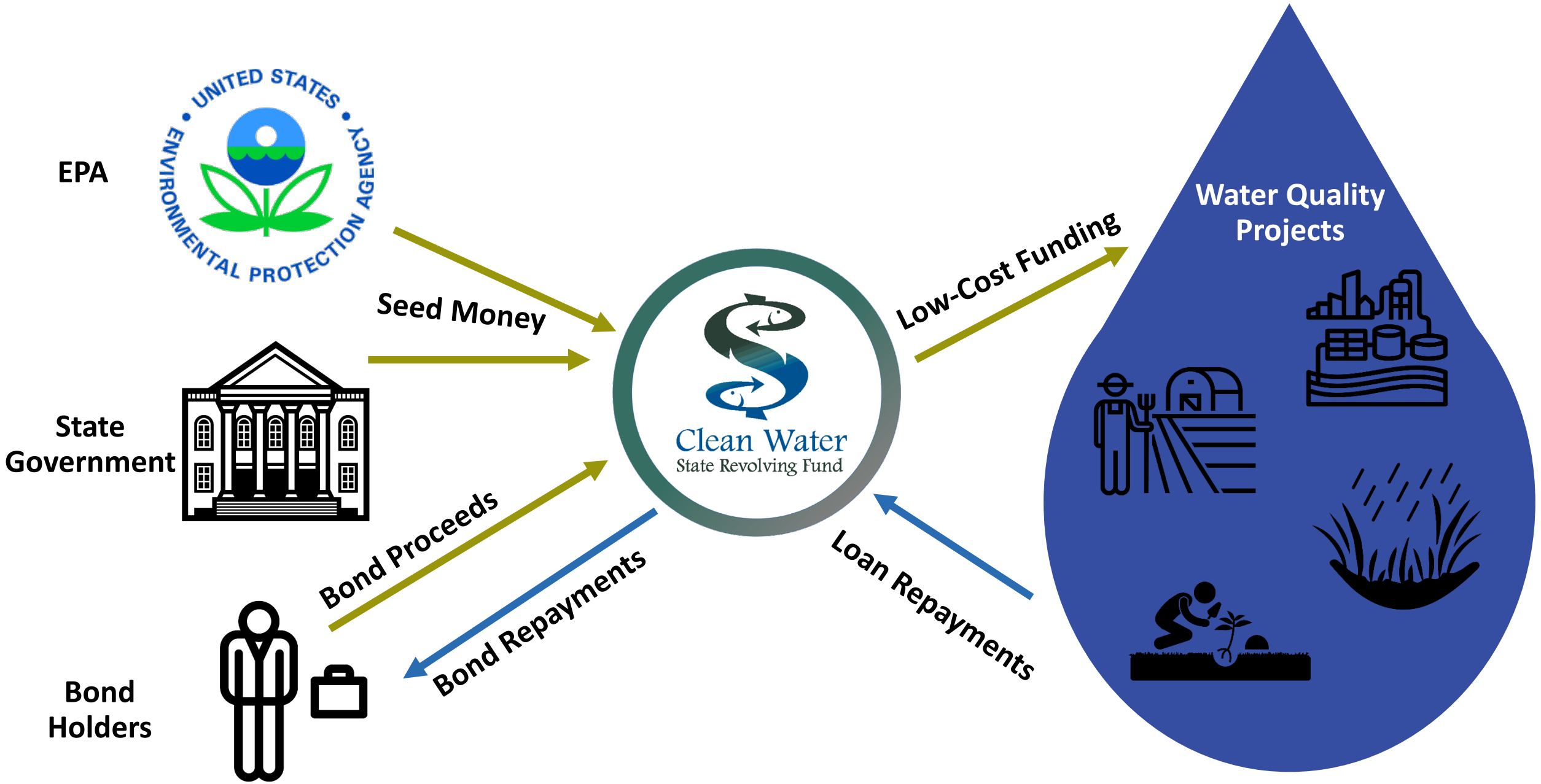
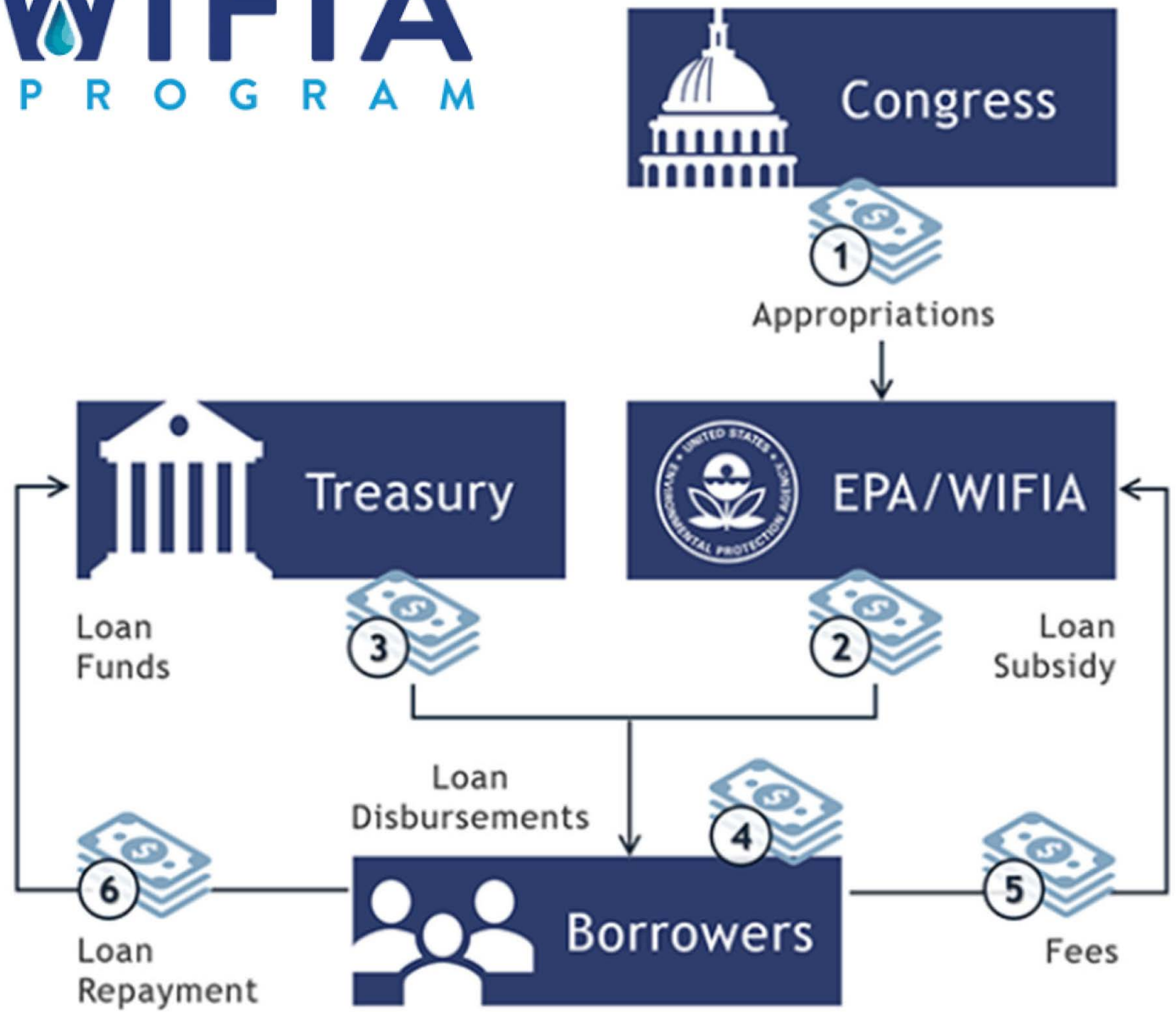
EPA Water Finance Support to Nutrient Credit Markets

Michael Deane, Chief
EPA Clean Water State Revolving Fund

Clean Water State Revolving Fund



WIFIA PROGRAM



Important Features

- $20 million: Minimum project size for large communities.
- $5 million: Minimum project size for small communities (population of 25,000 or less).
- 49 percent: Maximum portion of eligible project costs that WIFIA can fund.
- 80 percent: maximum total federal assistance of a project's eligible costs.
- 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 at the date of closing.
- Projects must be creditworthy and have a dedicated source of revenue.

Eligible Borrowers

Clean Water
State Revolving Fund

- Communities (public wastewater treatment facilities, municipalities, conservation districts, etc.)
- Private Entities
- Nonprofit Organizations
- Citizen Groups

*varies by state and project type

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- 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

Clean Water
State Revolving Fund

- 603(c)(1) Construction of publicly owned treatment works (POTW)
- 603(c)(2) Implementation of a Section 319 nonpoint source management program
- 603(c)(3) Implementation of a Section 320 National Estuary Program Comprehensive Conservation and Management Plan
- 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) Assistance to a qualified nonprofit entity to provide assistance to an eligible individual for the repair or replacement of household decentralized treatment systems

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- 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

CWSRF Nutrient Reduction

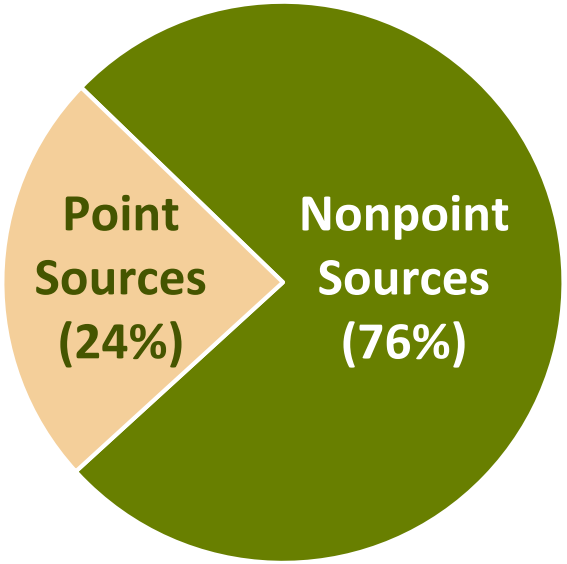
- The CWSRF can finance a variety of projects that reduce excess nutrients in rivers, lakes, and streams.
- Eligible projects include:
  - New nutrient removal processes at POTWs
  - Stormwater conveyance and treatment systems
  - Green infrastructure (e.g., bioswales, infiltration basins, wetland restoration)
  - Development of watershed-based plans
  - Agricultural best management practices (both livestock and field)
  - And more…

Reminder: All of these CWSRF project types are eligible for WIFIA as well!

WIFIA PROGRAM

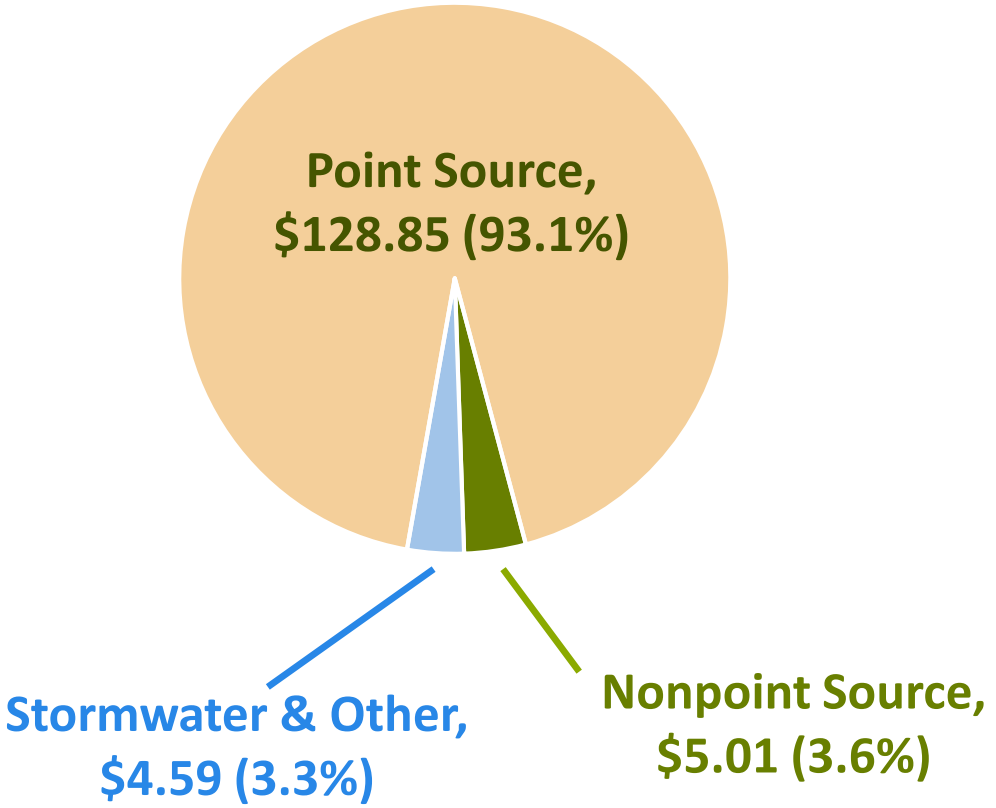
CWSRF by the Numbers

Primary Cause of Impairment for Waterbodies with TMDLs, %



(Source: EPA, 2011, A National Evaluation of CWA §319 Program)

CWSRF Investments through 2019, $ Billions



$138.5 billion provided via the 51 CWSRF programs since 1988

CWSRF role in NPS and Nutrient Reduction

CWSRF funds cannot be used to purchase credits directly. However, they can be used to facilitate, support and gain access to watershed-based markets:

- **Development of watershed-based plans that can include water quality trading**
- **Finance capital projects that generate credits**
- **Loan to a utility to fund nonpoint source projects in its watershed**

…And WIFIA can as well!

Additional ways CWSRF can support nutrient credit trading

- Tailored loan conditions
- Additional subsidy (forgiveness options)
- Flexible repayment options
- Innovative financing mechanisms

  Sponsorship Lending

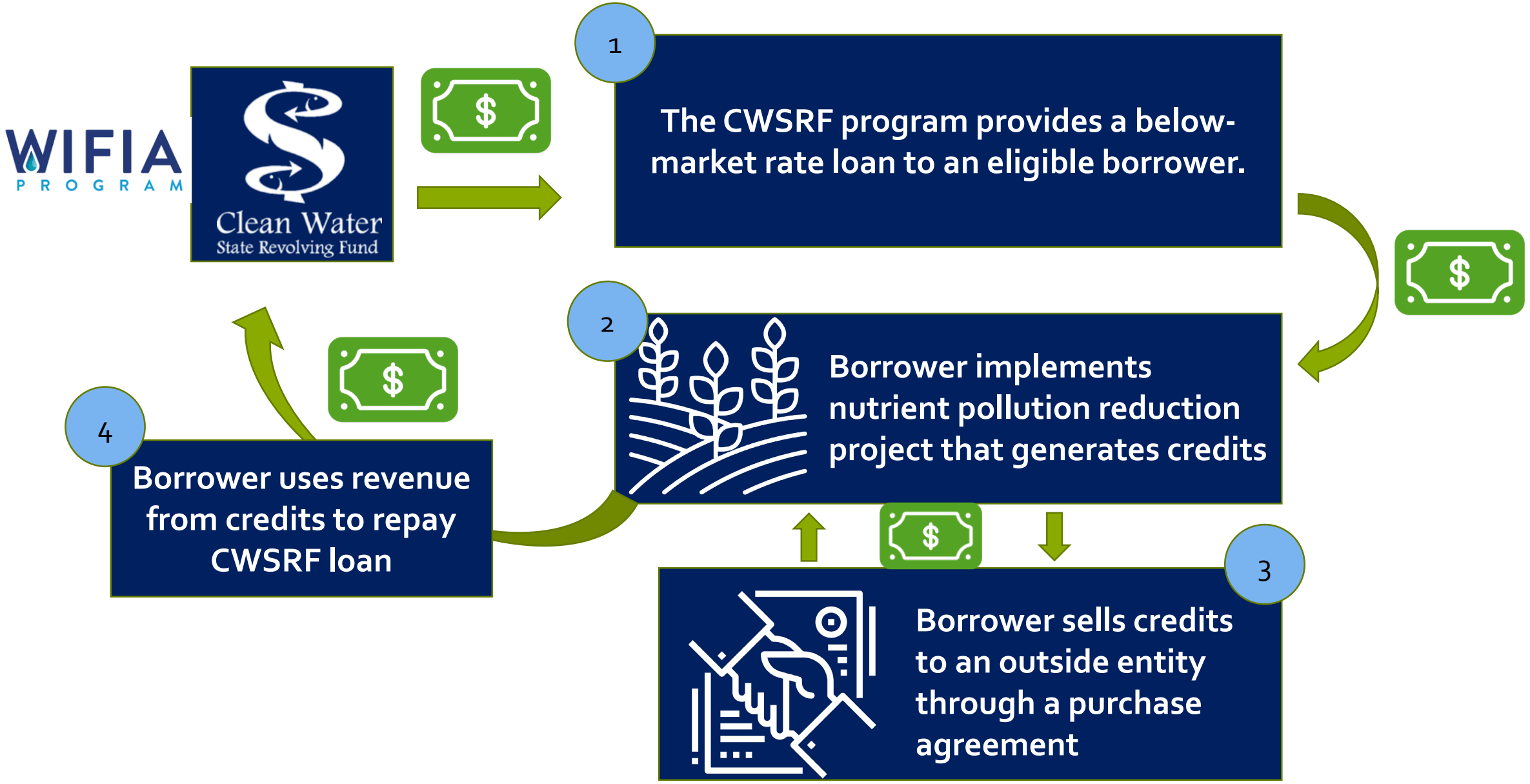
  Linked Deposit

Most CWSRF funds are from repayments back to the state (a.k.a. recycled funds) and can be used as state match for federal CWA Section 319 grants and more.

Challenges Using EPA Financing for NPS Needs

- Identifying a repayment source (most significant)
- State-imposed restrictions on lending to NGOs and Community Development Financial Institutions (CDFIs)
- Administrative costs associated with smaller loan sizes and greater number of projects (think “Ag BMPs vs POTW upgrades”) can be higher
- Capacity constraints at state CWSRF agencies to explore new directions - need encouragement to pivot
- Promoting the complementary nature and integration of non-point solutions to enable point sources to meet water quality standards more cost-effectively

Identifying Creative Repayment Sources: Using Credits for Loan Repayment



Lower Klamath River, California

- Borrower: Yurok Tribe
- $18.8M CWSRF loan at 0% interest from the California State Water Resources Control Board (CSWRCB), which administers the CWSRF
- Purchased 22,237 acres of forest land that the Tribe acquired to manage in a sustainable manner, included longer timber harvest rotations
- When revenues were not available for repayment as early as expected, the Tribe sold carbon offsets to repay the loan
- The Tribe completed a Forest Management Plan, a Nonpoint Source Program Plan, and a Final Project Assessment and Evaluation Plan that will be used as guidelines for implementing the Project for over 20 years

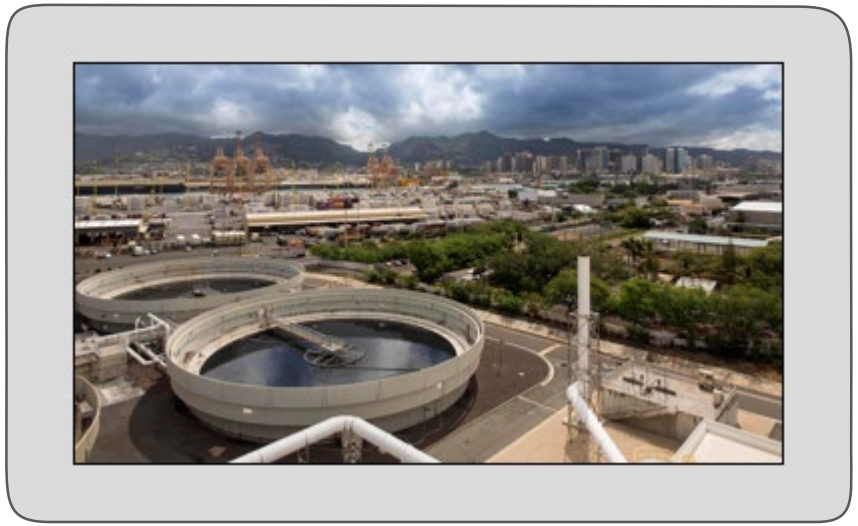
The Sponsorship Lending Model

How it Works

- A typical sponsor would be a wastewater utility willing to fund a NPS project that cost significantly less than facility upgrades to address the same issue

- CWSRF can finance both the POTW project and the NPS project **in one loan and offer an incentive rate**. To the sponsored project, the financing feels like a grant.

	Loan Amount	Interest Rate	Total Repayment Over 20 Years
CWSRF Loan	$1,000,000	3.8%	$1,463,707
CWSRF Loan w/ Sponsored Project	$1,393,442	0.3%	$1,463,707



State Examples: OH, IA, OR, ID, DE, VT

Wetland Restoration and Nutrient Reduction - Kent County, Delaware

- A land conservation loan sponsorship project implemented a pollution reduction strategy to repair the waters of the Murderkill Watershed.

- Total cost: $6.9M
  - $5.9M for WWTP expansion
  - $1M for wetland restoration

- Wetlands restoration and nutrient reduction

- **Systematically and permanently restore 255.3 acres of natural habitat**
- **Protect 164.4 acres of riparian forest buffer from being developed and/or destroyed**

The Linked Deposit Model

How it Works

1

Clean Water State Revolving Fund

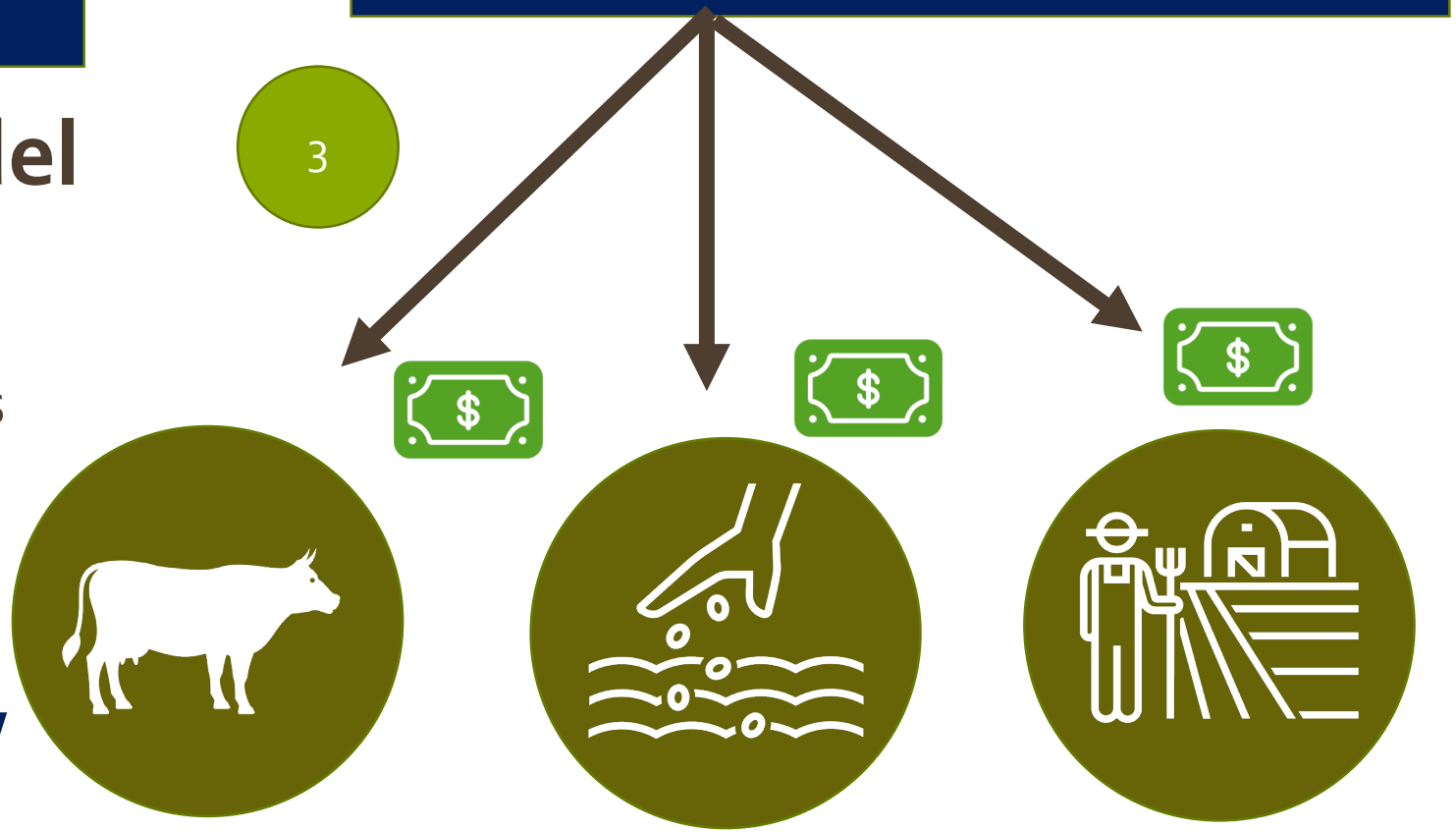
CWSRF program purchases a reduced-rate certificate of deposit from a private financial institution

2

Financial Institution loans out the deposited funds (at a slightly lower interest rate) for smaller-scale water quality projects

3

- Familiarity for individual borrowers
- Attractive for financial institutions
- Less administrative burden



State Examples: IA, ME, OH, AR, MO, MD, DE

Iowa SRF's Water Quality Linked Deposit Programs

- Address nutrient issues from both livestock and field
- Local Water Protection Program (LWPP)
- Livestock Water Quality Program (LWQP)
- Low-interest loans through participating lenders to non-CAFO Iowa livestock producers
- Borrowers work with local participating lenders to complete the lender's normal loan application process
- Borrowers work through their local Soil & Water Conservation District for project approval

SRF IOWA STATE REVOLVING FUND

"We received a low-interest loan from the **State Revolving Fund** to assist us in constructing two buildings with adequate manure storage so manure doesn't get washed out from the rain and effect our well like it did previously. The process was easy and if it wasn't for this financing, we probably wouldn't have been able to construct the new buildings and expand our operation."

JOHN & JOANNE TIMM
Timm Family Cattle, *Monticello*

Thank you!

For more information, please contact the CWSRF and WIFIA teams at the addresses below:

CWSRF@epa.gov

WIFIA@epa.gov

Click here to register for the EPA Water Finance Newsletter!

CWSRF Resources

Overview of CWSRF Eligibilities	https://www.epa.gov/cwsrf/overview-clean-water-state-revolving-fund-eligibilities
Financing Options for Nontraditional Eligibilities in the Clean Water State Revolving Fund program	https://www.epa.gov/cwsrf/clean-water-state-revolving-fund-cwsrf-nontraditional-financing
CWSRF Webinars	https://www.epa.gov/cwsrf/cwsrf-webinars
CWSRF Fact Sheets and Case Studies	https://www.epa.gov/cwsrf/clean-water-state-revolving-fund-cwsrf-project-success-stories
State CWSRF Websites	https://www.epa.gov/cwsrf/forms/contact-us-about-clean-water-state-revolving-fund-cwsrf#state
Water Finance Learning Modules (SRF, DWSRF, WIFIA, etc.)	https://ofmpub.epa.gov/apex/wfc/f?p=165:9:8014844532819::NO:9::

WIFIA resources

- **General information**
  - https://www.epa.gov/wifia/about-wifia
- What is WIFIA?
  - What is SWIFIA?
  - WIFIA Benefits
  - Laws and Regulations
- **Application materials**
  - https://www.epa.gov/wifia/wifia-application-materials
- Letter of Interest form
  - Letter of Interest checklist
  - Sample Letter of Interest
  - Sample financial pro forma
- **Resources**
  - https://www.epa.gov/wifia/resources-wifia-borrowers
- Program Handbook
  - Template Term Sheet
  - Federal Compliance Requirements

Appendix: Links to Information on Other Innovative Financing Approaches for Reducing Nonpoint Sources of Excess Nutrients

- Sioux Falls example – NPS Incentive rate loans offered by South Dakota's CWSRF program
  - www.wwdmag.com/south-dakota-utilities-honored-wastewater-and-drinking-water-excellence
  - www.epa.gov/sites/production/files/2019-07/documents/sd_skunkcreek_1771_508.pdf.

- New Jersey Water Bank (a co-financing partnership between the NJDEP and New Jersey Infrastructure Bank) offers low-cost financing for NPS projects
  - Barnegat Bay Watershed Water Quality Improvement: www.njib.gov/news/DEP+Awards+%252410+Million+in+Grants+to+Improve+Water+Quality+in+the+Barnegat+Bay+Watershed.58
  - Borough of Somerville Landfill Area Stream Corridor/Wetland Restoration: www.njib.gov/news/Borough+of++Somerville+%2522Green+Seam%2522.149
  - East Camden Brownfield Site Remediation - Cramer Hill Nature Preserve: www.njib.gov/news/Cramer+Hill+Nature+Preserve+opens+in+East+Camden.72