

The Interagency Creeks and Communities Strategy: Creating Healthy Streams and Wetlands by Bringing People Together

By Laura Van Riper

Riparian-wetland areas in the western United States provide a variety of ecological, economic, and social benefits, even though they comprise a relatively small percentage of the total land base. Today, successful management of these areas depends on bringing diverse groups of people together and building the capacity needed to confront and manage complex and contentious issues. The federal-level, interagency *Creeks and Communities (C&C) Strategy* is designed to integrate the biophysical and social dimensions of riparian-wetland management to achieve results that benefit both creeks and the communities that depend on them.¹ The strategy is a partnership of the Bureau of Land Management (BLM), the Forest Service (FS), and the Natural Resources Conservation Service (NRCS) to build understanding, ownership, and commitment in those individuals who must ultimately implement management decisions by incorporating scientific and technical information into collaborative decision-making processes. Many other agencies, nongovernmental organizations, committed public employees, and private citizens participate in, support, and contribute to the strategy.

At its heart, the C&C Strategy is designed to influence awareness, beliefs, and behaviors in support of improving riparian resources across a diverse range of individuals. This is done by providing opportunities for people to work cooperatively to share knowledge, build relationships, and develop a common vision for riparian-wetland areas on a landscape scale. C&C Strategy developers recognized that a variety of barriers exist to deter individuals from engaging in sustainable behaviors—lack of knowledge, cultural practices, social interactions, human feelings, organizational norms, and material constraints, such as lack of money, time, and trained staff.² As a result, the C&C Strategy moves beyond a technical information campaign, simply geared toward changing attitudes by enhancing knowledge, toward a more-integrated approach, targeting all of the elements needed to motivate groups to change their behaviors on the ground. In short, the

approach is focused on motivating collective action among individuals and groups, by building social capital (developing relationships, networks, and trust among individuals and groups), improving human capital (increasing individual knowledge, skills, and abilities), and mobilizing the resources needed to get work done on the ground.

The National Riparian Service Team (NRST), an interagency and interdisciplinary team with technical riparian and social science expertise, is charged with leading implementation of the C&C Strategy across the western United States. Under its leadership, a network (referred to as the *C&C Network*), comprising more than 150 individuals with federal, state, county, tribal, private nonprofit and for-profit, and university affiliations, is implementing this strategy at the state and regional scale (most members participate on a part-time or volunteer basis). In addition to the NRST, the C&C Network includes multiorganizational, interdisciplinary teams in a number of the western states and within the BLM, FS, and NRCS riparian coordinators at the state, regional, and national levels (Fig. 1). The C&C Network represents a vehicle for changing organizations toward a culture that values collaboration. This western-wide partnership allows for the leveraging of resources across numerous organizations and individuals to accomplish the Strategy mission. In addition to providing a mechanism for delivering services, the network enables learning, mentoring, relationship building, and information sharing among members. Communication and coordination is enhanced by linking members in different states and among disciplines and programs within and across collaborating agencies and organizations.

C&C Activities

The NRST and the C&C Network facilitate cooperative riparian restoration and management in a number of ways and provide considerable support to agency programs. Technology development has produced widely distributed techni-

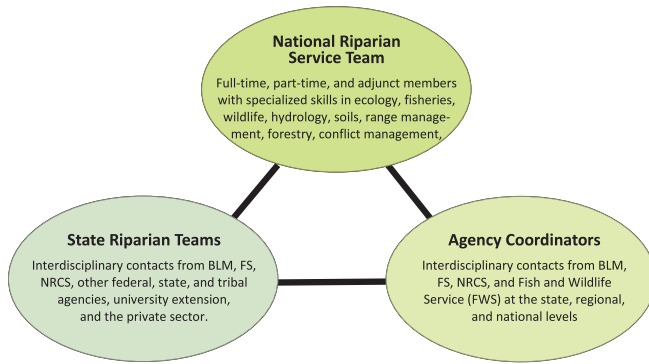


Figure 1. The Creeks and Communities Network.

cal references and instructional material. Their reviews and guidance add focus and clarity to a variety of projects and documents each year. Training for riparian assessment, riparian-grazing management, riparian monitoring, and conflict resolution/consensus building creates strength in the Network and among local interdisciplinary teams. The purpose is to provide participants with the foundational tools needed to understand and work with various stakeholders to adaptively manage riparian resources. An average of 40 training sessions and workshops are conducted each year, initiated by various agency and nonagency sponsors at the federal, state, and local level. Place-based problem solving is a primary activity of the NRST as is coaching and mentoring.

Place-based problem solving assistance, or service trips, are typically multiphased efforts geared toward working with people at their location, addressing their particular riparian-related concerns. At the request of an agency, organization, or landowner, the NRST outlines a series of activities designed to bring the appropriate technical resources and information to bear on a riparian issue or conflict and, at the same time, facilitate the creation of safe environments for mutual learning and reaching a common understanding between diverse and often conflicting stakeholders. The NRST is engaged in this type of activity with 8–12 communities or clients each year. Clients are diverse and include BLM, FS, NRCS, Fish and Wildlife Service, National Park Service, The Nature Conservancy, Soil and Water and Conservation Districts, Resource Conservation Districts, tribes, state agencies, formalized rancher alliances, watershed councils, and other local stewardship groups. Often multiple parties come together as the client, and always, the process engages diverse members of a community.

The C&C Strategy emphasizes coaching and mentoring in the collaborative, adaptive management of riparian areas. Mentoring activities typically occur during service trips and include participant shadowing of NRST-led support teams as they work to address both the technical and social dimensions of issues. Beginning in 2006, the coaching and mentoring component of the C&C Strategy was formalized with the NRST's designation by the FS National Partnership Office as a pilot "Collaboration Learning Lab," and has since continued as a partnership between the NRST and the BLM National

Landscapes Conservation Service. The primary purpose is development of specific partnership and collaboration competencies within agency employees and stakeholders.

Place-Based Problem Solving

NRST-led problem-solving efforts, or service trips, best highlight the collaborative aspects of the C&C Strategy. Rather than simply offering an expert opinion or solving the problem, the team's role is one of providing guidance and facilitating the sharing of current technical information and skills while at the same time enhancing the development of trust and relationships among the people who live and work in an area. This is important because, ultimately, they are the ones responsible for success. To effectively deal with riparian issues, people must be able to work together and must have a common understanding of riparian-wetland function and the attributes and processes that ensure sustainable production of values and benefits. This common understanding provides the foundation for cooperative restoration and/or management of these important areas. In short, the C&C Strategy approach is grounded in a belief that if you bring together the right people, in constructive ways, with good information, they will produce more informed and effective decisions, improved relationships, and sustainable communities and ecosystems.

Place-based assistance from the NRST begins with a situation assessment where team members speak with a range of people to ascertain the nature, scale, and scope of the social and technical issues at play. These face-to-face meetings with different stakeholders to discuss their perceptions, concerns, and needs provides information to the team about the current situation, potential opportunities, approaches for moving the situation from the present circumstance, and the people who should be involved in any subsequent steps. The situation assessment also provides important information needed to develop a tailored set of collaborative activities focusing on a range of topics to build capacity within the local community to address their issues. A customized, interdisciplinary support team, reflecting the issues at hand, is also assembled to shepherd the assistance. The specific focus, order, and number of activities vary across NRST assistance depending on the issues and the level and nature of the conflict identified during the assessment. Although in some situations, technical skill building may be less important than building collaborative skills, all assistance requires attention to both the resource and social dimensions. Regardless of the particular design and content of each step, the following elements reflect the principles and practices incorporated: bring affected interests together to build relationships and create learning environments, develop a community information base, and empower people to create change and leverage resources.

Truly successful and long-lasting solutions must meet the needs of both the resource and the community. Such solutions are accomplished through gaining the participation of a wide diversity of stakeholders to ensure that adequate breadth and depth of experience, knowledge, and needs are incorporated

throughout the process and to help build understanding and support for decisions. Once diverse individuals are organized, engaging people to explore different perspectives and approaches helps build relationships, foster understanding, and develop support for the creation and implementation of innovative solutions. Conflict management and consensus-building techniques are used to create safe atmospheres (where communication is nonthreatening, respectful, and attentive to different concerns and perspectives) that enable mutual learning and the negotiation of common ground among participants. Interested parties are afforded a range of opportunities to engage in the process, including participation in trainings, workshops, information collection, and community meetings.

Joint fact-finding is another important practice used in place-based problem solving. The NRST relies on this practice to gather baseline information through participatory riparian assessments. These not only build a community or shared information base but also they serve as a way of integrating science and technical information into collaborative decision making. To be useful, scientific and technical information must be understandable to multiple parties and interests who have a range of backgrounds and knowledge. Before information can be effectively used to inform decision making, all parties must view it as legitimate, valid (believable), relevant, and trusted. A joint fact-finding approach not only helps resolve key areas of uncertainty, it also strengthens personal relationships and builds trust among participants. Spending time together on the ground, learning and using a common vocabulary (terms, definitions, and concepts) to discuss the situation helps level the playing field and creates a shared knowledge base. Focusing on the physical functionality of riparian areas helps facilitate learning environments because people focus on the attributes and processes of riparian areas that must be in working order to produce values rather than focusing on the values themselves (Fig. 2). Experienced individuals work in an interdisciplinary fashion with diverse stakeholders, and once stakeholders begin to recognize that they can all agree on the physical functionality of riparian systems, they can more easily work together to provide a range of outcomes that are mutually acceptable and sustainable. Learning fundamental concepts together helps stakeholders frame their conversations and better identify and agree on the appropriate decision space.

The initial riparian assessment serves as the basis for identifying current resource conditions, limiting factors (what attributes and processes are not in working order), and what additional information is needed. That information is then used to inform other steps in the planning process, such as identifying possible management prescriptions and appropriate short-, mid-, and long-term monitoring options. The NRST typically provides continuing assistance to groups as they work through the various stages of the planning and implementation process.

Finally, place-based assistance focuses on building the capacity within individuals and groups to create change. It is not enough to simply build relationships and increase un-

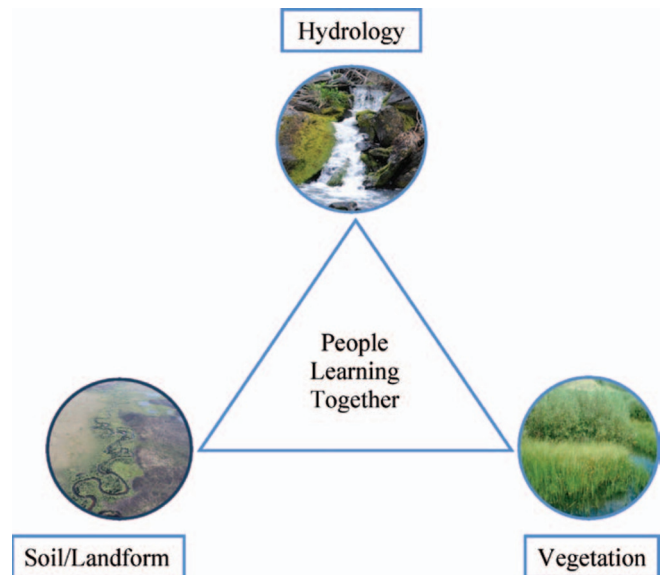


Figure 2. Develop a shared understanding of riparian physical function and the attributes and processes that support sustainable and resilient systems and the production of societal benefits and values.

derstanding; the goal is to use this as a means to accomplish restoration and/or management on the ground. As trust and understanding increases, however, the range of workable options often increases as well because individuals are able to broaden their perspectives and consider more innovative and synergistic solutions. Through the creation of these types of solutions, groups are frequently able to move out of a win-lose scenario and into more of a win-win situation because solutions developed with an understanding and consideration of the needs and perspectives of all interested parties tend to be more accepted, supported, and equitable. Furthermore, as diverse groups come together around issues and solutions, their sphere of influence and connection to other individuals and resources also increases, thereby, creating more opportunities to mobilize those resources for getting work done on the ground.

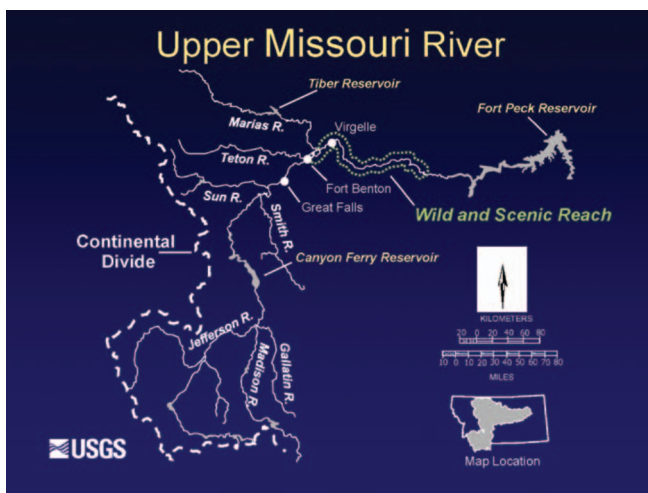
Case Study: Upper Missouri River Breaks National Monument

In 2008, the NRST was requested by the Upper Missouri River Breaks National Monument (UMRBNM) to work with all parties involved and facilitate discussions about riparian condition, current management, trends, and potential for the Upper Missouri River, primarily within the Wild and Scenic River Corridor. This was to be done in an open and objective manner that allowed for more-effective participation in decisions and collaboration around efforts to address riparian issues within the monument. The situation assessment, conducted with approximately 45 people in August 2008, revealed that the major issue for a wide range of people concerned the condition of cottonwood and associated riparian species within the river corridor. Particular concern was raised about the effects of livestock grazing and altered hydrologic flows because of the presence of dams on these im-

portant ecosystems within the monument. It was clear; there was a need to improve intergroup communication and dialogue among livestock producers, those with environmental concerns, the BLM, and other parties and, consequently, a need to create a collective vision for the monument.

A workshop was held in September 2008 to create a climate that enabled monument managers and staff and the many involved publics and users to begin working on meeting their current needs and to enhance future management, use, and enjoyment of the UMRBNM. Inherent in this purpose was the development of a common vision for the monument involving both management and communication actions and the relationships among people necessary to achieve that. The first 2 days of the workshop provided opportunities for attendees to become acquainted, discuss key issues, and listen to presentations on riparian studies and options for grazing management and monitoring. The third day of the workshop was dedicated to discussing specific strategies and actions. After much discussion, workshop participants selected four action items to move forward. Each of those four items was designed to be part of an ongoing, collaborative effort among the BLM and a variety of interested publics, agencies, and livestock grazing permit holders. Headway is being made on all four of the items:

- Action item 1: Building a large riparian enclosure to attempt to enhance woody species;
- Action item 2: Producing a newsletter as a means of updating the public about current activities within the monument. To date, four issues of the newsletter *A Monument Update* have been published;
- Action item 3: Developing a “River Community” weed-control effort involving resource specialists, interested permittees, high-school students, county weed districts, and concerned members of the public; and



The 149-mile Wild and Scenic Reach of the Upper Missouri River within the Upper Missouri River Breaks National Monument. Courtesy of Michael L. Scott.



Because of the lack of a common vision, the proclamation of Upper Missouri River Breaks National Monument by President Clinton on 17 January 2001 was celebrated, by some, as the protection of a national treasure and, by others, as a threat to the social and economic conditions at the local and regional level.

- Action item 4: Working with the Bureau of Reclamation and other partners to explore the possibility for increased seasonal water flows, at the appropriate times, to enhance woody riparian ecosystems along the river and assist in managing pallid sturgeon.

Following the 2008 meeting, BLM resource specialists from the Montana State Office and the Lewistown, Montana, and Havre, Montana, BLM field offices; US Geological Survey cottonwood specialists; members of the NRST; and private contractors, combined their efforts in 2010 to conduct a Proper Functioning Condition (PFC) assessment of riparian conditions³ on the Upper Missouri National Wild and Scenic River. BLM regulations and the Monument Resource Management Plan require riparian areas to be managed such that they are at PFC or making significant process toward PFC. Because the production of values derived from riparian areas depends on how well a system is functioning, the PFC assessment is an essential and foundational process. Although considerable inventorying, researching, and monitoring have been done on this portion of the Missouri River, the PFC assessment provides a format for the interdisciplinary team to synthesize this information into a comprehensive story of river function. In addition, through identifying features that are working, as well as the limiting attributes, the PFC assessment can be helpful in setting appropriate riparian objectives and focusing the development of management and monitoring strategies. Within the monument, PFC assessment results will be combined with other information to provide a baseline determination of resource condition in river-corridor grazing allotments to guide the development of focused riparian management and/or monitoring plans as needed on allotments.

"It's become obvious being involved, that if we don't work together it's not going to work. There has been ... quite a bit more communication and working together."

—BLM employee

Below is the timeline associated with the assessment and subsequent monitoring work, including public involvement, which continues to be an integral part of this process:

- February 2010: First preassessment meeting of the interdisciplinary team and other resource specialists to discuss applying one assessment methodology to such a large river system, to learn about existing source information, to divide the river into reaches, to discuss and document reach potential, and to start planning for field work logistics;
- April 2010: Second preassessment meeting of the interdisciplinary team to examine the existing source material and to discuss the important attributes and processes of this large river system as well as to finalize field-work logistics for this large-scale assessment;
- June 2010: Community preassessment workshops to inform interested stakeholders about how the PFC assessment process works, how the process will progress within the monument, and how the information will be used in future management as well as to discuss opportunities for public participation in the process;
- July 2010: Comprehensive PFC assessment on 149 miles of river within the monument (logistical difficulties associated with the field assessment limited opportunities for participation; however, a concerted effort was made to include two to three stakeholders each day with the interdisciplinary team as they assessed an average of 10–20 miles per day);
- March 2011: Community workshops to inform interested stakeholders about the PFC assessment findings and to provide an opportunity to discuss the outcomes and future steps, such as moving forward with developing and implementing a monitoring strategy.

Following the March 2011 postassessment community workshops, BLM resource specialists, US Geological Survey cottonwood specialists, members of the NRST, and private contractors once again combined their efforts to use existing monitoring information and the findings of the PFC assessment to develop an updated monitoring approach. A specialist meeting was held in April 2011 to discuss the needs and design of an updated monitoring strategy. That was followed by field testing of the selected approach and protocols during August 2011. Monitoring is continuing in the summer of 2012 with stakeholder involvement and community workshops to share information about the monitoring effort.



Interdisciplinary team members and interested stakeholder discussing the various elements considered when determining the health of the riparian area along the Upper Missouri River.

Although this assistance effort is currently ongoing, preliminary evaluation of results show a number of outcomes associated with NRST assistance beyond the work being done on the four action items listed above, the completion of the PFC assessment, and the use of the PFC in developing a monitoring strategy for the river.⁴ These additional outcomes include:

- Increased trust and/or improved relationships occurred among some diverse participants but not all. The individuals representing a more single-focus environmental viewpoint stopped participating in this assistance; however, individuals representing more broadly based environmental groups have reported better communication and understanding among groups and see a potential for the creation of a shared vision. Additionally, participants noted improved relationships among different stakeholders and the BLM and a greater appreciation for the work BLM is doing on the monument.
- Collaborative learning opportunities, particularly spending time on the river together had great value. The stakeholders who participated in the on-the-ground assessment efforts experienced a greater opportunity to work alongside monument staff and noted that participation in the assessment appeared to have had a significant influence on continued improvements in trust and strengthening of relationships between all parties. Agency staff also reported significant improvements in their ability to work together because of this effort. In particular, they noted the benefits

"[The monument] professional staff are pretty excited about the end result of this being better riparian management."

—BLM employee

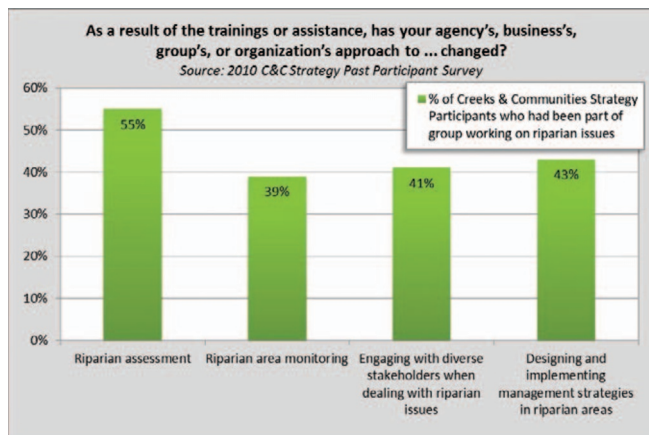


Figure 3. Of the nearly three quarters of participants involved with a group working on riparian areas and issues, the following percentages indicated that their approaches had changed as a result of their involvement with the Creeks and Communities Strategy.

gained from spending 10+ days in the field together; an opportunity that has been rare in their experience.

- Forums created where diverse stakeholders were able to jointly develop an understanding of the diverse issues associated with the management of the monument—mutual learning about different perspectives regarding monument management did occur.
- Interjecting NRST information and science regarding riparian function into the existing debate provided neutral ground, established the relationship between riparian function and the sustainable provision of values, provided a common vocabulary, and validated local ecological knowledge.
- Few, if any, PFC assessments on large-scale river systems, such as the Missouri River, have been conducted in the past. The NRST's assistance with developing the rationale to conduct this assessment, in addition to greatly improving the technical skills and abilities of monument staff, also has the potential to influence and improve future assessments of large-scale river systems in other areas.

C&C Strategy Effects on the Ground

For making a difference on the ground, preliminary results from the C&C program evaluation led by Oregon State University indicate that groups have changed their approach to riparian assessment, management, monitoring, and working with others because of their involvement with the C&C strategy (Fig. 3).⁴ Most (73%) of C&C Strategy participants that claimed to have implemented a riparian management strategy specifically covered in a training or service trip have seen indications of improvements. These include more-abundant and healthier riparian vegetation, slower streams, stabilization of stream banks, return of floodplains, and changes to stream channels.

When compared with solely training session participants, a slightly greater proportion of individuals who participated in NRST-led, place-based problem-solving efforts indicated

that their group's approach to riparian assessment, management, and monitoring, as well as their approach toward working with others, changed because of their involvement with the C&C strategy.

Regarding riparian assessment, strategy participants specifically noted an increase in their group's understanding of the importance of riparian areas and their integration of the processes and tools associated with PFC assessments into their understanding and analysis of riparian areas. For riparian management, participants specifically noted their group's increased use of PFC-assessment results to properly identify areas in need of management changes, to set appropriate goals and objectives for riparian areas, and to design more-effective grazing or other riparian management strategies. Respondents also noted that their groups are implementing more monitoring where they did not before, adopting new techniques for monitoring, and relying more on an interdisciplinary approach for assessment and monitoring than they did before their participation in the C&C strategy. Finally, participants indicated that their groups are more collaborative than they were before participating in the strategy. Specifically, group members are better able to communicate with different types of stakeholders, more apt to establish common ground with stakeholders before tackling a riparian issue, and more likely to include other stakeholders in riparian assessment, management, and monitoring efforts.

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