

DESCRIPTION OF DATA FIELDS

Field 1: **WATER_USE_SECTOR** – Identify water use sector.

WATER_USE_SECTOR		Definition from Water Use Protocols
1	Public Water Supply	Water distributed to the public through a physically connected system of treatment, storage and distribution facilities serving a group of largely residential customers that may also serve industrial, commercial, and other institutional operators. Water Withdrawn directly from the Basin and not through such a system shall not be considered to be used for Public Water Supply Purposes.
2	Self-Supply Commercial and Institutional	Commercial uses include Water used by motels, hotels, restaurants, office buildings and institutions, both civilian and military, that would not otherwise be considered Public Water Supplies. This category also includes Water for mobile homes, hospitals, schools, air conditioning and other similar uses not covered under a public supply. In addition, this category includes amusement and recreational Water uses such as snowmaking and Water slides.
3	Self-Supply Irrigation	Water artificially applied on lands to assist in the growing of crops and pastures or in the maintenance of recreational lands, such as parks and golf courses.
4	Self-Supply Livestock	Water used by animals such as horses, cattle, sheep, goats, hogs and poultry. Water used in fish hatchery operations is also included under this category.
5	Self-Supply Industrial	Industrial Water includes Water used in the manufacture of metals, chemicals, paper, food and beverage and other Products, as well as mining Water use. Mining Water use includes Water used in the extraction or washing of minerals, for example solids, such as coal and ores, and liquids such as crude petroleum and natural gas. Water used in quarrying and milling is also included in the industrial category. Brine extraction from oil and gas operations is not included. Withdrawals and Consumptive Uses for industrial and mining purposes (including dewatering operations) recorded under another category (e.g., public supply) will not be recorded here. Once initially reported, Water used in a closed cycle (recirculation) will not be reported as a Withdrawal. "Make-up Water" will be reported once upon entering the system. Other situations should be evaluated on a case-by-case basis.
6	Self-Supply Thermoelectric Power Production (Once-through cooling)	Cooling water and ancillary water use such as boiler make-up water and contact cooling water at electrical power generating facilities that use once-through cooling systems. Withdrawals and Consumptive Uses already recorded under another category (e.g., public supply) will not be reported here.

WATER_USE_SECTOR		Definition from Water Use Protocols
7	Self-Supply Thermoelectric Power Production (Recirculated cooling)	Cooling water and ancillary water use such as boiler make-up water and contact cooling water at electrical power generating facilities that use water recirculating cooling tower systems. Include water used at Combined Cycle Gas Turbine (CCGT) power plants in this category. Withdrawals and Consumptive Uses already recorded under another category (e.g., public supply) will not be reported here. Once initially reported, Water used in a closed cycle (recirculation) will not be reported as a Withdrawal. "Make-up Water" will be reported once upon entering the system.
8	Off-Stream Hydroelectric Power Production	Water removed from a stream channel and used to drive turbines that generate electric power. This category also includes "off-stream use" for pumped storage systems [e.g., reservoir storage] that return water to the source.
9	In-Stream Hydroelectric Water Use	This category includes "run of the river" use which is not considered a Water Withdrawal or Consumptive Use. Reporting for this category is voluntary.
10	Other Self Supply	Water used for purposes not reported in categories one through nine. Examples include, but are not limited to, Withdrawals for fish/wildlife, environmental, navigation and Water quality purposes. Specifically, Water used to maintain levels for navigation, for fish and wildlife habitat creation and enhancement (excluding fish hatchery operations included in category four), 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.

Field 2: **SOURCE** – Identify source.

- 1 Great Lakes-St. Lawrence Surface Water
- 2 Other Surface Water
- 3 Groundwater

Field 3: **BASIN** – Identify basin.

- 1 Lake Superior
- 2 Lake Michigan
- 3 Lake Huron
- 4 Lake Erie
- 5 Lake Ontario
- 6 St. Lawrence River

Field 4: **JURISDICTION** – Identify jurisdiction.

- 1 Illinois
- 2 Indiana
- 3 Michigan
- 4 Minnesota
- 5 New York
- 6 Ohio
- 7 Ontario
- 8 Pennsylvania
- 9 Quebec
- 10 Wisconsin

Field 5: **UNIT** – Report units of measurement.

- 1 Mgal(US)/day
- 2 ML/day

Field 6: **WITH_AMT** - Withdrawal amount is defined as the total withdrawal taking from surface water or groundwater by "threshold facilities." This is actual withdrawal amount, not capacity.

A "threshold facility" is defined as a facility withdrawing in excess of the Great Lakes-St. Lawrence Compact/Agreement uniform trigger level of 100,000 U.S. gallons/day (380,000 liters/day) averaged over a 30-day period. A threshold facility is determined by the total withdrawal (or consumption) of all sources combined (Great Lakes-St. Lawrence surface water, other surface water, and groundwater) rather than a single source.

Field 7: **CONSUMP** – Amount of withdrawal consumed within the Basin (field 3). (Definition taken from the baseline metadata.)

Field 8: **CONSUMP_PERCENT** - The percentage of reported consumptive uses that were determined through actual measurement.

Field 9: **CONSUMP_COEFFICIENT** - If the consumptive use was less than 100% measured, report the range of coefficients used to calculate consumptive use. This field may be reported as a single number or a range, depending to the values used to calculate consumptive use.

Field 10: **FACIT_NUM** - The number of threshold facilities that make up the reported withdrawal amount. A facility with more than one source of water will be counted as a Great Lakes basin facility if it has a Great Lakes basin source, otherwise it will be counted as an Other Surface water facility.

Field 11: **INTRABASIN_TRANSER_AMT** - The total amount transferred from or to the source Great Lakes-St. Lawrence River basin (the basin identified in field 3) to or from another Great Lakes-St. Lawrence basin. The amount of water transferred is reported as a positive number for the Great Lakes watershed from which the water is transferred and a negative number for the receiving Great Lakes watershed.

Field 12: **INTRABASIN_RETURN** - Total amount of transferred water returned to or from the basin identified in field 3. Returns to the basin associated with an outgoing transfer are reported as negative numbers; returns from the basin associated with an incoming transfer are reported as positive numbers. Some intrabasin transfers may not be required to provide return flow. In these cases, return flow would be zero in the summation of the aggregate return flow.

Field 13: **NET_INTRABASIN_CHANGE** – The net change (loss or gain) of water to the source Great Lakes-St. Lawrence River basin (the basin identified in field 3) caused by the intrabasin transfer. This number will be auto-calculated within the database by summing intrabasin return flow and the intrabasin transfer amount.

Field 14: **INTRABASIN_CONSUMP**– Amount of intrabasin transfer that is consumed within the receiving Great Lakes-St. Lawrence River basin.

Field 15: **INTRABASIN_NUM** – The number of intrabasin transfers that make up the reported intrabasin transfer amount.

Field 16: **DIVERSION_AMT** – The total amount of water diverted from or to the basin identified in field 3. The amount of water diverted out of the Basin is reported as a positive number and the amount of water transferred into the Basin is reported as a negative number.

Field 17: **DIVERSION_RETURN** – The total amount of water associated with the diversion returned to or from the basin identified in field three. Returns to the basin associated with an outgoing diversion are reported as negative numbers; returns from the basin associated with incoming transfers are reported as positive numbers. Note that some historical diversions may not provide return flow to the basin identified in field 3. In these cases, return flow would be zero in the summation of the aggregate diversion return flow.

Field 18: **NET_DIVERSION_CHANGE** - The net change (loss or gain) of water to the source Great Lakes-St. Lawrence River basin (the basin identified in field 3) caused by diversion. This number is auto-calculated within the database by summing diversion return flow and the diversion amount.

Field 19: **DIVERSION_NUM** – The number of diversions that make up the reported diversion amount.

Field 20: **METHODS** - Report the method used to determine the withdrawal amount.

- 1 Withdrawals measured (metered)
- 2 Withdrawals partially measured (>50% of withdrawals metered)
- 3 Withdrawals calculated (<50% of withdrawals metered, hours of pumping x pump capacity, hours of flow x flow rate at a weir or pipe, or other similar method)

Field 21: **ALL_WITH_AMT** - Total withdrawal amount that includes threshold facilities AND additional facilities that do not reach the Compact/Agreement trigger level of 100,000 US gal/day (380,000 liters/day).

Field 22: **ALL_CONSUMP** - Total consumption amount that includes threshold facilities AND additional facilities that do not reach the Compact/Agreement trigger level of 100,000 US gal/day (380,000 liters/day).

Field 23: **YEAR** – Data year.