

**FFY 2017 Project Application
Kentucky Nonpoint Source Pollution Control Program**

**Refer to the 2017 Grant Guidance document and the Application Instructions for instructions on completing this application.*

1. Project Title: Marshall County Fiscal Court Chestnut Creek Implementation

	2. Lead Agency & Primary Contact	3. Project Manager
Name	Kevin Neal/Brad Warning	Casey Madole
Agency	Marshall County Fiscal Court	Friends of Clarks River NWR
Street Address	1101 Main Street	P.O. Box 98
City	Benton	Benton
State	KY	KY
Zip	42025	42025
Telephone Number	(270) 527-4750	(270) 493-6196
Fax Number	(270) 527-4795	
Email Address	brad.warning@marshallcountyky.gov	caseymadole@gmail.com

4. Project Start Date: 01/01/2019

5. Project End Date: 12/31/2021

6. Fiscal Summary		
319 Funding	\$150,000	60%
Non-Federal Match	\$100,000	40%
Total Budget	\$250,000	100%

7. Type of Project	
<input type="checkbox"/>	Watershed Plan
<input checked="" type="checkbox"/>	WSP Implementation
<input type="checkbox"/>	BMP Technology Demonstration
<input type="checkbox"/>	Education/Outreach Technology Transfer
<input type="checkbox"/>	Other:

8. River Basin

<input type="checkbox"/> Statewide	<input type="checkbox"/> Tygarts	<input type="checkbox"/> Ohio Tributary	<input type="checkbox"/> Little Sandy
<input type="checkbox"/> Kentucky	<input type="checkbox"/> Green	<input type="checkbox"/> Lower Cumberland	<input type="checkbox"/> Mississippi
<input type="checkbox"/> Salt	<input type="checkbox"/> Tradewater	<input type="checkbox"/> Upper Cumberland	
<input type="checkbox"/> Licking	<input checked="" type="checkbox"/> Tennessee	<input type="checkbox"/> Big Sandy	

9. Geographic Coverage

<input type="checkbox"/> Statewide
<input type="checkbox"/> Regional
<input checked="" type="checkbox"/> Watershed

10. NPS Pollutant(s) to be addressed

<input type="checkbox"/> Low Dissolved Oxygen	<input type="checkbox"/> Pesticides
<input type="checkbox"/> Sedimentation/Siltation	<input type="checkbox"/> Oil and Grease
<input type="checkbox"/> Suspended Solids	<input type="checkbox"/> Nutrients
<input checked="" type="checkbox"/> Pathogens/Bacteria	<input type="checkbox"/> pH
<input type="checkbox"/> Organic Enrichment	
<input type="checkbox"/> Other:	

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11. Nonpoint Pollution Source(s) to be addressed. Select up to five sources and include the percentage to which the project addresses the source. Total must equal 100%.

Percent		Percent	
_____	NPS All	_____	Resource Extraction
_____	Agriculture	_____	Habitat Modification
_____	Construction	100%	Improper Waste Disposal (including onsite Waste Issues)
_____	Silviculture	_____	Hydrologic Modification
_____	Urban Runoff	_____	Recreation
		_____	Other:

12. Project Area

	Yes	No
Project deals directly with groundwater, springs or karst?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Watershed Projects Only, Complete the following:		
Project Implements a TMDL	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Project address a TMDL that is under development	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Project is on the 2010 Integrated Report, Assessment Category 5A	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Nonsupport Stream	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Partial Support Stream	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Project is on a Special Use Water with identified threat.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Project has other impairments or identified treats (describe in app.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

13. Location

Map Attached: Yes N/A

Watershed Name	HUC#	County ₁	County ₂	Drainage Area
Chestnut Creek Watershed	06040006-040-670	Marshall		8.05 Sq. Miles

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14. Project Summary (Two page limit):

In 2015, the Friends of Clarks River National Wildlife Refuge contracted with Third Rock Consultants and Murray State University to develop the Chestnut Creek Watershed Based Plan. This plan indicated that the main water quality needs in the watershed include:

- 1) General implementation, including hiring a watershed coordinator and establishing a local citizen's group
- 2) Addressing failing sanitary sewer facilities, including reducing pollution in facility discharges and developing a commercial pre-treatment program.
- 3) Repairing and maintaining septic systems in the watershed
- 4) Improving stream and habitat through stream restoration and/or stabilization best management practices
- 5) Removing trash and debris from Chestnut Creek and tributaries
- 6) Implementing agricultural BMPs throughout the watershed
- 7) Conducting an education and outreach program throughout the watershed and Marshall County in general
- 8) Connecting residences to the newly repaired sanitary sewer facility where sewer lines are available, decommissioning older septic systems that have a high potential to fail in the near future

The Marshall County Fiscal Court has committed \$300,000 to address the second need, related to addressing the failing sanitary sewer facility. The Friends of Clarks River National Wildlife Refuge have hired a watershed coordinator to address need one, and to coordinate needs three, four, five, six and seven. Through this project, need eight will be addressed, reducing pathogen concentrations in Chestnut Creek.

The existing Chestnut Creek BMP Implementation Plan will be amended to include a Homeowner Assistance Program to connect residences to the sanitary sewer system and reduce pathogen concentrations in Chestnut Creek. Landowners will be asked to submit applications to participate in the Homeowner Assistance Program. The Marshall County Fiscal Court will partner with the Chestnut Creek Watershed Coordinator and the Marshall County Sanitation District #2 to connect residences to the newly repaired sanitary sewer system.

Measures of success for this project will include the number of residences that participate in the Homeowner Assistance Program, and community interest in the Chestnut Creek watershed.

15. Introduction/Background (Two page limit):

The Chestnut Creek Watershed is approximately eight square miles and flows into the Clarks River at the Clarks River National Wildlife Refuge near Draffenville, Kentucky in Marshall County. The local land use is primarily agricultural, although development is occurring in Draffenville, including many new residential subdivisions. The watershed has one small sanitation district serving a limited number of residences and businesses. Many residences in the watershed should have on site waste disposal systems; however, the local health department has indicated some residences could have straight pipes or failing systems. Environmental awareness and stewardship is at a low level in the area.

In the *2010 Integrated Report to Congress on the Condition of Water Resources in Kentucky* (KDOW, 2010), Chestnut Creek was categorized as an impaired stream for partial support of both the aquatic life and primary contact recreation uses. Suspected sources of these impairments were not defined. In 2011, a TMDL for *E. coli* was developed for 40 stream segments within the Clarks River Watershed, including Chestnut Creek.

In 2012, the Friends of Clarks River National Wildlife Refuge received an EPA 319 (h) grant to develop a watershed based plan for Chestnut Creek that better identified the threats to water quality and solutions that could be implemented to address these threats. The Friends group partnered with Third Rock Consultants, LLC, Murray State University and a local watershed team to develop this watershed plan. This plan was completed and approved by the Kentucky Division of Water and EPA in 2016. This plan indicated that the main water quality needs in the watershed include:

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- 1) General implementation, including hiring a watershed coordinator and establishing a local citizen's group
- 2) Addressing failing sanitary sewer facilities, including reducing pollution in facility discharges and developing a commercial pre-treatment program.
- 3) Repairing and maintaining septic systems in the watershed
- 4) Improving stream and habitat through stream restoration and/or stabilization best management practices
- 5) Removing trash and debris from Chestnut Creek and tributaries
- 6) Implementing agricultural BMPs throughout the watershed
- 7) Conducting an education and outreach program throughout the watershed and Marshall County in general
- 8) Connecting residences to the newly repaired sanitary sewer facility where sewer lines are available, decommissioning older septic systems that have a high potential to fail in the near future

In 2016, the Friends of Clarks River National Wildlife Refuge received an EPA 319 (h) grant to address several of these needs, including the general implementation need of hiring a watershed coordinator to coordinate needs three, four, five, six and seven. The Marshall County Fiscal Court has worked with Marshall County Sanitation District #2 to address needs related to the failing sanitary sewer facility, including loaning the Marshall County Sanitation District #2 nearly \$300,000 to repair the facility and helping them to develop a commercial pre-treatment ordinance. The Marshall County Sanitation District #2 has recently enacted a tap on ordinance requiring residences with 500 linear feet of a sanitary sewer line to connect to the system. Additionally, Marshall County Sanitation District #2 has recently undertaken a \$2.3 million expansion project that will allow an additional 70-80 residences to connect to the system. The Marshall County Sanitation District #2 is interested in incentivizing new residential connections to the expanded sewer lines and properly decommission existing septic systems.

The aim of the project is to address high pathogen levels in the Chestnut Creek Watershed conducting a Homeowner Assistance Program that provides financial and technical assistance to residences in the Chestnut Creek Watershed for tapping onto existing or newly constructed Marshall County Sanitation District #2 sewer lines. Marshall County Fiscal Court will take the lead in this project, with assistance provided by the Chestnut Creek watershed coordinator, the Marshall County Health Department, and Marshall County Sanitation District #2. The Marshall County Fiscal Court will oversee this program and provide financial assistance to homeowners for this program. The Chestnut Creek Watershed Coordinator and Marshall County Sanitation District #2 will provide education/outreach materials and conduct educational meetings for the public and licensed plumbers in the area who will be making the sewer line connections. The Marshall County Health Department will identify how to properly decommission septic tanks for participants in the program. Homeowners will receive cost share funding based on their income status and the actual cost of tapping their homes onto existing or newly constructed sewer lines. The Marshall County Sanitation District #2 will be waiving the \$1,000 sewer line tap on fee as an additional incentive to increase participation in the program.

16. NPS Pollution Control Project Goal, Objectives, and Activities:

Goal: Reduce human fecal inputs in the watershed from improper onsite sewage disposal

Objective: Implement a Homeowner Assistance Program to maximize connections to the sanitary sewer system and reduce the occurrence of nonpoint source pollution in Chestnut Creek

Activities:

1. Amend existing Chestnut Creek BMP Implementation Plan to include a Homeowner Assistance Program (including homeowner applications, educational materials for homeowners and plumbers, advertisements, etc.) – Activity to be completed by Chestnut Creek Watershed Coordinator

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2. Submit amended Chestnut Creek BMP Implementation Plan to KDOW for review and approval – Activity to be completed by Chestnut Creek Watershed Coordinator
3. Identify residences with sewer lines currently available and contact those individuals asking them to participate in the Homeowner Assistance Program – Activity to be completed by Chestnut Creek Watershed Coordinator with assistance from Marshall County Sanitation District #2
4. Host educational meeting for homeowners and licensed plumbers to explain the Homeowner Assistance Program – Activity to be completed by Chestnut Creek Watershed Coordinator and Marshall County Sanitation District #2
5. Collect applications for participation in the Homeowner Assistance Program – Activity to be completed by the Chestnut Creek Watershed Coordinator
6. Identify work needed at each residence to install lateral lines and tap on to Marshall County Sanitation District #2, and to properly decommission and close existing septic system and develop summary of work for each residence – Activity to be completed by Marshall County Sanitation District #2 and Marshall County Health Department
7. Review applications and determine qualification for program, including funding assistance level for homeowner – Activity to be completed by Chestnut Creek Watershed Coordinator
8. Submit qualified applications with summary of work for each residence to Marshall County Fiscal Court for funding – Activity to be completed by Chestnut Creek Watershed Coordinator
9. Upon approval from Marshall County Fiscal Court, issue determination letter to applicants with funding rate – Activity to be completed by Chestnut Creek Watershed Coordinator
10. Review bids from homeowners and issue final funding amount to homeowners (upon approval from Marshall County Fiscal Court) – Activity to be completed by Chestnut Creek Watershed Coordinator
11. Evaluate work upon completion for each residence to ensure work is done appropriately – Activity to be completed by Marshall County Health Department and Marshall County Sanitation District #2
12. Issue reimbursement to applicants upon evaluation from Marshall County Health Department and Marshall County Sanitation District #2 – Activity to be completed by Marshall County Fiscal Court

Objective: Complete contract conditions

Activities:

1. Submit project invoices and project status reports to KDOW for reimbursement at least quarterly throughout the contract time frame – Activity to be completed by Marshall County Fiscal Court
2. Maintain all project records – Activity to be completed by Marshall County Fiscal Court
 - a. Homeowner records (financial assistance applications, reimbursement requests, receipts for work completed, Plumbing Inspector approvals, Marshall County Sanitation District #2 approvals, Marshall County Health Department approvals, and funding disbursements)
 - b. Nonfederal match generated through the project
 - c. Project management records (invoices to KDOW, final report, and financial closeout)
3. Develop and submit project final report and financial closeout – Activity to be completed by Marshall County Fiscal Court

17. Describe the NPS Pollution Control Plan of Work:

The Chestnut Creek Watershed Coordinator will amend the existing Chestnut Creek BMP Implementation Plan to include a Homeowner Assistance Program. This will include homeowner applications for the program, educational materials for homeowners and plumbers, advertisements for the program, sample approval letters for the program, etc. This amended plan will then be sent to Kentucky Division of Water for approval. The amended Chestnut Creek BMP Implementation Plan will identify existing residences with direct

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access to sewer lines and residences that will have access to sewer lines once the Marshall County Sanitation District #2 expansion project is completed in the spring of 2019.

The Chestnut Creek Watershed Coordinator, with assistance from Marshall County Sanitation District #2, will host an educational meeting with homeowners from the watershed and licensed plumbers from the area to communicate the goals of the program and explain the homeowner and plumber responsibilities. If necessary, the Chestnut Creek Watershed Coordinator and Marshall County Sanitation District #2 will make direct contact with each of the residences identified in the Implementation Plan to ask them to participate in the Homeowner Assistance Program.

Homeowners will fill out an application and submit it to the Chestnut Creek Watershed Coordinator. The Marshall County Health Department and Marshall County Sanitation District #2 will develop a work plan for each residence that identifies work needed to properly connect to Marshall County Sanitation District #2 owned sewer line and work needed to properly decommission existing septic systems. This work plan will then be given to the Chestnut Creek Watershed Coordinator, who will determine qualification for the program, including the funding assistance level (90% for low to moderate income residences, 20% for all others). This information will be submitted to the Marshall County Fiscal Court for approval, and then the Chestnut Creek Watershed Coordinator will send out determination letters to qualified applicants. This letter will instruct homeowners to get three bids for work and submit those bids to the Chestnut Creek Watershed Coordinator. The Chestnut Creek Watershed Coordinator will then let homeowners know the final funding amount they will receive for their project. The Marshall County Health Department and Marshall County Sanitation District #2 will inspect completed work and send approval to the Marshall County Fiscal Court. Homeowners will then turn their receipts in to the Marshall County Fiscal Court to request reimbursement.

The Marshall County Fiscal Court will invoice the Kentucky Division of Water at least quarterly and complete the final report for the project. Additional, the Fiscal Court will maintain all participant and project records as required by the federal 319(h) grant conditions.

18. Environmental Data Collection: N/A - No Monitoring will be done.

19. Public Involvement:

Public involvement will be critical to the success of this project. As described in the plan of work section, much effort will be made throughout the project to gain participation of local residents in the project, including individual contacts/site visits, letters/flyers/brochures and newspaper articles.

20. Project Partners: *Letters of participation are required from all partners (see 2016 Grant Guidance Document). Attach letters of participation as an appendix to this application.*

Marshall County Fiscal Court
1101 Main St., Benton, KY 42025
Lead Agency/Grantee
Kevin Neal/Brad Warning
270-527-4750

Marshall County Health Department
267 Slickback Rd., Benton, KY 42025
Technical Support
Juli Connor/Michael Carlson
270-527-1496

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Friends of Clarks River National Wildlife Refuge Chestnut Creek Watershed Coordinator
PO Box 98, Benton, KY 42025
Project Manager/BMP Implementation Plan Development/Outreach Support
Casey Madole
270-493-6196

Marshall County Sanitation District #2
1101 Main St., Benton, KY 42025
Technical Support
Randy Green
270-366-9534

21. Project Measures of Success:

Participation levels in the project activities, including:

- Number of homes served by the Homeowner Assistance Program
- Number of septic systems pumped out
- Number of septic systems decommissioned

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22. Milestone Schedule

Milestone	Responsible Partner	Start Date	End Date
Amend existing Chestnut Creek BMP Implementation Plan to include an Onsite Wastewater Component and Landowner Tap On Program	Chestnut Creek Watershed Coordinator	January, 2019	January, 2019
Submit amended Chestnut Creek BMP Implementation Plan to KDOW	Chestnut Creek Watershed Coordinator	January, 2019	January, 2019
Host educational meeting for homeowners and licensed plumbers	Chestnut Creek Watershed Coordinator, Marshall County Sanitation District #2	January, 2019	January, 2019
Collect applications for participation in the LTOP	Chestnut Creek Watershed Coordinator	January, 2019	October, 2021
Develop summary of work for participation in LTOP for each residence	Marshall County Sanitation District #2, Marshall County Health Department	January, 2019	October, 2021
Submit qualified applications with summary of work for each residence to Marshall County Fiscal Court for funding	Chestnut Creek Watershed Coordinator	January, 2019	October, 2021
Issue determination letter to homeowners	Chestnut Creek Watershed Coordinator	January, 2019	October, 2021
Review bids from homeowners and issue final funding amount to homeowners	Chestnut Creek Watershed Coordinator	January, 2019	October, 2021
Evaluate completed work at each residence and issue approval	Marshall County Sanitation District #2, Marshall County Health Department	January, 2019	October, 2021
Issue reimbursement to applicants	Marshall County Fiscal Court	January, 2019	November, 2021
Submit quarterly invoices and project status reports to KDOW	Marshall County Fiscal Court	April, 2019	December, 2021
Develop final report for project	Marshall County Fiscal Court	November, 2021	November, 2021
Submit final report for project to KDOW	Marshall County Fiscal Court	December, 2021	December, 2021

23. Reference/Literature Cited:

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Friends of Clarks River National Wildlife Refuge. 2015. "Chestnut Creek Watershed Based Plan." Friends of Clarks River National Wildlife Refuge, PO Box 98, Benton, KY 42025

Kentucky Division of Water (KDOW). 2010. "Integrated Report to Congress on the Condition of Water Resources in Kentucky." Kentucky Department for Environmental Protection, Division of Water, Frankfort, Kentucky.

24. Budget Summary

Category	BMP Implementation	Project Management	Education, Training, or Outreach	Monitoring	Technical Assistance	Other	Total Amount
Personnel							
Supplies							
Equipment							
Travel							
Contractual	\$235,000						\$235,000
Operating Costs		\$15,000					\$15,000
Other							
TOTAL							\$250,000

25. Detailed Budget

Budget Categories (Itemize all Categories)	§319(h) (60% of funds)	Non-Federal Match (40% of funds)	TOTAL
Personnel			
Supplies			
Equipment			
Travel			
Contractual	\$150,000	\$85,000	\$235,000
Operating Cost		\$15,000	\$15,000
Other	\$0	\$0	\$0
TOTAL	\$150,000	\$100,000	\$250,000

26. Budget Narrative: Describe in detail the Federal and Non-Federal match for each of the following Budget Categories.

Personnel:

Federal- none

Non-Federal match- none

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Supplies:

Federal- none

Non-Federal match- none

Equipment:

Federal- none

Non-Federal match- none

Travel:

Federal- none

Non-Federal match- none

Contractual:

Federal- \$150,000 in federal funds will be provided to homeowners on an individual reimbursement basis for them to decommission existing failing on-site wastewater systems and tap onto existing or newly constructed Marshall County Sanitation District #2 sewer lines. Cost sharing percentages will be established utilizing Lower to Moderate (LMI) criteria and based upon household income.

Non-Federal match- \$85,000 in non-federal match will be generated for the Homeowner Assistance Program by the Marshall County Sanitation District #2 waiving of tap on fees for participating homes, and homeowner financial contributions beyond the federal cost sharing portion.

Operating Costs:

Federal- none

Non-Federal match- The Marshall County Fiscal Court will administer this grant at no cost, a value of 10% of the total (\$15,000).

Other:

Federal- none

Non-Federal match- none

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27. Grant Application Conditions

Completion of this section is required in order to receive funding consideration.

- Applicant agrees that the proposed project will comply with all applicable state laws and rules Yes N/A
- Applicant agrees to obtain all applicable permits. Yes N/A
- Reporting will be conducted in accordance with the legal contract. Yes N/A
- All Project Partners have agreed to participate. Yes N/A

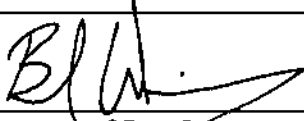
I have read and agree to comply with all applicable conditions as specified in the Application Instructions

- Watershed Plan Condition (See Section 27, Page 15) Yes N/A
- Required Training Condition (See Section 27, Page 15) Yes N/A
- Education Materials Condition (See Section 27, Page 15) Yes N/A
- Material Review Condition (See Section 27, Page 15) Yes N/A
- Quality Assurance Condition (See Section 27, Page 15) Yes N/A
- BMP Implementation Plan Condition (See Section 27, Page 16) Yes N/A
- Onsite Wastewater Condition (See Section 27, Page 16) Yes N/A
- AFO Condition (See Section 27, Page 16) Yes N/A
- Stream Restoration Condition (See Section 27, Page 17) Yes N/A
- GIS Condition (See Section 27, Page 17) Yes N/A
- Annual Report Condition (See Section 27, Page 18) Yes N/A
- Project Partners Condition (See Section 27, Page 18) Yes N/A

WARNING: Any application which is determined to be deficient, not eligible or missing KEY components will not be considered for funding.

28. Application Signature:

I certify that the information contained in this document is complete and accurate to the best of my knowledge and agree to comply with all conditions of funding.

	06/20/2017 12-4-18
Signature of Lead Agency's Authorized Representative	Date
BRAD WARNICK, MARSHALL COUNTY DEPUTY JUDGE/EXECUTIVE Kevin Neal, Marshall County Judge/Executive	270-527-4750
Typed Name and Title	Telephone Number