United States Environmental Protection Agency

USDA

Innovative Financing Strategies for Reducing Nutrients Webinar Series

FEDERAL FINANCING FOR NUTRIENT REDUCTIONS: GRANTS AND LENDING OPPORTUNITIES

June 12, 2019

Agenda

- Opening Remarks: Dave Ross, Assistant Administrator, EPA Office of Water
- How to Participate in the Webinar
- Webinar Series: Innovative Financing Strategies for Reducing Nutrients
- Opening Polls
- Featured Presentations:
  - **USDA Rural Development**
    Scott Barringer, Deputy Assistant Administrator, Rural Development, Water and Environmental Programs
  - **US EPA Office of Wastewater Management**
    Raffael Stein, Director, Water Infrastructure Division
  - **US EPA Office of Wetlands, Oceans and Watersheds**
    Tom Wall, Director, Watershed Restoration, Assessment, and Protection Division
- Q&A
- Adjourn

Opening Remarks

- **Dave Ross**
- Assistant Administrator of EPA's Office of Water

How to Participate in the Webinar

The **Q&A window** allows you to ask questions to the host and panelists.

To adjust your audio settings in the webinar, click on **Audio Options**.

Send a **chat to the host** (Rob Willis) if you have a technical issue.

Webinar Series: Innovative Financing Strategies for Reducing Nutrients

- This is the first in a four-part webinar series featuring case studies of successful approaches from across the country for funding nutrient reductions.
  - June 12: Federal Financing for Nutrient Reductions: Grants and Lending Opportunities
  - June 26: Private Sector Financing Solutions for Nutrient Reductions
  - July 10: Funding Landscape-Scale Nutrient Reductions
  - July 24: Stormwater Financing Solutions for Nutrient Reductions
- For more information on this webinar series, please contact waterfinancecenter@epa.gov.

Opening Poll #1

- What type of organization are you from?
  - Utility
  - Local government (not a utility)
  - State government
  - Federal government
  - Nongovernmental organization
  - Agricultural organization
  - Other

Opening Poll #2

- What is your experience/familiarity with financing for nutrient reductions?
  - Funded one or more nutrient reduction projects in the past
  - Have nutrient-reduction initiatives/projects and looking for additional funding/financing
  - Do not have immediate projects to fund, but interested to learn more
  - Familiar with potential financing opportunities, but would like to learn more
  - No or very little experience/familiarity with the topic

USDA Rural Development

Scott Barringer

Deputy Assistant Administrator, Rural Development,
Water and Environmental Programs

USDA, Rural Development

Infrastructure, Partnerships and Innovation in Water and Waste

USDA Water and Environmental Programs

USDA United States Department of Agriculture

Rural Development

RUS: Infrastructure and Services for Rural America

- 80 years serving rural America
- Eligibility
  - Serving cities, towns, and rural areas of 10,000 or less
  - Municipalities, private non-profit, and Native American entities
- Federal program delivered locally in rural areas
- Built on strong partnerships

Congressional and Other Set Aside Funds

WEP administers the following funds:

- Native American/Colonias
- Rural and Native Alaskan Villages
- Technical Assistance and Training Programs
- Solid Waste Management
- Household Water Well Systems
- Revolving Loan Funds
- Emergency Community Water Assistance Grants (ECWAG)
- Rural Economic Area Partnership (REAP) ND, NY & VT
- Special Evaluation Assistance for Rural Communities & Households (SEARCH)
- Predevelopment Planning Grants (PPG)
- Water & Waste Disposal Loan & Grants

Water & Environmental Programs

Water and Waste Water Program
Weekly Loan and Grant Status Report

June 7, 2019 - Week 36

Total FY 2019 Funding				**Subsidy Rate -0.27%**	
	BA		**Loan**	**Grant**	**Program Level**
Initial Appropriation	613,500,000		1,400,000,000	613,500,000	**2,013,500,000**
Adjustments					
Guaranteed Loans	190,000		50,000,000		**50,000,000**
Guaranteed Carryover	2,376,161		625,305,571		**625,305,571**
Carryover & Recoveries	292,517,140.11		-	285,537,433	**285,537,433**
Total Available	**908,583,301**		**2,075,305,571**	**899,037,433**	**2,974,343,004**

FUNDS	Allotment
WATER & WASTE DIRECT LOAN	1,260,000,000.00
SECD/RDP WATER & WASTE DIRECT LOAN	
WATER & WASTE DIRECT GRANT	493,199,790.89
SECD/RDP WATER & WASTE DIRECT GRANT	
WATER & WASTE GUARANTEED	675,305,571.05
SECD/RDP WATER & WASTE GUARANTEED	
DEPARTMENT OF HAWAIIAN HOMELANDS	0.00
TECHNICAL ASSISTANCE & TRAINING GRANTS	30,083,280.60
SEARCH	3,000,000.00
REAP	4,436,500.00
EMERGENCY COMM WATER ASSISTANCE GRANTS	19,000,000.00
ECWAG Appropriated	13,008,575.73
PERSISTENT POVERTY DIRECT LOAN	140,000,000.00
PERSISTENT POVERTY DIRECT Grant	49,369,000.00
SOLID WASTE MANAGEMENT GRANTS	4,075,773.68
306C ALLEVIATE HEALTH RISKS GRANTS (C0LONIAS)	29,784,220.51
306C NATIVE AMERICAN GRANTS	15,515,291.84
CIRCUIT RIDER CONTRACTS	23,039,839.38
PREDEVELOPMENT PLANNING GRANTS	1,000,000.00
INDIVIDUALLY-OWNED WATER WELL SYSTEMS	2,326,685.93
REVOLVING FUNDS	1,000,000.00
ALASKAN VILLAGE GRANTS	22,533,221.03
ALASKAN VILLAGE GRANTS PPG (RAVG_PPG)	1,351,613.90
FARM BILL 2014	1,285,984.98
Persistent Poverty ECWAG Appropriated	5,262,500.00
Persistent Poverty Native American	10,000,000.00
Hurricane Harvey, Irma, Maria	$164,475,000.00
CIRCUIT RIDER CONTRACTS - Harvey Irma Maria	$1,000,000.00
RUS TOTALS	$2,970,052,849.52
306C ALLEVIATE HEALTH RISKS GRANTS (housing)	$706,365.39
ALASKAN VILLAGE GRANTS (ADMINISTRATION)	$3,484,789.09
ALASKAN VILLAGE GRANTS (Billing)	$99,000.00
American Iron and Steel - Admin	$0.00
RUS TOTALS	$2,974,343,004.00

Assistance for Developing Application Documents

Special Evaluation Assistance for Rural Communities (SEARCH)

- Help for very small, financially distressed rural communities (2,500 or less) and have an MHI below the poverty line or less than 80% of statewide non-metro MHI
  - Predevelopment feasibility studies, design and engineering assistance, and technical assistance for funding applications

Eligible applicants include: most state and local gov't entities, non-profits, and federally recognized tribes

Assistance for Developing Application Documents

Water and Waste Disposal Predevelopment Planning Grants (PPG)

- Assists low-income communities with initial planning and development of applications for RD WWD direct loan/grant loan guarantee programs
- Eligible applicants include: most state and local governmental entities, nonprofits, and federally recognized tribes
- Eligible areas include rural towns (10k or less), **federally recognized tribal lands**, and Colonias and have an MHI below the poverty line or less than 80% of statewide non-metro MHI
- Max. grant amount is $30,000 or 75% of predevelopment planning costs
- Applicant or a 3rd party must cover 25% of the project cost

Funding Assistance for Water, Wastewater, Storm Water and Solid Waste Infrastructure

Water and Waste Disposal Grants to Alleviate Health Risks on Tribal Lands and Colonias

- Provides low-income communities access to safe, reliable drinking water and waste disposal facilities and services
- There is a $2M cap per project, but supplemental funding is available thru WWD Loan and Grant Program

Eligible applicants include: state and local governmental entities serving rural areas 10k or less, non-profits, utility districts serving Colonias, federally recognized tribes

Emergency Assistance

Emergency Community Water Assistance Grants (ECWAG)

- Helps eligible communities prepare, or recover from, an **emergency** that threatens the availability of safe, reliable drinking water
- Events included but not limited to*:
  - Drought or flood, earthquake, tornado or hurricane, disease outbreak, chemical spill leak or seepage
- Funds can be used for water transmission line grants up to $150,000 and water source grants up to $1,000,000

Eligible applicants include: most state and local governmental entities, private non-profits, **federally and state recognized tribes**, serving rural areas 10k or less

Water & Environmental Programs

- Purpose

  Provide loan and grant funds for the most financially needy communities.

  Financial assistance = reasonable user fees for rural communities.

Water & Environmental Programs

WHO IS ELIGIBLE FOR ASSISTANCE?

- Municipalities
- Counties
- Special Service Districts
- Indian Tribes
- Non-Profit Corporations (Cooperatives, Associations, Etc.)

Water & Environmental Programs

- APPLICANT REQUIREMENTS (WHO CONT.)
  - Be unable to obtain financing from commercial sources at reasonable rates and terms.
  - Have the legal capacity to borrow and repay loans, pledge security for loans, and maintain the facilities.
  - Project must be sustainable
  - Project must be consistent with area planning.

Water & Environmental Programs

- WHAT WE CAN FUND (USE OF FUNDS)
  - Construct, Repair, Modify, Expand or Improve
    - Water
    - Sanitary Sewage
    - Solid Waste Disposal
    - Storm Wastewater Disposal

Water & Environmental Programs
USE OF FUNDS (WHAT CAN WE FUND CONT.)

- Related Costs
  - Legal Fees
  - Engineering Fees
  - Land Acquisition
  - Water Rights
  - Generators (as part of a project)

Water & Environmental Programs

- DIRECT LOAN TERMS
  - Loan Only - Up to 40 Years or useful life of the facility and/or equipment.
  - Loan and Grant Mix – Maximum of 40 years or the useful life of the facility and/or equipment.

Direct Loan Interest Rates

April 1 - June 30, 2019 (FY 2019, Quarter 3)

Poverty	2.500%
Intermediate	3.375%
Market	4.250%

Water & Environmental Programs

- POVERTY INTEREST RATE ELIGIBILITY
  - Median Household Income (MHI) of the service area is less than 80% of the State Nonmetropolitan Household Income (SNMHI)

    AND
  - Primary purpose of the loan is to alleviate a documented health or sanitary or security problem of the facility being financed.

Water & Environmental Programs

- INTERMEDIATE INTEREST RATE ELIGIBILITY
  - Does not meet the eligibility requirements for the Poverty Rate

AND

  - The MHI of the service area is less than 100% of the SNMHI.

Water & Environmental Programs

- MARKET INTEREST RATE ELIGIBILITY
  - The MHI of the service area exceeds the SNMHI.

Water & Environmental Programs

- GRANT PROGRAM
  - May be provided to reduce user costs to a reasonable level.
  - A reasonable level is determined by comparison to similar systems.
  - Grant eligibility does not constitute the amount of grant a project may receive.

Water & Environmental Programs

- GRANT ELIGIBILITY
  - Not to exceed 75% of eligible costs of RD $
    - Project to alleviate a documented health or sanitary or security problem.

AND

    - MHI of service area is below the higher of poverty line or 80% of the SNMHI.

Water & Environmental Programs

- GRANT ELIGIBILITY (CONT.)
  - Not to exceed 45% of eligible costs
    - The project is not eligible for up to 75%
    - MHI of service area exceeds 80%is less than the SNMHI but not more than 100%
  - 0% of eligible costs
    - MHI of service area is greater than the SNMHI.

Water & Environmental Programs

- Keep in Mind the annual appropriations gave USDA funding levels that equate to 80% loan and 20% grant. So just because the applicant may qualify for 75% grant or 45% most will not get grant at that level.

Water & Environmental Programs

- GUARANTEED WATER & WASTE LOANS
  - Applicant can afford user rates
  - Loan made by a commercial lender
  - Guarantee by the Government (up to 90%)
  - Reduces risk to the commercial lender
  - Lender pays 1% Guaranteed Fee of guaranteed amount

Water & Environmental Programs

- LOAN SECURITY – Best Security Available
  - Loans must be adequately secured
  - Bonds
    - General Obligation (Best)
    - Revenue (usually what we get)
    - Assessment Bonds (LID or ULID)
  - Promissory Notes with a Mortgage or Deed of Trust
  - Assignment of Income (Tribal)
  - Financing Statement: Fixtures

Water & Environmental Programs

- COMBINED OR PARTNERSHIP FUNDING
  - Projects may be funded by combining funding from other sources in order to fully fund the project (leveraging).
  - Funding Sources
    - Federal
    - State
    - Private
  - System Contribution

Application Assistance: Electronic Tools

RD Apply

- Launch of online filing through RD Apply – September 2015
- 1,714 applications filed online (4/19)
- In 2018 246 RDAPPLY loans obligated for $627 million
- In 2018 229 RDAPPLY Grants obligated for $237 million

Application Assistance: Electronic Tools

e-PER

- Web-based application for engineers to use to write PERs
- Interactive system steps engineers through the PER development process based on 2013 Interagency Template
- Is compatible with RD Apply

WEP Water and Waste Disposal Programs 2009-2019

- **1,142 counties served in all 50 states and 1 territory**
- **24,479,410 rural residence received new or improved water and waste disposal service**
- **Average annual household income of population served = $37,421**
- **Rural communities served:**
  - 85% 5,000 or less
  - 70% 2,500 or less
  - 56% 1,500 or less
  - 45% 1,000 or less

Water and Waste Investment 2009-April 2019

- **$18.6 billion invested to build new or improved infrastructure**
  - 66% loan
  - 34% grant
  - 25% leveraged with other funding sources
- **$272 million in technical assistance funds provided to rural communities**
  - 877, 065 technical assistance visits
- **$124 Million Guaranteed Loans**

Water and Environmental Programs (WEP)

WEP Funding Portfolio

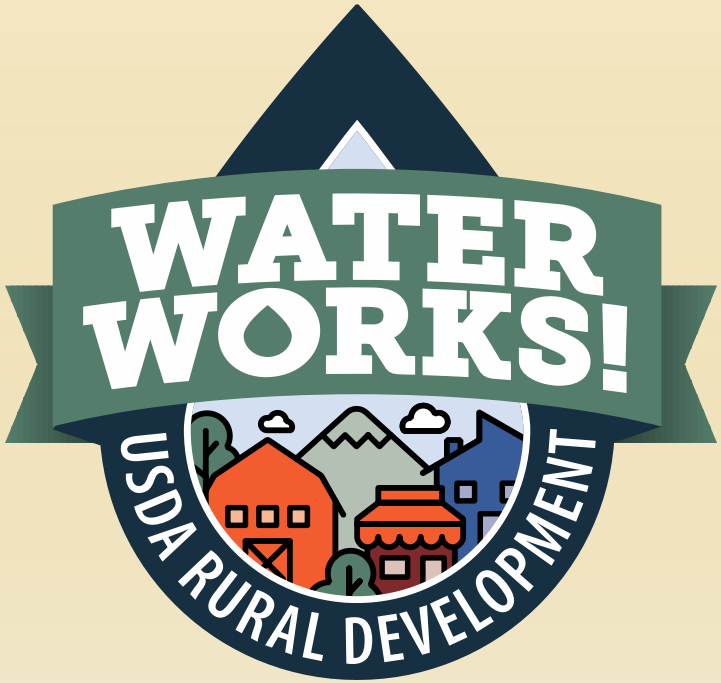
- **15,241 Outstanding Loans**
- **7,388 Borrowers**
- **7.233 projects funded, 2009-2019**
  - 4,064 water (56%)
  - 2,752 waste (38%)
  - 417 combo (6%)

Example of Project Funded last Summer in WI

- **Wastewater System was discharging higher than allowed limits for Phosphorus and Nitrogen.**

- The project involves advanced nutrient recovery using algae in a 70 mile long tube photobioreactor, surrounded by grow lights, in a greenhouse.

Thank You!



Rural Development
Water & Environmental Programs
www.rd.usda.gov

USDA United States Department of Agriculture
Rural Development

USDA is an equal opportunity provider, employer, and lender.

USDA United States Department of Agriculture
Rural Development

US EPA Office of Wastewater Management

Raffael Stein

Director, Water Infrastructure Division

Using CWSRF and WIFIA for innovative nutrient financing

Raffael Stein
Innovative Financing Strategies for Reducing Nutrients

CWSRF At-A-Glance

- Cumulative funding through 2018 was $133 billion.
- Annual funding has averaged over $7 billion over the past 3 years.
- National average interest rate for a CWSRF loan in 2018 was 1.5% compared to 3.7% market rate
- Over $4.5 billion in additional subsidization that can be used to address affordability and fund innovative projects.

CWSRF Nutrient Reduction At-A-Glance

Over $25B towards advanced wastewater treatment

Over $272M towards animal agriculture best management practices

Over $468M towards cropland best management practices

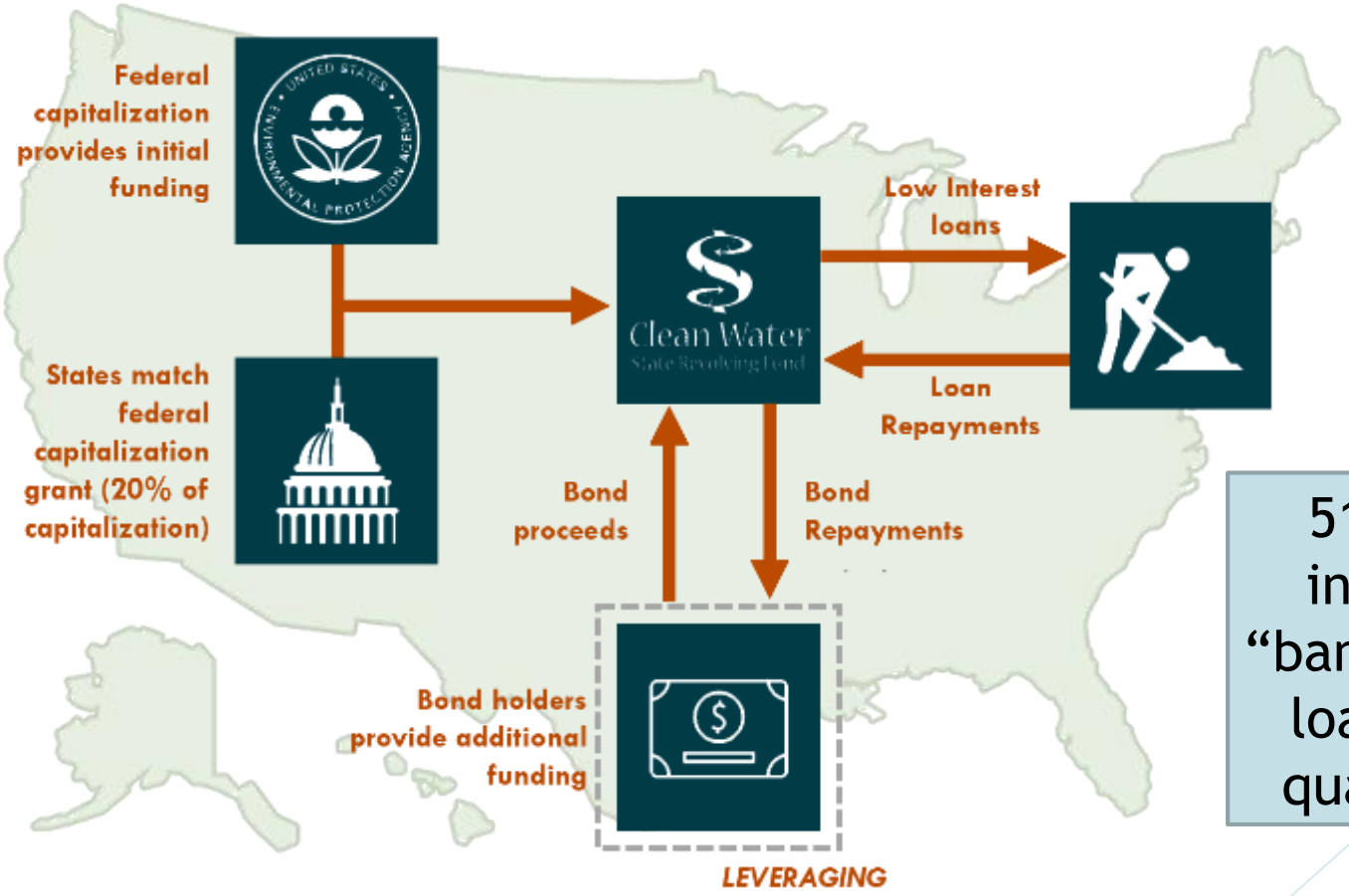
How It Works

EPA funds state CWSRFs each year, with 20% state match.

All 50 states and Puerto Rico have CWSRFs.

Apply for financing through state CWSRFs.

CWSRFs: Infrastructure Banks



51 state-level infrastructure “banks” that make loans for water quality projects

Terms: Up to 30 years

or useful life of the project, whichever is less

Below-market rates: 1.5% average interest rate in 2018 (compared to market rate 3.7%)

May also include additional subsidies (e.g., loan forgiveness and grants)

Repayment starts one year after project completion

CWSRF Assistance Options

- At or below market interest rate loans that may not exceed 30 years or the useful life of the project
- Buy or refinance local debt
- Guarantee or purchase of insurance for local debt obligations
- Guarantee SRF debt obligations (leveraging)
- Guarantee loans of “sub-state revolving funds”
- Pay SRF administrative expenses
- Earn interest
- Additional subsidization

Additional Subsidization

- CWSRFs may provide a portion of their capitalization grant in the form of principal forgiveness, negative interest loans, or grants

Significant Savings

Cost Savings of CWSRF Below-Market Interest Rates:

Market Rate	SRF Rate 0.0%	1.0%	2.0%	3.0%	4.0%
4.0%	47%	25%	17%	9%	0%
5.0%	38%	31%	24%	16%	8%
6.0%	43%	36%	30%	23%	16%
7.0%	47%	41%	35%	29%	22%

When the market rate is 7.0%, a 3.0% CWSRF loan for a $100,000 project is equal in savings to a $29,000 grant and a $71,000 loan at market rates.

Who is eligible?

(eligibility varies by state and project type)

Communities

Private Entities

Nonprofit Organizations

Citizen Groups

Clean Water Act

- 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(c)(12) Technical assistance to qualified individuals for decentralized wastewater treatment systems

What Projects are Eligible for CWSRF Assistance?

CWSRF assistance recipients have the flexibility to access income from many sources as repayment, including:

- Usage based wastewater bill charges
- Special assessments
- Home Owner Association assessments
- Stormwater district fees
- Farming revenues
- Non-profit membership fees
- Home owner fees
- Landfill fees
- For profit company revenue
- Property tax revenue

Flexible Repayment Options

Identifying a repayment source can be challenging for nutrient reduction projects such as stormwater or land conservation, among others.

CWSRF Nutrient Reduction

- The CWSRF can finance a variety of projects that reduce nutrient pollution in rivers, lakes, and streams.
- Eligible projects include:
  - Upgrade, repair, replacement, or installation/ construction of new nutrient removal processes at POTWs
  - Stormwater conveyance and treatment systems
  - Green infrastructure (e.g., bioswales, infiltration basins, wetland restoration)
  - Riparian buffers
  - Livestock waste management systems
  - And more…

Boxelder Sanitation District, Colorado
Biological Nutrient Removal

$10.4M CWSRF Loan with 2.5% Finance Charge

- Replace aerated lagoon system with an orbital nitrification plant to remove ammonia year-round
- Plant discharges into a 303(d) listed creek for selenium and E. coli
- Monitoring data 2011-2015
  - 95-99% reduction in nutrient levels
  - 88% reduction in biological oxygen demand
  - 48% reduction in selenium
  - 67% reduction in E. coli.
- Decreased number of wastewater effluent violations

Clean Water

City of Cocoa Beach, Florida Minuteman Causeway Project

Stormwater/Streetscape Improvements

$1.8M CWSRF Loan at 0.315% Interest to match a 319 Nonpoint Source Grant

- Green infrastructure/urban stormwater project to reduce nutrients discharged into the Banana River Lagoon
- Project treats an 8.34-acre watershed
- Native landscape bioswales/tree filters, underground exfiltration, and pervious pavers.

Ohio's Water Resource Restoration Sponsor Program (WRRSP)

Medina Marsh Land Conservation Project

Northeast Ohio Regional Sewer District (NEOSD) receives 0.06% discount on standard rate in exchange for sponsoring nonpoint source projects

- POTW volunteers to sponsor a land protection or restoration project in exchange for a reduced interest
- NEORSD saved an additional **$432,900** in reduced interest payments
- Sponsored acquisition of 87-acre Medina Marsh with partners Western Reserve Land Conservancy and Medina County Park District
- Protects 1,450 linear feet of floodplain and forested buffer along the Rocky River, 32 acres of high quality wetlands, and various habitats
- Acquisition links a 2-mile long green corridor and covers more than 360 acres

Dairy Manure Storage in Chesapeake Bay Watershed

$100,000 loan with 100% principal forgiveness to Pennsylvania farmer for manure management project

- Farm located at the headwaters of a creek that discharges into a cold water fishery
- Manure leaves the site during rain events
- Project stores stackable manure under roof and contains manure on a new curbed heavy use area
- Substantially reduce potential contaminated runoff
- Installation of gutter, downspouts, a drip-line drain and underground outlets to keep clean stormwater from mixing with the manure

Minnesota Agricultural Best Management Practices Loan Program
Leuthold Farm, Rock County, Minnesota

$220M in loans and 13,000 projects over the life of the program

- Program provides funds to 87 counties in Minnesota
  - More than 250 lenders
- Assistance for NPS pollution control practices to farmers, agriculture supply businesses, rural land owners, and water cooperatives.
- Projects are modest in size (~$25K per project)

Even though these projects are usually modest in size and cost an average of only $25,000 per project, they have the cooperation of 87 counties within the state and more than 250 lenders. This collaboration has resulted in $220 million in loans and 13,000 projects over the life of the program

Ag BMPs at Leuthold Farm- Minnesota

WIFIA PROGRAM

The Water Infrastructure Finance and Innovation Act (WIFIA) program accelerates investment in our nation's water and wastewater infrastructure by providing long-term, low-cost, supplemental credit assistance under customized terms to creditworthy water and wastewater projects of national and regional significance.

BACKGROUND

- **2014:** Congress passed as part of Water Resources Reform and Development Act (WRRDA) of 2014 which established the WIFIA program
- **2014-2016:** EPA developed its first Federal Credit Program for water infrastructure
- **FY2017:** Congress appropriated $25 million for credit subsidy which allowed EPA to select its first 12 projects to invite to apply for loans
- **FY2018:** Congress appropriated $55 million for credit subsidy and invited 39 projects to apply for WIFIA financing
- **FY2019:** Congress appropriated $60 million for credit subsidy which allowed EPA to finance approximately $6 billion.
- WIFIA program has closed its first 8 loans totaling over $2 billion in financing

ELIGIBILITY

Eligible borrowers

- Local, state, tribal, and federal government entities
- Partnerships and joint ventures
- Corporations and trusts
- Clean Water and Drinking Water State Revolving Fund (SRF) programs

Eligible projects

- Projects that are eligible for the Clean Water SRF, not withstanding the public ownership clause
- Projects that are eligible for the Drinking Water SRF
- Enhanced energy efficiency projects at drinking water and wastewater facilities
- Brackish or seawater desalination, aquifer recharge, alternative water supply, and water recycling projects
- Drought prevention, reduction, or mitigation projects
- Acquisition of property if it is integral to the project or will mitigate the environmental impact of a project
- A combination of projects secured by a common security pledge or submitted under one application by an SRF program

IMPORTANT PROGRAM FEATURES

$20 MIL — Minimum project size for large communities.

$5 MIL — Minimum project size for small communities (population of 25,000 or less).

49% — Maximum portion of eligible project costs that WIFIA can fund.

35 YEARS — Maximum final maturity date from substantial completion.

5 YEARS — Maximum time that repayment may be deferred after substantial completion of the project.

Interest rate will be equal to or greater than the U.S. Treasury rate of a similar maturity.

Projects must be creditworthy.

NEPA, Davis-Bacon, American Iron and Steel, and all federal cross-cutter provisions apply.

WIFIA BENEFITS

- **Very low interest rate** equivalent to the U.S. Treasury rate of the same maturity based on the weighted average life (WAL)
- **Highly flexible repayment schedule** during construction, allowing payment deferral during periods of high capital expenditure
- **Ability to preserve a borrower's senior debt capacity**, allowing borrowers issue future non-WIFIA project related debt at lower interest rates and with more favorable terms
- **Flexibility to sculpt the WIFIA repayment schedule** in order to reduce burden on rate payers. WIFIA repayments can be ramped up over time, allowing for small and steady rate increases to satisfy capital expenditures and debt service payments
- **Ability to back load repayments** offers significant saving compared to level repayment schedules, because cash outlays that are made sooner cost more than outlays in future years due to lost earning capacity on that cash
- Presence of low-cost, flexible WIFIA debt **improves the position and confidence of other lenders**. This may help borrowers obtain other sources of funding at more favorable terms

APPLICATION PROCESS

Project Selection

- Notice of Funding Availability
- Letter of Interest submission
- Letter of Interest evaluation
- Invitation to apply

Negotiation, and

- Application submission
- Application evaluation
- Due diligence
- Term sheet negotiation
- Loan agreement negotiation
- Closing

NEARLY $2B IN LOANS CLOSED

Saving borrowers over $700 million and creating over 6,000 jobs

BORROWER	KING COUNTY	CITY OF OMAHA	ORANGE COUNTY WATER DISTRICT	SAN FRANCISCO
LOAN AMOUNT	$134M	$69M	$135M	$699M
TERM	30 years from project completion	30 years from project completion	35 years from project completion	35 years from project completion
INTEREST RATE	3.06%	2.97%	3.06%	3.09%
CO-FINANCING	Revenue Bonds & SRF Loan	Revenue Bonds OR SRF Loan	Certificates of Participation	Revenue Bonds and SRF Loan
TRANSACTION FLEXIBILITIES	1) 10+ year interest only period 2) Sculpted debt service	1) WIFIA commitment prior to execution of an SRF agreement 2) Interest capitalization during construction	1) Optional ability to use WIFIA to retire construction financing 2) 5 year capitalized interest after construction 3) Springing Lien	1) Optional ability to use WIFIA to retire construction financing 2) Interest capitalization during construction 3) Sculpted debt service

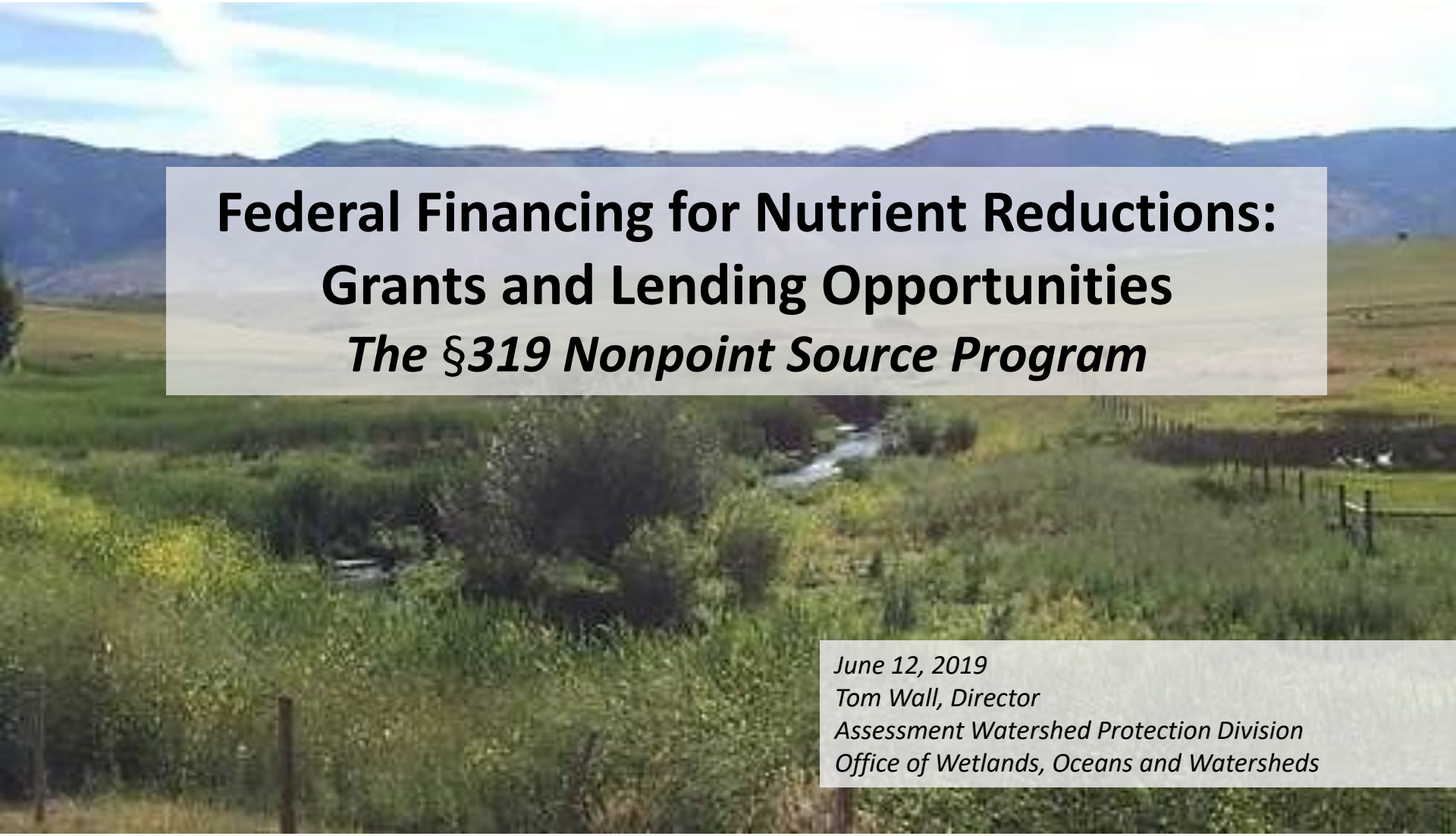
NEARLY $2B IN LOANS CLOSED

BORROWER	SAN DIEGO	ST. LOUIS SEWER DISTRICT	CITY OF BALTIMORE	MIAMI-DADE COUNTY
LOAN AMOUNT	$614M	$47.7M	$202M	$99.7M
TERM	35 years from project completion	35 years from project completion	35 years from project completion	35 years from project completion
INTEREST RATE	3.36%	3.06%	2.88%	
CO-FINANCING	Revenue Bonds and Short-Term Financing	SRF Loan	Revenue Bonds, grants from the County and Bay Restoration Fund	SRF Loan
TRANSACTION FLEXIBILITIES	1) Subordinated debt 2) Sculpted debt service	1) WIFIA commitment prior to execution of an SRF agreement 2) Backloaded repayment schedule	1) City was able to operate as normal under the Bond Resolution 2) WIFIA allowed City's Continuing Disclosure notices to address many reporting requirements in loan agreement	1) Capitalized interested 2) Subordinated debt without springing lien provision

US EPA Office of Wetlands, Oceans, and Watersheds

Tom Wall

Director, Watershed Restoration, Assessment, and Protection Division



Federal Financing for Nutrient Reductions: Grants and Lending Opportunities

The §319 Nonpoint Source Program

June 12, 2019
Tom Wall, Director
Assessment Watershed Protection Division
Office of Wetlands, Oceans and Watersheds

Nonpoint Source Pollution Dominates Impaired Waters

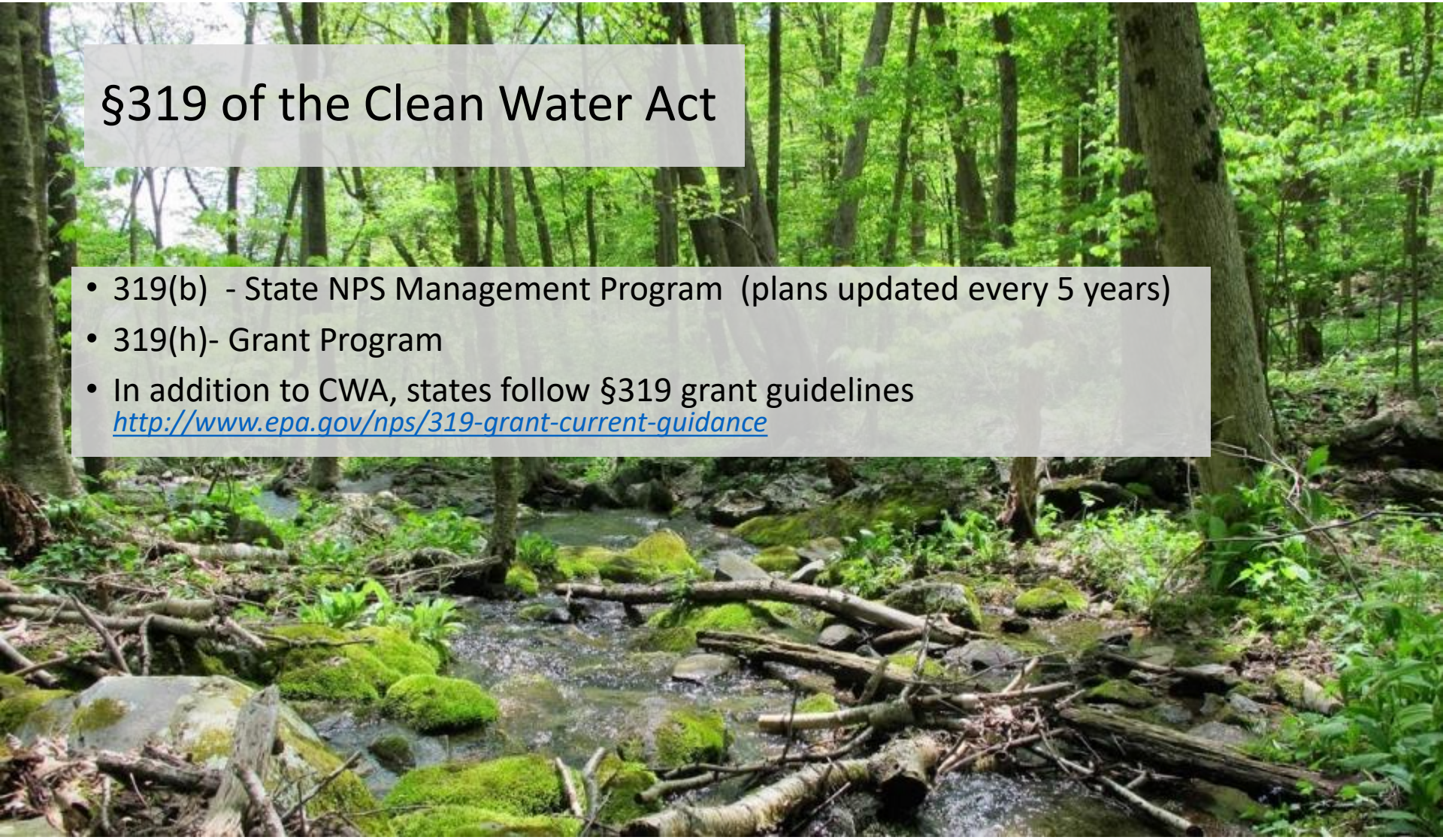
Probable Source Group	Miles Threatened or Impaired
Unknown	143,882
Agriculture	134,239
Hydromodification	88,295
Atmospheric Deposition	85,872
Habitat Alterations (Not Directly Related To Hydromodification)	65,577
Unspecified Nonpoint Source	60,618
Municipal Discharges/Sewage	56,457
Natural/Wildlife	50,121
Urban-Related Runoff/Stormwater	48,711
Silviculture (Forestry)	40,747

*NPS shaded in blue

Source: Draft CWA 305(b) National Water Quality Inventory

Disclaimer: Impairment information as of October, 2017. Because data are being migrated to the new ATTAINS system, these numbers may not reflect most current information.

§319 of the Clean Water Act



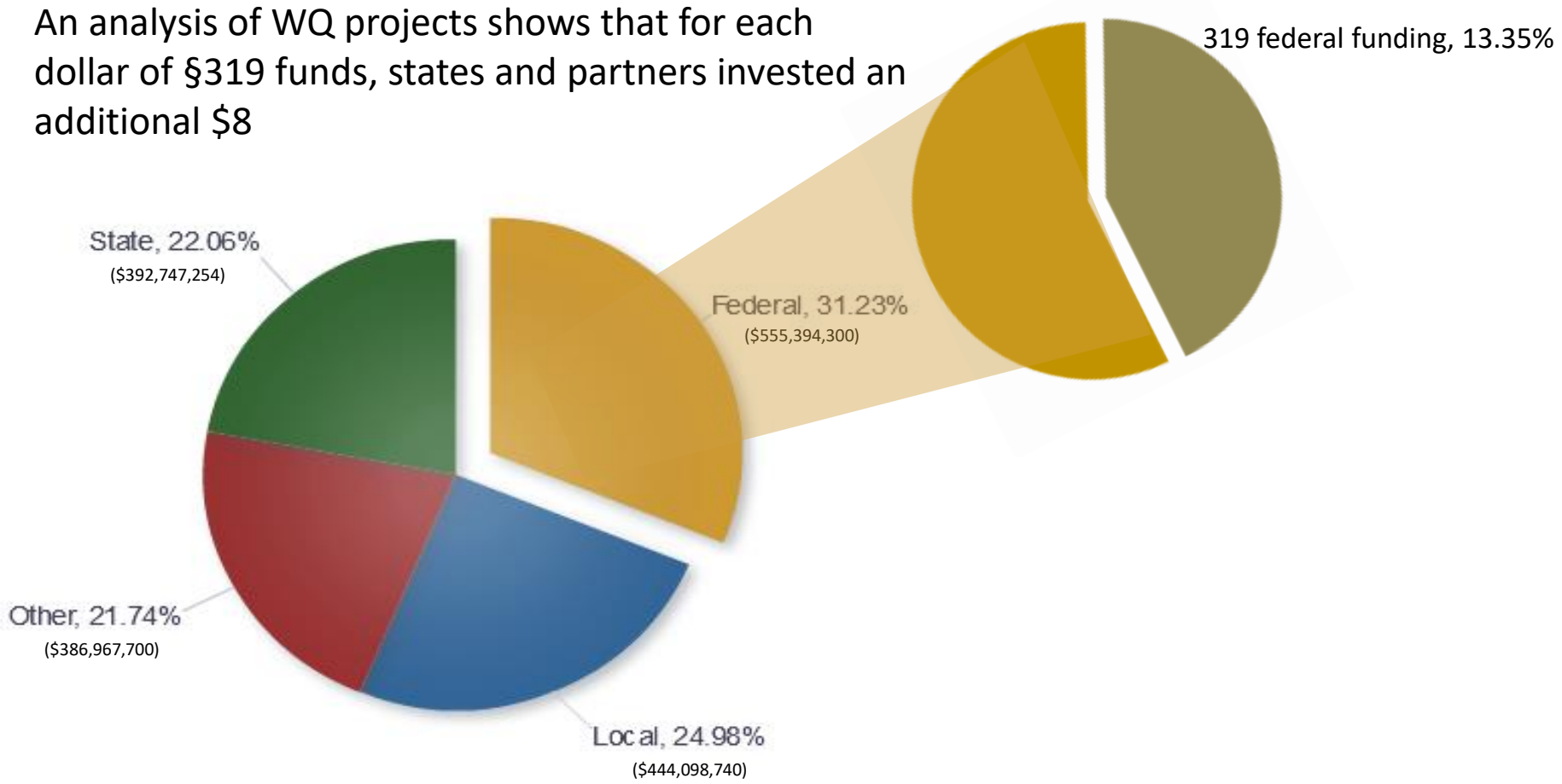
- 319(b) - State NPS Management Program (plans updated every 5 years)
- 319(h)- Grant Program
- In addition to CWA, states follow §319 grant guidelines *http://www.epa.gov/nps/319-grant-current-guidance*

§319 Allocation of Funds

- **Distributed to states annually based on formula**
  - In FY19 ~ $165M; ranges from ~$1M to $8M per state
  - 40% non-federal match required
  - About 5% of funds allocated to Tribes
- **Grant Guidelines** expect 50/50 split of funds
  - **NPS program funds –** manage state NPS program
  - **Watershed project funds –** support on-the-ground projects

§319 Grants: a Catalyst for Funds Leveraging and Coordination

An analysis of WQ projects shows that for each dollar of §319 funds, states and partners invested an additional $8

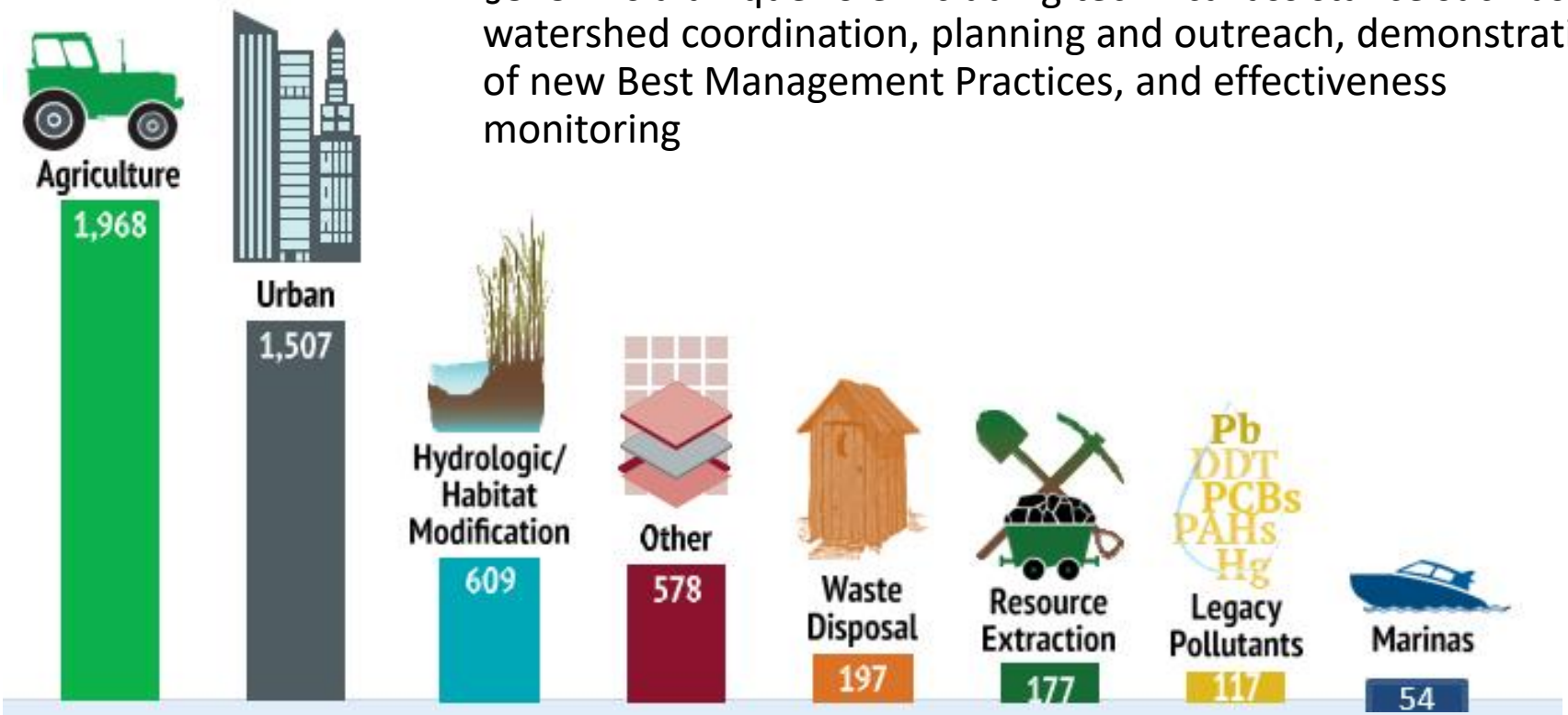


§319 Grants: a Catalyst for Funds Leveraging and Coordination

- Partners from national through local
  - In 10 years over 1000 different local partners in success stories since 2005, including:
    - 57 cities
    - 257 counties

A snapshot of §319 Projects 2008-2013

- §319 fills a unique role including technical assistance such as: watershed coordination, planning and outreach, demonstration of new Best Management Practices, and effectiveness monitoring



Of these projects ~ 80% address nutrient impairments

Section 319

Nonpoint Source Success Stories

Results:

- ~ 11,000 miles of streams and rivers, 290,000 acres of lakes and ponds restored for one or more impairments
- Most frequent pollutants: Sediment, Pathogens, Nutrients, Acid/Metals
- Nutrient successes, include the attainment of water quality standards in 80,000 acres of lakes, ponds and reservoirs; 2,700 miles of rivers and streams; and 60,000 acres of estuaries and coastal waters (since 2006).

Recent Success Stories Examples

Local farmer and conservation leader in cover crop

Iowa: Watershed Work Reduced Nutrients and Restored Native Freshwater Mussels in Lime Creek (2018)

- Local farmers formed the Lime Creek Watershed Council to encourage practices that reduce erosion
- Reduction in Sediment and Phosphorus and Nitrate concentrations
- Mussel species found went from 0 in 1998 to 6 in a 2011 survey.

Native wildflowers re-established along the lake shore

Minnesota: Community's Commitment to Installing Management Practices Restores Mitchell Lake (2019)

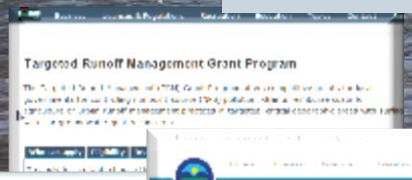
- Implementing a mix of upstream practices and in lake treatment reduced phosphorus and algal growth.
- Over 500 local community members from: the city Lake Association, Riley-Purgatory-Bluff Creek Watershed District, University of Minnesota, and Hennepin County.
- Phosphorus dropped from 107 ug/L to 57 ug/L

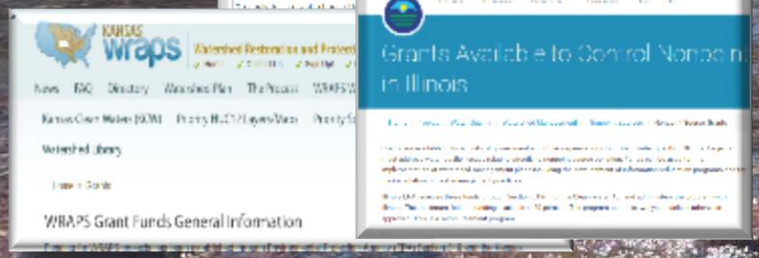
Points of Engagement in the Nonpoint Source Process

State Updates of 5 year nonpoint source management plans

Engage in State Competitive RFP process

Participate in Local level Watershed plans






Questions?

Open Q&A

Q&A

Thank you!

Thank you for attending the webinar.