

**White Clay Wild and Scenic River Assistance
CA P18AC01264**

Budget and Work Plan Summary, 2019 Funds

General: Funds provided in FY2019 will fund agreed upon workplan elements to support implementation of the White Clay Creek Watershed and its Tributaries Management Plan, consistent with PL 106-357. FY19 workplan elements are estimated as follows:

The White Clay Watershed Association (WCWA) will provide a part-time contract Watershed Coordinator to assist the White Clay Wild and Scenic Steering Committee (WCWSSC) in administrating all activities related to the Wild & Scenic designation and coordinate the implementation of the White Clay Creek Watershed and its Tributaries Management Plan (the Plan). The Watershed Coordinator will serve as the principle staff for WCWSSC in implementing the Plan and assisting in administrating all activities related to the Wild and Scenic designation. The Watershed Coordinator will be overseen by WCWSSC and will focus on working with the watershed municipalities, residents, and other interested parties.

WCWSSC through the Watershed Coordinator proposes to perform the following MAJOR ACTIVITIES.

- Serve as the principle contact on behalf of WCWSSC for watershed communities, state and federal organizations, local, state and federal government agencies, and liaison to the National Park Service and other Partnership Wild and Scenic Rivers.
- Organize and participate in quarterly meetings of the WCWSSC, as well as subcommittee and project-based meetings as needed, and assisting with projects related to the implementation of the Watershed Management Plan (the Plan) as appropriate.
- Meet with the project committees, subcommittees and full committee as needed to evaluate work accomplished, assign roles, identify need for subcontractors and in conjunction with committee members assist in setting goals for new short and long-term action items. Project groups are currently organized under three (3) subcommittees (Restoration, Education and Outreach, and Open Space)
- Maintain filing system, operating procedures and logistics, and database of contacts; purchase needed supplies; and subcontract for needed services.
- Manage specific project related and administrative tasks, coordinate with outside agencies and organizations and set time and cost estimates.
- Serve as point of contact for local organizations, the public, educational institutions and local, state, and federal governments/agencies.
- Develop annual budgets and workplans in consultation with NPS and the Committee and maintain a database of projects for tracking budget lines.
- Track major development proposals and land use issues and alert WCCSC and NPS to projects with potential significant affects to White Clay Creek. Coordinate with NPS on local project reviews. Attend planning and zoning board meetings as

circumstances dictate and time allows.

- Organize, edit and distribute the annual report via outreach events, email, website and regular mail. Oversee content and design of website (www. whiteclay.org). Utilize a variety of media resources including mailings, publications, brochures, website and Facebook page and coordinate with other organizations to distribute information and updates regarding program status, special events or projects in the watershed.
- Provide organizational, public relations, and marketing support for Wild & Scenic activities.
- Organize, support and attend events (when feasible) including the annual White Clay Creek Fest, public and municipal outreach, educational programs, school programs, workshops and community programs to further the goals of the Plan.
- Assist educational and research institutions in coordination, funding and intern positions for research and monitoring opportunities. These have included University of Delaware, West Chester University, Stroud Water Research Center, and Delaware Nature Society.
- Oversee and coordinate specific projects including:
 - Land preservation
 - Water Quality Monitoring (Stream Watch)
 - Catch the Rain
 - Christina Watersheds Municipal Partnership
 - Agricultural, Municipal, and Residential Best Management Practices
 - Land Stewardship
 - Reforestation
- Applies or coordinates with other organizations for grants for projects that address management goals.

Major Cost Breakdown of NPS Funds

Category	NPS Funds	Total
1. Personnel	\$50,880	\$50,880
2. Travel	\$1,527	\$1,527
3. Indirect Expenses	\$3,805	\$3,805
4. Contractual	\$52,388	\$52,388
5. Supplies	\$3,800	\$3,800
6. Other	\$7,600	\$7,600
Total	\$120,000	\$120,000

Cost Category Explanation:

1. Personnel: Personnel cost is the actual contracted rate of the part-time Watershed Coordinator which equates to 1272 hours/year at \$40 per hour.

2. Travel: Mileage is charged at standard federal rate for personnel. Travel expenses also include occasional parking and accommodations for meetings, workshops and NPS communications. (est. 2160 miles/year @ \$0.545/mile, plus tolls and parking \$100 and overnight accommodations for workshops and conferences 2 nights @\$125/night)

3. Office Expenses: Includes costs associated with maintaining and running home office (184 Sawmill Road, Landenberg, PA 19350). Includes office supplies, internet services and data storage, utilities, conference fees for management plan coordinator (and or intern/committee member) to attend local and regional conferences regarding water quality and restoration as they pertain to work in the White Clay Creek), printing, postage and or mailing services, memberships/dues and subscriptions, annual report design/printing/distribution, and office equipment. Breakdown below: (424 Indirect)

Item	Cost
Utilities/Occupancy (electric)	\$566
Internet Services and Data Storage	\$600
Office supplies and equipment	\$1,239
Postage/Printing	\$1,400
Total	\$3,805

4. Contractual: Anticipated small contracts necessary to implement the watershed management plan. (GIS mapping, report writing and intern support, stream monitoring support, bacteria monitoring and research, educational presentations and graphic design support, municipal outreach, support for restoration work) (Oct 2019-Sept 2020)

Item	Cost
University of Delaware Technical Assistance	\$5,000
University of Delaware Graduate Student Assistance	\$3,000
Bacteria Research (Water Quality)	\$10,180
Stream Watch (WQ testing/analysis)	\$3,858
Restoration/WQ Improvement Projects	\$3,000
Land Stewardship	\$5,550
Environmental Education Awards (School Programming)	\$1,500
Creek Fest	\$1,000
Graphic Design Support	\$2,000
Christina Watersheds Municipal Partnership (Municipal Outreach and Support)	\$6,800
Land Preservation	\$3,046
Land Transactions	\$7,454
Total	\$52,388

University of Delaware, Water Resources Center (WRC) Technical Assistance: Geographic Information System Mapping and Support, Report writing support (100 hours @ \$50.00/hour = \$5,000)

University of Delaware, Water Resources Center (WRC) Student Assistance: Website and blog support as needed; Creek Fest support (event posters, development of public relation materials, activity development and support for display); misc. administrative and project support; water quality monitoring support. (140 hours @ \$21.43/hour = \$3,000)

Bacteria Monitoring and Research: Collection and analysis for bacteria (enterococcus, E. coli, Total coliform) a minimum of 150 recreational season stream water samples over approximately 30 sites across the watershed as part of our recreational season water quality monitoring. DNA fingerprinting and real-time PCR (qPCR) assay for host-specific bacterial groups (e.g., Bacteroides) will be performed on selected samples to sort out the potential FIB sources (human, bovine, equine, poultry etc.) and their contribution to specific samples/sites to identify potential bacterial sources in the White Clay Creek (Pennsylvania portion) to target best management practices (BMPs) and implementation strategies. Lead Partner: Stroud Water Research Center; Other Identified Partners: Delaware Nature Society, USGS, University of Delaware Water Resources Center, City of Newark. (\$10,180, 424 contractual)

White Clay Watershed Stream Watch Program: Continue in to second year of stream monitoring/citizen science program using remote DIY sensors to measure physical and chemical parameters in select tributaries. Work with volunteers to collect continuous data at a minimum of 4 sites over a 12-month period (including collection and analyses of nutrients, sediment (TSS), and chlorides). Recruit additional volunteers and collaborate with listed partners to provide training, coordinate sharing of volunteers and equipment, and host a citizen scientist workshop. Lead Partner: Stroud Water Research Center; Support: Save Our Water, Delaware Nature Society, The Nature Conservancy of Delaware Stream Stewards, Chester County Master Watershed Stewards. (\$3,858, 424 contractual)

Restoration/Water Quality Improvement Projects: Implementation of conservation plans and/or best management practices on agricultural lands in White Clay Creek watershed. Lead Partner: Brandywine Conservancy; Other Identified Partners: Chester and New Castle County Conservation Districts, Chester County Planning Commission. (\$3,000, 424 contractual)

Land Stewardship: Continued land management services for enhanced riparian buffer establishment at locations throughout the White Clay Creek. Target locations of recently installed buffer plantings and existing woodlands including but not limited to the 4-acre Franklin Preserve (Franklin Township), 2-acre farm (New Garden Township), 2-acre farm (Penn Township), and the White Clay Creek Preserve. The focus is on invasive species management, natural succession strategies to improve habitat, and monitoring the survivorship of newly planted trees. Supplies may be purchased as needed to aid in land management and tree success such as additional caging, tubes,

stakes, or herbicide). (\$5,550, 424 contractual)

Environmental Education Awards/School Programs: Provide environmental education awards to 3 schools (or multiple grades of students in same school) for children and teachers in grades 4-12 to attend hands on watershed science classes at Stroud Water Research Center (\$350/class of 24 students) plus transportation if needed (generally \$300/bus load). In School Programming can be substituted for field trips to Stroud depending on school situation. Lead Partner: Stroud Water Research Center. Other potential partners: Delaware Nature Society, White Clay Creek State Park. (\$1,500, 424 Contractual)

Creek Fest: Creek Fest is an annual, one day event that celebrates the many ways to enjoy and protect the White Clay Creek. Our goal is to raise awareness of the drinking water, scenic, recreational, historical and natural resource values of the White Clay Creek through various activities and exhibits. Watershed residents are informed on various ways to protect, improve, and promote these resource values. Lead Partners and Sponsors: White Clay Creek State Park, Friends of White Clay Creek State Park, SUEZ, Mushroom Farmers of Pennsylvania. Funding support public relations, direct mailing, and sound management services. (\$1000, 424 contractual)

Graphic Design Support: Consulting fees for graphic design services, printing, and fabrication of outreach materials such as brochures and educational signage. (\$2,000, 424 Contractual)

Christina Watersheds Municipal Partnership/Municipal Outreach: Initiation of White Clay Watershed Implementation Plan (WIP) and continued participation in the Christina Watershed Municipal Partnership as White Clay lead on Municipal Separate Storm Sewer Systems (MS4) multi-municipal collaboration on TMDL and Pollution Reduction Plans. This will involve communication and collaboration with private, non-profit, and government partners, to design collaborative, regulatory compliant, equitable and affordable, water quality restoration programs to improve water quality in the White Clay watershed. As well as continuing to work with Chester County MS4 communities to implement BMPs that meet their regulatory obligations. Consultant Fees for Project Lead: Ellen Kohler, University of Maryland Environmental Finance Center; Other Identified Partners: Brandywine Red Clay Alliance, Chester County Water Resources Authority, University of Delaware Water Research Center, Chester County Conservation District, Stroud Water Research Center, Brandywine Conservancy, White Clay Watershed Municipalities, PA DEP, DNREC, DeIDOT, New Castle County and EPA. (\$6,800, 424 Contractual)

Land Preservation: Natural Lands Trust (NLT) and Brandywine Conservancy (BC) will continue to initiate potential land preservation projects within the White Clay Creek Wild and Scenic program area through outreach to appropriate landowners. This includes initial meetings with private landowners to discuss direct preservation through conservation easement or fee purchase. In addition, to evaluating potential funding scenarios for acquisition. Costs include staff time (70 hours at \$30/hour) for landowner contact, mapping, and mileage. Planned project outputs: Meet with four new

landowners and initiate new projects with two of them. (\$3,046, 424 Contractual)

Land Transactions: Conservation transactions are challenging in requiring multiple funders whose requirements and funding levels never match completely. The White Clay Creek land preservation funds are geared toward covering the “gap” between funding requirements to ensure completion of acquisition projects. Costs typically include staff time (50 hours at \$30/hour) devoted to negotiations, document preparation and review, capital/acquisition costs, and transactional costs (including survey, title search and insurance, appraisals, environmental reports, and legal costs). Planned project outputs: Closing on at least one project approved by the White Clay Creek Steering Committee. Advancing negotiations on at least two priority projects Priority parcel targeted for conservation. (\$7,454, 424 Contractual)

5. Supplies:

Water Quality Monitoring: Includes stream sensors, hand held sensors/kits, bacteria and water quality monitoring supplies, volunteer monitoring supplies. (\$3,400, 424 Supplies)

Outreach & Education Programs: Outreach and education materials including displays, maps, teaching supplies and handouts. Ongoing (\$400, 424 Supplies)

6. Other:

WCWA Insurance (\$2,600, 424 Other)

Catch the Rain: Rebate program to incentive voluntary green stormwater infrastructure implementation on private residential or institutional lands. (\$5,000, 424 Other)