

# Financing and Technical Assistance for Stormwater

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# Stormwater Infrastructure Investment

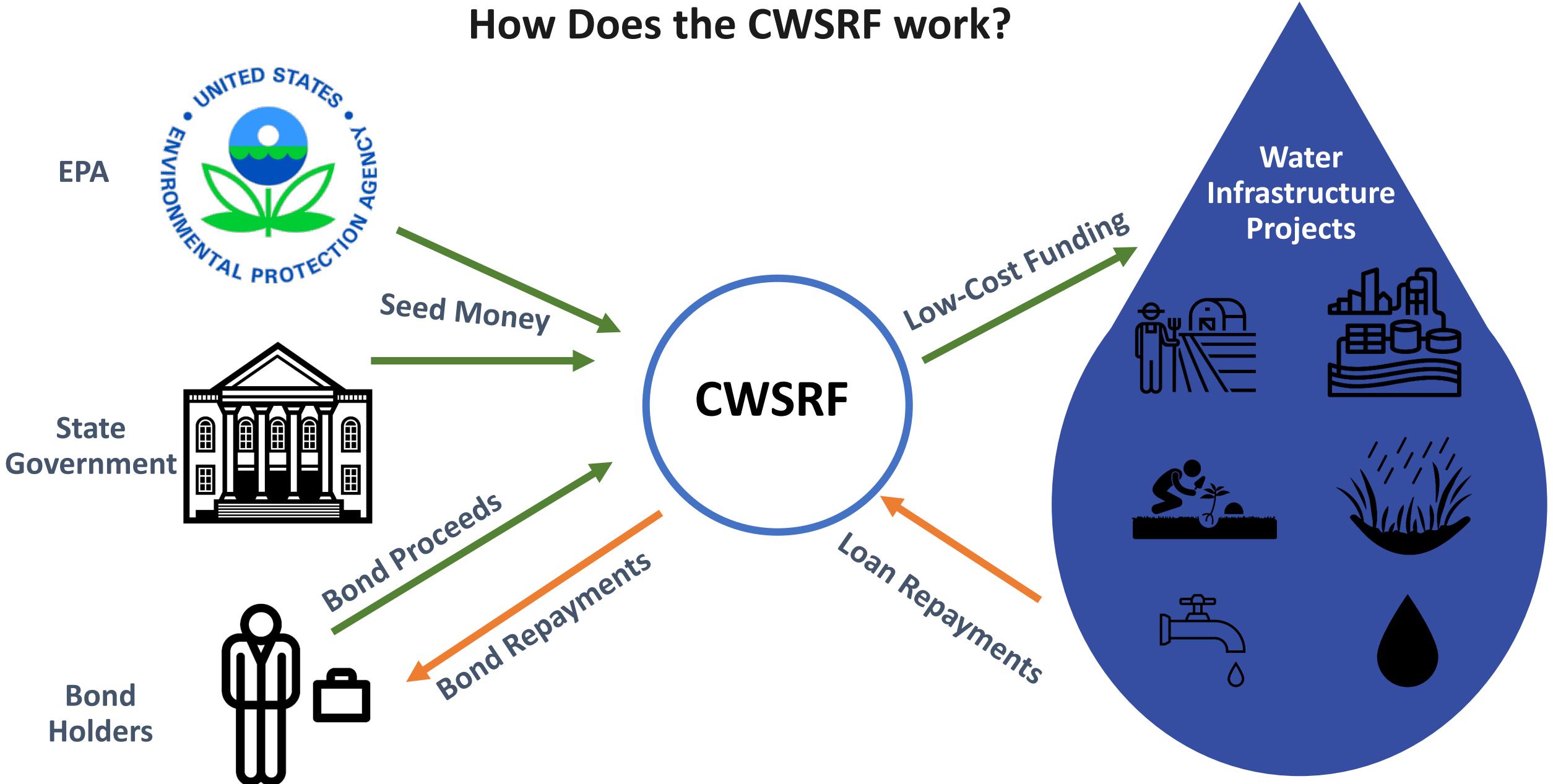
- Sources of financing for capital projects
  - Pay as you go
  - Federal/state grants
  - Municipal bonds, bank loans
  - Public-Private Partnerships
  - CWSRF & WIFIA
- All require revenue

# Stormwater Infrastructure Investment

- Sources of financing for capital projects
  - Pay as you go
  - Federal/state grants
  - **Municipal bonds, bank loans**
  - **Public-Private Partnerships**
  - **CWSRF & WIFIA**
- **Debt** for capital improvements
  - Timelines
    - Available Funds ↔ Construction
    - Payback period ↔ Use/Revenue
  - Proactive investment to avoid additional costs later

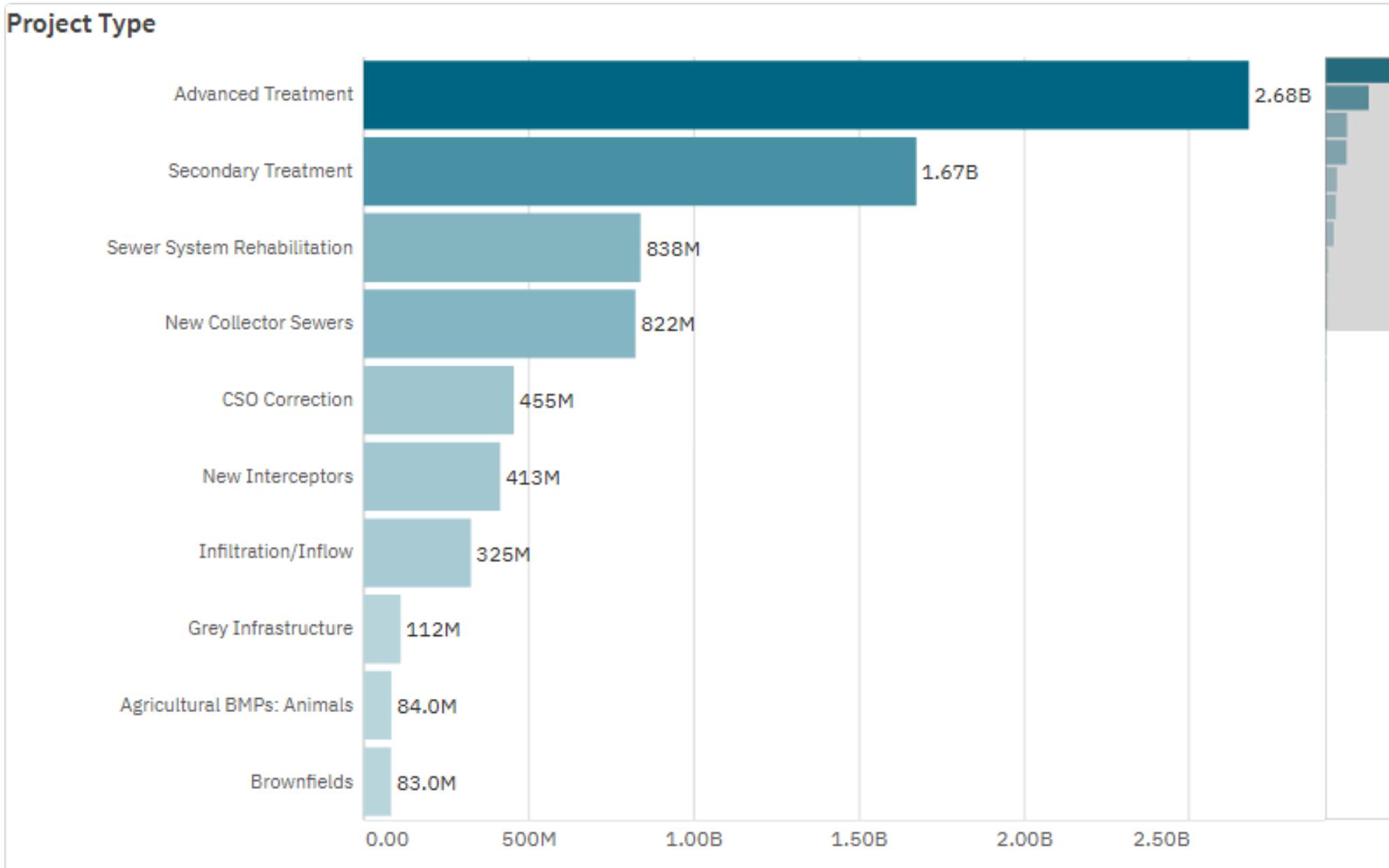
# Clean Water State Revolving Fund Overview

## How Does the CWSRF work?



# How is CWSRF used in the Bay states\*?

2000-2015

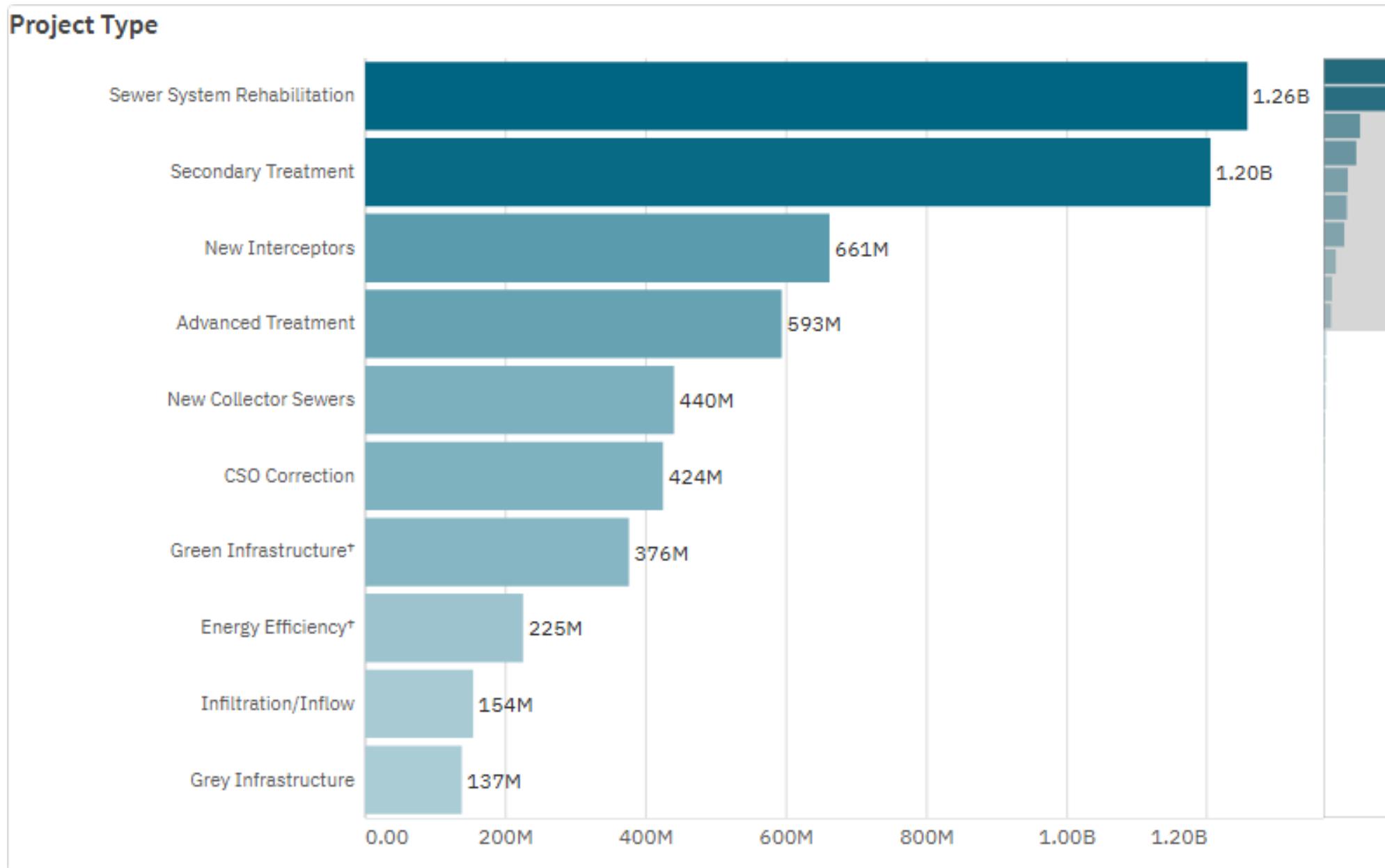


\*data by state,  
not Bay  
watershed  
(excludes NY, DC)

2016-2025

# How is CWSRF used in the Bay states\*?

\*data by state,  
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# How is CWSRF used in the Bay states\*?

\*illustration purposes only, data by watershed (excludes NY, DC)

State	Borrower Name	Current Agreement Amount	Annual Interest Rate (%)	Additional Subsidy Amount
MD	Baltimore, City of	\$8,098,571	1.2	\$2,500,000
MD	Prince Georges County	\$80,000,000	2.0	\$0
MD	Howard County	\$23,500,000	1.9	\$2,500,000
MD	Montgomery County	\$4,821,600	1.6	\$0
PA	OZFund, Inc.	\$1,823,693	2.2	\$0
PA	Capital Region Water	\$21,000,000	1.0	\$0
PA	Lebanon City	\$572,219	0.0	\$572,219
PA	Lancaster City	\$6,044,792	2.2	\$0
VA	Lynchburg, City of	\$10,000,000	0.3	\$2,500,000
VA	City of Portsmouth	\$2,335,131	0.0	\$0
VA	Westmoreland County	\$1,260,000	0.3	\$27,792
VA	Richmond, City of	\$965,950	0.0	\$0
VA	Norfolk, City of	\$2,142,967	0.0	\$0



# CWSRF/OSG/WIFIA Stormwater Examples

# Wetland Stormwater Retention

## City of Waynesboro, VA

- The City of Waynesboro converted an open field into a wetland stormwater retention system to delay the flow of excess water and filter phosphorus and nitrogen from runoff.
- The \$1.7 million project cost was split between a state grant and a CWSRF loan of \$870,376 at 0% interest for 20 years.



# Urban Stormwater Retrofit Public-Private Partnership (P3) Prince George's County, MD

- Prince George's County formed a Public Private-Partnership (P3), the "Clean Watershed Partnership," to implement stormwater BMPs across the county.
- The Partnership set goals for public engagement, contracting with local businesses, and employment of county residents. The initiative delegates project selection, design, construction, and maintenance to private partners.
- The County received low-interest rate loans from the CWSRF, borrowing \$48 million in 2019 (Phase 1), \$65 million in 2023 (Phase 2), and \$80 million (Phase 3) planned in 2025.



# Green Stormwater Infrastructure

## Capital Region Water - City of Harrisburg, PA

- CRW developed a CIP for green stormwater infrastructure throughout Harrisburg for the next 4 years.
- CRW received a \$13 million CWSRF loan from the Pennsylvania Infrastructure Investment Authority (PENNVEST) to cover the multi-year cash flow needs.
- Projects may include porous pavement, green roofs, rain gardens, and cisterns.



## Sewer Overflow and Stormwater Reuse Municipal Grants (OSG) Veteran's Memorial Park Project – City of Chester, PA

- The City of Chester received an **OSG award for \$2.3 million and a \$7.5 million CWSRF loan** for a project to address flooding, improve water quality, and enhance public usage and the environment in Veteran's Park.
- The project includes a stormwater control basin, with a drainage area of 196 acres and a storage volume of 14 acre-feet, native plants and trees, and park amenities.



Image Source: Corvias Infrastructure Solutions

# STORMWATER PROJECT EXAMPLES

## San Diego, CA

- **\$225M WIFIA loan** for Stormwater Capital Improvement Program
- Design and construction of traditional and green infrastructure projects
- Captured stormwater flows will be directed to innovative multi-benefit stormwater management technologies to reduce untreated runoff entering the Pacific Ocean
- First loan under a Master Agreement that will commit over \$359 million in WIFIA loans to San Diego

## Memphis, TN

- **\$10M WIFIA loan** for Stormwater Upgrades Project
- Memphis will complete 13 projects to modernize portions of the aging stormwater infrastructure
- First loan under a Master Agreement that will commit \$50 million in WIFIA loans to Memphis





# Technical Assistance for Stormwater





*Environmental Finance Centers*

*Closing America's Wastewater Access Gap*

*Lead Service Line Replacement Accelerators Pilot*

*Direct Technical Assistance*

*Clean Water Rural, Small & Tribal Assistance*

*Get the Lead Out (GLO) Initiative*

*Preliminary Engineering Support*

*Community Solutions Team Pilot*

*Training and Technical Assistance for Small Systems*

*Cybersecurity Technical Assistance*

*Creating Resilient Water Utilities*

*and more!*

# Technical Assistance (TA) Providers

- Regional and National Environmental Finance Centers (EFCs)
  - UMD EFC, LID Center
  - Syracuse University EFC
  - Rural Community Assistance Partnership (RCAP)
  - Environmental Policy Innovation Center (EPIC)
  - U.S. Water Alliance
  - Moonshot Missions
- WaterTA Engineering Support
- Stormwater Centers of Excellence
  - Cold Climate Center
  - Coastal Stormwater Center



## Planning and Design

- Stormwater master plans
- Green infrastructure opportunities analyses
- Watershed management plans
- Drainage studies
- Preliminary engineering reports

## Asset Management

- Stormwater system digitized maps
- Asset inventory and condition assessments
- Asset management plans
- Operations and maintenance plans

## Technical, Managerial, and Financial Capacity

- Stormwater program funding strategies
- Funding applications
- Stakeholder engagement and meeting facilitation
- Sustainable revenue sources
- Regulations and specifications

# Maryland Route One Corridor

University of Maryland  
Environmental Finance Center

- Partnership among a dozen communities to improve stormwater management, mitigate flooding, and expand pollinator habitat
- Outside convener enabled regional collaboration and peer-to-peer exchange
- Developed Action Plans as roadmaps for the communities





# Village of Oakwood, OH

**Significant I & I issues  
and stormwater  
drainage system not  
functioning properly**

2024 Camera Work  
2025 Smoke Testing &  
Flow Tracking



Address Regular and Persistent Flooding

- Surveyed and analyzed existing stormwater system
- Developed capital plan for improving drainage system
- Supporting town to identify funding and revenue source for improvements



# Stantonsburg, NC: Improving Drainage

## Community:

- Population ~800
- On North Carolina Viable Utility Distressed List

## Challenge:

- Repeated flooding due to inadequate storm sewers
- Untreated runoff to Contentnea Creek, a tributary to the Neuse River

## WaterTA Support:

- Stormwater master plan
- Preliminary project concepts



# How to Request Assistance

Submit a WaterTA request form at [epa.gov/WaterTA](http://epa.gov/WaterTA)



## Help for Your Community

The EPA's WaterTA aims to assist communities with applications for federal funding, quality infrastructure, and reliable water services. If your community is facing water infrastructure challenges and could benefit from support, we encourage you to learn more about [who can receive WaterTA services and the challenges WaterTA can help your community address](#) then complete and submit a webform request via the following button:

[\*\*Click Here to Request Water Technical Assistance for Your Community\*\*](#)



Complete in just a few minutes!