

## **Opportunities for Funding Protection Projects through the Drinking Water State Revolving Fund**

**SUMMARY:** The Safe Drinking Water Act (SDWA) authorizes states to use Drinking Water State Revolving Fund (DWSRF) capitalization grants to assist public water systems in financing infrastructure projects and, through four categories of set-asides, to support non-infrastructure activities and programs, including source water protection. The Local Assistance and Other State Programs set-aside, for which states may reserve up to 15 percent of their annual capitalization grant, allows states to provide, among other things:

- Loans to public water systems to acquire land and for conservation easements;
- Loans to community water systems to implement local, voluntary source water protection measures;
- Loans to community water systems to support source water quality protection partnership petitions;
- Expenditures to implement other source water protection efforts; and
- Expenditures to delineate, assess, and update assessments for source water protection areas.

The State Program Management set-aside, for which states may reserve up to ten percent of their annual capitalization grant, allows states to provide, among other things, technical assistance through source water protection programs. All four set-asides allow capitalization grant funding to be used for aspects of SDWA compliance that, while not explicitly about source water protection, can be relevant to water quality protection efforts.

Reports and other documents from the U.S. Environmental Protection Agency (EPA), especially the 2017 [Drinking Water State Revolving Fund Eligibility Handbook](#) and the 2019 [Protecting Source Water with the Drinking Water State Revolving Fund Set-Asides: Fact Sheet and Case Studies](#) confirm and further clarify the opportunity to use DWSRF funds for source water protection, and offer examples of activities for which funds reserved in the DWSRF set-asides may be used.

### **I. A Brief Overview of the DWSRF**

The DWSRF program was authorized by the 1996 amendments to the SDWA, to assist public water systems in financing infrastructure projects necessary to achieve compliance with federal drinking water regulations and to meet the SDWA's health objectives. Through the DWSRF program, the EPA provides grants each year to capitalize state revolving loan funds. From these funds, states provide financial assistance, typically in the form of subsidized loans, to eligible public water systems for purposes that the SDWA has outlined.<sup>1</sup> The DWSRF program is modeled after the Clean Water Act State Revolving Fund (CWSRF) program, and states may transfer as much as 33 percent of the annual DWSRF allotment to the CWSRF program, or an equivalent amount from the CWSRF to the DWSRF, affording states flexibility in addressing their most pressing water infrastructure needs.<sup>2</sup>

From 1997 through June 2018, cumulative net federal contributions for the DWSRF program totaled roughly \$20 billion. When combined with the required state match, loan principal repayments, bond proceeds, and other funds, DWSRF investment over that period totaled over \$38

billion to water systems and over \$3 billion to both states and water systems for set-aside programs.<sup>3</sup>

## **II. Opportunities to Use DWSRF Funding for Protection Projects**

The DWSRF program primarily funds capital improvements; however, in recognition of the value that activities other than those focused on infrastructure can have on drinking water compliance and human health, a state is authorized to use approximately 31 percent of its annual DWSRF capitalization grant for specified categories of set-asides.<sup>4</sup> Opportunities to support water quality protection through the DWSRF arise mostly through these set-asides. Below is a description of the parameters and flexibility of the set-asides as they pertain to source water protection.

### *a. Statutory Language*

Section 1452 of the SDWA authorizes the DWSRF and identifies requirements for the allotment and use of funds thereunder. Subsection 1452(k)(1) authorizes states to use funds under the Local Assistance and Other State Programs set-aside, the most expansively applicable set-aside for source water protection efforts. Under this set-aside, a state may:

- Provide a loan to a public water system to acquire land or a conservation easement to protect the quality of the system's source water and ensure compliance with national primary drinking water regulations;<sup>5</sup>
- Provide a loan to a community water system to implement local, voluntary, incentive-based source water protection measures in areas delineated under a source water assessment program [see SDWA §1453] and/or support source water quality protection partnership petitions [see SDWA §1454], with priority given to activities that facilitate compliance with national primary drinking water regulations or otherwise significantly further the health objectives of the SDWA;<sup>6</sup>
- Make expenditures to implement other source water protection efforts, and to establish and implement wellhead protection programs;
- Make expenditures to delineate, assess, and update assessments for source water protection areas, including the identification of potential sources of contamination; and
- Provide assistance, including technical and financial assistance, to a public water system as part of a capacity development strategy [see SDWA §1420(c)].<sup>7</sup>

For each fiscal year, up to 15 percent of the capitalization grant received by the state may be used for projects under this set-aside, but no more than 10 percent of the capitalization grant may go to any one of the bulleted categories of activities above.<sup>8</sup>

Subsection 1452(g)(2)(B) of the SDWA authorizes states to use funds under the State Program Management set-aside. Under this set-aside, the state may use up to a total of 10 percent of the capitalization grant received by the state each fiscal year to:

- Administer or provide technical assistance through source water protection programs;
- Develop and implement a capacity development strategy [see SDWA §1420(c)];
- Support public water system supervision programs [see SDWA §1443(a)]; and
- Support an operator certification program [see SDWA §1419].<sup>9</sup>

The Administration and Technical Assistance set-aside, SDWA §1452(g)(2)(A), and Small System Technical Assistance set-aside, SDWA §1452(g)(2)(C), offer few opportunities to support source water protection. Under the Administration and Technical Assistance set-aside, the state may provide technical assistance to public water systems in the state and cover the reasonable costs of administering DWSRF programs.<sup>10</sup> Under the Small System Technical Assistance set-aside, the state may provide technical assistance to public water systems serving 10,000 or fewer persons in the state.<sup>11</sup>

*b. EPA Clarifications*

The EPA has detailed the flexibility available in using DWSRF set-asides several times in the last few years.<sup>12</sup> In its *Drinking Water State Revolving Fund Eligibility Handbook*, the EPA identified, among other things, examples of eligible purposes and activities for which funds reserved in each of the four DWSRF set-asides may be used. The examples are intended only to be informative, rather than to reflect limits of DWSRF applicability.<sup>13</sup> In 2018, the America's Water Infrastructure Act (AWIA) added language to the SDWA that expanded the source water protection-related eligibilities of the Local Assistance and Other State Programs set-aside. EPA issued a [memo](#) to their Water Division Directors clarifying these changes. Of the examples that the Handbook and memo highlighted for each of the set-asides, the following uses of funds are (potentially) relevant to source protection:

Local Assistance and Other State Programs Set-Aside<sup>14</sup>

- Loans to public water systems to acquire land and conservation easements necessary for protecting drinking water sources, including costs associated with the acquisition such as appraisal and administrative costs.
- Loans to community water systems to implement voluntary, incentive-based source water protection measures, such as:
  - Building fences that keep agricultural animals away from the water's edge;
  - Creating or protecting riparian buffers (e.g., strips of vegetation) along streams and around reservoirs;
  - Public outreach and education on issues;
  - Management of chemical storage and use; and
  - Sealing off abandoned ground water wells and underground injection wells.
- Loans to public water systems for the voluntary, incentive-based removal of septic systems for source water protection.
- Loans to community water systems to implement source water quality protection partnership petition programs.
- Expenditures for conducting or updating source water assessments to incorporate climate change/extreme weather risks or new contamination risks (e.g., flooding, high runoff, harmful algal blooms or contaminants of emerging concern), and for updating source water assessments with GIS technology and data layers.
- Expenditures for source water protection efforts, such as:
  - Source water protection plans
  - Local source water protection ordinances
  - Small grant programs
  - Public outreach programs

- Integration across environmental programs that protect sources of drinking water, or best management practices within source water protection areas.
- Technical or financial assistance to cover costs and services that are consistent with and reflected in the state's Capacity Development Strategy, such as:
  - Training and outreach to keep water system personnel informed of new issues and to promote public awareness of source water protection;
  - Developing source water protection plans;
  - Conducting initial, special (non-routine) monitoring to establish a baseline understanding of a contaminant of concern or operation of newly-used technology; and
  - Demonstrating monitoring technology and techniques for training purposes over a limited well-defined timeframe (such as for assessment and capacity development in response to harmful algal blooms and other contaminants in source water).

State Program Management Set-Aside<sup>15</sup>

- Conducting source water protection activities to help water systems prevent contamination of drinking water sources.
- Support of state personnel who manage source water protection programs.
- Assessment of source water protection versus treatment at the plant and associated costs.

Administration and Technical Assistance Set-Aside<sup>16</sup>

- Preparation of materials and conducting public outreach and education (as part of general DWSRF program implementation).
- Development of multimedia products such as printed materials, public service announcements, videos, or other media.

Small System Technical Assistance Set-Aside<sup>17</sup>

- Technical assistance in drafting source water protection ordinances.

Appendix E of the *Drinking Water State Revolving Fund Eligibility Handbook* contains lists of previously approved uses of DWSRF set-asides by type of activity based on a survey conducted by the Association of State Drinking Water Administrators in 2014. These lists are not meant to be comprehensive of all potentially eligible activities, but rather are examples of the types of activities on which states have chosen to spend their set-aside funds. From the list related to source water assessment and protection, the following activities are (potentially) relevant to source protection involving surface waters:

- Development and implementation of source water protection activities.
- Revision/enhancement of state's source water assessment model.
- Collection of potential source of contamination (PSOC) locational data to be used in source water and wellhead protection analyses and plans.
- Planning and implementation of surface and ground water drinking water source assessment and protection activities, including source water management plans, buffer establishment and upkeep, road and storm water management and

- reconstruction activities, plugging abandoned wells, and developing public outreach and educational programs and materials.
- Development of an interactive source water assessment website.
  - Development of an online database/guide of source water protection activities.
  - Development and implementation of a source water protection ordinance template for city and county governments.
  - Facilitation of source water protection education and workshops (including CEUs for water system operators).
  - Support to small systems to protect source waters such as well closure and public education.
  - A contract with a technical assistance provider to maintain a source water website that shows source water assessment delineations, possible contaminant sites near public water system sources, and related information.
  - Updates for a state's source water protection reports on an ongoing basis.
  - Assistance with source water area delineations.
  - Development of source water protection plans and supporting GIS information.<sup>18</sup>

Numerous federal and state requirements accompany DWSRF assistance. A few of the more significant and broadly applicable ones are:

- A state must conduct EPA approved NEPA-like environmental reviews of DWSRF-funded source water protection activities, unless the activities solely involve technical assistance or administration.<sup>19</sup>
- For each requested set-aside, except the administration set-aside if not providing technical assistance, the state must develop an annual workplan, which includes a thorough description of planned activities, for EPA approval. The workplan is an opportunity for the state to propose innovative uses of set-aside funds that further the goals of the program.<sup>20</sup>

*c. State Examples*

New Mexico: The Source Water Protection Program of New Mexico's Environment Department uses DWSRF funds, specifically through the Local Assistance and Other State Programs set-aside, to help drinking water systems develop source water protection plans. The form of this support is technical assistance from Source Water Protection Program staff and contractors. One example of this technical assistance was contribution to the surface water assessment portion of Albuquerque Bernalillo County Water Utility Authority's [2018 Rivers and Aquifers Protection Plan](#). Similar support has been provided to the City of Farmington, the City of Rio Rancho, the City of Roswell, Philmont Scout Ranch, and the Village of Taos Ski Valley, among others.

The following examples are courtesy of the EPA's 2019 [Protecting Source Water with the Drinking Water State Revolving Fund Set-Asides: Fact Sheet and Case Studies](#):

Washington: The Skagit Public Utility District (PUD) provides drinking water to more than 65,000 people in Skagit County, serving three cities as well as suburban and rural areas. The Gilligan Creek area of the Cultus Mountain Watershed provides 45 percent of the PUD's source water for its Judy Reservoir Water System.

Until recently, timber companies owned all property around Gilligan Creek. Using a grant and a loan from two state agencies, Skagit PUD purchased and protected 250 acres of critical watershed area in perpetuity for its customers. The grant, funded with the DWSRF 15 percent Local Assistance Source Water Protection set-aside through the Washington Department of Health, was used by the PUD for appraisal and survey of the property early in the process. Knowing the approximate value and exact portion of the property helped the utility negotiate with the property owner and clearly identify a cost to rate payers for the PUD board of commissioners to consider. The PUD subsequently purchased the land in 2019 with a \$1.53 million Clean Water State Revolving Fund loan through the Washington Department of Ecology. The loan included 25 percent principal forgiveness, which reduced the amount owed on the loan. The PUD will pay back the loan through customer revenues and proceeds from selective timber harvests. This collaboration between multiple state agencies and funding sources resulted in a successful priority drinking water protection project.

**Maine:** The Portland Water District (the District) is Maine's largest water utility. Its source, Sebago Lake, is a multi-use lake with excellent water quality. The greatest challenge to the long-term protection of lake water quality is potential development pressure in the mostly privately-owned watershed. In response, the District developed a Watershed Land Conservation Program, which provides funding toward forest conservation. In 2019, the District approved the purchase of 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 District is using the Maine DWSRF's land acquisition loan program under the 15 percent set-aside, which offers a low interest rate and up to \$50,000 principal forgiveness, reducing the amount owed on the loan...

## Endnotes

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<sup>1</sup> U.S. ENVTL. PROT. AGENCY, FACT SHEET: DRINKING WATER STATE REVOLVING FUND (2019).

[https://www.epa.gov/sites/production/files/2019-11/documents/fact\\_sheet\\_-dwsrf\\_overview\\_final\\_0.pdf](https://www.epa.gov/sites/production/files/2019-11/documents/fact_sheet_-dwsrf_overview_final_0.pdf).

<sup>2</sup> U.S. ENVTL. PROT. AGENCY, DRINKING WATER STATE REVOLVING FUND PROGRAM OPERATIONS MANUAL 24 (2006). <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1007ZKN.txt>.

<sup>3</sup> U.S. ENVTL. PROT. AGENCY, DRINKING WATER STATE REVOLVING FUND: PROTECTING AMERICA'S PUBLIC HEALTH SINCE 1997 – 2018 ANNUAL REPORT 4, 12 (2019).

<sup>4</sup> U.S. ENVTL. PROT. AGENCY, DRINKING WATER STATE REVOLVING FUND ELIGIBILITY HANDBOOK 6-7, 28 (2017).

<sup>5</sup> “A State must develop a priority setting process for determining what parcels of land or easements to purchase or use an established priority setting process that meets the same goals. A State must seek public review and comment on its priority setting process and must identify the systems that received loans and include a description of the specific parcels of land or easements purchased in the Biennial Report.” 40 C.F.R. § 35.3535(e)(1)(i).

<sup>6</sup> “A State must develop a list of systems that may receive loans, giving priority to activities that facilitate compliance with national primary drinking water regulations applicable to the systems or otherwise significantly

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further the health protection objectives of the Act. A State must seek public review and comment on its priority setting process and its list of systems that may receive loans.” 40 C.F.R. § 35.3535(e)(1)(ii).

<sup>7</sup> 42 U.S.C. § 300j-12(k)(1); 40 C.F.R. § 35.3535(e).

<sup>8</sup> 42 U.S.C. § 300j-12(k)(2).

<sup>9</sup> 42 U.S.C. § 300j-12(g)(2)(B).

<sup>10</sup> 42 U.S.C. § 300j-12(g)(2)(A).

<sup>11</sup> 42 U.S.C. § 300j-12(g)(2)(C).

<sup>12</sup> See, e.g., U.S. ENVTL. PROT. AGENCY, DRINKING WATER STATE REVOLVING FUND: PROTECTING AMERICA’S PUBLIC HEALTH SINCE 1997 – 2018 ANNUAL REPORT 4, 12 (2019); U.S. ENVTL. PROT. AGENCY, DRINKING WATER STATE REVOLVING FUND ELIGIBILITY HANDBOOK (2017); Memorandum from Jennifer L. McLain, Acting Director Office of Ground Water and Drinking Water, U.S. Envtl. Prot. Agency, to Water Division Directors, Regions 1-10 (July 26, 2019); Memorandum from Steve Heare, Director Drinking Water Protection Division, U.S. Envtl. Prot. Agency, to DWSRF Branch Chiefs, Regions 1-10, PWSS Branch Chiefs, Regions 1-10, and Source Water Protection Branch Chiefs, Regions 1-10 (July 7, 2008).

<sup>13</sup> U.S. ENVTL. PROT. AGENCY, DRINKING WATER STATE REVOLVING FUND ELIGIBILITY HANDBOOK 5 (2017).

<sup>14</sup> *Id.* at 32-35, 61.

<sup>15</sup> *Id.* at 32, 61.

<sup>16</sup> *Id.* at 28-29.

<sup>17</sup> *Id.* at 30.

<sup>18</sup> *Id.* at 68.

<sup>19</sup> 40 C.F.R. § 35.3580(b).

<sup>20</sup> U.S. ENVTL. PROT. AGENCY, DRINKING WATER STATE REVOLVING FUND ELIGIBILITY HANDBOOK 26 (2017).