

**A Report to the Great Lakes-St. Lawrence River Water Resources  
Compact Council/Regional Body  
Water Conservation and Efficiency Program Review  
New York State**

**2023**

**Lead Agency/Contact:** New York State Department of Environmental Conservation  
John Hock, P.E. – Water Quantity Management Section,  
625 Broadway, Albany, NY (518) 402-8197

**Status of State’s Program:** NYSDEC’s Division of Water - Water Quantity Management Section currently regulates by permit or registration all water withdrawal systems with the *capacity* to withdraw 100,000 gallons per day or more and all agricultural facilities that withdraw 3 million gallons or more during any 30-day period within the Great Lakes basin. Since 1988, NYS Environmental Conservation Law (ECL) 15-1501 has required the submittal of a water conservation plan with each new application for a permit for a public water supply system. The main objective of the plans is to promote implementation of the most environmentally sound and economically feasible water conservation measures. Components of these plans must include, at a minimum, 1) customer and source metering, 2) water auditing, 3) leak detection and repair, and 4) outdoor water use management.

Amendments to NYS ECL 15-1501, et.al. were passed into law in 2011 and became effective beginning February 15, 2012. The current law extends DEC’s permitting and registration authority throughout the state and now includes non-public water supplies, registration of existing agricultural withdrawals that are greater than or equal to 100,000 gpd (30-day average), and registration of major basin water diversions outside of the Great Lakes-St. Lawrence River basin of greater than 1,000,000 gpd. Implementing regulations (6 NYCRR Part 601) took effect on April 1, 2013 that included a five year schedule to permit all existing withdrawals that meet or exceed the threshold volume.

On May 25, 2017, NYS DEC issued Technical & Operational Guidance Series (TOGS) 3.2.1 to promote consistent implementation of these statutes and regulations. On April 12, 2017 formal guidance (TOGS 1.3.12) was adopted for implementing flow related conditions in water withdrawal permits. This guidance requires that DEC assess the need for low flow (a.k.a. passby flow) conditions for new stream withdrawals, modified stream withdrawals, and existing stream withdrawals at permit renewal. This guidance requires that applicants enact feasible water conservation practices to ensure that best usages of stream resources and aquatic habitat are maintained and that the water withdrawals will result in no significant or cumulative adverse impacts to the quantity and quality of the water source.

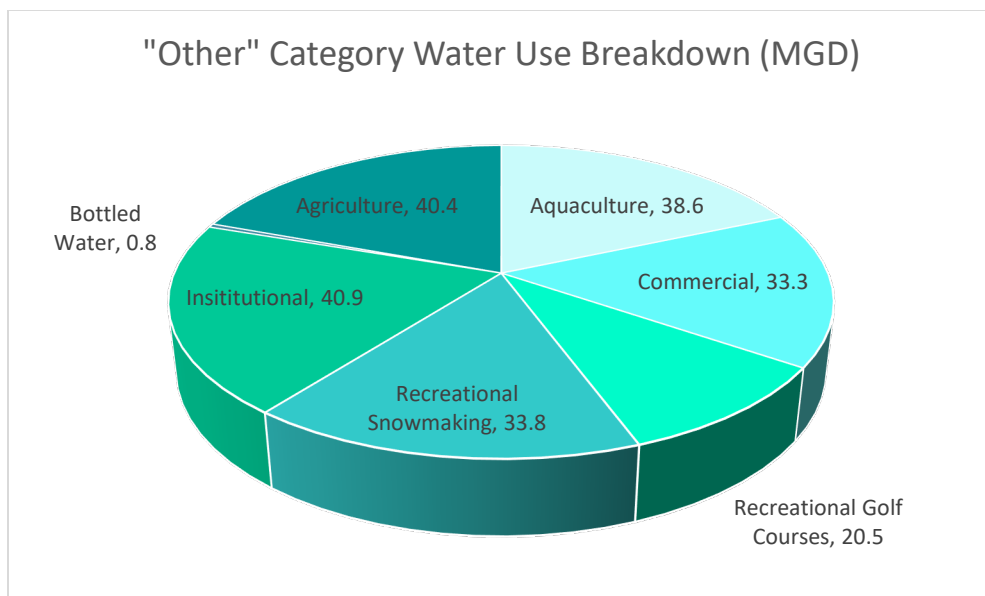
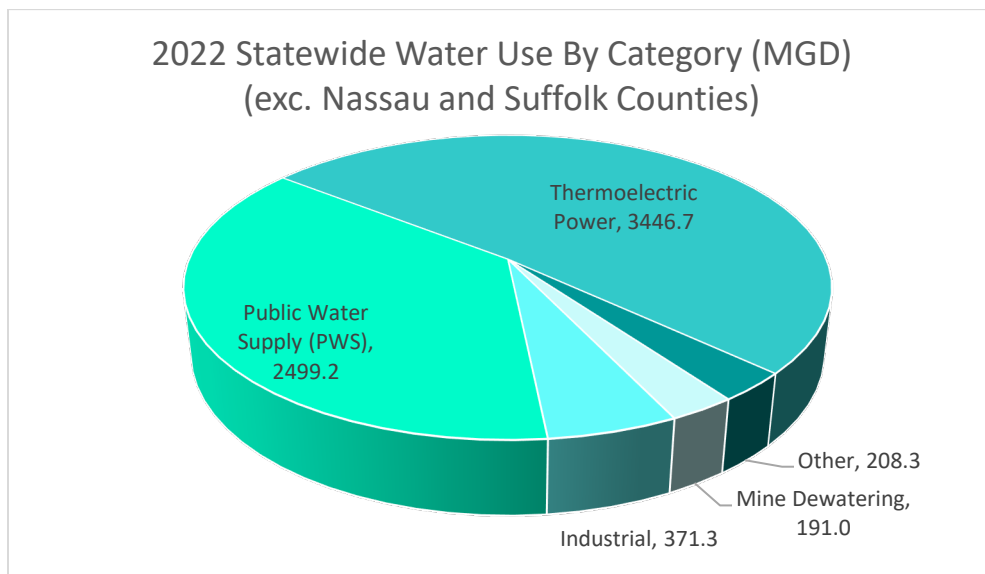
In 2023, NYSDEC worked with the New York State Energy Research and Development Authority (NYSERDA) to develop improved efficiency standards, requiring lower flow rates for showerheads, urinals, and bathroom and kitchen faucets sold or installed in NYS.

DEC currently regulates approximately 750 public water suppliers and non-public facilities combined within the Great Lakes Basin. Since the program’s inception in 1905, the Department and its predecessor commissions have issued approximately 12,000 water withdrawal permits (historically known as “decisions”). Since the current program regulations were passed in 2013, DEC has issued 614

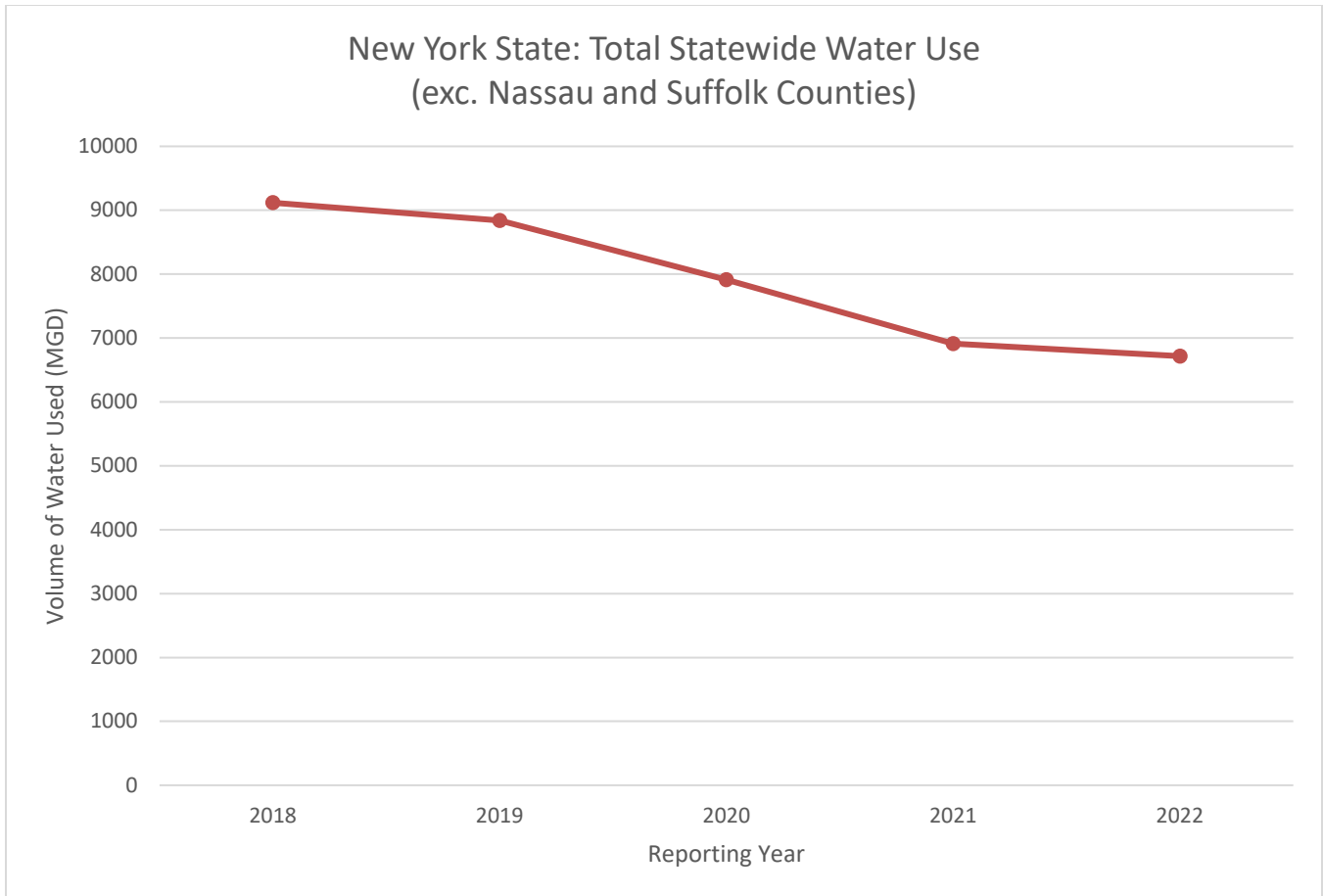
water withdrawal permits, permit modifications, permit renewals, and permit transfers within the Great Lakes Basin and 1,653 permits statewide.

**2022 Statewide Water Use and Water Use Trends:**

NYSDEC achieved 100 percent reporting compliance for withdrawals in calendar year 2022. Per NYCRR Part 601.5 regulations, specified facilities are to submit annual reports to the Department on or before March 31<sup>st</sup> of each year. Reports include but are not limited to water sources, source capacities, average daily usage, maximum daily usage, total monthly usage, and a summary of current water conservation practices. 2022 statewide water usage per category is summarized in the two charts below. Note that this data excludes Nassau and Suffolk Counties (Long Island) and includes portions of the state not located in the Great Lakes basin. Basin-specific water use trends can be found in the 2022 Great Lakes Commission Annual Report: <https://www.glc.org/library/2022-glc-annual-report>



NYSDEC has been collecting water usage data from certain facilities since 2005, and from most facilities with the capacity to withdraw 100,000 gallons per day or more since 2009. Summarized in the graph below are the past five years of statewide water usage.



**Water Conservation and Efficiency Program Objectives:**

OBJECTIVES	LEGISLATIVE OR PROGRAM CITATION
<ul style="list-style-type: none"> <li>○ Guide programs toward long-term sustainable water use.</li> </ul>	<p>NYSECL 1501.8 requires the DEC to adopt a program based on the Compact’s five water conservation goals to assure consistency; NYSECL 1503.2 adopts the Compact’s decision-making criteria for permit approval, including implementation in a manner that incorporates environmentally sound and economically feasible water conservation measures; and 1503.3 requires the DEC to publish a water conservation manual.</p>
<ul style="list-style-type: none"> <li>○ Adopt and implement supply and demand management to promote efficient use and</li> </ul>	<p>- An additional Water Conservation Manual (15 ECL 1501.8), has been developed by DEC to address various components of this objective which will be incorporated into conservation plans developed by all new non-potable water permit applicants.</p>

<p>conservation of water resources.</p>	<ul style="list-style-type: none"> <li>- Water conservation plans are required to provide annual water audit data which compares produced water to metered usage.</li> <li>- All water withdrawal permit applications for new or increased groundwater withdrawals must submit the results of a 72-hour pumping test.</li> <li>- All water withdrawal applications for new or increased surface withdrawals must submit hydrological data to confirm dependable water supply yields while adequately protecting water levels and in-stream flows for habitat.</li> <li>- All water withdrawal permits include conditions requiring metering, leak detection and repair, water audits, and maintaining water use records.</li> </ul> <p>Demand management is implemented through Department regulations (6 NYCRR Part 601). All water withdrawal applications must demonstrate that the requested withdrawal quantity is reasonable for the proposed use and that the need for the proposed water withdrawal cannot be met or reduced by increased water conservation or efficiency.</p> <p>NYS ECL §15-0314 was amended to raise standards for water-efficient plumbing and appliances to align with federal standards issued by the Environmental Protection Agency (EPA). The law took effect January 1, 2022.</p>
<p>o Improve monitoring and standardize data reporting among State and Provincial water conservation and efficiency programs.</p>	<p>All water withdrawers with the capacity to withdraw 100,000 gallons per day or more and all agricultural facilities with registered withdrawals are required to report their water withdrawals, sources, source capacities, current conservation practices, and types of use on an annual basis. Standard reporting forms for the submittal of this data have been developed and reports may now be submitted through our online nForm web portal. Submitted data undergoes internal QA/QC before being finalized. Information required is consistent with guidance developed by Compact Council/Regional Body.</p> <p>The Department manages approximately 750 actively reporting facilities within the Great Lakes Basin and has routinely achieved 100% compliance in required annual reporting.</p> <p>New York’s Great Lakes Action Agenda, an ecosystem-based management strategy for protecting, restoring and conserving natural resources, includes a goal to “Conserve Great Lakes Water Supplies” with nine specific priority actions designed to focus state policies, programs and ongoing funding opportunities. (See <a href="https://www.dec.ny.gov/lands/91881.html">https://www.dec.ny.gov/lands/91881.html</a>.)</p>

<p>○ Develop science, technology and research.</p>	<p>In developing an additional Water Conservation Manual for non-potable uses, the DEC has worked to identify best management practices (BMPs) and state of the art technologies for consideration by various water user categories. This manual will continue to be updated as additional technologies and efficiencies are learned through consultation with entities such as AWWA.</p>
<p>○ Develop education programs and information sharing for all water users.</p>	<p>DEC's current public guidance information is available on the Department's website:</p> <ul style="list-style-type: none"> <li>- Annual Water Withdrawal Reporting: <a href="http://www.dec.ny.gov/lands/86940.html">http://www.dec.ny.gov/lands/86940.html</a></li> <li>- Water Conservation Tips for the Public: <a href="http://www.dec.ny.gov/lands/5009.html">http://www.dec.ny.gov/lands/5009.html</a></li> </ul> <p>The Water Conservation Manuals have been designed specifically to enhance public understanding and user access to best management practices for assisting various water users in developing their required plans. The manuals currently used to develop these plans can be found at: <a href="http://www.dec.ny.gov/lands/86945.html">http://www.dec.ny.gov/lands/86945.html</a></p> <p>Application guidance is available for all water users on the Department's website:</p> <ul style="list-style-type: none"> <li>- TOGS 3.2.1 (Processing Water Withdrawal Permit Applications): <a href="https://www.dec.ny.gov/docs/water_pdf/togs321.pdf">https://www.dec.ny.gov/docs/water_pdf/togs321.pdf</a></li> <li>- TOGS 1.3.12 (Incorporation of Flow-Related Conditions in Water Withdrawal Permits): <a href="https://www.dec.ny.gov/docs/water_pdf/flowtogsfinal.pdf">https://www.dec.ny.gov/docs/water_pdf/flowtogsfinal.pdf</a></li> </ul> <p>All permitted and registered water withdrawals are included in a Google Earth data layer within the NYS GIS Clearinghouse: <a href="http://www.dec.ny.gov/pubs/42978.html#waterwith">http://www.dec.ny.gov/pubs/42978.html#waterwith</a></p> <p>Basic water well information collected since 2000 for over 130,000 wells is available on NYS DEC's website at <a href="https://www.dec.ny.gov/lands/33317.html">https://www.dec.ny.gov/lands/33317.html</a>, at the NYS GIS Clearinghouse (<a href="http://gis.ny.gov/gisdata/inventories/details.cfm?DSID=1203">http://gis.ny.gov/gisdata/inventories/details.cfm?DSID=1203</a>), and through NYS OpenData at <a href="https://data.ny.gov/">https://data.ny.gov/</a>.</p> <p>Annual Reporting Forms are now publicly available on DEC's InfoLocator web GIS tool: <a href="https://gisservices.dec.ny.gov/gis/dil/">https://gisservices.dec.ny.gov/gis/dil/</a></p>