#### QUARTERLY/ANNUAL PERFORMANCE REPORT NARRATIVE

Cooperative Agreement #: CA\_P18AC01264

Award Recipient: White Clay Watershed Association

Project/Program Title: Wild & Scenic River Funding

Date: January 2, 2020

Period Covered by Report: July 1, 2019 - December 31, 2019

NPS Funds expended during this reporting period: \$42,832.56

Submitted by: Shane Morgan, Management Plan Coordinator

Submitted to: National Park Service - Partnership Wild & Scenic Rivers

Summary of work performed during the period covered by the report:

## **Administration (\$27,694.79)**

Continued participation in watershed wide meetings throughout the quarter: Christina Watershed Municipal Partnership, Christina Basin Task Force, individual meetings with various watershed stakeholders, Board of Supervisors and other municipal meetings.

Conducted White Clay Steering Committee Quarterly meeting and maintained and updated program fiscal records.

Followed up on development projects in the watershed including the Papermill Road/DelDOT culvert project in New Castle County, the Newark Pedestrian Bridge project, the New Garden Township cell tower hearings, the proposed 0 Papermill Road subdivision and annexation to City of Newark.

Attended public open houses and provided comment to DNREC Division of Parks and Recreation regarding the revised White Clay Creek State Park Master Plan, New Castle County Department of Land Use regarding the proposed GreeNCC ordinance revisions, and the PA DCNR Planning for Pennsylvania Parks open house.

Tracked budgets and maintained communications with other non-NPS funders including DelDOT, University of Delaware Department of Economics, Brandywine Red Clay Alliance, SUEZ, and National Park Foundation.

Began preliminary work on annual report and planning and budgeting for FY20 NPS funding. Purged and updated watershed files.

## **Education (\$970.90)**

# Municipal Outreach:

- Maintained communications with municipal engineers and staff to continue discussions
  on their stormwater plans and permit applications to PA DEP and learn where they are
  in the revision and resubmittal process.
- Continued conversations with PA-DEP staff to understand how each TMDL plan is being reviewed and acted as a liaison between the municipality and PA DEP as questions arose.
- Continued exploration of additional BMP opportunities in the Pennsylvania MS4
  municipalities, including the use of riparian buffers to meet stormwater permit
  requirements in Franklin Township, the use of green stormwater infrastructure in West
  Grove Borough, and started preliminary work looking at roads in London Grove
  Township for potential BMPs in combination with the Catch the Rain program for
  homeowners along W. Woodview Road.
- Participated in the Christina Watershed Municipal Partnership monthly planning meetings to formalize our structure so we can be proactive in receiving funding to continue this work.
- Reviewed comments on declined grant application with NFWF for Delaware River Conservation Funds. We will resubmit next application round based on feedback from NFWF to help fund water quality improvement planning and project implementation in the urbanized areas of White Clay watershed.

## **School Programming:**

Committed to sending a class of 24-30 Newark High School Advanced Placement Environmental Science students to a field trip to Stroud Water Research Center (Stroud) set for Spring 2020). Committed to sending 800 students (entire fourth grade class) from Avon Grove Intermediate School to Stroud spring 2020.

Supported Delaware Nature Society in implementing a new environmental education elective program at Shu Middle School in Newark, Delaware for a class of 30 seventh graders.

#### Media and Print Materials:

- Maintained social media updates, website updates, and E-mail communications.
- Produced articles for municipal newsletters.
- Produced and submitted article to the NPS 2020 River Currents newsletter about the Catch the Rain Program.
- Conducted preliminary work on outreach post cards.
- Began preliminary planning and budgeting for a White Clay Watershed Report Card.

### **Creek Fest:**

- Began planning and outreach for the 2020 Creek Fest; including communications with exhibitors, vendors, and entertainment acts.
- Updated 2020 vendor forms, save the date, and web page.
- Held kick off meeting in December.

## Restoration (\$14,166.87)

#### Bacteria Research:

- Completed 2019 recreational bacteria sampling at 30 sampling sites.
- Supporting Stroud Water Research Center on microbial source tracking of select summer samples (to be completed late winter 2020).
- Ongoing: Seasonal bacteria collection at four sampling sites biweekly throughout the year. Data management and analysis.

## Stream Watch (water quality monitoring, analysis, and reporting):

- Volunteer coordination and management of five continuous monitoring stations.
- Installed a new continuous monitoring station outside of West Grove Borough in August 2019.
- Continued to use University of Delaware interns to collect stream samples at all sensor stations for Nitrate, Orthophosphate, Chlorides, and Total Suspended Solids.
- Met monthly with Rob Tuttle to develop and refine software using the open source R that meets the needs of our monitoring efforts in the Christina Basin. Currently working on automated reporting.
- Continued to refine the draft water quality monitoring plan and field protocols for volunteers.
- Held meetings with University of Delaware intern, Matt Kirchoff to go over GIS
  mapping needs for the interactive White Clay Watershed map. Matt is making updates
  to the current map under the supervision of Andrew Homsey.
- Ongoing: Data input, management, and analysis.
- Provided technical support and advice to stream stewards (Rob Tuttle, Jeff Chambers)
  work with UD engineering students to develop a prototype for an automated stream
  sampler that would collect samples during storm events.
- Worked with USGS to determine location of five new next generation stream gages in White Clay Creek.

#### <u>Catch the Rain Program</u>:

- Met with 13 Catch the Rain applicants (11 new, 2 repeat) and provided site reports.
- Continued planning with Brandywine Conservancy for second riparian planting in Franklin Township in Spring 2020.
- Coordinated with economic professors from University of Delaware (UD) on a research collaboration investigating homeowners' willingness to invest in residential BMPs specifically focusing on rain gardens. Aided with survey development, GSI descriptions and photos, and project budgeting and planning. The survey will be administered in January. Participants will then be selected for implementation projects by the UD team. WCWS program will conduct site visits in White Clay and help with implementation and project planning and UD will provide the funding for this outreach. This is part of a larger study to understand the incentives of BMP adoption and implementation.
- Issued 3 rebates for a permeable paver retrofit and rain garden, a conservation landscape, and a canopy tree planting.

- Continued to coordinate with New Castle County (DE) Special Services Department on a project at Paper Mill Park. After discovering the area didn't percolate well, the county agreed to hire an outside contractor to conduct the work. Met with two independent contractors on site to get proposals for New Castle County to review. The county has agreed to use an independent contractor to install the 800 square foot rain garden which is tentatively scheduled for a spring 2020 installation.
- Assisted Brandywine Conservancy in developing a Catch the Rain program brochure to be printed this winter.
- Ongoing Program Administration: Applicant tracking and communications, tracking of program statistics, assessment of current and future funding needs, updating of print and web media to reflect current and future program needs.

#### Water Quality Improvement Projects:

- Supported Brandywine Conservancy efforts to install a sediment catchment basin at a CAFO in London Grove Township.
- Administered the E.K. Dockstader Foundation grant funding to coordinate an impervious area assessment for West Grove borough completed by Rutgers University Extension and hosted 2-3 meetings to review assessment and select implementation project for Spring 2020.

## **Land Stewardship:**

- Worked with New Garden Township and an independent landscape contractor to provide needed assistance with stream buffer management at the New Garden Township Park. Proposal was accepted by the township manager and stewardship work will begin in March 2020.
- On-going: land stewardship work conducted at Hoopes farm, Hutchinson farm, and Franklin Preserve. Continued to monitor stewardship work at these sites to review progress and discuss future needs.
- Contracted with Jim White (Delaware Nature Society) to conduct invasive species management at Middle Run Natural Area.

# Land Preservation (\$0)

- Attended trails meetings with Kate Raman (Natural Lands) and Rachael Griffith (CCPC)
  to discuss how we can coordinate on White Clay watershed trail planning, open space,
  and GSI efforts. New Garden Township is working on its township trail map and there is
  renewed interest with the county to implement a multimunicipal trail circuit along the
  Route 1 corridor.
- Natural Lands is working on two potential new trail easements that involve identified landowners on the preliminary New Garden township map.
- Attended the London Grove Open Space Committee Annual Large Landowner Dinner with Brandywine Conservancy and Chester County. Presented overview of land preservation in White Clay and met individually with four large landowners to go over benefits of open space to water quality, and introduced the Catch the Rain program.

# **Federal Financial Report**

(Follow form Instructions)

OMB Number: 4040-0014 Expiration Date: 01/31/2019

		(1 01101 110111)								
1. Federal Agency and Or	rganizational Element to Wh	ich Report is Submitted			ying Number Assigned by Federal s, use FFR Attachment)					
National Park Servi										
			P18AC012	264						
3. Recipient Organization	(Name and complete addre	ess including Zip code)								
Recipient Organization Name: White Clay Watershed Association										
Street1: PO Box 10										
Street2:										
City: Landenberg County: Chester (PA) / New Castle (DE)										
State: PA: Pennsyl										
Country: USA: UNITED STATES ZIP / Postal Code: 19350-0010										
4a. DUNS Number 4b. EIN 5. Recipient Account Number or Identifying Number										
094577926	23-7116453			rants, use FFR Attac						
00101102										
6. Report Type	7. Basis of Accounting 8. Project/Grant Period 9. Reporting				Period End Date					
Quarterly	Cash	From: To:		12/31/2019						
Semi-Annual	Accrual	8/27/2018 9/3	30/2023							
Annual Final										
				L ,	0					
10. Transactions (Use lines a-c for single of	Cumulative									
Federal Cash (To repor										
a. Cash Receipts		\$86,826.01								
b. Cash Disbursements	\$103,504.22									
c. Cash on Hand (line a	(\$16,678.21)									
(Use lines d-o for single	(\$10,070.21)									
-	and Unobligated Balance:									
d. Total Federal funds au	\$240,000.00									
e. Federal share of expe		\$86,826.01								
f. Federal share of unliqu	\$16,678.21									
g. Total Federal share (s	\$103,504.22									
	\$136,495.78									
h. Unobligated balance of Federal Funds (line d minus g) \$136,495.78  Recipient Share:										
i. Total recipient share re	\$0.00									
j. Recipient share of expe	\$0.00									
k. Remaining recipient share to be provided (line i minus j)  Program Income:										
I. Total Federal program income earned \$0.00										
m. Program Income expended in accordance with the deduction alternative										
	ended in accordance with the									
o. Unexpended program income (line I minus line m or line n)										

11. Indirect Expense									
a. Type	b. Rate	c. Period From	Period To	d. Base	e. Amount Charged	f. Federal Share			
					1	1			
			g. Totals:						
12. Remarks: Attach any explanations deemed necessary or information required by Federal sponsoring agency in compliance with governing legislation:									
Add Attachment Delete Attachment View Attachment									
13. Certification: By signing this report, I certify that it is true, complete, and accurate to the best of my knowledge. I am aware that any false, fictitious, or fraudulent information may subject me to criminal, civil or administrative penalties. (U.S. Code, Title 18, section 1001)									
a. Name and Title of Authorized C	ertifying Offic	ial							
Prefix: Fir	vid	Middle N	Middle Name: Reed						
Last Name: Hawk Suffix:									
Title: Treasurer									
b. Signature of Authorized Certifying		c. Telephone (Area	c. Telephone (Area code, number and extension)						
David R Hawk		309-314-0642 (use email)							
d. Email Address		e. Date Report Sub	mitted 14. Agency u	se only:					
dhawk@ccil.org		12/31/2019							

Standard Form 425