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**Introduction**: Description of the geologic extent of watershed, problems and/or threats and the goals and objectives of the proposal.

## The Lower New Watershed



The majority of Fayette County is located in the Lower New River watershed. Within this watershed, the New River Gorge National River exists as a national treasure for West Virginians and visitors. It is home to a diverse array of plants, endangered animals and rare birds. Fayette County is a very popular tourist destination for outdoor recreation and many of the local residents have chosen to stay here because of the opportunities for activities in the natural world. The recreation industry is a major portion of the local economy and will not continue to thrive if the threat to the health and safety of customers is not addressed.

According to a recent State of the Watershed Report, the main stem of the Lower New River is impaired for fecal coliform bacteria, which means that the river does not always meet clean water standards set by the state of West Virginia. One of the primary sources of the fecal coliform bacteria is from inadequate wastewater treatment or leaking sewer pipes along some of the main tributaries.

The State of the Lower New Report recommendations includes addressing pollution through a holistic strategy that builds community support and community-

based programs. One of the best ways to build community support and to increase awareness around an issue is to educate the local youth on the concerns in their local watersheds. We will do this by providing hands-on teaching approaches on the importance of clean water and some of the nonpoint source pollution concerns in the Lower New.



The majority of Nicholas County is located in the Gauley River Watershed that meets the Lower New River at Gauley Bridge and becomes the Kanawha River. This watershed is also a source of exceptional outdoor recreation opportunities utilized by fishermen, river sports, birding, climbing, skiing, hiking and biking.

The Gauley River watershed is in southern West Virginia and encompasses approximately 1,419 square miles. The majority of the watershed lies within Nicholas, Webster, Pocahontas, and Greenbrier counties. Smaller portions of the watershed lie in Randolph, Clay, Fayette, and Summers counties. Major tributaries include Twenty mile Creek, Williams River, Cranberry River, Cherry River, and Meadow River.

Figure 3-1. Location of the Gauley River watershed

The water quality impairments in the watershed are primarily fecal coliform (while the mainstem is not listed), metals, pH, and sediment. The most significant nonpoint sources for fecal coliform bacteria are those related to the inadequate treatment of sewage. Failing onsite systems and direct discharges of untreated sewage often result in exceedances of the fecal coliform criteria. Precipitation runoff from residential areas is another nonpoint source of fecal coliform bacteria. As for the metals from nonpoint sources, Nonpoint sources include abandoned mine lands (AML), bond forfeiture sites, roads, oil and gas operations, timbering, agriculture, and urban/residential land disturbance. The permitted discharges from mining activities are the most prevalent point sources throughout the watershed. The presence of individual nonpoint source categories and their relative significance varies by subwatershed. Several tributaries are also impaired for biological integrity. Biological integrity/impairment is based on a rating of the stream's benthic macroinvertebrate community using the multimetric West Virginia Stream Condition Index (WVSCI). The causative stressors to the benthic communities identified in this effort include metals toxicity, pH toxicity, organic enrichment, sedimentation, and ionic toxicity.

## **Goals and Objectives**

The Fayette County and Nicholas County Water Festivals strive to reach every 5<sup>th</sup> grader these counties in a fun and engaging way with water education based on grade appropriate standards of learning. The festival is designed to:

- Educate the students in a fun and engaging way, so that they cultivate an interest and an excitement for learning about water and the natural world.
- Bring awareness to the value of our water resources as well as the threats and problems that exist within the watershed.
- Teach them what actions they can take to make a difference.

Management measures: A description of the nonpoint measures that will need to be implemented in order to achieve the goals and objectives of the plan. Include an identification (using a map or detailed description) of the critical areas in which those measures will be needed.

In order to meet the goals and objectives of the water festival, an invitation will be sent to each of the 5<sup>th</sup> grade teachers in the counties. On a first come, first serve basis, the number of classes that can best be accommodated at the event will be accepted. The water festival will have an established outline, including the topics of presentation and the associated content standards and objectives that will be addressed. Activities will be interactive, hands-on, and engaging.

Technical assistance: An estimate of the amounts of technical assistance needed, associated costs and the sources and authorities that will be relied on to implement this plan.

The water festivals will be planned by Kim Maxwell (WV Department of Environmental Protection) and Leah Perkowski-Sisk (National Park Service) primarily. They will rely on technical support from other specialists in their organizations as well as within the Army Corps of Engineers and local watershed organization volunteers to actually present at the event and to help coordinate the details of the event. Kim Maxwell (Project WET Coordinator, WV DEP) will be available to train presenters in their specific activities prior to the event if necessary.

Much of this effort will be from paid personnel, responsible for education and outreach in their respective organization.

Budget and match: The budget must be provided that shows a breakdown of anticipated expenses by category and by §319 funds and matching funds. The maximum §319 reimbursement for a project is 60% of the total project cost.

Water Festival Budget (per festival)	Amount Requested	Match	Total
Activity and Event Supplies	\$1,000		
Food for Presenters/Volunteers	\$300		
Thank you to presenters/volunteers	\$200		
Volunteers Time – event (5 hours @ \$17/hr.)		10@\$85=\$850	
Volunteers Time – set up/clean-up (2 hours@ \$17/hr.)		10@\$34=\$340	
Water Bottles		\$1000	
Bus Transportation		\$1000	
Total	\$1,500.00	\$3190.00	\$4691.00

There must be at least 40% non-federal matching funds for each project. According to the spreadsheet tool on the WV DEP webpage, we calculate that we need a \$2000 match for this grant.

Education and outreach: An education and outreach campaign that will be used to enhance public understanding of the project and encourage their early and continued participation in selecting, designing, and implementing the nonpoint management measures that will be implemented.

We begin the planning process by contacting the County Board of Education office and requesting their approval for the attendance of county 5<sup>th</sup> grade classes at the festival. In this initial letter, we include information about the water festival, details about the topics that will be covered (including CSO's) and pictures and quotes from previous water festivals. We request the Board of Education include information about the water festival on their webpage, newsletter, and/or school calendar.

We then contact potential presenters, including members of federal, state, and local organizations and outreach groups. We also inform this group about purpose and details of the festival.

Finally, we contact local and state representatives, as well as the media to invite them to attend the festival and to provide them with information on the event. We request feedback and evaluation from everyone involved (including the students). We also make sure that we send thank you cards to all of the schools, presenters and volunteers.

**Milestone schedule**: A description of interim, measurable milestones for determining whether management measures or other controls are being implemented.

The Water Festival Planning Committee has a timeline by which it operates. We hope to reach more counties and more students each year by streamlining the water festival process and making it more accessible to a wider spectrum of school districts.

## Planning a Water Festival – Timeline

March 2012	April 2012	May 2012
E-mail invite to be on the water festival planning committee – date and time of initial meeting	First planning meeting; send out festival announcements/invitations to teachers/students; send out festival announcements/invitations to presenters	Confirm class/school participation; confirm presenter/volunteers
June - July 2012	August 2012	September 2012
Planning meeting; supply prep	Preliminary work on schedules, map and presenter handouts etc.; put together pre- visit packets; reminder and confirmation of presenters/volunteers	Festivals
October 2012	November 2012	
Press release/media articles; Thank you' s	Final reports to NPS Program, due Nov. 1	

**Measures of success**: This could include a summary of your monitoring results, number of participants served by your outreach efforts, number of brochures distributed, number of BMPs installed, feet of stream bank restored etc.

Last year, the combined Fayette and Nicholas County Water Festivals reached a total of 248 students from 6 different schools. This year we hope to reach 200-250 students at each of the water festivals, thereby doubling our outreach efforts. At the festival, we also hope to attract the teachers in attendance to pursue a Project WET training, which would hopefully ensure more hands-on water education in the region.