

String of Pearls - Colorado Riverfront Project

Stacy Beaugh, Colorado Riverfront Commission Member
April 2014 River Management Symposium

Grand Junction, CO is one of the only metropolitan areas of its size that sits on the Colorado River, source of water for over 30 million people. The river sustains our way of life through agriculture and recreation, and is critical to desert ecosystems. For over 25 years the Colorado Riverfront Commission helped the greater Grand Junction community (Grand Valley) be stewards of this resource.

The Riverfront Commission was founded in 1987 to serve the City of Grand Junction, Town of Palisade, City of Fruita and Mesa County by coordinating efforts to revitalize and enhance the Colorado Riverfront. The Commission, a volunteer advisory board, boasts diverse membership from local elected officials (ex-officio members), state park and local government representatives, and community members whose current professions range from bankers, doctors, nonprofit administrators, students, lawyers, retirees, and others.

Among many accomplishments, our primary focus has been to connect the various community resources, open space, and parks by completing a paved, recreational trail along the greenway of the Colorado Riverfront in Western Colorado, otherwise known as connecting the "string of pearls". The Riverfront Trail is becoming a vital backbone trail allowing connection to the incredible natural resources available on public lands surrounding the Grand Valley including five parks that make up the James M. Robb Colorado River State Park system and numerous state wildlife areas. The long-awaited connection between the towns of Fruita and Grand Junction will be completed in August of 2014 and there are many smaller non-connected sections completed between Grand Junction and the town of Palisade, all totaling over 22 miles of hard surface trails. The Riverfront trails current footprint is approximately 2/3 of the Grand Valley's riverfront and is seen by the community as an alternative transportation corridor, providing non-motorized access to state parks and wildlife areas; is a venue for maintaining a healthy lifestyle; provides opportunities for education; and has provided access to the river for boating, wildlife and bird viewing, and other recreational activities.

Working across jurisdictions in a collaborative model, the Riverfront Foundation (the financial arm of the Riverfront Commission) and local governments have raised in excess of \$50M over the last 25 years to provide funding for the acquisition, design, construction and maintenance of the Riverfront Project from private sources and the Colorado Lottery funds. Additionally, the Riverfront Project partners have initiated and continued to support numerous events that promote the use of the river from Winefest and the Palisade Bluegrass Festival to the free Colorado Riverfront Concerts in Fruita. Currently, the Commission is evaluating our past accomplishments, cataloging our lessons learned, and building a strategic plan that will direct our ongoing and future efforts.

Kayak-based Videomapping for River System Management

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Abstract

Recent GPS, GIS, sensor and video technologies have provided the opportunity to map river systems foot by foot for complete georeferenced management. A kayak-based videomapping system utilizes above and below water video, GPS, river depth and width sensors to acquire georeferenced mechanical and biological attributes of river conditions. The system has been utilized to develop GIS maps of 1) Outstandingly Remarkable Values (ORV) on NPS Wild and Scenic Rivers, 2) endangered fish and mussel optimum aquatic habitat locations on NPS and USFS rivers, and 3) streambank erosion potential on rivers within Army installations and Oak Ridge National Lab. Over 250 miles of river systems have been videomapped and incorporated into ArcGIS. The georeferenced above and underwater video provides opportunities for virtual tours, and a video database that can be reviewed to detect river condition changes. The kayak-based videomapping system provides a flexible and useful technology for acquiring complete (foot by foot) river system georeferenced data for analysis and management.

You plan for it...then it happens. A Flood Control District's Reflection on the Colorado 2013 Floods

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Abstract

In 1965, the Denver Metro Area was devastated by a flood on the South Platte River that split the city in two. All but one bridge over the river had been destroyed with the roaring, debris filled waters. Soon after that historical event, the Urban Drainage and Flood Control District (District) was formed by an act passed by the Colorado State Legislatures. The purpose of the District was to be a regional agency to govern urban stormwater and provide flood control measures to better manage risks associated with flooding.

The District has always maintained a two-pronged approach for flood control: preventive measures through regional floodplain management and remedial measures through capital improvements and maintenance of drainage and flood control projects. Floodplain management has been based on developing and providing consistent design criteria, master planning of drainageways and incentivizing local governments who regulate the floodplains by following criteria and master plans. The basic principles of master planning include partnering with local agencies, using future developed hydrology and selecting a preferred alternative that is adopted by all project sponsors. The Maintenance Eligibility Program (MEP) assists local governments in providing guidance and reviews of private development with the commitment of long term maintenance.

The District's Design, Construction and Maintenance Program partners with local agencies to implement master planned improvements as well as maintaining MEP projects. The philosophy of designing and constructing projects has progressed since the inception of the District as industry understanding of a river system has become more sophisticated. But the underlying philosophy of having multifunctional flood control facilities has always been part of the equation.

In 2013, a tangible test of this two prong approach was experienced. How did it hold up? What lessons were learned this time and what advancements will come out of this historical event?

Presentation Title: Interagency Visitor Use Management – a progress report from the Interagency Visitor Use Management Council (IVUMC)

Presenters and affiliation: Keith Brown, Kerri Cahill (NPS), David Baker (BLM), maybe additional Council members.

Contact Information:

Session Organizer: Keith Brown, Bureau of Land Management, National Operations Center, P.O. Box 25047, Building 50, Denver, CO 80225-0047, 303-236-5396, kmbrown@blm.gov

Panelists:

Keith Brown, BLM

Kerri Cahill, NPS

David Baker, BLM

Additional Council members are possible

Value Proposition: Get the latest update on progress to develop a Visitor Use Management Framework from the Interagency Visitor Use Management Council (IVUMC).

Abstract:

Federal land managers strive to provide maximum opportunities and benefits from public use and access, while at the same time ensuring that natural and cultural resources are protected. Performing this balancing act is core to agency missions. To meet this need, an Interagency Visitor Use Management Council was recently chartered by the National Park Service, U.S. Forest Service, Bureau of Land Management, the U.S. Fish and Wildlife Service, and the U.S. Army Corp of Engineers. The council's purpose is to develop clear and consistent guidance for visitor use management and visitor capacity, shared investment in tool and training development, and raised awareness and commitment to a professional and scientific approach to managing visitor use on public lands.

The panel discussion will share background on the formation and mission of the council, draft guidance and tools being developed, and the relationship of these efforts to other programs, including the Federal Interagency Council on Outdoor Recreation. The audience will be encouraged to share ideas with the council on high priority action items and opportunities for pilot projects.

Creating a vision and priority attributes for the National Rivers Database using an e-Delphi exercise

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Sparked by discussions at the last River Management Society Symposium, coupled with efforts at the National Park Service, American Whitewater, Bureau of Land Management, and USGS, first steps were undertaken to develop a vision statement and priority list of attributes for a potential National Rivers Database (NRD). Apparent early on, before endeavoring to coalesce the technical requirements of such a database, was the need to establish a clear vision for the project and lay out a priority list of attributes for eventual inclusion. In order to create this vision and attribute list we engaged a panel of expert stakeholders (agency, industry, and non-profit professionals) in an e-Delphi exercise.

The Delphi method was used to systematically combine expert opinion for consensus (Linstone and Turoff, 1975) and organize diverse values and judgments through facilitation of multiple opinions (Powell, 2003). Internet technologies, through the use of an e-Delphi, were utilized to conduct iterative rounds of sequential surveys interspersed with controlled feedback reports. This facilitated the interpretation of expert opinions and, by extension, the achievement of a consensus on the vision and attributes for the NRD.

The presentation will explain the e-Delphi methodology, including the use of online interactive interfaces for data collection and outcome sharing, and discuss the resultant vision statement and priority list of attributes. Use of these outcomes will be discussed in the context of ongoing NRD efforts and plans further collaborative development. Individuals interested in the e-Delphi as a platform to engage select groups of stakeholders over complicated issues and/or those interested in the NRD development are encouraged to attend.

Management Implications based on Permit Data from Michigan's Pine River¹

¹ C.B. Griffin, Natural Resources Management, Grand Valley State University, Allendale, MI, USA, griffinc@gvsu.edu, Christina McGraw, Alexandria Rogers

Abstract

In 1992, a 26 mile section of Michigan's Pine River designated as a National Scenic River. There are eight main access points to this fast-flowing river. Prior to this research project the permit data wasn't being compiled which makes data-driven management nearly impossible. This research project looked at use patterns based on permits from commercial liveries as well as individual permits issued by the USFS (permits are only required during the peak summer season). An analysis of use data for over a decade shows a variety of trends which have significant management implications. For example, cheaper kayaks have made it easier for people to kayak by using their own equipment instead of using a commercial livery. This raises issues about the current allocation of more permits for commercial companies instead of private individuals.

MOVING BEYOND FEAR TO COLLABORATIVE ACTION: THE UNCOMMON RECIPE FOR PLANNING & MANAGING SHARED USES OF RESOURCES

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ABSTRACT

There is hope for planners and resource managers who are trying to balance the competing interests of polarized groups. Drawing from many disciplines including community planning, mediation, facilitation, conflict resolution, social identity theory, neuroscience, and principles of non-violent communication, Joy Lujan is helping polarized communities move beyond their fears and find collaborative solutions to managing shared resources.

In river management planning processes, people everywhere have the same basic needs that must be met to move beyond fear, demands, and animosity to achieve successful outcomes. Designing planning processes that meet these core needs will help people work together more effectively and result in more implementable, broadly supported plans that address people's most pressing interests while balancing resource stewardship.

When people perceive themselves as being in competition over how to use or manage a river resource much of the behavior people exhibit comes from fear that they are going to lose something they value or that something is going to be done to them. Without carefully designed processes, people become more and more entrenched in their positions. The most effective processes make it possible to for extremely polarized, deeply entrenched interests to engage in planning processes that moves them to a place of higher thinking and shared solutions.

As important as well designed processes, knowing how to effectively manage difficult internal, interpersonal, and group dynamics can be the key to whether a collaborative process is successful. This session will examine some common pitfalls at an individual level, at an interpersonal level and at the group level so that participants can better understand and effectively navigate difficult situations in collaboration.

3 possibilities for presentations:

- A. One or more 30-minute sessions broken into the following topics:
 - a. How fear and "othering" get in the way of collaboration and what you can do about it
 - b. Fear and compassion in river management: How an effective process helped 2 Colorado communities work through fear to find shared solutions to recreational use and management of well-loved rivers.
 - c. Internal, interpersonal and group dynamics in effective collaboration: how little things make a big difference.
- B. One 30-minute condensed overview of all of the topics above
- C. One 3-hour workshop session where I will cover all of the topics in item "A" in greater depth. The session will also include several interactive exercises.

Confluence Park – Looking Back at the Safety-Related Success of the First Designed In-River Whitewater Park in the U.S.

McLaughlin, Rick, P.E., McLaughlin Whitewater Design Group, a division of Merrick & Company

The whitewater river park at Confluence Park was constructed in 1974 - becoming the nation's first designed park constructed in an active river. The whitewater course was totally re-designed by the author and rebuilt in 1995. Located within a very urbanized area and regulated floodplain, the structures making up the features act to form a diversion and stabilize this formerly degrading river channel. While the park is one of the most heavily utilized – particularly by novices – there have been no known drownings or serious injuries within this steep-gradient whitewater park. The various features of the park employ a number of design techniques and philosophies that have proven successful over the past almost 40 years. The safety related aspects of the park will be discussed and questions and discussion will be encouraged.

Rick McLaughlin is an engineer at the McLaughlin Whitewater Design Group – a Division of Merrick & Company. He has been the design engineer on a number of whitewater and multi-purpose recreational projects since the early 1980s. Some of these include the current configuration of Confluence Park, the 1996 Olympic Whitewater Venue, a large river restoration, diversion, and whitewater project on the American River, a very large scale river restoration and whitewater project in Columbus Georgia and a fish passage and whitewater course in Delta Colorado.

ACA: Paddlesport Accessibility Workshop

Moore, Joe – ACA Adaptive Paddlesports Instructor Trainer

This workshop will explore paddlesport launch-site accessibility for individuals with physical disabilities. We will review, discuss and experience first-hand factors relevant to making paddlesport launch-sites more accessible to individuals using wheelchairs, prosthetics or other mobility aids.

In a classroom session we will review the Americans with Disabilities Act (ADA) and what additional efforts have been made to make paddlesport launch sites accessible. We will then take the workshop outdoors and experience first-hand the challenges of transferring into kayaks and canoes from various launch-site designs. More importantly we will discover what equipment and launch sight designs work best to make access as safe and comfortable as possible for everyone.

Recreational Whitewater: Keys to Successful Management

Nielsen, Benjamin, P.E., LEED – McLaughlin Whitewater Design Group, a division of Merrick & Company

Course Objectives: Participants will have an understanding of key concepts related to manmade recreational whitewater, have familiarity with common safety problems, exposure to design criteria, understanding of project development process, common project challenges, and required facility maintenance. The whitewater project process will be broken down into phases with key milestones and challenges identified in each phase. Course will train participants in fundamentals of developing a project management plan for whitewater projects and provide basic information needed to successfully manage existing and proposed whitewater projects.

Classroom Component: (Time Required = 2-3 hours)

- River safety – Common problems
- Current recreational whitewater criteria – CWCB and Urban Drainage and Flood Control District
- Evaluating existing facilities
- Developing new whitewater
 - Stakeholder involvement
 - Permitting
 - Fish passage
 - Design
 - Construction
 - Startup
- Operations and Maintenance

Field Component: (Time Required = 2-3 hours)

- Visit several manmade whitewater sites on the South Platte River in Denver
- Objective: Provide real-world applications of classroom material by field inspection of built manmade whitewater projects.

Course Outcomes:

- Understanding of key manmade whitewater concepts
- Familiarity with development of a whitewater project including key phases
- Ability to develop a project management plan
- Understanding of common mistakes and lessons learned
- Ability to effectively manage or participate in a manmade whitewater project

Developing Partnerships for River Restoration

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Located on private land in the heart of Camp Verde, Arizona, an irrigation diversion on the Verde River creates *terra incognita*. This diversion dam and the riparian flood zone located immediately downstream from the dam are seldom visited - even by landowners. Recreational boaters tend to avoid this stretch of river, which is otherwise attractive. The dam is an absolute barrier to native fish passage most of the year. Woody and herbaceous invasive plant species are common in this altered riparian area.

In the Verde Valley, Friends of the Verde River Greenway (FVRG) and The Nature Conservancy (TNC) have teamed up with local, state and federal partners to take on this challenge. Together, they are working to transform *terra incognita* into a community asset that will provide reliable irrigation water and recreational opportunities, as well as improve river flow and fish and wildlife habitat

Both FVRG and TNC are also engaged in watershed-scale programs that provide the context for successful local projects. FVRG leads the Verde Watershed Restoration Coalition, a river restoration collaborative and co-convenes the Verde Front, a sustainable recreation collaborative. TNC has developed strong partnerships with surface water users to improve irrigation efficiencies that enhance river flow.

Finally, multi-state partnerships and strategies provide an even broader context for successful restoration projects. TNC's Colorado River basin strategies guide their Verde River programs and projects. FVRG partners with restoration practitioners in other states through Cross-Watershed Network, and is currently facilitating a cross-watershed visit to Grand Valley, Colorado, from Verde Valley, Arizona, regarding sustainable river recreation.

Creating an Interactive Water Trails Map for Effective Communication

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ABSTRACT

The ability to create and share interactive maps has grown leaps and bounds within the past 5 years. This growth can be attributed to open source resources and the evolved abilities within industry standard mapping software programs. Land and river managers now have the ability to develop interactive maps right at their fingertips.

Interactive maps can relay a multitude of messages effectively to a broad audience by combining spatial information, text, and images in one platform. No longer is shared information static. Your audience can dive into the landscape that you manage and find the information you want to relay by actively engaging in a model of the terrain and using points and lines on the map to lead to what could be continually unfolding information.

The Northern Forest Canoe Trail has been using interactive maps to build community around a 740 mile waterway that connects Old Forge, NY to Fort Kent, ME. Interactive maps have allowed us to effectively recruit for volunteer projects, to develop a strong trail maintenance program, and to relay trail infrastructure locations to the public. Combining an interactive map with a forum has allowed us to create a real-time communication loop for both trail maintenance and trail use.

This presentation will review two types of interactive map creation; one using ArcMap software to create spatial data with attribute information, and the other using Google Earth. You can expect overviews of the steps needed to create an interactive map using both platforms. If time permits, we will work as a group to create an interactive map. You will leave with resources that will allow you to begin making your own interactive maps. Although it is not necessary, entering the presentation with a basic understanding of Google Earth and ArcMap would be beneficial.

USING MINDMIXER FOR ON-LINE ENGAGEMENT

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ABSTRACT

In today's world of electronic devices and massive use of the Internet, traditional face-to-face public meetings are somewhat of an anachronism. After many public meetings that had only a few members of the public in attendance, a search for another way of getting people's ideas was begun.

This session will provide an introduction and discussion of an on-line engagement platform called Mindmixer, which has been used on several outdoor recreation projects (through the Rivers, Trails, and Conservation Assistance program of the National Park Service), as well as by many communities and organizations. The principal purpose of Mindmixer is offering a channel for the submission of and response to ideas in a variety of digital media. Participants may respond to and upload comments, videos, images, text files – a wide choice of input is allowed.

The use of Internet-based tools such as Mindmixer help planners and managers provide a convenient, continuous means of collecting data and sharing results with a broad audience. On-line may also be a critical tool for connecting with the next generation of river managers.

The Cross Watershed Network: Year II Web and Restoration Workshop

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The Cross-Watershed Network [XWN] is an emerging network to connect practitioners through information sharing, collective capacity building, and collaboration across watersheds. XWN is designed to help groups grow their ability to develop effective partnerships and strong implementation capabilities in the following key areas:

- Building a peer-to-peer support system
- Capacity building
- Connecting
- Documenting lessons learned
- Information sharing; and,
- Increasing communication

XWN welcomes all site-based practitioners, watershed and river partnerships, private landowners, public and private agencies, nonprofit organizations, universities, and tribes working toward watershed health.

The Verde Watershed Restoration Committee hosted the first Cross-watershed Network workshop in Cottonwood, Arizona September, 2013 and over 60 watershed stakeholders attended from Arizona, Nevada, Utah, Colorado, and New Mexico. Presentations by geomorphology and habitat restoration experts offered best practices and interactive breakout sessions tackled programming, internal capacity and outreach topics with round robin feedback sessions and problem-solving discussion. Participants indicated that the workshop met or exceeded their expectation, was a worthwhile investment and relevant to their work in the areas of Geomorphology, Fish and Wildlife Habitat Restoration, Collective Problem Solving and Long Term Maintenance (of riparian restoration).

We look forward to sharing our forecast for XWN Year II: the status of the collaboratively managed this collaborated website, and plans for Workshop 2014.

Prepare to Launch!

Guidelines for Assessing, Designing, and Building Launch Sites for Carry-in Watercraft

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ABSTRACT

One of the key questions that needs to be addressed when connecting people to their rivers and waterways is how do they get in and out?

Prepare to Launch! is a resource designed to help river managers, parks planners and water trail managers being to answer this question. Drawing on existing case studies, this image heavy document focuses on how managers can build 'put-in and take out' sites as they address the evolving needs of paddlers and other users of non-motorized or hybrid (launches that welcome both non-motorized and motorized) watercraft.

This presentation will dive into the Prepare to Launch! online platform, with the opportunity for session attendees to become familiar with the tools and resources available. The session will highlight an innovative partnership developed launch case study. Participants will also have the opportunity to evaluate the good the bad and the ugly as we continue to evolve the best practices for the development of launch sites.

Session attendees are encouraged to bring their own stories and lessons learned to share as we evaluate and discuss how to improve the body of knowledge for launch access.

EFFECTS OF THE MAY 2010 FLOOD ON METRO NASHVILLE AND MIDDLE TENNESSEE – MANAGEMENT, RECOVERY AND PREPARATION

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ABSTRACT

The flood of May 2010 was a record rainfall and flood event in Nashville, Tennessee and many parts of middle and west Tennessee. The maximum rainfall for the event exceeded the 1000 year 48 hour rainfall frequency of 12.2 inches in the Nashville area according to NOAA Atlas 14 by as much as 5 inches in closer to 36 hours. River stages ranged from a 200 year flood frequency elevation to as much as 4 and 5 ft above the 500 year FEMA elevations in rivers and creeks in middle Tennessee.

Floods of this magnitude are expected to cause millions of dollars in damage to property and disruption to traffic, commerce, government operation and even loss of life and this flood met expectations quite well in middle and west Tennessee. This presentation will focus on the damage of several types to roads and bridges in the riverine environment and recovery efforts in the Nashville area and middle Tennessee from the TDOT perspective as well as new bridge design efforts. The presentation will also discuss the cleanup and property management issues for event recovery and preparation for future flood events from a flood plain management perspective for Metro Nashville government.