Modernize Clean Water Infrastructure

Jobs Protected or Created: **5,775**
Total Cost: **$385 million**

**Framing Statement**

The COVID-19 crisis has placed a burden on water and wastewater utilities because of an expected loss of revenue, threatening the Commonwealth’s clean water, rivers, and streams. Pennsylvania’s water utilities have continued to operate as an essential service during the crisis, enacting moratoriums on utility shut offs and restoring connections to ensure residents continue to have access to water during the stay-at-home shutdowns (PUC issues, 2020). Much needed water infrastructure projects have also been delayed (American Water Works Association, 2020). Wastewater treatment facilities have seen an increase of trash in their systems because residents are flushing their personal protective equipment down toilets or littering on streets that then washes into combined sewer systems (Tanenbaum, 2020).

These COVID-19 impacts are putting a significant strain on water utilities. The American Water Works Association (AWWA) estimates an aggregate financial impact on water and wastewater utilities exceeding $27 billion or a 16.9 percent impact on water sector revenues nationwide (AWWA, 2020). Expected delays and reductions in capital expenditures will result in communities experiencing a reduction in economic activity by as much as $32.7 billion (AWWA, 2020). This adds to a significant funding problem for Pennsylvania’s water utilities. The DEP’s *Pennsylvania Water and Wastewater Gap Study* indicated a $18.6 billion “gap” in funding for drinking water and wastewater infrastructure from 2015 to 2025 (PADEP, 2015).

The financial strain is not fleeting and will impact water utilities for years. Utilities will likely defer rate increases—their main source of revenue—in the short term to help residents cope with the pandemic and recession, which will further exacerbate revenue shortages (AWWA, 2020); however, the economic impacts on water utilities may mean larger rate increases are necessary over time to meet the costs of providing service and make up for lost revenue. Even before the COVID-19 water crisis, nationwide water rates were unaffordable for nearly 13.1 million households (Mack & Wrase, 2017). In Philadelphia, prior to the implementation of its income-based tiered-assistance...
program, nearly 40 percent of residents could not afford to pay their water bills (Nadolny, 2017). In other words, the pandemic is going to set back the ability of water utilities to modernize their infrastructure and put a future strain on residents’ ability to afford clean water.

These impacts threaten the Commonwealth’s ability to provide clean water. Whether it is from direct impacts like more garbage flowing into our rivers or fewer green infrastructure projects keeping sewage from entering our streams, a financially strained water utility system means more pollution in the future. Water utilities are anchor institutions in their communities, providing essential public health service and family-sustaining jobs. Water infrastructure projects provide an important opportunity to jumpstart the state economy, while safeguarding clean water by investing in shovel-ready water and wastewater infrastructure projects as well as maintenance and repairs of the existing system.

**Recommended Policy Interventions**

- Appropriate $360 million over 4 years to the Pennsylvania Infrastructure Investment Authority (PENNVEST) for drinking water and wastewater infrastructure projects. Funds should be set aside to support the design of green infrastructure alternatives in project development, which would support higher numbers of jobs including architects, planners, and laborers. Funding should also initially prioritize completing existing projects to get the most immediate job creation benefit as well as investments that leverage federal cost-share to increase the number of funded opportunities.  

- Prioritize modern, green infrastructure water infrastructure solutions in state water investments—e.g. vegetated buffers, gardens, rooftops, and green spaces that naturally capture water—rather than traditional gray infrastructure—e.g. large tunnels, storage basins, treatment facilities—because they’re quicker to develop, create immediate jobs, and provide equitable environmental benefits to communities (Neukrug and Koehler, 2020).

- Amend Act 30 of 2018 to include green stormwater infrastructure in the definition of “Water Conservation Project.” This change would significantly increase available private capital through municipal Commercial PACE programs for green stormwater retrofits and projects without costing the state any funds.

- Create a Green Stormwater Infrastructure Grant program at DEP and initially capitalize the program at $25 million. Currently, there is no central funding mechanism for green stormwater projects at the state level, aside from PENNVEST, that are open to any type of water project. This grant program would provide financial assistance to projects currently in the design phase so that they can be fully engineered. This would retain and create immediate jobs because much of this work can be done remotely by landscape architects, engineers, and planners. It could also be leveraged by municipal water utilities and municipal separate storm sewer system (MS4) permittees to support their green infrastructure projects through the design phase.
The Value of Water Campaign study The Economic Benefits of Investing in Water Infrastructure finds that for every $1 million invested in clean water and wastewater projects, between 15 and 18 jobs are created. Using the more conservative number of 15 jobs, this includes 6 direct jobs and another 9 indirect jobs triggered by the initial investment. Therefore, based on a total proposed investment of $385 million, we estimate 5,775 jobs would be retained and created.

It's unknown what kind of job impact changes to the state C-PACE law would have, though it's estimated it would generate immediate project opportunities. As a result, the economic impact of that policy change is not included in the estimates for this report.

The study assumed that increasing rates on water and wastewater by 1.5 percent each would reduce the funding gap to $4.2 billion. Federal funds would further reduce the gap, leaving Pennsylvania with a $900 million state investment gap, of $90 million per year.

Federal water infrastructure investment vehicles, such as the EPA's Water Infrastructure Finance and Innovation Act (WIFIA) and the USDA Rural Water Program, all limit the percentage of projects that can be funded by federal or program resources.

Other states, including New York, Massachusetts, and New Jersey provide much broader state grant programs for green infrastructure, in addition to traditional methods of financing water projects.
PennFuture is leading the transition to a clean energy economy in Pennsylvania and beyond. We are protecting our air, water and land, and empowering citizens to build sustainable communities for future generations.

Citizens for Pennsylvania’s Future—PennFuture—was created in 1998 as a statewide environmental advocacy organization. Since our founding, we have achieved significant legal and policy victories that reduce pollution and protect the environment. We have provided millions of dollars in pro bono legal services while setting critical precedents and enforcing environmental laws across the commonwealth.

Our team is working daily to protect public health, restore and protect natural resources, and move Pennsylvania toward a clean energy future. With offices in Harrisburg, Pittsburgh, Philadelphia, Erie, and Mt. Pocono, our team litigates cases before regulatory bodies and in local, state, and federal courts; advances legislative action on a state and federal level; provides public education; assists citizens in public advocacy; engages with grassroot citizenry to support environmental causes; and engages with communities to increase participation in democratic processes.