



Practical Tools and Information to Support Nonpoint Source Management

NARD Washington DC Conference

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Overview

- Intro and overview
- Programmatic information sharing tools
 - How's My Waterway?
 - Success Stories
- Technical tools designed to help conduct analysis
 - Pollutant Load Estimation Tool (PLET)
 - Restoration and Protection Screening Tool
- Leveraging NPS and Clean Water State Revolving Fund resources
- Discussion



§319 of the Clean Water Act

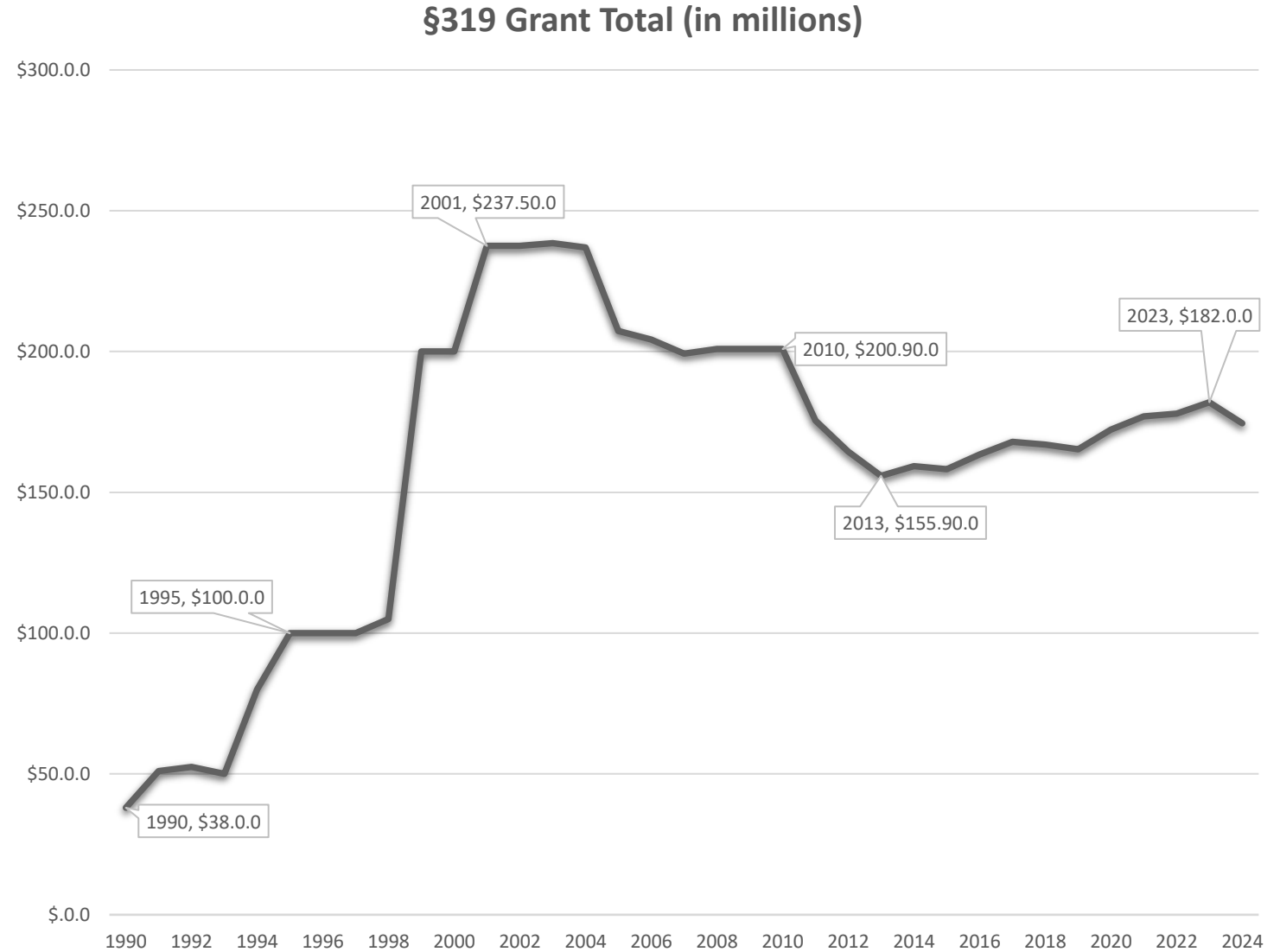
Established in 1987, provides a framework and federal funding for state and local NPS efforts

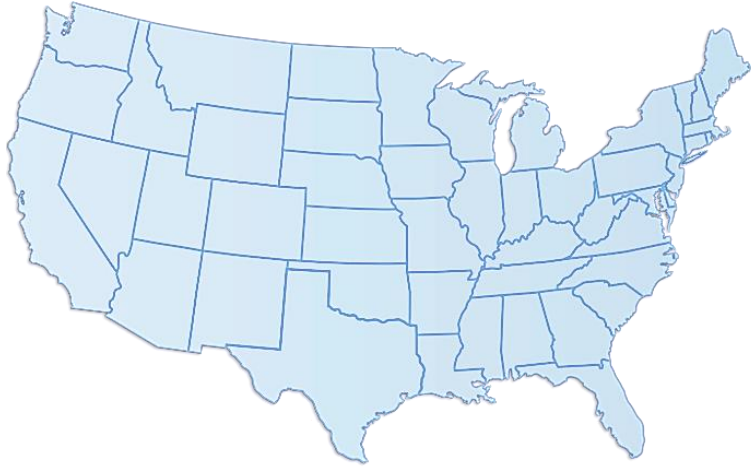
- 319(b) – 5-Year NPS State Management Programs
- 319(h)- Grant Program
- In addition to CWA, states follow grant guidelines in spending 319 funds.

<http://www.epa.gov/nps/319-grant-current-guidance>

319 Program History:

- Program Development: 1987 – 2003
- EPA program review + GAO Audit: 2011 – 2012
- 2013 Guidelines
- 2023-4 Guidelines update



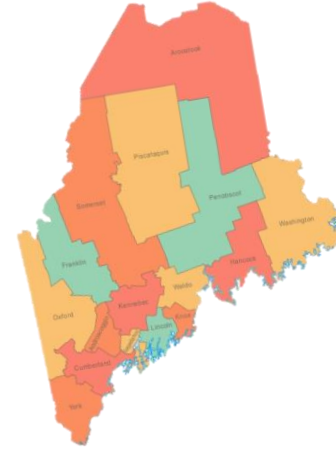


National Nonpoint Source Program: Provides national programmatic oversight, including national policy decisions and initiatives.



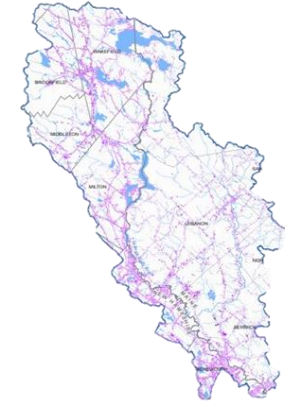
Regional NPS Coordinator: oversees the 319 program implementation in each region

Regional 319 Staff: work directly with states, territories, and Tribes to coordinate dispersal, implementation, and tracking of 319 grant \$



State NPS Program Managers: oversees the 319 program implementation for the state

State 319 Staff: work to move grant funds to subgrantees that will be implementing watershed based projects; reporting and tracking of spending



Subgrantees (watershed groups, conservation districts, etc): Apply for 319 grant funds for water quality improvement projects

How's My Waterway?

<https://mywaterway.epa.gov/>

Let's get started!

▼ washington, DC × >> Go OR Use My Location

Map showing the Pimmit Run-Potomac River watershed in Washington, DC. The watershed boundary is indicated by a dashed black line. Key locations labeled include McLean, Pimmit Hills, Idylwood, Arlington, Washington, West Falls Church, Seven Corners, Bailey's Crossroads, and Lake Barcroft. A scale bar shows 2 km and 2 mi. The map is powered by Esri.



Restore

Show Text

Efforts are underway to restore your community's water through grants and clean-up plans at the local, state, and federal level. View restoration plans and EPA funded [Nonpoint Source](#) restoration projects.

26

Projects

94

Plans

1

Stories

Nonpoint Source Projects

Restoration Plans

Success Stories

[Nonpoint Source](#) pollution generally results from land runoff, precipitation, atmospheric deposition, drainage, seepage or hydrologic modification.

There are 26 Nonpoint Source projects funded from EPA grants under the [Clean Water Act](#) Section 319 that benefit waterbodies in the *Pimmit Run-Potomac River* watershed.

Expand All

DC School-Based Nonpoint Source Pollution Prevention Program and Adult Outreach

ID: 107361

GRTS State Projects, State Success Stories, and Protection Projects

Nonpoint Source Projects Data Explorer

<https://www.epa.gov/nps/success-stories-about-restoring-water-bodies-impaired-nonpoint-source-pollution>

Nonpoint Source (NPS) Projects Data Explorer Nonpoint Source Mappers ▾ Search Grants/Projects ▾ Interactive Reports ▾

Nonpoint Source (NPS) State Projects : Interactive Map and Reporting About i Instructions

NPS Projects Funded (2000-2025)
National
22,782 Projects

Hover over a map feature to get more information

Data Filters **Geographic Area of Interest** Show Reports Below

Select a geographic area to view, enter a place name, or select to search by subwatershed code or subwatershed name and enter a search value

National Alaska Hawaii Puerto Rico Virgin Islands
American Samoa

Place: SEARCH

Search:
 Subwatershed Name Watershed Code **Subwatershed Code**
 SEARCH RESET



GRTS State Projects, Tribal Projects, and State Success Stories

Success Stories

Opportunity to highlight state restoration efforts and support measuring/tracking program impact

Nebraska Water Stories

Stories below open in a new browser tab.

[Conservation Work Leads to Atrazine Delisting of Shell Creek \(PDF\)](#)

High levels of agricultural runoff led to Shell Creek being listed as impaired for atrazine on the Nebraska state Clean Water Act

[Diverse Efforts Restore Aesthetic Use to Big Indian Reservoir 11A \(PDF\)](#)

Big Indian Reservoir 11A is a recreational lake and a flood control structure built in the Big Indian Creek watershed in southern

[Show more](#)

[Renovation of Big Springs Community Lake Restores Beneficial Use \(PDF\)](#)

Complaints by local residents about excessive accumulation of woody debris led the Nebraska Department of Environment

[Show more](#)

[Community-Based Efforts Decrease Algae Toxins in Carter Lake \(PDF\)](#)

Runoff and lakebed sediment resuspension led to elevated nutrient and turbidity levels in Carter Lake (which lies in both Iowa

[Show more](#)

[Land Treatment and Education Efforts Result in Lower Atrazine Concentrations \(PDF\)](#)

High concentrations of atrazine measured in the primary inflow to Recharge Lake caused the Nebraska Department of Environment

[Show more](#)

[Watershed Project Reduces Sediment and Nutrient Loading \(PDF\)](#)

Excess sediment and nutrient loads from crop production practices impaired the aquatic life designated use of Nebraska's

[Show more](#)

[View Less Stories](#)

[View More Stories](#)



Conservation Work Leads to Atrazine Delisting of Shell Creek

Waterbody Improved

High levels of agricultural runoff led to Shell Creek being listed as impaired for atrazine on the Nebraska state Clean Water Act section 303(d) list of impaired waters in 2006. Prior to this listing, in 1999, a group of landowners formed the Shell Creek Watershed Improvement Group (SCWIG) to address chronic flooding, poor water quality, poor fishery and instability of Shell Creek. With the help of conservation agencies, they developed and implemented a watershed management plan (2005–2015) to resolve these issues. A decade of dedicated conservation work in the watershed significantly reduced the number of exceedances of the aquatic life standard for atrazine, allowing one segment of Shell Creek, LP1-20700, to be delisted in 2018 for aquatic life impairment due to atrazine.



Welcome to the Drinking Water Mapping Application to Protect Source Waters (DWMAPS)



DWMAPS is an online mapping tool to help you find information critical to protecting drinking water sources. Click one of the search options below to get started. Once you enter the map, icons at the bottom of the screen correspond to the search tools within this welcome screen.



Locate Drinking Water Providers



Locate Potential Sources of Contamination



Locate Assessed Waterways



Locate Projects and Source Water Collaboratives

Open Map Layer List

[EPA Home](#)

[Drinking Water Home](#)

[Drinking Water Data and Reports \(SDWIS\)](#)

[Contact Us](#)

Drinking Water Mapping Application to Protect Source Waters (DWMAPS)

<https://www.epa.gov/sourcewaterprotection/drinking-water-mapping-application-protect-source-waters-dwmaps>

The screenshot displays the U.S. EPA DWMAPS web application interface. The main map shows a shaded watershed boundary in brown, covering areas around New Zion, Loradale, and Goose Creek. The map includes various geographical features like roads (Lexington Rd, Georgetown Rd, I-75, I-64, I-27, KY-353), parks (Kentucky Horse Park), and elevation markers (1011 ft, 1025 ft, 963 ft). A search bar at the top right contains the text "Find address or place". On the left, there are navigation controls for zooming in (+), zooming out (-), home, and orientation. At the bottom left, a weather widget shows "38.135 -84.152 Degrees" and a scale bar for "2 mi". The bottom right corner contains a row of icons for map layers, layers, layers, layers, layers, and layers.

On the right side, a panel titled "Projects and Source Water Collaboratives" is open. It has a "Back" button and a checkbox labeled "Display Surrounding Source Water Collaboratives layers." which is currently unchecked. Below this, there are three tabs: "Projects", "Collaboratives", and "Success Stories". The "Projects" tab is selected, showing a summary: "There are 1 Nonpoint Source projects funded from EPA grants under the Clean Water Act Section 319 that benefit waterbodies in the **Goose Creek-North Elkhorn Creek Watershed (ID: 051002050802)**. Exact waterbody locations are not shown."

A project detail card is visible below the summary, titled "Increasing Rain Garden Construction in the Bluegrass". It lists the following information:

- Project ID:** 83560
- Project Status:** Completed
- Impairments:** Sedimentation-Siltation, Phosphorus, Nitrogen, Biochemical Oxygen Demand (BOD)

At the bottom of the page, a footer contains the text: "Esri, NASA, NGA, UCG, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, N".

GRTS State Projects and State Success Stories

Technical Assistance



[Restoration and Protection Screening](#)
tool updates to provide
a web interface



**Recently released
technical documents:**

*A Compendium of Tools
and Methods to
Estimate Environmental
Benefits for Nature-
Based Solutions
(November 2024)*

*Bioretention Design
Handbook (November
2023)*



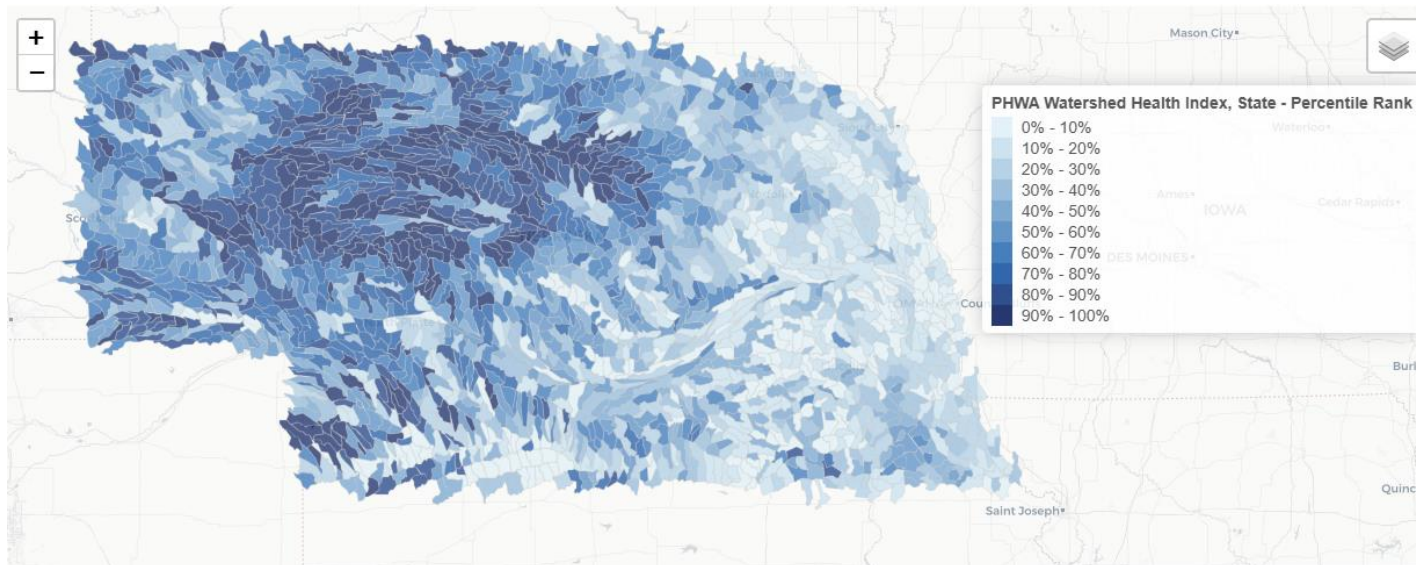
**Updates to EPA's PLET
model dataset for
precipitation and a
protected lands
component**



**EPA has plans in
place to update the
[Watershed Planning
Handbook](#)**

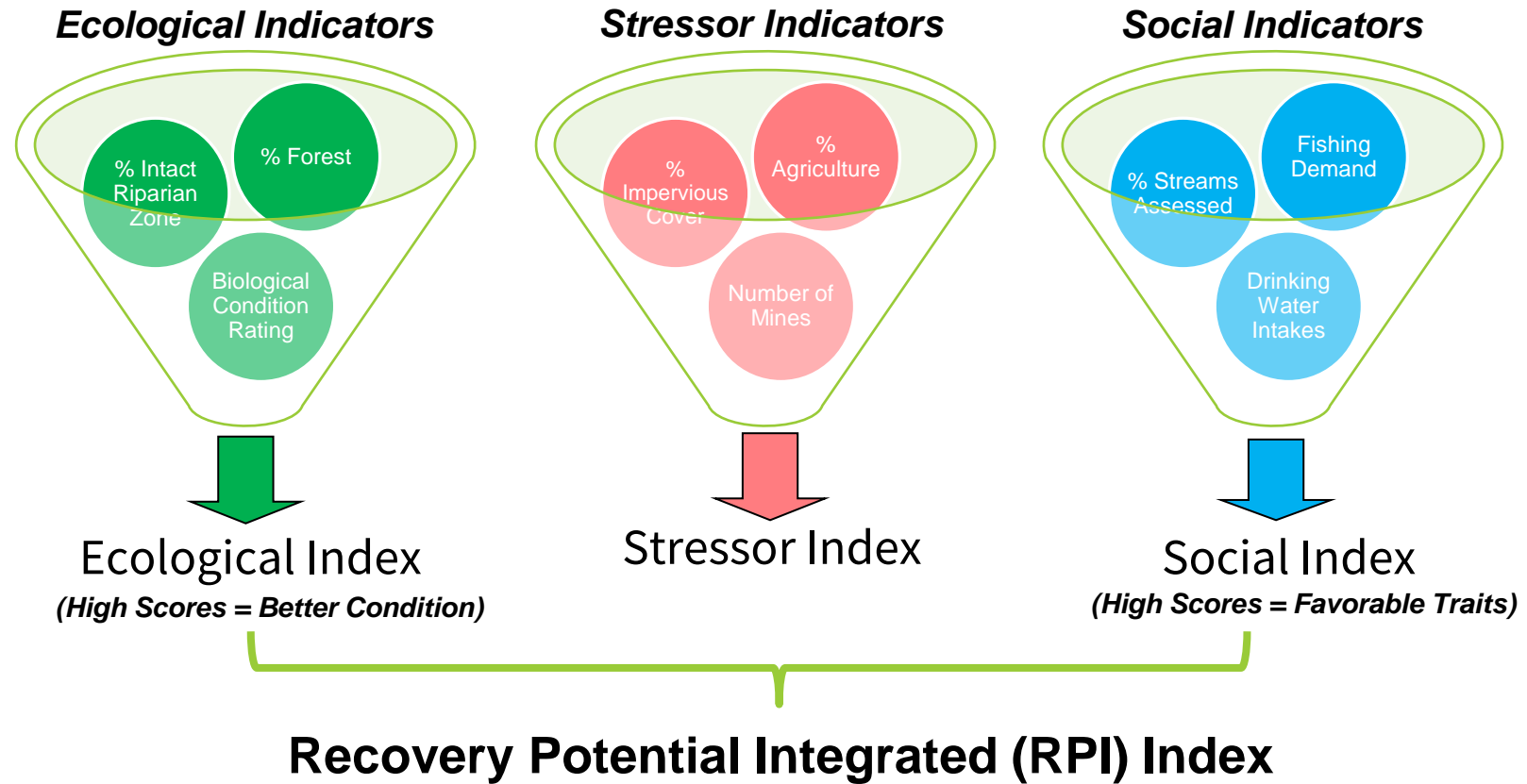
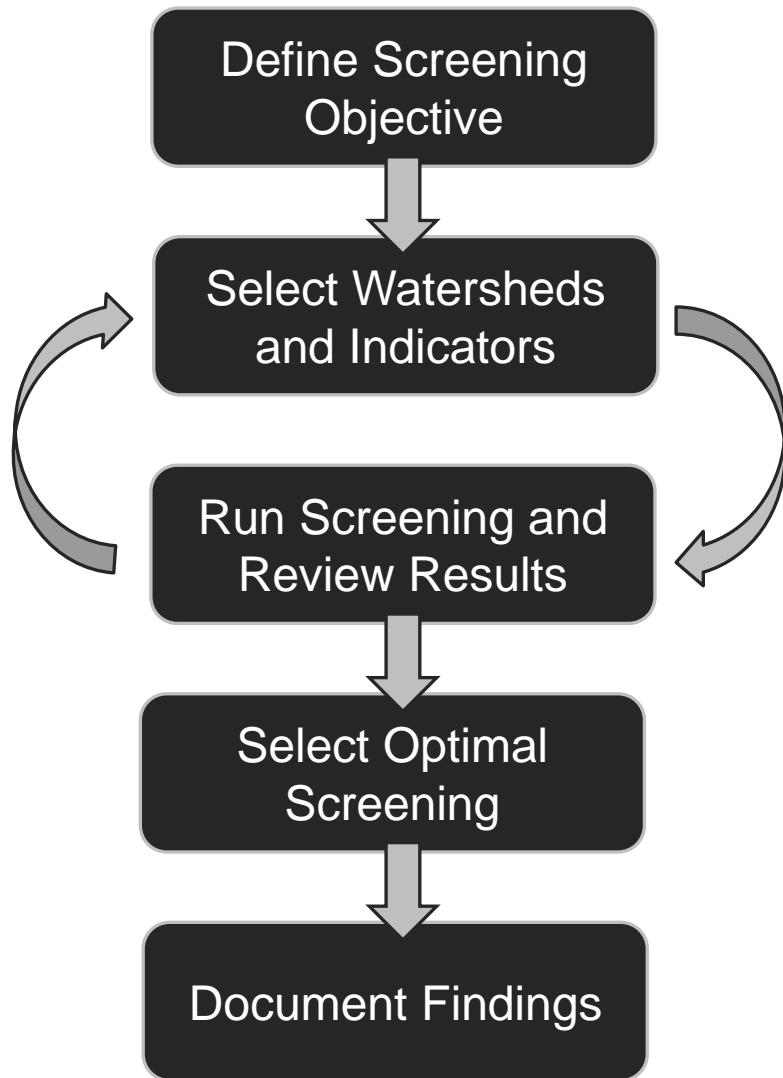
The RPS Tool

- Based on a framework developed by EPA in 2006 to provide a **systematic method, data, and tool for comparing watersheds** to inform management decisions and priorities
- A **free, publicly available tool + data indicator library** to support strategic planning of priority waters and watersheds for restoration and protection.
 - Available as both an Excel-based tool and a **NEW** web application!



Example RPS Indicator:
Statewide Watershed Health Index scores, based on the EPA's 2021 EPA Preliminary Healthy Watersheds Assessment.

RPS Tool Screening Process

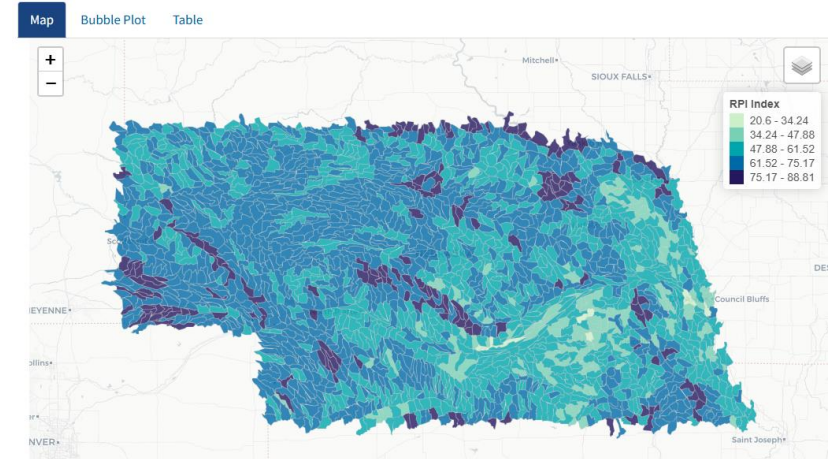


RPS Tool – Example Applications

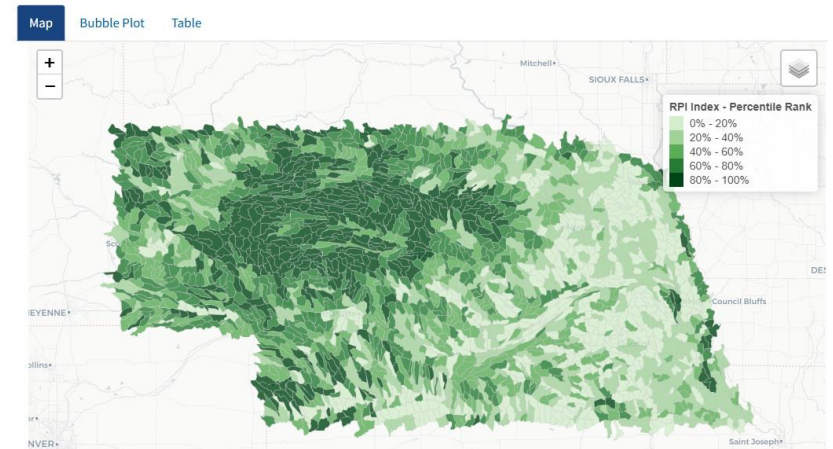
Has been used to prioritize watersheds for:

- TMDL development
- State nonpoint source program five-year plans & 319 grants
- Healthy watersheds protection
- Wetland and riparian buffer mitigation grants
- Water quality monitoring strategies
- Deepwater Horizon restoration funding

www.epa.gov/rps



Example: Nutrients Management RPS Screening Scenario



Example: Watershed Protection RPS Screening Scenario

Pollutant Load Estimation Tool (PLET)



Web-based tool that **estimates** annual, long-term **nutrient and sediment loads** from **surface runoff** over cropland, pastureland, feedlots, forest and urban land uses and **load reductions** resulting from BMP implementation



Section 319 subgrantees, watershed planners, academics, conservation districts, and others



Report annual load reductions* and planning purposes (i.e. watershed-based plans)

*319 grant recipients report load reductions in the Grants Reporting and Tracking System (GRTS)

PLET Snapshot Summary

Features	Description
Scale	Site and watershed (HUC12); multiple fields or HUC12s can be considered simultaneously
Land uses	Cropland, Pastureland, Urban*, Forest, Feedlots, and User Defined
Best Management Practices	Includes more than 60 best management practices across the 5 predefined land uses
Outcomes	<p>Long-term (30-yr) average annual loads and load reductions (post BMP implementation)</p> <ul style="list-style-type: none"> Nitrogen, Phosphorus, Biological Oxygen Demand (BOD): lbs/year Sediment: tons/year <p>Volume Reductions</p> <ul style="list-style-type: none"> Applies to select urban BMPs: gallons/year <p>NEW! Long-term prevented loads and prevented runoff from forest protection</p> <ul style="list-style-type: none"> Nitrogen, Phosphorus, Biological Oxygen Demand (BOD): lbs/year Sediment: tons/year Runoff: acre-ft/year
Coverage	Contiguous United States, Hawaii, Alaska Puerto Rico (<i>for HUC12s and weather data</i>)
Time and Data Demands	Simple; most inputs are auto-populated at the HUC12 scale

To access PLET visit epa.gov/nps/plet

Pollutant Load Estimation Tool (PLET) - Login



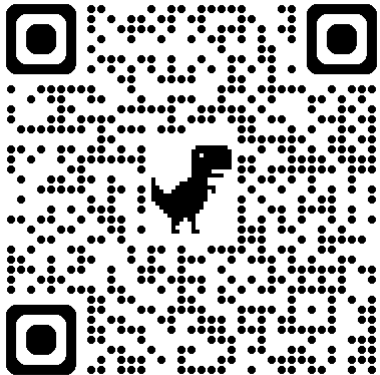
EPA Employee Login

Non-EPA Employee Login

NOTE: Non-EPA users **MUST** register with [LOGIN.GOV](https://login.gov).

For existing non-EPA users, to retrieve previously created models you MUST use the same email address in LOGIN.GOV as was used to register for PLET.

[Login Help](#) | [Contact PLET Helpdesk](#) | [Forgot LOGIN.GOV Password](#)



Pollutant Load Estimation Tool (PLET)

The [Pollutant Load Estimation Tool \(PLET\)](#) is a planning level web-based model used to estimate long-term nutrient and sediment loads from different land uses and the load reductions resulting from the implementation of best management practices.

On this page:

- [What is PLET?](#)
- [Model Documentation](#)
- [Training Materials](#)
- [Questions and Answers about the PLET model](#)

Check out the [Training Materials](#) link for:

- User's Guide
- Training Videos
- BMP Descriptions; and
- Tech Notes

User's can also reach out to the [PLET Help Desk](mailto:plet@tetrattech.com) (plet@tetrattech.com)

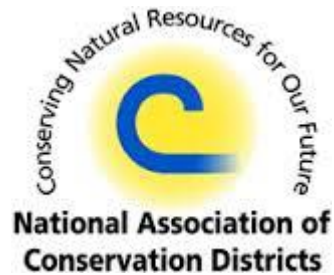
Questions or Comments?

- [Contact email-based Help Desk for PLET Model support.](#)

Related Information

Importance of Funds Leveraging and Coordination

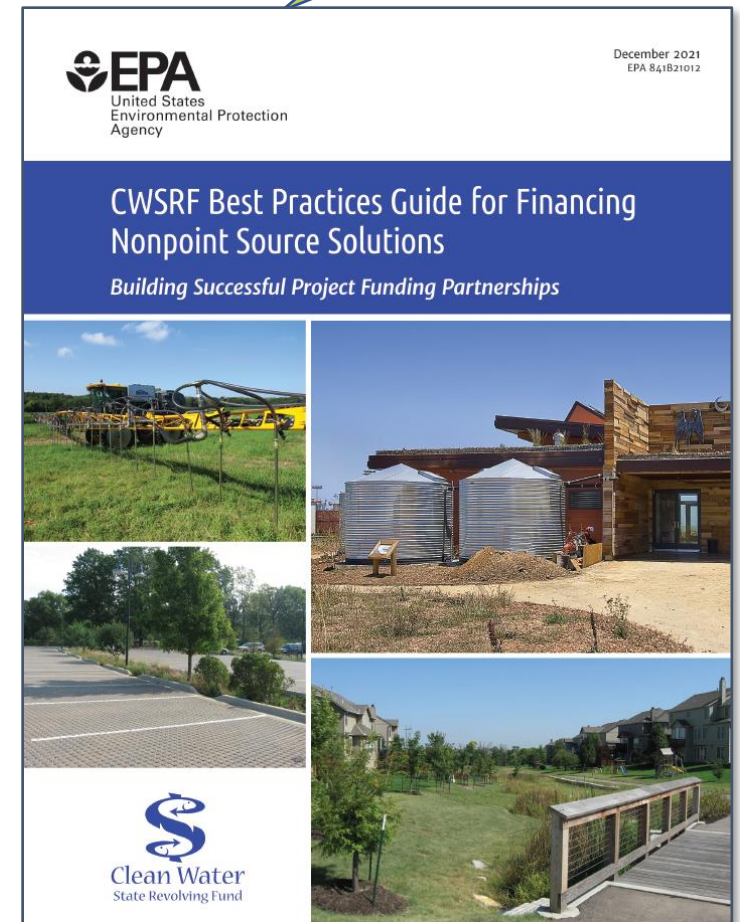
- Given magnitude of NPS problems and limited resources, NPS programs build connections and leverage funding
- **USDA** - especially NRCS conservation programs, National Water Quality Initiative
- **FEMA** – hazard mitigation planning and grants; nexus of water quality projects and reduced risk from natural hazards (drought, floods)
- **CWSRF** - has authorities for SRF-funded NPS projects and receptive to innovative NPS approaches



CWSRF by the Numbers

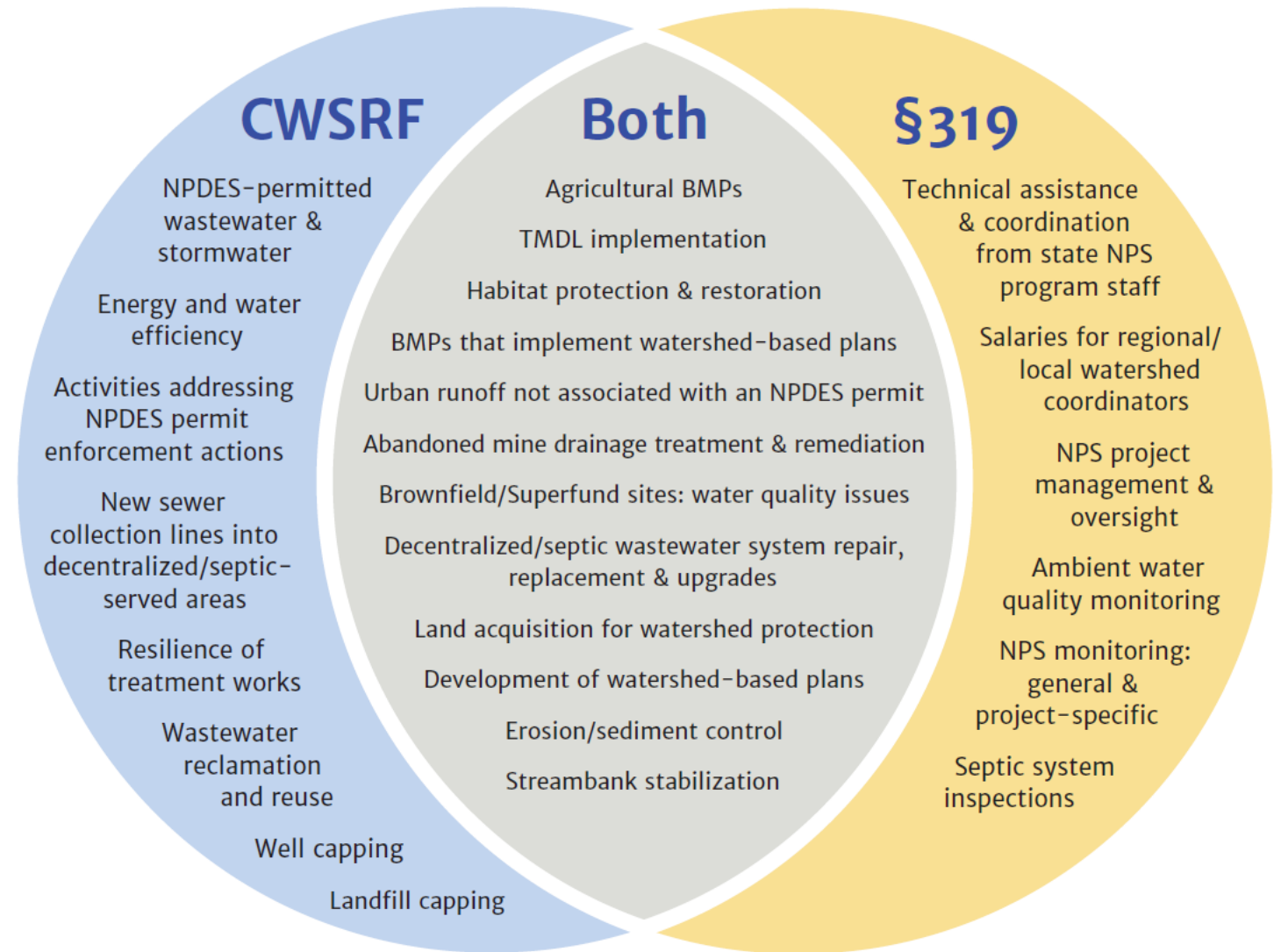
- **\$163 B** provided via 51 CWSRF programs since 1988
- **\$9.63 B** provided by the 51 CWSRF programs in FY22
- **46,224** assistance agreements (a.k.a. “projects”) since 1988
- **1.2%:** National average interest rate for CWSRF loan in 2022 vs. 3.5% prevailing market rate
- Just **3.4 %** of overall funding pie has gone toward NPS

Find me at
www.epa.gov/nps



What can be funded with the CWSRF and CWA §319?

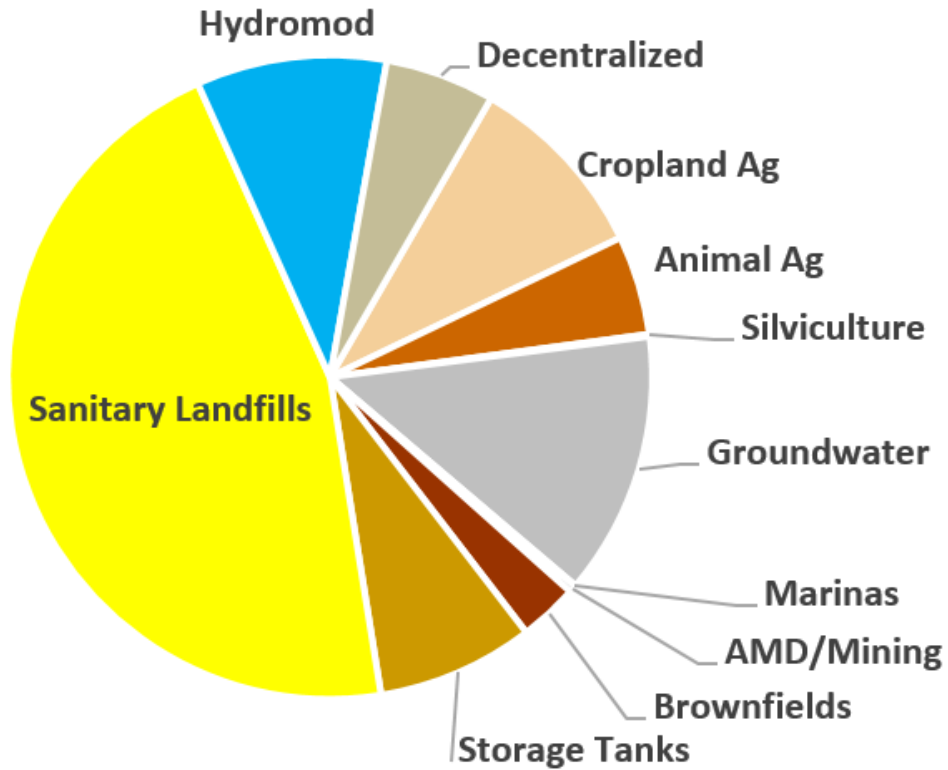
The federal perspective...



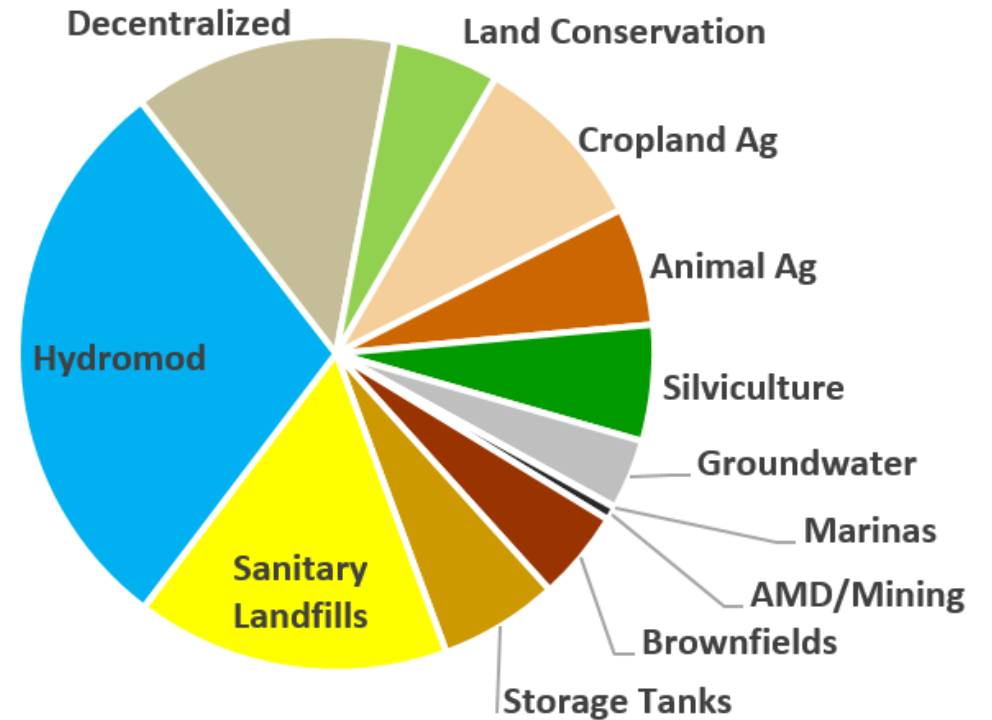
Examples of eligible uses of CWSRF and §319 funds

CWSRF Funding by NPS Category

1989-2007

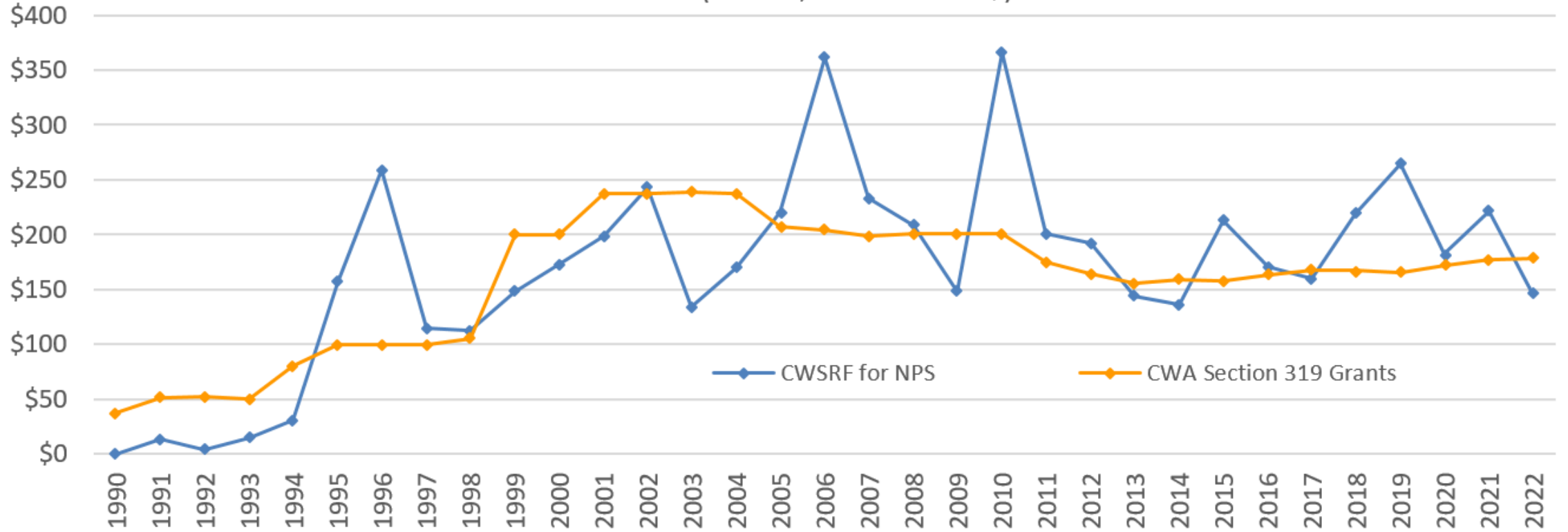


2008-2022



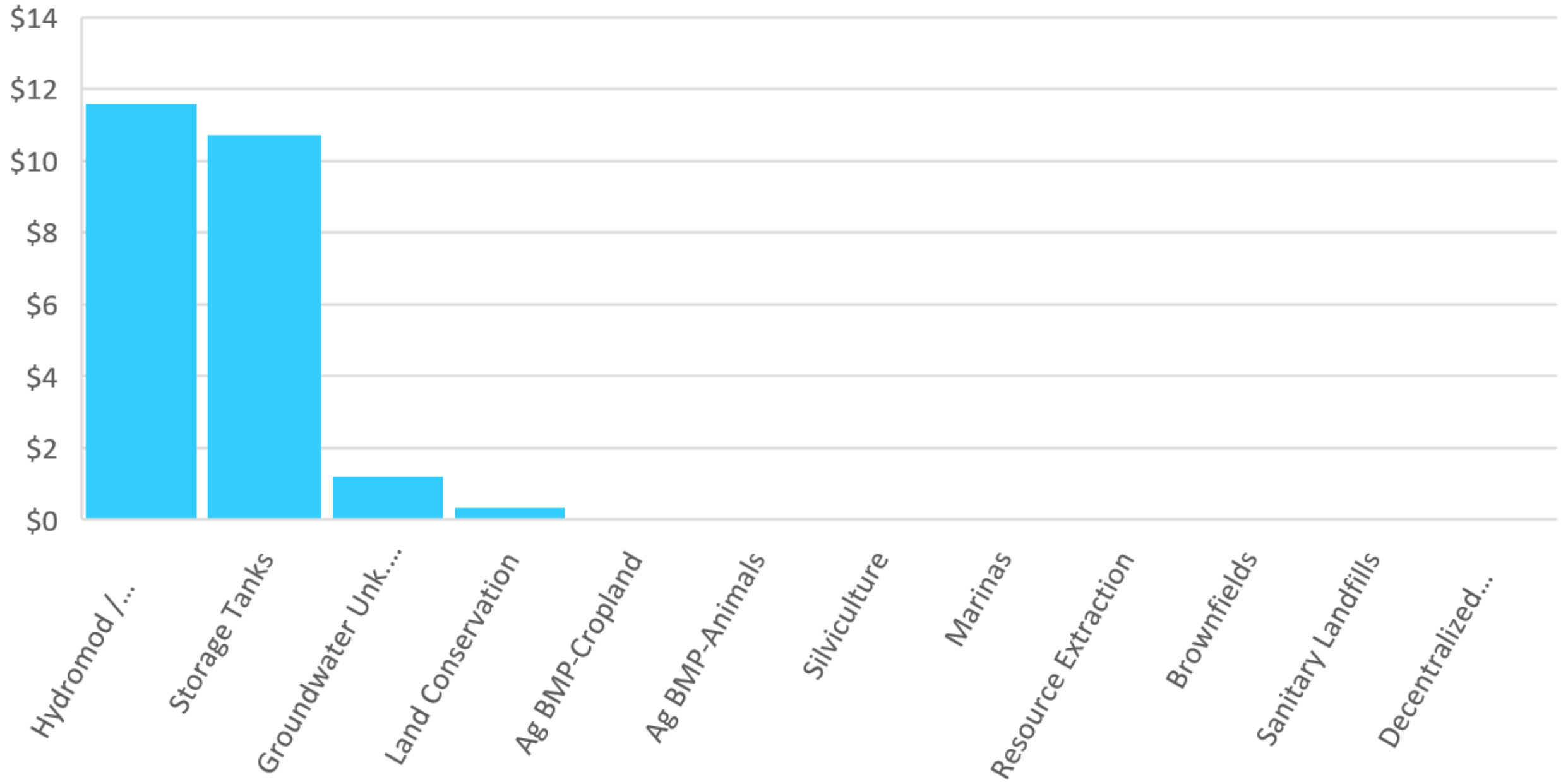
Nonpoint Source (NPS) Funding by Program Since 1990

(Annual, in Millions of \$)



(\$M)

Nebraska CWSRF, NPS Financing thru 2024



Discussion

How do you currently intersect with nonpoint source management?

Where have you found some success?

What environmental concern are you most interested in addressing?

How could the information provided help you achieve your goals?

References

Links

- [Section 319 Project Mapper](#)
- [Section 319 NPS State Contacts](#)
- [NPS Success Stories](#)
- [Leveraging 319 funds and State Revolving Funds](#)
- [Local Source Water Collaborative Map](#)

Follow up questions:
Rosaura Conde
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