.00	646531.00	476064.00	0.00	1122595.00	0.00	0.00	0.00	0.00
Wisconsin	0.00	49064.58	0.00	49064.58	0.00	0.00	0.00	0.00	0.00	49068.36	0.00	49068.36	0.00	0.00	0.00	0.00
Total	2319168.32	1135329.21	0.00	3454497.53	0.00	-11117.95	-11117.95	0.00	1737012.08	1135332.99	0.00	2872345.07	0.00	-11117.95	-11117.95	0.00

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	.06	*.05-.15	.03	L .061	L .065	.06	.05	0.1	L .06	
L Laying		*(.05-.26)	N .039	N .027	C .035			C .059		
N Non-Laying				C .03	B .05					
C Chicks				B 0.37						
B Broilers										
* Not Classified										
Turkey	.12		.12	.12	.008		.12	0.1		
Goats				M 6				1.5	2.0	
M Milk goats				O 1						
O Other										
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)

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)	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	.2	*.19-.57	.11	L .23	L .25	.20	.19	.38	L .20	
L Laying		*(.57-.98)	N .15	N .10				C .22		
N Non-Laying				C .11	C .13					
C Chicks				B 1.4	B .19					
B Broilers										
* Not Classified										
Turkey	.45		.45	.45	.30		.45	.38		
Goats				M 20			5.7	7.5		
M Milk goats				O 3.8						
O Other										
Ducks				.15						
Geese				.15						
Other Poultry				.15						
Mink				.038			.05			
Rabbits, Chinchillas				.19			.2			
All Fowl								.1		