

# Coordinators' Corner: Source Water Protection & State Revolving Funds

Hosted by the Source Water Protection Program, U.S Environmental Protection Agency



OFFICE OF GROUND WATER  
AND DRINKING WATER

# Housekeeping Notes



- Your cameras and microphones have been disabled until we reach the Q/A portion
- You may type questions and comments into the chat
- This meeting will be recorded for future sharing
- Be ready to engage! 😊

# Today's Agenda



## Welcome, Opening Remarks

- *Kara Goodwin, Source Water Protection, EPA HQ*

## The State Revolving Funds/Source Water Connection

- *Dallas Shattuck, Drinking Water State Revolving Fund, EPA HQ*
- *Alison Souders, Clean Water State Revolving Fund, EPA HQ*

## Findings on SRF Spending for Source Water Protection

- *April Byrne, Source Water Protection, EPA HQ*

## Source Water Protection/SRF Coordination in New Hampshire

- *Pierce Rigrod, New Hampshire Department of Environmental Services*

## Source Water Protection/SRF Coordination in Washington

- *Nikki Guillot, Washington State Department of Health*

## Discussion and Questions



# Clean Water and Drinking Water State Revolving Funds

Alison Souders (CWSRF) and Dallas Shattuck (DWSRF)

SRF/SWP Coordinator's Corner

December 8, 2022



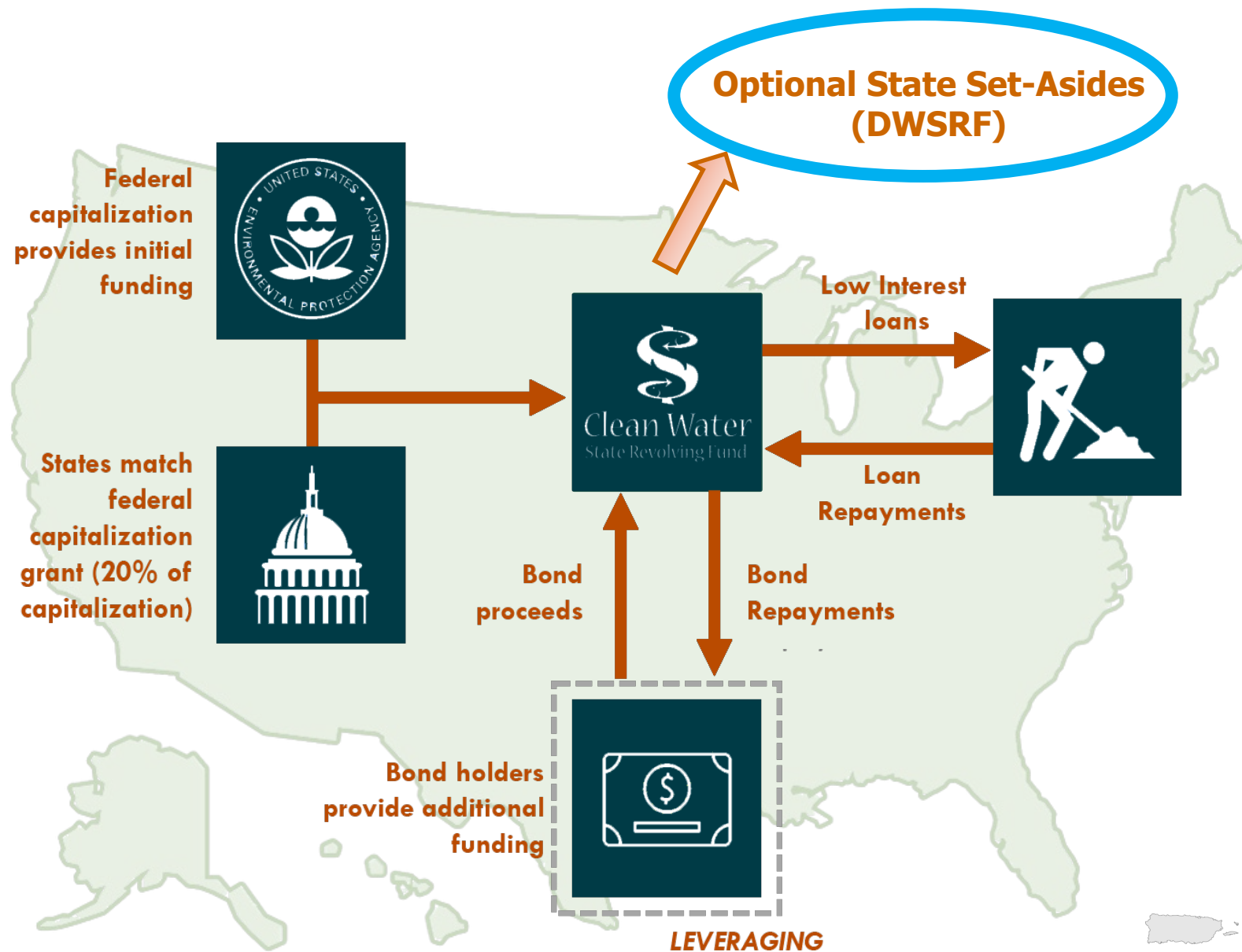
Clean Water  
State Revolving Fund





# The State Revolving Funds (SRFs)

- Federal/state partnerships designed to create, in each state, a perpetual source of financing for drinking water and wastewater infrastructure
- Combines federal and state funds to provide low-cost financing to water and wastewater systems
- State implemented and operated
- Flexibility in assistance provided
  - Type of assistance: loans, refinancing, loan guarantees, technical assistance
- Availability of special financing terms to disadvantaged communities to help address equity and affordability



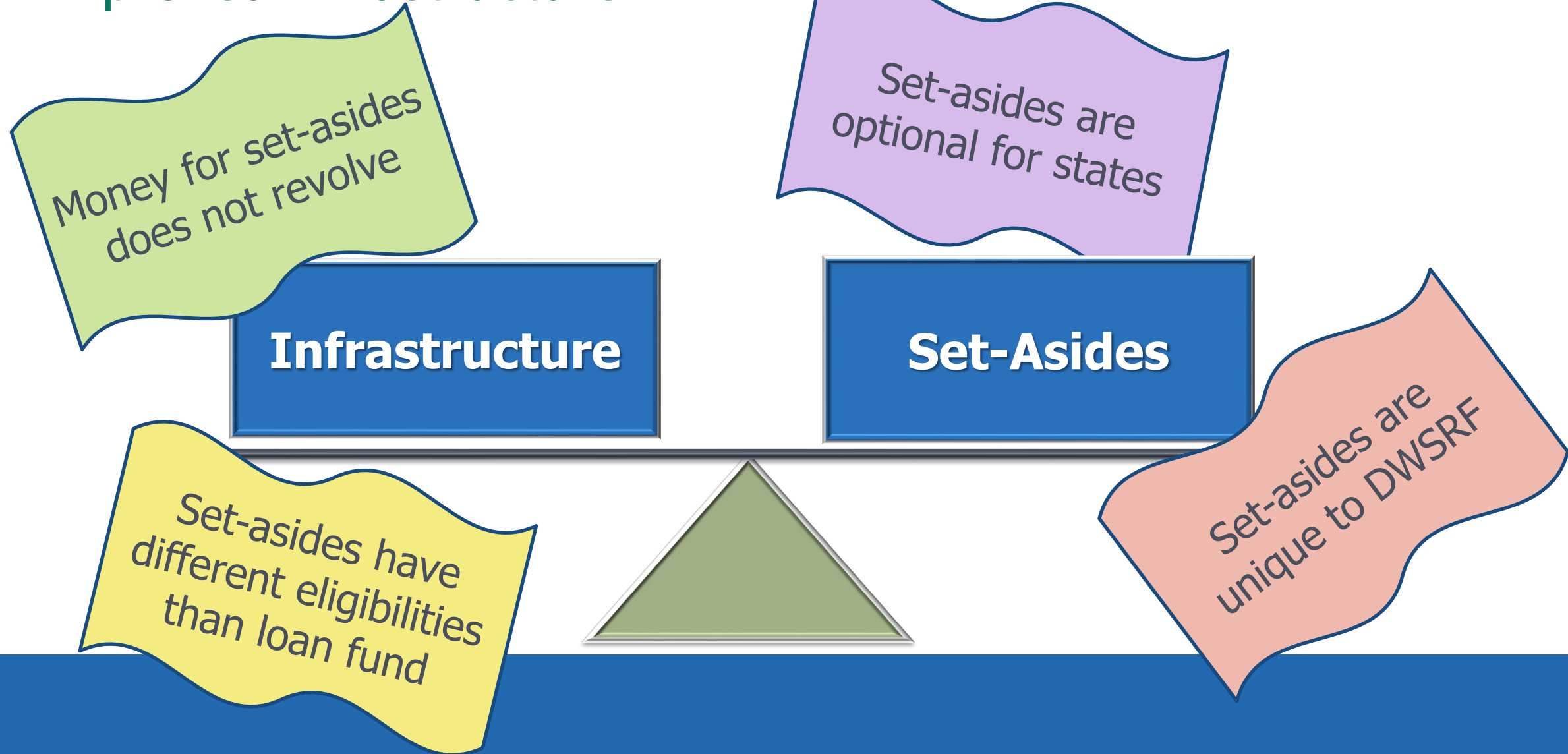
## States

- Apply for and receive capitalization grants, set priorities, select borrowers, award assistance, determine set aside activities
  - Intended Use Plans

## EPA

- Reviews applications and awards capitalization grants, provides technical assistance to States, oversees programs to ensure integrity and effectiveness, and reports on program performance

Not all drinking water problems can be fixed with new or improved infrastructure



## DWSRF Set-Asides



4%: Administration and Technical Assistance



2%: Small Systems Technical Assistance



10%: State Program Management



15%: Local Assistance and Other State Programs

# State Program Management (10% Set-Aside)



**Develop and Implement** Drinking Water Protection, Capacity Development, Operator Certification, and Source Water Protection Programs



Often Used to **Fund Staff**

- Source Water Coordinators
- Hydrogeologists



Can also be used by state for source water protection activities

# Local Assistance and Other State Programs (15%)

## Source Water Protection and Capacity Development Activities



- Loans to PWS for SWP land acquisition/easements, voluntary, incentive-based SWP measures, and source water petition programs



- Delineation, assessment, and **updates to assessments for SWP areas**



- Establishment and implementation of wellhead protection programs and **implementation of efforts to protect source water**



- Assist PWS with capacity development





# Local Assistance and Other State Programs (15%)

## **Source Water Protection** and Capacity Development Activities

- Developing Source Water Protection Plans
- Small grant programs
- Technical Assistance through 3rd parties
- Implementation of BMPs (e.g., cover crops)
- Updating SWA with GIS
- Development of local ordinances
- Public outreach and education
- Sealing abandoned groundwater wells



Cover crops around high-risk public wells in Sussex County, DE

# How to get started



Reach out to your SWP & DWSRF colleagues

<https://www.epa.gov/sourcewaterprotection>

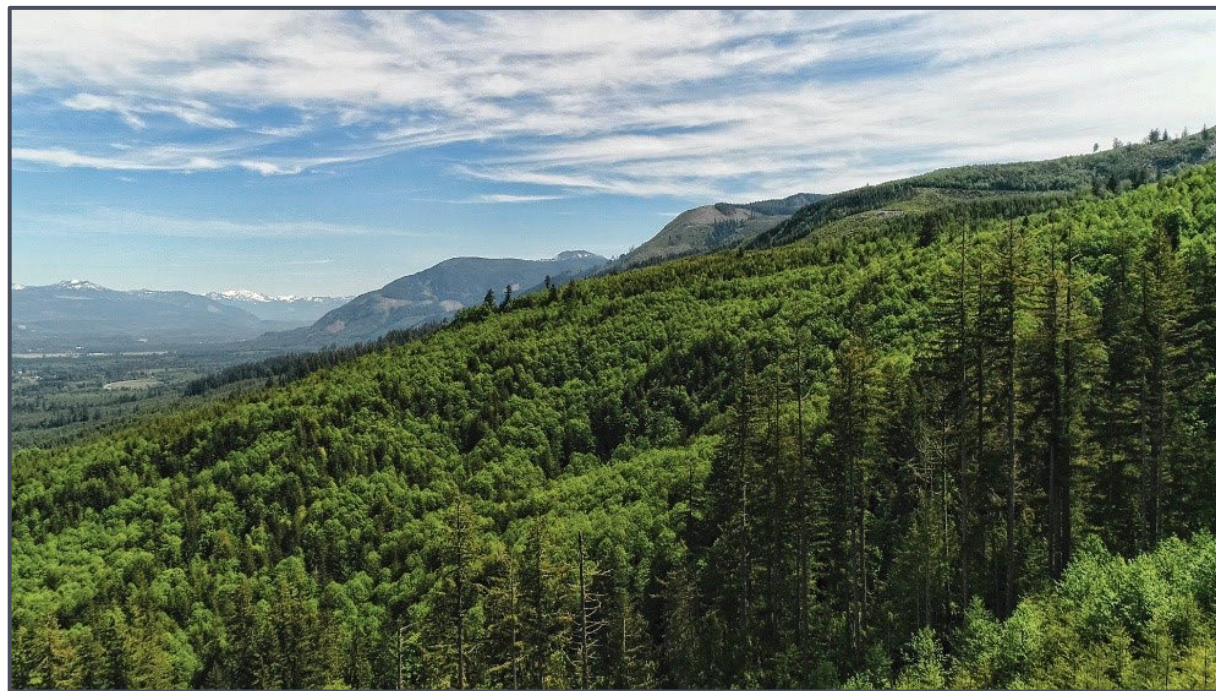
<https://www.epa.gov/dwsrf>



Identify priority areas/systems to update assessments and develop/implement plans

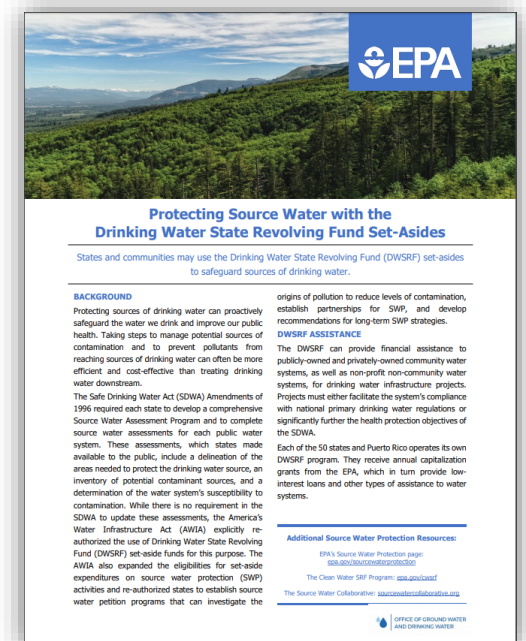
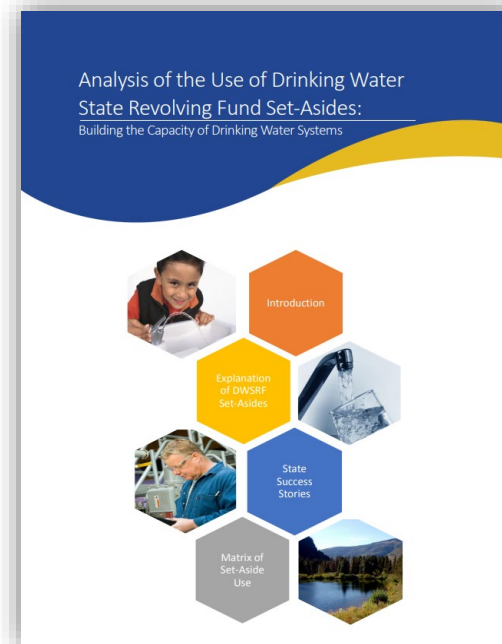
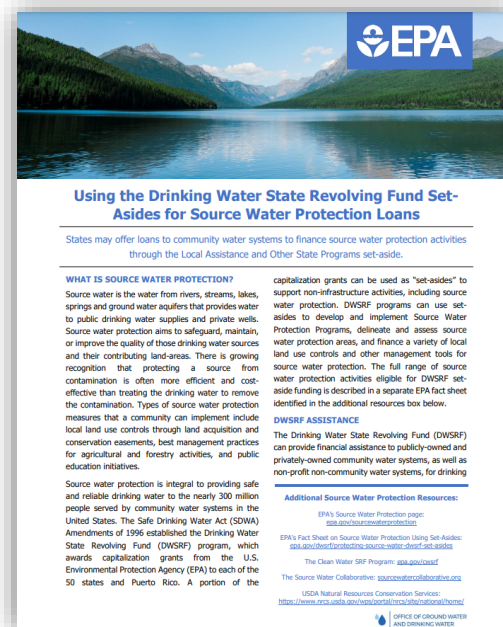
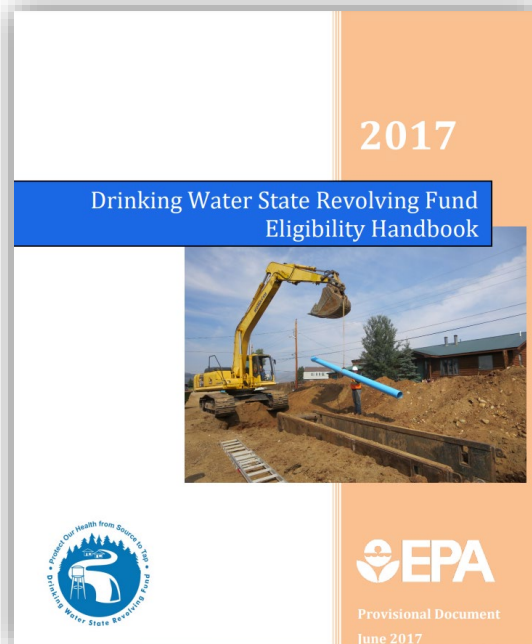


Encourage states to include SWP in Set-Aside Workplans



# DWSRF Resources

[www.epa.gov/dwsrf](http://www.epa.gov/dwsrf)





# Clean Water Act

## What Projects are Eligible for CWSRF Assistance?



- 603(c)(1) Construction of publicly owned treatment works (POTW)
- 603(c)(2) Implementation of a nonpoint source management program
- 603(c)(3) Implementation of a national estuary program CCMP
- 603(c)(4) Decentralized systems
- 603(c)(5) Stormwater management
- 603(c)(6) Projects that reduce the demand for POTW capacity through water conservation, efficiency, and reuse
- 603(c)(7) Watershed pilot projects
- 603(c)(8) Projects that reduce the energy consumption needs for POTWs
- 603(c)(9) Reuse of wastewater, stormwater, or subsurface drainage water
- 603(c)(10) Security measures at POTWs
- 603(c)(11) Technical assistance to small and medium POTWs
- 603(3)(12) Assistance to a qualified nonprofit entity to provide assistance to an eligible individual for the repair or replacement of household decentralized treatment systems

# Project Categories

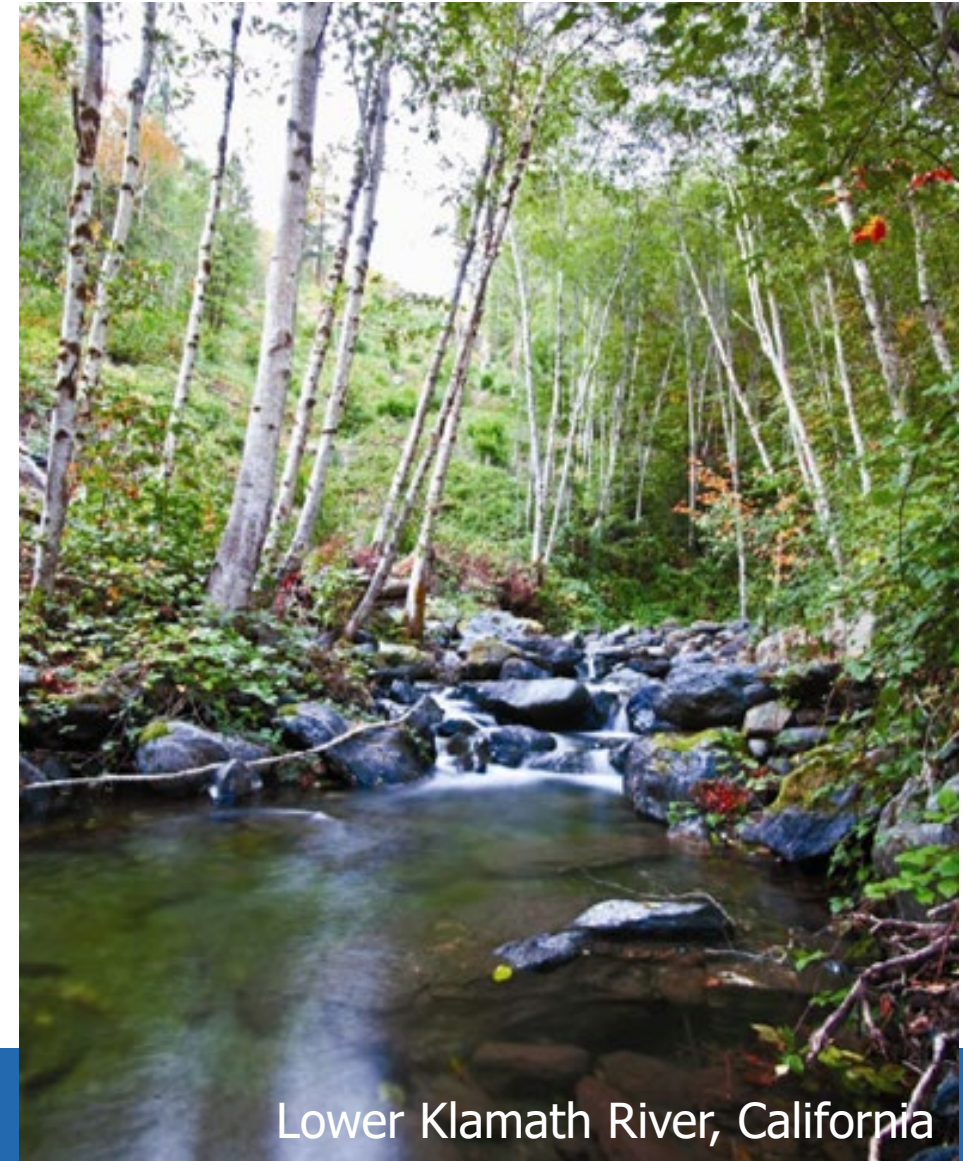
- Wastewater Treatment Plant Repair and Upgrade
- Decentralized Wastewater Treatment
- Groundwater Protection
- Surface Water Protection
- Green Infrastructure
- Contaminated Sites Clean Up & Conversion
- Planning/Assessments and Monitoring
- Land Conservation
- Habitat Restoration
- Stormwater
- Water Conservation & Reuse
- And more!

A full listing of CWSRF eligibilities including examples of eligible projects can be found in the “Overview of Clean Water State Revolving Fund Eligibilities,” which can be downloaded from our website at: <https://www.epa.gov/cwsrf/overview-clean-water-state-revolving-fund-eligibilities>



# Flexible Repayment Options

- Identifying a repayment source can be challenging for source water protection projects...
- Usage based wastewater bill charges
- Special assessments
- Timber harvest revenues
- Environmental credits
- Stormwater district fees
- Nonprofit membership fees
- Home-owner association fees
- For profit company revenue
- Property tax revenue
- Hunting license fees



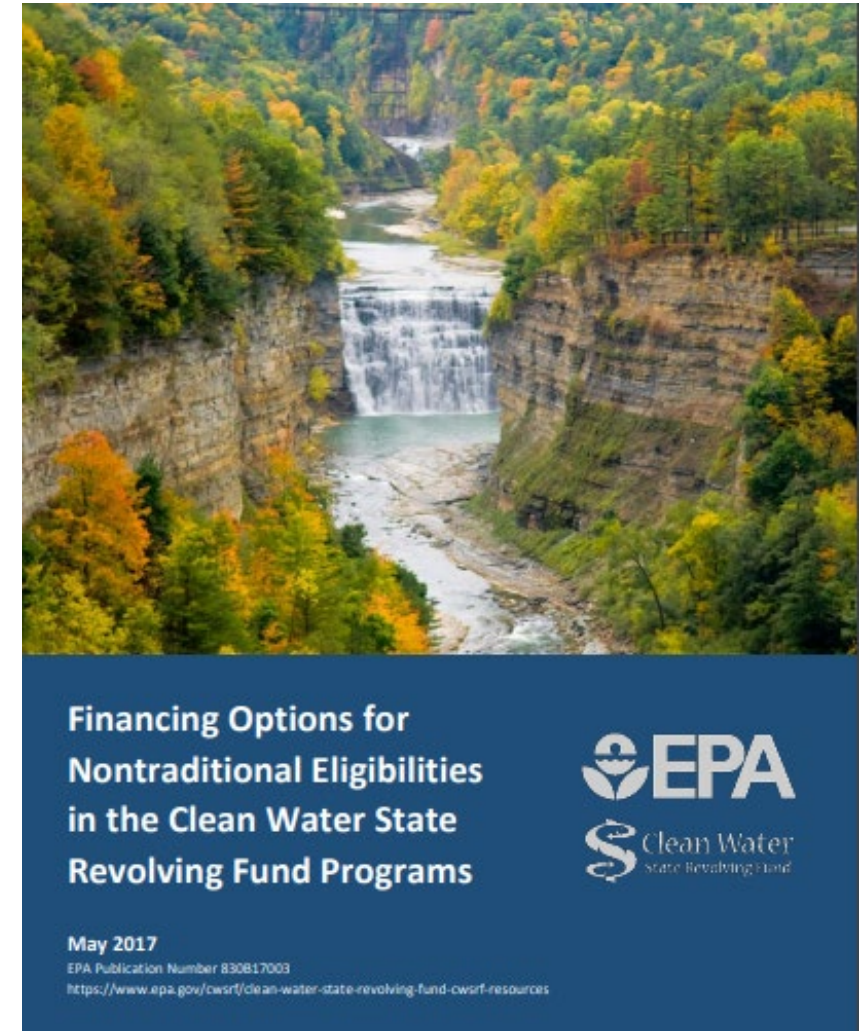
Lower Klamath River, California



# Innovative Financing Mechanisms

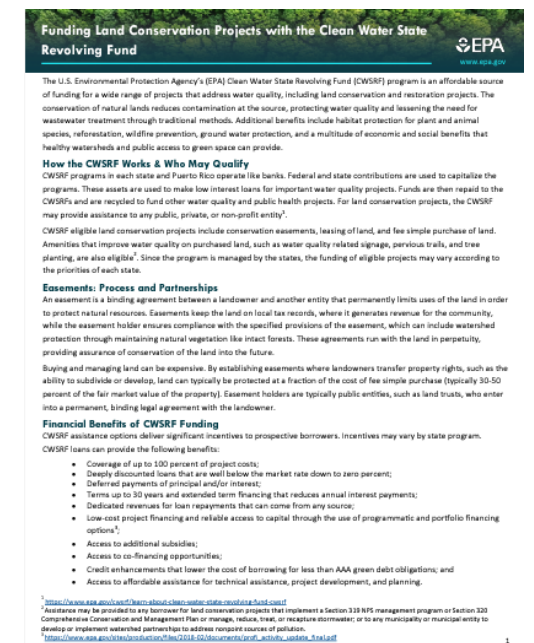
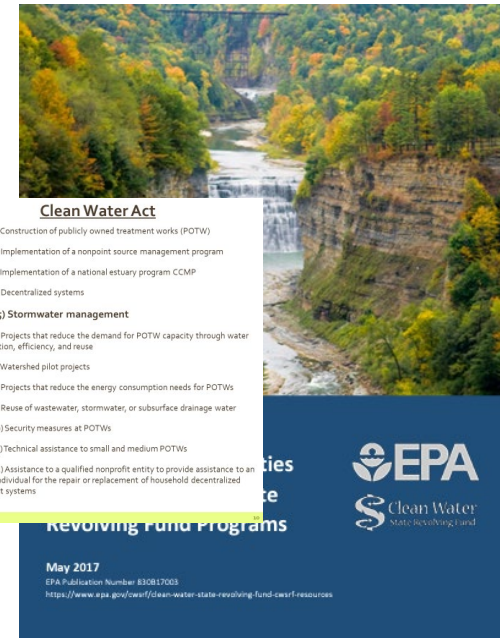
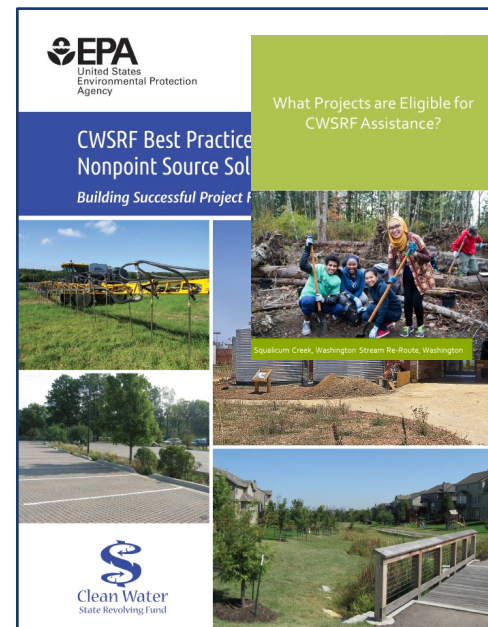
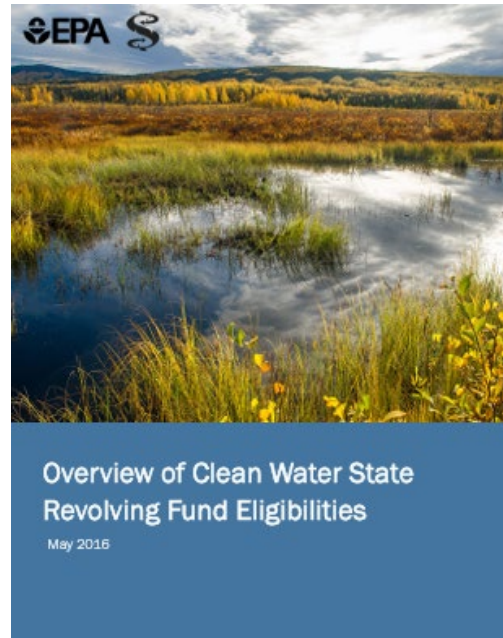


- Co-Funding
- Grant Match
- Sponsorship Financing
- Programmatic Financing
- State Incentives
- Linked Deposit
- Pass-Through Lending



# CWSRF Resources

[www.epa.gov/cwsrf](http://www.epa.gov/cwsrf)





# How to get started



Reach out to your CWSRF colleagues

<https://www.epa.gov/cwsrf>  
[cwsrf@epa.gov](mailto:cwsrf@epa.gov)



Reach out to your state CWSRF  
program contacts

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



Encourage states to include source  
water protection in their Intended Use  
Plans

Documents by State-  
<https://swefcsrfsitchboard.unm.edu/srf/>



# Bipartisan Infrastructure Law (BIL)

- Signed by President Biden on November 15, 2021.
- Historic investment in key programs and initiatives implemented by the U.S. Environmental Protection Agency to build safer, healthier, cleaner communities.
- Includes \$50 billion to the EPA to strengthen the nation's drinking water and wastewater systems – the single largest investment in water that the federal government has ever made.
- Approximately \$43.4B of this funding through the existing CWSRFs and DWSRFs.

# Available SRF Funding in the BIL

Appropriation	FY 2022 (\$)	FY 2023 (\$)	FY 2024 (\$)	FY 2025 (\$)	FY 2026 (\$)	Five Year Total (\$)
CWSRF General Supplemental	1,902,000,000	2,202,000,000	2,403,000,000	2,603,000,000	2,603,000,000	11,713,000,000
CWSRF Emerging Contaminants	100,000,000	225,000,000	225,000,000	225,000,000	225,000,000	1,000,000,000
DWSRF General Supplemental	1,902,000,000	2,202,000,000	2,403,000,000	2,603,000,000	2,603,000,000	11,713,000,000
DWSRF Emerging Contaminants	800,000,000	800,000,000	800,000,000	800,000,000	800,000,000	4,000,000,000
DWSRF Lead Service Line Replacement	3,000,000,000	3,000,000,000	3,000,000,000	3,000,000,000	3,000,000,000	15,000,000,000

# What does this mean for SWP?

- **CWSRF**

- A significant increase in funding available for a variety of clean water projects, including SWP-related activities.

- **DWSRF**

- States have the flexibility to take set-asides from each of the BIL grants (in addition to the set-asides from their base program).
- This means there will be a significant increase in set-aside \$\$ available to States to implement various activities, including SWP.
  - *NOTE: for the DWSRF EC grant, the set-asides must be used for purposes related to EC, including administering the EC grant.*



# Now is a great time for source water protection!



- Now is the time for conversations between SWP and SRF programs in states about the opportunities to dedicate money for source water protection
- EPA is encouraging states to re-think how they are utilizing their CWSRF funding and DWSRF set-asides and consider new opportunities for leveraging these dollars for source water protection



# THANK YOU

Alison Souders (CWSRF)  
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Dallas Shattuck (DWSRF)  
[Shattuck.dallas@epa.gov](mailto:Shattuck.dallas@epa.gov)

[www.epa.gov/dwsrf](http://www.epa.gov/dwsrf)  
[www.epa.gov/cwsrf](http://www.epa.gov/cwsrf)

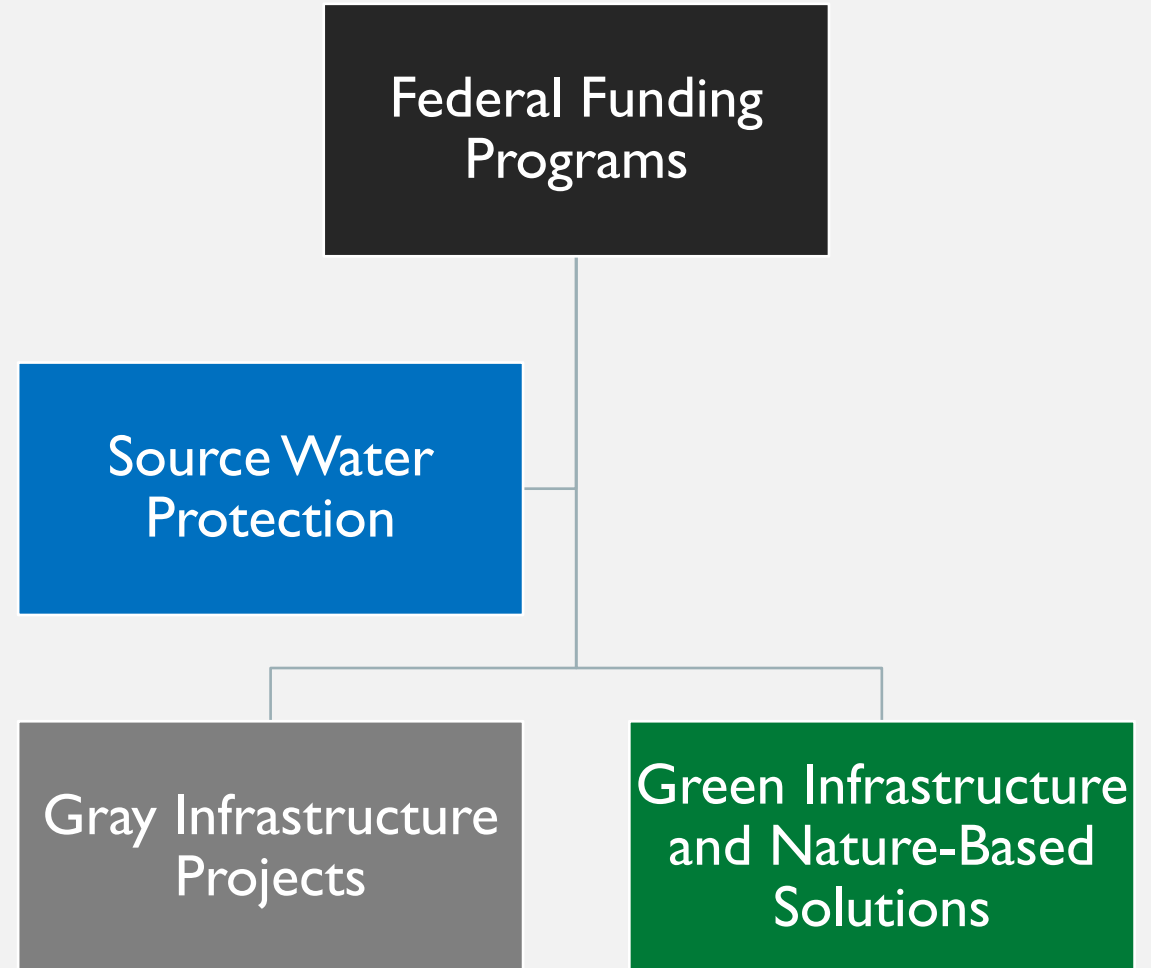
# SOURCE WATER PROTECTION ASSISTANCE THROUGH THE CLEAN WATER AND DRINKING WATER STATE REVOLVING FUNDS (FY2014-2020)

SRF Coordinators' Corner  
December 8<sup>th</sup>, 2022

April Byrne  
EPA Office of Water  
Office of Ground Water and Drinking Water

# 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



# ANALYSIS OF CLEAN WATER STATE REVOLVING FUND (FY2014-2020)

# METHODOLOGY

## Method 1: Keyword Search

### Source water language:

source water, drink, supply, groundwater, etc.

Example:

“The project consists of sampling of existing drinking water wells...”

## Method 2: Designated Drinking Water Use

### Designated Drinking Water

**Uses:** public water supply, domestic water supply, potable water supply, water supply IV, water supply (class a), etc.

## Method 3: Spatial Analysis

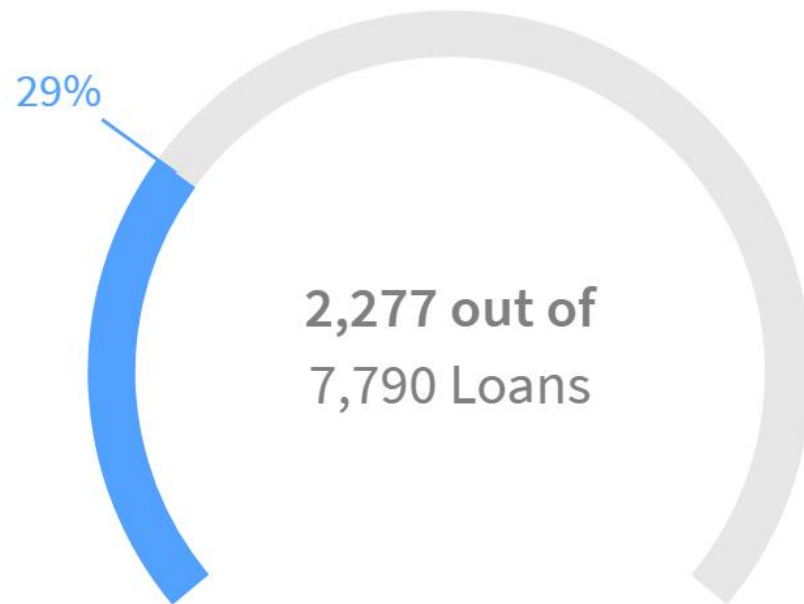
### NPDES facilities: CWSRF

looks to facilities within a protection area for a drinking water intake or wellhead are identified as potentially benefitting source water.

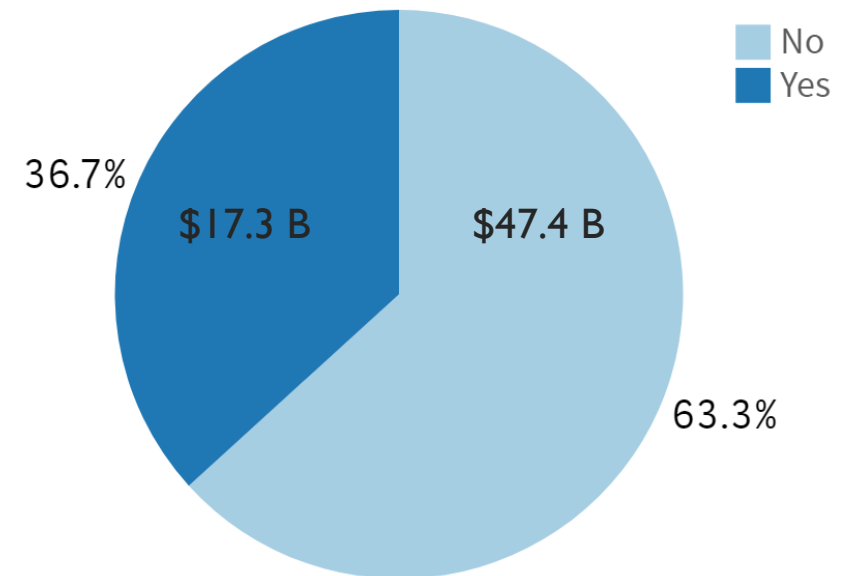


# RESULTS OF ALL THREE METHODS: CWSRF LOANS THAT MAY BENEFIT SOURCE WATER (FY2014-2020)

Number of CWSRF Loans that Benefit Source Water



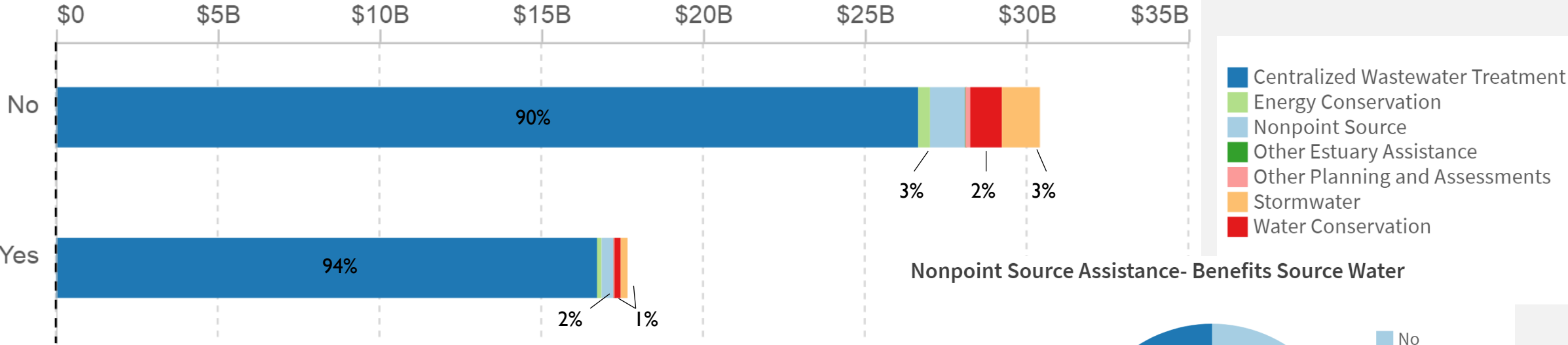
CWSRF Monetary Assistance that Benefits Source Water



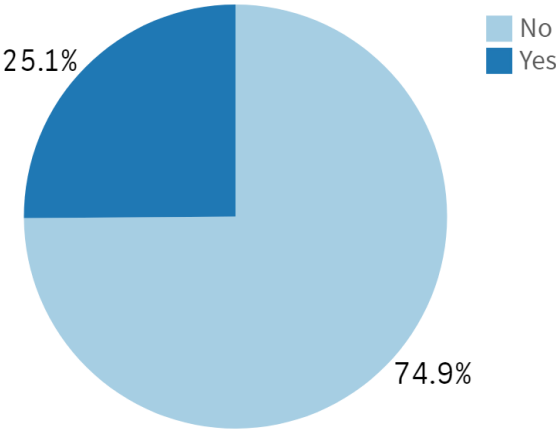
*Assistance includes federal dollars and matching and revolving funds from each state.*

# CWSRF ASSISTANCE BY PROJECT CATEGORY (FY2014-2020)

Potentially Benefits SW



Nonpoint Source Assistance- Benefits Source Water



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

**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

Preliminary Analysis

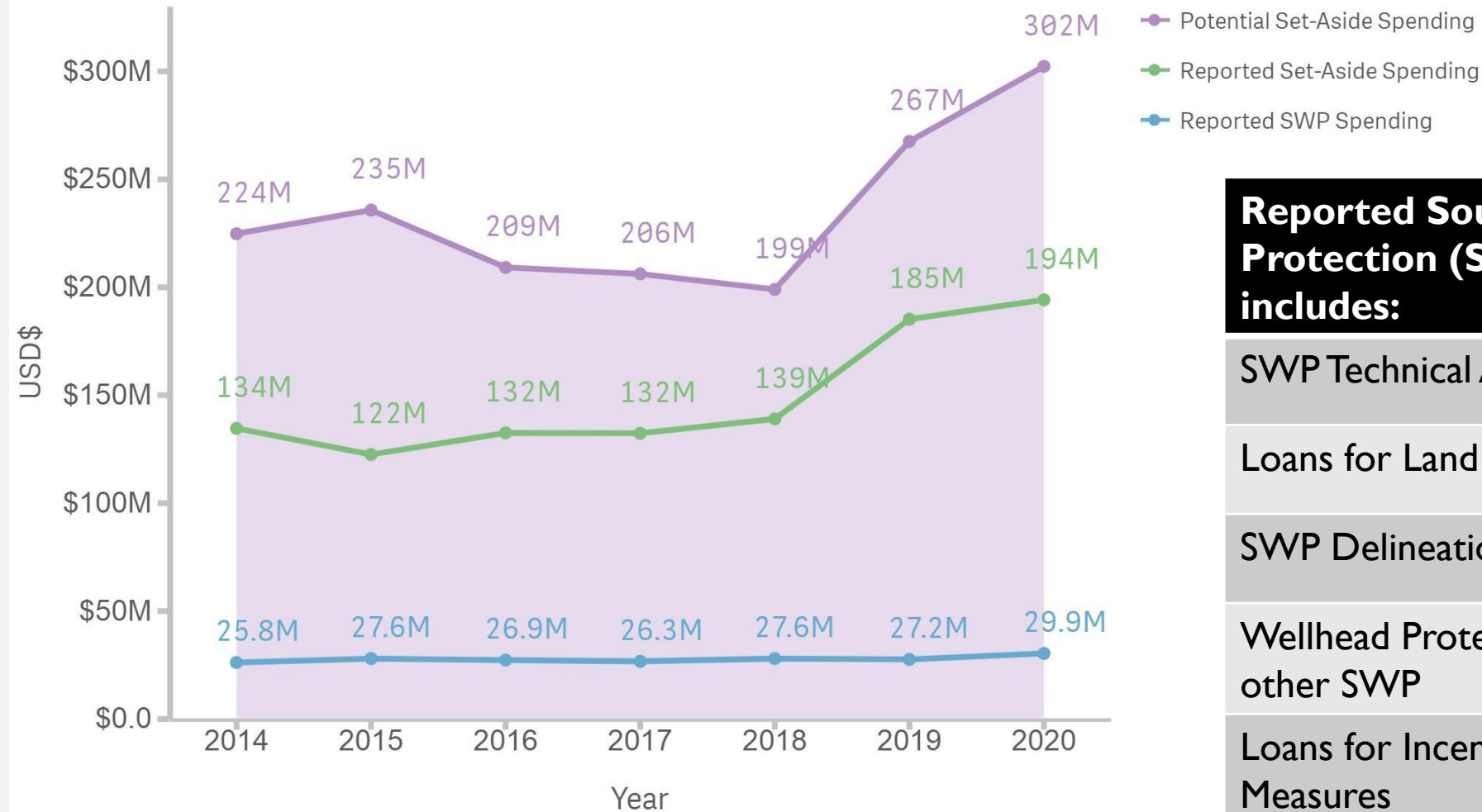
## KEY TAKEAWAYS OF CLEAN WATER STATE REVOLVING FUND ANALYSIS (FY2014-2020 )

- Approximately 37% of CWSRF assistance (total of \$17.3B) potentially benefits source water
- 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)

# DRINKING WATER STATE REVOLVING FUND

State Program and Local Assistance Set-Asides Ceiling and Reported Spending (FY2014-2020)



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

SWP Technical Assistance

Loans for Land Conservation

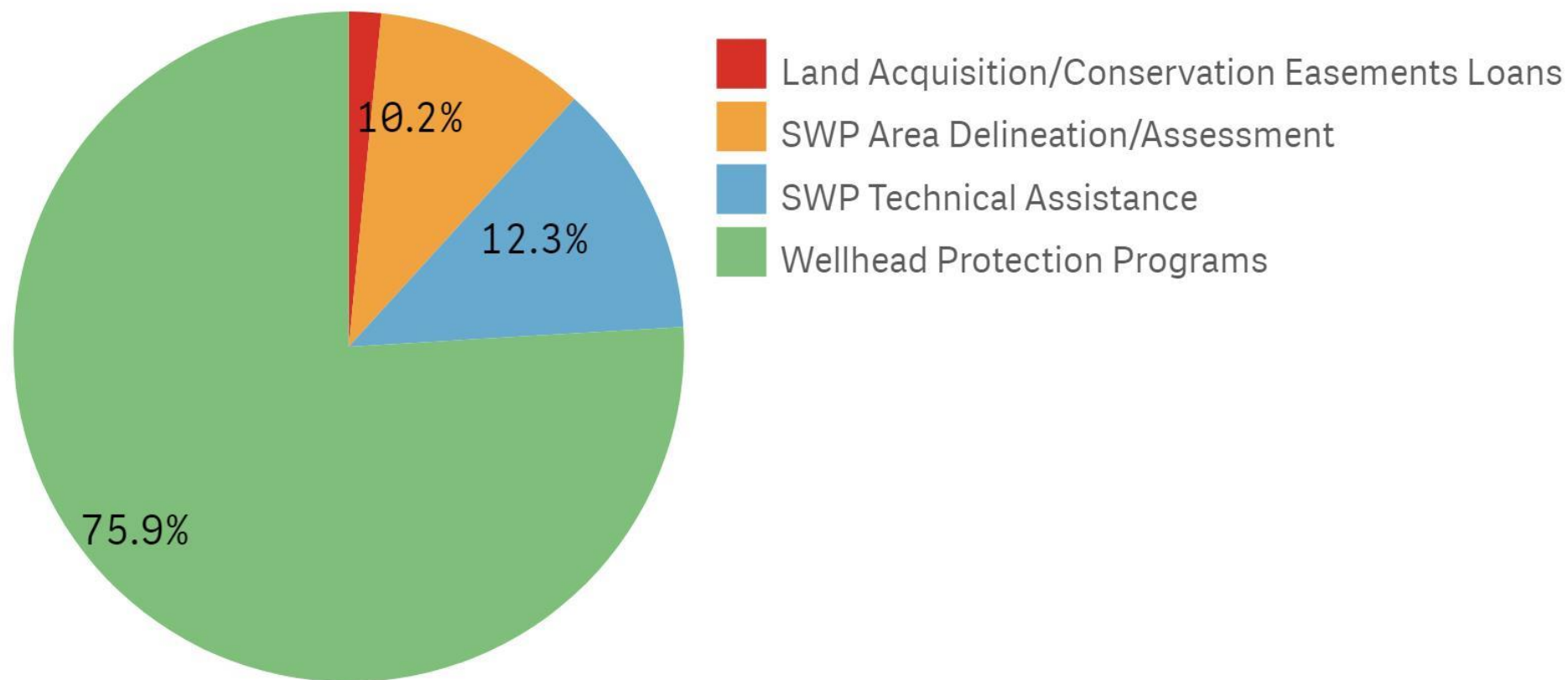
SWP Delineation/Assessment

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)



*No Loans for Incentive-Based Measures Spending between FY2014-FY2020.*



## DWSRF SET-ASIDES ANALYSIS TAKEAWAYS (FY2014-2020)

- Set-asides are optional, and states are choosing to use these funds for source water protection (SWP) and other non-infrastructure efforts
- \$191 million on total SWP spending
- Potential to increase investment in source water protection

# FINAL TAKEAWAYS OF ANALYSES (FY2014-2020)

- SRFs complement each other
- 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



Preliminary Analysis

# QUESTIONS AND DISCUSSIONS

April Byrne  
EPA, Office of Water  
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(202) 564-4492

EPA Source Water Protection Program  
[www.epa.gov/sourcewaterprotection](http://www.epa.gov/sourcewaterprotection)

EPA Clean Water State Revolving Fund  
[www.epa.gov/cwsrf](http://www.epa.gov/cwsrf)

EPA Drinking Water State Revolving Fund  
[www.epa.gov/dwsrf](http://www.epa.gov/dwsrf)

Bipartisan Infrastructure Law (BIL)  
[www.epa.gov/infrastructure](http://www.epa.gov/infrastructure)

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

# *RIISING TIDES LIFT ALL BOATS:* NEW HAMPSHIRE'S SRF INCREASE AND CROSS PROGRAM COLLABORATION

Coordinators' Corner | Source Protection  
Pierce Rigrod | Source Water Protection Program  
December 8, 2022





# AT THE INTERSECTION OF CLEAN AND SAFE DRINKING WATER IN NEW HAMPSHIRE

Past, Present, Future?

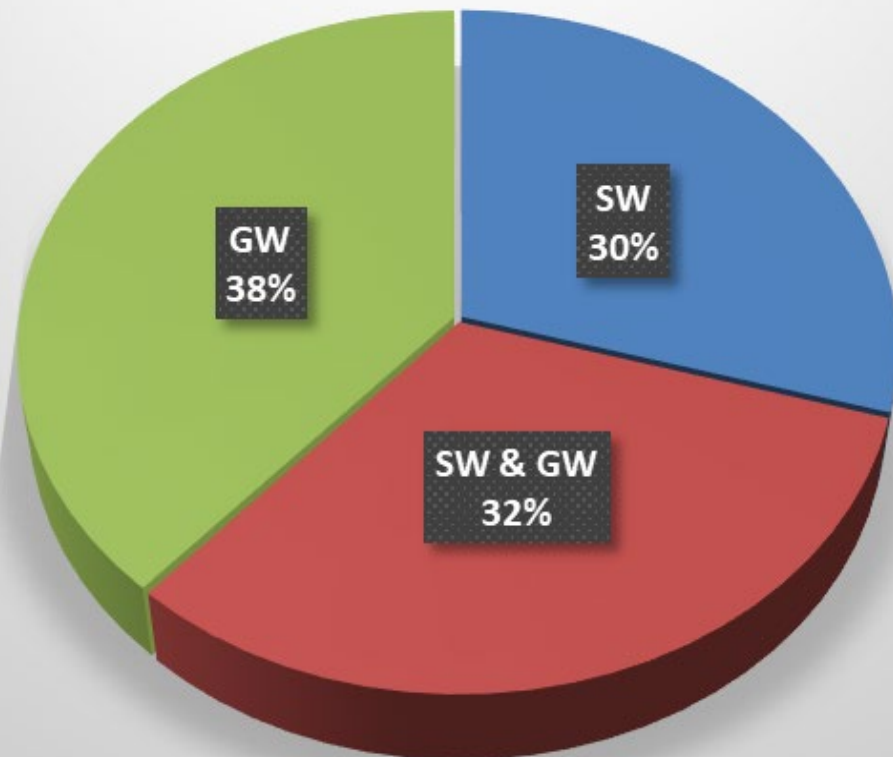


Photo: Steve Landry, Upper Merrimack River Local Advisory Committee

- ❑ Things we've done. DWSRF and CWSRF collaboration
- ❑ Things we continue to do. Current focus by both programs on cyanobacteria, chloride, MS4
- ❑ What could happen? Wait for it!

# WHAT'S ON TAP IN NH?

Population Served by Community Water Systems: Surface vs. Groundwater



NH RELIES HEAVILY  
ON SURFACE WATER

~62% GET AT LEAST  
SOME DW FROM  
SURFACE SOURCES

Community Systems	# Systems	Pop Served
Groundwater Only	647	323,821
Surface Water Only	20	222,073
Combined Sources (Surface and Groundwater)	18	285,627
Purchased Surface Water (only)	18	40,549
Purchased with Groundwater Sources	21	18,648

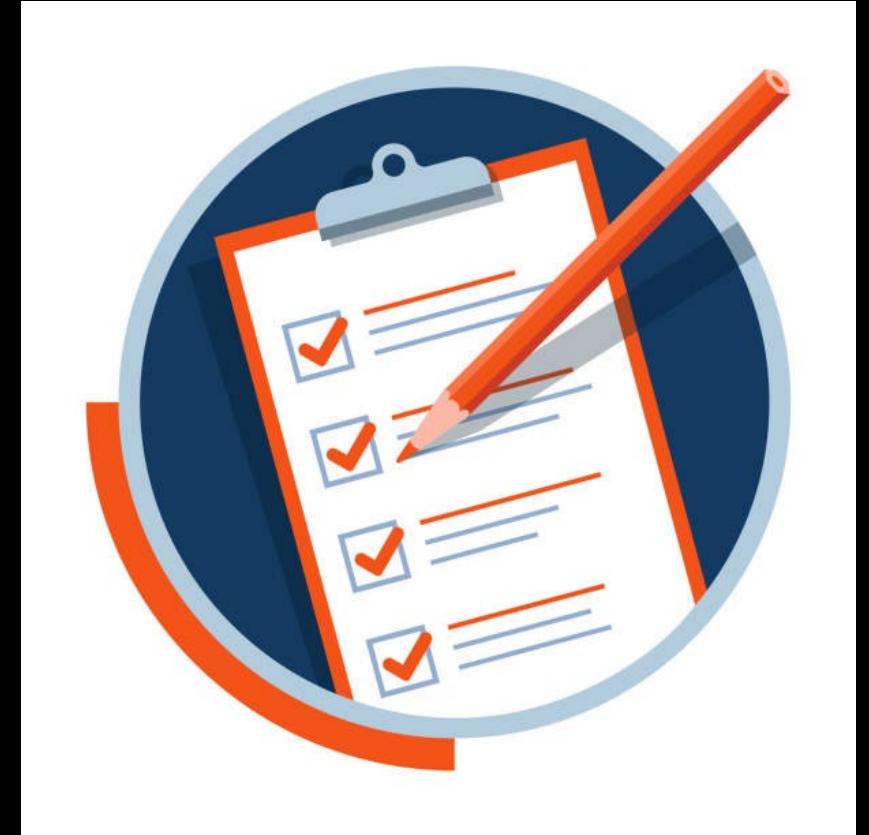




Credit: Mills Falls at the Lake

# REGION 5 CWA/SDWA INTEGRATION GUIDE (2015)

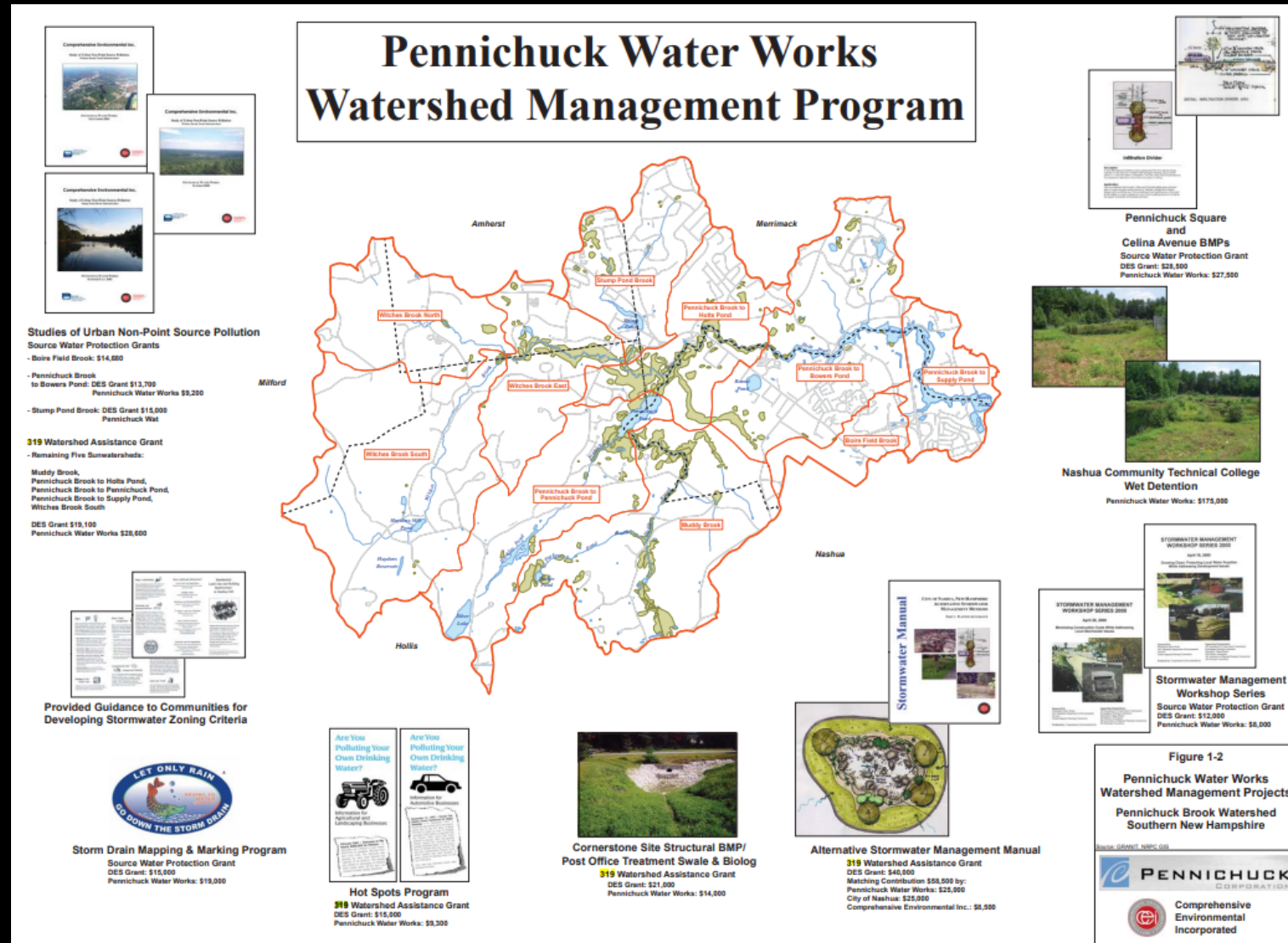
- Water quality standards for drinking water
- Monitoring/assessment WQS attainment for drinking water
- Impaired water for drinking water use?
- TMDLs for drinking water sources
- Integrated watershed planning
- Control non-point sources
- Enforcement...



Env-Wq 1702.17(f): “Potential drinking water supply, meaning the surface water could be suitable for human intake and meet state and federal drinking water requirements after adequate treatment”



# 319 WATERSHED PLANNING: COLLABORATING ON NONPOINT SOURCE AND CLEAN WATER ACT 319 PROGRAMS



# 319 WATERSHED PLANNING: PAUGUS BAY, LAKE WINNIPESAUKEE WATERSHED PLAN



WINNIPESAUKEE GATEWAY

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A

A

THE  
WATERSHED

WATERSHED  
MAP

LAKE  
RECREATION

LAKE  
MANAGEMENT

MONITORING  
THE LAKE

GET  
INVOLVED

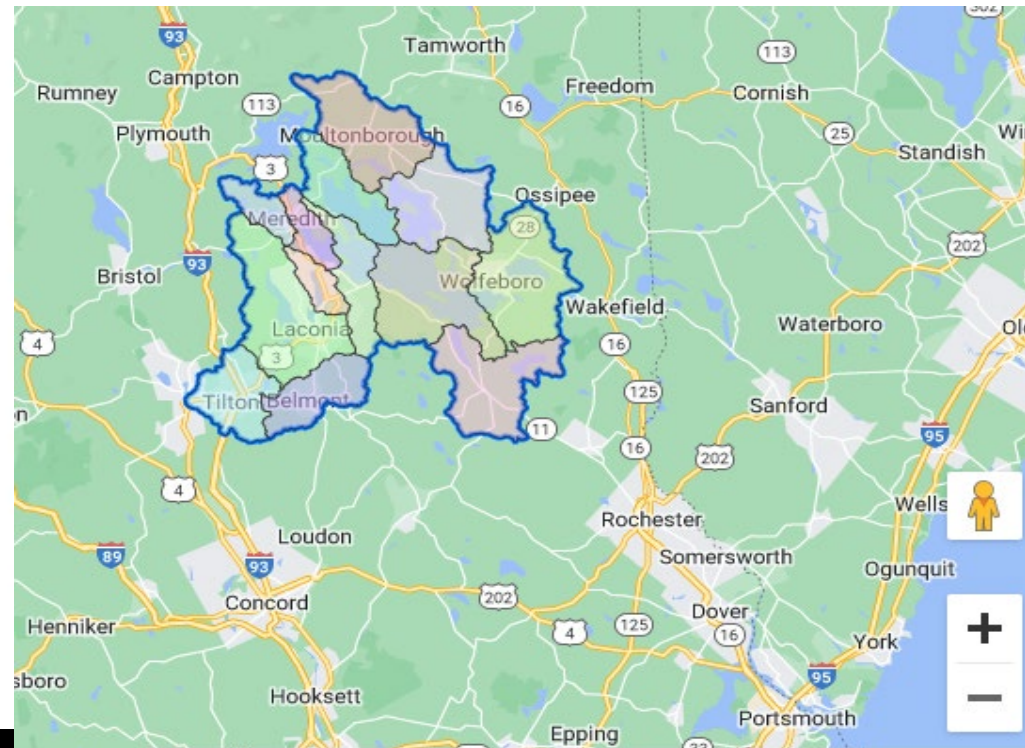
RESOURCES

ABOUT

Introduction

Watershed Issues

Map Atlas

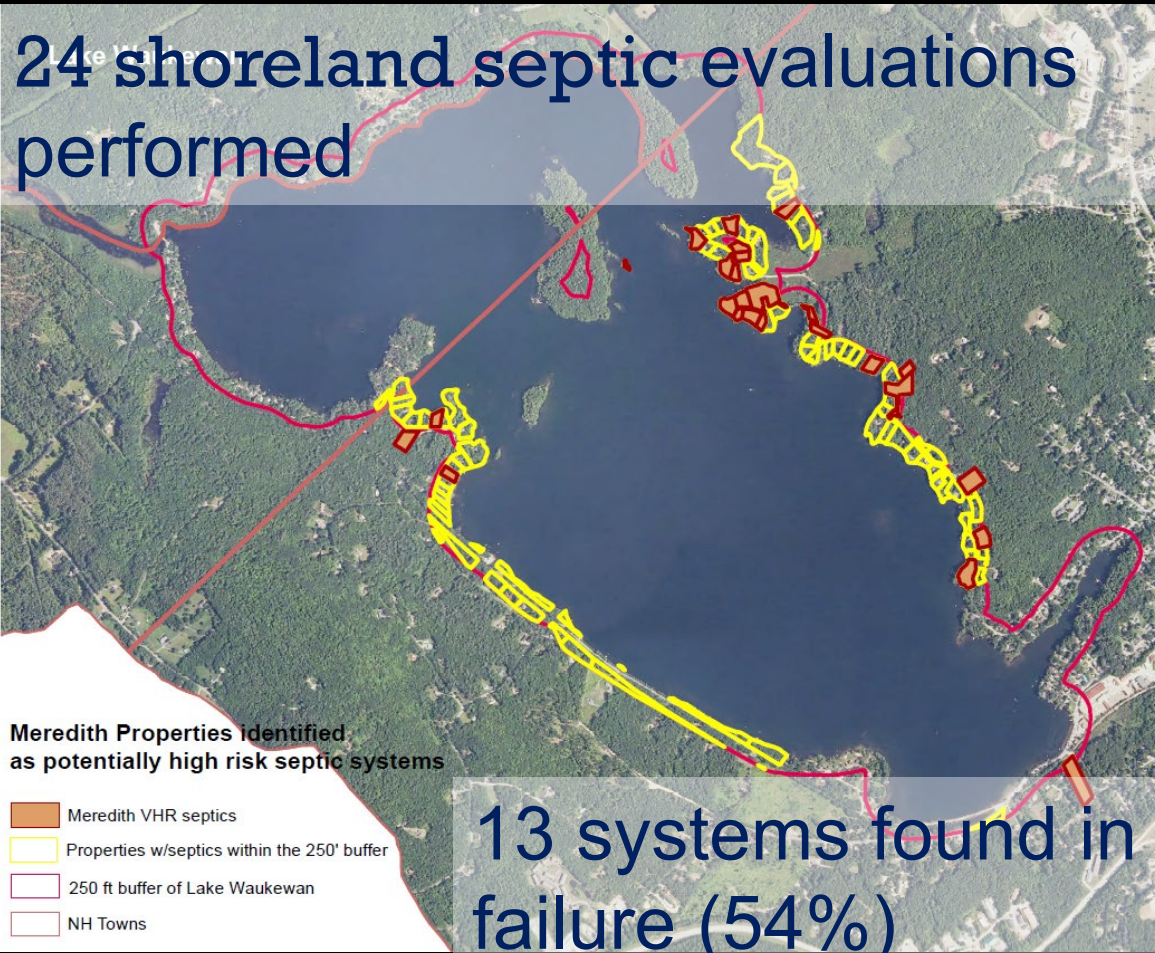




# 319 Watershed Implementation Septic System Improvement Initiative

Lake Waukewan  
Drinking water supply, Meredith, NH

24 shoreland septic evaluations  
performed





# 319 WATERSHED IMPLEMENTATION - PAUGUS BAY / LACONIA'S PRIMARY SOURCE: DESIGN & INSTALL BIORETENTION STORMWATER BASIN



11-04-2013: Northerly view of stone over perforated pipe.



Previously a ditch and pipe discharging directly into Paugus Bay.

Treats first flush, usually the runoff from one-inch of runoff coming from an impermeable area.

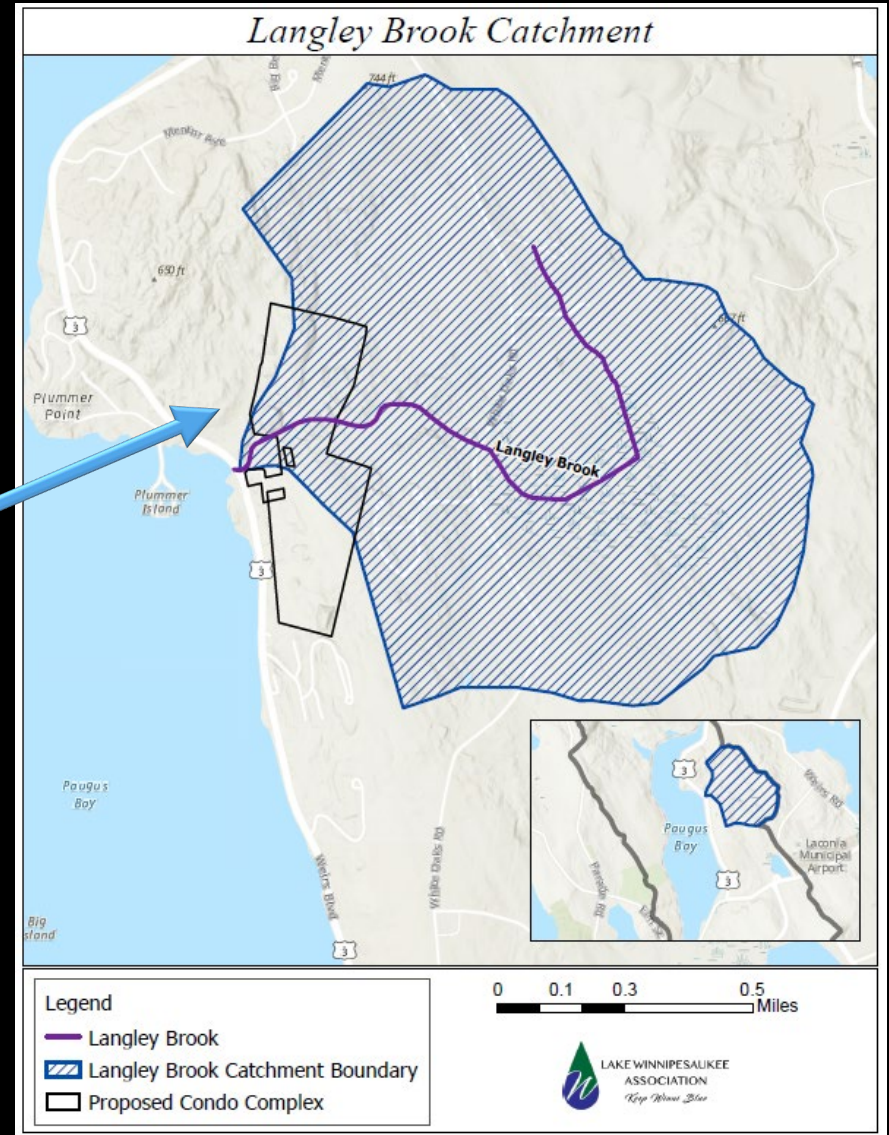
Bioretention shown to remove:

- 40% total nitrogen
- 95 to 98% of (Cd, Zn, Pb)
- 65% phosphorus

Source: [Penn State Cooperative Extension](#)



# Hydrologic Assessment of the Langley Brook catchment in the Paugus Bay watershed





# GETTING THAT TMDL DONE!

## LOCKE LAKE/WEBSTER STREAM SOURCE (2021)

Supported a source protection and monitoring plan



Water sample from Locke Lake beach that found Microcystis at nearly 2 million cells/ml. The bloom was identified as being Microcystis

Table 3-3 Locke Lake Current Phosphorus Loading Summary

TP INPUTS	Modeled Current TP Loading (kg/yr)	% of Total Load
Atmospheric	6.1	1.1
Internal Load from Hypolimnion	0.0	0.0
Waterfowl	83.9	15.6
Septic Systems	122.9	22.9
Halfmoon Lake Watershed Load	159.7	29.7
Locke Lake Watershed Load	165.0	30.7
<b>Total</b>	<b>537.6</b>	<b>100</b>



# CROSS PROGRAM MS4 PERMIT COORDINATION

## SECTION 2.3.4.7 PRIORITY OUTFALLS/INTERCONNECTIONS

- High Priority Outfalls:  
Outfalls/interconnections that have not been classified as Problem Outfalls and that are:
- “Discharging to an area of concern to public health due to proximity of public beaches, recreational areas, drinking water supplies or shellfish beds;”



# CROSS PROGRAM MS4 PERMIT COORDINATION

## SECTION 3.2.3 2017 NH SMALL MS4 GENERAL PERMIT

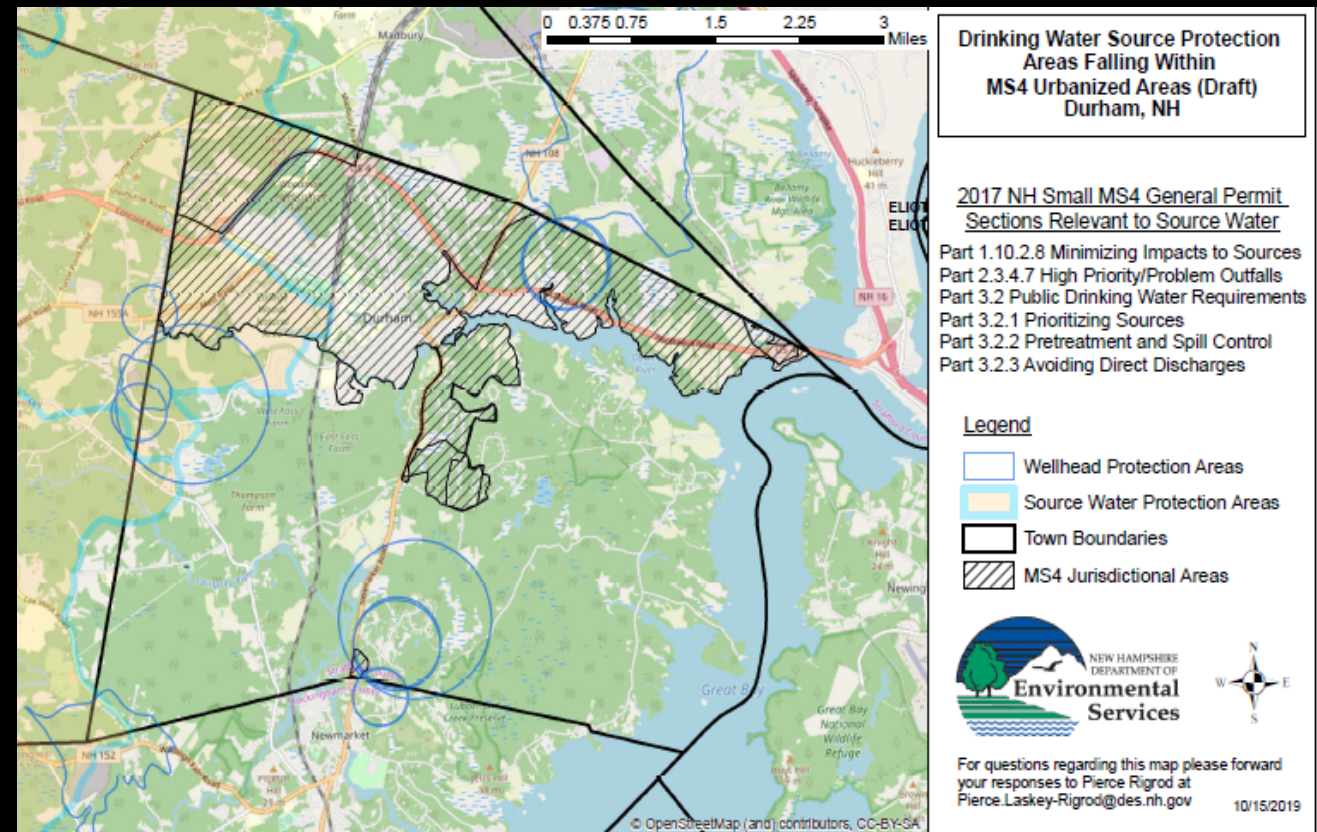
Section 3.2.3 – permittee shall avoid direct discharges to groundwater and surface water drinking water sources and ensure any discharges **near source protection areas of water supply wells or intakes** comply with the applicable state requirements.

Changed SWP grants to clarify ms4 activities were eligible.

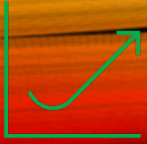
Attended MS4 coalition meetings and provided them maps, grant applications, etc.

Continue to support MS4 permit activities that protect DW over time.

Technical Assistance Map: Durham, NH - shows both source protection & MS4 jurisdictional areas



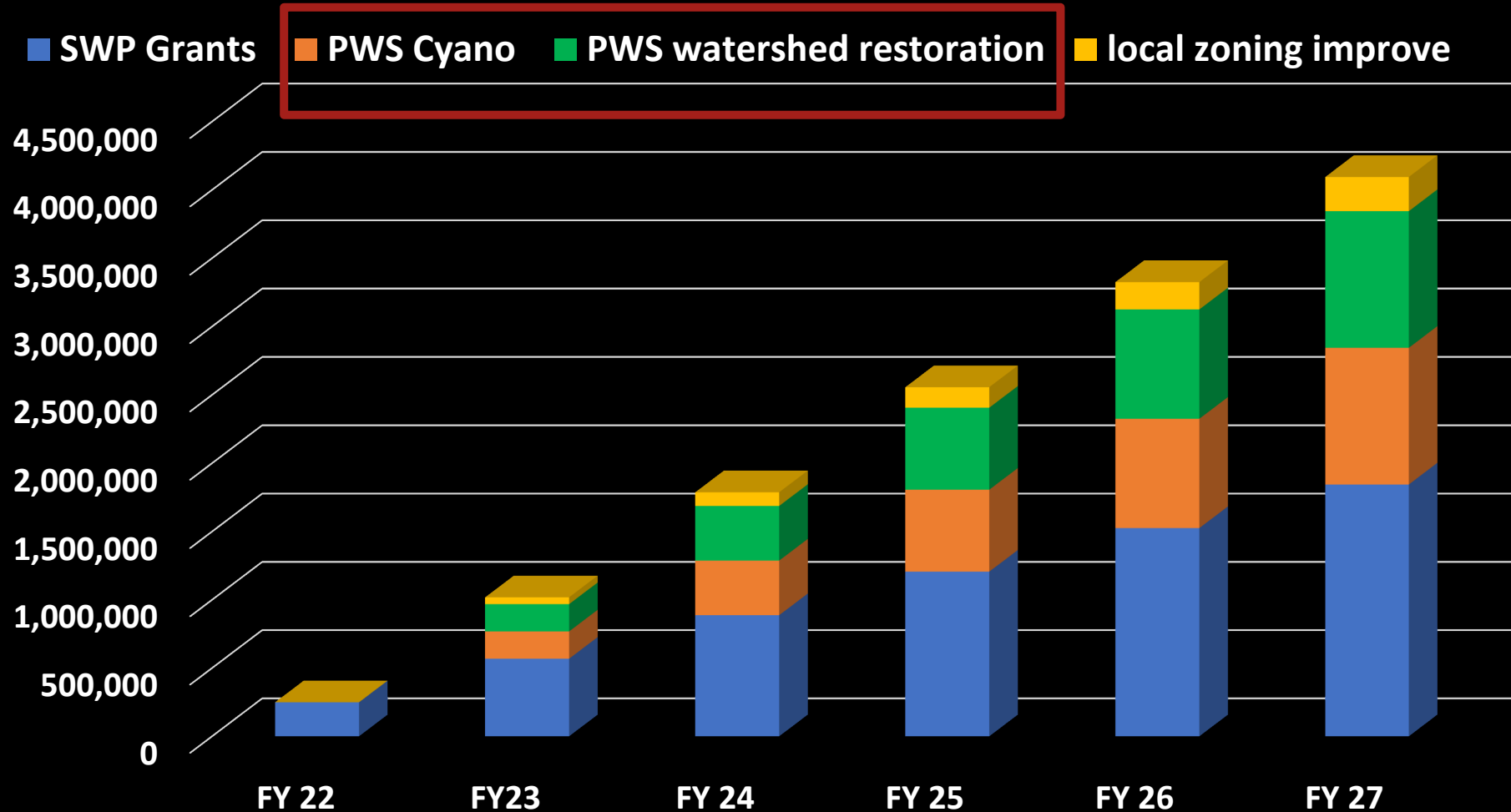




# PROJECTED CUMULATIVE FIVE-YEAR INVESTMENT IN SOURCE WATER PROTECTION

FY2022 – 2027

CUMULATIVE YEAR-OVER-YEAR TOTAL BASED ON CONTINUING FFY 2023



# NH LEGISLATIVE PRIORITY FOR 2023: CYANOBACTERIA

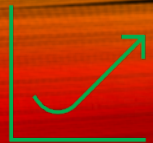
- House Bill (HB) 1066 - The Cyanobacteria Plan Advisory Committee was created in response to legislation in 2022 mandating NHDES to prepare a statewide cyanobacteria strategy by November 1, 2023.
- HB 1066 calls for NHDES to "prepare a plan to prevent the increase of, and eventually control, cyanobacterial blooms in New Hampshire's lakes and other waters."



# CYANOBACTERIA IMPAIRED DRINKING WATER SOURCES

Cycle	Assessment Unit ID (AUID)	Assessment Unit Name	Town(s) Primary Town is Listed First	Designated Use	Parameter Name	Parameter Level - NHDES Category
2020	NHLAK700020108-02-01	LAKE WAUKEWAN	MEREDITH, CENTER HARBOR, NEW HAMPTON	Primary Contact Recreation	Cyanobacteria hepatotoxic microcystins	5-M
2020	NHLAK700020110-02-01	PAUGUS BAY	LACONIA	Primary Contact Recreation	Cyanobacteria hepatotoxic microcystins	5-M
2020	NHLAK700060702-03	MASSABESIC LAKE	AUBURN, MANCHESTER	Primary Contact Recreation	Cyanobacteria hepatotoxic microcystins	5-M

Lake Massabesic is the primary source for Manchester, NH (largest populated city in state)

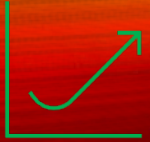


# FFY 23 - \$200,000 ADVANCE MONITORING AND RESPONSE TO CYANOBACTERIA BLOOMS

- Monitoring for cyano will be directed to PWSs now experiencing recurring cyanobacteria blooms
- Develop source-specific, detailed cyanobacteria monitoring plans
- Partner with a qualified monitoring entity and PWS for long-term monitoring.



Cyanobacteria bloom, Mascoma Lake, Enfield, NH (June 2022)

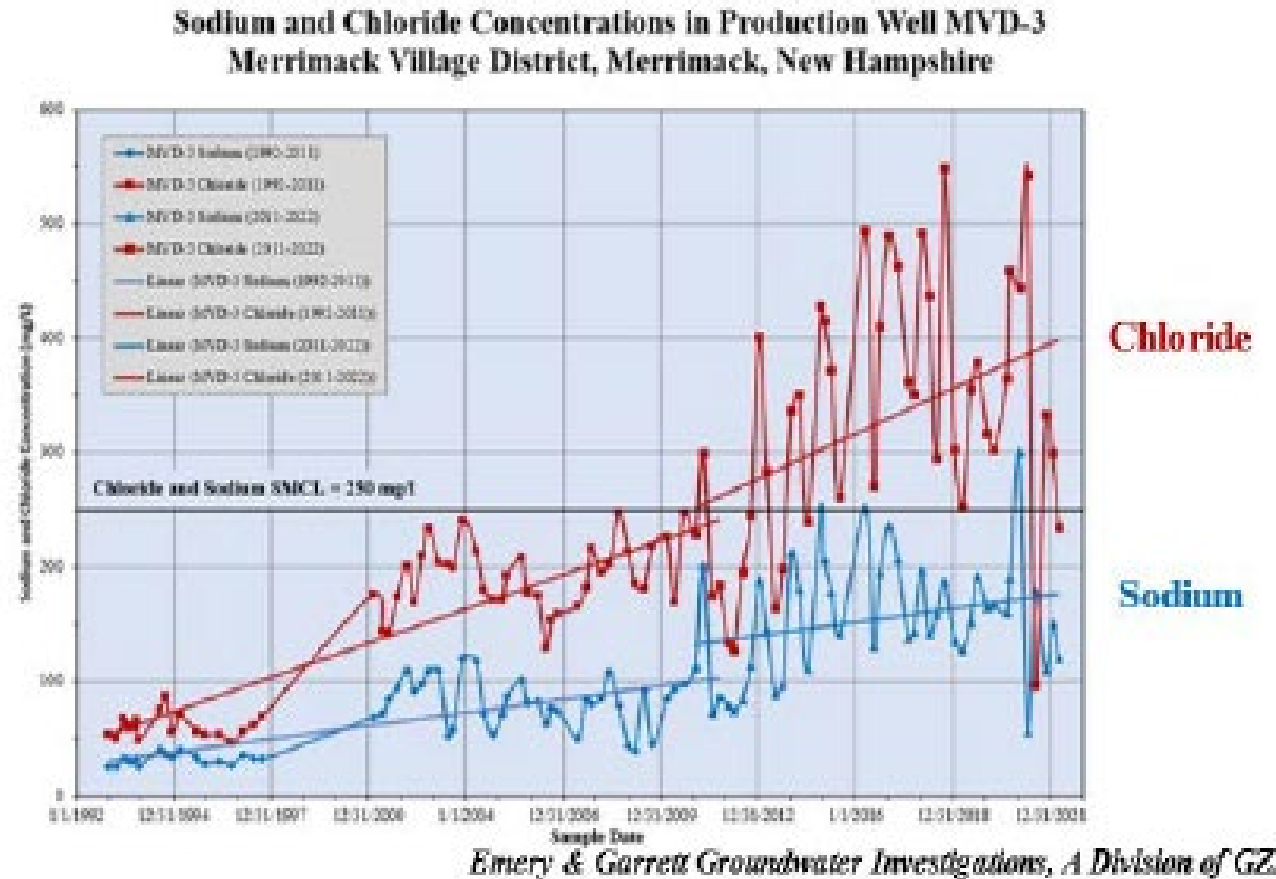


# WATERSHED PLANNING TO ADDRESS SALT IN SOURCE WATER \$200,000

- Over 100 PWSs have elevated NaCl levels.
- 150% increase in medians for NaCl in water supply wells over the last three decades.
- Current FFY – DES is funding watershed plan to address both surface water impairments and PWS elevated values in groundwater.

1991-2011:  
Chloride Increases  
9.96 mg/L Each Year  
Sodium Increases  
3.83 mg/L Each Year

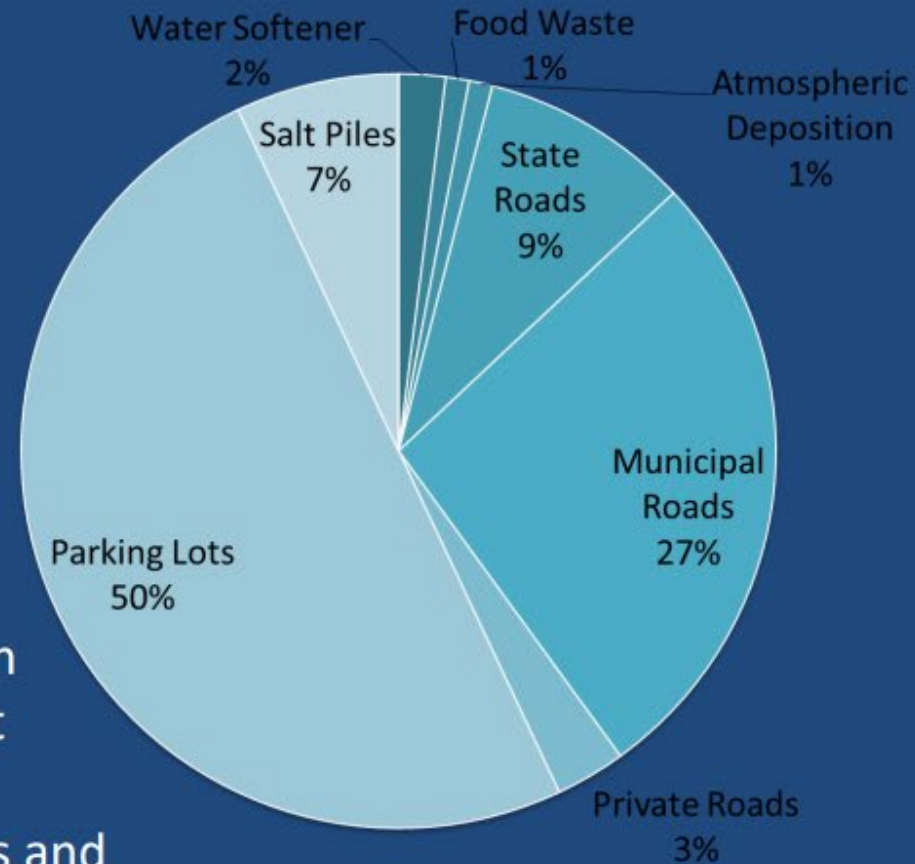
2011-April 2022:  
Chloride Increases  
13.1 mg/L Each Year  
Sodium Increases 3.9  
mg/L Each Year



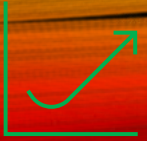




# Sources of salt in New Hampshire



- In urban and suburban areas, most of the salt comes from private parking lots, sidewalks and driveways



# 78% INCREASE SOURCE WATER PROTECTION GRANTS



Bioretention practice, Paugus Bay, Laconia NH

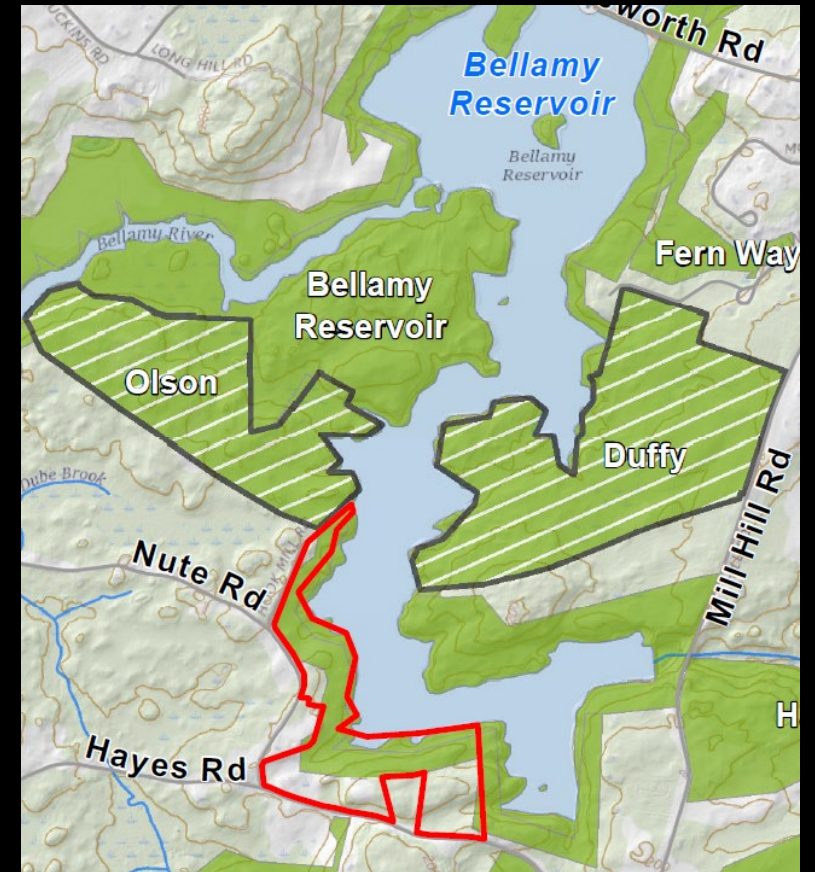
DW FUNDS WILL CONTINUE TO SUPPORT PROJECTS THAT:

- ✓ DESIGN OF STORMWATER PRACTICES
- ✓ MONITOR CYANOBACTERIA
- ✓ REDUCE SALT USE
- ✓ ADDRESS CLIMATE IMPACTS



# CWSRF TO CONSERVE LAND AND INSTALL GREEN INFRASTRUCTURE?

- Land conservation – possible but it is a lower priority (would score low) under CWSRF scoring criteria.
- NH has recurring land conservation funding to protect source water using MTBE settlement/judgement funds.
- Green infrastructure – seems like a big opportunity as we have dozens of “high-priority” stormwater practices in water supply watersheds that are not yet build that would improve water quality.



# USDA NRCS's RCPP Funding Merrimack River Watershed Council (2021-2026)

**\$13.5M proposal for land conservation and restoration**  
**\$5M pledged from DWGW Trust Fund**

**Focus:** includes statewide protection of source water

*The goal of this RCPP is to implement a cohesive, statewide strategy through multi-benefit projects that protect high priority source water areas for drinking water for over 750,000 people...*



*can we save it?*

## THE MERRIMACK

RIVER AT RISK

Largest water supply in NH and counting  
Massachusetts over 750,000 receive drinking  
water from the Merrimack River

SUMMER 2020





## **INNOVATIVE USE OF STATE REVOLVING FUNDS**

Office of Drinking Water



# Gilligan Creek Watershed Project

## EPA Coordinator's Corner

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Dec 8, 2022



**Nikki Guillot (Ghee-oh)**

*Program Manager*

Source Water Protection Program

# Washington State Regulations

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- Department of Health
  - Watershed Control Plan requirement
- Department of Ecology
  - Clean Water protection agency
- Department of Natural Resources
  - Forestry regulations

# Background

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- Skagit PUD serves Mt. Vernon, Burlington, Sedro-Woolley, and surrounding rural and suburban areas
  - 65,000 people
- Gilligan Creek provides approximately 45 percent of the system's supply
- Gilligan Creek Watershed
  - 3,700 acres
  - Owned and managed for industrial forestry
    - Much of the timber is ready for harvest

# Changes in the Watershed

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- Between 2001 and 2012
  - Clear-cut logging occurred over 34 percent
  - Increased forest road construction





# Resulting Water Quality Changes

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- Increased sediment rates
- Increased landslides
- Changes to stream flow regimes



# Impact—Utility Costs

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- Increased intake is clogged or damaged
  - 2009 storm = approximately \$400,000 in damage
  - 2014 = \$200,000 for intake improvements
- Higher turbidity
- Increased shutdowns or additional treatment costs
  - Replacement by Skagit River pumping = approximately \$250,000 annually



# Future Challenges

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- Watershed timber is mature and ready for harvest
- Forestry regulations allow clear-cutting immediately upstream of intake
- Planned logging proposal can become active quickly



# Response

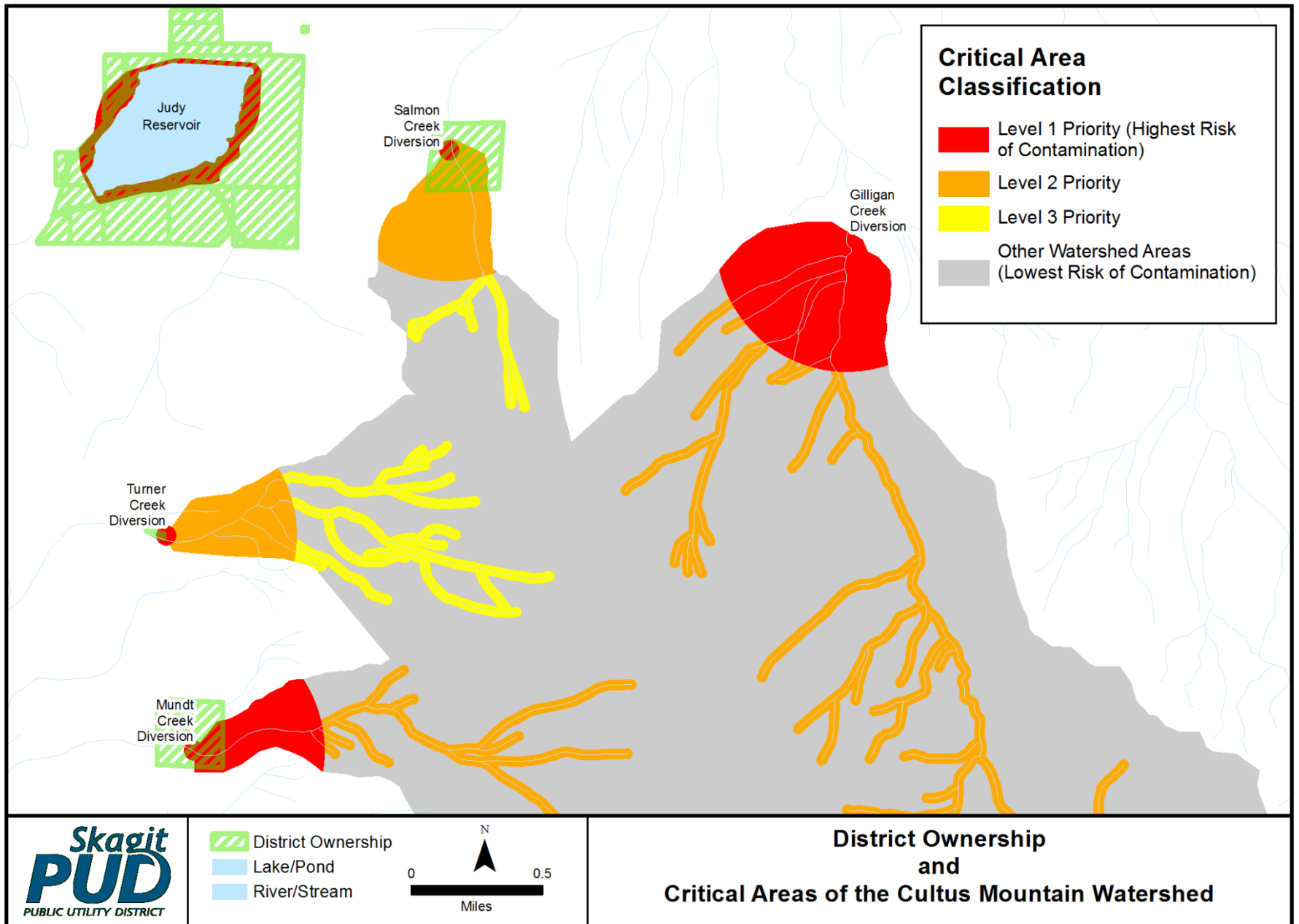
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- Improved communication with landowner
- Outreach to landowner about forestry best management processes
- Improvements to the watershed control plan

# Planning—2013 Cultus Watershed Management Plan

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- Used DOH Watershed Control Regulations as framework for plan
- Inventoried watershed and identified areas most sensitive to contamination
- Desired outcomes reduce risk of sediment deliver, chemical pollutants, temperature impact, and landslide hazards
- Considered multiple protection options



# Land Acquisition

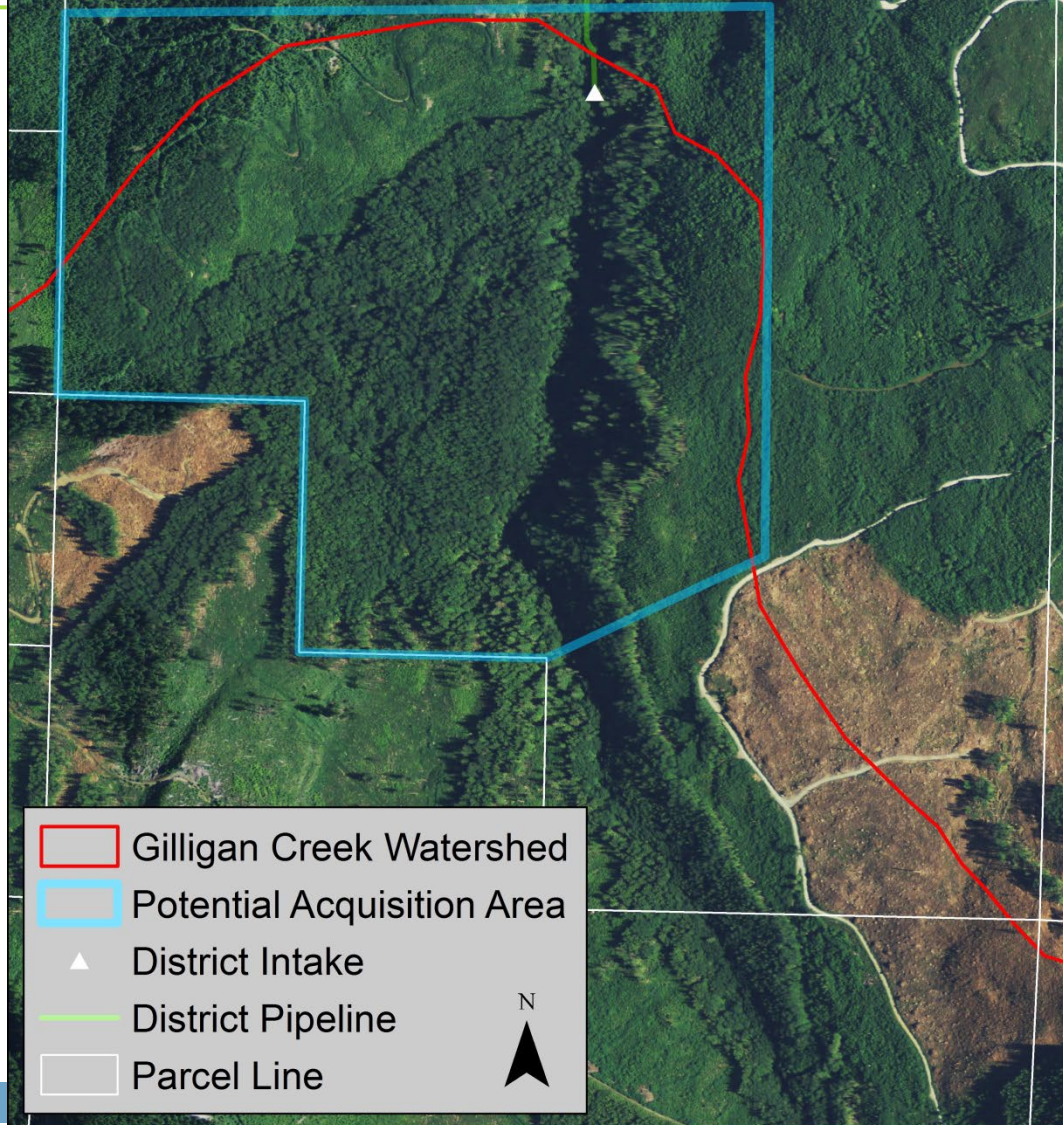
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- The watershed management plan identified acquisition or restrictive easement as best long-term protection of sensitive areas
- Board of Commissioners direct staff to engage in discussions with landowners
- Landowners willing to consider sale of property
- Look for funding partners—consider multiple benefits



# GILLIGAN CREEK DIVERSION

## POTENTIAL ACQUISITION AREA & AERIAL IMAGERY (2013)



# A Search for Funding

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- Networking
  - Land Conservation groups
  - Department of Health
- Commissioners support loan
  - Payed for by rate payers
  - Application to CWSRF

# Washington CWSRF Application Success

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- Non-point project with multiple benefits
  - Protecting drinking water source for 65,000 customers
  - Water quality benefit
  - Other environmental benefits
  - Deed restriction
- Planning and management—being prepared
  - Watershed plan
  - Long-term management strategy
  - Letters of support (Conservation groups and Department of Health)



# Funding Package

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- Ranked seventh of 155 applications on initial funding list
- CWSRF—non-point project
- Twenty-five percent Green Project reserve forgiveness (i.e. “grant”)
  - Only two to three projects a year receive green project reserve forgiveness
- Two percent interest loan for 20 years
- \$1,590,000 application budget

# DOH Support

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- Assisted Skagit PUD with feedback on watershed plan
- Provided letter of support for CWSRF funding application
- Provided DWSRF grants for land acquisition preparation work
  - Appraisal
  - Survey
  - Attorney

# Current Status

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- CWSRF contract is executed
- District signed a purchase and sale agreement



# Questions?







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