



QUARTERLY MEETING MINUTES

August 17, 2016, 10:00am - noon

New Garden Township Building, 299 Starr Road, Landenberg, PA 19350

Attendees:

Aileen Parrish	Ellen Kohler	Kristen Travers	Don Peters
Brian Styche	Doug Janiec	Mika Greenwood	Njeri Kimani
Beth Burnam	John Jackson	Ed O'Donnell	Erin McCormick
Shane Morgan	Martha Narvaez	Mike Zuk	Ellen Kohler
Chuck Barscz			

Approval of May Minutes

New Business

Reminder to sign up to our new mailing list groups.io. Invitations were sent but each member must subscribe individually. CCIL is discontinuing it's services on August 31, 2016.

Shane presented a condensed version of the strategic issues action plan for WCWA. The plan was an output from the Non-Profit Management Course paid for by WCWA. Tom Z. was provided a hard copy to review. The next step is for Tom to call for a meeting with WCWA. Chuck pointed out that it is the strength of the watershed association that is used to determine whether federal funds are awarded; specifically they look at the accounting and insurance. Shane pointed out that Dave Hawk does a great job with all of this, but there is a general concern that if circumstances changed and Dave could no longer do the accounting and other duties he takes on that there leave there is no one trained to take over his role. As an organization, WCWA needs to plan for that. There also needs to be more overlap between WCWA and the Wild and Scenic Committee. Don Peters suggested that the co-chairs for the committee should also be members of the WCWA board to help bridge that gap. Shane will circulate a hard copy of the strategic issues action plan to the executive committee for them to review more closely.

Brian Styche gave an overview of the planning process currently underway for the Chester County Comprehensive Plan Update. Shane was asked to serve on the Preservation Stakeholder Committee to represent the White Clay Watershed. The first meeting is September 13.

Subcommittee Reports:

Land Preservation and Reforestation

Erin M. noted that all funds remaining in the former NLT/NPS CA have been spent down. The Krauss (donated easement) is complete. Boddorf, Larmoore, and Sinclair Morris easements should all close by September 24, 2016 or the funds for these projects will have to return to the Federal Government. Erin updated the committee on the Reynolds easement noting that a family member submitted a petition in objection to the Reynolds easement and

that is being looked into. St. Anthony's is moving forward and they are in the process of working out the conservation and trails easements. The Friends of New Garden Trails and the New Garden Open Space Committee have been helping with the trail placement. NLT will also do an environmental assessment of the property.

Beth Burnam updated us on an agricultural easement that John G. is working on. A conservation plan was completed for the 180 acre farm in Penn and London Grove. The project should close in the next six months. This is one of the final missing pieces surround by county agricultural lands.

Shane noted that Red Tail Restoration is stewarding the Franklin Preserve riparian buffer installed in spring of 2013 by Brandywine Conservancy. She noted there was an extremely low survivorship of planted trees, only 135 out of 1050. Typically these plantings receive little care after planted and possible reasons for this low survivorship could be that it was planted before a dry season (spring instead of fall), invasive pressure, and one intern noted the tree tubes were infested with Japanese Beetles the summer after the seedlings were planted which could have caused the most damage. Red Tail is trying different management and planting strategies to help us moving forward with plantings that will receive relatively little care. An additional 900 trees will be planting this September 24 with volunteers and different planting strategies will be utilized. The new planting will receive another 6 months of care following installation and if funding permits, additional management will follow.

Research and Restoration

Kristen Travers presented the data collected this summer at five locations in New Castle County, three in mill creek, and two in middle run natural area. All sites exceeded the 100 cfu (geometric mean) fresh water primary contact standard set by the state. The intern noticed some suspicious looking PVC pipe coming from a sewer manhole that could be potentially illegal and the county should know about it. Ed O'Donnell suggested that Kristen contact Jonathan Husbands at New Castle County Special Services.

Shane updated the committee on the progress of bacteria sampling in the Pennsylvania portion of the White Clay. Jinjun (Stroud) will speak at the next Steering Committee Meeting to update us on the microbial source tracking which is currently in progress. She noted that they added some more sites in the upper watershed and that all bacteria counts (E coli, fecal coliform, and enterococcus) were high which is consistent with previous years of sampling.

Shane gave a short update on the monitoring work that Marion Waggoner and Dave Yake have been doing in Broad Run and Egypt Run looking at base flow and nitrate levels. She noted that nitrate levels are generally between 1-3.5 in Broad Run and double that in Egypt Run during base flow. John Jackson noted that background levels in healthy streams are <1 mg/L and that land use is definitely impacting these streams.

Beth gave a brief overview of the new Green Stormwater Infrastructure Pilot Project for the White Clay that we are calling 'Catch the Rain'. Two workshops for interested homeowners

will be held this September/October targeting older subdivisions in the Pennsylvania portion of the watershed. If successful it will expand into Delaware the following year.

Shane introduced Ellen Kohler to the committee as the Christina Watersheds Partnership White Clay Creek Pilot Area coordinator. The Brandywine Red Clay Alliance (BRCA) was awarded a NFWF Innovation Planning Grant in the amount of \$100,000 to help fund the multi-municipal collaboration in three pilot areas, an urban cluster (Coatesville area), an agricultural cluster (Honeybrook area), and a suburban cluster (White Clay). \$10,000 of which will support the White Clay Pilot area coordinator. The main role of the coordinator is to collaborate with municipalities in the White Clay (and their engineers) to create a watershed wide water quality improvement work plan that would be the basis for each participating municipality to meet its stormwater management responsibilities, whether through the municipal separated storm sewer (MS4) program, the total maximum daily load (TMDL) reductions, or the pollution reduction plans required to address all stream impairments. The coordinator would also be responsible for collaborating with the CTIP planning partners on behalf of the White Clay. The coordinator would develop an enforceable agreement among participants to guide implementation of the work plan. This plan could be used as an action plan for the Wild and Scenic Committee in terms of collaborating on and seeking out additional funding to implement projects throughout the watershed while also building stronger relationships with the municipalities and DEP. Ellen is attending the Franklin Township meeting tonight and visiting other municipalities throughout September to seek support and commitment from each township participating in the pilot.

Shane indicated that Landstudies submitted a site inspection report listed management strategies to successfully establish the newly planted buffer in New Garden Park. In lieu of spending the remaining grant funds towards a more detailed plan to remove the volleyball courts and create a stormwater infiltration area in its place, it was decided that the funds would best be used to help the recently planted buffer get established. The remaining funds will be expended on replacing trees that did not survive year one and invasive species management. Approximately \$11,000 remaining funds are to be spent by December 2018.

Shane noted that the Curtis Mill Riparian Buffer Planting Phase 2, planting of 20+ flats of native perennials, was completed May 14 with 10 Newark High School students and their teacher.

Education/Outreach

Martha updated the committee on the most recent Christina Basin Education Group meeting. She noted that she is still waiting on the final report from the Southeastern Pennsylvania focus groups and will share it when it becomes available. Martha, Kristen and Shane were working on producing a third video for the Christina Basin series with volunteers, Adam and Jason Barbato focused on stormwater, but this has been delayed until later in the year because of timing.

Shane indicated that she would be sending out letters to all watershed schools again this year to let them know about available funding for educational programming. Avon Grove Intermediate school already signed up again and will be sending its sixth grade class to Stroud the first week in October and having an onsite program for its fourth grade class at a

tributary of the White Clay on the school's property. Newark High School students will also be returning this year.

Stroud will be hosting a three day Watershed 101 Workshop for cluster partners (DRWI/WPF) on September 28 & 29 and Oct. 7. Shane will be participating in it and if there is room available, John Jackson noted that Shane could extend the invitation to volunteers or other members of the watershed committee interested in coming.

Old Business

Shane let the committee know that Kristen Molfetta, our former UD WRA intern, completed her research thesis on partnership Wild and Scenic Rivers with special focus on the White Clay Creek. Kristen is waiting for final approval from University of Delaware and then the report can be released publicly. Shane will share the report with members of the committee and Chuck as it was a very nice analysis of our management strategy and could be of use to NPS.

Doug Janeic mentioned he had been in contact with Ray Bivens regarding projects that would involve honoring Dorothy Miller and her legacy. Several ideas have been circulating amongst various groups and he thought it would be good for Ray to come to one of our meetings to let us know what the state's policy is on naming things and what can or can't happen in the state park. One potential idea is to have a kiosk with boards for important figures in the watershed, Dorothy being one of them. This could then be added to over time. Shane will invite Ray to the next meeting.

Chuck B. went over the section seven reviews conducted this quarter and announced that he would be retiring in January 2017. He stated that they were in the process of interviewing him and other NPS employees to determine the best role for river managers and that the next White Clay River Manager would be detailing Chuck in the near future so that she/he is ready to go come January.

Shane asked if there were any questions about the second quarter financials. No questions were asked. She then highlighted the success of the White Clay Restoration Fund which has grown consistently every year since it was established in 2012.

Announcements

Christina Basin BMP Bus Tour, September 9, meet at New Garden Park, 9am-4:30pm

AWRA Mid-Atlantic Conference, Wilmington Riverfront, September 15-16

Newark Community Day, Sunday, September 18, UD 11am-4pm

Coalition for the Delaware River Watershed Conference, Normandy Farms Hotel, Blue Bell, PA Sept 19-20.

White Clay Volunteer Tree Planting, Saturday, September 24 at Franklin Preserve (next to Crossan Park)

Mike Zuk announced that the Chester County Conservation District would be hosting an outreach event on September 13 for Hispanic mushroom producers. The workshop will cover DEP mushroom farm management plans and projects.

Meeting adjourned at noon.

WCWA and NPS reports attached to minutes.

FEDERAL FINANCIAL REPORT

(Follow form instructions)

1. Federal Agency and Organizational Element to Which Report is Submitted <p style="text-align: center;">National Park Service</p>	2. Federal Grant or Other Identifying Number Assigned by Federal Agency (To report multiple grants, use FFR Attachment) <p style="text-align: center;">P13AC01266</p>	Page <p style="text-align: center;">1</p>	of <p style="text-align: center;">1</p>
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pages

3. Recipient Organization (Name and complete address including Zip code) White Clay Watershed Association PO Box 10 Landenberg, PA 19350

4a. DUNS Number <p style="text-align: center;">094577926</p>	4b. EIN <p style="text-align: center;">23-7116453</p>	5. Recipient Account Number or Identifying Number (To report multiple grants, use FFR Attachment)	6. Report Type <input checked="" type="checkbox"/> Quarterly <input type="checkbox"/> Semi-Annual <input type="checkbox"/> Annual <input type="checkbox"/> Final	7. Basis of Accounting <input checked="" type="checkbox"/> Cash <input type="checkbox"/> Accrual
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8. Project/Grant Period From: (Month, Day, Year) <p style="text-align: center;">9/10/2013</p>	To: (Month, Day, Year) <p style="text-align: center;">9/30/2018</p>	9. Reporting Period End Date (Month, Day, Year) <p style="text-align: center;">6/30/2016</p>
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10. Transactions	Cumulative
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(Use lines a-c for single or multiple grant reporting)

Federal Cash (To report multiple grants, also use FFR Attachment):	
a. Cash Receipts	\$132,286.44
b. Cash Disbursements	\$154,637.10
c. Cash on Hand (line a minus b)	(\$22,350.66)

(Use lines d-o for single grant reporting)

Federal Expenditures and Unobligated Balance:	
d. Total Federal funds authorized	\$199,600.00
e. Federal share of expenditures	\$132,286.44
f. Federal share of unliquidated obligations	\$22,350.66
g. Total Federal share (sum of lines e and f)	\$154,637.10
h. Unobligated balance of Federal funds (line d minus g)	\$44,962.90
Recipient Share:	
i. Total recipient share required	\$0.00
j. Recipient share of expenditures	
k. Remaining recipient share to be provided (line i minus j)	
Program Income:	
l. Total Federal program income earned	\$0.00
m. Program income expended in accordance with the deduction alternative	
n. Program income expended in accordance with the addition alternative	
o. Unexpended program income (line l minus line m or line n)	

	a. Type	b. Rate	c. Period From	Period To	d. Base	e. Amount Charged	f. Federal Share
11. Indirect Expense							
g. Totals:							

12. Remarks: Attach any explanations deemed necessary or information required by Federal sponsoring agency in compliance with governing legislation:

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 218, Section 1001)

a. Typed or Printed Name and Title of Authorized Certifying Official <p style="text-align: center;">David R. Hawk, Treasurer</p>	c. Telephone (Area code, number and extension) 309-314-0642 (email recommended)
b. Signature of Authorized Certifying Official <p style="text-align: center;"><i>David R Hawk</i></p>	d. Email address dhawk@ccil.org
	e. Date Report Submitted (Month, Day, Year) 6/30/2016

14. Agency use only:

Standard Form 425
 OMB Approval Number: 0348-0061
 Expiration Date: 10/31/2011

Paperwork Burden Statement

According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB Control Number. The valid OMB control number for this information collection is 0348-0061. Public reporting burden for this collection of information is estimated to average 1.5 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0060), Washington, DC 20503.

QUARTERLY/ANNUAL PERFORMANCE REPORT NARRATIVE

Cooperative Agreement #: CA_P13AC01266
Award Recipient: White Clay Watershed Association
Project/Program Title: Wild & Scenic River Funding
Date: July 1, 2016
Period Covered by Report: April 1, 2016- June 30, 2016
Funds expended during this reporting period: \$22,350.66
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

Completed the 16-week Non-Profit Management Certificate Course with University of Delaware School of Public Policy. Developed an action plan and presentation for five strategic issues to present to the White Clay Watershed Association. Attended several watershed wide meetings throughout the quarter. Presented the Business and Industry award to SUEZ at the annual WRA-DRB meeting for their watershed control plan. Maintained and updated program fiscal records.

Education

Co-hosted the annual White Clay Creek Fest on May 7, 2016. Despite the poor weather, 650 people attended. 250 reusable water bottles were distributed, 13 rain barrels sold, and 8 new nonprofit organizations hosted exhibits.

Updated the White Clay Wild & Scenic Program blog and mailchimp newsletter, and social media. Continued to submit articles to two municipal newsletters (New Garden and London Grove Townships).

- Spring 2016 newsletter article: [Can't cut calories? Try a pollution diet instead.](#) (Overview of TMDLs)
- Summer 2016 newsletter article: [Catch the Rain! Get Creek Wise in White Clay.](#) (Overview of new Green Stormwater Infrastructure program)

Mailchimp Newsletter stats: 319 recipients, 36.7% average open rate (industry average 20.2%), click rate 7.8% (industry average 2.2%)

Website stats: 383 average visits (unique user with several page views)/month, 955 unique page views/month, 331 unique visitors/month.

Christina Basin Education Group – met in June, working on putting together a third Brandywine-Christina Basin video. Met with the Barbato brothers, Kristen T. and Martha N. to develop outline for next video focusing on stormwater impairments in the Brandywine-Christina and what citizens can do improve conditions.

Met with Education Subcommittee to develop FY16 work plan.

Provided funding for the following schools (@500 students total) to attend a watershed science field trip at Stroud Water Research Center (Our program increased Stroud's attendance by 30% in 2016 by providing bussing as a match to EITC programming funds for PA public schools):

- Newark High School AP Biology and Environmental Studies students, grades 11-12 (24) (expressed interest in returning Spring 2017)
- Assumption BVM, 7th grade (27)
- Avon Grove Intermediate School, 4th grade (400) (note AGIS contacted Stroud about coming out again fall 2016 with a new group of 4th graders)

Met with 2015 summer intern Patrick Heringslack to collect field sheets and sampling materials. Reviewed sampling locations and offered assistance to him with his graduation project requirements including suggestions on graphing needs and future bacteria analysis. Released second installment for internship hours completed.

Restoration

Created and presented 'Bacteria Research in the White Clay Creek' at the June Christina Basin Task Force Meeting. Met with Jinjun Kan and the new summer intern at Stroud and reviewed the summer 2016 bacteria sampling strategy.

Met with Kristen Travers to discuss expansion of White Clay bacteria monitoring into Delaware this summer. Delaware Nature Society will provide support for a summer intern, Andrea Miller (UD undergraduate) to sample 5 sites (3 in Mill Creek and 2 in Middle Run) for enterococcus. The intern will also conduct macroinvertebrate sampling at each location. Funds for materials will come from the White Clay Restoration Fund (DE tax check off).

Awarded \$20,000 E.K. Dockstader grant for the Green Stormwater Infrastructure Pilot Program 'Catch the Rain' proposal for the White Clay Creek in partnership with Brandywine Conservancy. Regular meetings with Beth Burnam to develop the program, create educational materials, and develop workshop for potential participants. Spoke with potential 'preferred' contractors, and began contacting coordinators of similar programs to learn more about how their programs (Philly Rain Check and Montgomery County Maryland Rainscapes). Met with Leslie Kedash (Kedash Design) to review educational needs (web/print) for the pilot program.

Continued communications and support (provided them with a Nitrate (NO₃-N) meter) to Marion Waggoner and Dave Yake (Save our Water). Flow data, localized precipitation data, and Nitrate levels being taken at both Broad Run and Egypt Run.

Provided municipal assistance for best management practices (BMPs):

- Continued work on the New Garden Park Riparian Buffer Growing Greener Project with Landstudies and New Garden Township; checked on new plantings and met with Township officials to discuss management of no mow areas.
- Contracted with GreenWeaver to treat the thistle. New Garden Township paid for the initial treatment (\$500).
- Contracted with GreenWeaver to treat the thistle in both basins and the parking island (source). London Grove Township paid for initial treatment (\$250).

- Consulted Eagle Scout, Nick Dinsmore, installing a rain garden at Franklin Township building for an Eagle Scout project. Provided scout with BMP signage for rain garden.
- Installed native pollinator plants (@1000 landscape plugs) in the Curtis Mill Park floodplain with City of Newark, and Newark High School students on May 14. This was phase 2 of work with these students. Phase 1 involved planting of trees and shrubs in the floodplain buffer in November (2015).

Continued work with the Christina Basin TMDL Implementation Partnership:

- Met with township managers at New Garden, Franklin, and London Grove to gauge interest in a multi-municipal collaboration on the upcoming stormwater management plans for DEP.
- Attended multiple meetings with the Christina TMDL Implementation Partnership (Brandywine Red Clay Alliance, Gaadt Perspectives, Brandywine Conservancy, Chester County Water Resources Agency, Ellen Kohler, LLC, and Naomi Young, UMD Finance Department) to develop path forward for the multi-municipal collaboration that includes a suburban pilot area in White Clay Creek.
- Proposed partial funding for a White Clay Creek suburban pilot area coordinator to work closely with township engineers, managers, and supervisors, regulatory agencies, and the CTIP partners on facilitating the White Clay Creek suburban pilot area. White Clay Wild and Scenic funding in the amount of \$10,000 was awarded to Ellen Kohler, LLC to act as the lead coordinator. This work will compliment the Water Fund work conducted by The Nature Conservancy and University of Delaware. It is the municipal (MS4) component to a watershed wide approach to cleaning up the streams.
- Provided letter of support to BRCA for a William Penn Innovation grant to help fund the CTIP work. BRCA was awarded \$100,000 in grant funding in the amount of \$100,000 from William Penn, \$10,000 of which will be applied to the White Clay suburban pilot area to support the work of the White Clay coordinator. Additional funding will be sought.

Land Preservation/Reforestation

Visited reforestation sites in need of stewardship with Rob Daniels, Brandywine Conservancy. Selected the Franklin Preserve reforestation site as the pilot and met on site with Brandywine Conservancy Reforestation Manger, Rob Daniels and contractor, Greg Gagliano (Red Tail Restoration LLC) to assess current conditions and go over management strategies. Contacted Franklin Township manager to discuss project and seek approval. Approval for work granted. Developed working contract between Red Tail Restoration, LLC and Brandywine Conservancy to move project forward and for spend down remaining funds in NLT/BC contract. Stewardship work to begin July 2016 and includes a fall tree planting.

Circulated funding reallocation proposal from Brandywine Conservancy and Natural Lands Trust to Steering Committee for approval. Proposal approved with some questions regarding staff costs involved. Reviewed questions with Chuck Barscz for clarification. Staff time is an allowable expense and has been vetted by NPS. It is included in several Wild and Scenic River contracts.

	Total Budgeted	Previously Reported Expenditures	Expenditures This Report	Amount Remaining
Budget Year: 2013				
Admin				
Contractual	\$22,392.23	(\$22,392.23)	\$0.00	\$0.00
Other	\$151.00	(\$151.00)	\$0.00	\$0.00
Supplies	\$1,563.58	(\$1,563.58)	\$0.00	\$0.00
Travel	\$1,000.00	(\$1,000.00)	\$0.00	\$0.00
Education				
Contractual	\$7,441.49	(\$7,441.49)	\$0.00	\$0.00
Supplies	\$784.86	(\$784.86)	\$0.00	\$0.00
Restoration				
Contractual	\$9,566.84	(\$9,566.84)	\$0.00	\$0.00
Supplies	\$6,000.00	(\$6,000.00)	\$0.00	\$0.00
Travel	\$300.00	(\$291.24)	\$0.00	\$8.76
Subtotal:	\$49,200.00	(\$49,191.24)	\$0.00	\$8.76
Budget Year: 2014				
Admin				
Contractual	\$4,000.00	(\$4,000.00)	\$0.00	\$0.00
Other	\$2,200.00	(\$2,200.00)	\$0.00	\$0.00
Personnel	\$32,500.00	(\$32,500.00)	\$0.00	\$0.00
Supplies	\$500.00	(\$500.00)	\$0.00	\$0.00
Travel	\$1,500.00	(\$1,500.00)	\$0.00	\$0.00
Restoration				
Contractual	\$12,292.93	(\$10,960.91)	\$0.00	\$1,332.02
Supplies	\$1,807.07	(\$494.63)	(\$1,312.44)	\$0.00
Travel	\$600.00	(\$316.96)	\$0.00	\$283.04
Subtotal:	\$55,400.00	(\$52,472.50)	(\$1,312.44)	\$1,615.06
Budget Year: 2015				
Admin				
Contractual	\$9,440.00	(\$8,707.10)	(\$78.57)	\$654.33
Other	\$2,600.00	(\$2,412.00)	\$0.00	\$188.00
Personnel	\$40,945.68	(\$18,460.97)	(\$15,177.60)	\$7,307.11
Supplies	\$1,250.00	(\$237.94)	(\$357.42)	\$654.64
Travel	\$1,500.00	(\$399.10)	(\$609.16)	\$491.74
Education				
Contractual	\$19,184.32	(\$360.59)	(\$2,448.70)	\$16,375.03
Supplies	\$1,080.00	(\$45.00)	(\$419.97)	\$615.03
Restoration				
Contractual	\$15,500.00	\$0.00	\$0.00	\$15,500.00
Supplies	\$3,500.00	\$0.00	(\$1,946.80)	\$1,553.20
Subtotal:	\$95,000.00	(\$30,622.70)	(\$21,038.22)	\$43,339.08
Total Reimbursement:			(\$22,350.66)	

The ledger for the expenditures in these reports is as follows:

Date	Bank/ Chk#	WCWA Trans#	To/From	Amount	Balance
					(\$6,748.46)
04/04/16	WA/1074	3365	Shane Morgan	(\$4,232.99)	(\$10,981.45)
			Administration Services, general administration work		
04/06/16	WA	3367	NPS	\$119.06	(\$10,862.39)
			nps reimbursement		
04/06/16	WA	3367	NPS	\$6,629.40	(\$4,232.99)
			reimbursement		
04/12/16	RA/884	3369	Post Master	(\$6.45)	(\$4,239.44)
			reimburse expenses - 500 post card postage & postage re		
04/12/16	RA/884	3369	Post Master	(\$170.00)	(\$4,409.44)
			reimburse expenses - postage & postage report to del na		
04/12/16	RA/885	3370	Shane Morgan	(\$162.00)	(\$4,571.44)
			reimburse direct mailing list for creekfest postcards		
04/16/16	WA/1020	3371	Duvall Bus Service	(\$225.00)	(\$4,796.44)
			bus service BVM to Stroud on 4/13/16		
04/29/16	RA/886	3378	Shane Morgan	(\$163.76)	(\$4,960.20)
			reimburse expenses		
04/30/16	WA/1109	3377	Shane Morgan	(\$3,742.09)	(\$8,702.29)
			Administration Services, general administration work		
05/02/16	RA/887	3385	North Creek Nurseries	(\$282.88)	(\$8,985.17)
			plants for educational display at creekfest		
05/16/16	RA/889	3395	Shane Morgan	(\$237.75)	(\$9,222.92)
			reimburse expenses		
05/25/16	WA/1112	3387	IDEXX Distribution Co.	(\$3,259.24)	(\$12,482.16)
			bacteria testing supplies		
05/31/16	RA/890	3389	Shane Morgan	(\$240.18)	(\$12,722.34)
			reimburse expenses		
06/01/16	WA/1113	3388	Shane Morgan	(\$4,643.41)	(\$17,365.75)
			Administration Services, general administration work		

06/21/16	RA/891	3399	Patrick Heringslack	(\$625.00)	(\$17,990.75)
			water quality internship		
06/22/16	WA/1114	3391	Avon Grove School Dist	(\$1,166.04)	(\$19,156.79)
06/30/16	RA/890	3398	Shane Morgan	(\$634.76)	(\$19,791.55)
			reimburse expenses		
06/30/16	WA/1115	3397	Shane Morgan	(\$2,559.11)	(\$22,350.66)
			Administration Services, general administration work		

Bank Codes:

RA - River Administrator's checking account

WA - White Clay Watershed Association's checking account

WS - WCWA Wild & Scenic checking account

NPS Report to White Clay Creek Watershed Management Steering Committee

8-8-16

Financials

NPS funds tracking log indicate as of June 30, 2016 there was a total of **\$44,962.90** remaining in the White Clay Watershed Association's Cooperative Agreement consisting of 2013 (**\$8.76**); 2014 (**\$1615.06**) and 2015 (**\$43,339.08**) funds. The 2015 funds are being spent, **\$21,038.22** invoiced this quarter.

As of June 30, 2016, NLT has **\$0.00** remaining in its Cooperative Agreement for White Clay Creek, which consisted of 2011, 2012, 2013, and 2014 funds. NLT was successful in their efforts to spend remaining funds in this Cooperative Agreement before they expired June 25, 2016. NLT invoiced **\$100,112.81** to close the account. NLT, along with Brandywine Conservancy completed 5 conservation easements, a conservation plan, analysis and mapping of forest buffer gaps and two reforestation projects this quarter. NLT is in the process of preparing a close out report for the Cooperative Agreement which will highlight and describe all of the completed projects for all of the funding which was granted through this Cooperative Agreement which totaled **\$209,450**

Section 7 Reviews:

1) Culvert Removal & Streambank Stabilization; Jenny's Run; City of Newark, DE - NPS conducted a review of the proposed culvert removal and site restoration plans as depicted and described on construction drawings and streambank stabilization plans prepared by Duffield Associates dated March 23, 2016. No "outstandingly remarkable resource values associated with the White Clay Creek National Wild and Scenic River exist in the immediate area of this project; however, known habitat that would support the federally threatened bog turtle (*Glyptemys muhlenbergii*) exists in two separate locations nearby. Turtles at either of those sites could wander into the proposed work areas or in the existing culverts.

Given the steepness of the existing stream banks that must be matched (45 degree angle; 1 to 1 slope) the use of geo bags; which are planned to be covered by a prepared subgrade, 4 inches of topsoil; then covered by staked erosion control matting and topped off with 1 inch of topsoil and then seeded; is an acceptable stabilization system for this site. Stabilizing the slope with grasses will increase the habitat value and the scenic qualities of the site. The use of approximately 2 feet of R4 rip rap at the toe of slope is necessary given the slopes involved and the potential stream velocities and stresses. The rip rap voids will fill in overtime with stream sediments and should not be a trap for wildlife.

NPS concluded that overall this project will be of a direct benefit to fish, reptiles and amphibians in the area by removing a culvert; which was an impediment to fish and wildlife migration from the mainstem of the White Clay Creek to upstream forest and wetland habitat on Jenny's Run. In general, this project should not significantly or negatively impact White Clay Creek or its resource values, and should not adversely affect the White Clay Creek National Wild and Scenic River if the following measures are taken: a) A State of Delaware approved bog turtle surveyor should monitor the project site for bog turtles during construction.

2) City of Newark, DE Sewer Repair near Pomeroy Trail bridge - NPS believes that this project does not pose any significant impacts to the unnamed tributary or the White Clay Creek National Wild and Scenic River. The project

is located in an area with no identified specific natural, historic or cultural or recreational outstandingly remarkable resource values associated with the White Clay Creek National Wild and Scenic. The unnamed tributary itself is very small, not more than 3 feet wide. The emergency repairs impacted a very limited area, not more than 10 feet long and included a minor amount of small stone being placed in the stream. The placement of this stone should not impede the free flow of the tributary, nor should it become a hindrance to the migration of amphibians, fish or other wildlife. NPS, therefore, has determined that this project should not significantly or negatively impact the White Clay Creek National Wild and Scenic River.

3) Culvert Repair; Bridge 1-239 on N352 Red Mill Road over Tributary to White Clay Creek; East of Newark, DE; New Castle County - NPS conducted a review of the proposed concrete liner repairs for the existing corrugated culverts located at Bridge 1-239 on Red Mill Road on a designated tributary of the White Clay Creek National Wild and Scenic River. U.S. Fish & Wildlife Service review indicates that bog turtle (*Clemmys muhlenbergii*) exist in the area of the project. Bog turtle (*Clemmys muhlenbergii*) is a federally threatened species and is an “outstandingly remarkable” resource value of the White Clay Creek National Wild and Scenic River. The U.S. Fish & Wildlife review of this project also indicates that critical habitat for the bog turtle does not exist at the project site. NPS is concerned that this culvert may be on a potential migration route for the bog turtle, even though there isn’t any bog turtle critical habitat at the project site; potential habitat may exist up stream adjacent to this tributary.

This repair project should not significantly or negatively impact White Clay Creek or its resource values, and should not adversely affect the White Clay Creek National Wild and Scenic River if the following measures are taken: a) Construction of this project is restricted till after June 15, the traditional bog turtle migration season; b) The downstream final in-channel bed elevation after the recessed rip-rap voids are filled in with existing stream bed material shall match the final invert elevation of the concrete liners so that the concrete liners are flush with the new stream bed elevation and are not higher than the new stream bed and therefore an impediment to bog turtle migration upstream within the repaired culvert; c) Necessary precautions have been taken to limit erosion and sedimentation and to restore this project site post construction; however, care should be taken in the selection of erosion control mats for this project. Strict sedimentation and erosion controls are appropriate, but “excelsior mat” or “curlex” type materials should not be used. The plastic netting associated with these materials does not readily decompose over time and may be a long term hazard to wildlife. We recommend the use of no-net products (no nets top or bottom of blanket), burlap, jute matting or blankets made from coconut fibers. We also do not recommend the use of “geosynthetic filter fabrics” for the same reasons. NPS lifted the seasonal restriction on this project a) after further consultation with DNREC and USFWS revealed no bog turtles in the immediate area or within close migrating proximity.

4) Culvert Replacement; Tributary East Branch White Clay Creek; Hilltop Road near Church Hill Road; Franklin Township; Chester County, PA - NPS conducted a review of the proposed culvert replacement, referenced above, as described on construction drawings and plans prepared by LTL Consultants, LTD dated December 22, 2015. No “outstandingly remarkable resource values associated with the White Clay Creek exist in the immediate area of this project. NPS is, however, concerned that this culvert may be on a potential migration route for reptiles and amphibians given critical habitats and wetlands which exist upstream and downstream of the project site.

The proposed plans for this culvert replacement call for the new culvert to be recessed below the existing culvert, which will assist in achieving a natural streambed through the culvert and will aid in reptile and amphibian migration. A natural streambed achieved by recessing culverts in relation to streambeds is a goal of the White Clay Creek Wild and Scenic Watershed Management Plan.

In general, this project should not significantly or negatively impact White Clay Creek or its resource values, and should not adversely affect the White Clay Creek National Wild and Scenic River if the following measures are taken: a) Construction of this project should take place within the USFWS time of year restrictions; b) The downstream, easterly, in-channel rip-rap, should be recessed to match the final invert elevation of the downstream culvert. The in-channel rip rap voids should then be backfilled in with existing on site stockpiled excavated stream bed material; this will prevent migrating reptiles and amphibians from getting stuck in the rip rap voids. The final stream bed elevation should be flush with the invert elevation of the new downstream culvert, this will aid in reptile and amphibian migration through the culvert; c) Necessary precautions have been taken to limit erosion and sedimentation and to restore this project site post construction; however, care should be taken in the selection of erosion control mats for this project. Strict sedimentation and erosion controls are appropriate, but "excelsior mat" or "curlex" type materials should not be used. The plastic netting associated with these materials does not readily decompose over time and may be a long term hazard to wildlife. We recommend the use of no-net products (no nets top or bottom of blanket), burlap, jute matting or blankets made from coconut fibers. We also do not recommend the use of "geosynthetic filter fabrics" for the same reasons.