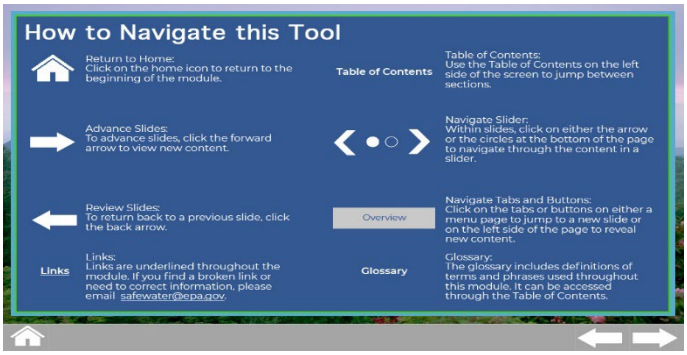
FITS: Funding Integration Tool for Source Water

START

EPA



How to Navigate this Tool

Return to Home:

Click on the home icon to return to the beginning of the module.

Advance Slides:

To advance slides, click the forward arrow to view new content.

Review Slides:

To return back to a previous slide, click the back arrow.

Links:

Links are underlined throughout the module. If you find a broken link or need to correct information, please email safewater@epa.gov.

Table of Contents:

Use the Table of Contents on the left side of the screen to jump between sections.

Navigate Slider:

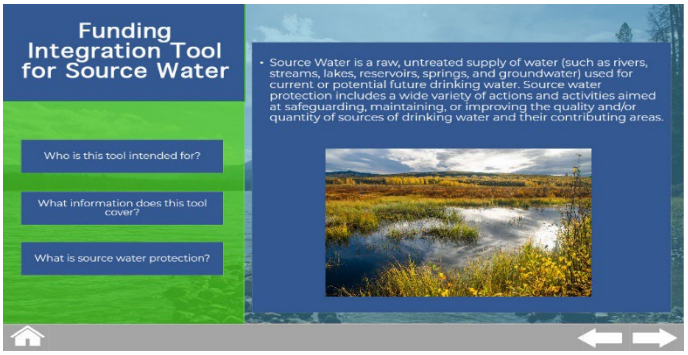
Within slides, click on either the arrow or the circles at the bottom of the page to navigate through the content in a slider.

Navigate Tabs and Buttons:

Click on the tabs or buttons on pages to jump to a new slide or reveal new content.

Glossary:

The glossary includes definitions of terms and phrases used throughout this module. It can be accessed through the Table of Contents.



Funding Integration Tool for Source Water

Click on the buttons to the left to learn more about the FITS: Funding Integration Tool for Source Water.

Who is this tool intended for?

This tool is intended for States, Tribes, and Territories; Federal agencies; watershed stakeholders; drinking water utilities; and users who are engaged with activities that protect sources of drinking water.

What information does this tool cover?

The tool provides synopses on various federal funding programs, planning and funding considerations for each component of a source water protection program, and examples from states on how funding sources have been leveraged in the past.

The funding programs described within this tool, while not developed for source water protection, may support activities that protect sources of drinking water, within their appropriated uses. For example, although LUST Trust Funds are not appropriated specifically for the source water program, LUST Trust Fund program activities protect sources of drinking water.

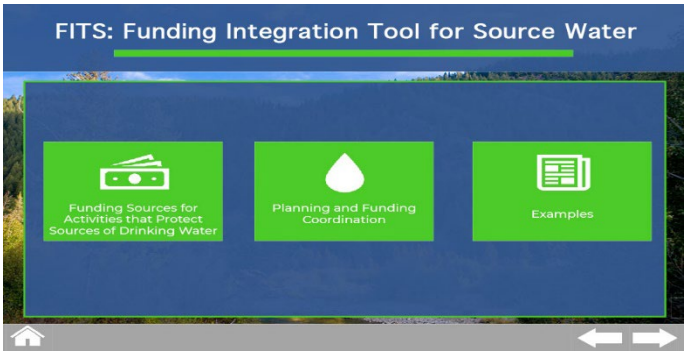
Individual programs are responsible for final funding decisions. Please contact the specific programs for more information.

The tool is divided into three sections:

- “Funding Sources for Activities that Protect Sources of Drinking Water” provides the following information for various federal funding programs: Overview; Uses; Eligibility; Considerations for small and disadvantaged communities (as applicable); Annual funding information; Funding structure; Limitations of funding; Program website and links to relevant guidance documents.
- “Planning and Funding Coordination” covers the steps or components of a source water program. For each step, the tool lays out general information, the potential funding sources that may support it, and recommendations for long-term planning and program collaboration. This section identifies planning considerations for future steps of a source water protection program along with tips for users to maximize eligibility for federal funding.
- “Examples” show funding sources in action.

What is source water protection?

Source Water is a raw, untreated supply of water (such as rivers, streams, lakes, reservoirs, springs, and groundwater) used for current or potential future drinking water. Source water protection includes a wide variety of actions and activities aimed at safeguarding, maintaining, or improving the quality and/or quantity of sources of drinking water and their contributing areas.



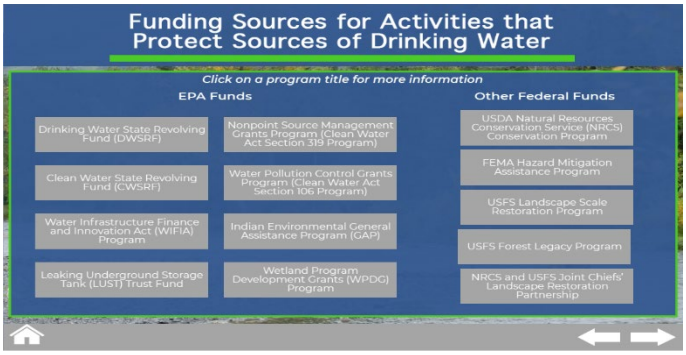
FITS: Funding Integration Tool for Source Water

Funding Sources for Activities that Protect Sources of Drinking Water

Planning and Funding Coordination

Examples

Funding Sources for Activities that Protect Sources of Drinking Water



Funding Sources for Activities that Protect Sources of Drinking Water

Click on a program title for more information

EPA Funds

Drinking Water State Revolving Fund (DWSRF)

Nonpoint Source Management Grants Program (Clean Water Act Section 319 Program)

Clean Water State Revolving Fund (CWSRF)

Water Pollution Control Grants Program (Clean Water Act Section 106 Program)

Water Infrastructure Finance and Innovation Act (WIFIA) Program

Indian Environmental General Assistance Program (GAP)

Leaking Underground Storage Tank (LUST) Trust Fund

Wetland Program Development Grants (WPDG) Program

Sewer Overflow and Stormwater Reuse Municipal Grants Program (OSG)

Other Federal Funds

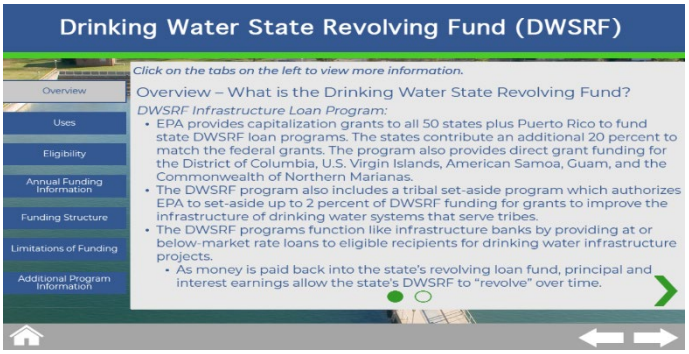
USDA Natural Resources Conservation Service (NRCS) Conservation Program

FEMA Hazard Mitigation Assistance Program

USFS Landscape Scale Restoration Program

USFS Forest Legacy Program

NRCS and USFS Joint Chiefs' Landscape Restoration Partnership



Drinking Water State Revolving Fund (DWSRF)

Click on the tabs on the left to view more information.

Overview

Uses

Eligibility

Annual Funding Information

Funding Structure

Limitations of Funding

Additional Program Information

Overview – What is the Drinking Water State Revolving Fund?

DWSRF Infrastructure Loan Program

- EPA provides capitalization grants to all 50 states plus Puerto Rico to fund state DWSRF loan programs. The states contribute an additional 20 percent to match the federal grants. The program also provides direct grant funding for the District of Columbia, U.S. Virgin Islands, American Samoa, Guam, and the Commonwealth of Northern Marianas.
- The DWSRF program also includes a national tribal set-aside program which authorizes EPA to provide up to 2 percent of DWSRF funding as grants to improve the infrastructure of drinking water systems that serve tribes.
- The DWSRF programs function like infrastructure banks by providing at or below-market rate loans to eligible recipients for drinking water infrastructure projects.
    - As money is paid back into the state's revolving loan fund, principal and interest earnings allow the state's DWSRF to "revolve" over time.

DWSRF Set-Asides

- States have the option of taking a percentage of their capitalization grant for non-infrastructure programs and activities.
- The programs and activities supported by these set-asides may include:
    - DWSRF administration
    - Water system capacity development
    - Water operator certification
    - Source water protection
    - Small water systems technical assistance
    - The Public Water System Supervision program

- Each state determines the appropriate balance between water infrastructure projects and set-aside activities for their unique circumstances.

Uses – How can funds be used for source water activities?

- Source water protection activities are funded by the DWSRF set-asides, not the loan fund.
- The State Program Management Set-Aside (a.k.a. 10 percent set-aside) is commonly used to support state source water protection program staff or to contract with a technical assistance provider.
- States may use the DWSRF Local Assistance and Other State Programs Set-Aside (a.k.a. 15 percent set-aside):
    - Make loans to public water systems for purchasing land or conservation easements for the purpose of SWP.
    - Make loans to community water systems for implementing source water protection petition programs or voluntary, incentive-based SWP measures in delineated source water protection areas.
    - Make expenditures to delineate, assess, and/or update SWP areas.
    - Make expenditures to establish and implement wellhead protection programs, and to implement efforts to protect source water in delineated source water protection areas.

Source Water Protection Activities DWSRF can be used for

- Example source water protection activities include:
    - Development and/or update of source water assessment
    - Communication of results (e.g., outreach materials, community meetings)
    - Source water protection plan development
    - Watershed management plan development
    - Data collection on land use threats and potential contaminant sources in SWPA
    - Evaluation/reevaluation of delineations
    - Development of GIS layers for source water assessment
    - Modeling of wellhead capture zones/time of travel zones
    - Monitoring study to determine occurrence/extent of contamination
    - Hazardous waste materials collection
    - Vegetative buffers upstream of water intake
    - Installation of water quality monitoring wells in wellhead protection area
        - Activities may have limited eligibilities for example if installed water quality monitoring wells in wellhead protection area temporarily to conduct assessment or set up groundwater model
    - Installation of ambient water quality monitoring stations upstream of intake
        - Activities may have limited eligibilities for example if installed water quality monitoring wells in wellhead protection area temporarily to conduct assessment or set up groundwater model
    - Rain gardens in SWPA
    - Abandoned well closure
    - Implement agricultural best management practices (e.g., for sediment control, fertilizer & pesticide application, irrigation)
    - Fencing upstream of water intake or around Wellhead Protection Area
    - Education of homeowners in SWPA on septic system maintenance

- Development of strategies and procedures for failing septic systems in SWPA
- Replacement of septic systems or connection to sewer system
- Establishment of buffer zones or setbacks from wellheads or surface water sources through easements, land acquisition, or other voluntary land use controls
- Implement sustainable forest management practices to protect source water resources (e.g., prescribed harvesting, measures to reduce wildfire risk)
- Development of land use ordinances or zoning regulations in SWPA (e.g., Restriction of storage and use of hazardous materials, establishment of buffer zones/setbacks)
- Development of health-based regulations
- Development of contingency plans for emergencies
- Technical assistance or support to form a source water protection collaborative or committee
- Implementation of training, workshops, outreach and education
- Implementation of monitoring or response to climate change

Eligibility - Who can access funds?

- Through the 15% set-aside, states may make loans to public water systems for purchasing land or conservation easements for the purposes of source water protection or to community water systems for implementing source water protection petition programs or voluntary, incentive-based SWP measures in delineated SWP areas.
- Many types of entities (e.g. local governments, water utilities, nonprofits, and technical assistance providers) may be eligible for other funding through the set-asides. States may set priorities for set-aside expenditures.
- If a state chooses to take some or all of the available set-asides, the state must prepare an annual workplan for each requested set-aside.
- Set-aside workplans must include a thorough description of planned activities.

Annual Funding Information - How much funding is available annually?

- From 2015-2020, the total national appropriation for the Drinking Water State Revolving Fund ranged from $848 million to $1.1 billion.
- States may take up to approximately 31 percent of their capitalization grants for set-asides. In fiscal year 2021, the federal allotment of funds to States, DC, and territories was $1.1. billion, which totals $341 million available to states for set-aside uses. See Funding Structure section for details on all four available set-asides.

Funding Structure – What type of funding is it?

- Congress appropriates funding for the DWSRF to EPA.
- EPA then awards capitalization grants to each state for their DWSRF based upon the results of the most recent Drinking Water Infrastructure Needs Survey and Assessment (a survey of water system capital improvement needs which is conducted every four years).
- The states and Puerto Rico provide a 20 percent match.
- The SDWA specifies percentages of the national appropriation for allotment to Tribes, Territories, and the District of Columbia.
- The allotment to tribes and territories is made first with the remaining amount allotted to States, Puerto Rico, and the District of Columbia.
- Each of the 50 states, Puerto Rico, and the District of Columbia receives a minimum annual allotment of one percent of the national grant funds after allotments for tribes, territories, and other national reserved programs are made.

DWSRF Set-Asides

- States have the option to take approximately 31% of their capitalization grant as set-asides. There are four distinct set-asides:
    - Four percent, $400,000, or 1/5th percent of the current valuation of the fund for DWSRF program administration and technical assistance to public water systems.
    - Two percent for technical assistance to small public water systems (systems serving 10,000 or fewer persons).
    - Ten percent for state program management.
    - Fifteen percent for local assistance and other state programs. A state may take a total of up to 15 percent of its capitalization grant for this set-aside. However, no more than 10 percent of the capitalization grant may be used for any one of the list of eligible activities.

Limitations of Funding – What can funds not be used for?

- Set-aside funding may not be used for:
    - Operations and maintenance
    - Routine compliance monitoring and sampling
    - Projects or related costs that are eligible for funding under the DWSRF loan program, with two exceptions:
        - Planning and design costs for small systems
        - Costs associated with restructuring a system as part of a capacity development strategy

Local Assistance and Other State Programs Set-Aside (15% set-aside)

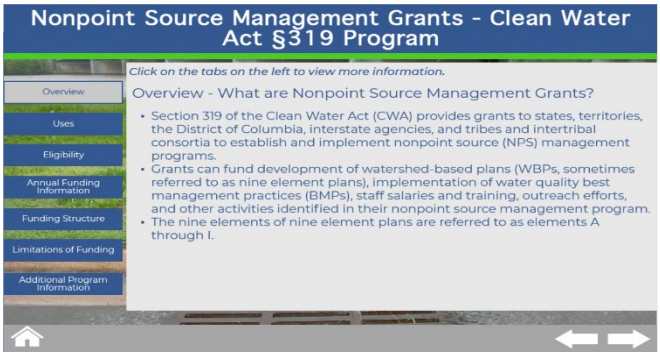
- If a state issues loans for source water protection under the 15 percent set-aside, the state must create a priority setting process for EPA approval similar to that created for the loan fund.
- States must offer loans at or below market interest rates that water systems can repay over a loan term of up to 20 years. Each loan must be secured by a dedicated source of repayment.
- A state can offer principal forgiveness or negative interest rates for these loans if given authority in an annual federal appropriations law; however, this would count towards any additional subsidization requirements and capped amounts.
- Additional subsidy authority under the disadvantaged community program cannot be used.
- A state must conduct environmental reviews of source water protection activities funded under the Local Assistance set-aside unless the activities solely involve administration (e.g., personnel, equipment, travel) or technical assistance.

Additional Program Information – Where can I find more information?

- General information on the Drinking Water State Revolving Fund is available here.
- DWSRF contact information by state is available here.
- Information on the Drinking Water State Revolving Fund loan and set-aside eligibilities for source water protection is available in these documents:
    - Memo: Expanded Source Water Protection-Related Eligibilities Under the DWSRF's Local Assistance and Other State Programs Set-Aside
    - Factsheet: Using the DWSRF Set-Asides for Source Water Protection Loans
    - Factsheet: Protecting Source Water with the DWSRF Set-Asides
    - Information on Drinking Water Infrastructure Grants - Tribal Set-Aside Program is available here.

- The Bipartisan Infrastructure Law delivers $50 billion to the EPA to strengthen the nation's drinking water and wastewater systems. A significant portion of water infrastructure dollars will flow through the Drinking Water State Revolving Fund from FY2022-2026. For more information on this unprecedented investment in our nation's water infrastructure and communities, click here.

  Examples



Nonpoint Source Management Grants - Clean Water Act §319 Program

Click on the tabs on the left to view more information.

Overview

Uses

Eligibility

Annual Funding Information

Funding Structure

Limitations of Funding

Additional Program Information

Overview - What are Nonpoint Source Management Grants?

- Under Section 319 of the Clean Water Act, EPA awards grants to states and the District of Columbia, territories, and eligible federally recognized tribes to implement NPS management programs. These grants support a range of activities, including staffing, NPS monitoring and planning, and watershed projects.
- EPA defines the term “nonpoint source” as any source of pollution that does not meet the legal definition of “point source” in the Clean Water Act. Nonpoint source (NPS) pollution, unlike pollution from industrial and sewage treatment plants, comes from many diffuse sources and generally results from land runoff, precipitation, atmospheric deposition, drainage, seepage, or hydrologic modification.
- EPA promotes the watershed approach to managing NPS pollution at the local scale. Watershed-based plans (also known as 9-element plans) provide the technical basis to strategically target management activities, while laying out a path for engaging affected stakeholders and landowners along the way.

Nine Elements of a Watershed-based Plan

Uses – How can funds be used for source water activities?

- Consistent with an EPA-approved nonpoint source management program plan Section 319 grants can be used for a variety of activities to help achieve and maintain beneficial uses of water, such as swimming, fishing, or drinking water.
- Eligible activities include:
    - Nonpoint source monitoring and assessment
    - Watershed planning
    - Implementing best management practices
    - Education and outreach activities
    - Activities to protect unimpaired/high quality waters

- Implementation work should include a completed WBP that incorporates all nine elements to address water quality. The nine elements are found in Chapter 2, Section 6 of EPA's Handbook for Developing Watershed Plans to Restore and Protect our Waters.

Source Water Protection Activities §319 Grants can be used for

- Example source water protection activities include:
    - Watershed management plan development
    - Data collection on land use threats and potential contaminant sources in SWPA
    - Development of data layers
    - Modeling of wellhead capture zones/time of travel zones
    - Monitoring study to determine occurrence/extent of contamination
    - Installation of ambient water quality monitoring stations upstream of intake
    - Vegetative buffers upstream of intake
    - Fencing upstream of intake or around Wellhead Protection Area
    - Rain gardens in SWPA
    - Abandoned well closure
    - Education of homeowners in SWPA on septic system maintenance
    - Development of strategies and procedures for failing septic systems in SWPA
    - Establishment of buffer zones or setbacks from wellheads or surface water sources through easements, land acquisition, or other voluntary land use controls
    - Implement sustainable forest management practices to protect source water resources (e.g., prescribed harvesting, measures to reduce wildfire risk)
    - Development of land use ordinances or zoning regulations in SWPA (e.g., Restriction of storage and use of hazardous materials, establishment of buffer zones/setbacks)
    - Technical assistance or support to form a source water protection collaborative or committee
    - Implementation of training, workshops, outreach, and education
    - Implementation of monitoring or response to climate change

Eligibility - Who can access funds?

- EPA awards Section 319 grants to State, Territorial, and Tribal nonpoint source agencies to implement EPA-approved nonpoint source management programs.
- Funding decisions are made by states and tribal agencies. Grants can be used to restore impaired waters as well as protect waters that are at risk of impairment if the state or tribe specifies intended activities and priorities in their EPA-approved Nonpoint Source Management Plan. If a plan is consistent with grant eligibility requirements and procedures, EPA then awards the funds to the state or tribal agency.
- EPA has focused 319 resources on watershed-based environmental restoration and protection, in which local stakeholders join forces to develop and implement WBPs to address NPS pollution based on the particular conditions in their communities. Thus, while not required, applicants are encouraged to utilize WBPs in their approach.

Considerations for Small and Disadvantaged Communities:

- At least half of Section 319 funds are invested in local water quality projects. Check the EPA State Nonpoint Source, Section 319 webpage for information on how projects are prioritized.

Annual Funding Information - How much funding is available annually?

- The total appropriation for the Section 319 grant program in federal fiscal year 2021 was $177 million.
- Section 319 grants awarded to states and territories support two categories of work:
    - Watershed Project Funds (minimum 50% of grant) support NPS projects guided by existing watershed-based plans
    - NPS Program Funds (remaining 50% of grant) support staffing, TMDL and watershed-based plan development, monitoring, and other NPS program activities.
- States may make funds available through subawards (e.g., contracts, subgrants) to both public and private entities, including:
    - Local governments
    - Tribal authorities
    - Cities or counties
    - Regional development centers
    - Local nonprofit organizations
    - State agencies
    - Federal agencies
    - Watershed groups
    - For-profit groups
    - Local school systems and institutions of higher learning
    - Individuals

Funding Structure - What type of funding is it?

- Section 319 requires a state cost-share or match of 40 percent of the total program costs of the EPA grant. However, states may decide what match percentage is required for specific projects funded under that grant. Project match for subrecipients can vary from zero to 100 percent, depending on the state.
- Section 319(h) funds are allocated to each state according to a national allocation formula contained in Appendix D of EPA's NPS Program and Grants Guidelines for States and Territories.
- Section 319 funds are awarded to eligible Tribes as described in EPA's Handbook for Developing and Managing Tribal Nonpoint Source Pollution Programs Under Section 319 of the Clean Water Act.
- For Tribes:
    - Tribes must demonstrate in writing to the Regional Administrator that fiscal circumstances within the tribe (or within each tribe that is a member of the intertribal consortium) are constrained to such an extent that fulfilling the cost-share or match requirement would impose undue hardship (see 40 CFR 35.635 and the EPA's Handbook for Developing and Managing Tribal Nonpoint Source Pollution Programs Under Section 319 of the Clean Water Act, pages I-63 and I-65).
- EPA awards additional Section 319 funds through a separate competitive process aimed at implementing watershed-based projects and watershed plan development. EPA posts an annual Request for Proposals (RFP) for competitive Section 319 grants here.
- Links on this page exit the site.

Limitations of Funding - What can funds not be used for?

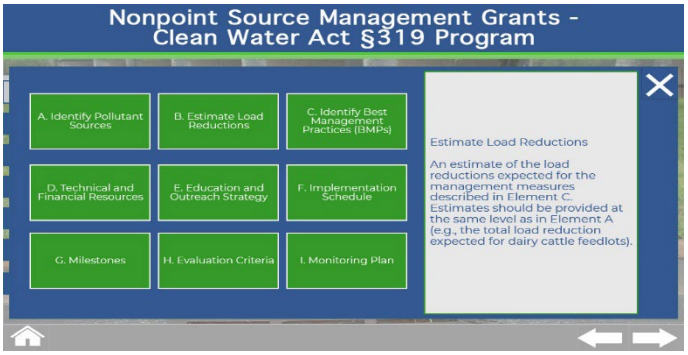
- Section 319 grants cannot be used for:
    - Implementing any action required by an NPDES permit.

- Activities which have not been outlined in the EPA-approved Nonpoint Source Management Plan. The CWA Section 319 program funds source water projects when the project purpose is in the management plan due to current or potential impacts from nonpoint source pollution.

Additional Program Information - Where can I find more information?

- Information on the Section 319 Grant Program, including Section 319 grant information and training resources, can be found here.
- For state-specific application information, please contact your state NPS coordinator.
- General information on the nonpoint source management program can be found here.

Examples



Nonpoint Source Management Grants - Clean Water Act §319 Program

Click an element to the left to learn more.

A. Identify Pollutant Sources

B. Estimate Load Reductions

C. Identify Best Management Practices (BMPs)

D. Technical and Financial Resources

E. Education and Outreach Strategy

F. Implementation Schedule

G. Milestones

H. Evaluation Criteria

I. Monitoring Plan

Identify Pollutant Sources

An identification of the causes and sources or groups of similar sources that will need to be controlled to achieve the load reductions estimated in this watershed-based plan (and to achieve any other watershed goals identified in the watershed-based plan). Sources that need to be controlled should be identified at the significant subcategory level with estimates of the extent to which they are present in the watershed (e.g., X numbers of dairy cattle feedlots needing upgrading, including a rough estimate of the number of cattle per facility).

Estimate Load Reductions

An estimate of the load reductions expected for the management measures described in Element C. Estimates should be provided at the same level as in Element A (e.g., the total load reduction expected for dairy cattle feedlots).

Identify Best Management Practices (BMPs)

A description of the NPS management measures that will need to be implemented to achieve the load reductions estimated in Element B (as well as to achieve other watershed goals identified in this watershed-based plan), and an identification (using a map or a description) of the critical areas in which those measures will be needed to implement this plan.

Technical and Financial Resources

An estimate of the amounts of technical and financial assistance needed, associated costs, and/or the sources and authorities that will be relied upon, to implement this plan.

Education and Outreach Strategy

An information/education component that will be used to enhance public understanding of the project and encourage their early and continued participation in selecting, designing, and implementing the NPS management measures that will be implemented.

Implementation Schedule

A schedule for implementing the NPS management measures identified in this plan that is reasonably expeditious.

Milestones

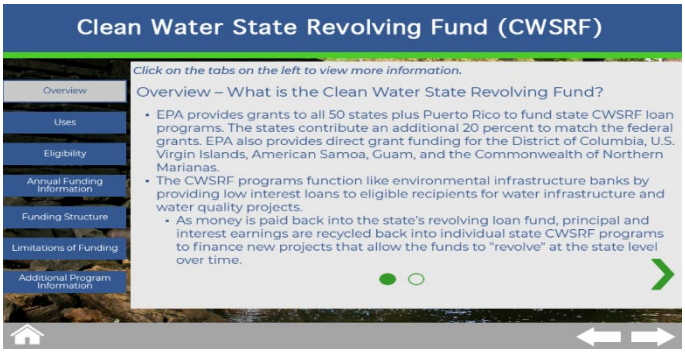
A description of interim, measurable milestones for determining whether NPS management measures or other control actions are being implemented.

Evaluation Criteria

A set of criteria that can be used to determine whether loading reductions are being achieved over time and substantial progress is being made towards attaining water quality standards and, if not, the criteria for determining whether this watershed-based plan needs to be revised or, if an NPS TMDL has been established, whether the NPS TMDL needs to be revised.

Monitoring Plan

A monitoring component to evaluate the effectiveness of the implementation efforts over time, measured against the criteria established under Element H immediately above.



Clean Water State Revolving Fund (CWSRF)

Click on the tabs on the left to view more information.

Overview

Uses

Eligibility

Annual Funding Information

Funding Structure

Limitations of Funding

Additional Program Information

Overview – What is the Clean Water State Revolving Fund?

- EPA provides grants to all 50 states plus Puerto Rico to fund state CWSRF programs. Each state contributes an additional 20 percent to match the federal grants.
- The CWSRF programs function like environmental infrastructure banks by providing low interest loans to eligible recipients for water infrastructure and water quality projects.
    - As money is paid back into the state's revolving loan fund, principal and interest earnings are recycled back into individual state CWSRF programs to finance new projects that allow the funds to "revolve" at the state level over time.
- A portion of each CWSRF program's federal capitalization grant may be provided to eligible borrowers in the form of principal forgiveness, negative interest loans, and grants to address community affordability issues.

Uses – How can funds be used for source water activities?

- Each CWSRF program has flexibility to strategically focus their program using Intended Use Plans (IUP). Required annually, a state's IUP explains the CWSRF program, goals, operations, and compliance to the public and EPA.
- Land conservation or other source water protection projects must be included in the state's IUP for a given year to be eligible for funding.
- EPA encourages states to open their CWSRFs to the widest variety of eligible water quality and public health projects. Those interested in a project should seek out their state's CWSRF program to determine whether these types of projects are eligible in their state and participate in the annual process that determines which projects are funded.
- CWSRF-eligible source water protection projects include:
    - Land conservation
    - Easements, leasing, and fee simple purchase of land
    - Agricultural best management practices

  - Cropland and livestock
  - Decentralized wastewater treatment
  - Septic tank repair or replacement
  - Remediation or prevention of contamination from resource extraction sites
  - Habitat restoration
  - Shoreline/riparian buffers
  - Stormwater management
  - Contaminated site clean-up
  - Wildfire risk management
  - Development and updates of source water protection plans
  - Development and initial delivery of public outreach and education material
- Agricultural Best Management Practices (BMPs): The CWSRF can fund a wide range of agricultural BMP activities that address runoff and erosion from agricultural cropland and animal feeding operations (AFOs), including:
  - Cropland activities such as the installation of manure injection equipment, water efficient irrigation equipment, conservation tillage equipment, and sediment control basins.
  - Chemical use reduction, such as chemical spray equipment and chemical storage containment structures.
  - Animal feeding operation (AFO) activities such as the installation of livestock and milk house waste management systems, manure containment structures, manure treatment or alternative use projects, and injection equipment.
  - Well sealing and water diversions to avoid feedlots.
  - BMP activities at concentrated animal feeding operations (CAFOs) are not eligible for CWSRF assistance unless they are located within the greater watershed of a National Estuary Program and implement a National Estuary Comprehensive Conservation and Management Plan (CCMP).
- Land Conservation: CWSRF eligible land conservation projects include conservation easements, leasing of land, and purchase of land. Amenities that improve water quality on purchased land, Amenities that improve water quality on purchased land, such as water quality related signage, pervious trails, and tree planting, are also eligible.

Eligibility - Who can access funds?

- CWSRF financing is available to any public, private, or nonprofit entity for many types of source water protection (SWP) projects, including both green and grey infrastructure water quality solutions for both surface water and groundwater. Since the program is managed by the states, the funding of eligible borrowers and projects may vary according to the priorities of each state.
- CWSRFs fund a wide range of water quality improvement projects. To be eligible to receive CWSRF assistance, a project must meet the criteria of one of the twelve CWSRF eligibilities listed on the next slide:
  - Construction of publicly owned treatment works (POTW)
  - Implementation of a nonpoint source management plan
  - Implementation of a national estuary program Comprehensive Conservation and Management Plan
  - Decentralized wastewater treatment systems
  - Stormwater management
  - Projects that reduce the demand for POTW capacity through water conservation, efficiency, and reuse
  - Watershed pilot projects

  - Energy efficiency for POTWs
  - Water reuse
  - Security measures at POTWs
  - Technical assistance for small and medium sized POTWs
  - Assistance to nonprofit entities to repair or replace individual decentralized wastewater treatment (e.g., septic tanks)
- Each project category has its own list of eligible recipients and project requirements.
- More details on each of these eligibilities are available in the Overview of Clean Water State Revolving Fund Eligibilities.
- **Considerations for Small and Disadvantaged Communities:**
  - A portion of each CWSRF program's federal capitalization grant may be provided to eligible borrowers in the form of principal forgiveness, negative interest loans, and grants to address community affordability issues.

Annual Funding Information - How much funding is available annually?

- From 2015-2020, the total national allotment for the Clean Water State Revolving Fund was between $1.4 and 1.7 billion.

Funding Structure – What type of funding is it?

- Congress appropriates funding for the CWSRF. EPA then awards capitalization grants to each state and Puerto Rico for their CWSRF based upon the allotment formula in the Clean Water Act.
- Each state and Puerto Rico provide a 20 percent match.
- As money is paid back into the state's revolving loan fund, the state makes new loans to other recipients for high priority, water quality activities. Repayments of loan principal and interest earnings are recycled back into individual state CWSRF programs to finance new projects that allow the funds to "revolve" at the state level over time.
- Under the CWSRF, states may provide various types of assistance, including loans, refinancing, purchasing or guaranteeing local debt, and purchasing bond insurance.
- Innovative Financing Options
  - Because source water protection projects may not have associated available income streams to repay loans, many states use a variety of innovative financing mechanisms to fund these projects.
  - Sponsorship Lending: Sponsorship lending bundles a publicly owned treatment works (POTW) project with a nonpoint source project. A municipality receives a loan with a reduced interest rate as compensation for also undertaking (i.e., sponsoring) a natural infrastructure or nonpoint source project, thus allowing municipalities to address pressing watershed restoration or protection priorities without placing a repayment responsibility on NPS projects. There are several models of sponsorship that states may utilize when financing a loan. Financing of a project may vary depending on the priorities, policies, and laws within each state.

Limitations of Funding - What can funds not be used for?

- CWSRF assistance may not be used for operations and maintenance or ambient water quality monitoring.
- Though EPA has a role in program administration and oversight, the CWSRF is a state-run program. Because each state may have its own statutes, rules, and regulations, the funding of eligible projects and assistance recipients may vary according to the priorities of each state. CWSRF contact information by state can be found here.

Additional Program Information - Where can I find more information?

- General information on the Clean Water State Revolving Fund can be found here.

- CWSRF contact information by state can be found here.
- Information on the Clean Water State Revolving Fund eligibilities can be found here.
- Information on the Clean Water Indian Set-Aside is available here.
- The Bipartisan Infrastructure Law delivers $50 billion to the EPA to strengthen the nation's drinking water and wastewater systems. A significant portion of water infrastructure dollars will flow through the Clean Water State Revolving Fund from FY2022-2026. For more information on this unprecedented investment in our nation's water infrastructure and communities, click here.
- CWSRF Factsheets:
    - Funding Agricultural Best Management Practices
    - Funding Estuary Protection and Restoration
    - Funding Land Conservation
    - Financing Options for Nontraditional Eligibilities in the CWSRF Programs
    - Protecting Source Water with the CWSRF
    - Funding Brownfield Remediation with the CWSRF

  Examples

Water Infrastructure Finance and Innovation Act (WIFIA) Program

Click on the tabs on the left to view more information.

Overview

Uses

Eligibility

Annual Funding Information

Funding Structure

Limitations of Funding

Additional Program Information

Overview – What is the Water Infrastructure Finance and Innovation Act Program?

- The Water Infrastructure Finance and Innovation Act of 2014 (WIFIA) established the WIFIA program, a federal credit program administered by EPA that provides long-term, low-cost supplemental financing for eligible water and wastewater infrastructure projects of national or regional significance.
- Eligible public and private borrowers can finance a wide variety of wastewater, drinking water, source water, water reuse, stormwater, and other water quality improvement capital projects with WIFIA loans.
- The WIFIA program is borrower-focused, with flexible terms for loans to stimulate investment while minimizing costs for ratepayers. It offers loans with terms of up to 35 years after completion of project construction. It also offers borrowers the advantage of developing customized terms, including sculpted repayment terms to match the specific needs of a project, payment deferment for up to five years after completion of project construction, and interest-only payment periods. Additionally, the WIFIA program lends at a low, fixed interest rate equal to the Treasury rate for a comparable maturity.

Uses – How can funds be used for source water activities?

- For eligible source water protection projects, WIFIA loans can finance the following development and implementation:
    - Development phase activities, including planning, preliminary engineering, design, environmental review, revenue forecasting, and other pre-construction activities
    - Construction, reconstruction, rehabilitation, and replacement activities.
    - Acquisition of real property or an interest in real property, environmental mitigation, construction contingencies, and acquisition of equipment.
    - Capitalized interest necessary to meet market requirements, reasonably required reserve funds, capital issuance expenses, and other carrying costs during construction.
    - WIFIA loans can be combined with private equity, revenue bonds, corporate debt, grants, and State Revolving Fund (SRF) loans.

Source Water Protection Activities WIFIA can be used for

- Example source water protection activities include:
    - Source water protection plan development
    - Replacement of septic systems or connection to sewer system
        - WIFIA can fund development and implementation activities for wastewater conveyance and treatment projects
        - Eligible activities include construction, reconstruction, rehabilitation, and replacement activities that are eligible for the Clean Water SRF, notwithstanding the public ownership clause
    - Implement agricultural best management practices
    - Abandoned well closure
    - Establishment of buffer zones or setbacks from wellheads or surface water sources through easements, land acquisition, or other voluntary land use controls
        - WIFIA can fund development and implementation activities related to acquisition of property if it is integral to the project or will mitigate the environmental impact of a project

Eligibility - Who can access funds?

- The entity applying for WIFIA credit assistance must be one of the following:
    - A corporation
    - A partnership
    - A joint venture
    - A trust
    - A federal, state, or local government entity, agency, or instrumentality
    - A tribal government or consortium of tribal governments
    - A State infrastructure financing authority as defined by the Clean Water Act and the Safe Drinking Water Act
- Prospective borrowers may only apply for WIFIA credit assistance with the purpose of undertaking one or several eligible projects listed below:
    - Wastewater projects that are eligible for the Clean Water SRF as described under Section 603 of the Federal Water Pollution Control Act, notwithstanding the public ownership requirement,
    - Drinking water projects that are eligible for the Drinking Water SRF as described in Section 1452(a)(2) of the Safe Drinking Water Act,
    - Projects that enhance energy efficiency in the operation of a public water system or a publicly owned treatment works,
    - Projects for repair, rehabilitation, or replacement of a treatment works, community water system, or aging water distribution or waste collection facility (including a facility that serves a population or community of an Indian reservation).
- Prospective borrowers may only apply for WIFIA credit assistance with the purpose of undertaking one or several eligible projects listed below:
    - A brackish or sea water desalination project, including chloride control, a managed aquifer recharge project, a water recycling project, or a project to provide alternative water supplies to reduce aquifer depletion.
    - A project to prevent, reduce, or mitigate the effects of drought, including projects that enhance the resilience of drought-stricken watersheds.

  - The acquisition of real property or an interest in real property. The acquisition must either be integral to an eligible project described above or would mitigate the environmental impacts of water resources infrastructure projects otherwise eligible for WIFIA assistance, as determined by the Administrator.

- A combination of eligible wastewater or drinking water projects, as defined in the previous slide, for which a state infrastructure financing authority submits a single application.
- A combination of eligible projects, described above, secured by a common security pledge, for which a single eligible entity, or a combination of eligible entities, submits a single application.
- For a map of selected projects dating back to fiscal year 2018, see the WIFIA webpage of selected projects.
- **Considerations for Small and Disadvantaged Communities:**
  - During the Project Selection phase, the WIFIA program uses the selection criteria outlined in the WIFIA statute, regulation, and Notice of Funding Availability to score letters of interest. One of the criteria is "the extent to which the project serves economically stressed communities, or pockets of economically stressed rate payers within otherwise non-economically stressed communities." Prospective borrowers that are economically stressed earn more points for this criterion, which may help them to be selected and invited to apply for a WIFIA loan.

Annual Funding Information – How much funding is available annually?

- In FY21, the WIFIA program announced the availability of approximately $5.5 billion in loans, which can vary annually.
- To find out if WIFIA funding is currently available, visit the website here.

Funding Structure – What type of funding is it?

- Each year, Congress must provide EPA with a credit subsidy appropriation to finance new projects.
- WIFIA loans are unique because a small expenditure of federal appropriations provides the WIFIA program significant funding to lend.
- As required by the Federal Credit Reform Act of 1990, EPA estimates the risk of default for each of its loans and sets aside a credit subsidy reserve based on this risk.
- Due to the extremely low risk of default associated with most loans in the water and wastewater industry, the WIFIA program estimates a 1 percent subsidy rate. This means that for every $1 in federal appropriation, the WIFIA program can generally lend $100. For example, EPA received a credit subsidy appropriation of $55 million in FY 2020 and was able to lend approximately $5.5 billion.
- Every year, EPA reviews projects in a two-phased process.
  - Phase 1 (Project Selection): EPA announces the amount of funding it will have available and solicits letters of interest from prospective borrowers. In their letters of interest, prospective borrowers demonstrate their project's eligibility, creditworthiness, engineering feasibility, readiness to proceed, and alignment with EPA's policy priorities. Based on this information, EPA selects projects which it intends to fund and invites the prospective borrowers to continue to the application process.
  - Phase 2 (Project Review, Negotiation, and Closing): Each invitee must apply for its WIFIA loan. The WIFIA program conducts a detailed financial and engineering review of the project. Based on that review, the WIFIA program proposes terms and conditions for the project and negotiates them with the applicant until they develop a mutually agreeable term sheet and loan agreement. Prior to closing, the WIFIA program must receive approval from the Administrator or their designee and the Office of Management and Budget. At closing, the prospective borrower executes the credit agreement, which is the binding legal document that allows the borrower to receive WIFIA funds.

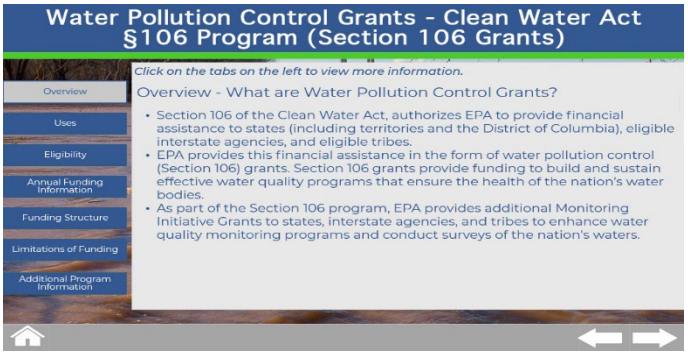
Limitations of Funding - What can funds not be used for?

- The anticipated total eligible project costs must not be less than $20 million, or less than $5 million for small communities (population of 25,000 or less).
- The WIFIA loan can finance only up to 49 percent of these eligible project costs.
- In FY 2021, WIFIA offered loan financing up to 80 percent of eligible project costs for small communities.

Additional Program Information - Where can I find more information?

- General information on the WIFIA program is available here.
- Information on the WIFIA program can be found in the Program Handbook, which is available here.
- Information about currently available funding and past Notices of Funding Availability is available here.
- The WIFIA program is administered by EPA headquarters. For questions about the WIFIA program or to meet with WIFIA staff about a prospective project, contact wifia@epa.gov.
- Sign up for WIFIA's mailing list here with this link.

  Examples



Water Pollution Control Grants - Clean Water Act §106 Program (Section 106 Grants)

Click on the tabs on the left to view more information.

Overview

Uses

Eligibility

Annual Funding Information

Funding Structure

Limitations of Funding

Additional Program Information

Overview - What are Water Pollution Control Grants?

- Section 106 of the Clean Water Act, authorizes EPA to provide financial assistance to states (including territories and the District of Columbia), eligible interstate agencies, and eligible tribes.
- EPA provides this financial assistance in the form of water pollution control (Section 106) grants. Section 106 grants provide funding to build and sustain effective water quality programs that ensure the health of the nation's water bodies.
- As part of the Section 106 program, EPA provides additional Monitoring Initiative Grants to states, interstate agencies, and tribes to enhance water quality monitoring programs and conduct surveys of the nation's waters.

Uses – How can funds be used for source water activities?

- Section 106 grants can support a wide variety of state and tribal water pollution prevention and control programs and activities, including:
    - Monitoring and assessing water quality;
    - Developing water quality standards;
    - Identifying impaired waters and total maximum daily loads;
    - Managing national pollutant discharge elimination system permits;
    - Ensuring compliance;
    - Implementing enforcement actions;
    - Protecting source water; and
    - Managing outreach and education programs.
- Increasingly, EPA, states, tribes, and interstate agencies are working together to develop basin-wide approaches to water quality management. The Section 106 program fosters a watershed protection approach at the state level by

looking broadly at states' water quality problems and targeting the use of limited finances available for effective program management.

- Section 106 grants also may be used to provide "in-kind" support through an EPA contract, or for associated program support if requested by a state or tribe, as discussed in EPA's final guidance.

Source Water Protection Activities §106 Grants can be used for

- Example source water protection activities include:
    - Development and/or update of source water assessment
    - Communication of SWA results (e.g., outreach materials, community meetings)
    - Watershed management plan development
    - Data collection on land use threats and potential contaminant sources in SWPA
    - Evaluation/reevaluation of SWPA delineations
    - Development of data layers
    - Monitoring study to determine occurrence/extent of contamination
    - Installation of water quality monitoring wells in wellhead protection area

Eligibility - Who can access funds?

- A state or territory may receive Section 106 funds if it:
    - Has established and is operating appropriate devices, methods, systems, and procedures necessary to compile and analyze data on navigable waters;
    - Has the authority to take action in cases of imminent and substantial endangerment to the health of persons; and
    - Provides EPA with water quality inventory data required by the CWA. The information on water quality inventory is contained in EPA's biannual water quality report: National Water Quality Inventory Report to Congress (305(b) report).
- An interstate agency (also known as a basin commission or interstate compact commission) may receive Section 106 funds if it:
    - Has jurisdiction over or responsibilities for activities in two or more states;
    - Was established either by an agreement or compact approved by Congress, or approved by the EPA administrator; and
    - Filed with the EPA administrator within 120 days after the enactment of section 106 of the CWA.
- Federally recognized tribes are eligible for Section 106 funding if they (or each member of their intertribal consortium) meet the requirements for Treatment as State (TAS) under the CWA.
- Of the 566 federally recognized tribes, approximately 330 meet the five requirements for TAS. Since 1987, the annual Section 106 tribal set-aside has grown from less than $1 million to more than $25 million. About 75 percent of these tribes have applied for and received TAS to receive Section 106 grants.

Annual Funding Information - How much funding is available annually?

- For Fiscal Year 2020, the total Section 106 allocation for the US was more than $223 million.
- Funding varies from year to year.
- The state Monitoring Initiative funds are allocated separately and are not included in the historical funding information. EPA uses a separate allocation formula that targets funds to enhance monitoring strategies and develop

statistically valid reports on water condition. The interstate and tribal Monitoring Initiative funds are allocated through the existing formula and are included in the historical funding information.

Funding Structure - What type of funding is it?

- Section 106 allocations are generated every year, according to formulae developed by EPA, which provides allotments directly to states and interstate agencies "on the basis of the extent of the pollution problem in the state."
- A portion of Section 106 funds is set aside and allocated to EPA regional offices to make allotments to eligible tribes.

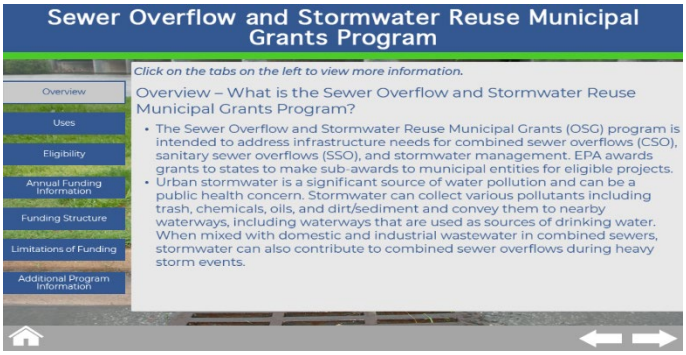
Limitations of Funding - What can funds not be used for?

- Section 106 grants cannot be used for:
    - Construction, operation, or maintenance of waste treatment plants, or
    - Activities financed by other federal grants.

Additional Program Information - Where can I find more information?

- Information on the Section 106 Water Pollution Control Grant Program, including grant information and guidance documents, can be found here.
- Contact information about Water Pollution Control (Section 106) Grants can be found here.

Examples



Sewer Overflow and Stormwater Reuse Municipal Grants Program (OSG)

Click on the tabs on the left to view more information.

Overview

Uses

Eligibility

Annual Funding Information

Funding Structure

Limitations of Funding

Additional Program Information

Overview - What is the Sewer Overflow and Stormwater Reuse Municipal Grants Program?

- The Sewer Overflow and Stormwater Reuse Municipal Grants (OSG) program is intended to address infrastructure needs for combined sewer overflows (CSO), sanitary sewer overflows (SSO), and stormwater management. EPA awards grants to states to make sub-awards to municipal entities for eligible projects.
- Urban stormwater is a significant source of water pollution and can be a public health concern. Stormwater can collect various pollutants including trash, chemicals, oils, and dirt/sediment and convey them to nearby waterways, including waterways that are used as sources of drinking water. When mixed with domestic and industrial wastewater in combined sewers, stormwater can also contribute to combined sewer overflows during heavy storm events.

Uses – How can funds be used for source water activities?

- Eligible projects exist under the following three general categories: 1) combined sewer overflow correction, 2) sanitary sewer overflow correction, and 3) stormwater and subsurface drainage water. The statutory eligibilities allow states to fund a variety of project types under each of the three project categories.
- Example activities that can be covered by OSG are provided below. For more details on the types of capital projects that are eligible and a more comprehensive list of activities, see the OSG Grant Implementation Document. Activities that OSG can be used for include:
- CSO Correction efforts which may include activities such as installation of separate sanitary and storm sewers, downspout disconnection, and planning and design activities related to an eligible capital project.
- SSO Correction efforts which may include activities such as enhancement of collection system, pump station, or treatment capacity for the purposes of mitigating SSOs or other capital projects for the purposes of mitigating or preventing the impact of stormwater on wastewater collection.
- Gray Infrastructure (i.e., conventional piped drainage and treatment systems designed to divert stormwater away from the built environment) efforts which may include activities such as traditional pipe, storage, and treatment systems; collection and treatment systems for reuse, or sediment controls like filter fences and street sweepers.

- Green infrastructure is the range of measures that use plant or soil systems, permeable pavement or other permeable surfaces or substrates, stormwater harvest and reuse, or landscaping to store, infiltrate, or evapotranspirate stormwater and reduce flows to sewer systems or to surface waters. Activities may include but are not limited to:
    - rainwater harvesting/collection
    - green roofs
    - infiltration basins
    - replacement of gray infrastructure with green infrastructure including purchase and demolition costs

Source Water Protection Activities OSG can be used for

- Example source water protection activities include:
    - Projects that correct a combined sewer overflow or sanitary sewer overflow in a source water protection area (SWPA)
    - Implementation of watershed management plan established under section 319 of the Clean Water Act
    - Removal or replacement of septic systems or connections to sewer system in a SWPA
    - Development of strategies and procedures for failing septic systems in a SWPA
    - Green infrastructure to manage urban runoff
    - Rain gardens in a SWPA
    - Wetland/riparian/shoreline creation, protection, and restoration in a SWPA
    - Establishment/restoration of urban tree canopy

Eligibility - Who can access funds?

- A state, Washington D.C., and the U.S. territories all have access to an allotted portion of the OSG appropriation from Congress. A state entity may apply for their allotment amount and then use those funds to make sub-grants to municipal entities for projects.
- Any municipality or municipal entity is eligible to receive funds for planning, design, and construction of:
    - Treatment works to intercept, transport, control, treat, or reuse municipal combined sewer overflows (CSOs), sanitary sewer overflows (SSOs), or stormwater.
    - Notification systems to inform the public of combined sewer or sanitary overflows that result in sewage being released into rivers and other waters; and
    - Any other measures to manage, reduce, treat, or recapture stormwater or subsurface drainage water.
- States are required to give priority to funding the projects of recipients that fall under any of the following criteria:
    - Qualifies as a “financially distressed community”
        - EPA defines the term ‘‘financially distressed community’’ as a community that meets affordability criteria established by the state in which the community is located if such criteria are developed after public review and comment
    - Has implemented or is complying with an implementation schedule for the nine minimum controls specified in the CSO control policy and has begun implementing a long-term municipal combined sewer overflow control plan or a separate sanitary sewer overflow control plan
    - Is requesting a grant for a project that is on a Clean Water State Revolving Fund intended use plan
    - Is an Alaska Native Village
    - Qualifies as a “rural community”

- The term "rural community" means a city, town, or unincorporated area that has a population of not more than 10,000 inhabitants.

Annual Funding Information - How much funding is available annually?

- In fiscal year (FY) 2020, OSG received a $28 million appropriation. In the following year of 2021, this amount increased to $40 million. In FY2022, the program received $43 million. In FY2023, the program received $50 million.

Funding Structure - What type of funding is it?

- Congress appropriates funding for the OSG program to EPA.
- EPA then allocates funds to each state for their OSG needs based on the Clean Watershed Needs Survey and Assessment (a survey of water system capital improvement needs).
- States must cover 20 percent of total activities cost/grant award amount, unless when funds go to rural communities or financially distressed communities.
- Cost-sharing can be provided through any, or a mix, of the following:
  - Public sources, including state appropriations or local government match to the OSG grant project etc.
  - Private sources, such as funding from a local business or nonprofit contributing to the OSG project etc.
  - In-kind services. States should work with their EPA Regional Project Officers to identify appropriate in-kind services in their OSG workplans and applications.
  - A CWSRF loan (including additional subsidization) to the same subrecipient or different subrecipients may be used to meet the cost share requirement.
- At least 20 percent of a state's allocation must be used for green infrastructure, water and energy efficiency improvements, and other environmentally innovative activities. States may apply up to four percent of their allotment towards their administrative expenses.
- State OSG programs award grants to eligible projects based on priority. As defined in the eligibility section, priority is given to municipalities which are "financially distressed communities."
- For more information on cost-sharing requirements and allocations to rural or financially distressed communities, see the Amendments to the OSG program memo here.

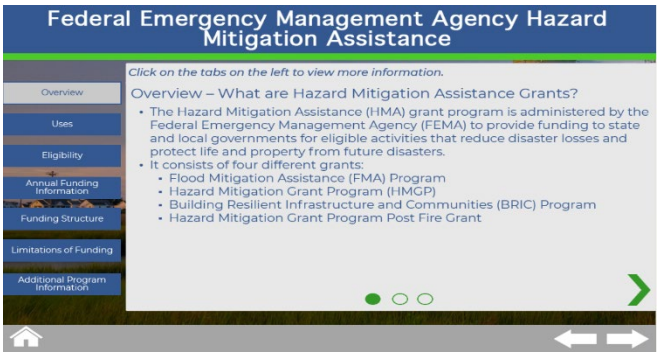
Limitations of Funding - What can funds not be used for?

- Operations and maintenance activities are not eligible for funding.

Additional Program Information - Where can I find more information?

- General information on the OSG program can be found here.
- Information on the OSG program can be found in the Program Grant Implementation Document, which is available here. Amendments to the Sewer Overflow and Stormwater Reuse Municipal Grants Program and Allocation of Federal Fiscal Year 2022 Funding can be found here.
- The OSG Program is administered by EPA headquarters. For questions about the OSG program or to meet with OSG staff about a prospective project, contact OSG@epa.com.

Examples



Federal Emergency Management Agency Hazard Mitigation Assistance

Click on the tabs on the left to view more information.

Overview

Uses

Eligibility

Annual Funding Information

Funding Structure

Limitations of Funding

Additional Program Information

Overview – What are Hazard Mitigation Assistance Grants?

- The Hazard Mitigation Assistance (HMA) grant program is administered by the Federal Emergency Management Agency (FEMA) to provide funding to State, local, Tribal, and Territorial governments for eligible mitigation measures that reduce disaster losses and protect life and property from future disasters.
- It consists of four different grants:
    - Flood Mitigation Assistance (FMA) Grant Program
    - Hazard Mitigation Grant Program (HMGP)
    - Building Resilient Infrastructure and Communities (BRIC) Grant Program
    - Hazard Mitigation Grant Program Post Fire (HMGP Post Fire) Grant
- Flood Mitigation Assistance (FMA) Grant Program provides funds for projects to reduce or eliminate the risk of flood damage to buildings that are insured under the National Flood Insurance Program (NFIP) on an annual application cycle.
- Hazard Mitigation Grant Program (HMGP) assists in implementing long-term hazard mitigation measures following a Presidential major disaster declaration. The key purpose of the HMGP is to ensure that the opportunity to take critical mitigation measures to reduce the risk of loss of life and property from future disasters is not lost during the reconstruction process following a disaster.
- Building Resilient Infrastructure and Communities (BRIC) Grant Program supports States, local communities, Tribes, and Territories as they undertake hazard mitigation projects, reducing the risks they face from disasters and natural hazards. BRIC is a FEMA pre-disaster hazard mitigation program that replaced the Pre-Disaster Mitigation (PDM) grant program beginning in fiscal year 2020 (FY 2020).

- Hazard Mitigation Grant Program Post Fire (HMGP Post Fire) assists in implementing long-term hazard mitigation measures following a Fire Management Assistance Grant (FMAG) declaration. States, Territories, and federally recognized Tribes affected by fires resulting in an FMAG declaration are eligible to apply.
- In addition to natural disasters, HMA grants can address hazards that impact drinking water sources, including flooding, erosion, and drought. They can also fund Low Impact Development (LID) and Green Infrastructure (GI) projects that provide cost-effective and resilient approaches to stormwater management.

Uses – How can funds be used for source water activities?

- Watershed planning and projects are eligible for HMA grants to the extent they mitigate hazards such as flooding and drought.
- Eligible activities can change each year. Generally, they include, but are not limited to:
    - Property acquisition
        - Risk reduction
        - Land restoration to natural state (e.g., wetlands)
    - Floodplain and stream restoration
    - Flood diversion and storage
    - Aquifer storage and recovery
    - Planning and implementation of low-impact development or green infrastructure solutions for stormwater management such as:
        - Rain gardens
        - Roadside swales
        - Infiltration trenches
        - Vegetative buffer zones
- Activities specific to BRIC:
    - Conducting hydrologic and hydraulic studies for unmapped flood zones or other areas where communities plan to submit hazard mitigation projects.
    - Coordinating, scoping, and developing regional or multi-community hazard mitigation projects to address resiliency and sustainability goals.
    - Updating or enhancing sections of the current FEMA-approved hazard mitigation plan, such as the risk assessment and/or mitigation strategy, incorporating climate adaptation, green building, smart growth principles, or historic properties and cultural resources information.
    - Integrating information from hazard mitigation plans, specifically risk assessment or mitigation strategies, with other planning efforts, such as:
        - Disaster recovery strategy (pre- or post-), preparedness, or response plans
        - Comprehensive (e.g., land use, master) plans
        - Capital improvement or economic development plans
        - Resource management/conservation plans (e.g., stormwater, open space)
    - Evaluating adoption and/or implementation of ordinances that reduce risk and/or increase resilience
- Activities specific to FMA include, but are not limited to:
    - Conducting meetings, outreach, and coordination with subapplicants and community residents

  - Developing or conducting engineering, environmental feasibility, and/or benefit-cost analyses
  - Undertaking activities that lead to development of project applications
  - Evaluating facilities to identify mitigation actions
  - Using staff or resources to develop cost-share strategies
  - Localized flood control
  - Floodwater storage and diversion
  - Floodplain and stream restoration
  - Stormwater management
  - Wetland restoration/creation
- Activities specific to HMGP and HMGP Post Fire include, but are not limited to:
  - Modifying or removing culverts to allow drainage to flow freely
  - Adding drainage dips and constructing emergency spillways to keep roads and bridges from washing out during floods
  - Constructing straw, rock, or log dams in small tributaries to prevent flooding
  - Green infrastructure solutions to reduce the impacts of flooding
- Activities Under the 5 Percent Initiative:
  - This initiative allows Grantees under the HMGP to use up to five percent of total HMGP grant funds for projects that are difficult to evaluate using FEMA-approved cost-effectiveness methodologies, but which otherwise meet HMGP eligibility requirements. Applicants and sub-applicants must provide a narrative description of the project's cost-effectiveness in lieu of a standard FEMA BCA.
  - Source Water Protection activities include:
    - The use, evaluation, and application of new unproven mitigation techniques.
    - Hazard identification or mapping related equipment for the implementation of mitigation activities.
    - Acquisition of GIS software, hardware, and data whose primary aim is mitigation.
    - Public awareness or education campaigns about mitigation.

Source Water Protection Activities FEMA HMA Grants can be used for

- Example source water protection activities include:
  - Watershed management plan development
  - Data collection on land use threats and potential contaminant sources in SWPA
  - Development of data layers
    - Only eligible under the 5 Percent Initiative. These are activities that are difficult to conduct a standard BCA to prove cost-effectiveness. Up to 5 percent of the total HMGP funds may be set aside by the Recipient to pay for such activities.
  - Hazardous waste materials collection
    - Only available for eligible activities such as the abatement of asbestos and/or lead-based paint and the removal of household hazardous wastes for disposal at an approved landfill
  - Vegetative buffers upstream of intake
  - Rain gardens in SWPA

- Development of contingency plans for emergencies
- Establishment of buffer zones or setbacks from wellheads or surface water sources through easements, land acquisition, or other voluntary land use controls
- Implement sustainable forest management practices to protect source water resources (e.g., prescribed harvesting, measures to reduce wildfire risk)
- Implementation of training, workshops, outreach, and education
  - Only eligible under the 5 Percent Initiative. These are activities that are difficult to conduct a standard BCA to prove cost-effectiveness. Up to 5 percent of the total HMGP funds may be set aside by the Recipient to pay for such activities.
- Implementation of monitoring or response to climate change

Eligibility - Who can access funds?

- States, Territories, and federally recognized Tribes are eligible to apply for HMA program funds but must have a FEMA-approved Standard or Enhanced Hazard Mitigation Plan. These plans may also need to be officially adopted locally based on state or local requirements.
- Local governments are considered sub-applicants and must submit subapplications to their applicant state, territory, or tribal applicant agency. Contact a State Hazard Mitigation Officer (SHMO) for more information.
- Local governments may sponsor applications from homeowners and businesses.
- In the case of BRIC and FMA, private non-profit (PNP) and private for-profit (PFP) utilities may be eligible if the local government submits an application on their behalf. HMGP accepts applications from PNP, but PFP must get the local government to apply on their behalf.
- Links on this page exit the site.
- **Considerations for Small and Disadvantaged Communities:**
  - Under BRIC small, impoverished communities are eligible for an increased cost-share of up to 90 percent federal dollars/10 percent non-federal dollars, and insular areas including American Samoa, Guam, the Northern Mariana Islands, and the USVI are eligible for a fully waived non-federal share if the entire award is under $200,000.

Annual Funding Information - How much funding is available annually?

- Annual appropriations under each program are subject to change and in some cases are dependent on the total disaster grants awarded by FEMA.
- BRIC - The BRIC grant program is funded annually. FEMA can set aside up to six percent of each major disaster's expenses to fund the program. For the most current information, please visit the FEMA website.
- FMA - FEMA provides annual funding under the FMA grant program to reduce or eliminate the risk of repetitive flood damage to National Flood Insurance Program-insured buildings and structures. There are funding caps associated with this grant which change annually. For the most current information, please visit the FEMA website.
- HMGP - The amount of funding available under a particular Presidential major disaster declaration is limited and is based on up to 15 percent of the total disaster grants awarded by FEMA. States with an enhanced mitigation plan may qualify for a higher percentage under the Disaster Mitigation Act of 2000.
- HMGP Post Fire - The amount of funding available following a Fire Management Assistance Grant (FMAG) declaration is limited and is based on the 10 year national average of FMAGs. It provides the eligible State, Territory, or Tribe affected by a wildfire due to an FMAG declaration up to 15 percent of the FMAG national average. Applicants with enhanced mitigation plans may qualify for a higher percentage. Funding will be shared between a state and affected tribe acting as a recipient.
- Links on this page exit the site.

Funding Structure - What type of funding is it?

- Cost-share or match: FEMA funds up to 75 percent of the eligible costs of each project, while the state or grantee provides a 25 percent match. This match can be fashioned from a combination of cash and in-kind sources.
- Funding from other federal sources cannot be used for the 25 percent share, with two exceptions. Funding provided to states under the Community Development Block Grant (CDBG) program from the Department of Housing and Urban Development (HUD) can be used to meet the non-federal share requirement.
- State Revolving Loan Funds are also eligible for this cost match as long as the funds being used come from the funds that have been paid back into the program and not the initial grant. See the FEMA/EPA Memorandum of Understanding for more information.
- Under FMA, FEMA may contribute up to 75 percent federal cost share for properties that are NFIP-insured but do not meet the repetitive loss or severe repetitive loss definitions, up to 90 percent federal cost share for repetitive loss properties, and up to 100 percent federal cost share for severe repetitive loss properties.

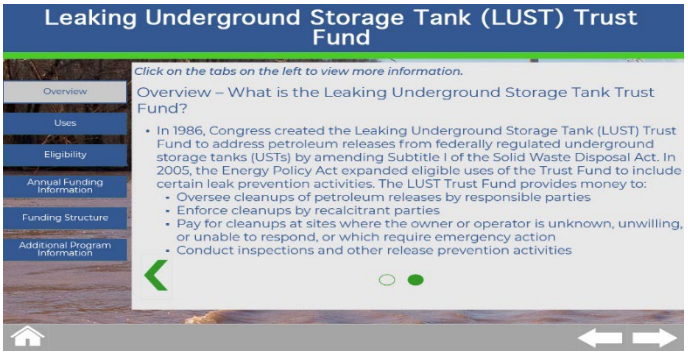
Limitations of Funding - What can funds not be used for?

- SWP activities must be linked to some other mitigation activity to justify need.
- Activities must not duplicate the flood prevention activities of other federal agencies and may not constitute a section of a larger flood control system.

Additional Program Information - Where can I find more information?

- Hazard Mitigation Assistance Unified Guidance
- FEMA Benefit-Cost Analysis
- Resource List for the BRIC Program
- For your local FEMA office
- Contact information for each State Hazard Mitigation Officer (SHMO)
- For more information, visit the program website
- Links on this page exit the site.

  Examples



Leaking Underground Storage Tank (LUST) Trust Fund

Click on the tabs on the left to view more information.

Overview

Uses

Eligibility

Annual Funding Information

Funding Structure

Additional Program Information

Overview – What is the Leaking Underground Storage Tank Trust Fund?

- Approximately 544,000 underground storage tanks (USTs) nationwide store petroleum or hazardous substances. The greatest potential threat from a leaking UST is contamination of groundwater, the source of drinking water for nearly half of all Americans. EPA, States, Territories, and Tribes work in partnership with industry to protect the environment and human health from potential releases.
- In 1986, Congress created the Leaking Underground Storage Tank (LUST) Trust Fund to address petroleum releases from federally regulated underground storage tanks (USTs) by amending Subtitle I of the Solid Waste Disposal Act. In 2005, the Energy Policy Act expanded eligible uses of the Trust Fund to include certain leak prevention activities. EPA allocates most of its Congressionally appropriated funding to state UST/LUST programs by formula.
- The LUST Trust Fund provides money to:
    - Oversee cleanups of petroleum releases from USTs by responsible parties
    - Enforce LUST cleanups by recalcitrant parties
    - Pay for cleanups at LUST sites where the owner or operator is unknown, unwilling, or unable to respond, or which require emergency action
    - Conduct UST inspections and other UST release prevention activities
- Environmental justice or other health and environment criteria may be considered when undertaking UST and LUST Program activities.

Uses – How can funds be used for activities that protect sources of drinking water?

- States and Tribes use LUST Trust Fund money to support underground storage tank cleanup and prevention programs, which help to protect source water.
- States and Tribes can use LUST Trust Fund cleanup money to:
    - Oversee cleanups at LUST sites and corrective actions by responsible parties; and

    - Clean up LUST sites that require prompt action to protect human health and the environment and/or where the responsible party is unknown, unwilling, or unable to perform the cleanup (approximately four percent of all cases).
- States use LUST Trust Fund prevention money to:
    - Inspect federally regulated UST facilities,
    - Conduct release prevention and compliance assurance activities at federally regulated UST facilities, and
    - Pay for enforcement activities related to release prevention at federally regulated UST facilities.
- Tribes use LUST Trust Fund prevention money to:
    - Promote release prevention by providing compliance assistance to UST owners and operators of federally regulated UST facilities.

Eligibility - Who can access funds?

- The LUST fund is not appropriated for the source water program. The funds are distributed to state and territorial UST programs annually via formula grants and the UST regulatory program activities performed by the states and territories (e.g., UST inspections and oversight of cleanups) help to protect source water.
- States, Territories, and Tribes currently receive LUST Funds to perform UST regulatory activities through assistance agreements with the federal government.
- For more information about assistance agreements for States and Tribes to clean up and prevent releases from USTs, see:
    - The Catalog of Federal Domestic Assistance: Leaking Underground Storage Tank Trust Fund Corrective Action Program (reference number 66.805)
    - The Catalog of Federal Domestic Assistance: Underground Storage Tank Prevention, Detection, and Compliance Program (reference number 66.804)
    - Links on this page exit the site.

Annual Funding Information - How much funding is available annually?

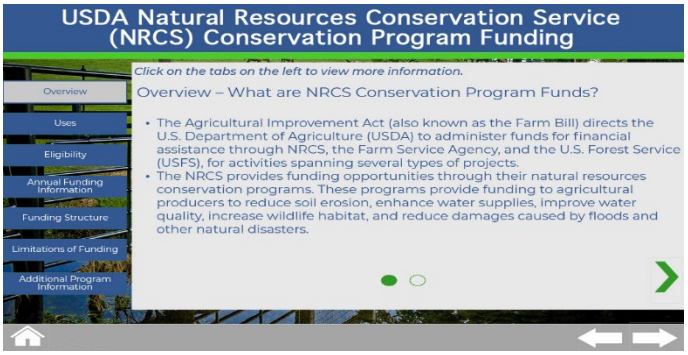
- In Fiscal Year 2021, Congress appropriated approximately $24 million from the LUST Trust Fund, $1.5 million of the State and Tribal Assistance Grants (STAG) for States and Tribes to prevent UST releases, and $55 million from the LUST Trust Fund to cleanup UST releases.

Funding Structure - What type of funding is it?

- The Trust Fund is financed by a 0.1 cent tax on each gallon of motor fuel sold nationwide.
- In Fiscal Year 2021, Congress appropriated approximately $24 million from the LUST Trust Fund, $1.5 million of the State and Tribal Assistance Grants (STAG) for states and tribes to prevent UST releases, and $55 million from the LUST Trust Fund to cleanup UST releases.

Additional Program Information - Where can I find more information?

- General information on the underground storage tank program can be found here.
- EPA has developed UST Finder, a web map application containing a comprehensive, state-sourced national map of underground storage tank (UST) and leaking UST (LUST) data (2018-2019). UST Finder contains information about proximity of UST facilities and LUST sites to surface and groundwater public drinking water protection areas; estimated number of private domestic wells and number of people living nearby; and flooding and wildfires. UST Finder can import additional data layers and export UST facility and LUST site information for use by other software programs.
- The UST facilities and releases layers are also available in the Drinking Water Mapping Application to Protect Source Water (DWMAPS) at both the point and county level.



USDA Natural Resources Conservation Service (NRCS) Conservation Program Funding

Click on the tabs on the left to view more information.

Overview

Uses

Eligibility

Annual Funding Information

Funding Structure

Limitations of Funding

Additional Program Information

Overview – What are NRCS Conservation Program Funds?

- The Agricultural Improvement Act (also known as the Farm Bill) directs the U.S. Department of Agriculture (USDA) to administer funds for financial assistance through NRCS, the Farm Service Agency, and the U.S. Forest Service (USFS), for activities spanning several types of projects.
- The NRCS provides funding opportunities through its natural resources conservation programs. These programs provide funding to agricultural producers to reduce soil erosion, enhance water supplies, improve water quality, increase wildlife habitat, and reduce damages caused by floods and other natural disasters.
- NRCS offers several technical and financial assistance programs to apply or enhance conservation on agricultural production lands. Through these programs, USDA prioritizes and approves contracts for financial assistance to help plan and implement conservation practices that address natural resource concerns on agricultural lands and non-industrial private forest land.

Uses – How can funds be used for source water activities?

- The 2018 Farm Bill guarantees that 10 percent of specific Conservation Program Funding is used for source water protection (SWP) projects and requires the Natural Resources Conservation Service (NRCS) to consult with drinking water utilities to identify priority source water protection areas. While not specifically called out in the Farm Bill, other source water protection stakeholders can also provide input into priority areas for investment of these funds.
- The NRCS provides many opportunities for stakeholder involvement and collaboration. Local agricultural associations, soil and water conservation districts, and other local and regional organizations, including drinking water utilities and state and regional source water programs, can often bring useful partnerships, expertise, and resources to these projects.
- In every state, the NRCS State Conservationist, in collaboration with a State Technical Committee, prioritizes the use of NRCS funds across numerous other programs. Stakeholders interested in SWP can contact their state conservationist and attend (and potentially join) their State Technical Committee to contribute to the decision-making process and recommend conservation practices, cost–share rates, and program policies that advance source water protection.

- Additionally, many of the financial assistance programs are partnership programs allowing stakeholders to work directly with NRCS to implement SWP projects. A majority of NRCS funding goes to conservation practices implemented by agricultural producers, but partnership programs allow stakeholders to increase their involvement in the decision-making process. For example, the Regional Conservation Partnership Program (RCPP), Conservation Innovation Grants (CIG), and the National Water Quality Initiative (NWQI) delivered through the Environmental Quality Incentives Program (EQIP) are partnership-driven and can benefit source water protection as a primary or secondary objective.

Source Water Protection Activities NRCS Funding can be used for

- Example source water protection activities include:
    - Source water protection plan development
        - While some conservation programs have some, but limited, planning support through technical assistance funding, it is best to use other funding sources for planning before considering NRCS funds for implementation.
    - Watershed management plan development
    - Implement agricultural best management practices (e.g., for sediment control, fertilizer & pesticide application, irrigation)
    - Fencing upstream of intake or around wellhead Protection Area
    - Establishment of buffer zones or setbacks from wellheads or surface water sources through easements, land acquisition, or other voluntary land use controls
    - Vegetative buffers upstream of intake
    - Abandoned well closure
    - Implement sustainable forest management practices to protect source water resources (e.g., prescribed harvesting, measures to reduce wildfire risk)

Eligibility - Who can access funds?

- NRCS offers voluntary programs to eligible agricultural producers for financial and technical assistance to help manage natural resources on eligible lands in a sustainable manner. Eligible producers must have an interest in the agriculture products or commodities produced on eligible lands and must have control of the land during the contract period. Eligible land includes:
    - Cropland and hayland
    - Rangeland
    - Pastureland
    - Non-industrial private forestland
    - Other farm or ranch lands
    - Environmentally sensitive areas
- Producers with average Adjusted Gross Income (AGI) in excess of $900,000 are not eligible for assistance.

Annual Funding Information - How much funding is available annually?

- NRCS delivers about $4 billion a year to help producers implement conservation practices on their working lands and provide them with technical assistance.
- The 2018 Farm Bill requires at least 10 percent of mandatory program funding nationally be targeted towards source water protection. Not all conservation programs are subject to that 10 percent requirement, but it represents approximately $350 million towards source water protection projects annually through 2023.

Funding Structure - What type of funding is it?

- Financial and technical assistance resources go directly to the agricultural producers and/or landowners to implement best management practices (or land treatments) to address natural resource concerns and deliver environmental benefits on their private working lands. NRCS provides payments for specified practices. The availability and amount of financial assistance can vary between states.
- Payments are based on regionally specific scenarios and generally include the estimated cost incurred for planning, design, materials, equipment used for installation, installation and labor costs, management and training costs, as well as the estimated income foregone by the producer associated with practice implementation.
- Some practices may be paid at a higher incentive rate based on the producer (if they are considered an underrepresented group) or if the practice is considered “high priority” for certain purposes or areas.
- State Technical Committees and local working groups make program and policy recommendations to prioritize projects based on size, scope, and required resources.
- NRCS State offices, in collaboration with source water protection stakeholders, identify priority source water protection areas (SWPA) and may offer increased incentives and higher payment rates for practices that address source water quality and/or water quantity. States may provide increased payment rates for high-priority source water practices.
- Some NRCS funding opportunities may require matching support, which may be cash or in-kind.

Limitations of Funding - What can funds not be used for?

- Within NRCS, there are a diverse array of assistance programs that help farmers, ranchers, and landowners respond to natural resource conservation concerns. Many of these NRCS conservation programs share goals with source water protection programs, even if the conservation programs have not specifically targeted protecting drinking water.
- Each of the programs have unique requirements and funding structures and limitations. Working with the State Technical Committee will provide information, analysis, and recommendations on conservation priorities and criteria for conservation activities and programs, including application and funding criteria, recommended practices, and program payment percentages.

Additional Program Information - Where can I find more information?

- More information on NRCS programs can be found here.
- To find your state conservationists, check out this contact us page.
- Check out this Collaboration Toolkit on the Source Water Collaborative website for additional information.
- Links on this page exit the site.

Examples

Wetland Program Development Grants

Click on the tabs on the left to view more information.

Overview

Uses

Eligibility

Biennial Funding Information

Funding Structure

Limitations of Funding

Additional Program Information

Overview – What are Wetland Program Development Grants?

- Wetland Program Development Grants (WPDGs) provide eligible applicants an opportunity to conduct projects that promote the coordination and acceleration of research, investigations, experiments, training, demonstrations, surveys, and studies relating to the causes, effects, extent, prevention, reduction, and elimination of water pollution by developing or refining state, tribal, or local government wetland programs.
- These programs are meant to build the capacity of state/tribal/local governments to increase the quantity and quality of wetlands in the United States by conserving and restoring wetland acreage and improving wetland condition.
- All WPDGs projects must include, impact, or affect wetland resources.

Uses - How can funds be used for source water activities?

- If a source water protection area includes wetlands, a WPDG is a potential opportunity to fund assessment and protection projects. The grants assist state, tribal, local government agencies, and interstate/intertribal entities in building programs to protect, manage, and restore wetlands.
- With the work of many states and tribes, the EPA has distilled a set of core elements, actions, and activities that together comprise a comprehensive wetland program:
    - Monitoring and assessment.
    - Voluntary restoration and protection.
    - Regulatory approaches including CWA 401 certification.
    - Wetland-specific water quality standards.
- To be eligible, programs must use one or more of the four core elements listed above.
- Resources on these core elements are Core Elements of an Effective State and Tribal Wetland Program, also called the "Core Elements Framework," and Grant Category Definitions Grouped by Core Element.

Source Water Protection Activities WPDG can be used for

- Example source water protection activities include:
    - Source water protection plan development
    - Watershed management plan development
    - Development of climate resiliency plans
    - Implement sustainable forest management practices to protect source water resources
    - Data collection on land use threats and potential contaminant sources in SWPA
    - Development of data layers
    - Installation of ambient water quality monitoring stations upstream of intake
    - Development of land use ordinances or zoning regulations in SWPA (e.g., restriction of storage and use of hazardous materials, establishment of buffer zones/setbacks)

Eligibility – Who can access funds?

- States, tribes, local governments, interstate associations, and intertribal consortia are eligible to apply for the Regional WPDG Request for Applications (RFAs).
- Nonprofits, interstate associations, and intertribal consortia are eligible to apply for the National WPDG RFAs.
- A tribal set-aside RFA is open to tribes and intertribal consortia.

Biennial Funding Information – How much funding is available biennially?

- Starting in FY21, all WPDG RFAs will be held on a biennial basis.
- All Regional RFAs will be held on odd years and Tribal and National RFAs will be held on even years.
- RFAs are typically announced in the late winter to early spring time.
- For more information, see Frequently Asked Questions about the Biennial Grant Cycle FY19 (PDF).

Funding Structure - What type of funding is it?

- WPDGs are one- to four-year grants or cooperative agreements. The average agreement is two years.
- The WPDG program requires grantees to contribute a minimum non-federal cost share/match of 25 percent of the total project costs. The cost share/match may be provided in cash or can come from in-kind contributions. Match can be lowered for tribes that place their award into a Performance Partnership Grant (PPG).

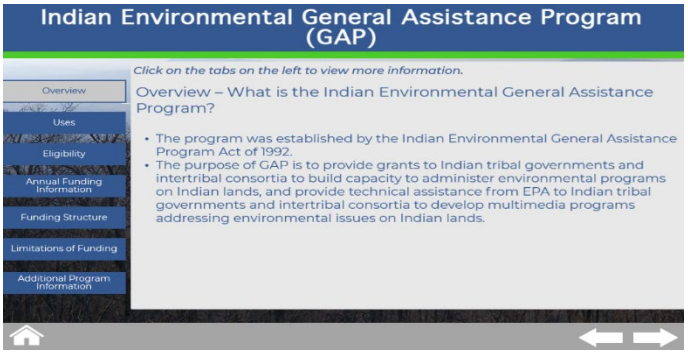
Limitations of Funding – What can funds not be used for?

- Please check out the RFAs posted on EPA's website for a full list of funding limitations.
- Funds cannot be used to implement day to day wetland programs.
- Funds cannot be used for activities required by a CWA 404, 402, or another Federal permit.

Additional Program Information – Where can I find more information?

- For more information, see the following webpages:
    - Economic Benefits of Wetlands (PDF)
    - Grant Information on the Core Elements of a Wetland Program
    - General FAQs about Wetland Program Development Grants (PDF)
    - Wetland Program Development Grants and EPA Wetlands Grant Coordinators
- Contact information can be found at Wetland Program Development Grants and EPA Wetlands Grant Coordinators.

Examples



Indian Environmental General Assistance Program (GAP)

Click on the tabs on the left to view more information.

Overview

Uses

Eligibility

Annual Funding Information

Funding Structure

Limitations of Funding

Additional Program Information

Overview – What is the Indian Environmental General Assistance Program?

- The program was established by the Indian Environmental General Assistance Program Act of 1992.
- The purpose of GAP is to provide grants to Indian tribal governments and intertribal consortia to build capacity to administer environmental programs on Indian lands, and provide technical assistance from EPA to Indian tribal governments and intertribal consortia to develop multimedia programs addressing environmental issues on Indian lands.

Uses – How can funds be used for source water activities?

- GAP funding can be used to assist in administering environmental protection programs on Indian lands. Tribes may use GAP funds to develop their own water quality management programs consistent with their own priorities and authorities.
- GAP funding can be particularly useful in gaining understanding of the nature and extent of source water issues that a tribe may need to address. It is also useful for determining and developing the necessary personnel skill sets, as well as institutional structure needed to effectively protect and manage a tribe's source waters. Specifically, GAP funding can be used for activities such as delineating a source water protection area, conducting a source water assessment, and developing a source water protection plan and/or source water protection program.

  Source Water Protection Activities GAP can be used for

- Example source water protection activities include:
    - Development and/or update of source water assessment
        - The activity "Source water assessment(s) update" is fundable with GAP funds if adequate justification is provided showing that the update is necessary for planning, developing, or establishing a source water protection program. Project Officers should ask questions such as: Are there new pollution sources that were not previously identified? Have environmental, land use, or institutional conditions changed significantly since the prior assessment was completed, thereby justifying the need for a new assessment?

- Communication of SWA results (e.g., outreach materials, community meetings)
- Source water protection plan development
- Data collection on land use threats and potential contaminant sources in SWPA
- Evaluation/reevaluation of SWPA delineations
- Development of data layers
- Hazardous waste materials collection
- Education of homeowners in SWPA on septic system maintenance
- Development of strategies and procedures for failing septic systems in SWPA
- Development of contingency plans for emergencies
- Conduct training, workshops, outreach, and education

Eligibility - Who can access funds?

- An Indian tribal government - An Indian tribal government is any tribe, band, nation, or other organized group or community, including any Alaska Native village or regional or village corporation (as defined in or established pursuant to the Alaska Native Claims Settlement Act, 43 U.S.C. 1601, et seq.), which is recognized by the U.S. Department of the Interior as eligible for the special services provided by the United States to Indians because of their status as Indians. An intertribal consortium is a partnership between two or more Indian tribal governments authorized by the governing bodies of those tribes to apply for and receive assistance under this program.
- An intertribal consortium - An intertribal consortium is eligible to receive a GAP grant if the consortium demonstrates that:
  - A majority of its members meets the eligibility requirements for GAP grants.
  - All members that meet the eligibility requirements authorize the consortium to apply for and receive the grant.
  - Only members that meet the eligibility requirements will benefit directly from the grant project and the consortium agrees to a grant condition to that effect.

Annual Funding Information – How much funding is available annually?

- Since GAP was established in 1992, Congress has appropriated annual national program funding.
- In Fiscal Year 2019 (FY19), the total appropriation for the GAP program was $63 million. For information on historical funding levels, visit this link.

Funding Structure – What type of funding is it?

- The American Indian Environmental Office distributes funding to each EPA regional office with federally recognized Tribes.
- The appropriate EPA regional office reviews applications for funding. If applications are approved, the EPA Regional Administrator or the delegated official awards financial assistance.

Limitations of Funding - What can funds not be used for?

- Generally, GAP funding cannot be used for:
  - **Implementation** of source water protection programs. Funding is intended to support planning initiatives, activities, and purposes.
  - **Revision of an existing plan or assessment**, unless a tribal program intends to significantly expand a program to address new environmental issues, creating a need for new or expanded capacity, including new plans and assessments.

  - **Grantees should discuss these circumstances with their project officers**, as the unique circumstances surrounding a proposed activity help determine the line between program implementation and planning, developing and establishing program capacity.

- Project or program eligibility is determined on a case by case basis.
- The determination as to whether a particular activity is eligible for GAP funding will often depend on the specific facts.
- For example, not all planning activities are eligible under GAP; they are only eligible if they are for the purpose of planning, developing, or establishing a source water assessment or protection plan. The determination of eligibility will be made by the respective Regional EPA Tribal program.

Additional Program Information - Where can I find more information?

- The current guidance on the GAP assistance awards is available here.
- General information on the GAP Program is available here along with points of contact in the GAP Program under the “Find GAP information in your Region” section.

  Examples

USFS Landscape Scale Restoration Program

Click on the tabs on the left to view more information.

Overview

Uses

Eligibility

Annual Funding Information

Funding Structure

Limitations of Funding

Additional Program Information

Overview – What is the Landscape Scale Restoration Program?

- The Landscape Scale Restoration (LSR) Program is a Forest Service State and Private Forestry competitive grant program that promotes collaborative, science-based restoration of priority forest landscapes and furthers priorities identified in State Forest Action Plans.
- Desired outcomes of the program include reduced wildfire risk; improved fish and wildlife habitats; maintained or improved water quality and watershed function; mitigated invasive species, insect infestation, and disease; and improved forest ecosystems.
- Links on this page exit the site.

Uses – How can funds be used for source water activities?

- LSR funding can be used for watershed protection and restoration activities, which may include maintaining or improving water quality and watershed functions.
- The use of LSR funds is based on specific authorities included in the Cooperative Forestry Assistance Act of 1978 as amended and include the following State and Private Forestry program authorities:
    - Forest Stewardship, Rural Forestry Assistance
    - Urban and Community Forestry
    - Forest Health Management-Cooperative Lands
    - State Fire Assistance
- Funds can be used for silvicultural activities but not construction/capital improvements including culvert installation or replacement.
- An example of an acceptable practice might be the installation of riparian forest buffers to stabilize stream banks, reduce runoff, and improve water quality and fish habitat.

Source Water Protection Activities USFS LSR can be used for

- Example source water protection activities include:

- Vegetative buffers upstream of intake
- Implement sustainable forest management practices to protect source water resources (e.g., prescribed harvesting, measures to reduce wildfire risk)

Eligibility - Who can access funds?

- State and territorial forestry agencies or an equivalent state agency, units of local government, tribes, 501 (c)(3) non-profit organizations, and universities are eligible to submit applications for the LSR Program. For-profit entities are not eligible to apply.
- LSR projects must focus on nonindustrial private forest land, or state forest land that is also rural. Rural is defined as any area other than an urbanized area. An urbanized area is a city or town that has a population of greater than 50,000 according to the latest census. Nonindustrial forest land is land that is rural, has existing tree cover, or is suitable for growing trees, and is owned by any private individual, group, association, corporation, tribe, or other private legal entity.
- Proposals must advance priorities identified in a State Forest Action Plan or in an equivalent restoration strategy that:
  - is complete or substantially complete
  - is for a multi-year period
  - covers non-industrial private forest land or state forest land
  - is accessible by wood processing infrastructure
  - is based on the best available science

Annual Funding Information – How much funding is available annually?

- While the funding level may fluctuate from year to year, for planning purposes, the federal funding for LSR projects has been approximately $14 million annually.
- Because LSR is administered in collaboration with the three regional state forestry organizations in the South, West, and Midwest/Northeast, it is important to read the RFA/RFP for each region when considering an application as there are some regional differences in the available funding for projects.
- Note: In addition to differences in available funding, there are differences in the application process and timelines.

Funding Structure – What type of funding is it?

- LSR is a competitive federal grant program. These federal grant funds require a 1:1 match from non-federal sources. Territorial, flag islands, and freely associated states must provide a 1:1 match on funds received in excess of $200,000.
- The match must be met by eligible and allowable costs and is subject to match provisions in grant regulations (Code of Federal Regulations Title 2 Part 200.306 and Subpart E for Cost Principles). Match must meet all the same requirements as the federal share (e.g., match cannot be used for construction, research, and other ineligible activities) and be documented sufficiently to support financial tracking and accountability.
- Cash and in-kind contributions for project elements that do not fall within State and Private Forestry (S&PF) organization program authorities included in the LSR competitive allocation may not be used as match. Other “nonmatch” leveraged funds do not need to meet the same standards.
- Links on this page exit the site.

Limitations of Funding - What can funds not be used for?

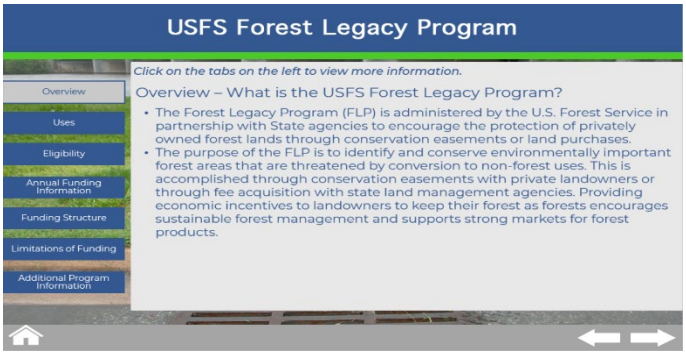
- Research is not eligible through the LSR Program.
- Construction is not an allowable cost and projects that involve requests for funds and/or provide match for construction of new buildings or roads are not eligible.
- Implementation of LSR projects can be extended by 1-3 years; however, projects should be fully funded in year one.

- Cost-share, reimbursement, and other types of payment directly to private landowners are not allowed.

Additional Program Information - Where can I find more information?

- National Guidance for FY 2021 can be found here. LSR proposal submissions are administered by three regional processes. Please visit the following websites for specific regional information about the application process, including the annual request for applications:
    - Northeast/Midwest
    - West
    - South
    - Links on this page exit the site.

  Examples



USFS Forest Legacy Program

Click on the tabs on the left to view more information.

Overview

Uses

Eligibility

Annual Funding Information

Funding Structure

Limitations of Funding

Additional Program Information

Overview – What is the Forest Legacy Program?

- The Forest Legacy Program (FLP) is administered by the U.S. Forest Service in partnership with State agencies to encourage the protection of privately owned forest lands through conservation easements or land purchases.
- The purpose of the FLP is to identify and conserve environmentally important forest areas that are threatened by conversion to non-forest uses. This is accomplished through conservation easements with private landowners or through fee acquisition with state land management agencies. Providing economic incentives to landowners to keep their forest as forests encourages sustainable forest management and supports strong markets for forest products.

Uses – How can funds be used for source water activities?

- FLP funding is used to identify and protect environmentally important private forest lands that are threatened by conversion to non-forest uses and provide the opportunity for continuation of forest uses and services. This can include the conservation of forested areas within source water protection areas. Further guidance on how the FLP selects projects can be found in the Forest Legacy Program Project Scoring Guidance Document.
- The FLP purchases forested properties, or accepts donations of forested properties, from private landowners. These properties are acquired by State or local governments and can become new State parks, State forests, wildlife management areas, and other public land. Landowner participation in the FLP is entirely voluntary.
- The FLP also acquires conservation easements that keep forested properties in private ownership but permanently limit property interests and uses of forest land to protect specific conservation values.
- FLP funding provides many benefits to source water by protecting forests from conversion to other land use types. Forests support important watershed functions that contribute to clean and abundant drinking water, for example:
- Forested lands act as natural filters to reduce soil erosion and contaminant export to surface waters and aquifers.
- Forests also play a role in maintaining natural flow patterns in streams and rivers and allow rainfall to infiltrate into the soil to recharge groundwater supplies.
- Links on this page exit the site

  Source Water Protection Activities USFS Forest Legacy Program can be used for

- Example source water protection activities may include:
    - Establishment of buffer zones or setbacks from wellheads or surface water sources through easements, land acquisition, or other voluntary land use controls
    - Development of climate resiliency plans
    - Vegetative buffers upstream of intake
    - Purchase of land or conservation easements within wellhead/SWPA
    - Implementation of climate resiliency plan actions to protect source water quality or quantity

Eligibility - Who can access funds?

- Landowners may participate in the FLP by either selling their property outright or by retaining ownership and selling only a portion of the property's development rights through permanent easement; both are held by state agencies or another unit of government.
- Projects are selected for funding through a competitive process—first at the State level and then at the national level.
- Completion of a State Forest Action Plan and associated Forest Legacy Assessment of Need is required to obtain both Forest Legacy Program project and administrative funds.
- Eligibility is determined by both the Federal requirements and any requirements identified in the State Forest Action Plan/Assessment of Need or other pertinent State law. A proposed FLP tract meets the minimum eligibility if:
    - It is within, or partially within, a designated Forest Legacy Area.
    - It has a minimum of 75 percent forestland or a documented plan that includes sufficient landowner capacity to reforest to at least 75 percent forestland.
    - It can be managed consistent with the purpose for which it was acquired by FLP.
    - The landowner is willing to sell or donate the interest in perpetuity; and
    - The landowner acknowledges that the conservation easement will be held by a government entity if Federal funds are used for the acquisition.
- Federal- or State-recognized tribes can participate in the FLP in partnership with the State Lead Agency under either the State grant or Federal acquisition option. Only nontrust tribal allotment lands can qualify for protection using FLP funds. The FLP funds cannot be granted directly to a Tribal government but may be granted to the State Lead Agency in support of a project as proposed by a Tribal entity. In accordance with limitations in the FLP statute, FLP acquisition funds can only be granted to a State Lead Agency and the purchased land, or interests in land, must be held by a unit of State government.

Annual Funding Information – How much funding is available annually?

- The FLP is funded through the Land and Water Conservation Fund. These funds are generated through royalties from offshore drilling activities.
- Congress determines the FLP budget as part of the annual Forest Service appropriation.
- Between 2017-2022 fiscal years, annual funding has ranged from about $60 million to $90 million.

Funding Structure – What type of funding is it?

- The FLP is implemented as a grant program with designated State agencies. States use FLP funds to purchase lands or to secure conservation easements from private landowners. Those state agencies legally hold the interests in the land acquired with FLP funds.
- The FLP operates on a willing buyer willing seller basis.

Limitations of Funding - What can funds not be used for?

- Project grants provide funds that must be used to purchase lands, acquire conservation easements, and pay for acquisition-related expenses.
- These funds cannot be used for:
    - general expenses of the FLP,
    - indirect costs, and
    - other project costs outside the project area of the grant award.
- In accordance with limitations in the FLP statute, FLP acquisition funds can only be granted to a State Lead Agency and the purchased land, or interests in land, must be held by a unit of State government.

Additional Program Information - Where can I find more information?

- The FLP program website can be found here.
- Information on the FLP program, including Program Manager contact information, can be found in the Program Grant Implementation Document, which is available here.
- Links on this page exit the site.
  Examples

The Joint Chiefs' Landscape Restoration Partnership

Click on the tabs on the left to view more information.

Overview

Uses

Eligibility

Annual Funding Information

Funding Structure

Limitations of Funding

Additional Program Information

Overview – What is the Joint Chiefs' Landscape Restoration Partnership?

- The Joint Chiefs' Landscape Restoration Partnership is a joint effort between the US Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) and the United States Forest Service (USFS). The program supports collaboration between NRCS, Forest Service, and local partners to undertake landscape-scale conservation and restoration projects that improve forest health and resiliency on public and private lands.
- Over a three-year period, projects help reduce wildfire threats, protect water quality and supply, and improve wildlife habitat for at-risk species where public and private lands connect.

Uses – How can funds be used for source water activities?

- A Joint Chiefs' Landscape Restoration Partnership project must meet one or more of the three objectives below:
    - Reduce wildfire threats
    - Protect water quality and supply
    - Improve wildlife habitat for at risk-species
- Activities that may be used to support these three objectives include:
    - Conservation practices
    - Landscape restoration
    - Enhanced forest management such as thinning, hazardous fuel treatments, fire breaks, or other activities
    - Education and outreach to local communities
    - Development of conservation or forest management plans for private landowners

Source Water Protection Activities the Joint Chiefs' Landscape Restoration Partnership can be used for

- Example source water protection activities may include:
    - Implement conservation practices (e.g. for sediment control)

- Fencing upstream of intake or around wellhead protection area
- Establishment of buffer zones or setbacks from wellheads or surface water sources
- Abandoned well closure
- Implement sustainable forest management practices to protect source water resources (e.g., prescribed harvesting, measures to reduce wildfire risk)
- Vegetative buffers upstream of intake
- Implementation of climate resiliency plan actions to protect source water quality or quantity
- Conduct training, workshop, outreach, and education

Eligibility - Who can access funds?

- Joint Chiefs' project proposals are developed through a collaborative process between NRCS, Forest Service, and partners. Interested landowners should contact their local NRCS and Forest Service office.
- Past partners have included county, state, non-governmental, tribal, utility, or private individual stakeholders including agricultural producers and forest landowners. The collaboration process and partnerships will depend on the specific community needs of each project.
- Regional Foresters and State Conservationists jointly submit proposals. NRCS and Forest Service national offices will evaluate the proposals and will announce the selected projects.

Annual Funding Information – How much funding is available annually?

- For fiscal years 2022 and 2023, Congress authorized up to $90M in funding to be appropriated. For FY22, over$48M was invested.
- USDA has invested more than $349M across 110 projects in nine years through the Joint Chiefs'.
- Funding solicitations are typically released annually in the spring. Information can be found here.

Funding Structure – What type of funding is it?

- Proposals are reviewed and vetted at multiple levels at NRCS and USFS based on local, state, Tribal and regional priorities.
- Projects are funded for up to three years and can provide private landowners with conservation resources that help them complete restoration efforts on their land for healthier and more resilient forest ecosystems. For more information on how Joint Chiefs' works with private landowners click here.

Limitations of Funding - What can funds not be used for?

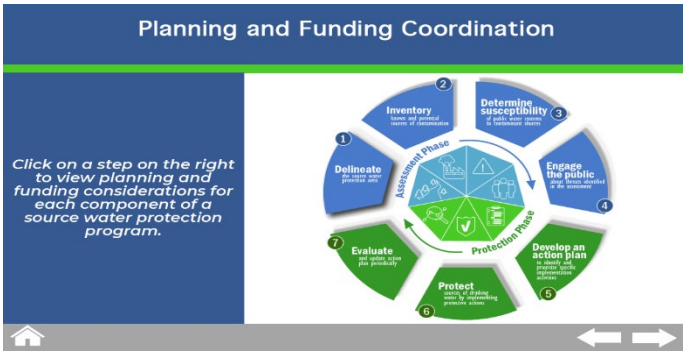
- Activities may not be carried out in:
  - A wilderness area or designated wilderness study area.
  - An inventoried roadless area.
  - On any Federal land on which, by Act of Congress or Presidential proclamation, the removal of vegetation is restricted or prohibited.
  - An area in which the eligible activity would be inconsistent with the applicable land and resource management plan.

Additional Program Information - Where can I find more information?

- General information, program contact information, and past awards can be found here.
- Legislation establishing the program can be found here.
- Links on this page exit the site.

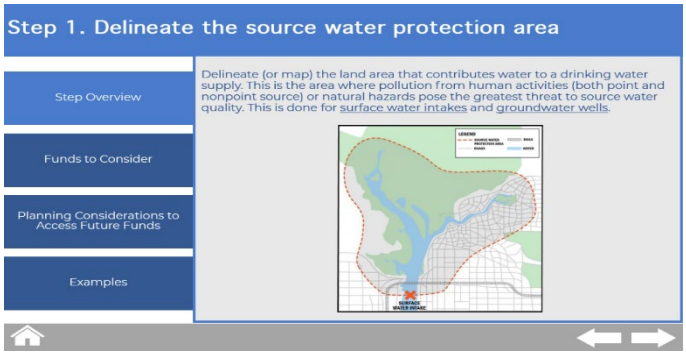
Examples

Planning and Funding Coordination



Planning and Funding Coordination

Click on a step on the right to view planning and funding considerations for each component of a source water protection program.



Step 1. Delineate the source water protection area

Step Overview

Delineate (or map) the land area that contributes water to a drinking water supply. This is the area where pollution from human activities (both point and nonpoint source) or natural hazards pose the greatest threat to source water quality. This is done for surface water intakes and groundwater wells.

Surface water intakes: Watershed boundaries are drawn from a topographic map on land area upstream of a water system's intake.

Groundwater wells: A boundary or radius is drawn around each well using information about the flow of underground water.

Funds to Consider

The following sources are options to help fund activities in this step, within the eligibilities of the program. Find specifics for each fund in the Funding Sources section. Click on a funding source below for more information on that source.

DWSRF: The Drinking Water State Revolving Fund is a federal-state partnership that provides financial support to water systems and state drinking water programs.

106: The Clean Water Act Section 106 Program Water Pollution Control Grants provide funding to build and sustain effective water quality programs for water pollution prevention and control programs and activities.

GAP: The Indian Environmental General Assistance Program provides grants to Tribes for planning, developing, and establishing environmental protection programs.

319: Section 319 of the Clean Water Act provides grants to States, Territories, and Tribes to support nonpoint source management programs. The planning activity is eligible, if within the scope of a watershed planning project.

Planning Considerations to Access Future Funds

Consider these recommendations for how you can coordinate with other programs and plan for funding future phases of your source water protection program.

DWSRF

NPS

GAP

WPDG

FEMA

DWSRF Set-Asides

DWSRF set-aside funds can be spent for activities within delineated source water protection areas or for statewide program activities.

Nonpoint Source Management Grants - Clean Water Act Section 319 Program

For a Section 319 grant, the watershed-based plan should include a description of the critical source areas in which measures will be needed to implement the plan (Element C). It may be helpful to identify these areas during the delineation process.

Indian Environmental General Assistance Programs

As part of the Safe Drinking Water Act section of GAP funding, eligibility includes the delineation of source water protection areas. Consider identifying the action of delineation of source water protection areas as a capacity indicator in your GAP work plan. The ability for a work plan to showcase capacity development indicators is a critical element of the application to GAP.

Wetland Program Development Grant

Wetlands can play an important role in source water supply and source water quality. Include wetlands within your source water protection area delineation as appropriate.

FEMA Hazard Mitigation Grants

For FEMA Hazard Mitigation Assistance Grants, the Hazard Mitigation Assistance Plan must include the defined planning area for hazard identification and risk assessments. This allows FEMA to understand natural hazards across the state and identify the locations that have been or may be most adversely affected. Watersheds critical to source water protection could be identified here.

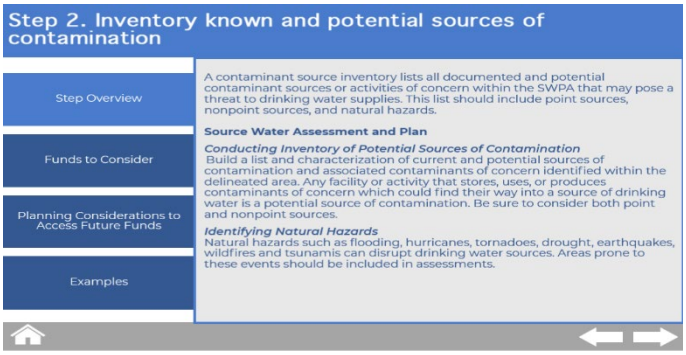
Examples

Examples of funded activities:

Click on the button below to read more examples

- The Nebraska DWSRF made a $1 million loan (from DWSRF 15% set-aside funds) to the City of Syracuse in 2019 for a land purchase of 637 acres from a group of private owners to protect the City's wells (built in the 1950s) from nitrate contamination. The loan was paired with the development of a Drinking Water Management Protection Plan for the City which delineated the 50-year wellhead protection area.
- In 2013, the Truckee Meadows Water Authority (TMWA), the primary water service provider for the Cities of Reno and Sparks and Washoe County in Nevada, partnered with regional public and private stakeholders in the development of the One Truckee River Management Plan using a "one water" approach. The City of Reno now requires building permit applicants to contact TMWA to determine if the proposed development could adversely impact delineated source water protection areas.

Explore More Examples



Step 2. Inventory known and potential sources of contamination

Step Overview

A contaminant source inventory lists all documented and potential contaminant sources or activities of concern within the source water protection area that may pose a threat to drinking water supplies. This list should include point sources, nonpoint sources, and natural hazards.

Source Water Assessment and Plan

Conducting Inventory of Potential Sources of Contamination

Build a list and characterization of current and potential sources of contamination and associated contaminants of concern identified within the delineated area. Any facility or activity that stores, uses, or produces contaminants of concern which could find their way into a source of drinking water is a potential source of contamination. Be sure to consider both point and nonpoint sources.

Identifying Natural Hazards

Natural hazards such as flooding, hurricanes, tornadoes, drought, earthquakes, wildfires, and tsunamis can disrupt drinking water sources. Areas prone to these events should be included in assessments.

Funds to Consider

The following sources are options to help fund activities in this step, within the eligibilities of the program. Find specifics for each fund in the Funding Sources section. Click on a funding source below for more information on that source.

DWSRF: The Drinking Water State Revolving Fund is a federal-state partnership that provides financial support to water systems and state drinking water programs.

319: Section 319 of the Clean Water Act provides grants to States, Territories, and Tribes to support nonpoint source management programs. The planning activity is eligible, if within the scope of a watershed planning project.

106: The Clean Water Act Section 106 Program Water Pollution Control Grants provide funding to build and sustain effective water quality programs for water pollution prevention and control programs and activities.

The following sources are options to help fund activities in this step, within the eligibilities of the program. Find specifics for each fund in the Funding Sources section. Click on a funding source below for more information on that source.

FEMA: The FEMA Hazard Mitigation Assistance Grants provide funding to State, local, Tribal, and Territorial governments for eligible mitigation measures that reduce disaster losses and protect life and property from future disasters.

WPDG: Wetland Program Development Grants provide funding to projects that promote the coordination and acceleration of research, investigations, experiments, training, demonstrations, surveys, and studies relating to the causes, effects, extent, prevention, reduction, and elimination of water pollution.

GAP: The Indian Environmental General Assistance Program provides grants to Tribes for planning, developing, and establishing environmental protection programs.

Planning Considerations to Access Future Funds

Consider these recommendations for how you can coordinate with other programs and plan for funding future phases of your source water protection program.

NPS

CWSRF

LUST

NRCS

WPDG

FEMA

OSG

Nonpoint Source Management Grants - Clean Water Act Section 319 Program

If you are considering coordination with the Section 319 nonpoint source program, Element A of a Watershed-Based Plan aligns well with this step. Element A includes: identification of causes of impairment and pollutant sources, or groups of similar sources, that need to be controlled to achieve needed load reductions, and any other goals identified in the watershed plan. This element also includes identification of critical source areas.

Clean Water State Revolving Fund

The Clean Water State Revolving Fund has a number of program eligibilities related to source water protection. During your inventory, it may be helpful to identify those potential sources of contamination that align with CWSRF eligibilities (e.g., decentralized sewage systems/septic systems) and any water quality benefits of potential CWSRF projects.

Leaking Underground Storage Tank Trust Fund

Leaking underground storage tanks may be a potential source of contamination within a source water protection area. Consider this potential source and if underground storage tanks (USTs) or LUSTs are identified as potential sources of contamination (PSOCs), coordinate with the UST program in your State or Tribe.

NRCS Conservation Program Funding

If there is agricultural activity within your source water protection area, consider the nonpoint source potential sources of contamination that may impact the quality and quantity of your drinking water source. The Natural Resources Conservation Service works with agricultural producers to implement agricultural treatments that address resource concerns (e.g., water quality). For organizations interested in engaging with NRCS, there are four key individuals to contact: 1) State Conservationist, 2) Assistant State Conservationist for Programs and/or the Assistant State Conservationist for Partnerships, 3) Assistant State Conservationists for Field Operations, and 4) District Conservationist. NRCS prioritizes projects and targeted efforts where conservation can support the viability and productivity of America’s working lands – farms, ranches, and forests – to protect water quality. NRCS programs do not fund stormwater runoff projects.

Wetland Program Development Grants

If a source water protection area includes wetlands, a WPDG is a potential opportunity to fund assessment and protection projects. The grants assist State, Tribal, local government agencies, and interstate/intertribal entities in building programs to protect, manage, and restore wetlands. With the work of many States and Tribes, EPA has distilled a set of core elements, actions, and activities that together comprise a comprehensive wetland program: monitoring and assessment; voluntary restoration and protection; regulatory approaches including CWA 401 certification; and wetland-specific water quality standards. Applicants can include one or more of the four core elements in their grant proposal.

FEMA Hazard Mitigation Assistance Grants

Identifying Natural Hazards
Hazard mitigation plans require applicants to document any potential hazards or risks. This information should also be included in a source water assessment, as appropriate.

Conducting Inventory of Potential Sources of Contamination

In a hazard mitigation plan, the State, local, Tribal, or Territory government must identify the characteristics and potential consequences of hazards (e.g., flooding erosion, drought, wildfire, etc.) to assets, including source water. This information can also be included in a source water assessment. Identifying these potential hazards will facilitate planning teams in funding protective actions as part of Step 6.

Sewer Overflow and Stormwater Reuse Municipal Grants Program

Sanitary sewer overflows (SSO) or combined sewer overflows (CSO) may be a potential source of contamination within a source water protection area. If a SSO or CSO is a potential source of contamination, coordinate with your OSG Program to include protection of source water in sewer overflow control plans.

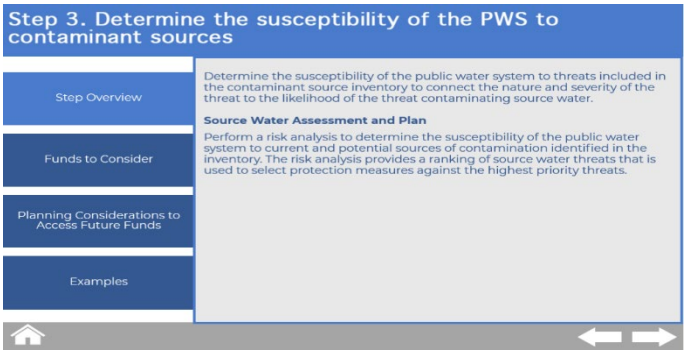
Examples

Examples of funded activities:

Click on the button below to read more examples

- The Delaware Department of Natural Resources and Environmental Control (DNREC) is in the process of updating the state's Source Water Assessment Plan (SWAP) (from DWSRF 15% Local Assistance and State Program set-aside). Following an evaluation of their SWAP (see example under Step 7: Evaluate), last revised in 1999, DNREC identified opportunities to improve their source water assessment process including identifying and developing an inventory of potential contaminant sources.

Explore More Examples



Step 3. Determine the susceptibility of the PWS to contaminant sources

Step Overview

Determine the susceptibility of the public water system to threats included in the contaminant source inventory to connect the nature and severity of the threat to the likelihood of the threat contaminating source water.

Source Water Assessment and Plan

Perform a risk analysis to determine the susceptibility of the public water system to current and potential sources of contamination identified in the inventory. The risk analysis provides a ranking of source water threats that is used to select protection measures against the highest priority threats.

Funds to Consider

The following sources are options to help fund activities in this step, within the eligibilities of the program. Find specifics for each fund in the Funding Sources section. Click on a funding source below for more information on that source.

DWSRF: The Drinking Water State Revolving Fund is a federal-state partnership that provides financial support to water systems and state drinking water programs.

106: The Clean Water Act Section 106 Program Water Pollution Control Grants provide funding to build and sustain effective water quality programs for water pollution prevention and control programs and activities.

GAP: The Indian Environmental General Assistance Program provides grants to Tribes for planning, developing, and establishing environmental protection programs.

319: Section 319 of the Clean Water Act provides grants to States, Territories, and Tribes to support nonpoint source management programs. The planning activity is eligible, if within the scope of a watershed planning project.

Planning Considerations to Access Future Funds

Consider these recommendations for how you can coordinate with other programs and plan for funding future phases of your source water protection program.

GAP

FEMA

USFS Forest Legacy

Indian Environmental General Assistance Programs

GAP funding is particularly useful in gaining understanding of the nature and extent of source water issues that a tribe may need to address. It supports the analysis of water quality data and determination of the status of water quality in tribal waters.

FEMA Hazard Mitigation Assistance Grants

There is alignment between this step and the risk assessment required by the FEMA Hazard Mitigation Assistance Grants. The FEMA risk assessment must include an analysis of the probability and the potential impacts of hazard events to state,

local, or tribal assets. The risk assessment must provide a summary of jurisdictions or areas most susceptible to damage and loss from hazard events.

USFS Forest Legacy Program

Consider including an assessment of land uses within your source water assessment to identify forested land that is critical to the source water quality and/or quantity.

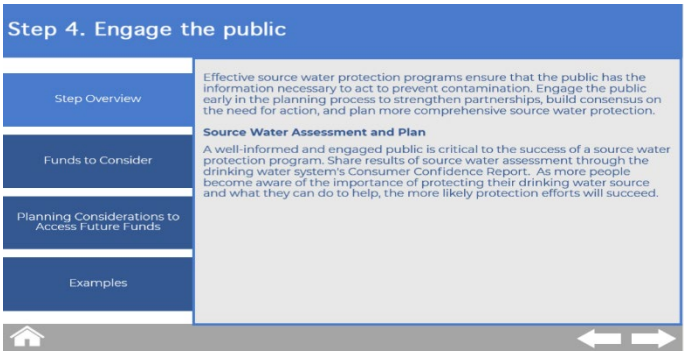
Examples

Examples of funded activities:

Click on the button below to read more examples

- By pooling several funding sources, the Delaware Department of Natural Resources and Environmental Control (DNREC) implemented the Delaware Ambient Groundwater Quality Network to monitor groundwater quality and water tables at more than 22 wells. Additional wells and exploratory borings monitor saltwater intrusion and responses to groundwater pumping and climate change to determine susceptibility to contamination and aquifer sustainability.
- In 2017, Salinas, Puerto Rico was awarded a FEMA Pre-Disaster Mitigation (PDM) Grant to fund its Aquifer Storage and Recovery Program. Puerto Rico had been dealing with severe drought and below-average rainfall which exacerbated the declining water table of the Salinas aquifer. Threats to the aquifer were identified, and action was taken to prevent drinking water wells from exceeding the recommended upper limit of total dissolved solids from saltwater intrusion.

Explore More Examples



Step 4. Engage the public

Step Overview

Effective source water protection programs ensure that the public has the information necessary to act to prevent contamination. Engage the public early in the planning process to strengthen partnerships, build consensus on the need for action, and plan more comprehensive source water protection.

Source Water Assessment and Plan

A well-informed and engaged public is critical to the success of a source water protection program. Share results of source water assessment through the drinking water system's Consumer Confidence Report. As more people become aware of the importance of protecting their drinking water source and what they can do to help, the more likely protection efforts will succeed.

Funds to Consider

The following sources are options to help fund activities in this step, within the eligibilities of the program. Find specifics for each fund in the Funding Sources section. Click on a funding source below for more information on that source.

DWSRF: The Drinking Water State Revolving Fund is a federal-state partnership that provides financial support to water systems and state drinking water programs.

106: The Clean Water Act Section 106 Program Water Pollution Control Grants provide funding to build and sustain effective water quality programs for water pollution prevention and control programs and activities.

GAP: The Indian Environmental General Assistance Program provides grants to Tribes for planning, developing, and establishing environmental protection programs.

FEMA: The FEMA Hazard Mitigation Assistance Grants provide funding to State, local, Tribal and Territorial governments for eligible mitigation measures that reduce disaster losses and protect life and property from future disasters.

319: Section 319 of the Clean Water Act provides grants to States, Territories, and Tribes to support nonpoint source management programs. The planning activity is eligible, if within the scope of a watershed planning project.

Planning Considerations to Access Future Funds

Consider these recommendations for how you can coordinate with other programs and plan for funding future phases of your source water protection program.

NPS

GAP

FEMA

Nonpoint Source Management Grants - Clean Water Act Section 319 Program

Include an information and education component to enhance the community's understanding of the plan and encourage early and continued public participation in selecting, designing, and implementing the nonpoint source management measures to be implemented (Element E).

Indian Environmental General Assistance Program

Proposals to use GAP funds for community outreach, education, and communication activities should demonstrate how the proposed activity will help increase knowledge and/or change behavior to achieve specific environmental program development goals, and how changes in knowledge and/or behavior will be measured to evaluate the activity's effectiveness at achieving stated goals.

FEMA Hazard Mitigation Assistance Grants

Public awareness and education campaigns can be funded under the 5 percent initiative. Educational outreach measures must be examined as a way to help focus the planning team in proposing applicable mitigation activities. In addition, there must be an opportunity for the public to comment on the hazard mitigation plan.

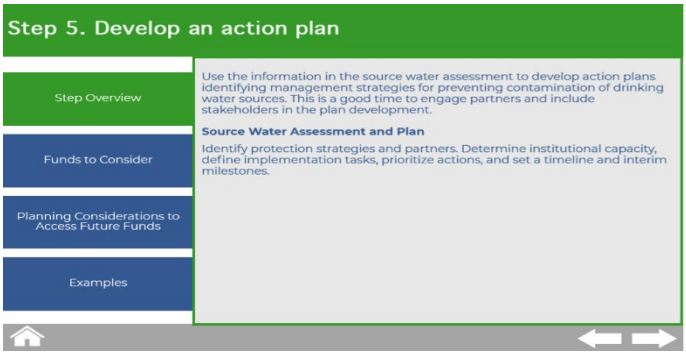
Examples

Examples of funded activities:

Click on the button below to read more examples

- In response to Natural Resources Conservation Service (NRCS)'s bulletin for National Water Quality Initiative pilot Source Water Protection projects in 2019, Oregon's "Partners in Water Quality Team," comprised of staff from the state's Department of Environmental Quality (DEQ), NRCS, and other local and state conservationists, provided a forum to develop joint criteria for prioritizing Drinking Water Source Areas (DWSAs). DEQ provided information from recently updated Source Water Assessments, non-point source reports, TMDLs, 303(d) list, and agricultural water quality reports, while NRCS field offices provided local knowledge of willing partners and landowners. The collaborative conversations on identifying prioritized DWSAs for NWQI grants led to an increased interest from the broader public around the topic of drinking water and conservation.

Explore More Examples



Step 5. Develop an action plan

Step Overview

Use the information in the source water assessment to develop action plans identifying management strategies for preventing contamination of drinking water sources. This is a good time to engage partners and include stakeholders in the plan development.

Source Water Assessment and Plan

Identify protection strategies and partners. Determine institutional capacity, define implementation tasks, prioritize actions, and set a timeline and interim milestones.

Funds to Consider

The following sources are options to help fund activities in this step, within the eligibilities of the program. Find specifics for each fund in the Funding Sources section. Click on a funding source below for more information on that source.

DWSRF: The Drinking Water State Revolving Fund is a federal-state partnership that provides financial support to water systems and state drinking water programs.

GAP: The Indian Environmental General Assistance Program provides grants to Tribes for planning, developing, and establishing environmental protection programs.

106: The Clean Water Act Section 106 Program Water Pollution Control Grants provide funding to build and sustain effective water quality programs for water pollution prevention and control programs and activities.

WIFIA: The WIFIA program accelerates investment in our nation’s water infrastructure by providing long-term, low-cost supplemental loans for regionally and nationally significant projects.

CWSRF: The Clean Water State Revolving Fund is a federal-state partnership that provides financial support to wastewater infrastructure and water quality improvement projects. Planning activities that have a reasonable prospect of resulting in a capital project are eligible.

WPDG: Wetland Program Development Grants provide funding to projects that promote the coordination and acceleration of research, investigations, experiments, training, demonstrations, surveys, and studies relating to the causes, effects, extent, prevention, reduction, and elimination of water pollution.

319: Section 319 of the Clean Water Act provides grants to States, Territories, and Tribes to support nonpoint source management programs. The planning activity is eligible, if within the scope of a watershed planning project.

Planning Considerations to Access Future Funds

Consider these recommendations for how you can coordinate with other programs and plan for funding future phases of your source water protection program.

NPS

CWSRF

CWA 106

GAP

LUST

WPDG

NRCS

FEMA

USFS Forest Legacy

Nonpoint Source Management Grants - Clean Water Act Section 319 Program

EPA has focused 319 resources on watershed-based environmental restoration and protection, in which local stakeholders join forces to develop and implement watershed based plans (WBP) to address nonpoint source pollution based on the particular conditions in their communities. A traditional WBP includes nine elements. To address groundwater contamination or protection, approval of an alternate WBP may be possible. More information on how to prepare a WBP can be found here.

CWSRF

Consider using this opportunity to identify partners who may be willing to take on a loan or identify a revenue source for loan payback.

Water Pollution Control Grants - Clean Water Act §106 Program

If you would like to utilize CWA Section 106 funds in your source water protection program, contact the 106 program coordinator for your state or tribe.

Indian Environmental General Assistance Program

GAP funding is useful for determining and developing the necessary personnel skill sets, as well as institutional structure needed to effectively protect and manage a tribe's source waters. GAP funding can be used for activities such as conducting a source water assessment and developing or expanding a source water protection plan or program (not a revision of a plan). Once the assessment and planning process is complete, the GAP program encourages tribes and inter-tribal consortia to seek funding support under EPA's media-specific programs for implementation funds. Regional EPA Tribal Programs can be found under the 'Find Gap Information in your Region' section.

Leaking Underground Storage Tanks

If leaking underground storage tanks were identified during the assessment phase, contact the Underground Storage Tank coordinator in your state or tribe to learn more about opportunities to address leaking underground storage tanks.

Wetland Program Development Grants

If a source water protection area includes wetlands, a WPDG is a potential opportunity to fund assessment and protection projects. The grants assist state, tribal, local government agencies, and interstate/intertribal entities in building programs to protect, manage, and restore wetlands. With the work of many states and tribes, EPA has distilled a set of core elements, actions, and activities that together comprise a comprehensive wetland program: monitoring and assessment; voluntary restoration and protection; regulatory approaches including CWA 401 certification; and wetland-specific water quality standards. Applicants can include one or more of the 4 core elements in their grant proposal.

NRCS Conservation Program Funding

NRCS has many opportunities to support implementation of conservation practices on agricultural lands in partnership with agricultural producers. Opportunities may exist to amplify NRCS's efforts with local and/or state funding support. For organizations interested in engaging with NRCS, there are 4 key individuals to contact: 1) State Conservationist, 2) Assistant State Conservationist for Programs, and/or the Assistant State Conservationist for Partnerships 3) Assistant State Conservationists for Field Operations and 4) District Conservationist. NRCS prioritizes projects and targeted efforts where conservation can support the viability and productivity of America's working lands – farms, ranches and forests – and make a difference in water quality. NRCS programs do not fund stormwater runoff projects.

FEMA Hazard Mitigation Assistance Grants

Consider including the following elements in your source water protection plan if your source water assessment identified natural hazards as a potential threat, and if you anticipate applying for FEMA Hazard Mitigation Assistance Grants:

- Actions and equipment to lessen the impact of natural hazards including flooding, erosion, and drought
- Low Impact Development and Green Infrastructure as an approach to stormwater management and flood prevention and/or mitigation

Mitigation strategies must address how the mitigation actions will be implemented and administered. The government must review their unique set of capabilities to undertake local mitigation to reduce loss and identify gaps.

USFS Forest Legacy Program

Watershed partners can work with state agencies to include watershed protection goals in Forest Action Plans and associated Forest Legacy Assessments of Needs.

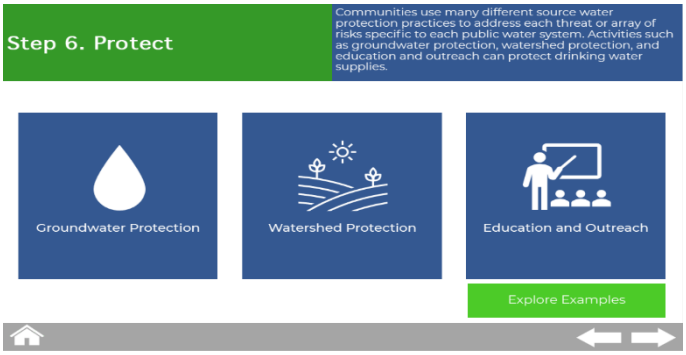
Examples

Examples of funded activities:

Click on the button below to read more examples

- The Vermont Conservation Strategy raised concerns about the loss of wetlands as they provide ecosystem services, such as water quality treatment, storage, and floodwater and erosion control. Vermont used WPDG funding to develop a statewide action plan that included a statewide wetland restoration strategy. The plan will coordinate with the Watershed Planning process, prioritize wetland restoration activities, and provide a template and methods for other watershed restoration plans throughout the state.
- The City of Ashland, Oregon wanted to reduce hazards from flooding and protect their surface water system which faced annual flooding risks. The University of Oregon’s Community Service Center developed a proposed natural hazard mitigation plan with 10 action items. The project was one of two national pilot projects that emerged from a collaboration between FEMA and EPA to incorporate water quality and nature-based approaches into hazard mitigation plans.

Explore More Examples



Step 6. Protect

Communities use many different source water protection practices to address each threat or array of risks specific to each public water system. Activities such as groundwater protection, watershed protection, and education and outreach can protect drinking water supplies.

Groundwater Protection

Watershed Protection

Education and Outreach

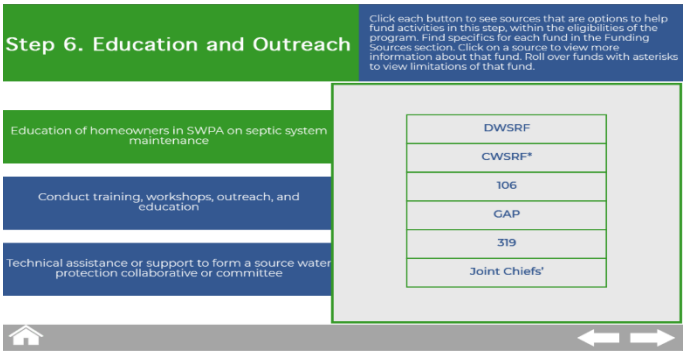
Explore Examples

Examples of funded activities:

Click on the button below to read more examples

- In 2015, the West Fork White River Watershed (WFWR) Initiative was submitted to the Regional Conservation Partnership Program (RCPP) at the Natural Resources Conservation Service (NRCS) to address water quality concerns, excess nutrients and sediment in surface waters, and fish and wildlife habitat degradation. The initiative focuses on restoring up to 2 miles of unstable river channel and 4 miles of riparian areas, developing 150 conservation-based plans, and implementing BMPs on agricultural and forest lands.
- State-based alliances between the forest and water utility sectors have been developed in many southeastern U.S. states including Arkansas, Georgia, South Carolina, and Texas. Their goal is to advance strategic and well-targeted forest conservation, management, and restoration through increased collaboration between the forest and water utility sectors. Funded actions have included protection activities, such as regional messaging strategies and development of educational materials.
- The Hawaii Division of Forestry and Wildlife plans to sustain and protect the Kawaihae and Honokoa watersheds of Oahu, Hawaii through non-native feral pig population control, public education about native forest ecosystems, community engagement on stewardship of the reefs and forests in the district, and protection of headwaters of five important streams from invasive species. Specific project activities funded by USFS LSR as well as other funding sources include installing fencing and retrofitting fences, clearing invasive plants, removing feral pigs, and hosting community or student led stewardship days.

Explore More Examples



Step 6. Education and Outreach

Click each button to see sources that are options to help fund activities in this step, within the eligibilities of the program. Find specifics for each fund in the Funding Sources section. Click on a source to view more information about that fund. Roll over funds with asterisks to view limitations of that fund.

Education of homeowners in SWPA on septic system maintenance

DWSRF

CWSRF*

- CWSRF can fund the development and initial delivery of outreach materials

106

GAP

319

Conduct training, workshops, outreach, and education

DWSRF

CWSRF*

- CWSRF can fund the development and initial delivery of outreach materials

319

FEMA*

- Only eligible under the 5 Percent Initiative. These are activities that are difficult to conduct a standard BCA to prove cost-effectiveness. Up to 5 percent of the total HMGP funds may be set aside by the Recipient to pay for such activities.

106

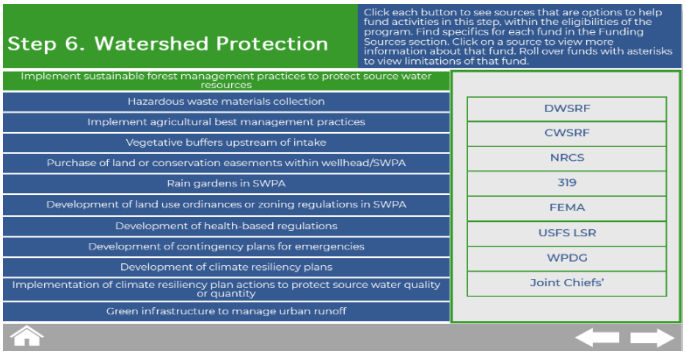
GAP

Joint Chiefs'

Technical assistance or support to form a source water protection collaborative or committee

DWSRF

319



Step 6. Watershed Protection

Click each button to see sources that are options to help fund activities in this step, within the eligibilities of the program. Find specifics for each fund in the Funding Sources section. Click on a source to view more information about that fund. Roll over funds with asterisks to view limitations of that fund.

Implement sustainable forest management practices to protect source water resources

DWSRF

CWSRF

NRCS

319

FEMA

USFS LSR

WPDG

Joint Chiefs'

Hazardous waste materials collection

DWSRF

GAP*

- GAP supports personnel costs for tribal environmental department management and administrative staff who oversee/coordinate solid and hazardous waste management programs and costs associated with oversight of work performed

FEMA*

- Only available for eligible activities such as the abatement of asbestos and/or lead-based paint and the removal of household hazardous wastes for disposal at an approved landfill.

Implement agricultural best management practices

NRCS

319

DWSRF

CWSRF

WIFIA

Joint Chiefs'

OSG

Vegetative buffers upstream of intake

DWSRF

CWSRF

319

NRCS

FEMA

USFS LSR

WIFIA

Forest Legacy

Joint Chiefs'

OSG

Purchase of land or conservation easements within wellhead/SWPA

DWSRF

CWSRF

NRCS

319

WIFIA

FEMA

Forest Legacy

Rain gardens in SWPA

CWSRF

DWSRF

319

OSG

Development of land use ordinances or zoning regulations in SWPA

DWSRF

319

WPDG

106

Development of health-based regulations

DWSRF

106

Development of contingency plans for emergencies

DWSRF

FEMA

106

GAP

Development of climate resiliency plans

DWSRF

FEMA

CWSRF

NRCS

WPDG

OSG*

- Climate resiliency planning is eligible when it pertains to stormwater management (i.e. conveyance cleanouts to prevent flooding and overflows, pump station fortification, drainage repair, and other stormwater mitigation practices)

Implementation of climate resiliency plan actions to protect source water quality or quantity

DWSRF

CWSRF

FEMA

NRCS

319

Joint Chiefs'

Forest Legacy

Sewer overflow correction

OSG

CWSRF

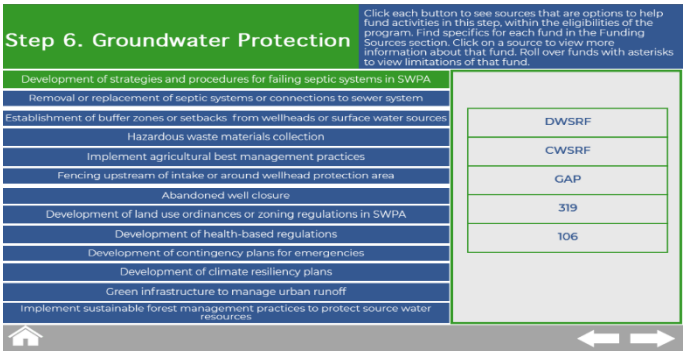
Green infrastructure to manage urban runoff

CWSRF

319

- Activities that are potentially eligible include those that are 1) not required by a final storm water permit or 2) those that support, but do not directly implement permit requirements.

OSG



Step 6. Groundwater Protection

Click each button to see sources that are options to help fund activities in this step, within the eligibilities of the program. Find specifics for each fund in the Funding Sources section. Click on a source to view more information about that fund. Roll over funds with asterisks to view limitations of that fund.

Development of strategies and procedures for failing septic systems in SWPA

DWSRF

CWSRF

GAP

319

106

OSG

Removal or replacement of septic systems or connections to sewer system

CWSRF

DWSRF

WIFIA

319

OSG

Establishment of buffer zones or setbacks from wellheads or surface water sources

DWSRF

CWSRF

NRCS

319

WIFIA

FEMA

Forest Legacy

Joint Chiefs'

Hazardous waste materials collection

DWSRF

GAP*

- GAP supports personnel costs for tribal environmental department management and administrative staff who oversee/coordinate solid and hazardous waste management programs and costs associated with oversight of work performed

FEMA*

- Only available for eligible activities such as the abatement of asbestos and/or lead-based paint and the removal of household hazardous wastes for disposal at an approved landfill

Implement agricultural best management practices

NRCS

319

DWSRF

CWSRF

WIFIA

Joint Chiefs'

OSG

Fencing upstream of intake or around wellhead protection area

319

NRCS

DWSRF

CWSRF

Joint Chiefs'

Abandoned well closure

DWSRF

319

NRCS

CWSRF

WIFIA

Joint Chiefs'

Development of land use ordinances or zoning regulations in SWPA

DWSRF

319

WPDG

106

Development of health-based regulations

DWSRF

106

Development of contingency plans for emergencies

DWSRF

FEMA

106

GAP

Development of climate resiliency plans

DWSRF

FEMA

CWSRF

NRCS

WPDG

OSG*

- Climate resiliency planning is eligible when it pertains to stormwater management (i.e. conveyance cleanouts to prevent flooding and overflows, pump station fortification, drainage repair, and other stormwater mitigation practices)

Sewer overflow correction

OSG

CWSRF

Green infrastructure to manage urban runoff

CWSRF

319*

- Activities that are potentially eligible include those that are 1) not required by a final storm water permit or 2) those that support, but do not directly implement permit requirements. For additional detail please see Page 24-26 of Section 319 Guidelines (US EPA 2013). https://www.epa.gov/sites/default/files/2015-09/documents/319-guidelines-fy14.pdf

OSG

Implement sustainable forest management practices to protect source water resources

DWSRF

CWSRF

NRCS

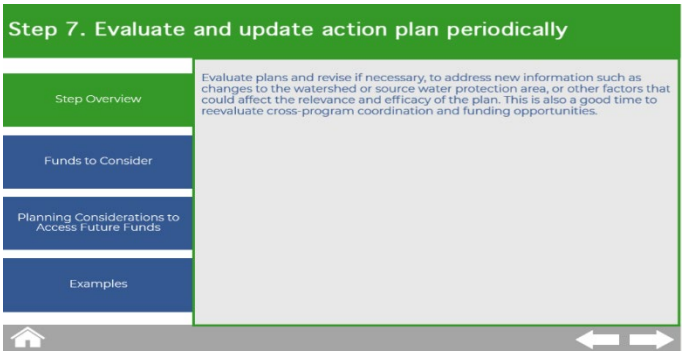
319

FEMA

USFS LSR

WPDG

Joint Chiefs'



Step 7. Evaluate and update action plan periodically

Step Overview

Evaluate plans and revise if necessary, to address new information such as changes to the watershed or source water protection area, or other factors that could affect the relevance and efficacy of the plan. This is also a good time to reevaluate cross-program coordination and funding opportunities.

Funds to Consider

The following sources are options to help fund this step. Find specifics for each fund in the Funding Sources section. Click on a funding source below for more information on that source.

DWSRF: The Drinking Water State Revolving Fund is a federal-state partnership that provides financial support to water systems and state drinking water programs.

106: The Clean Water Act Section 106 Program Water Pollution Control Grants provide funding to build and sustain effective water quality programs for water pollution prevention and control programs and activities.

Planning Considerations to Access Future Funds

Consider these recommendations for how you can coordinate with other programs and plan for funding future phases of your source water protection program.

Nonpoint Source Management Grants - Clean Water Act Section 319 Program

The watershed-based plan recommended for 319 funding includes element H and I. Element H includes: a set of criteria that can be used to determine whether loading reductions are being achieved over time and substantial progress is being made toward attaining water quality standards; Element I includes: a monitoring component to evaluate the effectiveness of the implementation efforts over time, measured against the criteria established under Element H.

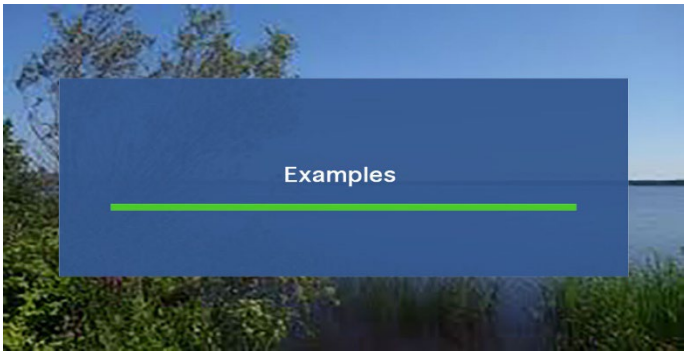
Examples

Click on the button below to read more examples

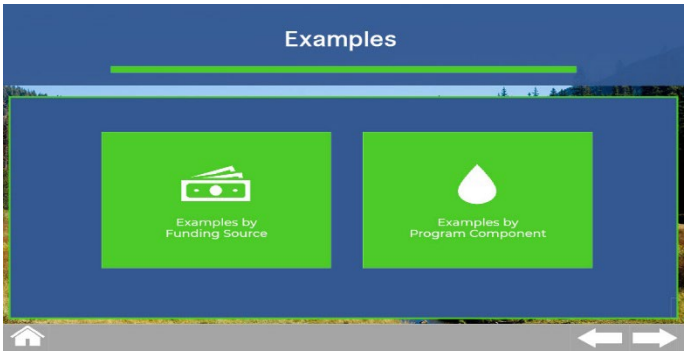
Examples of funded activities:

- After 20-years of performing assessments based upon a plan last revised in 1999, the Delaware Department of Natural Resources and Environmental Control saw a need to modernize the state's Source Water Assessment Plan. The plan will improve how public health information and susceptibility to contaminants are communicated to the public (see example under Step 2: Inventory).

Explore More Examples



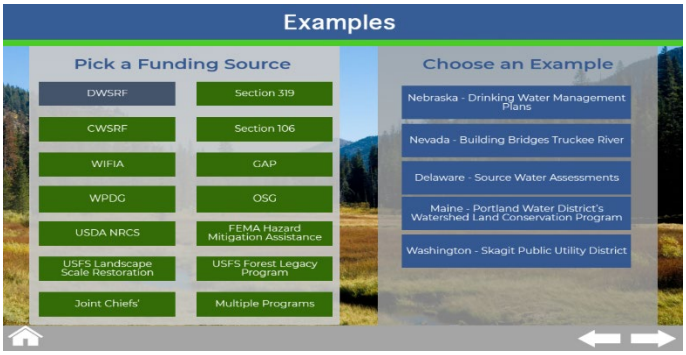
Examples



Examples

Examples by Funding Source

Examples by Program Component



Examples

Pick a Funding Source

Choose an Example

DWSRF

Nebraska - Drinking Water Management Plans

Nevada - Building Bridges Truckee River

Delaware - Source Water Assessments

Maine - Portland Water District's Watershed Land Conservation Program

Washington - Skagit Public Utility District

Section 319

Nevada - Building Bridges Truckee River

New Hampshire - Pennichuck Water Works' Source Watershed

CWSRF

Washington - Skagit Public Utility District

Pennsylvania – Lyme Timber Company

Section 106

Delaware - Groundwater Monitoring

WIFIA

WIFIA Example

GAP

Kickapoo Tribe - Streambank Stabilization

OSG

OSG Example

WPDG

Vermont - Conservation Strategy

USDA NRCS

Arkansas - West Fork White River Initiative RCPP

Oregon - NWQI Partnership Experience

FEMA Hazard Mitigation Assistance

Oregon - Ashland Hazard Mitigation Plan

Florida - Miami-Dade Flood Control Project

Puerto Rico - Salinas Aquifer Storage and Recovery

USFS Landscape Scale Restoration

Hawaii - Kohala Watershed Partnership

Southern U.S. - Forest and Water Partnerships

USFS Forest Legacy Program

Colorado – South Boulder Creek Watershed

Joint Chiefs'

Southern U.S. - Forest and Water Partnerships

Multiple Programs

New Hampshire - Pennichuck Water Works' Source Watershed

Nebraska - Drinking Water Management Plans

Washington - Skagit Public Utility District

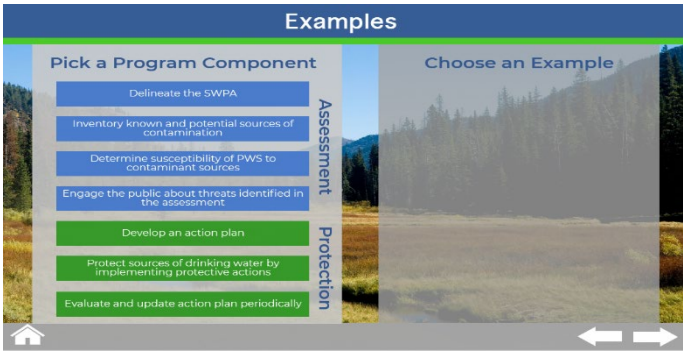
Delaware - Source Water Assessments

Delaware - Groundwater Monitoring

Kickapoo Tribe - Streambank Stabilization

Arkansas - West Fork White River Initiative RCPP

Oregon - NWQI Partnership Experience



Examples

Pick a Program Component

Choose an Example

Assessment

Delineate the SWPA

Nebraska - Drinking Water Management Plans

Nevada - Building Bridges Truckee River

Inventory known and potential sources of contamination

Delaware - Source Water Assessments

Determine susceptibility of PWS to contaminant sources

Delaware - Groundwater Monitoring

Delaware - Source Water Assessments

Puerto Rico - Salinas Aquifer Storage and Recovery

Engage the public about threats identified in the assessment

Oregon - NWQI Partnership Experience

Protection

Develop an action plan

Nebraska - Drinking Water Management Plans

Nevada - Building Bridges Truckee River

Kickapoo Tribe - Streambank Stabilization

Vermont - Conservation Strategy

Oregon - Ashland Hazard Mitigation Plan

Hawaii - Kohala Watershed Partnership

Protect sources of drinking water by implementing protective actions

Nebraska - Drinking Water Management Plans

Maine - Portland Water District's Watershed Land Conservation Program

Washington - Skagit Public Utility District

Arkansas - West Fork White River Initiative RCPP

Vermont - Conservation Strategy

Southern U.S. - Forest and Water Partnerships

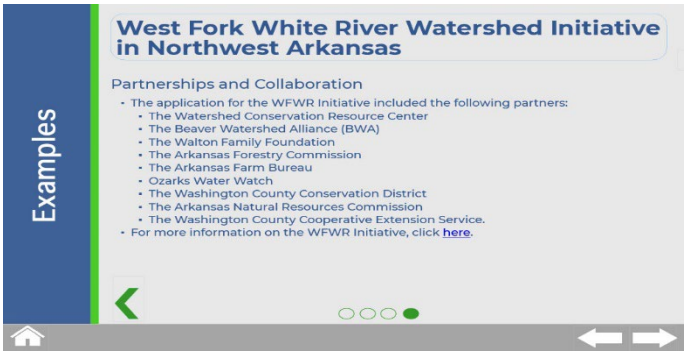
Puerto Rico - Salinas Aquifer Storage and Recovery

Hawaii - Kohala Watershed Partnership

Colorado – South Boulder Creek Watershed

Evaluate and update action plan periodically

Delaware - Source Water Assessments



West Fork White River Watershed Initiative in Northwest Arkansas

Project Details

- Goal:
  - Reduce sediment and nutrient loadings and improve aquatic and terrestrial habitats in the watershed.
- Project Description:
  - In the 1990s, the Beaver Water District began experiencing annual taste and odor events related to cyanobacteria from excessive nutrient loading into Northwest Arkansas' drinking water source, Beaver Lake.
  - In 2015, the Watershed Conservation Resource Center (WCRC), Beaver Water District (BWD), and Beaver Watershed Alliance (BWA) submitted the West Fork White River Watershed (WFWR) Initiative to the Regional Conservation Partnership Program (RCPP) at the Natural Resources Conservation Service (NRCS) to address water quality concerns, excess nutrients and sediment in surface waters, and fish and wildlife habitat degradation.
  - The WFWR Initiative will reduce sediments and nutrients reaching Beaver Reservoir and will help achieve goals prescribed in the Beaver Lake Watershed Protection Strategy, protecting drinking water for more than 420,000 area residents in one of the most rapidly growing regions in the U.S.

Funding Sources

- Total project cost was $8.7 million.
  - $4.3 million stemmed from RCPP contribution.
  - $4.4 million stemmed from local matching funds.
- For every dollar or equivalent in-kind service provided by partners, the RCPP provided up to one dollar toward the project as payments to farmers, ranchers, or forest landowners for conservation activities.

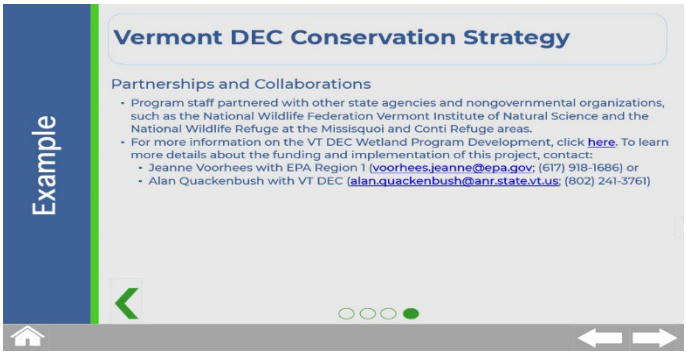
Actions and Outcomes

- **Restoration:**
  - The project will restore up to two miles of unstable river channel and four miles of riparian areas.
- **Conservation:**
  - Develop 150 conservation-based plans.
- **BMPs:**
  - Implement BMPs on agricultural and forest lands.

Partnerships and Collaboration

- The application for the WFWR Initiative included the following partners:
  - The Watershed Conservation Resource Center

  - The Beaver Watershed Alliance (BWA)
  - The Walton Family Foundation
  - The Arkansas Forestry Commission
  - The Arkansas Farm Bureau
  - Ozarks Water Watch
  - The Washington County Conservation District
  - The Arkansas Natural Resources Commission
  - The Washington County Cooperative Extension Service
- For more information on the WFWR Initiative, click here.
- Links on this page exit the site.



Vermont DEC Conservation Strategy

Project Details

- Goal:
  - Increase the number of wetlands that are conserved and restored to combat the 200-400 acres of wetlands that the Vermont Conservation Strategy estimated were being lost annually.
- Project Description:
  - The Vermont Conservation Strategy raised concerns about the loss of wetlands as they provide public goods including surface water and groundwater quality and protection, floodwater and stormwater storage and treatment, and erosion control.
  - This project helped to increase the number of wetlands that are conserved and restored degraded and impaired wetlands, through regulation, education and outreach, inventory and assessment, and restoration.

Funding Sources

- The Wetland Program Development Grant funded the full $200,000 for this project.
- EPA Region 1 allocated the funding to VT DEC.
- Funding decisions are made by EPA Regional offices and are based on the quality of the proposals received and adherence to the criteria.

Actions and Outcomes

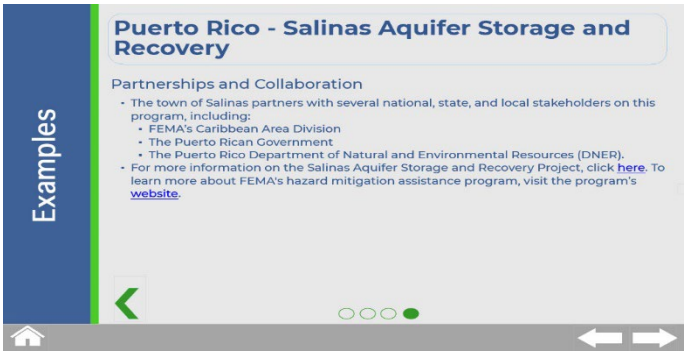
- **Restoration:**
  - Develop a statewide wetland restoration strategy that would be coordinated with the Watershed Planning process and will prioritize wetland restoration activities.
  - Provide a template and methods for other watershed restoration plans throughout the state.
- **Vulnerable Wetlands and Aquatic Resources:**
  - Develop a work plan and goals to give direction for future work and to strategize ways to strengthen protection of heritage value wetlands.
- **Outreach and Education:**
  - Educate those typically responsible for violations (e.g., heavy equipment operators or earth moving contractors on wetlands).
  - Education can help reduce these violations and protect wetland functions and values from irreversible impacts.
- **Enforcement and Compliance:**
  - Staff will continue to develop protocols for following up on complaints and enforcement actions.

  - This will help foster a better working relationship for more efficient, effective, and consistent enforcement and compliance activities.

- **New Regulation:**
  - No net loss of wetland functions, values, or acreage.

Partnerships and Collaborations

- Program staff partnered with other state agencies and nongovernmental organizations, such as the National Wildlife Federation Vermont Institute of Natural Science, and the National Wildlife Refuge at the Missisquoi and Conti Refuge areas.
- For more information on the VT DEC Wetland Program Development Grant, click here.
- To learn more about the wetland program in VT, generally, visit Vermont DEC's website.
- Links on this page exit the site.



Puerto Rico - Salinas Aquifer Storage and Recovery

Project Details

- Goal:
  - Protect and replenish aquifers in the southern region of Puerto Rico when experiencing severe drought.
  - Prevent drinking water wells from exceeding the recommended upper limit of total dissolved solids as saltwater moves inland due to low water levels in the aquifer and their proximity to the ocean.
- Project Description:
  - In 2015, Puerto Rico had been dealing with severe drought and below-average rainfall which only exacerbated the existing issue of the Salinas aquifer that had been steadily declining for 20 years.
  - Salinas is home to around 31,000 residents, several industries, irrigated farms, schools, hospitals, and the Camp Santiago National Guard training base—all of which depend exclusively on the aquifer for their water supply. A 2015 Executive Order issued by former Governor Alejandro García Padilla led to the formation of an interagency committee to address the water crisis and protect aquifers in the southern region.
  - The resulting Salinas Aquifer Storage and Recovery Program proposed to divert water from the nearby Patillas Reservoir, which normally spills into the sea, and store it in an existing aquifer.

Funding Sources

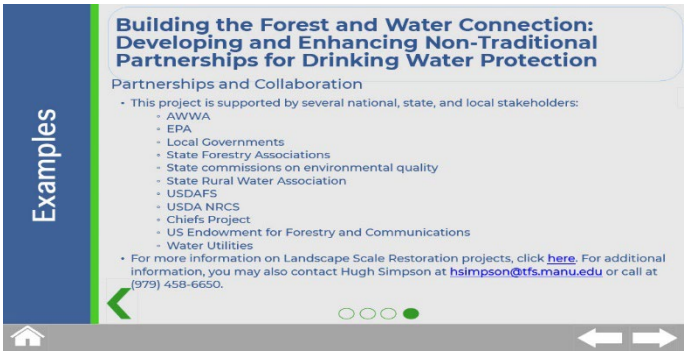
- Salinas was awarded a FEMA Pre-Disaster Mitigation (PDM) Grant in 2017 to fund its Aquifer Storage and Recovery Program. The PDM grant program was replaced by the Building Resilient Infrastructure and Communities (BRIC) grant program beginning in fiscal year 2020 (FY 2020).
- The total cost of the project was $2.85 million.
- FEMA provided $2.1 million in federal funding.
- The Puerto Rican Government provided $714,053 in funding.

Actions and Outcomes

- The project is being implemented and will provide the following benefits:
  - Increased the average recharge volume, providing the aquifer with twice as much water as is currently withdrawn by municipal supply.
  - Reduced loss of economic value associated with loss of water services to residential customers.
  - Reduced loss of function for businesses and government agencies dependent on the same water sources.
  - Reduced losses to the tourism sector and industries highly reliant on water supply.
  - Reduced agricultural nitrate use by replenishing irrigation supplies and improving growing conditions.
  - Reduced loss of ecosystem diversity by preventing the die-off of species such as blue land crabs and native trees.

Partnerships and Collaboration

- The town of Salinas partnered with several national, state, and local stakeholders on this program, including:
  - FEMA's Caribbean Area Division
  - The Puerto Rican Government
  - The Puerto Rico Department of Natural and Environmental Resources (DNER).
- For more information on the Salinas Aquifer Storage and Recovery Project, click here. To learn more about FEMA's hazard mitigation assistance program, visit the program's website.
- Links on this page exit the site.



Building the Forest and Water Connection: Developing and Enhancing Non-Traditional Partnerships for Drinking Water Protection

Project Details

- Goal:
  - Advance strategic and well-targeted forest conservation, management, and restoration through increased collaboration between the forest and water utility sectors, as forests play an integral role in maintaining a stable supply of safe drinking water in the Southern U.S.
- Project Description:
  - State-based alliances between the forest and water utility sectors have been developed in Arkansas, Georgia, South Carolina, and Texas. This project built on and furthered these partnerships to protect drinking water in the face of projected population growth. The Texas A&M Forest Service led this effort, in partnership with the Georgia Forestry Commission, The Arkansas Forestry Commission, and the South Carolina Forestry Commission.
  - This project will implement recommendations from State Partnership meetings, including a summary of forest watershed protection initiatives, priority watershed mapping, watershed-specific educational materials, and uniform coordinated messaging.

Funding Sources

- The following sources contributed to the project:
  - Forest Service Funding - $736,430 - Landscape Scale Restoration
  - Other Federal Funding - $1,494,000 - USDA Joint Chief's Project Funding (USFS and NRCS)
  - Non-Federal State Contribution - $736,430 - State Match (Personnel, Benefits, Contractual, Consolidated)
  - Non-Federal Other - $45,000 - US Endowment / American Forests
  - Total - $3,011,860

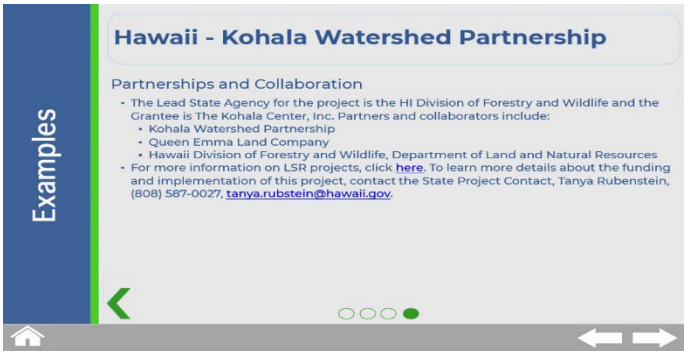
Actions and Outcomes

- **Priority Watershed Mapping:** Texas, South Carolina, and Georgia all created a statewide priority geospatial watershed map based on surface drinking water intakes, population served, forest importance to drinking water, threats to forestland, and existing watershed partnerships, which will be used to inform future efforts.
- **Regional Messaging Strategy:** A regional messaging strategy has been developed and distributed to state partnerships. Traditional media (billboards, articles, etc.) and social media are being used to raise awareness. Project partners collaborated with the Southeastern Partnership for Forests and Water to develop seven brief, high quality videos.
- **Educational Materials:** Presentations focused on Forests and Drinking Water Partnerships have been made at various conferences and meetings. A 5th grade curriculum plan was developed to highlight the forest and drinking water connection.

- **Technical Assistance:** Project staff conducted numerous landowner field days, workshops, site visits, and direct landowner technical assistance that resulted in the enrollment in conservation programs and closing of almost 15,000 acres in conservation easements in Lower Savannah.

Partnerships and Collaboration

- This project is supported by several national, state, and local stakeholders:
    - AWWA
    - EPA
    - Local Governments
    - State Forestry Associations
    - State commissions on environmental quality
    - State Rural Water Association
    - USDAFS
    - USDA NRCS
    - USDA Joint Chiefs' Landscape Restoration Partnership Project
    - US Endowment for Forestry and Communities
    - Water Utilities
- For more information on Landscape Scale Restoration projects, click here. For additional information, you may also contact Hugh Simpson at hsimpson@tfs.manu.edu or call at (979) 458-6650.
- For more information on Joint Chiefs' Restoration Partnership projects, click here.
- Links on this page exit the site.



Hawaii - Kohala Watershed Partnership

Project Details

- Goal:
    - Sustain and protect the Kawaihae and Honokoa watersheds, which supply the primary water sources for the Kohala District, in the forested summit region of Eke on Kohala Mountain of Oahu, Hawaii. This region is home to 26,000 people and spans 22,000 acres.
- Project Description:
    - The Hawaii Division of Forestry and Wildlife plans to achieve this goal through non-native feral pig population control, public education about native forest ecosystems, community engagement on stewardship of the reefs and forests in the district, and protection of headwaters of five important streams from invasive species.
    - The project will result in a 597 acre management unit (Eke) where aquatic and terrestrial resources will be protected.
    - Specific project activities include installing 3,000 meters of fencing and retrofitting 1,800 meters of fence to protect the Eke area from feral pigs, clearing two acres of Himalayan ginger from Eke, removing 75 percent of feral pigs, monitoring of feral pigs using Artificial Intelligence sensor data, and hosting 12 community stewardships days or student led stewardship days.

Funding Sources

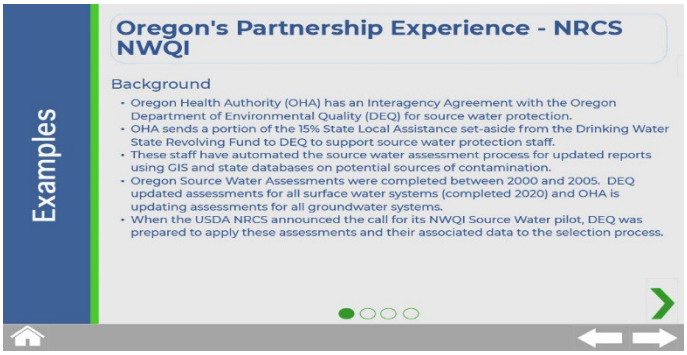
- The following sources contributed to the project:
    - Forest Service Funding: $300,000 - Landscape Scale Restoration
    - Non-Federal State Contributions: $300,000 – Hawaii Division of Forestry and Wildlife

Actions and Outcomes

- Community Outreach:
    - The Hawaii Division of Forestry and Wildlife drafted a community outreach plan and solicited feedback from partners to guide community outreach activities.
- Monitoring:
    - Preparing to conduct baseline monitoring after deploying one Oceanit Artificial Intelligence sensor to monitor feral pigs and other ungulates remotely.
- Eke Unit:
    - The project will complete a 597 acre Eke management unit to protect aquatic and terrestrial resources from ungulate and invasive weed damage.

Partnerships and Collaboration

- The Lead State Agency for the project is the HI Division of Forestry and Wildlife and the Grantee is The Kohala Center, Inc. Partners and collaborators include:
    - Kohala Watershed Partnership
    - Queen Emma Land Company
    - Hawaii Division of Forestry and Wildlife, Department of Land and Natural Resources
- For more information on LSR projects, click here. To learn more details about the funding and implementation of this project, contact the State Project Contact, Tanya Rubenstein, (808) 587-0027, tanya.rubenstein@hawaii.gov.
- Links on this page exit the site.



Oregon's Partnership Experience - NRCS NWQI

Background

- Oregon Health Authority (OHA) has an Interagency Agreement with the Oregon Department of Environmental Quality (DEQ) for source water protection.
- OHA sends a portion of the 15 percent State Local Assistance set-aside from the Drinking Water State Revolving Fund to DEQ to support source water protection staff.
- These staff members have automated the source water assessment process for updated reports using GIS and state databases on potential sources of contamination.
- Oregon Source Water Assessments were completed between 2000 and 2005. DEQ updated assessments for all surface water systems (completed 2020) and OHA is updating assessments for all groundwater systems.
- When the USDA NRCS announced the call for its NWQI Source Water pilot, DEQ was prepared to apply these assessments and their associated data to the selection process.

Partnerships and Collaboration

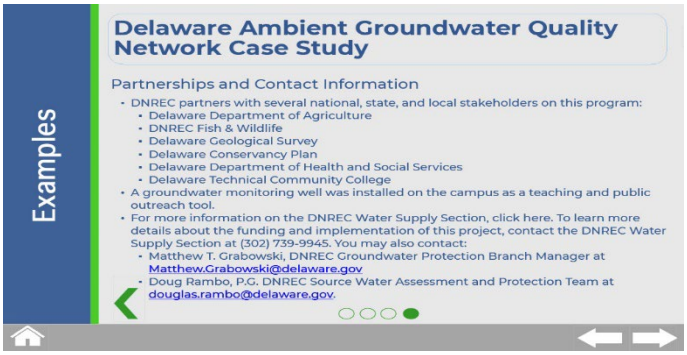
- The collaborative conversations on identifying prioritized DWSAs for NWQI grants led to:
    - An increased interest from the broader public around the topic of drinking water and conservation.
    - Strengthened inter-agency cooperation to protect public health through conservation and restoration.
    - Other partnerships to explore applying for a Regional Conservation Partnership Program.

Tips to Enhance Collaboration

- Partnership Key Takeaways:
    - Coordinate with NRCS staff early and often. Ensure that regional leads, like Basin Team Leader, District Conservationist, and Basin Resource Conservationist, are invited to the table. Attend NRCS State Technical Advisory Committee to share input on priority areas.
    - Engage the state's Clean Water Act water quality agency. Talk to TMDL and Non-Point Source program staff to identify priority areas for both groundwater and surface water. Obtain data from the CWA programs to support proposals and assessments.
    - Be open and transparent about the location of prioritized areas to see where other agencies' target areas or facilities may overlap.
    - Emphasize shared goals, benefits of collaboration, and readily available data.
    - Collaborate with Soil & Water Conservation Districts, Watershed Councils, NGO's, and other state agencies, such as Department of Agriculture, Water Resources, or Forestry.

Funding and Contact Information

- Funding:
    - DWSRF 15 percent State Local Assistance and Other Programs set-aside administered through Oregon Health Authority
    - NRCS investment in 10 NWQI Source Water Protection projects
- To learn more details about the funding and implementation of these Oregon projects, contact Julie Harvey, DEQ Drinking Water Protection Coordinator at Julie.harvey@deq.state.or.us or see NRCS information here.
- Links on this page exit the site.



Delaware Ambient Groundwater Quality Network Case Study

Project Details

- Approximately 55 percent of Delaware's population relies on groundwater for their drinking water.
- By pooling several funding sources, the Delaware Department of Natural Resources and Environmental Control (DNREC) implements the Delaware Ambient Groundwater Quality Network to monitor groundwater quality and water tables at more than 22 wells. Additional wells and exploratory borings monitor saltwater intrusion and responses to groundwater pumping and climate change.

Funding Sources

- The following sources contributed to the project:
    - Well installation/equipment/cellular services:
        - Delaware state bond bill- $158,000
        - Chesapeake Bay Implementation Grant- $158,000
    - Sample costs, QAPP, etc.:
        - Water Pollution Control Grant of Section 106 of the Clean Water Act- $27,000
        - 15 percent Local Assistance and State Program set asides from the Drinking Water State Revolving Fund- $27,000
    - Staff time: Supported through Section 106 and DWSRF set aside funds

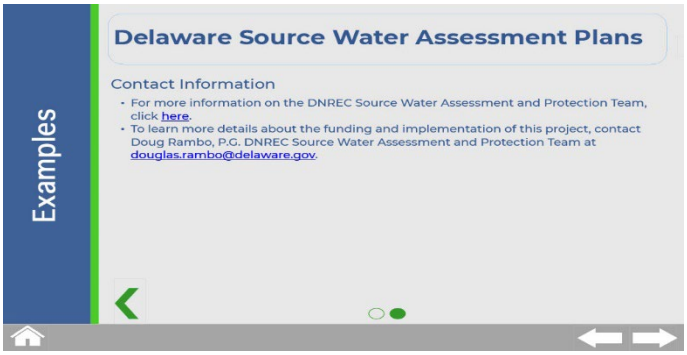
Actions and Outcomes

- Network of wells is used to monitor for contamination and also plan for the long-term sustainability of drinking water aquifers across the state.
- DNREC plans to collaborate with the Delaware Conservancy Plan to potentially install additional wells to monitor water quality upgradient of a wastewater site.
- The Ambient Groundwater Quality Network will also support the 305(b) Water Quality Assessment report.
- The DNREC is planning to continue sampling using support from the Section 106 Grant and DWSRF set asides.

Partnerships and Contact Information

- DNREC partners with several national, state, and local stakeholders on this program:
    - Delaware Department of Agriculture
    - DNREC Fish & Wildlife
    - Delaware Geological Survey
    - Delaware Conservancy Plan

  - Delaware Department of Health and Social Services
  - Delaware Technical Community College
- A groundwater monitoring well was installed on the campus as a teaching and public outreach tool.
- For more information on the DNREC Water Supply Section, click here. To learn more details about the funding and implementation of this project, contact the DNREC Water Supply Section at (302) 739-9945. You may also contact:
  - Matthew T. Grabowski, DNREC Groundwater Protection Branch Manager at matthew.grabowski@delaware.gov
  - Doug Rambo, P.G. DNREC Source Water Assessment and Protection Team at douglas.rambo@delaware.gov
- Links on this page exit the site.



Delaware Source Water Assessment Plans

Project Details

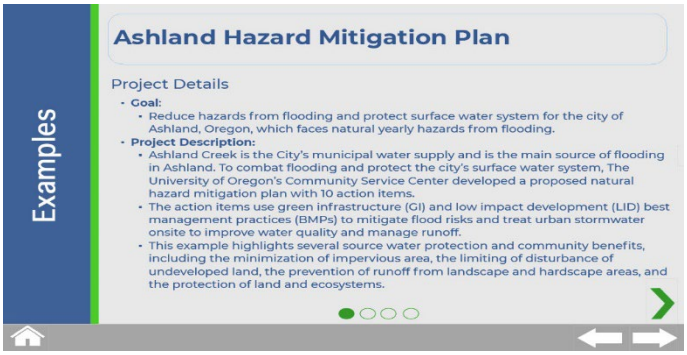
- The Delaware Department of Natural Resources and Environmental Control (DNREC) is in the process of updating the state's Source Water Assessment Plan (SWAP) using the 15 percent Local Assistance and State Program set aside from the Drinking Water State Revolving Fund (DWSRF). Following an evaluation of their SWAP, last revised in 1999, DNREC identified opportunities to improve their source water assessment process.
- The new SWAP will update and modernize the state's process for conducting source water assessments including a risk-based assessment strategy to share public water supply and public health information in an effective and straightforward manner.
- In Delaware, DNREC conducts source water assessments when a new water system begins operation, a new water source is brought online, an existing source is abandoned, or following a request for assistance from a water system.
- The DNREC contracts with the Water Resources Center at the University of Delaware to perform the surface water assessments for Delaware. The DNREC handles all groundwater related assessments.

Contact Information

For more information on the DNREC Source Water Assessment and Protection Team, click here.

To learn more details about the funding and implementation of this project, contact Doug Rambo, P.G. DNREC Source Water Assessment and Protection Team at douglas.rambo@delaware.gov.

Links on this page exit the site.



Ashland Hazard Mitigation Plan

Project Details

- Goal:
    - Reduce hazards from flooding and protect surface water system for the city of Ashland, Oregon, which faces natural yearly hazards from flooding.
- Project Description:
    - Ashland Creek is the City's municipal water supply and is the main source of flooding in Ashland. To combat flooding and protect the city's surface water system, The University of Oregon's Community Service Center developed a proposed natural hazard mitigation plan with 10 action items.
    - The action items use green infrastructure (GI) and low impact development (LID) best management practices (BMPs) to mitigate flood risks and treat urban stormwater onsite to improve water quality and manage runoff.
    - This example highlights several source water protection and community benefits, including the minimization of impervious area, the limiting of disturbance of undeveloped land, the prevention of runoff from landscape and hardscape areas, and the protection of land and ecosystems.

Funding Sources

- This project was one of two national pilot projects that emerged from a unique collaboration between FEMA and EPA to incorporate water quality and nature-based approaches into hazard mitigation plans.
- By completing a FEMA approved Hazard Mitigation Plan, the city is eligible to apply for federal funding toward natural hazard mitigation projects.

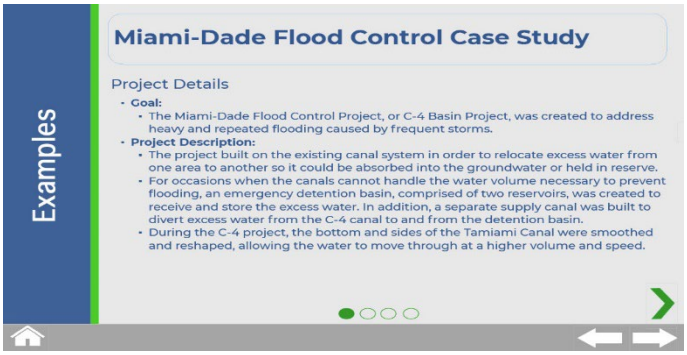
Actions and Outcomes

- This project recommended 10 action items to either incorporate GI/LID BMPs into existing NHMP actions or to implement new GI/LID based risk reduction actions for the city's NHMP.
- These included actions related to land use, flood mitigation, earthquake resilience, water treatment plant relocation, floodwater storage projects, a "green streets" program, and wildfire mitigation programs. Most of these actions will benefit drinking water sources and provide co-benefits, including improved habitat, water quality (including compliance with TMDL goals), and water conveyance.
- Participants of this project strongly recommend that future efforts strive to engage partners (e.g., Department of Environmental Quality, Oregon Department of Water Resources Program, Public Works Transportation, etc.) who do not typically engage in GI/LID or NHMP planning activities. Broadening participation expands funding opportunities and engages potential project implementation partners early in the process.

Partnerships and Contact Information

- The following partners contributed to this project:
    - FEMA

  - EPA
  - The City of Ashland
  - USFS
  - State and local agencies
  - The University of Oregon Community Service Center Team
- For more information on the Ashland Hazard Mitigation Plan, click here.



Miami-Dade Flood Control Case Study

Project Details

- Goal:
  - The Miami-Dade Flood Control Project, or C-4 Basin Project, was created to address heavy and repeated flooding caused by frequent storms.
- Project Description:
  - The project built on the existing canal system in order to relocate excess water from one area to another so it could be absorbed into the groundwater or held in reserve.
  - For occasions when the canals cannot handle the water volume necessary to prevent flooding, an emergency detention basin, comprised of two reservoirs, was created to receive and store the excess water. In addition, a separate supply canal was built to divert excess water from the C-4 canal to and from the detention basin.
  - During the C-4 project, the bottom and sides of the Tamiami Canal were smoothed and reshaped, allowing the water to move through at a higher volume and speed.

Funding Sources

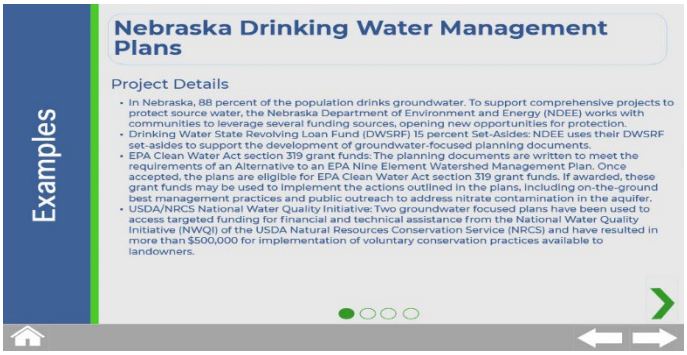
- The cost of the project totaled $70 million.
- The State of Florida was awarded $52.5 million from FEMA's Hazard Mitigation Grant Program.
- The Quality Neighborhood Improvement Program, along with the South Florida Water Management District and Miami-Dade County, contributed funds for the remaining 25 percent.

Actions and Outcomes

- The C-4 Project is in operation and has successfully reduced serious flooding, leading to fewer insurance claims, reduced repair costs, fewer wages lost due to time away from work, and increased public safety.
- By providing a method of flood control, the county was able to protect sources of drinking water from contamination during flooding events.

Partnerships and Collaboration

- The following partners contributed to this project:
  - State agencies, the South Florida Water Management District, and Miami-Dade County worked together in funding and implementing this project.
- For more information on the C-4 Basin Project, click here.
- Links on this page exit the site.



Nebraska Drinking Water Protection Management Plans

Project Details

- In Nebraska, 88 percent of the population drinks groundwater. To support comprehensive projects to protect source water, the Nebraska Department of Environment and Energy (NDEE) works with communities to leverage several funding sources, opening new opportunities for protection.
- Drinking Water State Revolving Loan Fund (DWSRF) 15 percent Set-Asides: NDEE uses their DWSRF set-asides to support the development of groundwater-focused planning documents.
- EPA Clean Water Act section 319 grant funds: The planning documents are written to meet the requirements of an Alternative to an EPA Nine Element Watershed-based Plan. Once accepted, the plans are eligible for EPA Clean Water Act section 319 grant funds. If awarded, these grant funds may be used to implement the actions outlined in the plans, including on-the-ground best management practices and public outreach to address nitrate contamination in the aquifer.
- USDA/NRCS National Water Quality Initiative: Two groundwater focused plans have been used to access targeted funding for financial and technical assistance from the National Water Quality Initiative (NWQI) of the USDA Natural Resources Conservation Service (NRCS) and have resulted in more than $500,000 for implementation of voluntary conservation practices available to landowners.
- USDA/NRCS Source Water Protection Initiative: NRCS directs two percent of Environmental Quality Incentive Program funds to priority areas, including wellhead protection areas, to protect or restore the quality or quantity of the drinking water source.

Project Spotlight: Protection from Nitrate Contamination in Auburn

- The Nebraska Department of Environment and Energy awarded the City of Auburn a Source Water Protection grant (from DWSRF 15 percent set-aside funds) to complete a Drinking Water Protection Management Plan in 2017. This plan meets requirements of an Alternative to an EPA Nine Element Watershed-based Plan making their wellhead protection/source water protection area eligible for CWA Section 319 project funding.
- In 2021, the city was awarded Section 319 funds to begin implementing their plan. The first phase includes upgrading underperforming onsite wastewater treatment systems, properly decommissioning abandoned wells, and implementing agricultural best management practices including buffer strips, cover crops, and no till.
- The plan and associated activities will provide long term protection from nitrate contamination in Auburn's public water supply.

Project Spotlight: Supporting Acquisition of Watershed Land in Syracuse

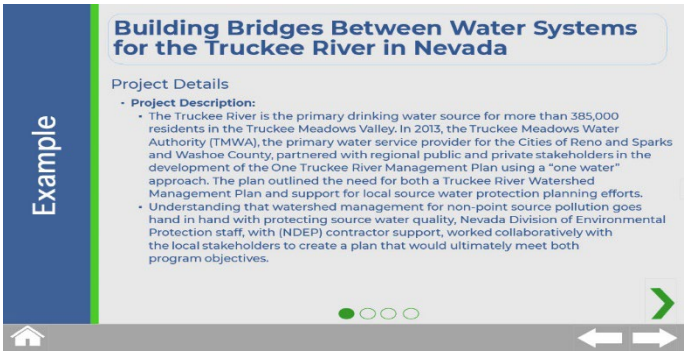
- The Nebraska DWSRF made a $1 million loan (from DWSRF 15 percent set-aside funds) to the City of Syracuse in 2019 for a land purchase of 637 acres from a group of private owners. This land will protect the City's existing wells (built in the 1950s) and planned wells from nitrate contamination.
- The loan was paired with the development of a Drinking Water Protection Management Plan for the City. The plan will develop a groundwater model to delineate the 50-year wellhead protection area and establish a robust Nebraska Department of Environment and Energy and EPA approved Drinking Water Protection Management Plan that

includes all elements of a Wellhead Protection Plan. This project identifies water quality issues and opportunities for improving water quality, and it engages the community in planning and implementation.

- The Nebraska DWSRF makes protection plans a requirement of any land acquisition loan agreements under the 15 percent set-aside. Protection plans serve as the guide for the City to protect its well field source and makes them eligible for CWA Section 319 assistance in the future.

Contact Information

- For more information visit the NDEE Water Programs webpage or contact Ryan W. Chapman, ryan.chapman@nebraska.gov.
- Links on this page exit the site.



Building Bridges Between Water Systems for the Truckee River in Nevada

Project Details

- The Truckee River is the primary drinking water source for more than 385,000 residents in the Truckee Meadows Valley. In 2013, the Truckee Meadows Water Authority (TMWA), the primary water service provider for the Cities of Reno and Sparks and Washoe County, partnered with regional public and private stakeholders in the development of the One Truckee River Management Plan using a "one water" approach. The plan outlined the need for both a Truckee River Watershed Management Plan and support for local source water protection planning efforts.
- Understanding that watershed management for non-point source pollution goes hand in hand with protecting source water quality, Nevada Division of Environmental Protection staff, with (NDEP) contractor support, worked collaboratively with the local stakeholders to create a plan that would ultimately meet both program objectives.

Funding Sources

- The Nevada Division of Environmental Protection (NDEP) Source Water Protection program contracted with a technical assistance provider to help the communities develop an "integrated" source water and 319(h) watershed protection plan for public water systems and the Truckee River in the Truckee Meadows. The plan meets program criteria for funding and technical assistance for both source water protection and the 319 program.
- NDEP distributed Section 319 funds to a local non-profit organization, the Nevada Land Trust, to assist in the development of the watershed-based plan portion of the planning effort.
- The NDEP Source Water Protection program is fully funded by the DWSRF Set-Asides and the Nonpoint Source program is funded by Section 319 funds.
- The Western Regional Water Commission, funded through local taxes and fees, provided funding to the local Truckee Meadows Storm Water Permit Coordinating Committee to assist in the development of the watershed-based planning portion of the effort.
- TMWA, the largest drinking water utility in the region provided significant staff time for technical assistance throughout the planning process.

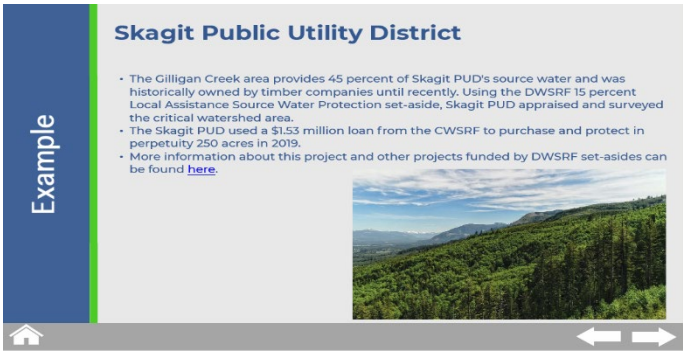
Actions and Outcomes

- The 2020 Integrated Source Water and 319(h) Watershed Protection Plan for Public Water Systems and the Truckee River in the Truckee Meadows, a multi-jurisdictional program and tool, was developed by the community to help preserve and improve the quality of water sources that supply drinking water to the general public. Stakeholders can use this tool to support individual or cooperative funding requests for a multitude of water quality improvement projects.
- Once the planners in Washoe County, City of Reno, and City of Sparks realized that their decisions (e.g., codes, ordinances, and building permit approvals) may significantly impact source water quality, numerous partnerships were formed. For instance, the City of Reno now requires building permit applicants to contact TMWA to determine if the proposed development could adversely impact source water protection areas. This simple referral opens the door for community education and coordination to protect source water protection areas throughout the watershed.

- The next steps moving forward are to implement the plan actions or project profiles. Specific implementation actions have been, and continue to be, developed into proposed projects by local stakeholders and are eligible to be funded by Section 319 funds.
- In 2020, two projects were granted section 319 funding as a result of this planning effort.

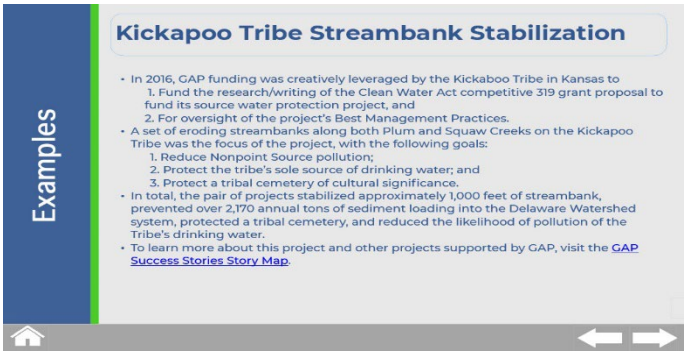
Partnerships and Collaboration

- Multiple programs of the Nevada Division of Environmental Protection (NDEP), including the Bureau of Safe Drinking Water, Source Water Protection and Bureau of Water Quality Planning, and Non-Point Source Program, leveraged program resources to develop a regional plan to bring funding and technical assistance to the Truckee River watershed. A list of partners and contact information is found below:
    - John Enloe, Director of Natural Resources Planning and Management, TMWA, (775) 834-8250, jenloe@tmwa.com
    - Chris Wessel, Water Management Planner, Northern Nevada Water Planning Commission, (775) 954-4682, cwessel@washoecounty.us
    - Birgit Widegren, Nonpoint Source Branch Manager, Bureau of Water Quality Planning, Nevada Division of Environmental Protection, (775) 687-9550, bwidegren@ndep.nv.gov
- For more information on the Source Water Protection program, click here.
- All of the components of the plan, an online mapping tool, and more program details can be found here.
- Links on this page exit the site.



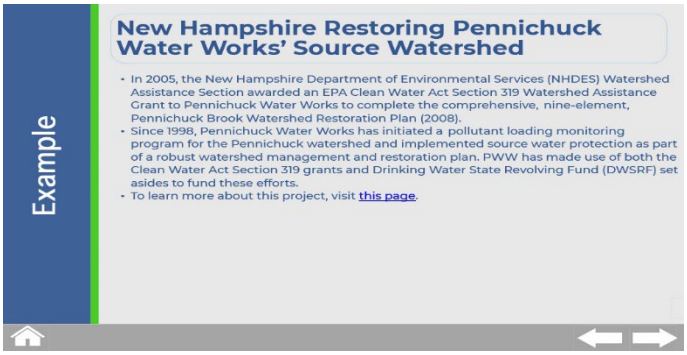
Skagit Public Utility District

- The Gilligan Creek area provides 45 percent of Skagit PUD's source water and was historically owned by timber companies until recently. Using the DWSRF 15 percent Local Assistance Source Water Protection set-aside, Skagit PUD appraised and surveyed the critical watershed area.
- The Skagit PUD used a $1.53 million loan from the CWSRF to purchase and protect in perpetuity 250 acres in 2019.
- More information about this project and other projects funded by DWSRF set-asides can be found here.



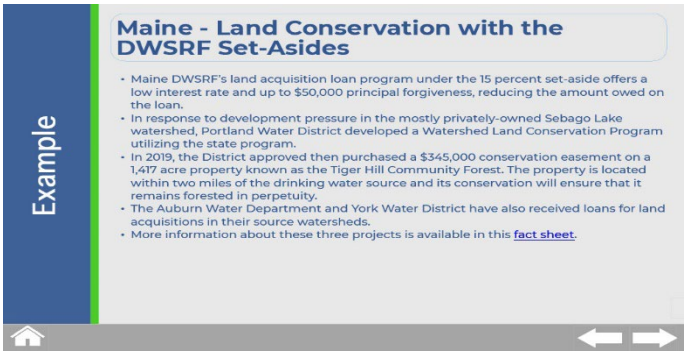
Kickapoo Tribe Streambank Stabilization

- In 2016, GAP funding was creatively leveraged by the Kickapoo Tribe in Kansas to:
  1. Fund the research/writing of the Clean Water Act competitive 319 grant proposal to fund its source water protection project, and
  2. For oversight of the project's Best Management Practices.
- A set of eroding streambanks along both Plum and Squaw Creeks on the Kickapoo Tribe was the focus of the project, with the following goals:
  1. Reduce Nonpoint Source pollution;
  2. Protect the tribe's sole source of drinking water; and
  3. Protect a tribal cemetery of cultural significance.
- In total, the pair of projects stabilized approximately 1,000 feet of streambank, prevented over 2,170 annual tons of sediment loading into the Delaware Watershed system, protected a tribal cemetery, and reduced the likelihood of pollution of the Tribe's drinking water.
- To learn more about this project and other projects supported by GAP, visit the GAP Success Stories Story Map.



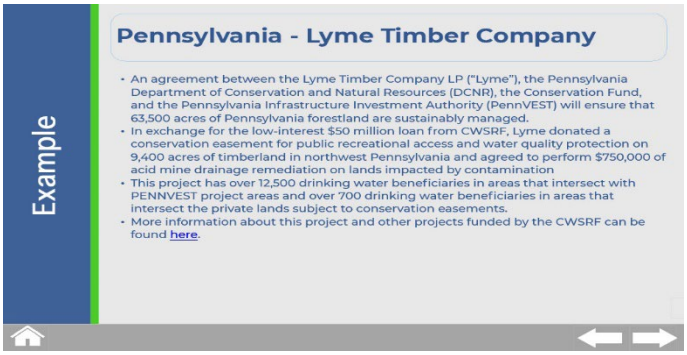
New Hampshire Restoring Pennichuck Water Works' Source Watershed

- In 2005, the New Hampshire Department of Environmental Services (NHDES) Watershed Assistance Section awarded an EPA Clean Water Act Section 319 Watershed Assistance Grant to Pennichuck Water Works to complete the comprehensive, nine-element, Pennichuck Brook Watershed Restoration Plan (2008).
- Since 1998, Pennichuck Water Works has initiated a pollutant loading monitoring program for the Pennichuck watershed and implemented source water protection as part of a robust watershed management and restoration plan. PWW has made use of both the Clean Water Act Section 319 grants and Drinking Water State Revolving Fund (DWSRF) set-asides to fund these efforts.
- To learn more about this project, visit this page.
- Links on this page exit the site.



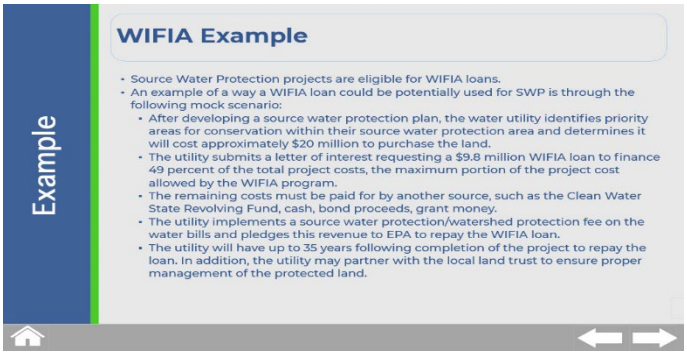
Maine - Land Conservation with the DWSRF Set-Asides

- Maine DWSRF's land acquisition loan program under the 15 percent set-aside offers a low-interest rate and up to $50,000 principal forgiveness, reducing the amount owed on the loan.
- In response to development pressure in the mostly privately-owned Sebago Lake watershed, Portland Water District developed a Watershed Land Conservation Program utilizing the state program.
- In 2019, the District approved then purchased a $345,000 conservation easement on a 1,417-acre property known as the Tiger Hill Community Forest. The property is located within two miles of the drinking water source and its conservation will ensure that it remains forested in perpetuity.
- The Auburn Water Department and York Water District have also received loans for land acquisitions in their source watersheds.
- More information about these three projects is available in this fact sheet.



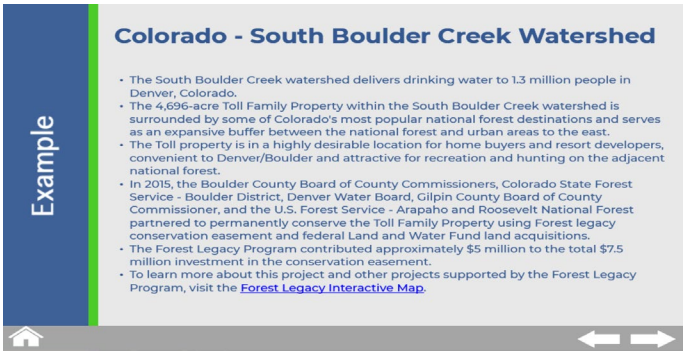
Pennsylvania - Lyme Timber Company

- An agreement between the Lyme Timber Company LP ("Lyme"), the Pennsylvania Department of Conservation and Natural Resources (DCNR), the Conservation Fund, and the Pennsylvania Infrastructure Investment Authority (PennVEST) will ensure that 63,500 acres of Pennsylvania forestland are sustainably managed.
- In exchange for the low-interest $50 million loan from CWSRF, Lyme donated a conservation easement for public recreational access and water quality protection on 9,400 acres of timberland in northwest Pennsylvania and agreed to perform $750,000 of acid mine drainage remediation on lands impacted by contamination.
- This project has over 12,500 drinking water beneficiaries in areas that intersect with PENNVEST project areas and over 700 drinking water beneficiaries in areas that intersect the private lands subject to conservation easements.
- More information about this project and other projects funded by the CWSRF can be found here.



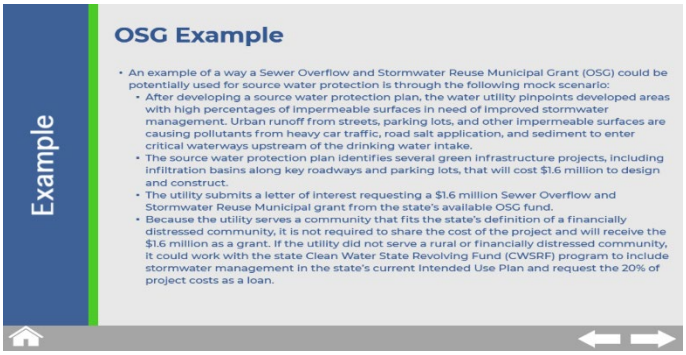
WIFIA Example

- Source Water Protection projects are eligible for WIFIA loans.
- An example of a way a WIFIA loan could be potentially used for SWP is through the following mock scenario:
  - After developing a source water protection plan, the water utility identifies priority areas for conservation within their source water protection area and determines it will cost approximately $20 million to purchase the land.
  - The utility submits a letter of interest requesting a $9.8 million WIFIA loan to finance 49 percent of the total project costs, the maximum portion of the project cost allowed by the WIFIA program.
  - The remaining costs must be paid for by another source, such as the Clean Water State Revolving Fund, cash, bond proceeds, grant money.
  - The utility implements a source water protection/watershed protection fee on the water bills and pledges this revenue to EPA to repay the WIFIA loan.
  - The utility will have up to 35 years following completion of the project to repay the loan. In addition, the utility may partner with the local land trust to ensure proper management of the protected land.



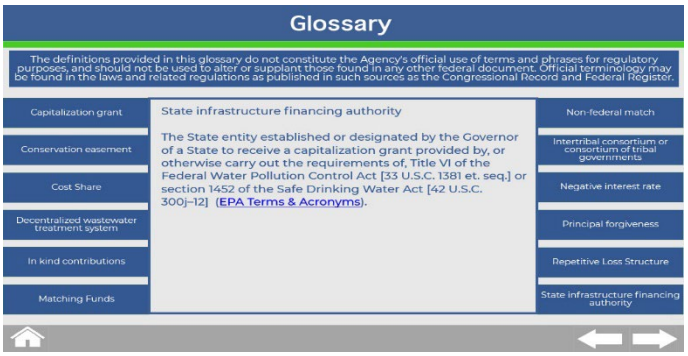
Colorado- South Boulder Creek Watershed

- The South Boulder Creek watershed delivers drinking water to 1.3 million people in Denver, Colorado.
- The 4,696-acre Toll Family Property within the South Boulder Creek watershed is surrounded by some of Colorado's most popular national forest destinations and serves as an expansive buffer between the national forest and urban areas to the east.
- The Toll property is in a highly desirable location for home buyers and resort developers, convenient to Denver/Boulder and attractive for recreation and hunting on the adjacent national forest.
- In 2015, the Boulder County Board of County Commissioners, Colorado State Forest Service - Boulder District, Denver Water Board, Gilpin County Board of County Commissioner, and the U.S. Forest Service - Arapaho and Roosevelt National Forest partnered to permanently conserve the Toll Family Property using Forest legacy conservation easement and federal Land and Water Fund land acquisitions.
- The Forest Legacy Program contributed approximately $5 million to the total $7.5 million investment in the conservation easement.
- To learn more about this project and other projects supported by the Forest Legacy Program, visit the Forest Legacy Interactive Map.
- Links on this page exit the site.



OSG Example

- An example of a way a Sewer Overflow and Stormwater Reuse Municipal Grant (OSG)could be potentially used for source water protection is through the following mock scenario:
    - After developing a source water protection plan, the water utility pinpoints developed areas with high percentages of impermeable surfaces in need of improved stormwater management. Urban runoff from streets, parking lots, and other impermeable surfaces are causing pollutants from heavy car traffic, road salt application, and sediment to enter critical waterways upstream of the drinking water intake.
    - The source water protection plan identifies several green infrastructure projects, including infiltration basins along key roadways and parking lots, that will cost $1.6 million to design and construct.
    - The utility submits a letter of interest requesting a $1.6 million Sewer Overflow and Stormwater Reuse Municipal grant from the state's available OSG fund. to finance 80% of the total project costs, the maximum portion of the project cost allowed by the OSG program.
    - Because the utility serves a community that fits the state's definition of a financially distressed community, it will receive the $1.6 million as a grant without the need to contribute local funding. If the utility did not serve a rural or financially distressed community, it could work with the state Clean Water State Revolving Fund (CWSRF) program to include stormwater management in the state's current Intended Use Plan and request the 20% of project costs as a loan.



Glossary

The definitions provided in this glossary do not constitute the Agency's official use of terms and phrases for regulatory purposes, and should not be used to alter or supplant those found in any other federal document. Official terminology may be found in the laws and related regulations as published in such sources as the Congressional Record and Federal Register.

Click on a term or phrase to view the definition.

Capitalization Grant

Conservation Easement

Cost Share

Decentralized Wastewater Treatment System

In Kind Contributions

Matching Funds

Non-federal Match

Intertribal Consortium or Consortium of Tribal Governments

Negative Interest Rate

Principal Forgiveness

Repetitive Loss Structure

State Infrastructure Financing Authority

Capitalization Grant

Clean Water State Revolving Fund Program: Assistance agreement by which the EPA obligates and awards funds allotted to a State for purposes of capitalizing that State’s revolving fund. [40 CFR 35.3105]

Drinking Water State Revolving Fund Program: Award by EPA of funds to a State for purposes of capitalizing that State’s Fund and for other purposes authorized in section 1452 of the Act. [40 CFR 35.3505]

Conservation Easement

Easement restricting a landowner to land uses that are compatible with long-term conservation and environmental values (EPA Terms & Acronyms).

Cost Share

Also known as “non-Federal share,” or “match,” is the portion of the costs of a federally assisted project or program not borne by the Federal Government (FEMA Definition).

Decentralized Wastewater Treatment System

An onsite or clustered system used to collect, treat, and disperse or reclaim wastewater from a small community or service area (EPA Terms & Acronyms) (e.g., septic systems).

In Kind Contributions

The value of a non cash contribution to meet a recipient's cost sharing requirements. An in kind contribution may consist of charges for real property and equipment or the value of goods and services directly benefitting the EPA funded project (EPA Terms & Acronyms). Specifications around in kind/match contributions may vary, please consult funding programs for details on what qualifies as in kind/match contributions.

Matching Funds

The portion of allowable project costs a recipient contributes to a Federally funded project (sometimes determined by statute). The match may include in kind as well as cash contributions (EPA Terms & Acronyms).

Non-federal Match

In general, the portion of allowable project cost contributed toward completing the project using non-Federal funds. Certain programs may allow certain types of federal funds as matching funds or may allow in kind as well as cash contributions.

Intertribal Consortium or Consortium of Tribal Governments

A partnership between two or more Indian tribal governments authorized by the governing bodies of those tribes to apply for and receive assistance under one or more programs listed in [40 CFR 35.501] [40 CFR 35.502].

Negative Interest Rate

The rate of interest is such that the total payments over the life of the loan are less than the principal of the loan. That part of the debt is gone, lowering the amount that the borrower owes. This term is used by the Clean Water and Drinking Water State Revolving Fund programs.

Principal Forgiveness

Some (or all) of the principal is forgiven, that is, it does not have to be repaid. That part of the debt is gone, lowering the amount that the borrower owes. This term is used by the Clean Water and Drinking Water State Revolving Fund programs.

Repetitive Loss Structure

A National Flood Insurance Program-insured structure that has had at least 2 paid flood losses of more than $1,000 each in any 10-year period since 1978 (FEMA Definition).

State Infrastructure Financing Authority

The State entity established or designated by the Governor of a State to receive a capitalization grant provided by, or otherwise carry out the requirements of, Title VI of the Federal Water Pollution Control Act [33 U.S.C. 1381 et. seq.] or section 1452 of the Safe Drinking Water Act [42 U.S.C. 300j–12] (EPA Terms & Acronyms).

Links on this page exit the site.