

# Using CWSRF Emerging Contaminants (EC) Funds to Tackle New or Re-emerging Contaminants

2024 National Webinar  
March 13, 2024



Emerging Contaminants Funding through the Bipartisan Infrastructure Law

# Agenda

## Using CWSRF EC Funds

### Introduction by EPA

- ◆ Project Types, Eligibilities and Development
- ◆ Funding Application Best Practices
- ◆ Summary of Proposed EC Projects

### Panel Discussion: SRF Assistance Recipients

- ◆ Introduction of Projects and Speakers
- ◆ Questions from EPA
- ◆ Questions from Audience

# Opening Poll Questions

Clean Water SRF, Emerging Contaminants



# Clean Water SRF

## Emerging Contaminants (EC) Fund

- ◆ New appropriation under the Bipartisan Infrastructure Law (BIL), enacted on November 15, 2021
- ◆ Appropriates **\$1 billion over five years** to address ECs
  - ◆ \$335M of federal funds have been deployed to states
  - ◆ Local governments and utilities can expect additional appropriations over the next three years

**All funds are to be awarded to funding applicants as  
100% forgivable loans or grants**

# Clean Water SRF Emerging Contaminants Fund

## Project Types

All Clean Water EC projects must have a **water quality benefit** and **address an identified EC**.

- ◆ Wastewater treatment (centralized & decentralized)
- ◆ Septic-to-sewer conversions
- ◆ Water reuse
- ◆ Biosolids
- ◆ Purchasing laboratory equipment
- ◆ Groundwater and surface water protection and restoration
- ◆ Stormwater management and treatment
- ◆ Nonpoint source pollution control
- ◆ Source water protection
- ◆ Landfill capping and leachate control
- ◆ Cleanup of contaminated sites

# Clean Water SRF Emerging Contaminants Fund

## Project Eligibilities

Funds can be used for:

- ◆ **Planning, design, and construction** costs for the portion of the project specific to addressing ECs
- ◆ **Pilot or demonstration projects** to assess EC treatment technologies to develop a future capital project
  - ◆ Including monitoring the fate of ECs through the treatment process

Funds **cannot** be used for:

- ◆ Identification of ECs
- ◆ Operations and maintenance costs
- ◆ Routine water quality monitoring

# Clean Water SRF Emerging Contaminants Fund Project Development

ECs must be identified prior to applying for funding.\*

ECs can be identified through:

- ◆ Traditional sampling & analysis
- ◆ For PFAS, qualitative assessment of upstream facilities known or suspected to discharge PFAS
- ◆ For nonpoint sources, e.g., stormwater, qualitative or quantitative identification within the drainage area or management area

\* States may utilize up to 2% of this appropriation to provide technical assistance to small, rural, and Tribal publicly-owned treatment works

# Clean Water SRF Emerging Contaminants Fund Funding Application Best Practices

Include clear eligibility indicators in project descriptions:

1. **Indicate what EC has been identified** and will be addressed: PFAS, microplastics, etc.
2. **Indicate viable treatment technology** or method that is reasonably expected to address ECs.
3. **For planning activities that include sampling**, clarify the scope and how they will result in a **capital project**.

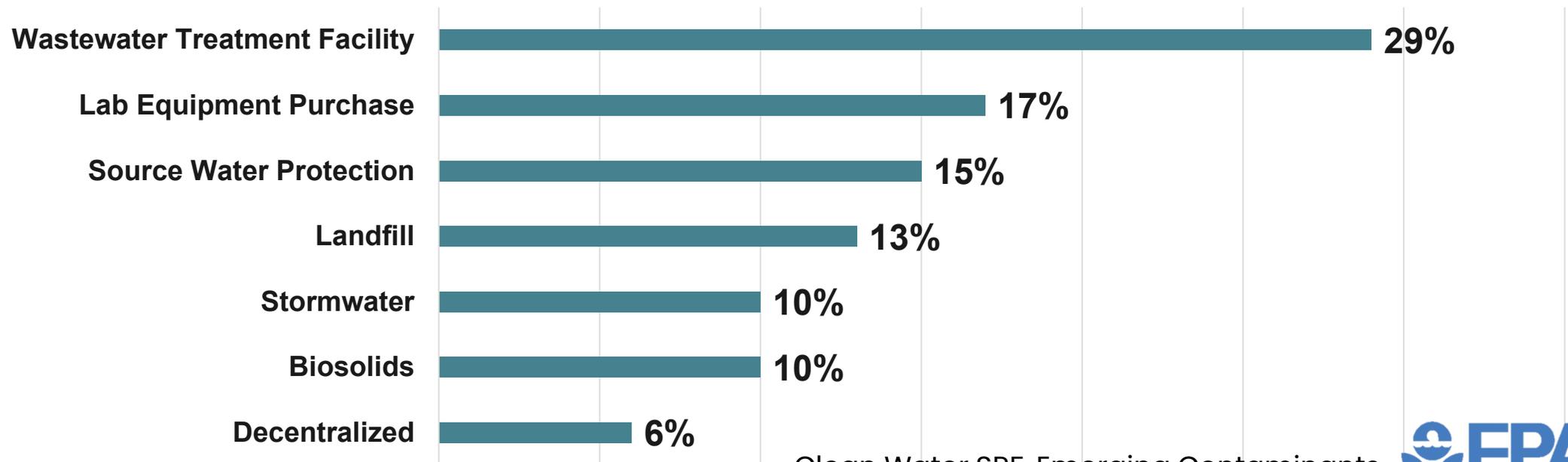
**When in doubt, consult your state SRF program.**

# Clean Water SRF Emerging Contaminants Fund Project Types

In FY 2022, there were 52 proposed **Clean Water SRF** emerging contaminants projects across states and Puerto Rico.

More than half of these projects were project planning efforts.

### Percent of Emerging Contaminants Project Types



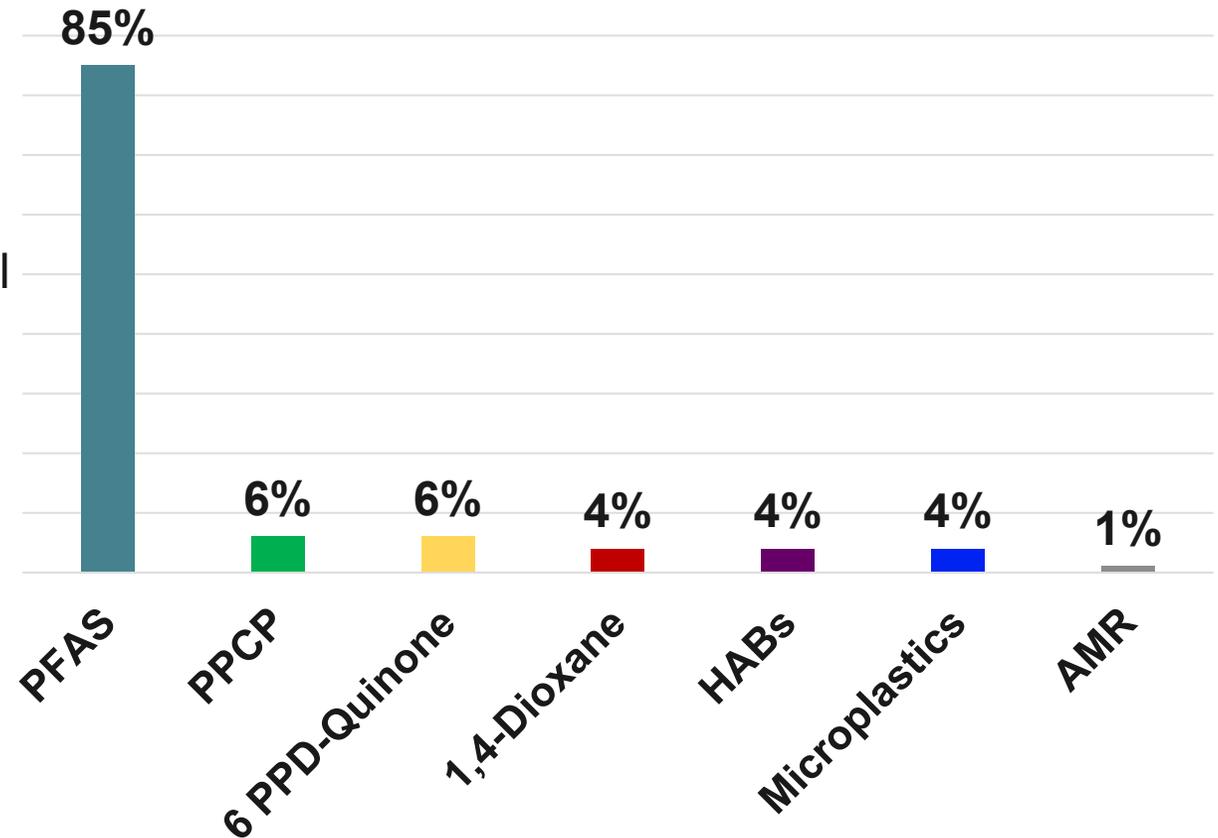
# Clean Water SRF Emerging Contaminants Fund

## Emerging Contaminants Addressed

Of the 52 proposed projects:

- ◆ 85% will address PFAS
- ◆ 25% will address other contaminants:
  - ◆ Pharmaceuticals and Personal Care Products (PPCP)
  - ◆ 6 PPD-Quinone
  - ◆ 1,4-Dioxane
  - ◆ Harmful Algal Blooms (HABs)
  - ◆ Microplastics
  - ◆ Antimicrobial Resistance (AMR)

Percent of Projects Addressing an EC



**Note:** Percentage adds up to greater than 100% as some projects address more than one EC.

# Panel Discussion

Clean Water SRF, Emerging Contaminants



# Panelist Introductions



## Alisa Blaylock

- ◆ Septic-to-Sewer Program Coordinator, Southern Nevada Water Authority



## Alan Oyler

- ◆ Public Works Project Manager, City of Orlando



## Bob Spencer

- ◆ Capital Projects Coordinator, Green Stormwater Infrastructure Program, Seattle Public Utilities

# Southern Nevada Water Authority/ Las Vegas Valley Water District

## Septic-to-Sewer Conversion

- ◆ PPCPs identified in areas of high septic system density during routine groundwater monitoring
  - ◆ Presence of PPCPs could be linked to failing decentralized systems
- ◆ Connect houses currently on septic to the nearby Flamingo Water Resource Center
  - ◆ A portion of which is treated using membrane filtration and ozone disinfection

# City of Orlando Water Reclamation Division

## Biosolids Treatment using SCWO

- ◆ Sampled influent, effluent, and biosolids for PFAS
  - ◆ Identified biosolids as a potential pathway to the environment
- ◆ Wastewater biosolids are predominantly land applied
  - ◆ Restricted by groundwater level at land application sites
  - ◆ Could be subject to greater regulation if PFAS rules develop
- ◆ Need to develop an alternative to land application
  - ◆ Supercritical water oxidation (SCWO) technology eliminates the organic fraction of sludge, reducing the volume to be handled into a small quantity of inert mineral salts
  - ◆ SCWO is also reported to destroy PFAS chemicals
  - ◆ Orlando pilot test of SCWO is scheduled for Summer 2024

# City of Seattle Public Utilities

## South Thornton Natural Drainage System Installation

- ◆ Puget Sound stormwater science team linked 6PPD and 6PPD-quinone to pre-spawn Coho salmon mortality in urban streams
  - ◆ 6PPD is a tire rubber antioxidant used to prevent degradation
- ◆ Planned installation of 43 bioretention cells along multiple residential blocks within the Thornton Creek Basin
  - ◆ Infiltration, sorption and filtration to address 6PPD and 6PPD-quinone entering the creek → also TSS, oil, copper, zinc and phosphorus

# Panelist Discussion & Questions



## Alisa Blaylock

- ◆ Septic-to-Sewer Program Coordinator, Southern Nevada Water Authority



## Alan Oyler

- ◆ Public Works Project Manager, City of Orlando



## Bob Spencer

- ◆ Capital Projects Coordinator, Green Stormwater Infrastructure Program, Seattle Public Utilities

# Closing Poll Questions

Clean Water SRF, Emerging Contaminants



# Resources

## **CWSRF eligibilities:**

- <https://www.epa.gov/cwsrf/overview-clean-water-state-revolving-fund-eligibilities>

## **CWSRF emerging contaminants case studies & FAQs:**

- <https://www.epa.gov/cwsrf/clean-water-state-revolving-fund-emerging-contaminants>

## **Research references and additional information:**

- <https://www.epa.gov/sustainable-water-infrastructure/clean-water-technology-center>

# Contact Information

## State CWSRF Program Contacts

<https://www.epa.gov/cwsrf/state-cwsrf-program-contacts>

## EPA CWSRF Emerging Contaminants Team

[cwsrfEC@epa.gov](mailto:cwsrfEC@epa.gov)

**Thank you for attending!**