



Maryland
Department of
the Environment

State Revolving Funds and Source Water Protection

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MDE Water Quality Financing Administration

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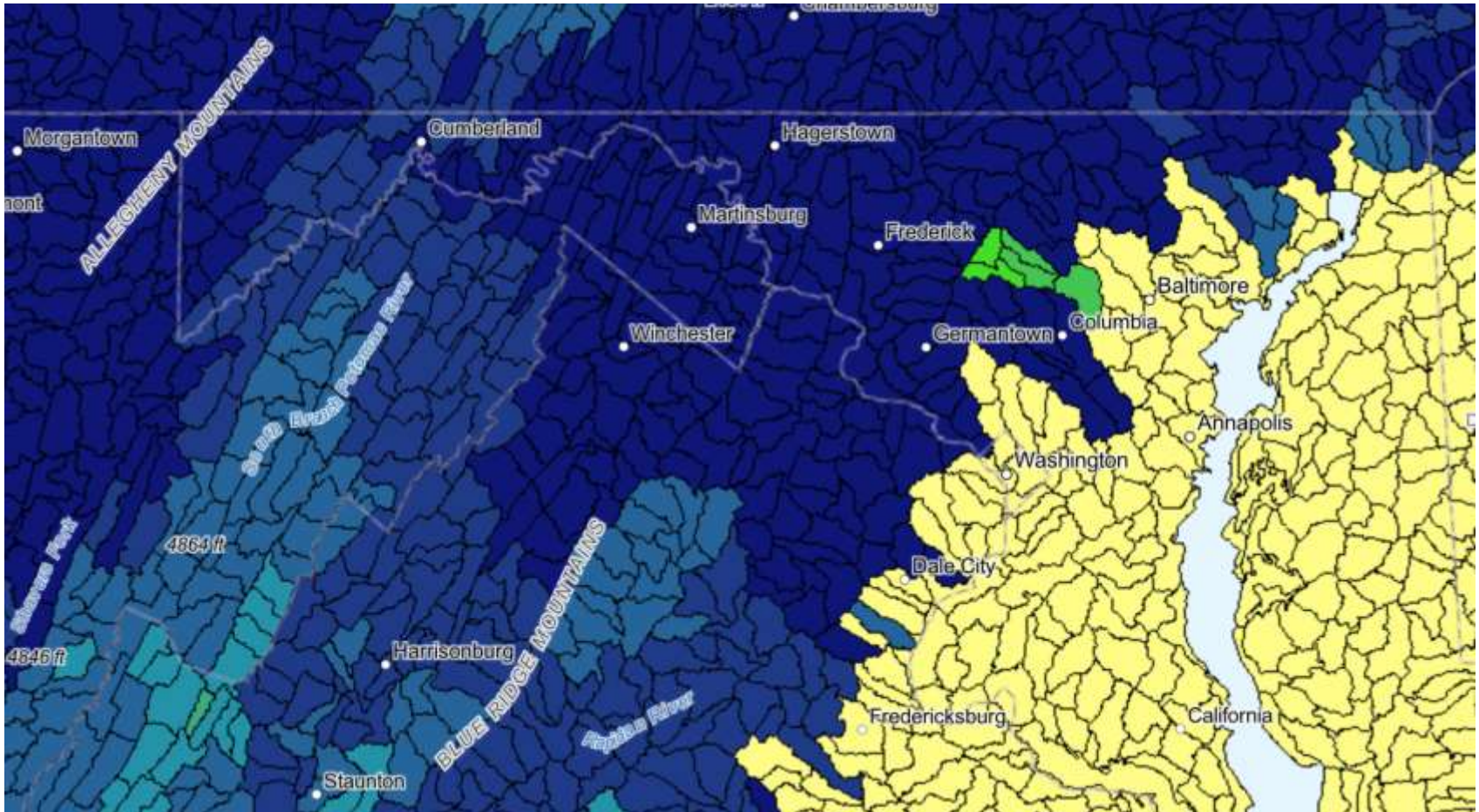


Outline

- Drinking Water Sources and Programs in Maryland
- State Priorities in CWSRF, DWSRF, and 319 Programs
- EPA Guidance on Source Water Protection Updates
- EPA Guidance on Watershed Financing Partnerships
- Underwriting and Economics of Source Water Protection
- Potomac River Watershed Attributes and Benefits



USDA Priority Areas for Source Protection



Source: USDA Forests to Faucets Surface Drinking Water Importance Web Map



MDE High Priority Watersheds in Potomac Basin

- City of Frederick (Monocacy River and Linganore Creek water sources)
- Fort Detrick (Monocacy River water source)
- WSSC (Potomac River water source)
- Cities of Rockville, Brunswick, Sharpsburg, Hagerstown (Potomac River water source)

70% of Maryland's population served by surface water.



Issues Funding Source Water Protection

- Nonpoint source management and planning is conducted on a watershed basis.
- Funding is provided on a jurisdictional basis.
- How do you cross jurisdictional lines when the work necessary is outside of the utility's jurisdiction?
- Align watershed management priorities and funding sources to form watershed financing partnerships.



State 319 and CWSRF Priority Systems

- 319 Grant prioritizes TMDL implementation, watershed-based plan implementation, cost effectiveness in terms of nutrient and sediment management, and protection as well as restoration.
- CWSRF prioritizes water quality and public health benefits based on nitrogen reduction, cost effectiveness of nitrogen reduction, and mitigation of threats to public health, as well as resilience.
- Eligibilities for funding between the two programs align based on eligibilities defined in FWPCA Section 319.



America's Water Infrastructure Act of 2018 (AWIA)

- Increasing trend in DWSRF appropriations

(2018=\$1.1B, 2019= \$1.1B, 2020=\$1.3B, 2021=\$1.95B)

- AWIA amended 15% Local Assistance set-aside to expand eligibilities to development of source water assessments.
- Implementation of protection activities now eligible.
- “By including proper coordination with partners, updated assessments and plans may be used to leverage other funding sources such as the Clean Water State Revolving Fund, 319 grant, and conservation funds from NRCS.”



Safe Drinking Water Act Eligibility and Uses

- Safe Drinking Water Act Section 1452(k)(1)(A) authorizes states to make loans to public drinking water utilities to acquire land or a conservation easement from a willing seller to protect a source of water for a community water system.
- Loans had been eligible, but the main change enacted through AWIA was to SDWA Section 1452(k)(1)(D) authorizing DWSRF grants for development of local source protection plans, local ordinances, land acquisition plans, development of small grant programs,, implementation of BMP's, public outreach, and integration of plans across a broad range of environmental programs to leverage implementation benefits.



CWSRF Watershed Finance Partnerships

- “A watershed partner may act as a broker, an intermediary for funding, or as a recipient of CWSRF assistance.”
- Tremendous amount of flexibility in the CWSRF to utilize innovative financing mechanisms such as programmatic financing and sponsorship models.
- No two watersheds/partnerships/projects are alike.
- Tailor financing mechanisms to individual projects.



Watershed Partner as Broker

“A watershed partner may act as a broker, identifying key nonpoint source projects within a watershed and bringing them to the CWSRF for financing. The CWSRF can then make use of flexible loan terms and innovative financing mechanisms available to put together the best financing package available for each project.



Watershed Partner as Intermediary

“A watershed partner may take on a CWSRF loan, then make sub-loans or sub-grants to additional partners.”

Eligible watershed partners include water utilities, local governments, state agencies, environmental non-profits including accredited land trusts, regional organizations, and private borrowers through linked deposit.



Watershed Partner as Recipient of CWSRF Assistance

“A watershed partner may receive a loan to implement a group of watershed protection and restoration projects. Programmatic financing may be used in this scenario.”

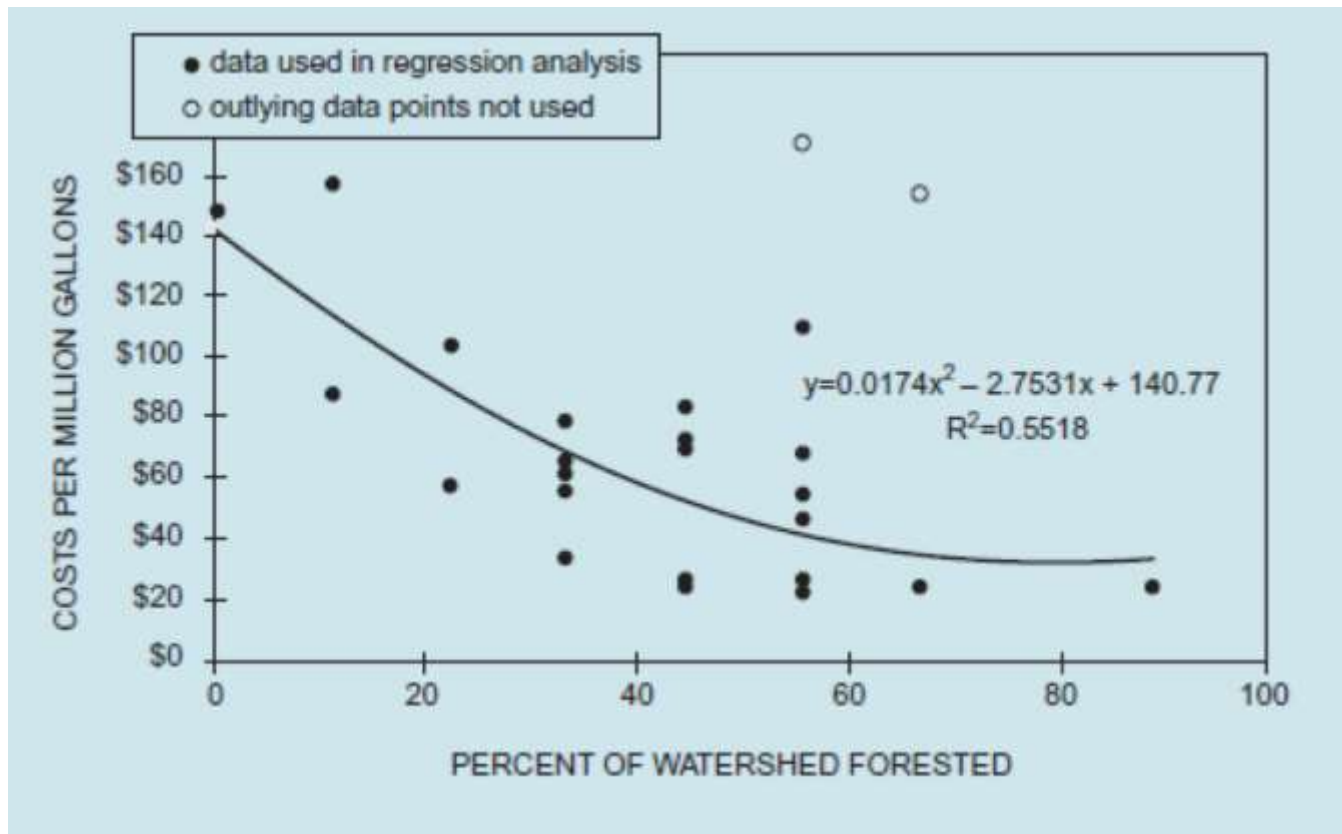
Any changes to scope of programmatic financing would be required to allow the project to still achieve benefits defined in assistance recipient’s application for CWSRF assistance.

Eligible watershed partners include water utilities, local governments, state agencies, environmental non-profits including accredited land trusts, regional organizations, and private borrowers through linked deposit.



Underwriting and Cost Savings

- Source Water Protection makes economic sense.



Source: 2004 Trust for Public Land and American Water Works Association study



Underwriting and Cost Savings

- Reduction in amount of chemicals (alum, ferric chloride, other coagulants) required for treatment.
- Decreased required frequency of filter backwash cycles, prolonging useful life of filter media and mechanical equipment at the treatment plant.
- Reduction in operating costs increases affordability.



Underwriting and Cost Savings

- Underwriting of non-traditional SRF borrowers is based upon financial health of organization, trends in revenues and size and demographics of donor base, collection of user fees, and expected grant awards.
- Much simpler and safer from an underwriting perspective to underwrite a drinking water utility's enterprise fund, especially when the project pays for itself in operating cost savings for the utility.



Additional Protection Project Benefits

- Other benefits of source water protection projects beyond those to water users include ecosystem benefits, social and environmental benefits, stewardship benefits, risk mitigation and increased community resilience.
- Drinking water utilities should explore partnerships with local chambers of commerce and other civic organizations, as these groups have the ability to expand local awareness of water sources and threats, and integrate source water protection into community planning processes as a priority for funding. Without source water, there can be no city and local economy.



Attributes of the Potomac River Basin

- Need for forest restoration, mine remediation, and economic development in upper watershed.
- Potential for increase in outdoor recreation economy.
- Increased assimilative capacity in Potomac River.
- Protection of habitat and wilderness in the Allegheny's.
- Agricultural areas of great importance in source watershed.
- Potential engagement of non-traditional partners due to importance of helping disadvantaged Appalachian communities and serving Nation's capital with safe drinking water.
- Blue-ribbon trout habitat in North Branch Potomac River supporting four different trout species.
- Chesapeake Bay restoration is also advanced with completion of same scope of work as protecting source water for the Washington, DC metropolitan area.
- Improved source water quality for major drinking water suppliers including USACE.



Questions and Contact Information



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