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Mr. Tim Craddock
WVDEP DWWM, Nonpoint Source Program
601 57th St. SE
Charleston, WV. 25304

Dear Mr. Craddock,

It is our pleasure to submit the enclosed progress report for CWA 319 Grant, Appalachian Watershed and Stream Monitors (NPS 1338). There is no invoice enclosed with this report, as no charges were made during the grant period of 1 July 2010 (start date) – 30 September 2010.

Thank you for your assistance. If you have any questions please do not hesitate to contact me.

Sincerely,

Kevin R. Stitzinger

AGO Progress Report

Organization: The Mountain Institute

Contact: Kevin Stitzinger, Watershed Education Coordinator, Appalachia Program

Grant # NPS 1338

Period: 1 July 2010 – 30 September 2010

Project Summary

The Mountain Institute's (TMI) **Appalachian Watershed & Stream Monitors**

(AWSM) program activates students to become environmental stewards, reinforces the importance of clean water, and connects students to their local landscape and community. AWSM is an extended program that integrates hands-on, inquiry based outdoor learning with ongoing stream and watershed education. AWSM also helps develop positive long term community relationships by encouraging local participation in watershed issues through connections to local watershed groups. Teachers and local watershed organizations will partner to engage students in community activities such as clean-ups, monitoring, and habitat restoration. These projects solidify students' commitment to clean water in their community. With the help of Clean Water Act 319, The Mountain Institute has developed the AWSM program to engage teachers and students from across the state. The Mountain Institute aims to work with approximately 200 students and eight teachers, and support hands-on, science-based water quality assessment with students at 10 mountain streams.

Activities from 01 June 2009 through 30 September 2009

In July Watershed Education Coordinator Mr. Kevin Stitzinger and Education Coordinator Ms. Beth Boehme worked to support the growth of AWSM through a focus on staff and curriculum development. Together Mr. Stitzinger and Ms. Boehme finalized participant recruitment for the August professional development workshop. The August professional development workshop was followed by a pre-trip visit to each participating school in September along with presentation of the first field trip of the season at the end of that month. *Activities during this time period were charged to a DEP 106 Watershed Improvement grant (NPS 1330). No charges were made to the current DEP grant agreement (NPS 1338) for these activities.*

Milestones

During the four-day workshop in early August 2010 The Mountain Institute's AWSM curriculum was presented to seven educators. The course provided teachers with tools and knowledge to (1) incorporate Save Our Streams skills and water monitoring resources into their overall course curriculum, (2) increase knowledge of science, geography, and civic responsibility as related to the watersheds of their communities and how to transfer these messages to students, and (3) connect teachers with state agencies and non-profit watershed organizations providing an emphasis on stewardship. Further, participants were introduced to TMI's Appalachian Watershed Curriculum Project; a catalogue of innovative education resources for multiple subjects and grade levels. This resource is being built by TMI and other educators to highlight headwater conservation themes and alignment to state educational standards. In addition participants benefited from instructional advice on working with students in the outdoors including exchanges of successes and pitfalls from past participants. The workshop also brought in Tim Craddock of the WV Department of Environmental Protection to lead SOS instruction, as well as guest speakers including Neil Gillies of Cacapon Institute, Josh Nease of Trout Unlimited, and Kara Baylog OSM/VISTA with the Eastern Coal Regional Roundtable. These individuals presented organization activities that can be used in the classroom to complement the AWSM curriculum and discussed watershed issues of concern from across the state.

Following the professional development workshop and after the start of the school year, Mr. Stitzinger meets with four participating teachers and their students to offer pre-program orientations. The presentation focus was the AWSM Program, including watershed geography and ecology, and the students' connection to the Ohio River and Chesapeake Bay via their local headwater streams. This

included identification of their local “school sheds” or sub-watersheds within which their local sampling sites are located. Students attending the presentations were those who were eligible to participate in the upcoming project field trips to TMI’s Spruce Knob and local sampling event, and in some cases students who would not be attending the field trips but were interested in the subject matter. Additionally, the presenter reviewed proper clothing and attitudes necessary for safe and successful field trips. The presentation was given to 100 students.

In late September the first school (Pendleton County Middle School) visited TMI’s Spruce Knob Mountain Center for a 2-day training session for students. Students receive close attention from TMI’s field instructors; generally, 6-8 students form working groups, rotating between stations that assess the test stream’s macroinvertebrates, its chemical profile, and physical characteristics. Evening activities included instructive watershed games and activities that reinforced concepts presented earlier in the day and a free association journaling exercise which focused on students’ personal connection with water. Journal entries were shared around a campfire by everyone. Day two included a watershed delineation exercise, planting of over thirty trees at the Big Run watershed restoration site in the shadow of Spruce Knob and a drive to the top of Spruce Knob to discuss land use and potential downstream impacts. Eighteen middle school students attended the field trip along with three adults.

Invoice

During this time period all project costs were charged to matching grants and no costs have been charged to NPS 1338. Utilization of NPS 1338 money will be reflected in the report for the next 6 month time period and TMI will not be invoicing WVDEP for expenses at this time.