

Clean Water SRF

Emerging Contaminants Funding:

Recent trends and projects

2023 CIFA SRF Workshop
November 13, 2023



Emerging Contaminants Funding through the
Bipartisan Infrastructure Law

Agenda

What's Emerging in Stormwater and Wastewater?

Clean Water SRF Emerging Contaminants Funding

- ◆ Emerging Contaminants Fund Overview
- ◆ Eligibilities
- ◆ Federal Fiscal Year 2022 Year-in-Review
- ◆ Eligibility Challenges and Best Practices
- ◆ Panel: Clean Water Projects Addressing Emerging Contaminants
- ◆ Questions & Answers

Clean Water SRF

Emerging Contaminants Fund Overview

- ◆ New appropriation under the Bipartisan Infrastructure Law (BIL), enacted on November 15, 2021
- ◆ Appropriates **\$1 billion over five years** to address emerging contaminants
 - ◆ FFY 2022: \$100 M
 - ◆ FFY 2023 to FFY 2026: \$225 M each year
- ◆ Funding issued to states as CWSRF Emerging Contaminants Capitalization Grant based on the current CWSRF distribution percentages
- ◆ All funds are to be awarded to funding applicants as **100% forgivable loans or grants**

CWSRF Emerging Contaminants Fund

What are emerging contaminants?

- ◆ Examples: PFAS, antimicrobial resistant bacteria, 6PPD-quinone (from tires), microplastics, pharmaceuticals and personal care products
- ◆ Contaminants with national water quality criteria, except for PFAS, are not considered emerging contaminants.
 - ◆ Includes nutrients (e.g., ammonia, nitrogen, and phosphorus), certain organics, and certain metals.



Definition only for the purpose of CWSRF financing, not DWSRF.

See Appendix B of EPA's March 2022 memo:
https://www.epa.gov/system/files/documents/2022-03/combined_srf-implementation-memo_final_03.2022.pdf

CWSRF Emerging Contaminants Fund

Eligibilities

- ◆ **Projects or activities must:**

- ◆ Meet one of the 12 eligibilities outlined in section 603(c) of the Clean Water Act (CWA) – [See CWSRF eligibilities](#)
- ◆ Address **identified** emerging contaminants

- ◆ **Funds can be used for the:**

- ◆ **Portion** of the project specific to addressing emerging contaminants
- ◆ **Planning & Design** efforts to develop an eligible capital project that addresses emerging contaminants
- ◆ **Construction and capital costs** of building an eligible project that addresses emerging contaminants

CWSRF Emerging Contaminants Fund

FFY 2022 Year-in-Review

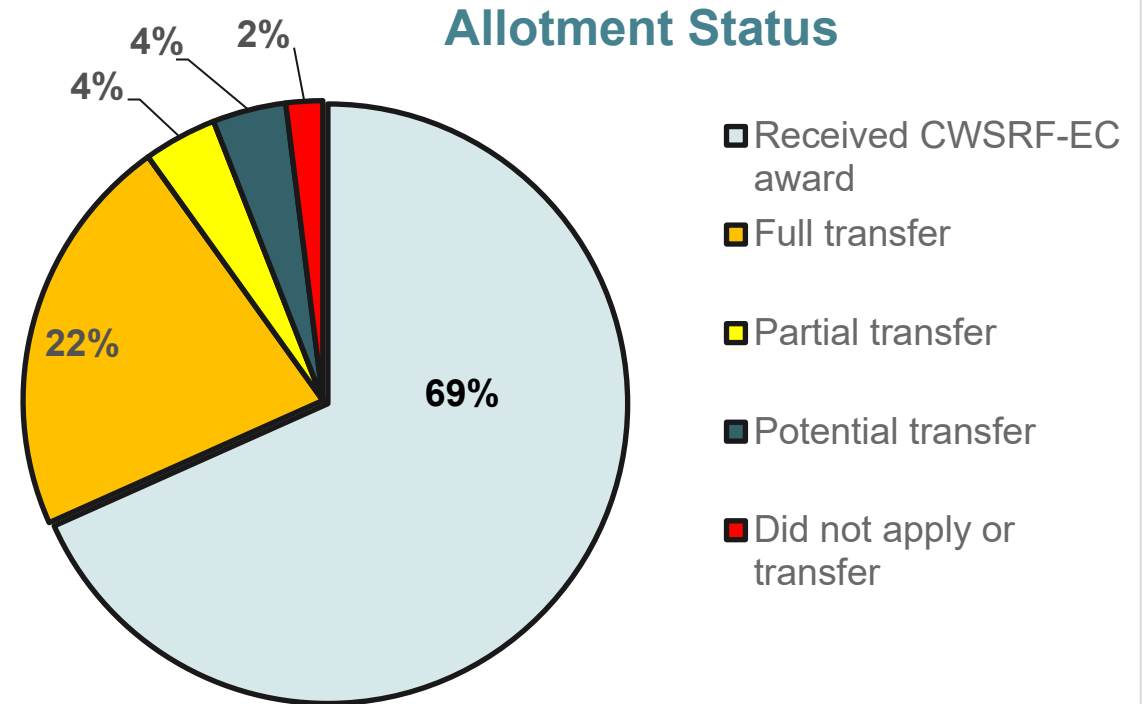
- FFY22 Emerging Contaminants Grant award deadline was September 30, 2023.
- FFY23 Emerging Contaminants allotments were announced in February 2023. Grant award deadline is September 30, 2024.
- Most states were able to identify viable emerging contaminants projects and build a project pipeline through targeted solicitations.
 - The majority of projects will use emerging contaminants funding to purchase laboratory equipment, perform eligible monitoring and conduct pilot studies.
 - Some states transferred their emerging contaminants grant to the DWSRF.
 - Some states were challenged in identifying viable emerging contaminants projects.

FFY22 CWSRF Emerging Contaminants Allotment Status

Of the 50 states and Puerto Rico:

- 35 states received a CWSRF- EC grant award (69%)
- 11 states made a full transfer to DWSRF (22%)
- 2 states made a partial transfer to DWSRF (4%)
- 2 states will potentially transfer all or part to DWSRF (4%)
- 1 state declined their CWSRF emerging contaminants grant (2%)

➤ *One state made a DWSRF transfer to CWSRF*

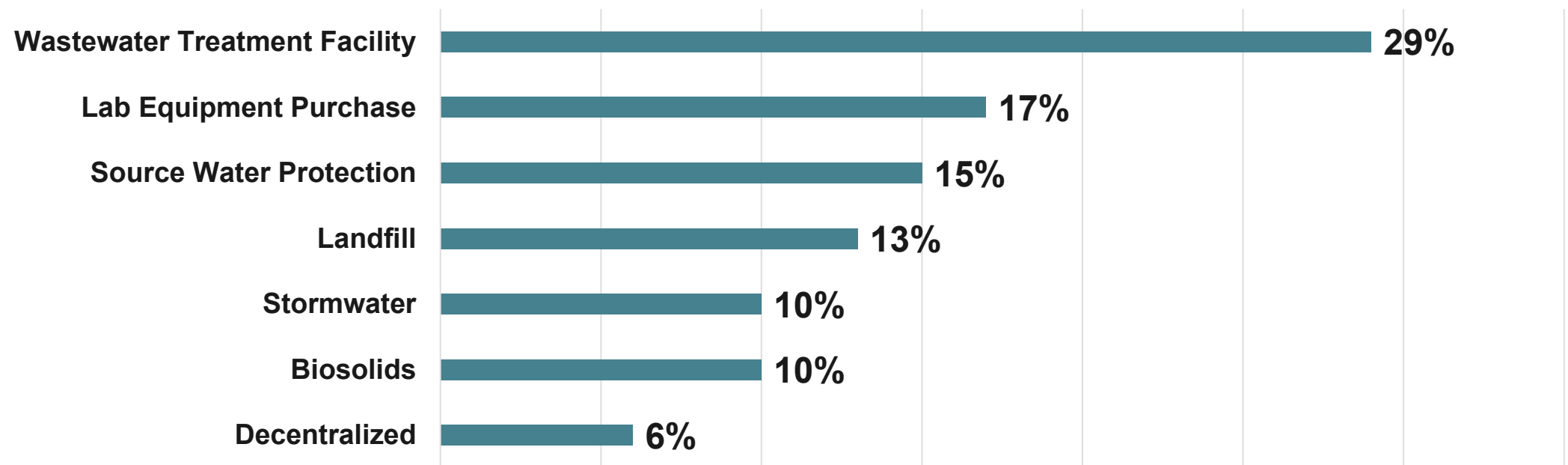


FFY22 CWSRF Emerging Contaminants

Project Types

There are 52 proposed emerging contaminants projects across states and Puerto Rico.

Percent of Emerging Contaminants Project Types



FFY22 CWSRF Emerging Contaminants Project Planning Efforts

62% of the 52 proposed projects are project planning efforts to address emerging contaminants and include:

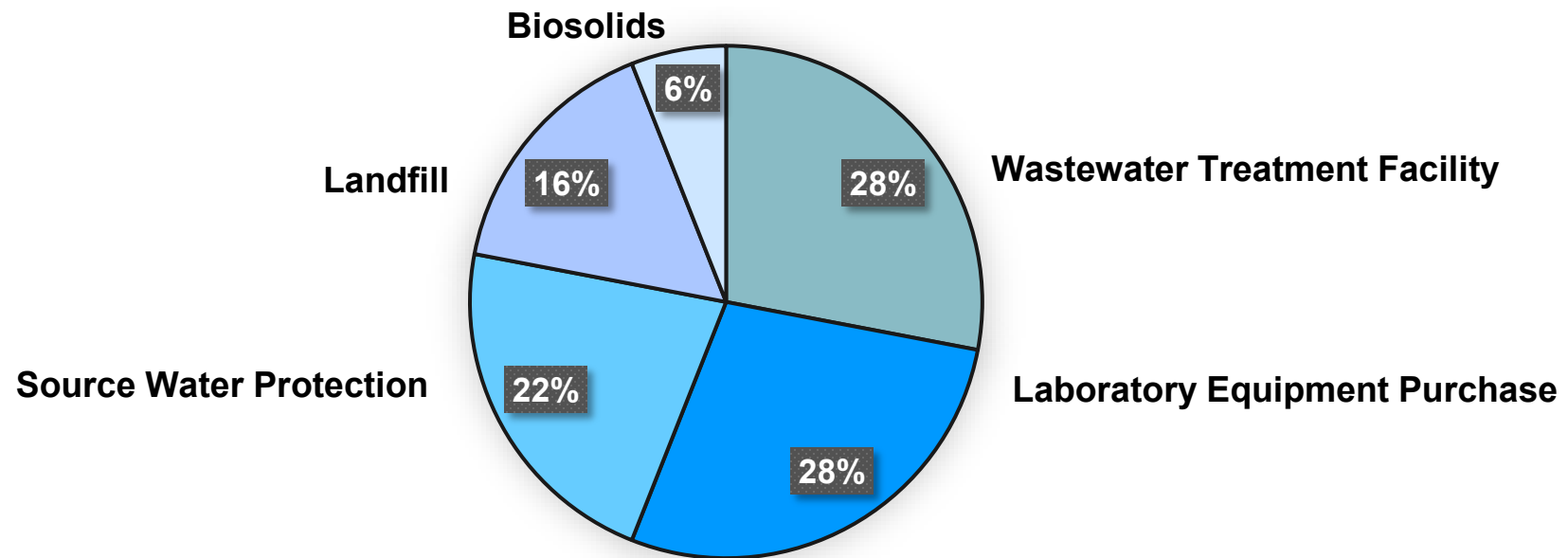
- ◆ Monitoring or lab equipment purchases
- ◆ Monitoring to determine project location and targeted treatment.
- ◆ Pilot projects to identify and test treatment options and to assess effectiveness.

- ◆ Proposed project planning efforts include:
 - ◆ Biosolids Thermal Remediation Pilot Study (Alaska)
 - ◆ Landfill Leachate PFAS Removal Pilot Study (North Carolina)
 - ◆ Purchase of Liquid Chromatography with Tandem Mass Spectrometry (LC-MS-MS) equipment to analyze wastewater samples for emerging contaminants (Ohio)
 - ◆ Source water contamination studies to develop nonpoint source projects (New York)

FFY22 CWSRF Emerging Contaminants Project Planning Efforts

There are 32 proposed project planning efforts to address emerging contaminants. The majority are WWTF and Lab Equipment Purchase projects.

Percent of Planning Effort Project Types



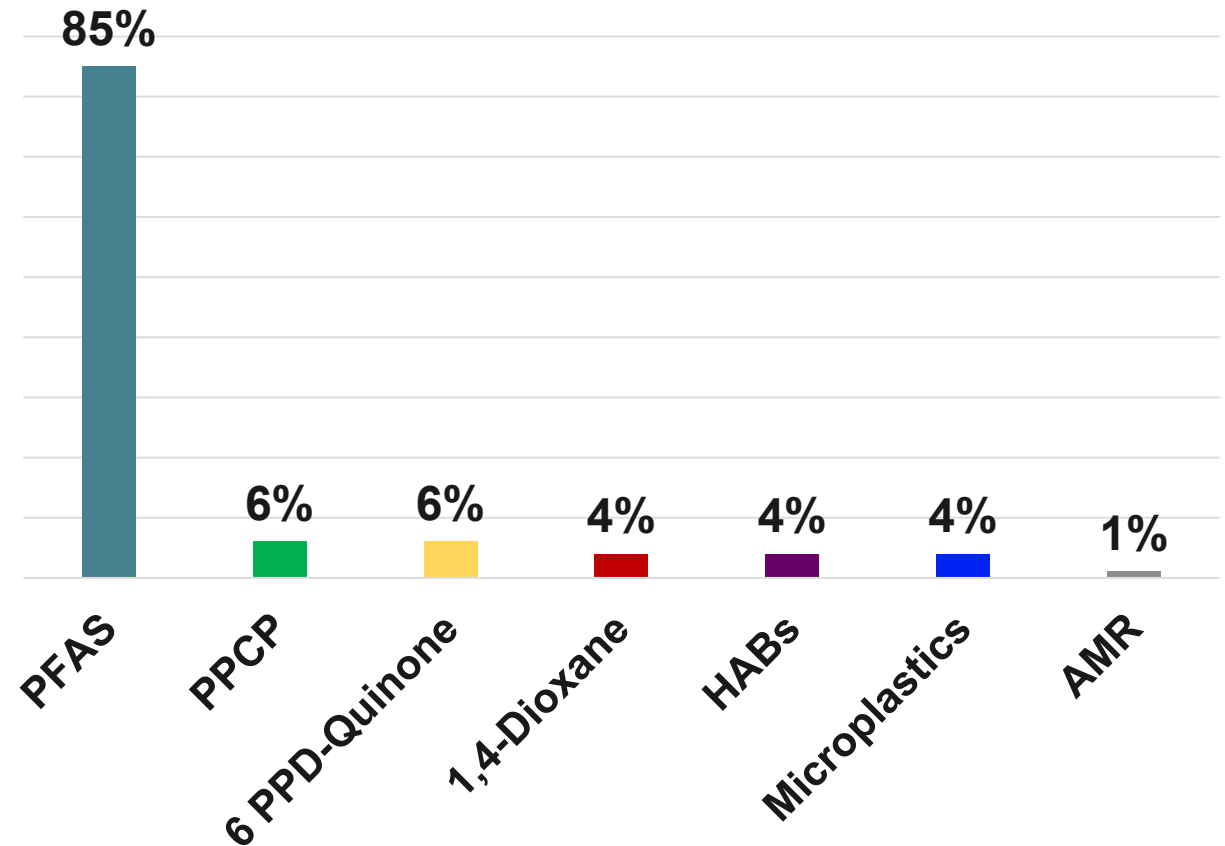
FFY22 CWSRF Emerging Contaminants

Emerging contaminants addressed

Of the 52 proposed projects:

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

Percent of Projects Addressing an EC



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

Best Practices

- ◆ **Confirm emerging contaminants project eligibility:** When in doubt, consult your EPA Region or EPA HQ.
- ◆ **Intended Use Plans:** Include clear eligibility indicators in project descriptions:
 1. **Indicate what Emerging Contaminant has been identified** and will be addressed: PFAS, microplastics, etc.
 2. **Indicate viable treatment technology** or method that is reasonably expected to address emerging contaminants.
 3. **Clarify scope of monitoring and planning activities** and how they will result in a **capital project**.

EPA CWSRF Emerging Contaminants Assistance

EPA Headquarters is available to support states' efforts to:

- ◆ Review emerging contaminants project eligibilities.
- ◆ Provide information on treatment technologies or methods to address emerging contaminants.
- ◆ Develop a framework that provides information on technology effectiveness for Emerging Contaminants.
- ◆ Build an emerging contaminants project pipeline through data analysis and marketing and outreach efforts that can help states identify projects.

Panel: Clean Water Projects Addressing Emerging Contaminants



- **City of Norman, OK – Biosolids Co-Composting and Treatment Study**
 - Bryce Callies and Michael Watts, *Garver*
- **Southern Nevada Water Authority/Las Vegas Valley Water District, NV – Septic-to-Sewer Conversion to address PPCPs**
 - Elizabeth Kingsland, *Nevada Department of Conservation and Environmental Resources*
- **City of Seattle, WA – Stormwater Bioretention to treat 6-PPD Quinone**
 - Jeff Njedley, *Washington Department of Ecology*
- **State of Montana – Emerging Contaminant Laboratory Equipment Purchase**
 - Anna Miller, *Montana Department of Natural Resources and Conservation*
- **State of New York – Emerging Contaminants Project Pipeline Development**
 - Maureen Coleman, *New York State Environmental Facilities Corporation*

What's next:

EPA has several current and planned efforts:

- ◆ Emerging Contaminants webinars
- ◆ State outreach to support project identification and eligibility determinations
- ◆ Technology effectiveness data requests and project review
 - ◆ *Please consider sharing any project effectiveness data with EPA to help further encourage future project development!*



Emerging Contaminants Funding
through the Bipartisan Infrastructure Law

Questions & Answers

- ◆ What are ways that EPA can support your efforts to build an emerging contaminants project pipeline?
- ◆ What webinar topics will be most useful for you?
- ◆ Are you noticing barriers that communities have identifying emerging contaminants or applying for funding? What are they?
- ◆ What type of emerging contaminants projects has your state decided to prioritize?

Resources

CWSRF eligibilities:

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

CWSRF emerging contaminants FAQs:

- <https://www.epa.gov/dwsrf/bipartisan-infrastructure-law-srf-memorandum>

Case studies:

- <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

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Thank you for attending!