SOURCE WATER PROTECTION ASSISTANCE THROUGH THE CLEAN WATER AND DRINKING WATER STATE REVOLVING FUNDS (FY2014-2020)

CIFA National SRF Workshop
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EPA Office of Water
Office of Ground Water and Drinking Water
AGENDA

• Source Water Protection 101
• Source Water Protection Eligibilities Supported by the SRFs
• Available Funding - Bipartisan Infrastructure Law
• Clean Water State Revolving Fund Analysis
• Drinking Water State Revolving Fund Set-Asides Analysis
• Conclusion & Discussion
WHAT IS SOURCE WATER PROTECTION?

- Part of a multi-barrier approach to clean drinking water
- Primarily voluntary
- Coordination across environmental programs
- Watershed investment program

Photo courtesy of Strafford Rivers Conservancy
SOURCE WATER PROTECTION ELIGIBILITIES SUPPORTED BY THE STATE REVOLVING FUNDS
Eligibilities Related to Source Water Protection

- Development and/or update of source water protection plans
- Land conservation
- Agricultural best management practices
- Septic tank repair/replacement
- Shoreline/riparian buffers
- Wildfire risk management
- Habitat restoration
- Stormwater management
- Contaminated site clean-up
- Remediation or prevention of contamination from resource extraction sites
- Outreach and education

1987- Amendments to Clean Water Act
(40 CFR Part 35.3115)

2014- Water Resources Reform and Development Act
(33 USC 1383)
# Drinking Water State Revolving Fund Set-Asides and Source Water Protection Eligibilities

<table>
<thead>
<tr>
<th>Set-Aside</th>
<th>Eligibilities</th>
<th>Activities</th>
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<tbody>
<tr>
<td>State Program Management (10%)</td>
<td>Source Water Protection (SWP) Technical Assistance</td>
<td>• Fund Source Water Coordinators, Hydrogeologists, and other drinking water professionals</td>
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<td>Local Assistance and Other State Programs (15%)</td>
<td>• Loans to public water systems (PWSs) for SWP Land Acquisition/Conservation Easements</td>
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<td></td>
<td>• Loans to community water systems for Incentive-Based SWP Measures</td>
<td>• Updating delineations and assessments with GIS</td>
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<td>• SWP Area Delineation/Assessment</td>
<td>• Developing Source Water Protection Plans</td>
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<td>• Wellhead Protection Programs and SWP activities</td>
<td>• Technical Assistance through 3rd parties</td>
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<td>• Implementation of BMPs</td>
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<td>• Development of local ordinances</td>
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<td></td>
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<td>• Public outreach and education</td>
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### ADDITIONAL FUNDING FOR THE SRFS THROUGH THE BIPARTISAN INFRASTRUCTURE LAW (BIL)

<table>
<thead>
<tr>
<th>Appropriation</th>
<th>FY 2022 ($)</th>
<th>FY 2023 ($)</th>
<th>FY 2024 ($)</th>
<th>FY 2025 ($)</th>
<th>FY 2026 ($)</th>
<th>Five Year Total ($)</th>
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<tbody>
<tr>
<td>CWSRF General Supplemental</td>
<td>1,902,000,000</td>
<td>2,202,000,000</td>
<td>2,403,000,000</td>
<td>2,603,000,000</td>
<td>2,603,000,000</td>
<td><strong>11,713,000,000</strong></td>
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<tr>
<td>CWSRF Emerging Contaminants</td>
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<td>225,000,000</td>
<td>225,000,000</td>
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<tr>
<td>DWSRF General Supplemental</td>
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<td>2,202,000,000</td>
<td>2,403,000,000</td>
<td>2,603,000,000</td>
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<tr>
<td>DWSRF Emerging Contaminants</td>
<td>800,000,000</td>
<td>800,000,000</td>
<td>800,000,000</td>
<td>800,000,000</td>
<td>800,000,000</td>
<td><strong>4,000,000,000</strong></td>
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<tr>
<td>DWSRF Lead Service Line Replacement</td>
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<td>3,000,000,000</td>
<td>3,000,000,000</td>
<td><strong>15,000,000,000</strong></td>
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PURPOSE OF ANALYSIS

- Understand the benefits to source water provided by the CWSRF and DWSRF
- Identify opportunities for further investment in source water protection through the SRFs
- Understand who benefits from source water protection projects

Federal Funding Programs

Source Water Protection

Green Infrastructure and Nature-Based Solutions

Gray Infrastructure Projects
ANALYSIS OF CLEAN WATER STATE REVOLVING FUND (FY2014-2020)
Perform a keyword search and document source water protection language in CWSRF loan description

- **Source water language:** source water, drink, supply, water source, public water, potable, aquifer, municipal water, community water, groundwater, etc.

- Example:

  “The project consists of sampling of existing drinking water wells, drilling and sampling of new monitoring wells to quantify impacts from the existing wastewater treatment facility on groundwater resources in the area.”
Identify CWSRF loans that impact waterway with designated drinking water use

- **Designated Drinking Water Uses:** public water supply, domestic water supply, potable water supply, water supply IV, water supply (class a)…..

- Example state-defined drinking water designated use:
  "Domestic water supply consists of three use subcategories - public water supply, sole-source surface drinking water supply, and aquifer protection." (30 Texas Administrative Code § 307.7)
METHOD 3: SPATIAL ANALYSIS

Locate NPDES facilities receiving CWSRF assistance within proximity to drinking water intake or wellhead

• Spatial Analysis:
  • Map NPDES facilities receiving CWSRF assistance
  • Intersect NPDES facilities with surface water protection areas or wellhead protection areas
RESULTS OF ALL THREE METHODS: CWSRF LOANS THAT MAY BENEFIT SOURCE WATER (FY2014-2020)

Number of CWSRF Loans that Benefit Source Water

- 29%
- 2,277 out of 7,790 Loans

CWSRF Monetary Assistance that Benefits Source Water

- 36.7%
- 63.3%

Assistance includes federal dollars and matching and revolving funds from each state.

Preliminary Analysis
CWSRF LOANS THAT MAY BENEFIT SOURCE WATER

Assistance includes federal dollars and matching and revolving funds from each state.

Preliminary Analysis
CWSRF ASSISTANCE BY PROJECT CATEGORY (FY2014-2020)

- **90%** of $35B loans benefit centralized wastewater treatment.
- **3%** of $35B loans benefit energy conservation.
- **2%** of $35B loans benefit nonpoint source.
- **3%** of $35B loans benefit other estuary assistance.
- **3%** of $35B loans benefit other planning and assessments.
- **3%** of $35B loans benefit stormwater.
- **3%** of $35B loans benefit water conservation.

**Preliminary Analysis**

- **48** loans with source water language in description.
- **883** loans that impact a waterway with a designated drinking water use.
- **1,660** loans to NPDES facilities located within source water protection area.

Nonpoint Source Assistance - Benefits Source Water

- **25.1%** of loans do not benefit source water.
- **74.9%** of loans benefit source water.

Assistance includes federal dollars and matching and revolving funds from each state.
Approximately 37% of CWSRF assistance (total of $17.3B) potentially benefits source water

Number of loans and monetary assistance that potentially benefit source water from year to year has remained stable during study period

Over 90% of CWSRF loans are traditional gray infrastructure loans regardless of source water benefit

About 25% of non-point source CWSRF loans are identified as potentially benefitting source water
ANALYSIS OF DRINKING WATER STATE REVOLVING FUND SET-ASIDES (FY2014-2020)
DATA SOURCES & METHODOLOGY FOR ANALYSIS OF DRINKING WATER STATE REVOLVING FUND SET-ASIDES

- DWSRF National Information Management System (NIMS) Reports
- Federal Fiscal Years 2014-2020
- Focus on source water protection authorized activities

Reported Source Water Protection (SWP) Spending includes:

- SWP Technical Assistance
- Loans for Land Conservation
- SWP Delineation/Assessment
- Wellhead Protection Programs and other SWP
- Loans for Incentive-based SWP Measures
State Program and Local Assistance Set-Aside Ceiling and Reported Spending (FY2014-2020)

**Reported Source Water Protection (SWP) Spending includes:**

- SWP Technical Assistance
- Loans for Land Conservation
- SWP Delineation/Assessment
- Wellhead Protection Programs and other SWP
- Loans for Incentive-based SWP Measures
SOURCE WATER PROTECTION ACTIVITIES IN DWSRF SET-ASIDES

Percent of Total SWP Set-Aside Spending (FY2014-2020)

- Land Acquisition/Conservation Easements Loans: 10.2%
- SWP Area Delineation/Assessment: 12.3%
- SWP Technical Assistance: 75.9%
DWSRF SET-ASIDES ANALYSIS TAKEAWAYS (FY2014-2020)

- Set-asides are optional and states are choosing to use these funds for source water protection and other non-infrastructure efforts
- Potential to increase investment in source water protection
- Different source water protection activities eligible under the SRFs
• Source water protection projects allow states to take full advantage of Bipartisan Infrastructure Law funds.

• Additional benefit of gray infrastructure projects

• Better data inputs = better stories to share
CASE STUDY

Skagit Public Utility District in Washington
CASE STUDY

Delaware Source Water Assessment Plans
QUESTIONS AND DISCUSSIONS

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EPA Source Water Protection Program
www.epa.gov/sourcewaterprotection

EPA Clean Water State Revolving Fund
www.epa.gov/cwsrf

EPA Drinking Water State Revolving Fund
www.epa.gov/dwsrf

Bipartisan Infrastructure Law (BIL)
www.epa.gov/infrastructure

Protecting Source Water with the Clean Water and Drinking Water state Revolving Funds Factsheet