Is spending one dollar to get $142 a good deal? When it comes to investing in clean drinking water, you bet your life it is.

A new ACPPA-sponsored study by public policy researchers at the College of William and Mary finds that every dollar invested in drinking water infrastructure generates a variety of public health benefits by preventing waterborne diseases and reducing lead contamination in drinking water supplies. Putting a dollar value to these improvements depends on a number of variables, but the research team identified a range of possible returns beginning at more than $142 generated by each dollar invested.

The new findings come as the White House, Congress and advocacy organizations are gearing up for a once-in-a-generation debate about rebuilding America’s crumbling infrastructure.

The report analyzed the benefits of water infrastructure spending in two ways: pure economic impacts and public health benefits. The report found that one dollar invested in water infrastructure generates as much as $2.20 in economic activity.

The research team also used a panel of specific diseases to estimate the value of preventing common waterborne illnesses – norovirus, Shigella, non-Legionella bacteria, E. coli and Legionella – and the reduction in lifetime earnings associated with lead exposure-related cognitive problems. They found that investment in water infrastructure can generate $142 or more in public health benefits per dollar spent.

“The connection between water infrastructure and public health is pretty obvious,” ACPPA President Richard Mueller said. “What’s stunning about this report is the scale of the return on investment in dollar terms.
Spending one dollar can get you well over a $100 in public health benefits. Given how important safe, clean drinking water is for all Americans, it’s hard to imagine there’s any investment out there that gives government a better return."

The nation’s water infrastructure investment needs are thought to be as much as $1 trillion and an estimated 240,000 water mains break each year. With those needs in mind, the report also examined ways to pay for system upgrades and studied shortcomings of current funding and financing mechanisms. The report found that water system owners are simultaneously confronted with significant investment needs and public pressure to keep water prices low, which makes it difficult to fund improvements through rate increases. Given the lack of common auditing standards, many owners don’t have a clear picture of their investment needs, and federal resources are often under-utilized because of a lack of technical or financial capacity on the part of municipalities, willingness to plan for a loan, or the ability to meet stringent regulatory and administrative requirements (whether actual or perceived).

The researchers determined that tax exempt bonds are the most popular and cost-effective financing mechanism for municipalities. However, access to low-interest bonds depends on the economic stability of a municipality and thus may be out of reach for cities with low credit ratings.

The study also underscored the benefits of collaboration – both through public-public and public-private partnerships. “Our research found that municipalities and water structure owners are more successful when they work together,” the report said. “Creating consortia of public or private partners allows localities to build their technical capacity and increase the efficiency of their cost-models.” The report concluded that combining a rate-based funding scheme with financing at the local, state, or federal level increases the feasibility of water infrastructure projects.

“There are many important takeaways from this report,” Mueller said. “Congress needs to expand tax-exempt financing, promote collaboration, and find ways to encourage system owners to assess the condition of their infrastructure and plan for improvements. There’s also a clear need to assess the administrative and regulatory strings attached to federal money to determine if there are ways to make it easier for localities to access these critical resources.”

ACPPA is distributing the report to the media, industry allies, the Trump administration, and congressional offices. ACPPA members are encouraged to read and share it with public and private sector contacts involved in water infrastructure issues.

The report is available at [www.acppa.org/WMstudy](http://www.acppa.org/WMstudy).
ACPPA Working to Make 2018 the Year of Infrastructure

With the tax debate behind us, Congress, the White House, and advocacy groups are gearing up for a once-in-a-generation debate about infrastructure.

ACPPA is working closely with its allies in the North American Concrete Alliance (which includes such groups as the Portland Cement Association, National Ready Mixed Concrete Association, and American Concrete Pipe Association) to build support on the Hill for a big, bold infrastructure package.

President Trump made infrastructure a central theme in his State of the Union speech on Jan. 30, calling on Congress to advance a $1.5 trillion plan. While we await the specific plan, the president explained that federal investment should be “leveraged by partnering with state and local governments and, where appropriate, tapping into private sector investment.” According to what’s purported to be a leaked draft outline of the White House infrastructure plan, it will focus in several areas:

- Encouraging state, local, and private infrastructure investment by providing incentives in the form of grants for up 20 percent of a project’s cost (water supply and drinking water facilities are included on the eligibility list).
- Making federal funding and technical assistance available for innovative and transformative projects that might not otherwise receive private financing (clean water and drinking water projects are included on the eligibility list).
- Improving investment in rural communities to facilitate freight movement and improved access to reliable and affordable transportation (water supply projects included on eligibility list).
- Increasing the capacity of federal credit programs to increase investment.
- Improving infrastructure on public lands using revenues from energy and mineral development.
- Disposing of federal assets to improve the overall allocation of economic resources for infrastructure.
- Creating a financing mechanism to facilitate purchases of federally-owned, civilian real property.
- Changing rules applicable to private activity bonds to allow them to be used for a wider variety of public-purpose infrastructure.

The leaked White House document also includes principles for each infrastructure category. In the water infrastructure arena, the administration aims to:

- Authorize the Clean Water State Revolving Fund for private owned public purpose treatment works.
- Expand the Environmental Protection Agency’s Water Infrastructure Financing Innovation Act (WIFIA) authorization to include flood mitigation, navigation and water supply.
- Eliminate the requirement that WIFIA borrowers be community water systems.
- Authorize Brownfield rehabilitation and clean up of superfund sites under WIFIA.
- Reduce rating agency opinions from two to one for all borrowers.
- Increase the base level of administrative funding authorized to ensure EPA has sufficient funding to operate the WIFIA program.
- Removing the restriction on the ability to reimburse costs incurred prior to loan closing under WIFIA.
- Expand the WIFIA program to authorize eligibility for credit assistance for water systems acquisitions and restructurings.
- Remove the application of Federal requirements for de minimis federal involvement in water programs.
• Apply identical regulatory requirements to privately-owned, “public purpose” treatment works and public-owned treatment works.

ACPPA and its NACA allies are conducting numerous meetings with congressional offices to gather intelligence and urge action. Democrats, who have traditionally been better on infrastructure issues than Republicans, seem willing to work across the aisle to get a bill done. It’s clear, however, that although Congress has been waiting for the White House to move first on infrastructure and release clear objectives, ultimately, Congress will write the bill and determine the priorities.

ACPPA members are encouraged become involved in our advocacy efforts to expanding infrastructure funding and financing. Participating in NACA’s “Cement & Concrete Industry: Infrastructure State of the Union” webinar on Feb. 13 at 11:00 a.m. and attending the NACA Washington Fly-In on April 17 & 19 are both great opportunities.

---

The State of the Infrastructure Union

On Jan. 30, President Trump addressed a joint session of Congress in his first official State of the Union Address. The president’s remarks covered a broad range of administration priorities, noting key policy issues and highlighting important events from his first year in office.

In the following excerpt from the address, the president introduces his challenge for investing in American infrastructure (a full transcript of the speech is available through the inside-the-beltway publication The Hill):

“As we rebuild our industries, it is also time to rebuild our crumbling infrastructure.

America is a nation of builders. We built the Empire State Building in just one year — is it not a disgrace that it can now take 10 years just to get a permit approved for a simple road?

I am asking both parties to come together to give us the safe, fast, reliable, and modern infrastructure our economy needs and our people deserve.

Tonight, I am calling on the Congress to produce a bill that generates at least $1.5 trillion for the new infrastructure investment we need.

Every federal dollar should be leveraged by partnering with state and local governments and, where appropriate, tapping into private sector investment — to permanently fix the infrastructure deficit.

Any bill must also streamline the permitting and approval process — getting it down to no more than two years, and perhaps even one.

Together, we can reclaim our building heritage. We will build gleaming new roads, bridges, highways, railways, and waterways across our land.”
To keep members aware of the activities of government and standards organizations, we regularly sweep public databases and publications for the industry-specific terms indicated below. We then provide our members with links to documents identified in the search. Please note that in some cases the URLs may link to subscription-only databases. The purpose of this service is to identify emerging threats and trends as well as opportunities for collective action by ACPPA.

**NEWS RESULTS**

**Infrastructure Investment**

**Mayor Matt Childers: City Continues Exploring New Ideas and Projects**


“We knew at the outset of the project that it was going to be horrific. We did. We just didn’t have any idea how horrendous it would be. Road construction is easy. Infrastructure isn’t.”

**Infrastructure Plan Must Resist Allure of Wasteful Spending**


Despite the urgency of passing an infrastructure bill, spending and infrastructure reform has been a thorn in the side of presidents and Congress. President Trump, who has been playing up the prospect of infrastructure reform, faces a critical choice over whether to find alternative funding sources for projects or continue down the same road of spend and spend more.

**A Rising Tide for Water Infrastructure Investment**


Drinking water so effortlessly comes out of our taps, yet how many New Jerseyans understand the upkeep necessary to maintain the 60,000 miles of water infrastructure below our streets, which also includes sewer and storm water systems?

**Walking on Water**


America's water crisis goes well beyond the intolerable problems in Flint, throughout which ugly neurotoxins were spread. Since 2014, according to the Environmental Protection Agency, 41 states have reported action level exceedance, meaning that higher-than-acceptable levels of contaminants are in the drinking water. Waterborne disease outbreaks have become common.
Outlook 2018: The Biggest Water Topics in the West This Year


California and other Western states will be grappling with long-term water issues related to infrastructure, clean drinking water systems and watershed restoration, among other concerns.

Materials

Fungus May Help Concrete Self-Repair


Researchers at Binghamton University-State University of New York and Rutgers University have developed a self-healing fungi concrete that could help permanently repair cracks, according to Science Daily.

New Environmentally Friendly Mix To Prevent Concrete Cancer in Building Industry


Imagine if you could reduce or replace the toxic ingredients in concrete with an uncontaminated raw natural material direct from mother earth and have safer longer lasting concrete structure?

The Economic Demands for Sustainable Cement Production

01/11/2018  http://www.publicnow.com/view/01B5CC4E3B2E9783E0E5BADC498469E081F92311

Cement production discharges more than 500,000 tons of sulfur dioxide, nitrogen oxide, and carbon monoxide a year into the atmosphere. However, what is really driving many cement producers to adopt more sustainable practices is economics. Energy costs represent 20-40% of the total production costs in the cement industry, based on U.S. Department of Environmental Protection (EPA) estimates.

Projects

[Illinois] Pipe Problems Delay Hotel Construction

01/30/2018  http://www.1470wmbd.com/pipe-problems-delay-hotel-construction/

Broken pipes have delayed construction at the Four Points by Sheraton Hotel in downtown Peoria.

[Georgia] Kennesaw State University Plans Sewer System Upgrade


Cobb County’s Board of Commissioners approved an upgrade Jan. 9 to Kennesaw State’s sewer system because of the increase in students on campus and in the surrounding residential areas.

[South Carolina] Drainage Improvement Project Wrapping Up


The drainage improvement project included the removal and disposal of existing storm drains and construction of approximately 1,924 linear feet of reinforced concrete pipeline.
[Texas] Amarillo Officials Will Hold Public Meeting on Sewer Construction  
01/14/2018 http://www.wmcactionnews5.com/story/37263484/amarillo-officials-will-hold-public-meeting-on-sewer-construction

The City of Amarillo is holding a public meeting on Thursday, regarding the upcoming Hastings-Broadway Sewer Extension and Rehabilitation project.

[Pennsylvania] Construction Error Leads to Fountain of Water in West Oak Lane  
01/10/2018 http://6abc.com/construction-error-leads-to-fountain-of-water/2922481/

The Philadelphia Water Department says a fountain of water was not the result of a frozen pipe bursting, but a rupture from a construction mistake.

Water & Wastewater

[California] Service Restored To 100 Customers Affected By Water Main Break  

Water service has been restored to about 100 people who were affected by a water main break in Hayward on Sunday, city officials said.

Maryland Renewable Waste Company Could Solve a Nutrient Problem in Sussex County  

Environmentalists worry using poultry litter as fertilizer is a source of pollution for Delaware’s waterways, but a Maryland renewable waste company wants to take that litter and convert it into energy.

[South Dakota] Emergency Water Main Replacement Coming After Multiple Breaks  

Since a water main break on Saturday, the city has experienced at least four different breaks on the Wallace Street water main, affecting water service at six houses as of Wednesday afternoon, according to City Administrator Stephanie Ellwein. As of Wednesday afternoon, the most recent break had occurred around 11 p.m. Tuesday.

[South Carolina] Major Sewage Spill Threatens Vernon River  

A break in a Chatham County sewer line near Lake Mayer released about 124,000 gallons of sewage last weekend, creating a major spill in the Vernon River.
The water main break that closed a portion of southbound Van Dyke Avenue in Sterling Heights this past fall was at least in part due to a "poorly designed," 60-year-old pipe system, according to a city report.

[Ohio] Water Line Breaks Plaguing Area
Whether or not the weather is solely to blame, water line breaks over the past few days are creating a hardship on customers and repair crews.

[Maine] Millions of Gallons of Portland Sewage Still Overflowing into Casco Bay
Maine was in the grips of a worsening drought in the fall of 2016 when a 4-inch rainstorm delivered temporary but much-needed relief to parched streams, wells and reservoirs in the Portland area.

[North Carolina] Charlotte Water Responds to Nearly Half a Dozen Water Main Breaks in One Day
The source of all the water was easily noticeable. A steady fountain of water could be seen coming up thru a raised, cracked part of the sidewalk pavement.

[Louisiana] Running Faucets or Leaks: What Most Strained New Orleans During the Freeze?
Faced with too many people running their faucets for too long to keep pipes from freezing, the New Orleans Sewerage & Water Board urged residents Wednesday (Jan. 3) to "immediately turn off running water." The idea, officials said, was that running the tap all day had strained the water distribution system on the city's east bank, prompting the utility to reduce water pressure so the system could keep up with demand.

[Michigan] Water Main Break Closes Oakland Center Indefinitely
01/06/2018  https://oaklandpostonline.com/20151/campus/water-main-break-closes-oakland-center-indefinitely/
A water main break rendered the Oakland Center unusable through the afternoon on Saturday, Jan. 6. With the exception of the Banquet Rooms and Au Bon Pain, the building will reopen on Sunday, Jan. 7.
**[Ohio] 'Catastrophic' Break Projected to Cost $500,000**


A “catastrophic” water main break at the former FirstEnergy Plant C that caused several feet of flooding early Sunday morning will cost about half a million dollars to fix, Ashtabula County Port Authority officials estimate.

---

**Workforce Issues**

**Smith College to Host Forum on Lack of Women in Construction Workforce**


According to the National Association of Women in Construction, some 936,000 women worked in the construction industry in 2016, the majority in sales and office work.

---

**[Alberta] Man Rescued from Underground Pipe at Lethbridge Construction Site**


There were some tense moments at a north Lethbridge construction site on Monday afternoon as a worker was stuck in a pipe for nearly two hours before being lifted to safety.

---

**Thorburn: Tackling The Wage Gap**


Fortunately, there is at least one local development that we can all support that provides some relief from the relentless race to the bottom often indulged in by U.S. companies. This solution comes in the form of properly structured Project Labor Agreements (PLAs). By ensuring standard wages and uniform hiring practices, possibly including a requirement that workers complete apprenticeship programs, these agreements are designed to ensure that workers are treated fairly in relation to local standards.
REGULATORY RESULTS

Cement

Environmental Protection Agency | Direct Final Rule | National Emission Standards for Hazardous Air Pollutants; Delegation of Authority to Texas
The Texas Commission on Environmental Quality (TCEQ) has submitted updated regulations for receiving delegation of the EPA authority for implementation and enforcement of National Emission Standards for Hazardous Air Pollutants (NESHAPs) for all sources (both part 70 and non-part 70 sources).

General

Regulatory Information Service Center | Notice | Introduction to the Unified Agenda of Federal Regulatory and Deregulatory Actions—Fall 2017
The complete Unified Agenda and Regulatory Plan can be found online at http://www.reginfo.gov and a reduced print version can be found in the Federal Register.

Water Supply

Environmental Protection Agency | Final Rule | Public Notification Requirements for Combined Sewer Overflows to the Great Lakes Basin
The Environmental Protection Agency (EPA) is finalizing a rule to implement section 425 of the Consolidated Appropriations Act of 2016, which requires EPA to work with the Great Lakes States to establish public notification requirements for combined sewer overflow (CSO) discharges to the Great Lakes.

LEGISLATIVE RESULTS

Water Funding

H.R. 4902 | Introduced by Rep. Katko, John (R-N.Y.) | To amend the Water Infrastructure Finance and Innovation Act of 2014 to provide to State infrastructure financing authorities additional opportunities to receive loans under that Act to support drinking water and clean water State revolving funds to deliver water infrastructure to communities across the United States, and for other purposes.