

# Water Efficiency

While the [2009 State Water Plan Principles](#) provided a comprehensive overview of water conservation and efficiency issues pertinent to Pennsylvania, the water conservation and efficiency recommendations in the 2009 Update focused primarily on the establishment, funding, and operations of a Technical Assistance Center as required by Act 220 of 2002. Early phases of a contractor-organized, nonprofit-based center were completed. However, significant challenges related to the organizational structure and long-term funding to maintain and carry out its functions halted its implementation.

As an alternative, the State Water Plan will now be utilizing the existing [Pennsylvania Clean Water Academy](#) as a digital training library to house educational and outreach resources on a wide range of water resource topics, including water efficiency.

For the 2022 Update, the Water Supply Workgroup of the statewide committee met to review the 2009 State Water Plan Update recommendations and to formulate suggestions focused primarily on meeting today's priorities and challenges related to water efficiency. The following recommendations recognize the opportunities under the State Water Plan to disseminate technical information, address adaptation of climate change, manage public water supply assets, and accomplish overall improvement in efficiency by municipal and industrial water users.

## Water Efficiency Recommendations

1. Information and materials on water efficiency technologies and practices should be developed and incorporated into the Clean Water Academy [and other state information dissemination vehicles] to promote their adoption. Recommendations for administration and operation of these forums are:
  - Secure consistent funding and technical resources needed to effectively promote water use efficiency through the dissemination vehicles
  - Improve marketing and expand the audience of the [Clean Water Academy](#) and other vehicles while avoiding duplication with others offering technical assistance
  - Develop materials related to water audits, leak detection and repair, and retrofits
  - Document and disseminate goals for water use efficiency
2. The expected need for increased irrigation in the face of climate change should be assessed. Best practices for irrigation, including minimizing impact to small watersheds, should be developed by the Pennsylvania Department of Agriculture with assistance from DEP, Penn State, and agricultural stakeholder groups, and disseminated via county conservation districts and other agricultural liaison entities.
3. System ~~Asset~~ Management ~~Guidance~~ [training and guidance](#) should be developed and implemented ~~and encouraged~~ for public water suppliers ~~systems~~ not currently maintaining an asset management plan. Training in system asset management should be [developed and](#) encouraged for continuing education credits for system operators.
4. Additional aspirations for improved water efficiency associated with Pennsylvania's municipal and industrial water users:
  - Water suppliers:

- Adopt technology and use policies that cut water resource uses and demands at peak times of drought or resource constraints
- Incorporate time-of-use rates that encourage using water at times of less demand
- Water users:
  - Implement technologies that reduce overall base demand
  - Install 'smart meters' that enable detailed measurement of water use in buildings to detect water leaks and other wasteful water use practices
- Interested Parties:
  - Conduct research and promote innovative practices through marketing incentives, outreach, and educational efforts
  - Provide support and resources to entities that have implemented or wish to implement innovative water use efficiency practices
  - Offer rebates to encourage replacing open loop systems with closed loop systems
  - Link water use efficiency to the strong existing interest in energy efficiency and expand eligibility for energy efficiency grants to water use efficiency efforts