



News and Highlights of Creeks and Communities: A Continuing Strategy for Accelerating Cooperative Riparian Restoration

“The Fundamentals”

A message from

Steve Smith, NRST Team Leader

Dear colleagues and friends,



In the January issue of FSA, I wrote about the importance of “keep our eye on the prize” in an era of seemingly endless complexity – the prize being successfully achieving cooperative riparian restoration and management. To take that concept a step further, I believe that it is incredibly important to focus on the *fundamentals* in order to achieve this goal and ultimately acquire “the prize.” With so many things required of us these days, we may sometimes wonder just what constitutes a “fundamental”. As it relates to cooperative riparian restoration and creeks and communities, I have some ideas on what those might be.

By definition, a fundamental is “a basic principle, rule, law, or the like, that serves as the groundwork of a system.” Another way the dictionary defines it is: “One of the minimum constituents without which a thing or a system would not be what it is.” Given those definitions, here is my short list of riparian/Creeks and Communities fundamentals:

- ◆ **Riparian Ecology – Understand the Systems:** An absolute must – we must understand how soil, water, and vegetation interact on a particular landscape in order to determine site potential and understand how systems respond to both natural events and management activities. We simply cannot be successful unless we understand this interaction, use the best and most current science, and bring sound technical abilities to the table – period.
 - **Plant Identification Skills:** I’ll single this fundamental out from general riparian ecology because it is a critical skill that is rapidly diminishing in the land management agencies.
 - **Soils Skills:** This one too – another diminishing skill in the agencies and key to understanding site potential.

No other success can compensate for a failure to understand how riparian systems operate. If these skills are lacking — acquire them.

- ♦ **Social Dynamics – Understand the People**: Engaging and listening to the right people, at the right time, with the right content – in a thoughtful, skillful, and respectful manner is critical to the success of any cooperative riparian restoration effort. All of the ecological and technical information in the world is useless if we do not understand people and communicate effectively – period.

No other success can compensate for a failure to understand people and communicate effectively. If these skills are lacking — acquire them.

- ♦ **Organize our Actions – Integrating riparian inventory, assessment, monitoring, management, and restoration efforts**: As we are engaged in understanding our systems and the people that influence them, it is critical for us to skillfully apply this knowledge within a framework that links processes together in a cohesive and logical manner. Far too many of our riparian efforts focus on parts of this framework, however, in a disconnected manner – we need to do a better job of addressing all of the parts at the appropriate time and then linking them together in a comprehensive way in order to be effective. Using shortcuts and omitting key steps in a planning and implementation framework are recipes for disaster. Since resources and money are finite, this fundamental responsibility includes the critical task of prioritizing riparian management and restoration efforts so we are spending our time and money in the most efficient manner possible.

If these organizational skills are lacking — acquire them.

To use a football analogy, should a team really focus on developing an offensive playbook with innovative sets and genius plays if they don't block, run, throw, and catch with proficiency? As the great Vince Lombardi said (and proved): "Block and tackle – stick to the fundamentals and the rest will follow." There is a lesson here for us riparian practitioners. While we regularly have new time saving tools available to us, there never has been, nor will there ever be, a "silver bullet" tool or process that will compensate for a lack of practicing the fundamentals of riparian management.

Thank you again for your commitment to Creeks and Communities and as always, if there is anything the team or I can do to help, feel free anytime to pick up the phone, send an email, or drop by. If you ever need us to provide letters of support or telephone calls on your behalf for your work in Creeks and Communities, please let us know. I can be reached at 541-416-6703 or steven_smith@blm.gov.

Thanks for reading and I hope to see you on the stream soon.

Sincerely,

Steve

Partnerships for Cooperative Riparian Restoration and Management

The National Landscape Conservation System (NLCS) is committed to engaging in collaborative, community-based stewardship both within and outside government. To accomplish this goal, the NLCS has partnered with the interagency National Riparian Service Team (NRST) to provide services aimed at improving the ability of land managers and stakeholders to collaboratively address riparian-wetland resource issues within NLCS. The purpose of this partnership is to offer an opportunity for training and mentoring in both the general principles and practices of collaborative problem solving as well as riparian assessment, management and monitoring. The NRST and their Creeks and Communities Strategy have been selected as the servicing venue because of their expertise in applying this approach across the western United States over the past decade. Additional emphasis is also placed on supporting environmental education through partnering with schools and other organizations.

The NRST is currently working with four NLCS areas under this partnership arrangement, including the Lower Crooked Wild and Scenic River (LCWSR) managed by the Prineville BLM. Within Prineville, the Crook County School District has initiated a Natural Resources Education Program (NREP). Since 2008, the NREP has served as a framework for providing quality natural resource education by having students and teachers “adopt” the Crooked River watershed as a place for learning and incorporating the natural and social resources of the area into K-12 education. Under the NREP, a list of watershed based projects have been identified to provide these learning opportunities, one of which is a monitoring project for the LCWSR jointly proposed by the Crook County School District, the Prineville BLM, OSU Cascades Campus, and OR Department of Fish and Wildlife, funded by NLCS.

The management plan for the designated LCWSR requires monitoring of river values, including stream and riparian components contained in the Proper Functioning Condition (PFC) riparian assessment method and the Multiple Indicator Monitoring (MIM) protocol and the recently funded monitoring project measures a number of the indicators prescribed in the plan. At the conceptual level, this project is designed to provide a laboratory/forum whereby students and teachers can learn about the existing condition of riparian areas, what may be limiting and what is needed, and how multiple uses can be compatible with multiple management objectives. At the practical level, the purpose is to select Crook County High School students to gather riparian vegetation and channel data under the direct guidance of scientists from the cooperating agencies. Students are trained using a combination of classroom instruction to lay an academic foundation coupled with practice in the lab and field to establish accurate scientific protocols and methodologies. Professional scientists are brought into the classroom to demonstrate procedures, offer technical support, and provide a voice on field sampling and logistics.

As part of the partnerships mentioned above, the NRST was asked to provide PFC and MIM training to a class of students at Crook County High School in an effort to not only build on what they had learned using the “Holding on to the Green Zone” instructional materials provided by the BLM and co-developed by NRST, but also to prepare select students for data collection on the LCWSR, in the summer of 2010. To accommodate this request, the NRST secured the services of Tim Burton and Erv Cowley, consultants with Riparian Management Services, a firm based in Boise, Idaho. The following article is an account of the initial phase of working with the students.

“Healthy Streams Through Bringing People Together”

Crook County High School's Natural Resources Education Program - Teaching PFC and MIM

During the week of April 19-23, Tim Burton and Erv Cowley provided instruction on riparian Proper Functioning Condition (PFC) assessment method and the Multiple Indicator Monitoring (MIM) protocol to high school students at Crook County High School, in Prineville, Oregon. These students were from Brian Wach's fisheries and wildlife class, and this training was part of their preparation for conducting riparian assessment and monitoring of the Lower Crooked Wild and Scenic River (LCWSR), under an NLCS grant.

The course material had 5 components and one was presented each day during the week. On Monday, the class participated in group discussion covering principles of stream and riparian functionality. Prior to the workshop, each team was given a set of questions from which to obtain and report answers from "A Guide to Assessing Proper Functioning Condition and the Supporting Science for Lotic Areas (TR 1737-15). In class, each team reported their findings and the instructors provided assistance in the form of graphics and handouts. This provided an opportunity to study, in-depth, the PFC technical reference and to prepare for actual field assessment the following day.



On Tuesday, the class proceeded to Ochoco Creek to assess functionality in the field. Each team was assigned a separate reach of stream to evaluate. The instructors provided a training key they had developed; Riparian Proper Functioning Condition Assessment Checklist – Training Key. This training tool is in the form of a dichotomous key that allows selecting answers (Yes, No, NA) to the PFC checklist items using couplets. A couplet consists of several descriptions representing mutually exclusive choices. The choices are compared with the situation at the field site to help identify the answer. Teams completed the checklists using the training key and reported results at the gazebo in Pioneer Park.

On Wednesday, the class initiated monitoring by stratifying the stream into reaches and selecting the appropriate site for monitoring, the Designated Monitoring Area or DMA, following procedures described in the MIM protocol document. Satellite photography, stream profiles, topographic maps, and other teaching aids were used to help the students stratify the stream. In this photo, Tim is describing features used to identify riparian complexes on the stream.



"Healthy Streams Through Bringing People Together"



Also on Wednesday, the Instructors described the basic MIM protocol and field tools used to measure monitoring indicators. The basic monitoring equipment and methods were demonstrated indoors using artificial turf to delineate “greenlines” adjacent to the stream. In this photo Erv demonstrates sampling methods with the monitoring frame placed on the greenline. Two strips of turf were used representing each side of the stream, thus allowing demonstration of in-channel measures and greenline-to-greenline width.

On Thursday, teams once again visited the field site on Ochoco Creek and conducted MIM monitoring at assigned reaches of the stream. Here Erv is assisting a team with substrate and greenline-to-greenline width. Teams collected data from 20 plots each during a 3 hour period and recorded the information on field forms and in the field computer. Prior to the workshop, students were assigned to read the Multiple Indicator Monitoring (MIM) technical reference (draft TR 1737-23).



On Friday, students met in the computer lab to enter data collected on Thursday into the Data Entry Module, and to analyze the data using the Data Analysis Module. Working individually, each student was able to work at a PC and handle data using MS EXCEL and to experience first-hand the operations of the analysis module. Included were explanations of the various mathematical calculations used to derive the monitoring metrics and their applicability to interpreting conditions of the stream and riparian vegetation.

The next step in the program will be a MIM implementation class to be held in June of 2010. At that class, several actual DMAs will be identified and established for monitoring stream reaches on the LCWSR and other streams in the area. MIM monitoring will be conducted with coaching by the instructors so that students gain a clear understanding of the sampling rules. Data collected by the teams will be entered into field computers using the Data Entry Module. Students will learn how to use the functions of that module, including how to assess adequate sample size and how to properly code plant species encountered in the sampling. Field data will then be analyzed using the Data Analysis Module where students learn how to use the quality assurance functions of the Module and to transfer derived metrics into the MIM Database.

Note: Products of this training course, including the workshop outline, in-class exercises, equipment list, handouts, and presentations will be made available on the NRST web site at <http://www.blm.gov/or/programs/nrst/index.php>

“Healthy Streams Through Bringing People Together”

Multiple Indicator Monitoring (MIM) of Stream Channels and Streamside Vegetation Training Opportunity

Increased interest in riparian area management has created a growing need to effectively monitor this important part of the landscape. Use of this tool will provide managers, landowners, and others, the information necessary to adaptively manage riparian resources. The MIM protocol was developed to: 1) address multiple short and long term indicators, 2) measure the most important indicators relative to change, 3) use existing procedures to the extent possible, 4) improve efficiency through use of electronic data collection, 5) yield statistically acceptable results within realistic time constraints, and 6) provide useful data to inform management decisions. The course offerings listed below are being sponsored by the respective State Riparian Service Teams as activities of the Creeks and Communities strategy in an effort to foster learning and problem solving at the ground level, by the people most affected. This training is available to individuals from Federal, State, and local agencies, Tribes, industry and conservation interests, and others. Course instructors are Tim Burton and Erv Cowley of Riparian Management Services, LLC consulting firm based in Boise, Idaho, and Steve Smith, Team Leader of the interagency National Riparian Service Team.

- ◆ **August 3-6, 2010 in Richfield, Utah** – Contact Justin Jimenez at 801-539-4073 or justin_jimenez@blm.gov
- ◆ **September 14-17 in Rock Springs, Wyoming** – Contact Dennis Doncaster at 307-352-0207 or dennis_doncaster@blm.gov

Additional information about the MIM protocol and a downloadable copy of the MIM Technical Reference is available at <http://www.rmsmim.com>.

Full Stream Ahead

Is there something you would like to see in a future issue of *Full Stream Ahead*? If so, send an email to nrst@or.blm.gov. The NRST utilizes this newsletter to share highlights, news and hot topics that pertain to the Creeks and Communities Strategy. This newsletter is for the entire network and we encourage you to send in ideas, questions and articles for us to publicize.

FY2010 State Team Training Schedule

California

PFC - Bishop

June 21-23

Contact: Dave Weixelman (530) 478-6843
dweixelman@fs.fed.us

Colorado

PFC - Grand Junction

June 15-16

Contact: Jay Thompson (303) 239-3724

PFC - Denver

July 13-14

Jay_Thompson@blm.gov

New Mexico

PFC - Silver City

May 17-19

Contact: John Sherman (505) 438-7683

PFC - Taos

August 23-25

John_S_Sherman@blm.gov

Nevada

PFC - Squaw Valley Ranch

June 10-11, 2010

Contact: Sherm Swanson (775) 784-4057

PFC - Carson City

July 26 or Aug 2 - TBD

sswanson@cabnr.unr.edu

PFC - Owyhee

Aug 23 or Sept 6 - TBD

PFC Eureka (possible RGM too)

Sept 20, 27 or Oct 4 - TBD

PFC - Lovelock

October - TBD

Oregon

PFC - Baker City

August 30-31

Corey Parsons (541) 523-6418

Corey.Parsons@oregonstate.edu

Texas

PFC - Lubbock

Sept 21-23

Contact: Russell Castro (254) 742-9982

Helotes Creek Workshops

Sept 24-26

Russell.Castro@tx.usda.gov

Utah

PFC—Price

June 8-10

Contact: Justin Jimenez (801) 539-4073

MIM—Richfield

August 3-5

Justin_Jimenez@blm.gov

Wyoming

PFC—Pinedale

June 29-July 1

Contact: Dennis Doncaster (307) 352-0207

MIM - Rock Springs

September 14-16

Dennis_Doncaster@blm.gov

PFC = Proper Functioning Condition

MIM = Multiple Indicator Monitoring

The National Riparian Service Team can be contacted at:

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