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

<table>
<thead>
<tr>
<th>2. Lead Agency &amp; Primary Contact</th>
<th>3. Project Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name: Kevin Neal/Brad Warning</td>
<td>Casey Madole</td>
</tr>
<tr>
<td>Agency: Marshall County Fiscal Court</td>
<td>Friends of Clarks River NWR</td>
</tr>
<tr>
<td>Street Address: 1101 Main Street</td>
<td>P.O. Box 98</td>
</tr>
<tr>
<td>City: Benton</td>
<td>Benton</td>
</tr>
<tr>
<td>State: KY</td>
<td>KY</td>
</tr>
<tr>
<td>Zip: 42025</td>
<td>42025</td>
</tr>
<tr>
<td>Telephone Number: (270) 527-4750</td>
<td>(270) 493-6196</td>
</tr>
<tr>
<td>Fax Number: (270) 527-4795</td>
<td></td>
</tr>
<tr>
<td>Email Address: <a href="mailto:brad.warning@marshallcountyky.gov">brad.warning@marshallcountyky.gov</a></td>
<td><a href="mailto:caseymadole@gmail.com">caseymadole@gmail.com</a></td>
</tr>
</tbody>
</table>

4. Project Start Date: 02/01/2018
5. Project End Date: 06/30/2019

6. Fiscal Summary

<table>
<thead>
<tr>
<th></th>
<th>Funding</th>
<th>Match</th>
<th>Total Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>319 Funding</td>
<td>$81,437.69</td>
<td>60%</td>
<td>$135,749.87</td>
</tr>
<tr>
<td>Non-Federal Match</td>
<td>$54,312.18</td>
<td>40%</td>
<td></td>
</tr>
</tbody>
</table>

7. Type of Project

- [ ] Watershed Plan
- [x] WSP Implementation
- [ ] BMP Technology Demonstration
- [ ] Education/Outreach Technology Transfer
- [ ] Other:

8. River Basin

- [ ] Statewide
- [ ] Kentucky
- [x] Salt
- [ ] Licking
- [x] Tygarts
- [ ] Green
- [ ] Tradewater
- [x] Tennessee
- [ ] Ohio Tributary
- [ ] Lower Cumberland
- [ ] Upper Cumberland
- [ ] Big Sandy
- [ ] Little Sandy
- [x] Mississippi

9. Geographic Coverage

- [ ] Statewide
- [ ] Regional
- [x] Watershed

10. NPS Pollutant(s) to be addressed

- [ ] Low Dissolved Oxygen
- [ ] Sedimentation/Siltation
- [ ] Suspended Solids
- [ ] Pathogens/Bacteria
- [x] Organic Enrichment
- [ ] Other:

- [ ] Pesticides
- [ ] Oil and Grease
- [ ] Nutrients
- [x] pH
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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%.

<table>
<thead>
<tr>
<th>Percent</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPS All</td>
<td>Resource Extraction</td>
</tr>
<tr>
<td>Agriculture</td>
<td>Habitat Modification</td>
</tr>
<tr>
<td>Construction</td>
<td>Improper Waste Disposal (including onsite Waste Issues)</td>
</tr>
<tr>
<td>Silviculture</td>
<td>Hydrologic Modification</td>
</tr>
<tr>
<td>Urban Runoff</td>
<td>Recreation</td>
</tr>
<tr>
<td>Other:</td>
<td></td>
</tr>
</tbody>
</table>

12. Project Area

Yes | No
--- | ---
Project deals directly with groundwater, springs or karst? | ☐ ☑

Watershed Projects Only, Complete the following:

- Project implemented a TMDL ☑ ☐
- Project address a TMDL that is under development ☐ ☑
- Project is on the 2010 Integrated Report, Assessment Category 5A ☐ ☑
- Nonsupport Stream ☐ ☑
- Partial Support Stream ☐ ☑
- Project is on a Special Use Water with identified threat. ☐ ☑
- Project has other impairments or identified treats (describe in app.) ☐ ☑

13. Location

Map Attached: Yes ☑ N/A ☐

<table>
<thead>
<tr>
<th>Watershed Name</th>
<th>HUC#</th>
<th>County1</th>
<th>County2</th>
<th>Drainage Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chestnut Creek Watershed</td>
<td>06040006-040-670</td>
<td>Marshall</td>
<td></td>
<td>8.05 Sq. Miles</td>
</tr>
</tbody>
</table>

Map of Chestnut Creek Watershed in Marshall County

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14. Project Summary (Two page limit):

Marshall County is interested in addressing elevated levels in the Chestnut Creek Watershed by repairing and maintaining septic systems in the watershed and conducting a landowner tap on program; connecting residences to the newly repaired sanitary sewer facility where sewer lines are available. Marshall County has several entities committed to working together for the betterment of all involved.

15. Introduction/Background (Two page limit):

Introduction/Background

"About five miles from Benton there is a little creek running into East Fork of Clark river (sic), called Chestnut creek (sic). It heads up between two high hills, whose faces form a topographical synclinal. On these hill slopes, facing each other, a few chestnut bushes are found; but they stop absolutely and abruptly at the tops of these two slopes, and on the other sides of these same hills not a chestnut bush is to be found. Nor is there any chestnut in any other part of this section of the country. ... How these chestnut bushes came to grow upon the faces of these two hills I cannot imagine; for they could not have come from seeds floated down the stream, in as much as the mountain above the head of the stream has no chestnut on it, and never has had any so far as I could find out. The people have recognized the peculiarity of the growth, as indicated by the name of the stream." - L. H. Defries, 1877

Such is the story behind the naming of Chestnut Creek, a stream which drains 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 residential subdivisions.

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. The majority of 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 (KDOH, 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 has 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:

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

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8) Connecting residences to the newly repaired sanitary sewer facility where sewer lines are available, decommisioning 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 and the implementation need for agricultural BMPs throughout the watershed. The watershed coordinator will also be assisting with the establishment of a local citizen’s group and conducting the education and outreach program that was identified as a need for the watershed and Marshall County as a whole. 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 aim of the project is to address high pathogen levels in the Chestnut Creek Watershed as recommended in the Chestnut Creek Watershed Plan by repairing and maintaining septic systems in the watershed and conducting a landowner tap on program, connecting residences to the newly repaired sanitary sewer facility where sewer lines are available. Marshall County Fiscal Court will take the lead in this project, with assistance provided by the watershed coordinator and the Marshall County Health Department. Assistance and funding will be provided to local homeowners and the community to allow for the repair or replacement of failing septic systems, as well as the homeowner’s portion of connecting to Marshall County Sanitation District #2, including their lateral line installation. Additionally, this project will educate the community about preventative septic maintenance by requiring participants in the program to attend a septic maintenance class.

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

Goals/Objectives/Activities

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

Objective: Enable better septic system function in the Chestnut Creek Watershed

Activities:
1. Amend existing Chestnut Creek BMP Implementation Plan to include an Onsite Wastewater Component, including an Onsite Wastewater Incentive Grant Program (OWIGP) and Septic Pumpout Program (SPP) – Activity to be completed by Chestnut Creek Watershed Coordinator
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 failing septic systems and contact those individuals asking them to participate in the OWIGP – Activity to be completed by Marshall County Health Department, Marshall County GIS Department and Chestnut Creek Watershed Coordinator
4. Advertise SPP to residents throughout the watershed – Activity to be completed by Marshall County Health Department and Chestnut Creek Watershed Coordinator
5. Collect applications for participation in the OWIGP and SPP – Activity to be completed by the Chestnut Creek Watershed Coordinator
6. Identify work needed at each residence to repair failing septic system – Activity to be completed by Marshall County Health Department
7. Using a ranking process, prioritize the order in which septic systems will be repaired or replaced through the OWIGP and SPP, should funding not be available for all – Activity to be completed by Marshall County Health Department and Chestnut Creek Watershed Coordinator
8. Submit ranked applications to Marshall County Fiscal Court for funding – Activity to be completed by Chestnut Creek Watershed Coordinator
9. Compile a list of approved septic plumbers/installers and send a call out for bids to conduct work necessary for OWIGP (as recommended by Marshall County Health Department for each residence) and conduct SPP – Activity to be completed by Marshall County Fiscal Court
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10. Secure appropriate contractors for OWIGP and SPP – Activity performed by Marshall County Fiscal Court with advice from Marshall County Health Department

11. Evaluate work upon completion for each septic system in the OWIGP and SPP to ensure work is done appropriately – Activity to be completed by Marshall County Health Department

12. Pay contractor for work completed in the OWIGP and SPP – Activity to be completed by Marshall County Fiscal Court

Goal: Educate the community about proper septic maintenance and watershed health

Objective: Educate homeowners and local citizens about water quality and septic system function

Activities:

1. Develop program for septic maintenance workshops (presenters, dates, locations, content) and submit to KDOE for review and approval (required workshop for all participants in the OWIGP or SPP) – Activity completed by Marshall County Health Department and Chestnut Creek Watershed Coordinator

2. Advertise and conduct septic system workshops (at least two) – Activity completed by Marshall County Health Department and Chestnut Creek Watershed Coordinator

3. Collect contact information from local citizens interested in future watershed project information – Activity to be completed by Chestnut Creek Watershed Coordinator

4. Produce letters/flyers/brochures advertising the OWIGP and SPP – Activity to be completed by Chestnut Creek Watershed Coordinator, with assistance from Marshall County Health Department and Marshall County Fiscal Court

5. Develop newspaper article to advertise the OWIGP and SPP for the Marshall County Tribune – Activity to be completed by Chestnut Creek Watershed Coordinator, with assistance from Marshall County Health Department and Marshall County Fiscal Court

6. Provide septic information and advertise OWIGP and SPP through the Marshall County Health Departments website – Activity to be completed by Marshall County Health Department

7. Post advertisement and project updates to the Chestnut Creek Watershed’s Facebook page – Activity to be completed by Chestnut Creek Watershed Coordinator

8. Develop newspaper article to describe success of OWIGP and SPP for the Marshall County Tribune Courier upon completion of the project - Activity to be completed by Chestnut Creek Watershed Coordinator, with assistance from Marshall County Health Department and Marshall County Fiscal Court

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

Objective: Conduct residential landowner tap on program

Activities:

1. Amend existing Chestnut Creek BMP Implementation Plan to include a Landowner Tap On Program (LTOP), hooking residences up to Marshall County Sanitation District #2 where possible – Activity to be completed by Chestnut Creek Watershed Coordinator

2. Submit amended Chestnut Creek BMP Implementation Plan to KDOE for review and approval – Activity to be completed by Chestnut Creek Watershed Coordinator

3. Identify residences with sewer lines available and contact those individuals asking them to participate in the LTOP – Activity to be completed by Chestnut Creek Watershed Coordinator with assistance from Marshall County Sanitation District #2

4. Collect applications for participation in the LTOP – Activity to be completed by the Chestnut Creek Watershed Coordinator

5. 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 systems and develop summary of work for each residence – Activity to be completed by Marshall County Sanitation District #2 and Marshall County Health Department
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6. Submit completed applications with summary of work for each residence to Marshall County Fiscal Court for funding – Activity to be completed by Chestnut Creek Watershed Coordinator

7. Compile a list of approved contractors and send a call out for bids to conduct work necessary for LTOP (as recommended by Marshall County Sanitation District #2 and Marshall County Health Department for each residence) – Activity to be completed by Marshall County Fiscal Court

8. Secure appropriate contractors for LTOP – Activity performed by Marshall County Fiscal Court

9. 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

10. Pay contractor for work completed in the LTOP – Activity to be completed by Marshall County Fiscal Court

17. Describe the NPS Pollution Control Plan of Work:

Plan of Work

Onsite Wastewater Incentive Grant Program (OWIGP) and Septic Pumpout Program (SPP)
The Chestnut Creek Watershed Coordinator will amend the existing Chestnut Creek BMP Implementation Plan to include an Onsite Wastewater Component, including an OWIGP and SPP, with assistance from the Four Rivers Basin Coordinator. This amended plan will then be sent to the Marshall County Health Department and Marshall County Fiscal Court for review and approval before being sent to the Kentucky Division of Water.

The Marshall County Health Department will work with the Marshall County GIS Department and Chestnut Creek Watershed Coordinator to identify residences with failing septic systems using tools that the Marshall County GIS Department has available to them. A list of these residences will be included in the amended Chestnut Creek BMP Implementation Plan.

Once a signed contract is received from the Kentucky Division of Water, the Chestnut Creek Watershed Coordinator, with assistance from the Marshall County Health Department, will then contact those individuals directly and ask them to participate in the OWIGP. In addition, the Chestnut Creek Watershed Coordinator will develop a newspaper article to advertise the OWIGP for the Marshall County Tribune. This article will be reviewed by the Marshall County Health Department, Marshall County Fiscal Court and Kentucky Division of Water prior to being submitted. Participants in the OWIGP will fill out an application (also included in the amended Chestnut Creek BMP Implementation Plan) that will be submitted to the Chestnut Creek Watershed Coordinator. The landowner will be required to have a site evaluation from the Marshall County Health Department detailing the work that is necessary to repair or replace their failing septic system.

Once applications have been received, the Chestnut Creek Watershed Coordinator will partner with the Marshall County Health Department to prioritize the order in which septic systems will be repaired or replaced through the OWIGP, and these ranked applications and the Marshall County Health Department evaluation results will then be submitted to the Marshall County Fiscal Court for funding. The Marshall County Health Department will provide a list of approved septic plumbers/installers to the Marshall County Fiscal Court. Once ranked applications have been received, the Marshall County Fiscal Court will follow their regular procurement process to secure appropriate contractors for OWIGP.

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.
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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
Julie Connor/Michael Carlson
270-527-1496

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

Four Rivers Basin Coordinator
PO Box 1156
Benton, KY 42025
Technical Support
Maggie Morgan
270-559-4422

Marshall County Sanitation District #2
1101 Main St., Benton, KY 42025
Technical Support
Lyndall Groves
270-205-7959

21. Project Measures of Success:

Participation levels in the project activities, including:

- Septic maintenance workshop attendance with post workshop surveys
- Onsite Wastewater Incentive Grant Program applications received
- Onsite Wastewater Incentive Grant Program number of septic systems repaired
- Septic Pumpout Program applications received
- Septic Pumpout Program number of septic pumpouts completed
- Number of people registering for future watershed communication with Chestnut Creek Watershed Coordinator
## FFY 2017 Project Application
### Kentucky Nonpoint Source Pollution Control Program

### 22. Milestone Schedule

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Responsible Partner</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amend existing Chestnut Creek BMP Implementation Plan to include an Onsite Wastewater Component and Landowner Tap On Program</td>
<td>Chestnut Creek Watershed Coordinator</td>
<td>8/1/2017</td>
<td>10/31/2017</td>
</tr>
<tr>
<td>Identify residences with failing septic systems</td>
<td>Marshall County Health Department, Marshall County GIS Department, Chestnut Creek Watershed Coordinator</td>
<td>8/1/2017</td>
<td>10/31/2017</td>
</tr>
<tr>
<td>Compile a list of approved septic plumbers/installers</td>
<td>Marshall County Health Department</td>
<td>8/1/2017</td>
<td>10/31/2017</td>
</tr>
<tr>
<td>Identify residences with sewer lines available for participation in the LT TOP</td>
<td>Marshall County Sanitation District #2, Chestnut Creek Watershed Coordinator</td>
<td>8/1/2017</td>
<td>10/31/2017</td>
</tr>
<tr>
<td>Submit amended Chestnut Creek BMP Implementation Plan to KDOV</td>
<td>Chestnut Creek Watershed Coordinator</td>
<td>10/1/2017</td>
<td>11/1/2017</td>
</tr>
<tr>
<td>Develop program for septic maintenance workshops</td>
<td>Marshall County Health Department, Chestnut Creek Watershed Coordinator</td>
<td>2/1/2018</td>
<td>4/30/2018</td>
</tr>
<tr>
<td>Develop newspaper article to advertise the OWIGP and SPP for the Marshall County Tribune</td>
<td>Chestnut Creek Watershed Coordinator</td>
<td>2/1/2018</td>
<td>4/30/2018</td>
</tr>
<tr>
<td>Produce letters/fliers/brochures advertising the OWIGP and SPP</td>
<td>Chestnut Creek Watershed Coordinator</td>
<td>2/1/2018</td>
<td>4/30/2018</td>
</tr>
<tr>
<td>Receive contract for project from KDOV</td>
<td>KDOV, Marshall County Fiscal Court</td>
<td>2/1/2018</td>
<td>2/1/2018</td>
</tr>
<tr>
<td>Contact residences with failing septic systems to ask for participation in OWIGP</td>
<td>Marshall County Health Department, Chestnut Creek Watershed Coordinator</td>
<td>4/1/2018</td>
<td>6/1/2018</td>
</tr>
<tr>
<td>Advertise SPP to residents throughout the watershed</td>
<td>Chestnut Creek Watershed Coordinator</td>
<td>4/1/2018</td>
<td>6/1/2018</td>
</tr>
<tr>
<td>Collect applications for participation in the OWIGP</td>
<td>Chestnut Creek Watershed Coordinator</td>
<td>4/1/2018</td>
<td>6/1/2018</td>
</tr>
<tr>
<td>Collect applications for participation in the SPP</td>
<td>Chestnut Creek Watershed Coordinator</td>
<td>4/1/2018</td>
<td>6/1/2018</td>
</tr>
<tr>
<td>Identify work needed at each residence to repair failing septic system as part of OWIGP</td>
<td>Marshall County Health Department</td>
<td>4/1/2018</td>
<td>6/1/2018</td>
</tr>
<tr>
<td>Submit program for septic maintenance to KDOV for review and approval</td>
<td>Chestnut Creek Watershed Coordinator</td>
<td>4/1/2018</td>
<td>8/1/2018</td>
</tr>
<tr>
<td>Submit newspaper article to advertise the OWIGP and SPP for the Marshall County Tribune to KDOV for review</td>
<td>Chestnut Creek Watershed Coordinator</td>
<td>4/1/2018</td>
<td>8/1/2018</td>
</tr>
<tr>
<td>Submit letters/fliers/brochures advertising the OWIGP and SPP to KDOV for review</td>
<td>Chestnut Creek Watershed Coordinator</td>
<td>4/1/2018</td>
<td>8/1/2018</td>
</tr>
<tr>
<td>Provide septic information and advertise OWIGP and SPP through the Marshall County Health Departments website</td>
<td>Chestnut Creek Watershed Coordinator</td>
<td>4/1/2018</td>
<td>6/1/2018</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Task</th>
<th>Responsible Party</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post advertisement and project updates to the Chestnut Creek Watershed's Facebook page</td>
<td>Chestnut Creek Watershed Coordinator</td>
<td>4/1/2018</td>
<td>8/1/2018</td>
</tr>
<tr>
<td>Collect contact information from local citizens interested in future watershed project information</td>
<td>Chestnut Creek Watershed Coordinator</td>
<td>4/1/2018</td>
<td>8/1/2019</td>
</tr>
<tr>
<td>Collect applications for participation in the LTOP</td>
<td>Chestnut Creek Watershed Coordinator</td>
<td>4/1/2018</td>
<td>6/1/2018</td>
</tr>
<tr>
<td>Develop summary of work for participation in LTOP for each residence</td>
<td>Marshall County Sanitation District #2, Marshall County Health Department</td>
<td>4/1/2018</td>
<td>6/1/2018</td>
</tr>
<tr>
<td>Advertise septic system workshops</td>
<td>Chestnut Creek Watershed Coordinator</td>
<td>4/1/2018</td>
<td>8/1/2019</td>
</tr>
<tr>
<td>Submit completed applications with summary of work for each residence to Marshall County Fiscal Court for funding</td>
<td>Chestnut Creek Watershed Coordinator</td>
<td>7/1/2018</td>
<td>8/1/2018</td>
</tr>
<tr>
<td>Compile a list of approved contractors and send a call out for bids to conduct work necessary for LTOP</td>
<td>Marshall County Sanitation District #2, Marshall County Health Department</td>
<td>6/30/2018</td>
<td>7/30/2018</td>
</tr>
<tr>
<td>Secure appropriate contractors for LTOP</td>
<td>Marshall County Fiscal Court</td>
<td>8/1/2018</td>
<td>9/1/2018</td>
</tr>
<tr>
<td>Prioritize the order in which septic systems will be repaired or replaced through the OWIGP</td>
<td>Marshall County Health Department, Chestnut Creek Watershed Coordinator</td>
<td>4/1/2018</td>
<td>6/1/2018</td>
</tr>
<tr>
<td>Complete work required for LTOP</td>
<td>Contractor selected by Marshall County Fiscal Court</td>
<td>9/1/2018</td>
<td>12/30/2018</td>
</tr>
<tr>
<td>Evaluate work upon completion for each residence to ensure work is done appropriately</td>
<td>Marshall County Sanitation District #2, Marshall County Health Department</td>
<td>9/1/2018</td>
<td>12/30/2018</td>
</tr>
<tr>
<td>Submit ranked applications to Marshall County Fiscal Court for funding</td>
<td>Chestnut Creek Watershed Coordinator</td>
<td>7/1/2018</td>
<td>8/1/2018</td>
</tr>
<tr>
<td>Send a call out for bids to conduct work necessary for OWIGP (as recommended by Marshall County Health Department for each residence) and conduct SPP</td>
<td>Marshall County Fiscal Court</td>
<td>8/1/2018</td>
<td>9/1/2018</td>
</tr>
<tr>
<td>Secure appropriate contractors for OWIGP and SPP</td>
<td>Marshall County Fiscal Court</td>
<td>8/1/2018</td>
<td>9/1/2018</td>
</tr>
<tr>
<td>First septic system workshop</td>
<td>Marshall County Health Department, Chestnut Creek Watershed Coordinator</td>
<td>1/1/2019</td>
<td>2/1/2019</td>
</tr>
<tr>
<td>Conduct OWIGP work</td>
<td>Contractor selected by Marshall County Fiscal Court</td>
<td>9/1/2018</td>
<td>12/31/2018</td>
</tr>
<tr>
<td>Conduct SPP work</td>
<td>Contractor selected by Marshall County Fiscal Court</td>
<td>9/1/2018</td>
<td>12/31/2018</td>
</tr>
<tr>
<td>Evaluate work upon completion for each septic system in the OWIGP to ensure work is done appropriately - ongoing as systems are repaired</td>
<td>Marshall County Health Department</td>
<td>9/1/2018</td>
<td>12/31/2018</td>
</tr>
<tr>
<td>Pay contractor for work completed in the LTOP</td>
<td>Marshall County Fiscal Court</td>
<td>1/1/2019</td>
<td>1/31/2019</td>
</tr>
</tbody>
</table>
FFY 2017 Project Application
Kentucky Nonpoint Source Pollution Control Program

<table>
<thead>
<tr>
<th>Activity</th>
<th>Responsible Party</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second septic system workshop</td>
<td>Marshall County Health Department, Chestnut Creek Watershed Coordinator</td>
<td>3/1/2019</td>
<td>3/30/2019</td>
</tr>
<tr>
<td>Develop newspaper article to describe success of OWIGP and SPP for the Marshall County Tribune Courier</td>
<td>Chestnut Creek Watershed Coordinator</td>
<td>5/1/2019</td>
<td>5/30/2019</td>
</tr>
<tr>
<td>Submit newspaper article to describe success of OWIGP and SPP for the Marshall County Tribune Courier to KDOM for review</td>
<td>Chestnut Creek Watershed Coordinator</td>
<td>5/1/2019</td>
<td>5/30/2019</td>
</tr>
<tr>
<td>Pay contractor for work completed in the OWIGP and SPP</td>
<td>Marshall County Fiscal Court</td>
<td>1/1/2019</td>
<td>2/1/2019</td>
</tr>
<tr>
<td>Develop final report for project</td>
<td>Marshall County Fiscal Court, Marshall County Health Department, Chestnut Creek Watershed Coordinator</td>
<td>5/1/2019</td>
<td>05/30/2019</td>
</tr>
<tr>
<td>Submit final report for project to KDOM</td>
<td>Marshall County Fiscal Court</td>
<td>6/30/2019</td>
<td>6/30/2019</td>
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</tbody>
</table>

23. Reference/Literature Cited:

24. Budget Summary

<table>
<thead>
<tr>
<th>Category</th>
<th>BMP Implementation</th>
<th>Project Management</th>
<th>Education, Training, or Outreach</th>
<th>Monitoring</th>
<th>Technical Assistance</th>
<th>Other</th>
<th>Total Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel</td>
<td>$3,211.40</td>
<td>$7,981.10</td>
<td>$2,328.36</td>
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<td>$0.00</td>
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<tr>
<td>Supplies</td>
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<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$4,562.50</td>
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<tr>
<td>Equipment</td>
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<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$3,780.00</td>
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<tr>
<td>Travel</td>
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<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
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<td>$0.00</td>
</tr>
<tr>
<td>Contractual</td>
<td>$90,812.50</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$90,812.50</td>
</tr>
<tr>
<td>Operating Costs</td>
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<td>$23,074.01</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
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<td>$0.00</td>
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<td>$0.00</td>
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<tr>
<td>TOTAL</td>
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<td>$135,749.87</td>
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</table>
### FFY 2017 Project Application
Kentucky Nonpoint Source Pollution Control Program

#### 25. Detailed Budget

<table>
<thead>
<tr>
<th>Budget Categories (Itemize all Categories)</th>
<th>§319(h) (60% of funds)</th>
<th>Non-Federal Match (40% of funds)</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel</td>
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<tr>
<td>Supplies</td>
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<td>$4,562.50</td>
<td>$4,562.50</td>
</tr>
<tr>
<td>Equipment</td>
<td>$0.00</td>
<td>$3,780.00</td>
<td>$3,780.00</td>
</tr>
<tr>
<td>Travel</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Contractual</td>
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<td>$10,000.00</td>
<td>$90,812.50</td>
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<tr>
<td>Operating Cost</td>
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<td>$23,074.01</td>
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<tr>
<td>Other</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$81,437.69</strong></td>
<td><strong>$54,312.18</strong></td>
<td><strong>$135,749.87</strong></td>
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</tbody>
</table>
26. Budget Narrative: Describe in detail the Federal and Non-Federal match for each of the following Budget Categories.

**Personnel:**

**Federal- explain in detail how the funds would be utilized**
The Marshall County Sanitation District #2 will conduct trainings for the 10 new households that tap into the Sanitation District’s System.

- 10 Households attend a 2 hour Training @ $20/hour = $400.00
- 1 Trainer – 5 Hours of Training Prep + 2 Hours of Training @ $32.17/ Hour = $225.19

**Total Federally Funded Personnel: $625.19**

**Non-Federal match- if there is match in this category, explain in detail about your match**
The Marshall County Health Department will conduct Septic System Maintenance Trainings for the 35 Households that will be a part of either the Pump Out Project or the System Replacement Project.

- 35 Households attend a 2 hour Training @ $20/hour = $1,400.00
- 1 Trainer – 5 Hours of Training Prep + 2 Hours of Training @ $43.31/ Hour = $303.17

The Marshall County Sanitation District #2 Engineer will tap-on the 10 Households to their Sanitation District. This is estimated to take 10 hours per tap on.

- 10 Households x 10 hours each = 100 Hours x $32.17/Hour = $3,217.00

The Marshall County Sanitation District #2 Engineer will fill the Closing Septic Tanks for the 10 Households coming on to the Sanitation District. This is estimated to take 6 hours per fill.

- 10 Households x 6 hours each = 60 Hours x $32.17/Hour = $1,930.20

The Marshall County Health Department must inspect all 10 tap-ons. This is estimated to take 1 hour per tap-on.

- 10 Tap-on x 1 Hour = 10 hours x $43.31/Hour = $433.10

The Marshall County Sanitation District #2 will haul 10 loads of Top Soil and 10 loads of #57 Gravel. Each load will take approximately 2 hours. Tandem Dump Truck Driver is $32.03/hour.

- 10 Households x 2 loads each = 20 Loads x 2 Hours = 40 Hours x $32.03/Hour = $1,281.20

The Marshall County Health Department must inspect all 10 Septic Tank Opening/Filling/Closing for those that have tapped-on to the Sanitation District. This is estimated to take 5 hours per inspection with 2 inspections per Septic Tank Opening/Filling/Closing.

- 10 Septic Tank Opening/Filling/Closing x 5 Hours per inspection = 50 Hours x $43.31/Hour = $2,165.50

**Total Non-Federally Funded Personnel: $12,895.67**

**Supplies:**

**Federal- explain in detail how the funds would be utilized**
None

**Non-Federal match- if there is match in this category, explain in detail about your match**
The Marshall County Sanitation District #2 will haul 25 tons of #57 Gravel to each 10 Septic Tank Closure Location. This cost is estimated to be $10.25/ton.

- 10 Households x 25 tons each = 250 Tons x $10.25/Ton = $2,562.50
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The Marshall County Sanitation District #2 will haul 10 loads of Top Soil to each 10 Septic Tank Closure Location. This cost is estimated to be $200.00 load.

\[ 10 \text{ Households} \times 1 \text{ load each} = 10 \text{ Loads} \times \$200.00/each = \$2,000.00 \]

Total Non-Federally Funded Supplies: \$4,562.50

Equipment:

Federal- explain in detail how the funds would be utilized
None

Non-Federal match- if there is match in this category, explain in detail about your match
The Marshall County Sanitation District #2 will use a Tandem Dump Truck with 14 cu yard bed to haul #57 Gravel for 10 fills. This will take approximately 2 hours per fill. Equipment Rate is $75/Hour.

\[ 10 \text{ Households} \times 2 \text{ hours each} = 20 \text{ Hours} \times \$75/\text{Hour} = \$1,500.00 \]

The Marshall County Sanitation District #2 will use a Tandem Dump Truck with 14 cu yard bed to haul Top Soil for 10 fills. This will take approximately 2 hours per fill. Equipment Rate is $75/Hour.

\[ 10 \text{ Households} \times 2 \text{ hours each} = 20 \text{ Hours} \times \$75/\text{Hour} = \$1,500.00 \]

The Marshall County Sanitation District #2 will use a Tractor with Front Loader and Backhoe to fill closing Septic Tanks with #57 Gravel and Top Soil for 10 fills. This will take approximately 6 hours per fill. Equipment Rate is $13/Hour.

\[ 10 \text{ Households} \times 6 \text{ hours each} = 60 \text{ Hours} \times \$13/\text{Hour} = \$780.00 \]

Total Non-Federally Funded Equipment: \$3,780.00

Travel:

Federal- explain in detail how the funds would be utilized
None

Non-Federal match- if there is match in this category, explain in detail about your match
None

Contractual:

Federal- explain in detail how the funds would be utilized
5 Septic Systems will be replaced at a cost of $3,000 per system. - \$15,000

The Marshall County Health Department has a permit fee for the 5 new Septic Systems - $325 each - \$1,625.00

Lawn repair for the 10 Tap-on Customers is estimated at a cost of $250 each - \$2,500.00

The Marshall County Health Department has a permit fee for the 10 Tap-on Customers - $150 each - \$1,500.00

Approximately 1365 feet of new lines must be installed for the 10 Households coming onto the Sanitation District. The cost of this is estimated to be $37.50 per foot.
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1365 feet x $37.50/foot = $51,187.50

30 Homes will be put into a Pump Out Program at a cost of $300 each - $9,000.00

Total Federally Funded Contractual: $80,812.50

Non-Federal match- if there is match in this category, explain in detail about your match
The Marshall County Sanitation District #2 Engineer will tap-on the 10 Households to their Sanitation District.  This cost is $1,000 per tap-on.

10 Households x $1000/Tap-on = $10,000.00

Total Non-Federally Funded Contractual: $10,000.00

Operating Costs:

Federal- explain in detail how the funds would be utilized
None

Non-Federal match- if there is match in this category, explain in detail about your match
Administrative Costs of Grant Processing, 17% of the total project ($135,729.48) - $23,074.01

Other:

Federal- explain in detail how the funds would be utilized
None

Non-Federal match- if there is match in this category, explain in detail about your match
None
FFY 2017 Project Application
Kentucky Nonpoint Source Pollution Control Program

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.

<table>
<thead>
<tr>
<th>Signature of Lead Agency’s Authorized Representative</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kevin Neal, Marshall County Judge/Executive</td>
<td>06/20/2017</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Typed Name and Title</th>
<th>Telephone Number</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>270-527-4750</td>
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