

Swim Splash Smile



WILD AND SCENIC RIVER VOLUNTEER WATER QUALITY MONITORING GRANTS: PROPOSALS DUE 6/1

May 14, 2018

This is a request for proposals for volunteer water quality monitoring and/or citizen science programs that need financial support. Volunteer monitoring and citizen science are valuable ways to improve stewardship and connect people to wild and scenic rivers. As such, the National Park Service (NPS) Wild and Scenic Rivers program is offering a new opportunity for groups within NPS wild and scenic river watersheds to expand their volunteer water quality monitoring programs through a new initiative we are calling Swim Splash Smile.

Swim Splash Smile will fund lab and field equipment purchases, lab analyses, and/or training for volunteer groups within NPS wild and scenic river watersheds. Funding can also go towards technical assistance in developing volunteer water quality monitoring programs. We are interested in proposals in the \$2,000-\$10,000 range, but may consider special requests up to \$25,000. In addition to financial and technical assistance, Swim Splash Smile will work with the selected groups to track and highlight program success. To commemorate the 50th Anniversary of the Wild and Scenic Rivers Act, eligible partner groups must be working within watersheds of designated wild and scenic rivers in national parks or designated partnership wild and scenic rivers. Rivers on the Nationwide Rivers Inventory or state-administered wild and scenic rivers are not eligible this year but will be considered in the future. Ideal projects will begin this year and contribute to sustainable relationships with the NPS Wild and Scenic Rivers program. Therefore, funding will be prioritized for projects that demonstrate potential for longevity beyond 2018 and the initial purchase.

In addition to strengthening partnerships on wild and scenic rivers, NPS seeks to improve how water quality data is collected, managed, and shared. Programs with interest and/or the capacity to make their data credible as well as publicly available will also be prioritized.

If you are interested in this funding opportunity, please fill out the following proposal form and send to kathryn_willi@partner.nps.gov. The deadline to submit proposals is **Friday, June 1, 2018**. NPS may contact you with additional questions before the official award announcement on **Friday, June 15, 2018**. Please contact Katie Willi (kathryn_willi@partner.nps.gov, 970-225-3544) or Kelleen Lanagan (kelleen_lanagan@partner.nps.gov, 202-354-6934) if you have any questions.

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PROJECT INFORMATION

1. Which wild and scenic river is involved in this project?

White Clay Creek Watershed (PA/DE)

2. What is the ultimate goal/objective of this water quality project?

1) To gather and maintain a database of water quality parameters that will provide a better understanding of our headwaters and larger streams so that we may manage them in a more effective and efficient manner; 2.) to engage residents in watershed management over the long-term to create a strong and informed network of volunteers, thereby creating better stewards and advocates for our natural resources, and 3.) to share data with elected officials, regulators, and developers (those making decisions that could impact water quality and stream habitat within the watershed) and watershed residents so that they may make more informed decisions regarding their own properties and land use proposals within their communities.

3. Estimated cost. (If your project is selected, we will require more specific information about actual cost.)

At a minimum we are requesting \$10,000 to support expansion of our current monitoring program. However; \$25,000 would support the purchase of additional continuous monitoring sensors, and supplement our bacteria monitoring efforts using microbial source tracking.

4. Explain in 2-3 sentences how the funding will be used [e.g., purchasing equipment, lab analyses, etc.].

Purchasing of additional continuous stream sensors (@\$2600 per sensor including annual cell plans to transmit data online), lab and field equipment for volunteers to use on site (@\$1000), professional lab analysis of additional water quality parameters (@\$70 per sample per site per sampling date for professional lab analysis of chlorides, bacteria concentration, nitrate, orthophosphates, TSS and potentially a few DOC at select sites) Example: 15 sites x 10 water quality samples/site x \$70/sample= \$10,500), and intern support with data management, report generation, and volunteer coordination. Depending on the amount awarded,

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preference would be given to the field kits and lab analysis at existing long-term sites.

5. What is the name and role of the organization(s) involved in this project?

White Clay Wild and Scenic River Program – lead, volunteer coordinator
Stroud Water Research Center – technical support, supplemental training (stream sensors)
Delaware Nature Society – intern support, and volunteer training support
The University of Delaware Water Resources Center – intern support, and assistance with development of trend reports for publication.

6. Please describe how certain metrics [e.g., volunteer hours, volunteers engaged, samples collected] could be used in demonstrating the success of your project.

1.) Improved understanding of watershed health as a whole and of the smaller tributaries that make up the majority of stream miles via increased data, data management and data analyses (minimum of 6 samples per site during varying flow regimes for chlorides, TSS, nitrate, and orthophosphate); 2.) Detection of trends in water quality, both good and bad, so White Clay Watershed Association/White Clay Wild and Scenic Program can make more informed decisions regarding restoration and protection shared with the public via trend reports every (5 years), quarterly articles, and annual updates; 3.) Sharing of current information about our watershed to residents, elected officials, government agencies, and other interested parties so they can make informed decisions. (data driven public outreach, # of events, # of articles, record of outcomes: improved ordinances, improved land development proposals, and improved BMP effectiveness); and 4.) success will be demonstrated by volunteer recruitment, retention, and satisfaction.

7. On what timeline do you plan to carry out the proposed monitoring activity/project? Ideally projects would be started in 2018.

Our monitoring program was initiated in 2012, starting with five bacteria monitoring sites using limited Wild and Scenic Program funds and leveraging those funds with other outside sources. The program has slowly expanded over the course of the following 6 years, but additional funding would allow us to purchase needed field equipment to measure and analyze additional water quality parameters at fixed sites in a consistent manner, add and monitor temporary sites where we need more information to answer specific questions about the watershed, allow us to

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install additional continuous monitoring sensors at select sites, and allow us to expand our outreach to citizens to help carry out the program goals thereby making the role of citizen scientists a more established component of our monitoring program.

8. Do you currently have a monitoring plan that includes quality assurance protocols, standardized sampling methods, and ways to archive your data? If not, would you be willing to work towards a more standardized approach to water quality monitoring and data management?

Yes, we began our water quality monitoring program in 2012 and have specific protocols we follow depending on what we are testing. Throughout 2017-18 we began putting all of this together in one manual to have monitoring goals and protocols in one place. We also realized the need for data management and storage and are working with a retired software engineer to design a software program using 'R- language' to manage and archive the large amounts of data coming in from the continuous sensors.

9. Do you plan to make the data that you collect available for others to use?

Yes, this is part of our mission statement. We are also collaborating with the Delaware Nature Society and The Nature Conservancy (Delaware chapter) to develop quarterly educational pieces for social media, newsletters, and blogs, based on the data collected since we are all working towards the same goals throughout the larger Brandywine Christina watershed.

CONTACT INFORMATION

Please provide contact information for both the primary contact and others that would be involved in the project.

Primary Contact Name: Shane Morgan

Primary Contact Email: mpc@whiteclay.org

Primary Contact Phone: 484-716-6836

Additional Contact Information (Name, Email, Phone):

Jamie Fosburgh, Acting Manager, NER Rivers Program, jamie_fosburgh@nps.gov, 617 223-5191