

ISSUE BRIEF

SENATE POLICY DEVELOPMENT AND RESEARCH OFFICE

PREPARED IN CONJUNCTION WITH THE SENATE REPUBLICAN POLICY COMMITTEE

Water and Sewer Infrastructure Upgrade Issues

Introduction

Like other states, Pennsylvania is in need of a massive overhaul of many components of its infrastructure. It has been estimated that the combined capital needs of existing drinking water and wastewater facilities across the state will total \$36.5 billion over the next 20 years. In addition, billions more will be needed for the operation and maintenance, replacement and repair and debt retirement associated with these systems.

In response to this growing concern, during the 2007-08 Session, the General Assembly passed, and Governor Rendell signed, the [H2O PA Act](#) (Senate Bill 2 – Earl), an \$800 million program designed to assist municipalities and authorities in paying for repairs to their water, sewer, and flood control systems. H2O PA also set aside \$35 million specifically to fund the repair of dams classified as unsafe by the Department of Environmental Protection. In addition, the [Water and Sewer Systems Assistance Act](#) was enacted to generate additional funds for infrastructure enhancement.

The Senate also adopted [Senate Resolution 224](#) (Vance) in February 2008 directing the Legislative Budget and Finance Committee to estimate the costs that wastewater treatment plants will incur to comply with the Chesapeake Bay Tributary Strategy. Further, in April 2008, Governor Rendell established the Sustainable Water Infrastructure Task Force, composed of administration representatives, legislators, local government officials and industry representatives, to provide an analysis of the issues related to sustained investment in the state's water and sewer infrastructure. The following will discuss these efforts and related issues.

H2O PA Act

The \$800 million H2O PA bond issue is funded with revenue from the Pennsylvania Gaming Economic Development and Tourism Fund. This funding program will be available for projects throughout Pennsylvania, with first priority given to those involving consolidation of two or more local systems, and second priority to those involving regional projects, such as joint authorities, where two or more municipalities have formed joint water or sewer systems. To be eligible for funding, a project must be owned by a municipality or authority, and must include local matching funds totaling at least 50 percent of the project cost. The Commonwealth Financing Authority will evaluate applications, with the Department of Environmental Protection and the Pennsylvania Infrastructure Investment Authority (PENNVEST) providing technical review and assistance.

On December 9, 2008, the Commonwealth Financing Agency approved H2O PA guidelines in three areas:

- High Hazard Dams/Unsafe Dam projects include those involving repair, rehabilitation or removal, security measures, engineering or other costs. Municipalities must provide at least 25 percent matching funds.
- Flood Control projects include construction, improvement, repair or rehabilitation. Applicants must provide easements and rights of way, relocation of buildings and utilities, alterations or rebuilding of inadequate bridges and operation and maintenance of the completed project.
- Water Supply, Sanitary Sewer and Storm Water projects are open to municipalities or municipal authorities for acquisition, construction, improvement, expansion or rehabilitation of all or part of a water supply, sewage disposal, or storm water system they own and maintain. Eligible projects also include

consolidation or regionalization of systems managed or operated as an integrated system. Applicants must provide matching funds of at least 50 percent of the amount awarded under the program.

The deadline to submit the first round of H2O PA applications is February 13, 2008.

Water and Sewer Systems Assistance Act

The Water and Sewer Systems Assistance Act authorized the \$400 million bond referendum to fund improvements to drinking water and wastewater treatment systems approved by the voters in November. PENNVEST plans to begin using the funds at its January 26, 2009 Board of Directors meeting. No new requirements or special applications are needed for communities to access the funding. Up to \$200 million of the referendum funding can be used for grants and PENNVEST anticipates using most, and perhaps all, of this grant capacity to help more economically-challenged communities across the Commonwealth. The application due date for the April PENNVEST meeting is February 16th. Communities interested in accessing this referendum funding should be targeting February 16th to get their applications to PENNVEST.

Chesapeake Bay Tributary Strategy Compliance Costs

On February 12, 2008, the Senate adopted Senate Resolution 224, directing the Legislative Budget and Finance Committee to study the costs for wastewater treatment plants to comply with [Pennsylvania's Chesapeake Bay Tributary Strategy](#). The Chesapeake Bay Tributary Strategy was released by the Department of Environmental Protection in 2005. The Strategy calls for reductions in nutrients and sediment entering the Susquehanna River. The Department has estimated that the cost for wastewater treatment plants to comply with the Strategy will be as low as \$190 million, while local municipalities have estimated the costs to be at least \$1 billion.

In November 2008, the Legislative Budget and Finance Committee released the final [Chesapeake Bay Tributary Strategy Compliance Cost Study](#). The study estimates the 2009-indexed total project cost (i.e., the total cost for the planned project consisting of nutrient-related and non-nutrient related upgrades) for the body of significant dischargers will be \$1.96 billion. This figure translates into an annualized 2009-indexed total project-related user cost (capital plus operation and maintenance) of \$84 per household per year. The report also reviewed the Pennsylvania Nutrient Trading Program, as well as potential funding sources for necessary upgrades.

Sustainable Water Infrastructure Task Force

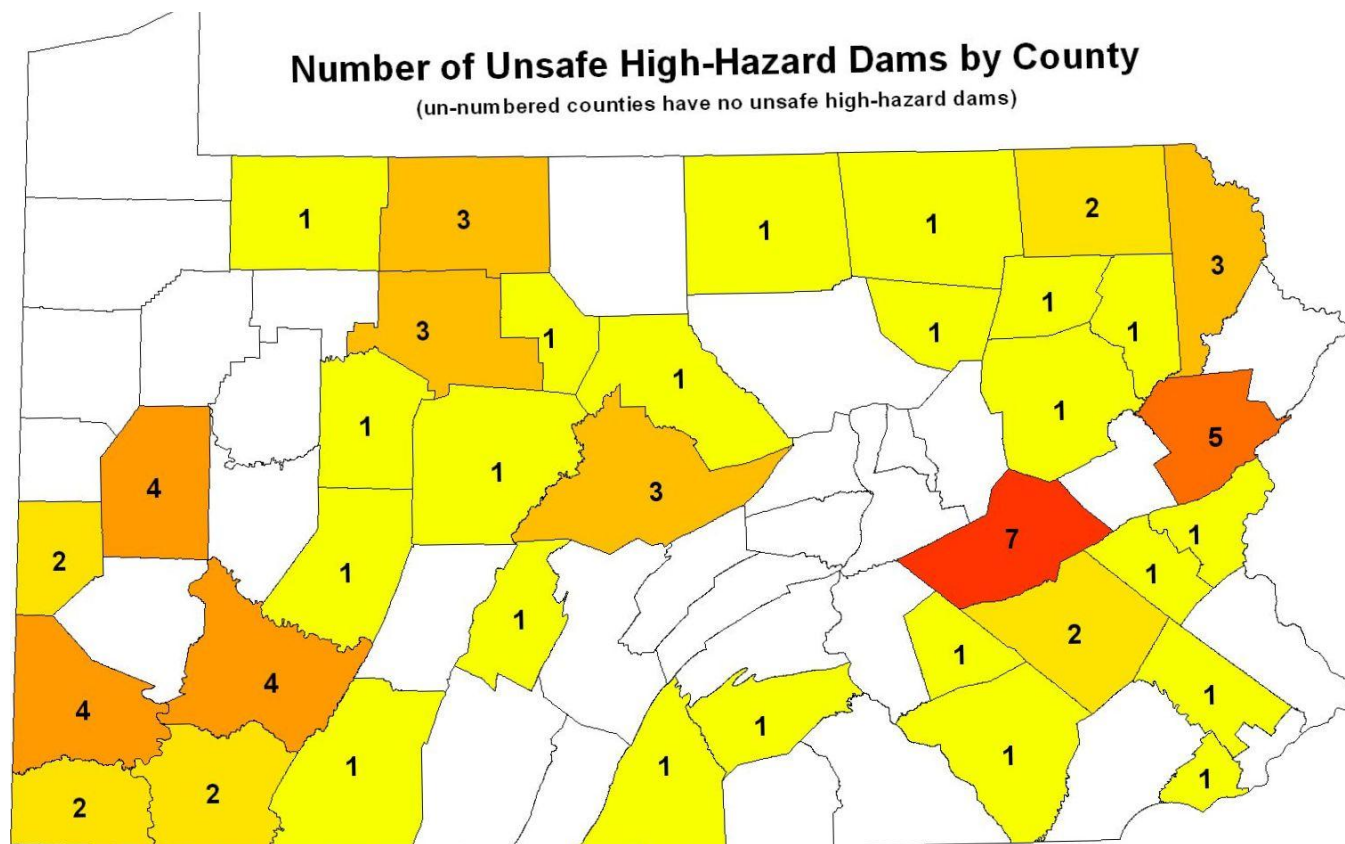
Also, in November 2008, the Governor's Sustainable Water Infrastructure Task Force issued its [final report](#) comprised of input collected at eight public meetings conducted throughout the Commonwealth and independent research and analysis performed by each of five working groups. The Task Force's report discusses options for addressing the need for additional financial resources to upgrade the state's water and wastewater infrastructure. Those options include increased federal subsidies, increased state subsidies, and increasing the reliance on user rates. The report also suggests that any sustainable solutions must fundamentally change the way water and wastewater systems are managed, both fiscally and physically.

Dams

Pennsylvania has 780 high hazard dams, according to the Department of Environmental Protection. A high hazard dam refers to any dam that may endanger a populated area; the term makes no implication as to the condition of the dam. Of the high hazard dams, 68 or 8.7 percent are considered by the Department to be unsafe, such a dam is in poor condition and/or has inadequacies in function or design. High hazard dams face two yearly inspections, one by a professional engineer on behalf of the dam owner, and one by the Department. According to the Department, unsafe dams are not formally scheduled to receive additional inspections; however, additional inspections may occur.

Importantly, not all 68 unsafe dams are at immediate risk of failure. As part of the federal response to Hurricane Katrina, the Federal Emergency Management Agency has been updating its flood maps. As a result of these updates, many dams have been deemed unsafe that previously met or surpassed government standards.

As noted earlier, the H20 PA Act set aside \$35 million to be used to repair high hazard dams. For municipalities to qualify for state assistance for dam repairs, they must provide 25 percent of the total cost. The Department of Environmental Protection will make funding recommendations based on how much of a hazard a dam poses and whether the proposed project is the “most cost-efficient way of addressing the hazard.” Final approval of such assistance will come from the Commonwealth Finance Authority.



Prepared by BJ Sieg, Research Analyst, December 10, 2008.