ARCADIS

International Municipal Lawyers Association
Washington DC

Funding Options and Financing Strategies

April 10, 2022



Agenda

1 **Water industry challenges and stormwater funding gap**

2 **Funding options, financing strategies, stormwater utilities**

3 **Infrastructure funding opportunities**

4 **Conclusion**

Issues Facing the Water Industry

Rank	Category	Score	% Critical
1	Renewal & Replacement of aging water and wastewater infrastructure	4.51	52%
2	Financing for capital improvements	4.43	55%
3	Long-term water supply availability	4.32	50%
4	Public understanding of the value of water systems and services	4.17	40%
5	Watershed/source water protection	4.14	39%
6	Public understanding of the value of water	4.11	34%
7	Aging workforce / anticipated retirements	4.06	40%
8	Emergency preparedness	4.05	31%
9	Compliance with current regulations	4.02	34%
10	Groundwater management and overuse	3.99	30%
11	Compliance with current regulations	3.98	30%
12	Cost recovery (pricing water to accurately reflect the cost of service)	3.96	27%
13	Governing board acceptance of future water and wastewater rate increases	3.94	29%
14	Public acceptance of future water and wastewater rate increases	3.90	26%
15	Talent attraction and retention	3.88	26%

Source: AWWA 2020 State of the Water Industry report

Nine of the top fifteen AWWA Water Industry Issues are related to infrastructure funding!

Stormwater Program Challenges

WEF National MS4 Needs Assessment Survey

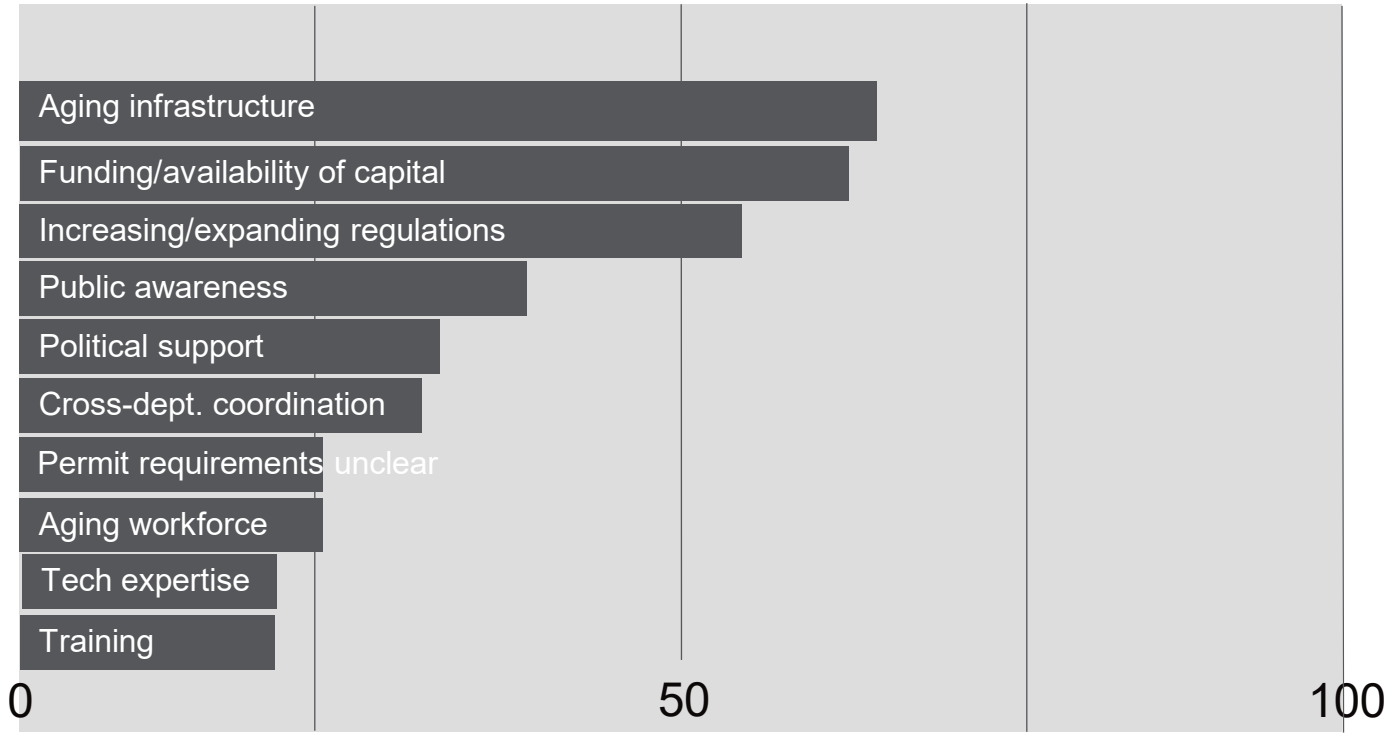
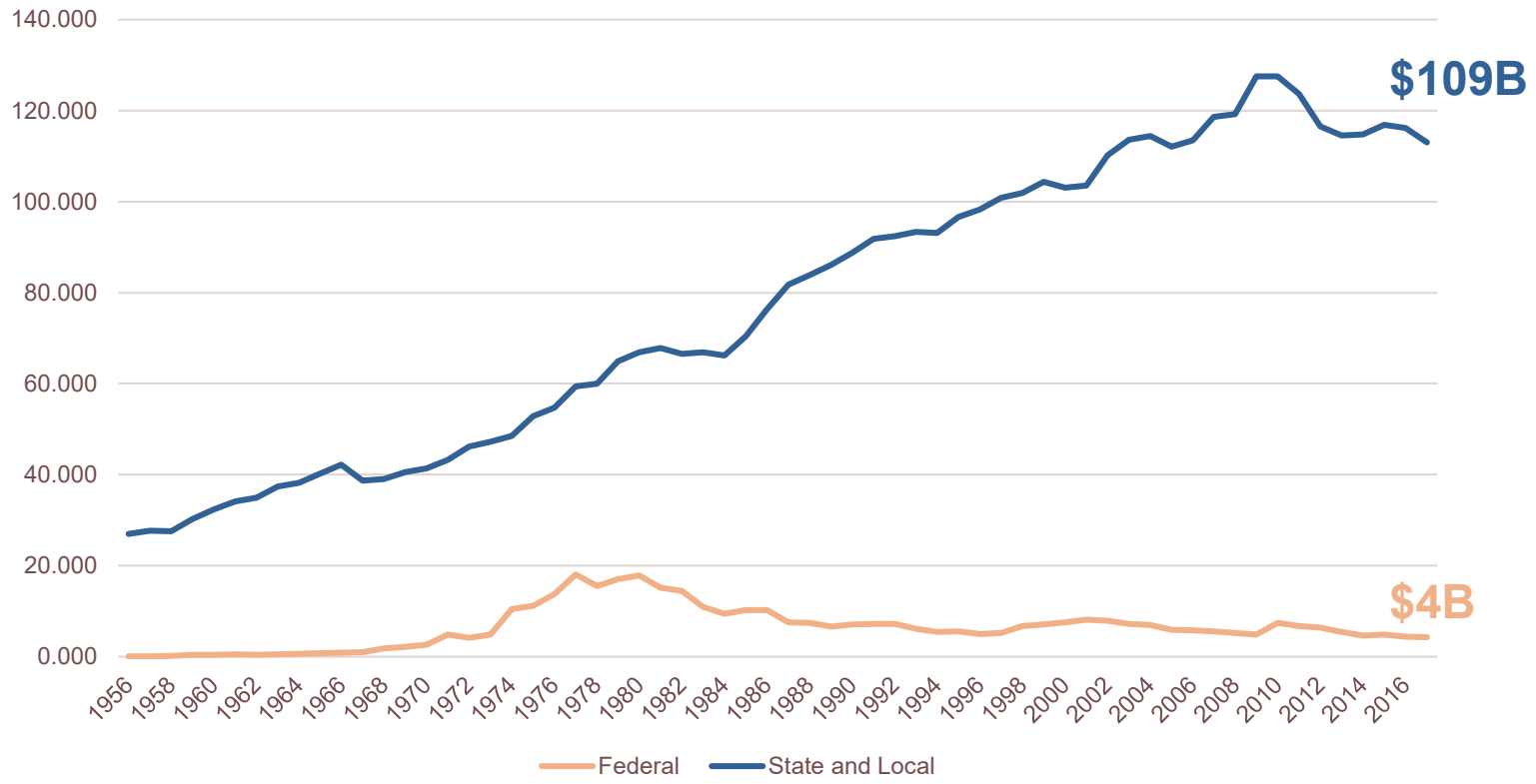


Chart depicts the percent of respondents indicating challenge as challenging or very challenging

Source: WEF Stormwater Institute, https://wefstormwaterinstitute.org/programs/ms4survey/

State and Local vs Federal Spending on Water Infrastructure

Billions of Dollars



Source: Congressional Budget Office

Includes water supply and wastewater treatment facilities

Water Infrastructure Funding is a Local Challenge

Industry Investment Need

Infrastructure at the end of its useful life necessitates significant investment.
But where will these funds come from?

AWWA Report “Buried No Longer” Potable water pipe networks	$1 Trillion
USEPA Drinking Water Infrastructure Needs Survey Water treatment, storage, and source	$137 Billion
USEPA Clean Watersheds Needs Survey Wastewater and stormwater	$271 Billion
TOTAL	$1,408,000,000,000

Stormwater Funding Needs

Do you have an annual budget gap for your stormwater program? In other words, are you deferring some expenditures due to lack of funding?

# of Reponses	Yes	No	Null
Phase I	58.6%	28.5%	12.9%
Phase II	59.3%	28.9%	11.9%
Non-traditional	45.5%	49.1%	5.5%
DOTs	56.5%	26.1%	17.4%

Source: WEF Stormwater Institute, https://wefstormwaterinstitute.org/programs/ms4survey/

Average annual program budget reported:

$3.41M

Average additional annual budget needed:

$2.92M

WEF Stormwater Funding Gap Analysis

2020 Survey Funding Gap Analysis results

- Estimated gap using “simple” method = $8.2B
- Estimated gap using “complex” method = $7.7B
- Midpoint between two estimates = $8.0B

2018 Survey Funding Gap Analysis results

- Estimated gap using “simple” method = $8.1B
- Estimated gap using “complex” method = $6.9B
- Midpoint between two estimates = $7.5B

Source: WEF Stormwater Institute, https://wefstormwaterinstitute.org/programs/ms4survey/



Section 2

Funding Options & Financing Strategies



Utility Funding Sources

What are your utility capital funding sources and/or strategies?

RANKING	UTILITY FUNDING SOURCES RANKED BY % MENTIONS
1	Rate increases (25%)
2	Bonds (18%)
3	Grants (14%)
4	Operational savings (13%)
4	Reserves (13%)
4	State Revolving Funds (SRFs) (13%)
5	Water Infrastructure Finance and Innovation Act (WIFIA) (4%)

Source: AWWA 2020 State of the Water Industry report

Options for Financing Clean & Drinking Water Infrastructure

Types of Financing	Advantages	Disadvantages
State Revolving Fund	• Below market interest rates • Options for principal forgiveness	• Project must score high enough to qualify for interest rate subsidy • meet SRF program requirements (AIS, Davis Bacon, DBE, etc) • Amortization schedule driven by local finance law
WIFIA	• Offer Treasury Rates (preferred market rates) • Flexible amortization schedules	• Interest rates above SRF subsidized rates • No option for principal forgiveness • Must meet all federal SRF program requirements • $100K application fee • 49% Project Funding
Bonding	• No federal requirements	• Higher interest rates • Issuance Process & Costs

Stormwater funding options available

Some options are tied to specific functions, costs or projects. Direct taxation and stormwater utilities can be used as dedicated sources to fund a program.



Traditional

- Stormwater utilities and taxing districts
- General appropriation revenues
- Grant and loan programs
- Municipal bonds
- Fee in-lieu-of programs
- Developer funding
- Water/wastewater revenues

Innovative

- Capital markets (EIB, incentives)
- Cost sharing
- Private and non-profit sources
- Public-private partnerships
- Mitigation banking
- Credit trading
- Subsidies, fee reductions, etc.

Innovative Funding Sources for SW and Green Infrastructure

- Cost sharing – identify incentives
- Private and non-profit sources
  - GI offers versatility in framing ideas
  - Leverage other infrastructure costs
  - Green jobs!
- Public-Private Partnerships
  - Accelerate implementation
  - Lower construction and maintenance costs
  - Access to new sources of capital
  - Shift risk



Integration of other market-based options

P3 and CBP3s

- SWU pays for local share of P3 and provides adjustments (credits) once BMPs are implemented
- Potential for leveraging funds

Water quality (nutrient) or volume trading

- Property owner meets stormwater requirements by buying stormwater nutrient or volume credits from an established bank (green infrastructure aggregators, clearinghouse, etc.) or other property owners (bilateral)
- Adjustments (credits) to stormwater fee are provided to property owner

Subsidies

- Property owners receive a subsidy to retrofit existing parcel to meet stormwater requirements (needs lower implementation costs)
- Adjustments (credits) to stormwater fee are provided to property owners

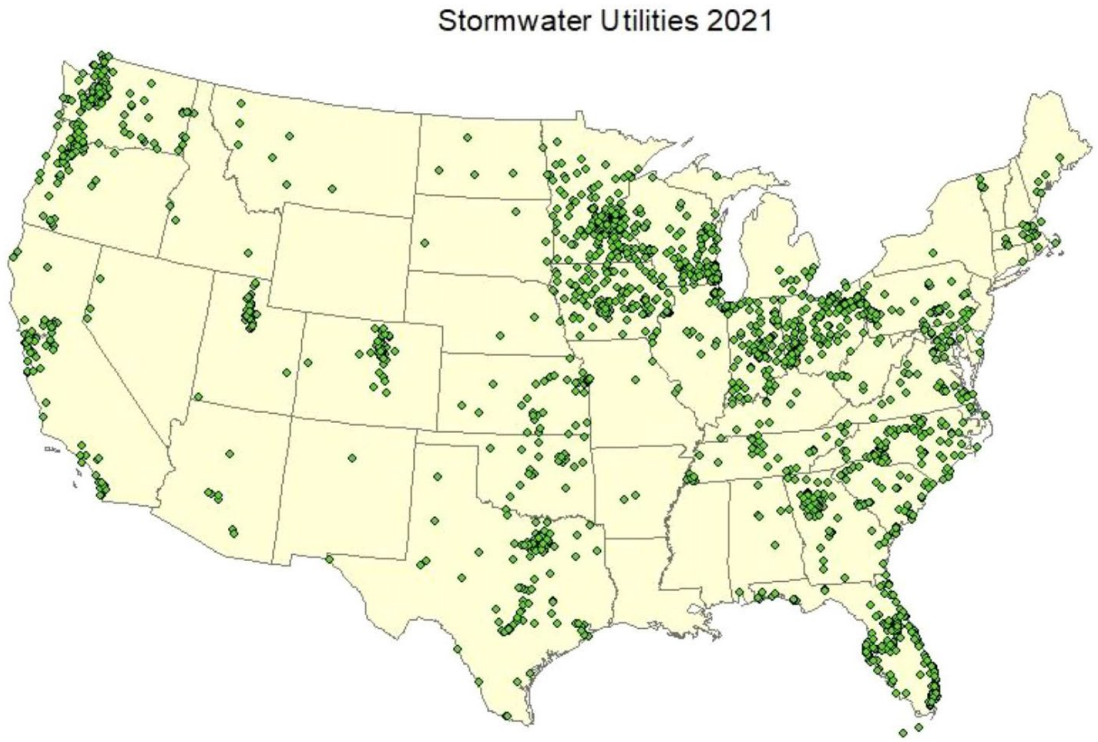
Financing Strategy

"The combination of **actions** that a utility or local government undertakes in order to **generate funds** to pay for stormwater programs, including compliance, operations, and infrastructure planning, design, construction, maintenance, and monitoring."

WEF, 2014. *Green Infrastructure Implementation*, Financing Strategies Chapter

Status of Stormwater Utilities Across the U.S.

- More than 1,800 confirmed SWUs in the U.S. but likely closer to 2,000
- Over 1/3 are more than 20 years old
- A growing trend because stormwater is a utility operation



Source: Western Kentucky University Stormwater Utility Survey

Steps to Develop a Stormwater Utility

Program Review & Revenue Requirements

Organization & Staffing

Endorsement from Elected Officials / Management

Rate Structure

Credits & Appeals

Billing Requirements

Public Outreach / Community Support

SWU Implementation / Ordinance



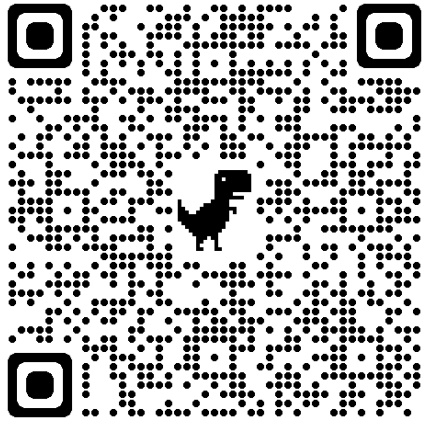
Stormwater Funding Task Force Update

- AWIA was signed into law in October 2018
- Section 4101 calls for EPA to establish a Stormwater Infrastructure Funding and Finance Task Force, composed of representatives of Federal, state, and local governments, and private (including nonprofit) entities
- Objective was to conduct a study on, and **develop recommendations to improve**, the availability of public and private sources of funding for the construction, rehabilitation, and operation and maintenance of stormwater infrastructure to meet the requirements of the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.)
- Workgroup under the Environmental Financial Advisory Board (EFAB)



Stormwater Infrastructure Finance Task Force Findings

- Current stormwater funding as well as outreach on the importance of stormwater infrastructure are insufficient to meet existing needs
- Identified an estimated annual funding gap of $7-10 billion
- EFAB made eight recommendations to EPA in its March 2020 report grouped into two overarching categories:
  - Allocate new federal stormwater funding
  - Provide stormwater funding education and technical assistance



Report: https://www.epa.gov/waterfinancecenter/efab-report-evaluating-stormwater-infrastructure-funding-and-financing



Section 3

Infrastructure Funding Opportunities

Federal Grant and Loan Programs

Funding Program	Description	Opportunity Details	Key Dates
FEMA – Hazard Mitigation Grant Program (HMGP)	• $3.5 B announced on August 5 for COVID-19 Disaster Declarations • BRIC and FMA Notices of Funding Opportunities released Aug 9, 2021; http://www.grants.gov/	• Entities seeking funding under this opportunity must have a FEMA approved Hazard Mitigation Plan at the time the project is submitted to FEMA for consideration and at the time an award is made.	BRIC and FMA applications open Sept 30, 2021, and closed 3 p.m. EST Jan. 28, 2022 Applications for add'l funding not yet known
Economic Development Administration (EDA) Investing in America's Communities	$3 B in funding to assist communities in efforts to build back better by accelerating the economic recovery and building local economies that will be resilient to future economic shocks.	• Build back better regional challenge ($1 B) • Travel, Tourism, and Outdoor Recreation ($750 M)	• Build Back Better: Phase 1 applications due Oct. 19, 2021 • Travel, Tourism, Rec: applications due Jan. 31, 2022
Homeland Security Grant Program	Projects that support state and local efforts to prevent terrorism and other catastrophic events and prepare for the threats and hazards that pose the greatest risk to the security of citizens.	Fund a range of preparedness activities, including planning, organization, equipment purchase, training, exercises, and grant management and administration.	Applications typically due in February each year
Safeguarding Tomorrow Through Ongoing Risk Mitigation (STORM) Act	State revolving fund intended to be used to mitigate the impact of natural hazards, including droughts, severe storms (Hurricanes, Tornadoes, Windstorms, Cyclones & Severe Winter Storms), wildfires, earthquakes, flooding, and zoning/land use planning changes.	• $5 M cap per project on awards • 1% interest rate on loans • Congress authorized $100 million for each FY2022 and FY2023	TBD – FEMA expected to release program rules and intended use plan in 2021.

Recent and Proposed Legislation

Funding	Description	Opportunities
Recently Enacted / In Place		
American Rescue Plan - 2021	**$1.9 Trillion approved by the House March 10** $1.9T in funding, program changes, and tax provisions to aid the nation's response and recovery from the coronavirus pandemic	• **Coronavirus State and Local Fiscal Recovery Fund: $350B** • FEMA Disaster Relief Fund: $50B (which is increasing BRIC) • Low-Income Household Drinking Water and Wastewater Emergency Assistance Program: $500 Million • Airport Relief : $8B • Fed. Transit Administration Grants : $30B
Consolidated Appropriations Act - 2021 (HR-133)	**$2.3T FY 2021** Division M = Coronavirus Response and Relief Supplemental Appropriations Act, 2021 (CRRSAA)	• $1.4T FY 2021 incl. funding for: **BUILD grants, transit grants, high hazard dams, state revolving funds** • Water Resource Development Act : $10B (USACE funding)
EPA State Revolving Funds – 2021	**$2.7B SRF** - This funding assists states, tribes and territories with infrastructure projects that help protect surface water and provide safe drinking water to communities across the United States.	
Infrastructure Bill – FY 2021	The current version of the Senate bill with bipartisan support contains $550 billion in new spending for major investments in **roads, bridges, passenger rails, drinking water and wastewater systems**. Current timeline is said to be late summer to early fall.	**Water**: investments in water infrastructure includes: • $50 billion for investment in weatherization and protection against climate-change fueled disasters like droughts and floods. • $55 billion for funding for clean drinking water, including replacing all the country's lead pipes and service lines.
Drinking Water and Wastewater Infrastructure Act of 2021	The bill contains $35 billion in new investment in new and existing programs to support drinking water and wastewater infrastructure projects. Most funds are allocated to the EPA's Drinking Water State Revolving Fund (DWSRF) and the Clean Water State Revolving Fund (CWSRF).	• SRF investment of $2-$3 billion per year over the next 5 years • Drinking Water Assistance for Small/Disadvantaged Communities. • Lead in drinking water • Resiliency and Sustainability-Tied Grants. • Sanitary Sewer Overflows and Stormwater Reuse • R&D and Information Sharing

Stormwater funding* in the Bipartisan Infrastructure Legislation (BIL)

- EPA Sewer Overflow & Stormwater Reuse Municipal Grant Program - $1.4B over 5 years
- Stormwater Infrastructure Technology Program, five Stormwater Centers of Excellence - $25M
- Stormwater infrastructure planning/development and implementation grants - $50M
- EPA Clean Watershed Needs Survey - $5M biennially
- Clean Water SRF - $11.7B, some for stormwater
- CWSRF Emerging Contaminates - $1B
- Drinking water provision – some stormwater



** Changing*

Other Funding Programs in BIL

** = Needs FY22 Appropriations*

WIFIA: $250 million over 5 years*

- One credit rating agency letter

Sewer Overflow & Stormwater Reuse Municipal Grants: $1.4 billion*

- Pending Budget Reconciliation package increases to $1.85 billion, of which $1.35 reserved for financially distressed communities

Low-Income Water Ratepayer Assistance grant pilot program *

- 40 grants to utilities per year
- Pending Budget Reconciliation package includes $225 million

Infrastructure Resiliency & Sustainability Grants: $125 million *

Connection to POTWs Grants: $200 million *

- Budget Reconciliation package includes $150 million in grants to individual households on decentralized systems.

Stormwater Infrastructure Technology:

- 3 - 5 Stormwater Centers of Excellence at $5 million per year. *
- $10 million per year for stormwater planning and implementation grants

***Wastewater Energy Efficiency Grant Pilot Program**: $100 million *

Alternative Source Water Pilot Program: $125 million. *

Water Workforce Grants: $25 million *

The Small Publicly Owned Treatment Works Efficiency Grant Program: $ amount TBD *

Three Sources of Funding Over the Next Five Years:

1. Any Eligible Project:

$11,713,000,000 for the Clean Water SRF for any eligible project.

$11,713,000,000 for the Drinking Water SRF for any eligible project.

2. Lead Service Line Replacement:

$15 billion for the Drinking Water SRF for lead service line replacement, including planning, identification and design (includes inventories).

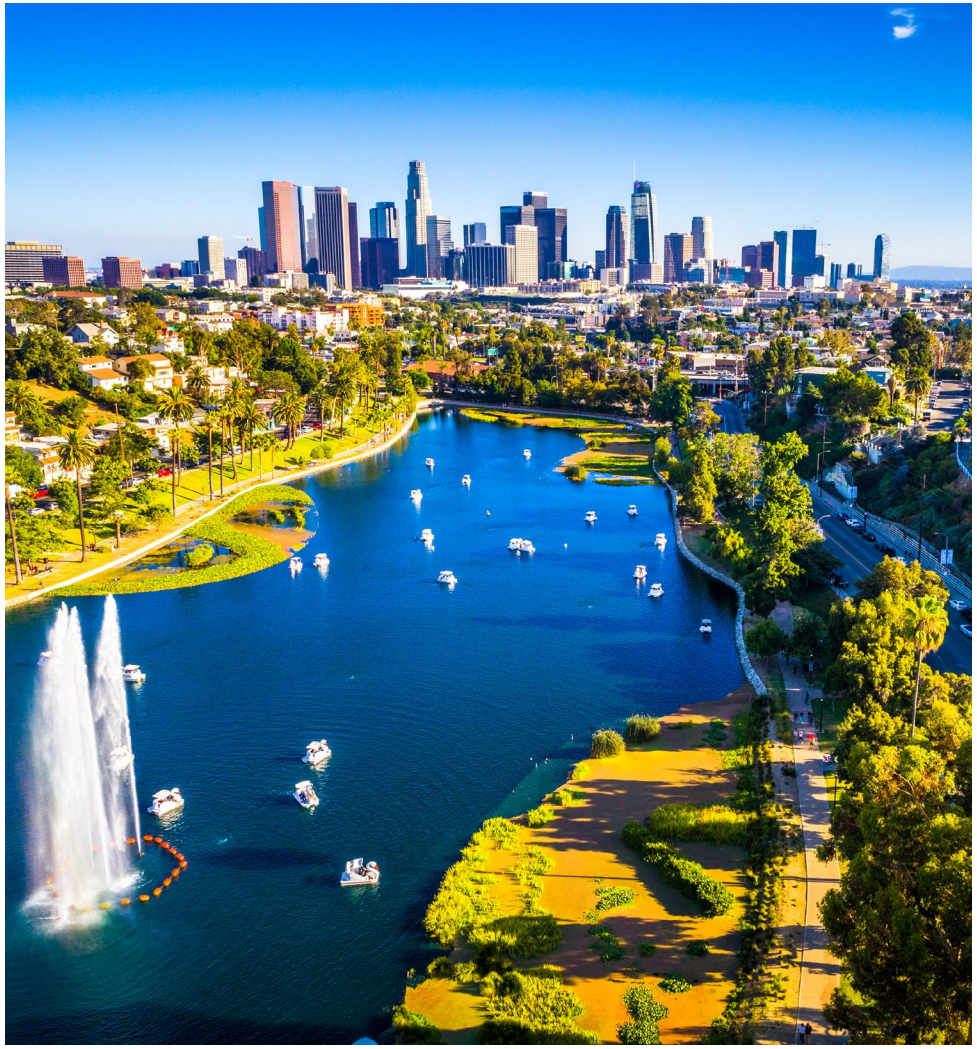
3. Remediation of Emerging Contaminants:

$1 billion for remediation of emerging contaminants with a focus on PFAS/PFOA for the Clean Water SRF.

$4 billion for remediation of emerging contaminants with a focus on PFAS/PFOA for the Drinking Water SRF.

Conclusions

- Water (W/WW/SW) program challenges are understood and the need for funding is clear
- There are several funding sources available, but gaining stakeholder buy-in is still difficult
- A systematic process to develop a financing strategy leads to successful implementation
- Need support to get funding appropriated



Thank you for attending

Learn more about building a fit-for-future utility



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