

## **Pennsylvania 2012 Water Conservation and Efficiency Program Report December 7, 2012**

The following information summarizes Pennsylvania's efforts regarding its Water Conservation and Efficiency Program, and is being submitted by the Commonwealth to the Regional Body and Compact Council pursuant to the requirements in the Agreement Article 304 and the Compact Section 4.2.2.

### **1. Lead Agency and Contacts**

Lead Agency: Pennsylvania Department of Environmental Protection (DEP)

Lead Contacts:

- Duke Adams, Executive Assistant, Office of Water Management, (717) 783-7404
- Andrew Zemba, Director, Interstate Waters Office, (717) 772-4785

### **2. Status of the State or Province's Water conservation and efficiency goals and objectives consistent with the Basin-wide goals and objectives.**

Pennsylvania continues to achieve its Water Conservation and Efficiency Goals/Objectives through a mix of voluntary efforts combined with state-wide regulatory requirements.

Pennsylvania's Act 43 of 2008 (32 P.S. § 817.25) authorized the Commonwealth to join the Compact and established that the Water Conservation and Efficiency Program, required under Section 4.2 of the Compact, shall be a voluntary program. As part of its State Water Planning Program, Pennsylvania has eight key goals that support the Basin-wide and regional objectives of the Compact. Pennsylvania's water conservation and efficiency goals are articulated in the State Water Planning Program, (27 Pa.C.S. § 3120(a).)

As reported in prior updates, the eight goals are:

1. Establish guidelines for developing voluntary water use reduction in Critical Water Planning Areas.
2. Identify and compile principles, practices, and technologies to assist all water users in conserving water.
3. Identify and compile principles, practices, and technologies to encourage groundwater recharge.
4. Develop a statewide program to promote voluntary reduction of water loss.
5. Establish a voluntary statewide conservation program for all users.
6. Develop educational programs for households, industry, and other water users.

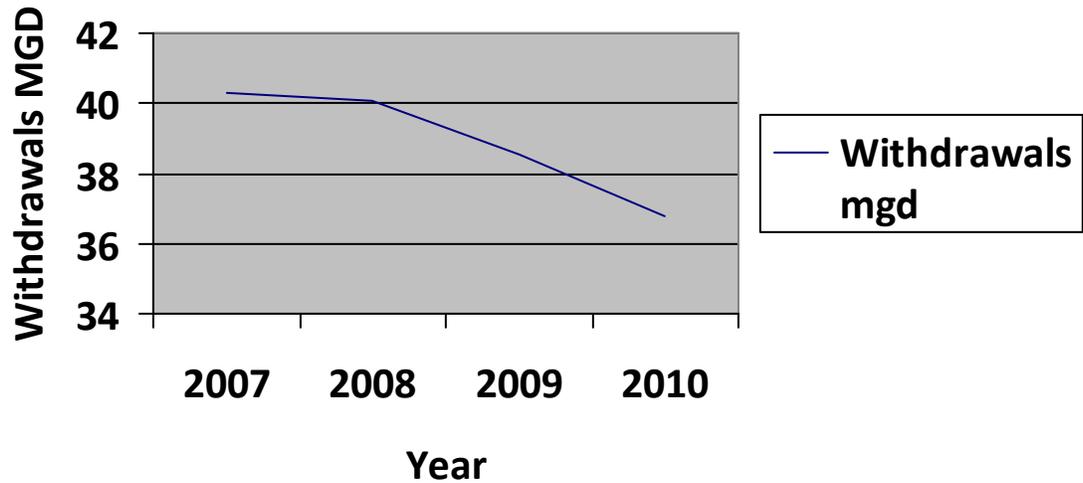
7. Facilitate Governor's Water Conservation and Efficiency Award Program.
8. Establish voluntary water use reduction goals for all users.

Regarding goals one through three, Pennsylvania is currently developing plans for two Critical Water Planning Areas (CWPAs) (outside the Great Lakes Basin). As these plans are developed, the information will be used to help implement the first three goals. No CWPAs have been identified in the Great Lakes basin at this time; however, the planning efforts currently underway in other basins are pilot projects that will help solidify the process, should the need to designate a CWPA in the Great Lakes basin arise in the future.

To help achieve all eight goals, Pennsylvania had been focusing its efforts on developing a Water Resources Technical Assistance Center (WRTAC), which is also required by Commonwealth Act 220 (Water Resources Planning Act). As previously reported, significant progress had been made: A website was developed, a non-profit organization (Save Water PA) was established, and a business plan was created. Budget pressures have reduced the availability of funds to continue the effort as originally planned. Section 5 of this paper discusses alternative approaches that are being considered. The Pennsylvania Environmental Council (PEC) is initiating fundraising efforts to further develop the Save Water PA organization and renew the commitment to water conservation assistance.

Finally, Pennsylvania has several regulatory programs, administered by DEP and the Public Utility Commission, that support the objectives of water use reduction, water loss reduction, and overall water conservation. These regulatory programs are established on a state-wide basis, independent of the Great Lakes Compact, and are implemented on an on-going basis. The programs, which primarily involve Public Water Supply Agencies and water users who withdraw 10,000 gallons of water per day or more on a 30 day average, are discussed in further detail in Section 4 of this paper. A chart showing withdrawals, diversions, and consumptive use in Pennsylvania's portion of the Great Lakes watershed is attached at the end of this report (Source: Great Lakes Commission based on data supplied by PA DEP).

## PA Great Lakes Reported Water Withdrawals



Source: Great Lakes Commission based on data supplied by PA DEP

### 3. Water Conservation and Efficiency Program Overview.

Pennsylvania's Water Conservation and Efficiency Program is implemented through a mix of voluntary efforts combined with state-wide regulatory requirements. Pennsylvania's Act 43 authorizes the use of a voluntary water conservation and efficiency program. As part of its State Water Planning Program, Pennsylvania has eight key goals that support the Basin-wide and regional objectives of the Compact. In addition, regulatory programs that support and complement water conservation and efficiency goals and objectives are already in place through other statewide laws and policies of the Commonwealth. The majority of water use in Pennsylvania's Great Lakes basin is attributable to Public Water Supplies. Public water supply agencies throughout the Commonwealth are required to obtain a water allocation permit, with approvals of systems metering, use justification, drought management, water conservation, and efficient use elements included in the permitting process Water Rights Act, (P.L. 842 No. 365), 32 P.S. §§ 631, *et. seq.*

*Pennsylvania regulatory programs with citations and summaries include the following:*

*The Great Lakes-St. Lawrence River Basin Water Resources Compact—32 P.S. §§ 817.21 et seq. Section 5 (Powers and Duties of DEP) of that PA statute, 32 P.S. § 817.25, states, inter alia, that, “The department shall have the power and duty to: (2) Administer and implement within the basin a water conservation and efficiency program required under section 4.2 of the Compact. Such a program shall be a voluntary program, utilizing the provisions of 27 Pa.C.S. § 3120 (relating to water conservation).”*

*Water Resources Planning Act of 2002 (P.L. 1776, No. 220), 27 Pa.C.S. §§ 3101 et. seq.* Act 220 authorizes DEP to build capacity to the water use reporting system to develop a program for water users to record their voluntary water conservation and efficiency efforts.  
[http://www.portal.state.pa.us/portal/server.pt/community/state\\_water\\_plan/18721](http://www.portal.state.pa.us/portal/server.pt/community/state_water_plan/18721)

*Water Rights Act, (P.L. 842 No. 365), 32 P.S. §§ 631, et. seq. Pennsylvania Surface Water Allocation Program—*under this act, public water supply agencies must obtain Water Allocation Permits from DEP to acquire rights to use surface water sources in Pennsylvania. Included in the review of permit applications, DEP considers the conservation, development, and use to the best advantage of existing sources of water supply. Permits generally contain requirements to implement water conservation programs, adopt drought contingency plans and submit annual permit compliance reports.  
[http://www.depweb.state.pa.us/portal/server.pt/community/water\\_allocation/10632](http://www.depweb.state.pa.us/portal/server.pt/community/water_allocation/10632)

**4. A description of how Pennsylvania promotes Environmentally Sound and Economically Feasible Water Conservation Measures consistent with the regional objectives follows:**

<b>OBJECTIVES</b>	<b>LEGISLATIVE OR PROGRAM CITATION</b>
<b>Guide programs toward long term sustainable water use</b>	<p>Water Rights Act, P.L. 842 (Act No. 365)—under this act, public water supply agencies must obtain Water Allocation Permits from DEP to acquire rights to surface water in PA. In its review of the permit applications, DEP considers water conservation and use of existing water supplies.</p> <p>Act 220 of 2002 (Water Resources Planning Act) authorizes DEP to build capacity to the water use reporting system to develop a program for water users to record their voluntary water conservation and efficiency efforts.</p> <p>PA Public Utilities Commission (PUC) has provisions in the PA Code for water conservation measures for public water suppliers (52 Pa. Code § 65.11) in the event of short term</p>

	<p>water supply deficiencies. In addition, Public Water Suppliers are to encourage customers to implement cost-effective water conservation measures. Rates for water utilities are set with consideration for the following factors: customer education, efficient plumbing fixtures, leak detection, water audits for large non-residential customers, unaccounted for water, and metering (65.20 PA Code). This section also requires public water suppliers to file mandatory conservation contingency plans.</p>
<p><b>Adopt and implement supply and demand management to promote efficient use and conservation of water resources</b></p>	<p>A Department regulation, which establishes water withdrawal and use registration, monitoring, record-keeping and reporting requirements at <u>25 Pa. Code Chapter 110</u>, became effective upon its publication in the Pennsylvania Bulletin on November 15, 2008.</p> <p>This regulation requires water users who withdraw 10,000 gallons of water per day or more on a 30 day average to report their water use to DEP.</p>
<p><b>Improve monitoring and standardize data reporting among State water conservation and efficiency programs</b></p>	<p>Pennsylvania participates in the Great Lakes Regional Water Use Database process. Currently this process is administered by the Great Lakes Commission in consultation with the Council of Great Lakes Governors, to meet the goal of standardizing data reporting among the Jurisdictions. A reporting requirement has been imposed in the Commonwealth on all water uses over 10,000 gallons per day; and any water withdrawal or use for unconventional gas well development requires submission of a water management plan. 58 Pa. C.S. § 3211(m).</p>
<p><b>Develop science, technology and research</b></p>	<p>PA DEP plans to seek the assistance of Pennsylvania Sea Grant and Penn State University to focus on developing science, technology, and research in the Great Lakes Basin.</p>
<p><b>Develop education programs and information sharing for all water users</b></p>	<p>Water Resources Planning Act of 2002 (P.L. 1776, No. 220), 27 Pa.C.S. §§ 3101 et. seq. Act 220 authorizes DEP to build capacity to the water use reporting system to develop a program for water users to record their voluntary water conservation and efficiency efforts.</p> <p>Pennsylvania is considering new ways to increase water conservation and efficiency awareness and enhance commitments made in Resolution 5 of the Compact Council and Resolution 6 of the Regional Body. PA DEP plans to seek the assistance of Pennsylvania Sea Grant and Penn State University to increase the level of water</p>

	conservation and efficiency outreach and education in the Great Lakes basin and promote an existing Penn State Extension website for water conservation.
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**5. Description of the State or Provincial Water conservation and efficiency program implementation timeline and status.**

Sections 3 and 4 of this report describe elements of the program that are implemented on an ongoing basis. In addition, Pennsylvania is considering new ways to increase water conservation and efficiency awareness and enhance commitments made in Resolution 5 of the Compact Council and Resolution 6 of the Regional Body.

In 2013, PA DEP plans to seek the assistance of Pennsylvania Sea Grant and Pennsylvania State University (Penn State) in a multi-year project to increase the level of water conservation and efficiency outreach and education in the Great Lakes basin. Penn State University has Federal designation and support from USGS as the state’s official water resources research center. We will initiate work with Penn State University through Penn State Agricultural Extension offices, Pennsylvania Sea Grant, and the Water Resources Research Center to develop an outreach and educational program for the Great Lakes basin. Such an outreach and education program will build on an existing water conservation-based website through Penn State University Agricultural Extension offices <http://extension.psu.edu/water/conservation>.

Finally, the Save Water PA website was implemented in 2010. Development, while on-going, has been affected by personnel and resource constraints, natural disasters and severe weather events which affected prioritization during 2011-2012. PEC remains committed to further implementation of its commitments through Save Water PA. As described in Section 3 of this report, fundraising efforts will continue in 2013 to further develop the WRTAC.

# JURISDICTION REPORT- Pennsylvania

Jurisdiction Totals

Units: Mgal(US)/d  
Year Of Data: 2010

## Total Report - All Facilities

Category	Withdrawals			TOTAL	Diversions		Consumptive Use
	GLSW	OSW	GW		Intrabasin	Interbasin	
Public Supply	27.72	0.11	1.58	29.40			2.94
Domestic Supply							
Irrigation	0.00	0.09	0.00	0.09			0.08
Livestock	0.00	1.67	0.21	1.88			1.50
Industrial	5.31	0.00	0.07	5.38			0.54
Fossil Fuel Power							
Nuclear Power							
Hydroelectric Power							
Other	0.00	0.00	0.02	0.02			

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

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

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

**Mgal(US)/d (mgd):** million gallons per day

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

**Withdrawal amount:** water removed or taken from surface or groundwater (including hydroelectric use)