Lesson Learned

Contents

Executive Summary

For over a decade, RiversEdge West (REW) has formed collaborative partnerships with a variety of watershed groups in the four-corner states of Utah, Colorado, Arizona, Nevada, and New Mexico to carry out restoration work. Collaboration in this context entails bringing together non-profit organizations, state and federal agencies, institutions, private landowners, and funders, and other stakeholders to form partnerships in pursuit of common goals. When successful, such partnerships can accomplish goals that would often be impossible to realize independently. In the summer of 2020, REW initiated a 'lessons learned' study to take stock of the body of collaborative conservation work between REW and its watershed partners in the Colorado River Basin states. Interviews were conducted with executive directors and staff of 11 partnerships, and the Cross Watershed Network. The central goal of this study was to better understand the key factors that determined how well collaborative partnerships realized their conservation goals. The intended outcome is a list of important lessons learned for the benefit of future collaborative partnerships. Interview questions focused on how well collaborative partnerships worked together to achieve their goals as well as how well REW was able to contribute to their success. What are the key ingredients of successful, collaborative partnerships? What worked well and what did not? If we had to do it all over again, what would we do differently? Key findings include:

- The importance of forming a mutual strong mission statement and sense of purpose, backed by goals with sufficient detail to allow progress toward realizing them to be quantified;
- Having a champion and/or strong leadership and ongoing participation;
- Understanding the time needed to form successful partnerships; strong collaborative partnerships do not happen overnight; relationships and trust must be developed first;
- Meetings, jointly conducted pilot projects, fundraising, and short-term agreements can foster the foundational trust needed for long lasting and successful collaborative partnerships;
- Forming mutually realistic, near-term objectives, and celebrating their achievement; this fosters excitement for realizing long-term and more impactful, collaborative goals; and
- For collaborative partnerships that involve multiple players, having an outside facilitator that leads meetings, keeps track of outcomes, holds participants accountable for commitments, among other considerations, is essential for success.

During the interviews, partners of the 11 partnerships identified their successes and the factors they attributed those successes to. Success, as defined in this report, are subjective, as they are defined differently by each partnership, but are largely considered to be: 1) meeting the stated objectives of the group; and 2) the ability to continue collaborating over time. Table 1 summarizes the different stated successes into common categories and reasons for the success.

Table 1: Summary of Key Ingredients for Long-Term, Viable Collaborative Partnerships

Category	Reason for Success
Leadership and Participation	Consistent and committed partners that are passionate about the landscape
	Collaboration across jurisdictions and areas of expertise
	Participation by public land managers
	Use of demonstration projects to show on-the-ground impact

Governance	A governance structure that fits the partners' needs, abilities, and geographies; not a one-size-fits-all approach
	Sub-committees that keep people engaged and help meet goals
Planning	Understanding that restoration is a long-term process
	Assessing baseline conditions up front
	Setting realistic goals based on future conditions
Effective Implementation	Creating a restoration plan
	Using a combination of labor (volunteers, conservation corps, contractors)
	Working with private landowners to design projects that they can maintain
	Breaking large projects into smaller, manageable sections
Monitoring and Evaluation	Developing a plan for monitoring early in the process
	Employing an adaptive management approach e.g., reviewing and using monitoring data to determine approach to treatment as opposed to following a strict plan
	Building monitoring funding needs into implementation projects
Communication	Understanding the relationship of local community to the river
	Establishing and maintaining strong channels of communication within a partnership
	Investing in increasing public awareness
	Tailoring private landowner outreach
Funding	Having committed funding for capacity/coordination
	Engaging participating state and federal agency staff and leadership to help secure funding
	Diversifying funding sources to reduce overdependence on a single funding source
	Working with funders to sunset funding gradually and/or invest in legacy funds

Applying the lessons learned for benefit of future partnerships requires a contextual understanding of the challenges that partnerships face, many of which are unique to the agencies, organizations, and institutes that form the partnership as well as the environment that they work in. Common partnership challenges are summarized, below, with greater detail provided in the Key Challenges chapter.

Table 2: Summary of Common Partnership Challenges

Challenge	Reason for Challenge
Funding (Project and Capacity)	Capacity funding is an ongoing challenge for most partnerships because most funding opportunities are specific to implementation projects
	Difficult to diversify funding sources
	Loss of major funder interest/Changes in funder priorities/Donor fatigue
	Restoration is an ongoing and evolving process that doesn't fit neatly into grant timelines
Consistent Communication	Partners and stakeholders are busy with other priorities
	Lack of a dedicated partnership coordinator or facilitator position
	Difficult for landowners to contribute financially

Working with Private Lands	Agricultural producers and ranchers have busy schedules
	Agricultural producers and ranchers have other, non-conservation priorities (e.g., production, financial sustainability) and commitments for their land
	Private lands are often more difficult to fund than public or conserved land
	It is difficult to document long-term commitments to a project from a landowner after the funding ends
Community and Volunteer Engagement	Partnership and/or project work is based in a remote area
	Local community may not support all the goals of the partnership
	Large landowners (e.g., ranchers) spend a lot of time working the land and are less inclined to volunteer time
	Other organizations with more recognition in the community attract more interest
	Historical skepticism of government or non-local entities
	Difficult to build trust with the community and demonstrate benefits
Partner Involvement	Some stakeholders are paid to participate and attend meetings while others are volunteering time or sacrificing time from other projects
	Building trust between entities takes time
	Being open and inviting can bring in more controversial groups
	Stakeholders can have complicated relationships, sometimes due to events or situations from the past and/or outside the scope of the partnership
	Local community skeptical or weary of government and non-local entities
	Staff turnover results in a loss of institutional knowledge and necessitates rebuilding trust

Addressing these challenges collaboratively is especially critical as the conservation community prepares for a future of unknowns related to changing climate conditions and drought, and as political divisions continue to grow throughout the United States. These conditions will require collaborations to be thoughtfully designed, resourced, and implemented for them to be effective. This report provides some key observations as to how that can be achieved.

Introduction

Over the last 20 years, RiversEdge West (REW) has led or supported on-the-ground riparian restoration work throughout Utah, Colorado, Nevada, and Arizona. In the context of this report, we use the term restoration broadly to refer to any action or set of actions that aim to improve the hydroecologic condition of a river or river reach for the benefit of native species and people (i.e., we are not using 'restoration' to refer to taking back conditions to pre-human or pre-European time period). This work has largely taken place through collaborative partnerships consisting of organizations, state and federal agencies, institutions, private landowners, and funders who partnered to develop a shared vision on a restoration approach. In this study, we evaluate 11 watershed partnerships. Each of these partnerships is unique with regard to the entities involved, the goals they hope to achieve, the socioeconomic and biophysical environment they work in, and how they function. REW's role in the partnerships also varied. The goal of this project is two-fold – to understand and capture the factors that have led to partnership successes and failures and memorialize those lessons and use them to inform how REW provides services and assistance to partnerships moving forward. Results of the lessons learned study

describe key lessons learned regarding how well collaborative watershed partnerships worked together to achieve their goals as well as how well REW supported these collaborative efforts.

Methodology

Eleven watershed partnerships that REW works with in varying degrees were included in the lessons learned study. In addition to the 11 collaborative watershed partnerships, the Cross-Watershed Network was also included as a unique example of collaboration across geographically disbursed partnerships. Unlike the other watershed partnerships discussed in this report the Cross-Watershed Network was built to serve as a means for these groups to have structured peer-to-peer information exchanges. The watershed partnerships included in the study differ with respect to their age (years in operation), geographic focus, conservation goals, number and variety of partners, funding sources, different governance structures. The following partnerships were selected to participate in interviews (See Appendix C for Partnership Background Summaries):

- Cross Watershed Network
- Desert Rivers Collaborative
- Dolores River Restoration Partnership
- Escalante River Watershed Partnership
- Gila Watershed Partnership
- Lower Gila Watershed Group
- Middle Colorado Watershed Council
- Purgatoire Watershed Weed Management Collaborative
- Southeast Utah Riparian Partnership
- Verde Watershed Restoration Coalition
- Virgin River Coalition
- White River Partnership

The people interviewed were identified as ones central to the advancement of the collaborative partnership. Interviewees that could reflect on either the history of the partnership or the current day conditions were chosen to participate. Most interviewees tended to be founders of partnerships, coordinators, and/or past or current Executive Directors of leading organizations.

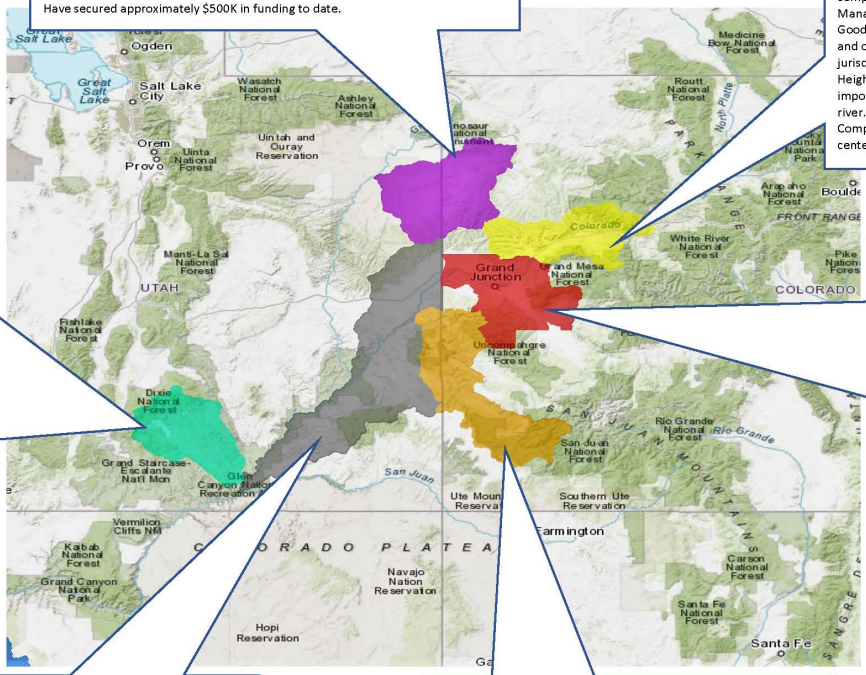
In preparation for the interviews, a set of standard questions were developed, and the same questions were used in all interviews. The questions inquired about the successes/challenges of each partnership, what partners attributed those successes/challenges to, as well their reflections on REW's role in their work and recommendations for how future collaborations can ensure success. The questions aimed at better understanding the extent to which each group has met its intended goals and what has led to its restoration and/or conservation successes and challenges. Interviews were conducted by REW staff. Interview results were organized, synthesized, and important take home points compiled and summarized in this report.

Partnership Geography and Successes

White River Partnership (WRP):
Public-private partnership collaborating for 5 years with recently signed MOU.
Completion of 3-year restoration plan outlining plans to restore 208 acres of riverside lands.
Working across state boundaries to conduct riparian restoration.
Engaging a diversity of partners in the region - two Bureau of Land Management field offices, multiple counties and cities, private landowners.
Close work with Conservation Corp to plan and implement project work.
Have secured approximately $500K in funding to date.

Middle Colorado Watershed Council (MCWC):
Public-private partnership collaborating for 13 years.
High level of participation in and completion of the Integrated Watershed Management Plan.
Good working relationships with partners and ongoing coordination across jurisdictions.
Heightened local awareness about the importance of issues concerning the river.
Completion of CO River Interpretive center in Rifle.

Escalante River Watershed Partnership (ERWP):
Public-private partners have been collaborating for 13 years across 3 federal agencies, multiple cities and counties and many nonprofits and private landowners
Initial removal of Russian Olive completed on 6,000 acres per restoration plan.
Ongoing monitoring and maintenance happening on treated acres and new work treating tamarisk taking place.
Expanded Colorado River cutthroat trout habitat from 8.2 miles in the 1990s to over 62 miles of habitat in 2013.
Raised over $10M over the lifetime of the partnership from a wide diversity of funding streams.
Have built an established reputation as a successful partnership – received awards, media attention and serve as an example for other groups.

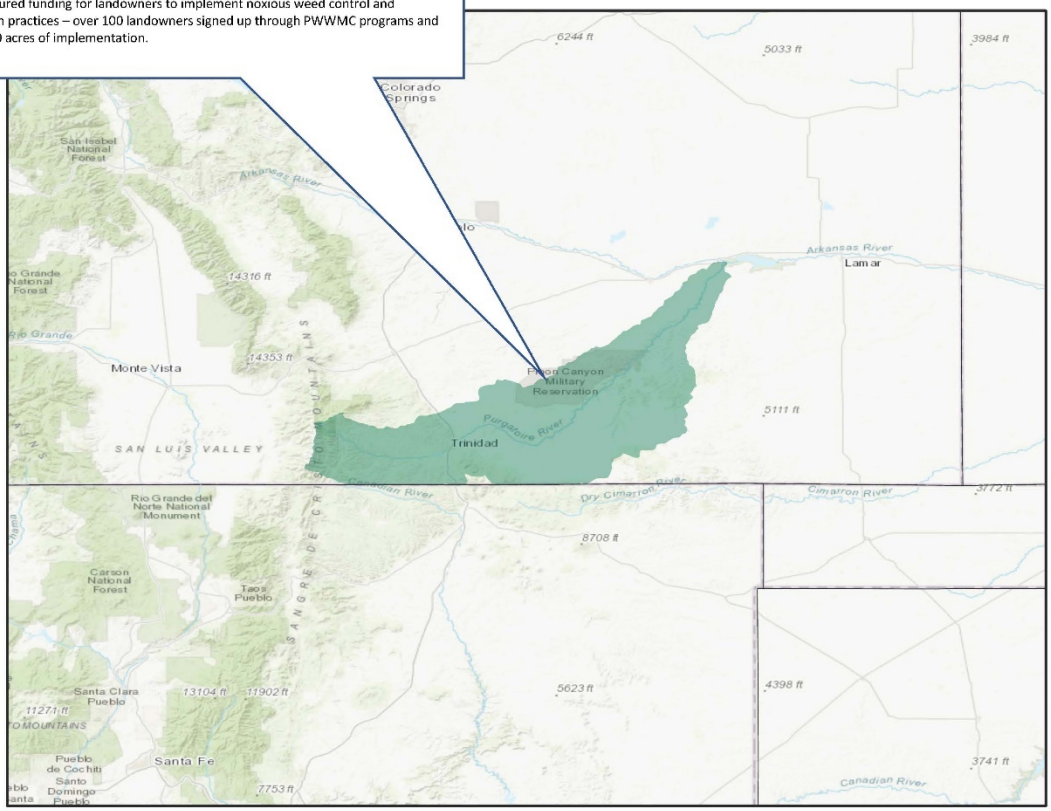


Desert Rivers Collaborative (DRC):
Public-private partnership collaborating for 10 years with signed MOU.
728 acres of initial tamarisk removed, 696 acres of tamarisk resprouts treated, 238 acres of revegetation conducted, and 1,348 acres of secondary weeds treated.
Reliable technical assistance and guidance on treatment and monitoring strategies and coordination of project work across jurisdictions.
Close working relationship with multiple landowners to get work completed on the ground.
Habitat improvements at Connected Lakes.

Southeast Utah Riparian Partnership (SURP):
Since 2007 the partnership has been functioning and many of the original members are still involved.
The partnership has served as an important venue for sharing information about project work among partners and has continued to monitor its impact.
Repeatedly received Watershed Restoration Initiative funding through collaboration and good project design.
Collecting and managing geospatial data.
Ecological improvements in the watershed due to SURP-driven work.
Remaining an informal network partnership that doesn't have much overhead cost.

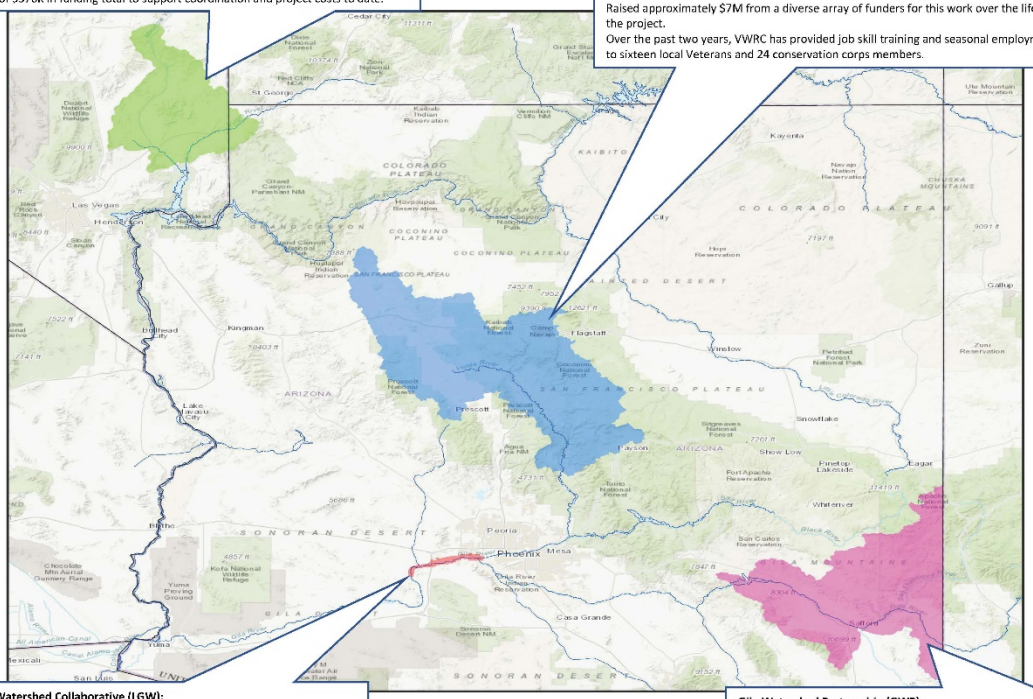
Dolores River Restoration Partnership (DRRP):
Public-private partners have been collaborating for 13 years across 2 states, 3 BLM offices, multiple cities and counties and many nonprofits and private landowners.
Initial removal of tamarisk completed on 1,900 acres.
Ongoing monitoring and maintenance happening on treated acres.
Hired 516 Conservation Corps youth to conduct restoration.
Raised over $7M from a diverse array of funders for this work.
Winner of the 2014 Colorado Collaboration Award.

Purgatoire Watershed Weed Management Coalition (PWWMC):
Public-private partnership collaborating for 6 years.
Recognition as the lead noxious weed organization in the region.
Over 128 acres of tamarisk/Russian olive treated.
Have procured funding for landowners to implement noxious weed control and restoration practices – over 100 landowners signed up through PWWMC programs and over 3,000 acres of implementation.



Virgin River Coalition (VRC):
Public-private partnership established and collaborating for five years with a signed MOU.
Ongoing participation in workshops and meetings by diverse partners.
Completion of a watershed plan outlining multiple restoration priorities in the watershed.
Hired a facilitator and watershed coordinator that have been instrumental to keeping the momentum of the group.
Raised a total of $370K in funding total to support coordination and project costs to date.

Verde Watershed Restoration Coalition (VWRC):
Partnership has been collaborating for 13 years.
To date, over 8,000 streamside miles have been inventoried and mapped for invasive plants and over 5,000 acres have been treated along the Verde River and its tributaries.
Ongoing monitoring and maintenance happening on treated acres and new work treating tamarisk taking place .
Raised approximately $7M from a diverse array of funders for this work over the life of the project.
Over the past two years, VWRC has provided job skill training and seasonal employment to sixteen local Veterans and 24 conservation corps members.



Lower Gila Watershed Collaborative (LGW):
Public-private partnership collaborating for 4 years.
Working to rehabilitate nearly 58 miles of the Gila and Salt Rivers.
Completion of several important on-the-ground pilot restoration projects
Implementation of key research on conditions and trends along the Lower Gila River
Establishment of monitoring protocols.
Formation of a strong, diverse public-private coalition.
Organization of governance structure into a leadership committee that receives guidance from several working groups.

Gila Watershed Partnership (GWP):
The partnership has been operating and collaborating for 7 years.
Removed and treated over 212 acres of invasive tamarisk and planted over 105 acres with native species cultivated in their nursery.
GWP is well-integrated into the local community and organizes the upper Gila Watershed Forum and important gathering

Contributing Factors of Success

The factors for success that emerged from the interviews are shared below. Similar observations from various interviews have been grouped into a single observation and all observations have been categorized based on shared themes. No priority has been assigned to these observations since the ingredients that lead to the successes of one group may not apply to another. The observations are presented as succinct bullet points to make it easy for the reader to process and refer to this information later.

Leadership and Participation

- Working in unique and highly valued landscapes that attract a diversity of partners and funders helps to keep partners motivated over time.
- Consistent and committed leadership with a passion for the landscape is key to ensuring effective leadership.
- For partnerships with a 501c3 designation, having active and well-connected Board Members helps to connect the project to the local community.
    - The board of directors of the non-for-profit Friends of the Verde Rivers (FVR) – a lead organization in promoting collaboration to protect and restore native ecosystems and species in the Verde River watershed in central Arizona – contains numerous long-term serving members who live and work in the watershed and are dedicated to protecting the rich diversity of this remarkable watershed. For example, Chip Norton is a founding FVR board member and lifetime Verde River watershed citizen. He is also owner of Sinagua Malt, which is a benefit corporation located in Camp Verde, Arizona that provides a market solution for declining flows in the Verde River. [add photo here of Verde River, maybe one of Chip on the river]
- Committed partners who care about the watershed and want to participate in the partnership increases participation and longevity.
- Collaboration across jurisdictions, sectors, and areas of expertise is critical to making a lasting partnership and garnering the necessary resources.
- Having at least one federal or state agency as a key partner can help bring ongoing support and funding and focus to project work.
    - Of the 11 watershed partnerships that were included in the lessons learned study, most have one or more federal or state agencies as core partners. For example, the Bureau of Land Management collaborates on a variety of on-the-ground restoration efforts being conducted by the Gila Watershed Partnership in central Arizona; Arizona Game and Fish Department has been a key and central member on a variety of initiatives that are being implemented along the lower Gila River by the Lower Gila River Collaborative; and both Tonto and Coconino National Forests work closely with the FVR.
- Strong federal and state leadership in the areas of water policy and funding is instrumental to partnership success and helps to reinforce the importance of restoration work overtime e.g., State of Colorado Water Plan, Bureau of Land Management Healthy Landscapes Initiative, and Utah Partnership for Conservation and Development Watershed Restoration Initiative.
- Community outreach and ongoing engagement, especially early in the process, is an important tool for building local awareness, buy-in and long-term stewardship. Whether the project is in a rural or urban community - awareness and politics influence partnership effectiveness.

- Engage community representatives e.g. county, city, businesses early on.
- Engage in storytelling and educational events to grow community awareness and support.
- Host community workshops and volunteer events regularly.

Governance

- Loose network partnerships (informal structure and/or information sharing focused efforts) tend to be nimbler and more adaptable to changing circumstances and funding levels than partnerships with a firm structure and staff - this structure can be advantageous for projects that have a smaller scope or require less involvement or long-term commitment to be successful.
- Structured and formal partnerships can be more durable over time because they can withstand personnel changes and have ways of institutionalizing systems, procedures, and information sharing. This type of partnership also promotes trust among partners, credibility in the community, and collaborative fundraising.
- For more formal and structured partnerships, establishing a steering committee or core team of committed partners that has the authority to make decisions that consider the larger picture, and develop and implement the strategic vision for the group is a key strategy for ensuring the longevity of a partnership.
    - For example, as part of protecting and restoring native ecosystems along the Verde River, FVR established several working groups consisting of a diversity of partners to set priorities and monitor outcomes. An example of this is the Sediment Working Group, which consists of personnel from FVR, Coconino National Forest, Tonto National Forest, The Nature Conservancy, and REW that has developed monitoring and prioritization strategies for implementing and gauging the success of efforts to reduce soil erosion throughout the Verde River watershed.
- Operating through a committee-based structure helps to ensure all participants have an opportunity to be engaged and provide their expertise where appropriate. It also allows for partnerships that have more than one priority or management strategy to accomplish their goals.

Planning

- Creating a restoration plan that guides the work of the partnership is critical to keeping partners on task and focused and working around a shared vision. A plan that has a diversity of objectives: ecological, social, economic etc. helps to attract a wider diversity of partners and funders.
    - For example, the FVR, TNC, University of Maryland Center for Environmental Science, and others involved in collaborative restoration and conservation efforts in the Verde River watershed have developed an ecohealth Report Card for the watershed that is used as a tool for understanding problem areas in need of restoration or conservation efforts. The report card also serves as an outreach tool for use by managers and organizers to highlight issues of importance when communicating conservation and restoration with the public. Through numerous workshops and public events, the report card core team identified some of the important threats facing the watershed (e.g.,

land-use changes, groundwater pumping, overuse of resources, climate change, and human pollution), providing a basis for both developing an overall condition score as well as for identifying conservation and restoration priorities

- Setting realistic goals that are informed by baseline information and are responsive to future conditions and not based on restoring to past conditions will help to set more accurate metrics for progress tracking.
    - For example, the LGRC has divided the Lower Gila River into five zones based on ecohydrologic conditions and trends, providing a foundation for establishing realistic restoration goals for each of those subreaches. As the entire Lower Gila River is ephemeral and experiences natural flow only following heavy periods of precipitation, zones that receive agricultural return flows are deemed restoration priorities given the higher availability of water and native habitat and species. In addition, such relatively water rich zones provide higher quality recreation opportunities for local citizens and visitors. [insert figure of the five zones]
- Gathering baseline assessments up front to have an accurate picture of the original conditions when commencing a project.
- Choosing the right geography is important (e.g., a whole watershed versus specific reaches) and not conforming to socio-political boundaries in the identification of this area is important to making and tracking ecological impact.

<u>Coordination</u>

- Having dedicated coordination capacity for the partnership is essential in keeping partners motivated and on task. In some cases, taking a team approach to partnership coordination was instrumental in ensuring consistency, being eligible for a greater diversity of funding streams, and providing adequate support.
- Having dedicated coordination – one or more people who can carry out project management, ensure consistent communication across partners, and bring consistency to a project.
- Having a backbone organization such as RiversEdge West there to provide ongoing support, networking, technical assistance, and other resources to partnerships.
- The funding and creation of cross-cutting positions (e.g., Mike Wight, Kristen Jespersen) by the Walton Family Foundation. These positions worked across partnerships to provide added capacity, support and technical assistance and helped to ensure best practices were being followed and lessons were being shared across watersheds.
- Having consistent and good neutral facilitation can be critical to ensuring all partners feel heard, meetings are efficient, and people stay engaged.
- Good facilitation helps to establish a consistent process that allows diverse voices to be heard and considered. It also allows subject area experts to participate in a way that will allow them to have the greatest value (e.g., providing content focused expertise versus process design.)
    - For example, Southwest Decision Resources – a team of facilitation and collaboration professionals based in Tucson, Arizona – has been hired to facilitate many of the work group meetings related to collaboration along the Lower Gila River and the Verde River. Such facilitation is seen as essential for not only facilitating the meetings, themselves, but also for setting meeting dates, organizing agendas, distributing meeting notes, and keep all involved on task for meeting deadlines and priorities.

Funding

- Having a committed funder that will support capacity and planning at the onset of partnership development and support those costs for multiple years goes a long way towards building a lasting foundation and partnership longevity.
- Engage and/or communicate regularly with relevant federal and state agency leadership to ensure financial and staff support of project work and engagement in partnership.
- Work to diversify funding to prevent an over-dependence on any given funding stream.
- Establishment of "legacy" funds by large funders that help to maintain high-level early investments.

Implementation

- Demonstration projects – making a visible impact on the ground early in the project keeps partners motivated and engaged in the work and attracts new partners and funders.
- Adopting an adaptive management approach both to on-the-ground implementation strategies and partnership management is an important means for shifting with changing realities, staying relevant, and ensuring the intended impact is being made over time.
    - Building adaptive management into the restoration plan at the get go helps to anchor this principle in
- Using volunteers and volunteer projects helps to offset project expenses, engage the local community in the project work, and increases local awareness.
    - For example, the Gila Watershed Partnership has established an extensive volunteer network of citizens, community leaders, teachers and students in an array of river conservation priority activities, including river cleanups, water quality monitoring, implementing and maintaining restoration sites, growing native plants, amongst other activities.
- Understanding the importance and committing to maintenance of treated sites by land managers and funders is critical to ensuring the long-term success and intended ecological impact of project work is realized. Without considering the monitoring and maintenance demands of a given project at the front end these activities tend to be deprioritized and under-funded.
- Changing hydrologic patterns given persistent drought conditions have a direct impact on the success of revegetation efforts in many locations – these conditions and access to water in general need to be considered when making plans for revegetation.
- Restoration has been successful for some groups when it has been broken down into smaller sections as opposed to larger reaches.

Monitoring and Evaluation

- Developing a plan for monitoring upfront has been instrumental in helping to track success and determine where and how to focus resources on maintenance work after initial treatment has been completed.
    - Considering how monitoring data will be recorded, managed, and stored is an important part of this pre-planning process.
- Long-term monitoring is essential to understanding how well conservation and restoration goals are achieved.

- For example, with technical assistance from REW, restoration teams in the Escalante, Lower Gila River and Verde River have established long-term sentinel monitoring sites that are tracking how management of invasive plants and other restoration actions are impacting riverine ecosystems. Data collected by collaborative partnerships in these, and other watersheds are incorporated into a database managed by REW. Analysis of these data will allow quantification of progress toward restoration goals as well as serve as a foundation for adaptive management.

Communications

- Understanding the culture, ideologies, beliefs of the local communities help to engage residents in project work and/or communicate the purpose and value of the work.
- Establishing strategies that allow frequent and regular communication between partners on planning, implementing, and evaluating conservation and restoration is essential to not only the success of specific projects, but also to identifying future priorities and funding opportunities that will allow work to be expanded for greater impact.
- Building personal connections among individual partners translates to improved working relationships across agencies and organizations. These relationships allow for more effective work on-the-ground, increased funding opportunities and help partnerships weather personnel changes and turnover.
- Increased public awareness about the importance of rivers, best river management practices help to rally public support and funding.
- Adequate capacity to conduct direct outreach to private landowners and provide technical assistance is critical to conducting effective restoration on private lands. This work often requires significant capacity, particularly with regard to assisting private landowners to maintain their restoration projects long after they have been implemented.

Reasons for Challenges

Challenges faced by watershed partnerships to realizing their long-term restoration goals in the watershed they are working in are summarized below.

Funding

- Restoring damaged ecosystems like a river and its tributaries is a long-term and evolving process that often doesn't fit neatly into grant funding timelines, which are often two years in length. That noted, it must be emphasized that the long-term funding form WFF secured by many of the watershed partnerships interviewed for this study is an important exception to the short-term nature of most restoration grants. Regardless of the funding source, long-term maintenance, monitoring, and evaluation needs to be taken into are essential to the success of restoration and need to be supported by the funding source.
- Coordination is critical to partnership success however capacity funding for coordination is often hard to come by because funders are often only interested in implementation work. Loose network partnerships with an informal structure and/or with a focus on information sharing tend to have a more challenging time obtaining capacity funding.

- Funder fatigue and evolving funder priorities, as well as changes in private foundation boards and/or agency staff, can shift funding away from partnerships' focus to new or different projects that are outside the scope of the partnership.
- Planning, implementing, and managing restoration projects faces different challenges depending on the ownership and management of the land that restoration is occurring on. The challenge is that rivers are made up of different types of land management and ownership, and watershed partnerships need to be fluent in how to operate in different management and ownership settings. Also funding for this work varies greatly for public versus private land.

Community Engagement

- Agricultural producers and ranchers have busy schedules and often must prioritize other land management needs and goals to maintain the economic viability of their land. There is also a long-time cycle; from developing an idea, to fundraising for that idea, to implementation. Many landowners don't have patience or time for that. To address that challenge, partnerships need to develop win-win restoration goals/objective that will bring benefit to native species and people. If landowners perceive that what we are developing restoration and ecological-wise is of benefit to them, then they'll move forward and engage.
- Some partnerships struggle to gain recognition in communities where other organizations are larger or more well-known among community members.
- Partnerships struggle to gain support and trust from the community when they include or are led by non-local, environmentally focused entities, and when the partnership prioritizes an issue that the larger local community does not. This is especially true of partnerships operating in rural areas and/or areas with historical skepticism towards government and non-local entities.
- Building a volunteer base in rural areas is difficult due to the remoteness of project work. Many rural residents are less inclined to participate in hands-on events because they already spend a lot of time outside working the land.

Stakeholder Engagement and Partner Involvement

- There is an inherent imbalance in participation in partnerships between those partners who are paid to participate because it is part of their job and those partners that are volunteering their time to participate. Consequently, ensuring ongoing regular participation by volunteer partners can be a challenge. Therefore, those parties can end up being underrepresented.
- Trust between stakeholders is key to partnership success and takes a long time to establish. Relationships between stakeholders within the context of the partnership can be strained or complicated by events from the past, events outside the scope of the partnership, and events outside the control of individual partners.
- Being open and inviting to all viewpoints can improve trust and ensure equal representation, but also bring in controversial groups and opinions. A local coordinator or facilitator can give voice to the majority and not let extremists dominate the conversation.
- Staff turnover results in a loss of project expertise and institutional knowledge and necessitates rebuilding trust and rapport among stakeholders.

Environmental

- Water rights issues and altered river systems result in sporadic flows, reduced water availability, and other conditions that increase the likelihood of invasive vegetation establishment and make planning revegetation goals and projects difficult.
- Climate change impacts on precipitation decrease water availability and alter the timing of yearly high and low flows. Temperature changes due to climate change alter the potential desirable vegetation composition; restoring riparian vegetation composition to a previous state can be impossible.
- Land-use changes resulting from population growth, rural development, and agricultural expansion increase the biophysical and chemical impacts on riverine systems.

Role of RiversEdge West in Partnership Success

Having a central organization serve as a coordinator and a repository of best practices can make or break a partnership's ability to achieve long term restoration.

The full suite of resources that RiversEdge West brings to the table is extremely helpful for partnerships (technical assistance, tamarisk beetle data, access to research, funding assistance).

The Restore Our Rivers fundraising campaign was very valuable in helping to build up a pot of discretionary funding and invest in capacity in a way that some partnerships did not have the experience or ability to do. This small infusion of capacity funding went a long way in helping certain partnerships such as the Virgin River Coalition.

Central Lessons Learned for Long-Term Viable Watershed Partnerships

The successes and challenges present above have some shared themes and provide a distilled set of lessons learned for existing and future watershed partnerships.

Prioritize Relationship Building

Relationship-building should be prioritized during the early stages of partnership development before taking steps to formalize the partnership or initiating watershed planning processes. Partnership development and watershed planning require high levels of collaboration and coordination between many entities that represent diverse interests. Often, these entities have a surface-level knowledge of each other at best and lack the trust.

Several watershed partnerships noted that trust and rapport among partner can be strengthened by implementing projects together and by increasing interaction between partners informally. For example, Nancy Steele and Tracy Stevens of the Friends of Verde Partnership emphasized how the Verde River partnerships were strengthened when they began to work collaboratively together to implement on-the-ground projects.

Invest in Facilitation and Coordination Capacity:

A dedicated facilitator and/or partnership coordinator brings a lot of value to the partnership development and planning processes through stakeholder and public engagement and communication, ensuring all voices are heard, maintaining progress, and celebrating partnership successes. Loose network multi-stakeholder partnerships benefit from a neutral facilitator that can carry our program management and keep the group on task. Facilitator/Coordinator are essential internal and external

communications and ongoing coordination is critical to keeping a project going e.g., work planning, hiring, fundraising, etc.

Bring in Diverse Stakeholders through Structured Engagement:

To be viable and effective in the long-term, watershed partnerships need to reflect the societal diversity of the watershed they are working in. Conservation practitioners, managers, scientists need to be working together with ranchers, farmers, community leaders, teachers, students and others. Invite participation from as many stakeholders as possible and make it a welcoming environment for all interests. Ensure outreach and planning is thoughtful to diverse audiences, especially underserved and underrepresented groups. Focus on diversity, inclusivity, indigenous relationships, and environmental justice from the beginning. A flexible structure allows for more open participation during the early stages. Early support for the project from key local stakeholder representatives is important, especially if some stakeholders are not local to the focus area of the project.

To engage diverse partner effectively their engagement needs to be structured. Create a blueprint that outlines partner responsibilities and capabilities, how partners can work together, and establish clear goals. If timing or partner relationships do not allow for establishing quantifiable goals, a consensus on partnership trajectories still provides direction for future actions and planning.

Consider the Local Context:

Understand the local political and social context and build rapport with the community. Inviting community feedback during the missioning, visioning, and goal-setting processes can increase and maintain community support and awareness of the project. Keep the local community abreast of what the partnership is doing and solicit community feedback.

Choose a Valued Landscape and Achievable Scope:

Places motivate people and inspire leadership and long-term participation in partnerships. Repeatedly people mentioned the importance of a given landscape to them as a driver for ongoing participation in a partnership. Defining a project area based on the ecosystem and landscape features and not political or jurisdictional boundaries is key. Restoration conducted at a watershed-scale tends to generate the greatest ecological benefits.

In terms of defining the scope of a project it is helpful to Identify a key problem or set of problems and scale them to be achievable. Consider starting at a smaller landscape scale to keep the project manageable. It's easier to expand after initial successes than to scale the project back after it begins. Partnerships take time to begin and gain momentum. Start with entities that are local, have invested interest, have land, and are willing to invest. All of these are key factors for long-term success.

Plan for the End Game

Restoration is a marathon and requires thoughtful planning that considers the lifetime of the project and the end goal. Understanding baseline conditions and build monitoring and maintenance plans into overall project scope is a key strategy for ensuring the long-term viability of a restoration plan.

Thinking ahead is important in fundraising for restoration as well – building capacity, fundraising, and monitoring costs into implementation budgets is an important strategy for covering all project costs. Reactionary or rushed planning at the front end contributes to long term challenges related to efficacy and partner buy-in. Additionally, it is important to communicate with funders about the long vision – having a plan that does so makes this easier.

Diversify Funding Early On

A diverse funding portfolio is critical to being able to weather changes in funder priorities and eventual funder fatigue. While the significant investment in certain watersheds such as the Dolores River, Verde River, Gila River and Escalante River allowed these groups to scale up quickly and set ambitious and informed restoration goals. It took a great deal of time for these groups to be able to backfill this funding as it sunsetted after 5 years. Investing the time to build state, federal, local and foundation relationships at the front end will help partnerships have the diversity of funding needed to persist over time.

Be Adaptive

Approach restoration as an ongoing process by incorporating adaptive management into the plan and identifying an evaluation method to create an accountability structure. Pursue and utilize the best information for integrating changing climate conditions into restoration work especially as it relates to hydrology, planting types and methods, and wildfire prevention.

Conclusion

For watershed-scale restoration work to be effective and have a lasting impact, practitioners must be committed over the long-term. While collaborative partnerships can be challenging to establish and sustain, if they are developed in an inclusive, transparent, and scaled manner they are a highly effective means for ensuring this work is done over multiple years and/or decades. Identifying project leaders, developing shared systems for working together and sharing information, and having a clear vision is essential to success. Securing reliable capacity support early in the development of a partnership will make these activities more viable. All-in-all restoration work that is conducted in an ecologically defined landscape as opposed to in a piecemeal manner is likely to achieve the intended goals. Establishing ways to share successes among partners, with the local community, and across partnerships is another effective way to ensure restoration work is adhering to best practices and is sensitive to community needs.

The most successful partnerships outlast the original vision that they set out to work on and evolve to sustain that work and/or tackle new challenges. They do this by building a strong basis of trust among participants and the community in which they are working and strategically recruiting new partners.

Appendices

Appendix A: Interviewee List

Partnership	Name	Affiliation
Dolores River Restoration Partnership	Stacy Beaugh	RiversEdge West
	Mike Wight	Conservation Legacy
	Emily Kasyon	Southwest Conservation Corps
	Rica Fulton	RiversEdge West
Escalante River Watershed Partnership		
	Linda Whitham	The Nature Conservancy
	John Spence	National Park Service
	Jonathan Paklaian	Grand Staircase Escalante Partners
	Sarah Bauman	Grand Staircase Escalante Partners
Verde Watershed Restoration Coalition		
	Nancy Steele	Friends of the Verde River
	Tracy Stephens	Friends of the Verde River
	Elain Nichols	Friends of the Verde River
Lower Gila River Collaborative		
	Tice Suplee	Audubon Arizona
Gila Watershed Partnership		
	Melanie Tluczek	Gila Watershed Partnership of Arizona
Virgin River Coalition		
	Deborah Campbell	Deborah Campbell and Associates
	Rob Sutter	Enduring Conservation Outcomes
	Tanya Anderson	The Nature Conservancy
Desert Rivers Collaborative		
	Rica Fulton	RiversEdge West
	Montana Cohn	Mesa County Weed Management Program
	Pete Firmin	Colorado Parks and Wildlife
Southeast Utah Riparian Partnership		
	Kara Dohrenwend	Rim-to-Rim Restoration
	Gabriel Bissonette	Bureau of Land Management

	Tony Mancuso	Utah Division of Forestry, Fire, and State Lands
Purgatoire		
	Shelly Simmons	Purgatoire Watershed Weed Management Collaborative
Middle Colorado Watershed Council		
	Lori Rink	Middle Colorado Watershed Council
	Paula Stepp	Middle Colorado Watershed Council
White River Partnership		
	Jake Deslauriers	Utah Conservation Corps
	John Leary	RiversEdge West

Appendix B: Interview Questions

1. What are your partnership's top three priorities overall?
2. Please describe your governance structure (aka how you operate).
3. Please describe how partners communicate and coordinate their work.
4. Please state some of your key successes as a partnership.
5. To what do you attribute these successes?
6. Please state some of your biggest challenges as a partnership.
7. Why do these challenges exist?
8. What are your thoughts for how to address them?
9. Please describe the planning and partnership development process. Did you set goals for your work? If so, at what stage in the development process?
10. What has kept your partnership operating over time e.g., strong leadership, good systems, adequate resources. Please explain.
11. Please describe the role funding has played in the evolution of your partnership.
12. What are your ongoing funding issues?
13. Please describe the ecological impacts you have seen since your partnership has started doing this work.
14. Please describe the restoration methods that have worked best for you and why.
15. How do you track progress?
16. If you could start your watershed partnership anew today, what would you do differently?
17. Please indicate how REW has helped you achieve success and/or address challenges?
18. Have you seen a change in the ability of your partnership to accomplish its goals since REW's engagement?
19. Please describe any REW initiatives or resources that you have found truly valuable; this could include outside the partnership e.g., conference, resource center
20. What could we have done better to accomplish our mutual objectives?
21. Understanding we have limited capacity, how can REW be of greatest assistance into the future?

Appendix C: Partnership Background Summaries

Desert Rivers Collaborative

Website

https://riversedgewest.org/events/desert-rivers-collaborative

Background

The Desert Rivers Collaborative (DRC) was formed in 2012 to cooperatively protect, restore, and maintain native river corridor habitat in Mesa and Delta counties through the development of community partnerships.

The DRC is focused on improving the Colorado River and its major tributaries in Mesa County. Emphasis is also being placed on the Gunnison River, from the City of Delta north to its confluence with the Colorado River.

The Colorado and Gunnison Rivers are renowned for their ecological, recreational, aesthetic, cultural, and vital economic values. Unfortunately, many of these values have been negatively affected by the predominance of invasive plant species, including tamarisk and Russian olive. Proliferation and persistence of these species can result in reduced water quality and quantity, altered river regimes, an increased risk of fire, diminished river access, and reduced ecological systems and habitats.

Goals

Building upon decades of partners' experiences, the DRC is striving to bring a strategic and coordinated approach to riparian restoration such that measurable, landscape-scale improvements can be achieved and sustained.

- Protecting, restoring, and maintaining habitat for fish and wildlife species, including Colorado River endangered fish species
- Promoting improvements in river function, flood control, and erosion mitigation
- Fostering community pride and livelihood through improvement of recreational experiences and opportunities along our rivers
- Providing the local community economic incentives and employment opportunities for removing invasive plant species on their own property
- Employing adaptive management strategies that facilitate communication and coordination between land managers, landowners, and partners

Participants (past and present)

- Audubon Society
- City of Fruita
- City of Grand Junction
- Clifton Sanitation District
- Colorado Canyons Association
- Colorado Parks and Wildlife
- Colorado State University Extension
- Delta County
- Hutchins Water Center at Colorado Mesa University
- Mesa County
- Natural Resources Conservation Services
- One Riverfront
- RiversEdge West
- River Restoration Adventures for Tomorrow
- Southwest Chapter River Management Society
- Town of Palisade

- US Bureau of Reclamation
- US Fish and Wildlife Service
- Western Colorado Conservation Corps
- Western Colorado Landscape Collaborative
- Western Slope Conservation Center

REW is currently coordinating the partnership, with support from numerous local and regional stakeholders. REW is responsible for working with partners to understand restoration goals, sharing information with partners, keeping track of and collecting data, facilitating meetings, raising funds for proposed projects, and raising awareness locally about the work being done and its importance with the local communities and schools. The DRC is a flagship project for REW, given its location in Grand Junction. As such, REW is working to continue to engage partners and the community in the project to protect and steward the river into the future.

Watershed Plan & Description of Work to be Accomplished

Current projects are focused on tamarisk and Russian olive removal, secondary weed treatment, and restoration with native plant materials. The mainstem of the Colorado River in the Grand Valley is the current focus of most project work, with some restoration occurring on tributaries and washes. Monitoring is being undertaken by partners to determine restoration success, and a comprehensive monitoring program is slated to begin in summer 2021. A hydrogeomorphic analysis is also being conducted to determine the effects of tamarisk removal on bank stability, as well as additional ad hoc research and analyses that inform restoration practices in the DRC area.

Funding

The DRC has a growing corps of loyal funders to include:

- Alpine Bank
- The Bacon Family Foundation
- Bird Conservancy of the Rockies
- Brach's Storage
- Colorado Parks and Wildlife
- Colorado Department of Natural Resources
- Colorado River District
- Colorado State Forest Service
- Colorado Water Conservation Board
- The Goodwin Family Foundation
- Great Outdoors Colorado
- Intermountain West Joint Venture
- Jared Polis Foundation
- Junior Service League
- Many Rivers
- National Fish and Wildlife Foundation
- One Riverfront

Current Status

REW is currently coordinating the partnership, with support from numerous local and regional stakeholders. As a group, the DRC has succeeded in removing tamarisk along over 69,200 acres of riparian lands in the Grand Valley since 2013. The main challenge is to continue maintaining these sites to ensure they recover and that revegetation efforts are successful, as capacity and resources for this work are challenging to come by. Since many of the project's sites have poor soil conditions and little access to supplemental irrigation, active revegetation is a challenge. REW is working to develop a tool that will help local land managers and owners prioritize where and how to conduct maintenance work and is helping to offset the capacity demands of this work by working with two-person restoration strike team that can be responsive to on-the-ground conditions and needs.

REW is also working with local municipalities and a wide array of local stakeholders to determine the opportunities and need for a regional collaborative approach to planning for and managing the stretch of the Colorado River in the Grand Valley. This project is called the River Corridor Initiative and is in the assessment phase.

Dolores River Restoration Partnership

Website

https://storymaps.arcgis.com/stories/1823f6163cfd4b19ae31eb3ab460788f

https://riversedgewest.org/events/dolores-river-restoration-partnership

Background

The Dolores River Restoration Partnership (DRRP) is a public-private collaboration of local, state, and federal agencies, universities, not-for-profit organizations, landowners, foundations, and citizen volunteers committed to addressing the thousands of acres of tamarisk infesting the lower part of the Dolores River, below McPhee Dam to the confluence with the Colorado River.

Created in 2009, the DRRP is working on nearly 200 miles of the Dolores River across two states to shift the trajectory of the riparian corridor habitat towards a more self-sustaining, diverse, and resilient system trajectory. As an informal network of individuals, organizations, and agencies, co-lead by RiversEdge West and Southwest Conservation Corps, the DRRP represents a broad and continuously growing collaborative partnership - one that is considered a good example of successful restoration.

Trust and good working relationships tie the collaboration together and provide the foundation in which we work. This work includes not only restoring the riparian habitat on the Dolores River to a more naturally functioning state, but educating the public, conducting monitoring and scientific research, and adapting management efforts based on new information, lessons learned, and emerging challenges.

Goals

The overarching vision of the Dolores River Restoration Partnership is a thriving Dolores River system that is ecologically, socially, and economically sustainable in a multi-use context. Work towards this overarching vision is guided by four sets of partnership goals:

- Ecological: Increase the number of acres of sustainable, healthy riparian and floodplain plant communities in the watershed while reducing those dominated by tamarisk and other invasive, non-native plant species.
- Social: Increase opportunities for the next generation of stewards with regional conservation and youth corps programs that support underserved young adults; improve aesthetic enjoyment; and increase public safety.
- Economic: Increase employment opportunities for contractors and youth in the Dolores River area; invest in the local economies of the Dolores River Area; improve effectiveness and financial efficiency of our riparian restoration; enhance visitor experience for recreation; and leverage funds from local, state, federal, and private sources to advance funding strategies.
- Management: Facilitate communications between land managers and partners to help coordinate treatments, share lessons learned and increase treatment effectiveness/efficiency;

incorporate educational and interpretative practices to enhance public understanding and appreciation of riparian restoration actions.

Participants (past and present)

- Bird Conservancy of the Rockies
- Bureau of Land Management: Tres Rios, Grand Junction, Uncompahgre and Moab Field Offices
- Bureau of Reclamation
- Colorado Department of Agriculture
- Colorado Department of Parks and Wildlife
- Colorado State University
- Counties of: Dolores, San Miguel, Montrose, Mesa, Colorado; Grand County, Utah
- Department of Energy
- Dolores River Boating Advocates
- Dolores River Dialogue
- Dolores Tamarisk Action Group
- Dolores Water Conservancy
- Fort Lewis College
- Four Corners School/Canyon Country Youth Corps
- Gateway Canyons Resort
- Gateway School
- Natural Resources Conservation Service
- Navarro Research & Engineering, Inc.
- Paradox Valley Charter School
- Private landowners & citizen volunteers
- Southeast Utah Riparian Partnership
- Southwest Basin Roundtable
- Southwest Conservation Corps/Conservation Legacy
- RiversEdge West (formerly Tamarisk Coalition)
- The Nature Conservancy
- U.S. Fish and Wildlife Service, Partners for Fish and Wildlife
- University of Utah – Rio Mesa Center
- Utah Department of Natural Resources
- Volunteers for Outdoor Colorado
- Walton Family Foundation
- Western Colorado Conservation Corps
- Wildlands Restoration Volunteers

From the very beginning, REW has served as a leader for the DRRP and has provided critical coordination, technical assistance, and fundraising support to the partnership. When the DRRP was first forming, The Nature Conservancy (TNC) and the Southwest Conservation Corps (SCC) were actively involved in the coordination and planning of the partnership alongside REW. In more recent years these responsibilities have largely been shared by REW and SCC, who have both been instrumental in planning project work, coordinating implementation and fundraising. Up until 2018, the DRRP employed a neutral facilitator to lead the group, help to manage conflict, and oversee partnership-wide project management. Since 2018, the group has met less frequently and has not required professional facilitation.

Watershed Plan & Description of Work to be Accomplished

Extensive growth of tamarisk along the part of the river has displaced native plant communities, impaired wildlife habitat and forage, negatively impacted wetlands, contributed to river channelization and simplification, impeded access to campsites and other recreational opportunities, hindered biodiversity, and increased risks associated with wildfire in the riparian corridor. In 2010, stakeholders completed the **Dolores River Riparian Action Plan** (DR-RAP) to articulate the science-driven vision, goals, and site selection criteria of the DRRP as well as to facilitate increased collaboration, adaptive

management, and information exchange across the Dolores River for the goal of achieving large-scale meaningful success.

Given the variety of public agencies and private landowners engaged in restoration work within the partnership, DR-RAP is an important guiding tool that effectively established shared goals and a level of consistency for restoring riparian plant communities along the Dolores River across six counties, four Bureau of Land Management (BLM) Field Offices, and two states. This consistency was established through a set of prioritization criteria, dictating where restoration should occur, as well as with an outline of restoration methods that extended from initial treatments to short and long-term monitoring and maintenance.

DR-RAP identifies approximately 1,900 acres of riparian habitat along the Dolores River that have been prioritized for active treatment; this includes a variety of treatments, including control of invasive plants (e.g. tamarisk, Russian Olive Siberian elm, and Russian knapweed), planting and seeding select sites with native species of grasses, shrubs, and trees (e.g. coyote willow, cottonwoods, inland salt grass, and four-wing saltbush), and installing cattle guards and other infrastructure as part of ongoing grazing management efforts in the riparian corridor.

Since its inception, the DRRP has removed tamarisk on over 1,882 acres of the riparian corridor along the Dolores River and some tributaries. Furthermore, the DRRP has treated 2,080 acres of tamarisk re-sprouts, 3,291 acres of secondary weed, and conducted active revegetation activities over 585 acres. It is crucial to maintain these sites to reach restoration goals and fulfill the DRRP's vision of a Dolores River that is more naturally functioning, self-sustaining, diverse, and resilient over time, as well as to protect investments that have been made. Currently, the focus of the DRRP is to treat resprouts of tamarisk and manage persistent secondary weeds such as Russian knapweed and hoary cress on restoration sites. The DRRP is also moving into more targeted habitat restoration work, with a focus on fish and bird species.

Funding

An integral and seminal funder of the DRRP was the Walton Family Foundation (WFF). In fact, the WFF effectively kicked the partnership off by identifying the watershed as a key landscape in its riparian restoration investment portfolio. Other important funders throughout the life of the partnership have been:

- Bureau of Land Management
- Colorado Department of Public Health and Environment
- Colorado Parks and Wildlife
- Colorado Healthy Rivers Fund
- Colorado River Water Conservation District
- Colorado State Forest Service
- Colorado Water Conservation Board
- Commission for Environmental Cooperation
- David & Lucile Packard Foundation
- El Pomar Foundation
- Hendricks Charitable Foundation
- National Fish and Wildlife Foundation
- National Resource Conservation Service
- National Wild Turkey Federation
- North American Partnership for Environmental Community Action
- Packard Foundation
- Partners for Fish and Wildlife
- The Southwest Water Conservation District
- The Telluride Foundation
- Utah Watershed Restoration Initiative

Current Status

The DRRP is mostly in a monitoring and maintenance phase of the project, with initial tamarisk removal planned in select areas such as the Dolores River Canyons Wilderness Study Area and on select sites along the Dolores River in Utah (except for the proposed work in the Wilderness Study Area (WSA), which would involve initial removal). The DRRP relies heavily on the strike team model for this important maintenance and habitat restoration work. The crews are certified in herbicide use to treat priority sites in a low-cost, prompt, and responsive manner. The DRRP strives to employ strike teams for around 50 weeks per year. The DRRP has the overall goal of completing at least 1,000 acres of maintenance work over the next three years, utilizing these strike teams to complete most of the work. Strike teams are employed by SCC and Western Colorado Conservation Corps (WCCC) and are highly trained 2 to 3-person teams that can conduct a wide array of activities including monitoring, secondary weed, and tamarisk resprout treatment, active revegetation, and other site-specific maintenance tasks and have proven to be a mobile and effective way to maintain and steward past restoration work.

The partnership is also striving to treat the remaining tamarisk stands left on the Dolores River that is in hard-to-reach areas. The major focus of this effort is the Dolores River Canyons Wilderness Study Area (WSA.) The partnership is gathering resources to treat the WSA using rafts and horse packing to get 6 to 8-person conservation corps chainsaw crews into the infested areas to remove large stands of tamarisk. Strike teams will play a critical role in this work as they can provide technical guidance and support to chainsaw crews for this remote work. It is important that the partnership stays on top of the tamarisk resprouts with this effort. To be efficient with the level of effort it takes to access these areas, the DRRP will need to rely on strike teams to make sure resprouts are treated the very next year after primary tamarisk removal. If this effort is to be successful, the DRRP will need strike teams to consistently access these sites in both the spring and summer.

Lastly, the partnership is beginning to focus on areas where passive revegetation of native plants is not sufficient or providing the biodiversity needed for healthy riverside habitat. We are working towards creation of an active revegetation plan that will inform planting and seeding of native species projects on a site-by-site basis. This plan will incorporate vegetation monitoring, elevation, and hydrologic data as well as current predictions about climate change in the region to help the partnership prioritize sites for active revegetation work and outline methods that will increase chances of planting success. This plan is in its early stages but will hopefully be funded in 2021, completed by the end of 2023, and use by 2024. In 2021 the DRRP plans to conduct maintenance on at least 300 acres of treated lands.

Escalante River Watershed Partnership

Website http://escalanteriverwatershedpartnership.org/

Background

Created in 2009, the mission of the Escalante River Watershed Partnership (ERWP) is to restore and maintain the natural ecological conditions of the Escalante River and its watershed and involve local communities in promoting and implementing sustainable land and water use practices.

ERWP, a coalition of private and public agencies, groups, and individuals, is joining with local communities in a coordinated effort to protect and maintain a healthy river and watershed for future

generations. The ERWP is focused on improving the health of the entire watershed, with special emphasis on the removal of Russian olive from the Escalante River and its tributaries. Over 6,000 acres have been targeted for treatment. As one of the more established watershed partnerships in the region, ERWP serves as a model of success for other groups working within the Colorado River Basin.

The ERWP works collaboratively with private landowners and public land agencies on restoration work and science research across all land management and ownership boundaries. Using a science based "Ten Year Action Plan" and a "Woody Invasive Control Plan" to guide its efforts, the ERWP is working to restore the ecological functions and processes of a healthy watershed. By following adaptive management protocols and coordinating various ecological restoration projects at a watershed-wide scale, the ERWP has been successful in carrying out restoration that is comprehensive, replicable, and sustainable.

Goals

The overarching goal of the ERWP is to restore and maintain the natural ecological conditions of the Escalante River and its watershed and involve local communities in promoting and implementing sustainable land and water use practices.

Participants (past and present)

- Boulder Community Alliance
- Color Country Cooperative Weed Management Area
- Dixie National Forest, US Forest Service
- Escalante Canyon Outfitters
- Four Corners School/Canyon Country Youth Corps
- Glen Canyon National Recreation Area, National Park Service
- Grand Canyon Trust
- Grand Canyon Wildlands Council
- Grand Staircase-Escalante National Monument, Bureau of Land Management
- Grand Staircase-Escalante Partners
- Great Old Broads for Wilderness
- Individual Private Landowners
- Rim to Rim Restoration
- RiversEdge West (formerly Tamarisk Coalition)
- Springs Stewardship Institute
- Southwest Conservation Corps
- The Nature Conservancy
- Trout Unlimited
- US Fish & Wildlife Service/Partners for Fish & Wildlife Program
- Utah Conservation Corps
- Utah Division of Forestry, Fire & State Lands
- Utah Division of Water Quality
- Wild Utah Project
- Wilderness Volunteers

Since the beginning, the ERWP has employed a neutral facilitator to lead the group, help to manage conflict, and oversee partnership-wide project management. All on-the-ground and research has been conducted as part of the mandates or programs of participating partners or through committees. A key committee throughout the life of the partnership has been the Coordinating Committee, which consists of committee chairs and oversees the capacity and long-term planning for the partnership.

REW's role in the partnership has varied over time. In the beginning, REW staff provided direction and assistance with the development of riparian restoration protocols and goals, as well as monitoring

information. REW has also hosted an Annual Conference, which has provided opportunities for ERWP to share information and connect with other practitioners and researchers in the field. REW staff have also helped the partnership with fundraising, capacity building, and strategic planning. REW staff have gathered budget information, spearheaded a fundraising campaign that provided discretionary funding to the partnerships, connected key partners, and fundraised for overall partnership capacity.

Watershed Plan & Description of Work to be Accomplished

ERWP developed a science-based Action Plan that guided the specific restoration and research efforts of the partnership. This was a ten-year action plan that prioritized the following activities:

- Woody Invasive Control: ERWP is implementing an ambitious five-year plan to significantly reduce the spread of Russian olive and tamarisk on both private and public lands in the watershed.
- Active Restoration: Where appropriate, partners are restoring critical habitat by planting native trees and plants in areas where woody invasive vegetation has been removed.
- Monitoring: A long-term monitoring program is providing feedback to land managers about the success of specific restoration tactics.
- Beaver Assessments: Partners are identifying suitable habitat for the reintroduction of beavers and supporting recreation management to protect these areas.
- Native Fish Habitat Restoration: Partners are identifying areas where the impacts of non-native fish can be lessened, and native fish populations can be increased and expanded; and implementing projects to increase connectivity for native fish and educate local communities on the importance of native fish conservation.
- Science and Research: Scientists are studying water quality and quantity issues, the impacts of the tamarisk beetle and the effectiveness of invasive tree removal and revegetation efforts.
- Education and Awareness: Partners are communicating with the public about the ecological values of the Escalante, working with private landowners as they restore their lands and providing opportunities for individuals and private and public organizations to participate in volunteer monitoring and restoration projects.

Each year, ERWP would check in on the actions called out in the action plan to verify their relevance and feasibility. This process allowed the partnership to regularly evaluate what was and wasn't working and update the plan accordingly. In 2018, after ten years of implementation, the ERWP set about updating the Action Plan and developed a Strategic Plan which set out new goals for the partnership and restructured committees. Through this planning effort the ERWP set forth the following goals for February 19, 2024.

- Riparian Restoration: Riparian habitats are improving through site assessments, data gathering, restoration, and monitoring and maintenance.
- Uplands Restoration: Uplands habitats are improving through site assessments, data gathering, restoration, and monitoring and maintenance.
- Science and Conservation Targets: The Escalante River Watershed is used as a living laboratory to understand the effects of ecosystem processes, land uses, and climate change on species and system targets, through ongoing watershed-relevant research, information sharing, and adaptive management.

- Springs: Conditions of seeps and springs are improving by collecting data, inventorying, and assessing conditions, developing guidelines for restoration, and implementing and monitoring restoration.
- Native Fish and Wildlife:
    - Native Fish – The warm and cold native fish communities are mostly intact and self-sustaining with few if any non-native species, by controlling non-native species numbers (using chemical, biological, or mechanical means), reintroducing native species, and improving fish habitat.
    - Native Wildlife -The role of native wildlife is restored [?] as a tool for increasing proper functioning of riparian habitats in the watershed.

Stewardship and Community Engagement: Watershed stewardship is enhanced through education and outreach, coordinated volunteerism, service-learning, and citizen science.

Funding

An integral and seminal funder of the ERWP was the Walton Family Foundation (WFF). In fact, the WFF effectively kicked the partnership off by identifying the watershed as a key landscape in its riparian restoration investment portfolio. Other important funders throughout the life of the partnership have been:

- Backcountry.com
- Conservation Lands Foundation
- National Park Service
- National Fish and Wildlife Foundation
- National Forest Foundation
- Patagonia
- US Forest Service
- Utah Department of Agriculture and Food
- Utah Department of Fire, Forestry and State Lands
- Utah Partners for Conservation and Development

Current Status

In 2019, the GSEP and the ERWP reached a hard-won milestone – the completion of all primary treatments of Russian olive on public land in the 1.3-million-acre watershed. This goal required millions of dollars, hundreds of laborers, and the coordination of federal and state agencies, local and regional NGOs, and other stakeholders. In 2020, the partnership has entered the monitoring and maintenance phase of the project. Although this phase requires fewer resources, the work remains challenging and involved. According to the ERWP's Monitoring and Maintenance Plan (revised 2018), the Partnership will retreat one-fifth of the previously treated areas every year, effectively treating the entire watershed in five years. The first several years of retreatment are critical, as resprouts are most aggressive shortly after initial treatment. The Escalante River Watershed's project was one of the largest in area and scope ever conducted. It is also one of the most remote. Road access is very limited, and supplies are brought in on foot, or horseback. To accomplish this phase of the project work, the partnership must continue to actively engage partners and the community, and successfully fundraise.

Friends of the Verde River

Background

The Friends of the Verde River (Friends) is a not-for-profit, 501c(3) conservation organization with a geographic focus on the Verde River in central Arizona. The vision of Friends is a healthy, flowing Verde River and tributaries that support the natural environment, vibrant communities, and quality of life for future generations. Friends focuses on restoring habitat, sustaining river flows, and building supportive communities via a combination of "boots-on-the-ground" projects and policy solutions guided by sound conservation principles that address human and environmental needs in an outcomes-oriented manner. Friends accomplishes its conservation objectives through voluntary, inclusive partnerships that foster commitment and engagement in pursuit of our shared vision.

The seeds for Friends began in the spring of 2007 with a group of long-time river activists who wanted to take a more "hands-on" approach to protect the Verde River, which is the longest free-flowing stream in Arizona. At the same time, Arizona State Parks was seeking a non-governmental partner to assist with conservation and public outreach efforts to support the Verde River Greenway State Natural Area. Friends of the Verde River (at that time called Friends of Verde River Greenway) emerged as an affiliate of Arizona State Parks Foundation committing to river restoration and enhancement projects as well as introductory canoe trips on the river.

In late summer of 2009, with the assistance of the Arizona State Parks Foundation and the Verde Watershed Association, Friends embarked on a course to build capacity within the organization and expand community participation in support of its mission. In December 2011, Friends of the Verde River (at that time called Friends of Verde River Greenway) was established as a 501(c)3 and became independent of Arizona State Parks Foundation. Friends continues its close partnership with Arizona State Parks.

Goals

The threat of invasive riparian plants was central to the development of CIPMP, which laid the groundwork for a strong community driven coalition made of private landowners, non-profit organizations, local communities and businesses, and federal and state agencies that has, in turn, lead to the development of VWRC and its two primary goals, which are to:

- Develop a strategic approach for controlling invasive plants in the riparian corridors of the Verde River watershed that will enable stakeholders to prioritize, develop, and implement restoration actions; and
- Increase the level of collaboration and communication among stakeholders, thereby enhancing information transfer, adaptive management, and basin-wide success.

In 2015, VWRC Partners looked beyond combating invasive plants and developed a strategic plan that identifies nine other priorities: (i) cooperative invasive plant management, (ii) research and monitoring, (iii) state of the watershed, (iv) sedimentation and erosion, (v) sustaining flows, (vi) Verde native seed and plant cooperative, (vii) Verde outdoor volunteer network, (viii) youth pathways, and (ix) sustainable funding. It is important to note in this context that VWRC is not a separate organization. VWRC is a network that is managed and facilitated by FVR.

Participants

- Community Counts-AmeriCorps
- Arizona Game & Fish Department
- Arizona State Forestry
- Arizona State Parks
- City of Cottonwood
- Coconino National Forest

- Coconino Rural Environment Corps (CREC)
- Gila Watershed Partnership
- National Park Service
- Nina Pulliam Charitable Trust
- USDA Natural Resources Conservation Service
- Prescott National Forest
- Salt River Project
- Tonto National Forest
- Southwest Conservation Corps
- RiversEdge West (formerly Tamarisk Coalition)
- The Nature Conservancy
- The Vetraplex
- The Wildlife Habitat Council
- Town of Camp Verde
- Town of Clarkdale
- US Fish & Wildlife Service
- Verde Natural Resource Conservation District
- Verde Valley Land Preservation
- Walton Family Foundation
- Yavapai-Apache Nation
- Yavapai County
- Oak Creek Watershed Council
- Verde River Basin Partnership
- USDA Forest Service-Region 3

Watershed Plan & Description of Work to be Accomplished

In 2010 the Walton Family Foundation provided funding for the development of the Verde River Cooperative Invasive Plant Management Plan (CIPMP), a five-year plan that outlines goals to manage invasive species while supporting our local communities both socially and economically. Friends was a significant contributor to the development of this plan. The Verde River Cooperative Invasive Plant Management Plan (CIPMP) was completed in 2011. The CIPMP was the result of a collaborative multi-stakeholder public/private planning process to develop a strategic approach for controlling invasive non-native plants within the riparian corridors on a watershed scale. In early 2012, Friends hired its first employees and took on a leadership role in the Verde Watershed Restoration Coalition.

Funding

- Walton Family Foundation
- Arizona State Forestry
- Arizona Game & Fish Department
- Coconino National Forest
- Prescott National Forest
- US Fish & Wildlife Service, Partners for Fish & Wildlife Program
- Yavapai County Resource Advisory Committee
- Walton Family Foundation
- National Park Service
- In-kind contributions
- Tonto National Forest
- Individual private donors

Current Status

Friends in its current form was established in 2017 with the merger of Friends of Verde River Greenway, Verde River Valley Nature Organization, and Verde River Basin Partnership. Friends is a traditional 501c3 traditional structure, operated by a volunteer board. Nancy Steele is the current Executive Director and is the only board employee who is delegated to hire staff, prepare budgets, develop programs, etc. The board meets every other month or six times a year. Total membership is ten with aspirations in the near future to increase the board to 12 members. Executive committee is made up of four officers plus one at large member (training to leadership position). Friends works closely with three collaborative groups: VWRC, Verde Front, and Sustaining Flows Council, which was formed in 2019.

Priorities with REW

Friends informs its own priorities as well as those of VWRC through several workgroups. REW sits on two workgroups: the sedimentation workgroup and the invasive riparian plant work group. Other work group participants include the USFS, TNC, and Southwest Decision Resources. Over the last two years, Friends and REW have mainly worked together on several Friends priorities, including developing restoration criteria for prioritization, monitoring riparian plant community response to on-the-ground management/restoration efforts, and strategic planning. Joint priorities for 2022 include joint fundraising, establishing and measuring additional sentinel monitoring sites, developing the lessons learned report into a concise journal article for wide distribution, analyzing long-term monitoring data sets, and participating in and fostering the 'Sustainable Flows' program and the 'River Friendly Living' program.

Lower Gila River Collaborative

Website https://sites.google.com/view/lgrc/home

Background

The Lower Gila River Collaborative (LGRC) is a voluntary partnership for the Lower Gila River. The mission of LGRC is to serve as an ongoing forum for collaboration, coordination and outreach that benefits natural and cultural resources of the Lower Gila River corridor, which is defined as the reach of the Gila River downstream of the Salt River-Gila River confluence to Gila Bend. The LGRC supports natural resource restoration and enhancement, stewardship, nature-based recreation, and compatible economic development. The LGRC is not a non-profit organization or formal legal agreement among the parties. The group's activities are documented by a charter agreement that was finalized in 2018 where partners agree to work together on shared regional priorities and to provide capacity and financial support for strategic coordination on river conservation and restoration priorities. The LGRC is built upon several foundational partnerships, including El Rio Vision (1990s) and Rio Reimagined (initiated in 2018).

The El Rio reach spans 17.5 miles of the Gila River from the confluence of the Agua Fria to the Hassayampa River confluence (essentially, the upper portion of the central geography of the LGRC). The El Rio Vision focuses on addressing flooding, incorporating multi-use opportunities, and restoring and maintaining riparian habitat through public-private partnerships. Several studies and reports were completed as a result of the vision, including the El Rio Watercourse Master Plan in 2006.

Rio Reimagined (https://rioreimagined.org/) was launched in 2018 and is a vision for thriving river communities spanning 58 miles of the Gila and Salt Rivers. Rio Reimagined focuses public and political attention on these two rivers systems, particularly around issues of economic development, vibrant communities, and river-based recreation and tourism. The LGRC complements this regional vision, ensuring place-based planning, continued learning that informs decision-making, and improved effectiveness of projects on the ground. LGRC serves as the primary forum for partners to the west (or downstream) of Rio Reimagined to collaborate.

The LGRC identifies priorities and work streams via a Leadership Council, which consists of Arizona Game and Fish Department, Maricopa County, and the incorporated cities of Avondale, Buckey, and Goodyear. The Leadership Council receives regular input via several different workgroups that include

'Restoration and Habitat,' 'Economic Development and Tourism,' and 'Engagement and Outreach.' Southwest Decision Resources has been contracted to schedule, coordinate, and facilitate all workgroup meetings. Over the past two years, REW's involvement with the LGRC has been primarily through the Restoration and Habitat and Engagement and Outreach workgroups, which meet at least once every two months. REW has also given a variety of presentations to both the LGRC and the greater partnership that includes Rio Reimagined.

Goals

Current LGRC restoration goals include:

- Developing prioritization criteria for restoration sites and projects
- Identifying and designing restoration
- Establishing monitoring sites
- Strategic planning
- Joint fundraising

Specific collaborative proposals for 2022 include a joint proposal with National Audubon and USFWS and a pilot restoration project with Buckeye Irrigation District.

Participants

- Arizona Cross-Watershed Network
- Arizona Department of Environmental Quality
- Arizona Department of Forestry and Fire Management
- Arizona Game and Fish Department
- Arizona State Land Department
- Arizona State University
- Audubon Arizona
- Buckey Irrigation District
- Bureau of Land Management
- Bureau of Reclamation
- City of Avondale
- City of Buckeye
- City of Goodyear
- City of Phoenix
- Desert Botanical Gardens
- El Rio Vision
- GeoSystems Analysis, Inc.
- Gila River Indian Community
- Gila Watershed Partnership
- Maricopa County Flood Control District
- Maricopa County Parks and Recreation
- National Audubon
- Natural Resources Conservation Service
- Northern Arizona University
- Pheasants Forever
- REI
- Rio Reimagined
- Rio Salado
- RiversEdge West
- Southwest Decision Resources
- United States Fish and Wildlife Service
- Westmarc

Watershed Plan & Description of Work to be Accomplished

Priorities for future work, include:

- Expand on-the-ground river restoration; a particularly important priority in this regard is develop pilot restoration projects with local farms and the Lower Gila River Tribal community
- Expand sentinel monitoring sites that include surveys of riparian vegetation, shallow groundwater, and water quality
- Develop a GIS-based map that delineates current restoration work and future priorities

- Continue to hold public events that will educate the public about lower Gila River amenities, value, the LGRC, itself, and our future priorities
- Develop collaborative proposals to fund the above

Middle Colorado Watershed Council

Website: https://www.midcowatershed.org/

Background

The Middle Colorado Watershed Council (MCWC) consists of a diverse set of stakeholders, representing municipal, industrial, agricultural, recreational, environmental, land management, and educational interests, that live and operate within the middle Colorado River Watershed. Originally organized as a collaborative in 2009, the Council incorporated as a nonprofit Colorado corporation in 2013. The Council's mission is to evaluate, protect, and enhance the health of the middle Colorado River watershed through the cooperative effort of its watershed stakeholders.

MCWC's core values include:

- Balanced stewardship. Seek common-sense solutions that support multiple uses and reflect local values.
- Watershed health. Recognize the interconnections between water quantity, water quality, and community and economic well-being.
- Collaboration. Foster partnerships between diverse stakeholders around common interests.
- Informed decisions. Disseminate reliable, unbiased, and factual information as the basis for sound decision-making.

The MCWC includes the Colorado River and all its tributaries (excluding the Roaring Fork River) from the Garfield/Eagle County line downstream to the Town of DeBeque. Major tributaries include Roan, Parachute, Rifle, Elk, Canyon, No Name, Grizzly, South Canyon, Divide, Mamm, and Battlement Creeks. This 2,000 square mile focus area includes 84 miles of the Colorado River and a cumulative total of 7,500 tributary stream miles.

The Roaring Fork River, a major tributary in the watershed, is intentionally excluded because of the active watershed management efforts of the Roaring Fork Conservancy.

Goals

The Council's statement of goals includes the following:

- Support the long-term health of the watershed for the wellbeing of the community and the local economy.
- Protect and enhance water quality.
- Promote smart, efficient water use and conservation.
- Increase knowledge, awareness, and stimulate interest in the watershed.
- Manage the organization and finances effectively and efficiently.
- Inform planning and decision-making with unbiased, fact-based information.
- Create partnerships and collaboration among stakeholders.

Participants (past and present)

- Alpine Bank
- Battlement Mesa Metropolitan District
- Bureau of Land Management
- City of Glenwood
- City of Rifle
- Colorado Department of Public Health and Environment
- Colorado Parks & Wildlife
- Colorado River Water Conservation District
- Colorado State University Extension
- Eagle River Watershed Council
- Garfield County
- Garfield & Hecht
- George Wear Consulting
- Natural Resources Conservation Service
- SGM
- Sonoran Institute
- US Fish & Wildlife Service
- US Forest Service
- US Geological Survey
- West Divide Water Conservancy District
- Williams

REW's role in the MCWC has been largely to provide technical assistance support on an as-needed basis. MCWC did participate in REW's Restore Our Rivers fundraising campaign and received discretionary funding that helped catalyze more engaged planning and fundraising within the partnership. Additionally, MCWC regularly attends and participates in REW's Annual Conference.

Watershed Plan & Description of Work to be Accomplished

In late 2012, MCWC was awarded a grant from the Colorado Department of Public Health and Environment Nonpoint Source Pollution Control program to support the development of a Watershed Plan. This Plan assesses existing conditions, identifies and prioritizes needs and issues, and outlines projects, activities and best practices to address those needs. In addition to increasing understanding of the watershed and identifying strategies to sustain its health into the future, this process, and the information it created, will be used to educate the public, local agencies, and other entities about the watershed, as well as relevant policy and management issues. It will also facilitate pooling of resources and help coordinate data sharing, monitoring efforts, on-the-ground projects, and capital investments.

The overarching work of the MCWC is focused in the following four areas:

- Information: Gather, evaluate, and disseminate information pertinent to watershed health.
- Projects: On-the-ground projects and educational campaigns.
- Outreach and Engagement: Identify and engage the public, partners, and stakeholders.
- Education: Increase knowledge, awareness and understanding to promote balanced stewardship.

Past and present projects include:

- Watershed Assessment - characterizing the existing health of the watershed (completion 2014)
- Watershed Plan – charting the course of action as implementation of specific projects and strategies (completion 2014)
- Monitoring plan – developing a strategy for filling in key data gaps that will increase our understanding of the watershed condition (initiate in 2014)
- River cleanup – an annual event designed to reduce nonpoint source pollution and to heighten citizen awareness around watershed stewardship (spring and fall 2014)

- Educational workshops – bimonthly events focusing on regional topics of importance (on-going)
- Communications plan – for the effective dissemination of unbiased, fact-based information

Funding

MCWC has not received support from a single large foundation such as the Walton Family Foundation to date. The following entities have provided ongoing financial support to the MCWC.

- Alpine Bank
- Battlement Mesa Metropolitan District
- Bureau of Land Management
- City of Glenwood
- City of Rifle
- Colorado Department of Public Health and Environment
- Colorado River Water Conservation District
- Garfield County

Current Status

MCWC is currently completing an Integrated Watershed Management Plan, which will provide an overview of the key stressors of this reach of the river and outline strategies for managing them into the future.

Purgatoire Watershed Weed Management Collaborative

Website https://www.purgatoireconservation.org/purgatoire-watershed-weed-management-collaborative.html

Background

The Purgatoire Watershed Weed Management Collaborative (PWWMC) has its roots in Tackling Tamarisk on the Purgatoire (TTP), an informal partnership formed in2004. TTP was successful in developing a coordinated approach to managing tamarisk and other riparian invasive species through the implementation of projects in the Upper Purgatoire Watershed. Over time, both the scope and the stakeholder group expanded, and the group was formalized as the PWWMC in 2016. In 2020, PWWMC became the designated noxious weed program of the Spanish Peaks-Purgatoire River Conservation District (SPPRCD).

PWWMC has a strong focus with on-the-ground project implementation on private lands through 5 programs:

- Russian Knapweed Initiative Cost Incentive Program
- Riparian Restoration Cost Incentive Program (aka tamarisk and Russian olive)
- Herbaceous Noxious Weed Cost Share Program
- List A species treatment programs
- Tercio Good Neighbor Cost Incentive Program

Additionally, PWWMC works closely with Las Animas County, implementing annual activities through an Intergovernmental Agreement (IGA) focused on County Rights-of-Way and List A species treatments.

Goals

The Goal of Purgatoire Watershed Weed Management Collaborative (PWWMC) is to maintain, protect, and improve the ecological integrity, agricultural productivity, and the economy of the Purgatoire River Watershed through non-native noxious weed control and landscape restoration.

Partners (past and present)

- Branson-Trinchera Conservation District
- City of Trinidad
- Colorado Department of Agriculture
- Colorado Parks and Wildlife
- Colorado State Forest Service
- Colorado Water Conservation Board
- Ducks Unlimited
- Las Animas County
- Moore Charitable Foundation
- Tercio Ranch
- Private Landowners
- Purgatoire River Water Conservancy District
- Purgatoire Watershed Partnership
- RiversEdge West
- The Nature Conservancy
- Upper Arkansas Cooperative Weed Management Area
- US Army Corps of Engineers, Trinidad Lake

REW has been involved with PWWMC since the initial TTP project and played a major role to get the collaborative up and running. REW helped develop the coordinator position and employed the coordinator position for several years until it was moved to the Spanish Peaks-Purgatoire River Conservation District in 2020.

Watershed Plan & Description of Work to be Accomplished

Partners completed a woody invasives management plan in 2008 and began implementation in 2009. PWWMC has treated over 3000 acres since 2005, working with over 100 private landowners and many local and state entities.

Objectives

- Control noxious weeds
- Improve and protect native vegetative cover and thus, native wildlife habitat, agricultural productivity, recreational and hunting opportunities, drinking water supplies, and local economies
- Increase public awareness and support for healthy lands within the watershed
- Arkansas River Watershed Collaborative

Funding (past and present)

- Branson-Trinchera Conservation District
- Colorado Department of Agriculture
- Colorado Parks and Wildlife
- Colorado State Forest Service
- Colorado State Land Board
- Colorado Water Conservation Board
- Ducks Unlimited
- Las Animas County
- Moore Charitable Foundation
- Restore Our Rivers (Tamarisk Coalition/RiversEdge West)
- Spanish Peaks-Purgatoire River Conservation District
- The Nature Conservancy

Current Status

In June 2020, the Coordinator position moved from RiversEdge West to the Spanish Peaks-Purgatoire River Conservation District - PWWMC is now fully housed by SPPRCD. Project work continues with a focus on private lands, as well as partnering with non-profit, local, state, and federal entities to accomplish noxious weed control and land restoration across the Purgatoire Watershed.

Southeast Utah Riparian Partnership

Website: https://www.revegetation.org/se-utah-riparian-partnership.

Background

The Southeast Utah Riparian Partnership (SURP) began as the Southeast Utah Tamarisk Partnership (SUTP) formed in March of 2006 to respond to tamarisk leaf beetle impacts as well as work on plant restoration projects along the Colorado River and its tributaries. The SUTP changed its name to SURP in 2011 to better reflect their focus on collaborative work on restoration as opposed to simply focusing on tamarisk removal. SURP is comprised of local, state, and federal agencies; businesses; non-profit organizations; and individuals. SURP is committed to supporting, informing, and advocating for the restoration, protection, and maintenance of healthy riparian ecosystems in Utah's Colorado River Watershed.

SURP works on riparian and riverside lands adjacent to the Colorado River, and its major tributaries and washes in Grand and San Juan Counties of Utah. Partners work to restore areas impacted by invasive plants including tamarisk, Russian olive, Ravenna grass and Russian knapweed. These introduced species out-compete native plants, often leading to diminished habitat, incised banks, simplified river channels and increased fire danger. In 2013 Partnership recognized the increasing impacts of rapidly growing recreational use in these riparian areas. In 2018 SURP expanded efforts to also focus on maintaining channel complexity to conserve and expand fish habitat. The collaboration and commitment from both private and public entities involved in the SURP improves project success across administrative boundaries.

SURP's main activities include:

- Providing a forum for interagency collaboration, coordination, and communication including creating a geodatabase to provide a method for project partners to understand past actions on the landscape, locations of vegetation response and beetle monitoring, and track current project work.
- Collaboratively managing projects to treat invasive species and encourage native plant regeneration at prioritized sites.
- Facilitating active revegetation with native plants where needed.
- Monitoring project success: vegetation response to large scale invasive removal as well as beetle activity since 2007, with other efforts focused on tamarisk mortality and vegetation recruitment in declining tamarisk stands. Members of SURP maintain one of the longest running data sets in the nation on the distribution and impacts of the tamarisk leaf beetle, a biocontrol used for tamarisk management.

Goals

The goals of the partnership are to:

- Work to understand the effects of biocontrol and other project activities on riparian ecosystems
- Act as a public resource for understanding ecological processes and fostering stewardship
- Coordinate projects involving multiple collaborating agencies
- Promote resilient native ecosystems
- Mitigate the negative impacts of recreation on project sites
- Integrate visitor experience into projects when appropriate

By 2025 SURP will:

- Have effectively shared information gathered through various monitoring efforts (e.g., biocontrol and vegetation monitoring) to help with evaluating site conditions and to help inform land management decisions about work. The group will continue to actively share data, information, and knowledge about project success and failure.
- Consider project sites and improve management techniques through use of a geodatabase that allows all members to access information about legacy project sites and that is updated with information about current site conditions and continued monitoring efforts.
- Actively use tools to facilitate project prioritization based on science, site conditions, and articulated land management goals.
- Provide accurate and useful information to the community about river restoration, riparian land management, and stewardship as well as share information between partners.
- Be a welcoming and inclusive partnership for all collaborators who want to work with this group as supported by their own funding sources.

Participants (past and current)

- Bureau of Land Management
- Canyon Voyages
- Canyonlands Field Institute
- City of Moab
- Community members
- Glen Canyon National Recreation Area
- Grand Canyon Trust
- Grand Conservation District
- Grand County
- Living Rivers
- National Park Service
- National Wild Turkey Federation
- Plateau Restoration, Inc.
- Red River Canoe Company
- Rim to Rim Restoration
- San Juan County
- RiversEdge West (formerly Tamarisk Coalition)
- The Nature Conservancy
- Town of Castle Valley
- United States Department of Energy
- United States Geological Survey
- Utah Conservation Corps
- Utah Division of Forestry Fire and State Lands
- Utah Department of Transportation
- Utah Division of Wildlife Resources
- Utah State University Extension
- Utah Trust Lands Administration

REW has been involved with SURP since helping to develop the original Southeast Utah Tamarisk Partnership Plan in 2006. In recent years, SURP was a partner in REW's Restore Our Rivers campaign which raised discretionary funding to support partnership coordination and fundraising. With support from The Nature Conservancy Utah and the Walton Family Foundation, REW has assisted with beetle

monitoring efforts as well as geodatabase and monitoring development. Most recently, REW provided coordination support to SURP in partnership with Rim-to-Rim Restoration.

Watershed Plan & Description of Work to be Accomplished

In 2007 SURP? completed a Woody Invasives Management Plan with the support of twenty agencies, non-profit organizations, and individuals. In 2018 the group agreed that rather than redrafting another plan for revegetation actions along this reach of river it would be more useful to ensure tools are available to all collaborators including:

- Rasmussen and Shafroth's *Conservation planning for the Colorado River in Utah* (2016) available from: https://pubs.er.usgs.gov/publication/70180405;
- A database of legacy and existing projects;
- A site reassessment tool to evaluate site conditions on restoration areas;
- Monitoring data from beetle and vegetation monitoring efforts.

Funding

SURP is a grassroots effort with many people volunteering their time and agencies and entities providing in-kind services. A substantial funding source for on the ground restoration is Utah's Watershed Restoration Initiative, a partnership-driven effort to conserve, restore, and manage ecosystems in priority areas across the state.

Current Status

SURP is an active partnership and meets two times per year. Usually, one of these meetings is a site visit or field trip. The core team also meets as needed throughout the year. They are currently on Phase 5 of their collaborative WRI project, which has a focus on monitoring and maintenance of the work they have already accomplished in previous years. Rim-to-Rim Restoration is a non-profit organization that coordinates the Southeast Utah Riparian Partnership.

Virgin River Coalition

Background

The Virgin River Coalition (VRC) consists of an assemblage of private and public entities working together to develop and implement a comprehensive approach toward the conservation and restoration of a healthy Lower Virgin River for people and nature in Nevada and Arizona.

In 2008, with funding from the U.S. Bureau of Land Management and the Southern Nevada Water Authority to support facilitation of meetings, workshops and symposiums, the Virgin River Conservation Partnership (VRCP) convened and provided a forum for stakeholders in the Lower Virgin River Watershed to share information about resource conservation efforts in the region. Shortly thereafter, the partnership engaged the Army Corps of Engineers to assess resource related watershed issues and to develop a strategic plan to further guide conservation projects. This planning process stalled, but the Partnership continued to meet, coordinate, and share information. The need for a planning document to guide conservation efforts in the watershed became more apparent with each passing year. In 2015, the Partnership identified a funding source suitable to support planning efforts, namely the Tamarisk Coalition's (now RiversEdge West) Restore Our Rivers Campaign.

In February 2017, the Lower Virgin River Integrated Watershed Planning Committee (Committee) convened and watershed planning efforts began with assistance from The Nature Conservancy (TNC), and the support of two consulting firms: Deborah Campbell – Deborah Campbell and Associates and Rob Sutter – Enduring Conservation Outcomes. Subsequently, Tamarisk Coalition approved the use of Restore Our Rivers funding to support planning efforts by the Committee.

The Committee had four focused and interactive working sessions in late 2017 and early in 2018 to develop the content of the watershed plan. Participants included a broad cross-section of community and conservation interests. In April 2019, an Integrated Watershed Management Plan for the Lower Virgin River was completed. The document outlines the key issue areas affecting this stretch of river and provides an action plan and governance structure for tackling these issues. Completion of the plan established the Virgin River Coalition.

Goals

The purpose of the VRC is to develop and initiate implementation of a cooperative, broad-based, integrated watershed plan that will improve the human benefits and ecological health of the Virgin River for future generations of residents, businesses, recreational users, farmers, and ranchers.

The vision of the VRC isa thriving Lower Virgin River watershed that provides multiple benefits for people and nature, maintained, and restored through public and private collaboration, from now and into the future.

The mission of the VRC is to develop strategies, identify partnerships, facilitate implementation, and evaluate progress to improve the human values and ecological health of the Virgin River for future generations of residents, businesses, recreational users, farmers, and ranchers.

Participants (past and present)

- Agricultural Users
- Arizona Game and Fish
- Bureau of Land Management
    - Arizona
    - Nevada
- City of Mesquite
- Clark County Desert Conservation Program
- Community Members
- Friends of Gold Butte
- Kokopelli ATV Club
- National Park Service
- Nevada Division of Environmental Protection
- Nevada Department of Wildlife
- Partners in Conservation
- RiversEdge West (formerly Tamarisk Coalition)
- The Nature Conservancy Nevada
- The Nature Conservancy Utah
- US Fish and Wildlife Service, Arizona
- US Fish and Wildlife Service, Nevada
- US Geological Survey
- Virgin Valley Water District

River Stressors

The Virgin River originates in the mountains of southwest Utah, flows through the Mojave Desert of Arizona and Nevada, and eventually empties into Lake Mead. The river supports the water and recreation needs of many communities, including the cities of Mesquite and St. George, whose populations have seen significant growth in the past decades.

The river and riparian corridor are also home for many plant and animal species including several federally listed and state protected endangered fish and bird species. The Virgin River chub (*Gila seminude*) and the woundfin (*Plagopterus argentissimus*) are listed as endangered under the Endangered Species Act, and the Virgin River spinedace (*Lepidomeda mollispinus*) is petitioned for listing.

One of the threats that the river is facing is a reduction in base-flow due to diversions for irrigation, domestic and municipal water supply, as well, as reduced snowmelt and precipitation. The reduction in base-flow directly contributes to higher water temperatures, which can increase mortality, reduced reproductive success, restrict connectivity, and favor non-native species. Behavior of native fish is altered above 28 C (82.4 F) and survival is reduced above 31 C (87.8 F). During the summer months the Virgin River stream flow temperatures frequently exceed the upper behavioral and critical thermal ranges that native fish can use for reproduction and survival. Thermal exceedances exist throughout the extent of the Virgin River, but especially from the Utah-Arizona state lines downstream. This threat, coupled with the presence of non-native fish species (predominantly red shiner (*Cypernella lutrensis*) that outcompete native fish under normal and high-water temperatures) and the loss of floodplain aquatic habitat (predominantly caused by the non-native tamarisk (*Tamarix spp.)*

Watershed Plan & Description of Work to be Accomplished

The twenty strategies identified in the plan are organized under seven strategic themes. The goals and strategies for the strategic themes are summarized below.

- Recreation: The goal for recreation is a comprehensive watershed-wide recreation system, for both non-motorized and motorized use, that educates users on the natural and human history of the Lower Virgin River watershed and responsible OHV and hiking use. The strategies identified include developing a vision for the recreation system, assisting the City of Mesquite in an update of the Plan citywide recreation plan, facilitating the content and dissemination of information on recreational opportunities in the watershed, and completing a watershed-wide recreation system plan. Recently, the Recreation Working Group completed criteria for the selection of recreation projects, with assistance of the NPS Rivers, Trails and Conservation Assistance Program, and participated in projects to build staging areas for regional trails, signage along ATV trails, and a map of ATV trials north of Mesquite.
- Water Management: The goal for water management is to increase the flexibility and efficiency of water management to meet current and future needs of water users while minimizing negative impacts to the river system. Strategies focus on identifying approaches to increase the flexibility of water management.
- Native Fish: The goal is to restore sustainable native fish populations in the Virgin River from the Utah-Arizona line to the Bunkerville Irrigation Diversion in Mesquite, Nevada to conditions where non-native red shiner have completely eradicated, and other non-native fish have been eradicated or reduced to a level where native species numerically dominate the assemblage of fish in all fish samples with evidence of multiple age-classes of native fish species. The strategies are consistent with and complimentary to ongoing native fish restoration efforts by state and federal wildlife agencies and conservation plans, and include implementing annual fish monitoring to assess status of native fish and effectiveness of barriers, developing a temporal and spatial understanding of the relationship between low flows and high water temperatures

that are damaging to native fish species, and developing and initiating implementation of a comprehensive plan for establishing fish barriers and removing non-native fish. The Native Fish Working Group will be updated the conservation plan for native species in late 2021.

- Riparian Habitat: The goal is to increase the spatial extent of native plant diversity and cover by increasing the area controlled for non-native vegetation. The goal hypothesizes that the removal of non-native vegetation will help restore natural floodplain processes and channel morphology. Strategies will support a demonstration project to gain community support, assist in the implementation of the U.S. Bureau of Land Management/National Park Service Riparian Restoration Plan for the Lower Virgin River, and maintain and improve habitat for Species of Greatest Conservation Need through prioritization of sites and advocating for best restoration practices. Several parcels have been cleared of non-native species in 2021.
- Communication and Outreach: The goal is that key stakeholders and a significant portion of the local community will know the purpose of the Virgin River Coalition and the actions and the products it has and plans to produce. Strategies will be to produce several immediate communication and presentation products and develop a communication, input, and participation plan to increase citizen understanding and involvement.
- Fundraising: The goal is to fundraise to support the ongoing coordination and project implementation as outlined on by an annual budget. It is expected that cost of ongoing coordination, planning and fundraising activities will amount to $50,000 - $75,000 a year. Project implementation costs are expected to vary significantly by project and year but are expected to be around $100,000. The VRC commits to funding the work outlined in the plan through direct funding or matching other monies.
- Operations: The goal is to maintain and strengthen participation in the Coalition, with strategies to continue meetings, increase participation, ensure progress on strategies, and establish a data repository.

Funding

The VRCP? has received funding and in-kind contributions from:

- Nevada Division of Environmental Protection, Bureau of Water Quality Planning
- Clark County Desert Conservation Program
- Enterprise Foundation
- Bureau of Land Management
- City of Mesquite
- RiversEdge West, Restore Our Rivers Fund
- The Nature Conservancy
- Nevada Department of Wildlife
- Kokopelli ATV Club
- Deborah Campbell and Associates

Current Status

The VRCP has created a much needed and valued means for collaborating on the protection and restoration of the Virgin River. The VRCP retains the services of the facilitator and planner that oversaw the IWMP process and recently hired a VRCP Coordinator who is responsible for representing the VRCP locally, engaging the local community in its work, as well as helping to maintain communication across the various committees. The Coordinator has successfully hosted a river-clean up event, is planning a lecture series, and is spearheading the creation of a partnership webpage.

The Steering Committee meets regularly and continues to work to strategize project implementation, partner coordination, and resource development. Working Groups meet to identify project opportunities.

White River Partnership

Website: https://riversedgewest.org/white-river-partnership

Background

The White River Partnership (WRP) consists of a collection of private and public entities working together to develop and implement a comprehensive approach toward the conservation of a healthy riparian ecosystem for the White River and tributaries in both Colorado and Utah. The WRP held its first meeting in 2016 in Utah. From 2019 through 2021, WRP partners met to develop a memorandum of understanding and riparian restoration framework for the White River.

The focus area of the White River Partnership is the main stem and tributaries of the White River that have been impacted by tamarisk and Russian olive. The original focus area of the WRP was the Lower White River Watershed (from Yellow Creek confluence in Colorado to the Green River confluence in Utah); the focus area was expanded to east of Meeker, Colorado to encompass the entirety of tamarisk and Russian olive infestations in the White River basin.

The White River is important to the agricultural and ranching communities of northwest Colorado and northeast Utah and is also critical to the survival of important terrestrial and aquatic wildlife, including endangered and conservation priority fish species as well as deer and elk.

Goals

Goals of the WRP are:

- Ecological/Geomorphic: A healthy White River with a functioning riparian area and in-stream habitat characterized by a resilient community of native and/or desirable vegetation that supports wildlife and fish habitat needs
- Social: A restoration program along the White River that educates youth and local community about natural resource management and provides opportunities for employment and career advancement in related fields
- Cultural: A White River with robust cultural resources and adequate protections in place for these resources
- Management: An established process for ensuring ongoing restoration, maintenance, and stewardship of the river and the sharing of lessons learned with other practitioners.
- Economic: A restored White River that offers opportunities for improved recreation, sustainable agricultural production and ranching, employment for local contractors and youth conservation corps, and is mindful of other local industry's needs

Participants (past and present)

- Bureau of Land Management:
  - Northwest Colorado District
  - Utah Aquatic Habitat Management Program
  - Vernal Field Office
  - White River Field Office
- Canyon Country Discovery Center

- Colorado Northwest Community College
- Colorado Parks and Wildlife
- Colorado Water Conservation Board
- Natural Resources Conservation Service
- Community members
- Rio Blanco County Weed and Pest Department
- RiversEdge West
- State of Utah School and Institutional Trust Lands Administration
- Town of Meeker, CO
- Town of Rangely, CO
- Uintah County, UT
- United States Bureau of Reclamation
- United States Fish and Wildlife Service
- Utah Conservation Corps
- Utah Division of Wildlife Resources
- Utah State University
- Western Colorado Conservation Corps
- White River Alliance
- White River and Douglas Creek Conservation District

Watershed Plan & Description of Work to be Accomplished

REW, in collaboration with many White River partners, developed a plan for restoring the riparian areas of the White River that are impacted by tamarisk and Russian olive infestations. The plan highlights the common goals and approaches of entities and landowners on the White River, provides a framework for guiding future restoration implementation, and identifies initial priority restoration sites.

Riparian restoration efforts are also by guided by the following plans:

- Utah State University's Conservation, Restoration and Monitoring Plan for the White River (in development)
- The White River and Douglas Creek Conservation Districts' Integrated Water Initiative

Work to be accomplished:

- Continue and expand restoration implementation
- Refine site selection criteria
- Continue to develop partnership structure, such as a steering committee
- Coordinate outreach such as volunteer events and workshops

Funding

The WRP has received funding from:

- Bureau of Reclamation
- Bureau of Land Management
- Colorado Water Conservation Board
- George S. and Dolores Dore Eccles Foundation
- LT and JT Dee Foundation
- Utah Watershed Restoration Initiative

Current Status

RiversEdge West coordinates the WRP, which has been meeting regularly since 2017. In Utah, project work is ongoing and focuses on improving fish habitat through maintaining and reestablishing the river's naturally migrating river channel. Initial WRP restoration work in Colorado is scheduled to begin in April 2022.

Appendix D: Cross-Watershed Network (XWN) Lessons Learned

Cross Watershed Network (XWN) was created by RiversEdge West to address a common need expressed by practitioners to increase collaboration among peers working in watersheds throughout the Southwest U.S. Founding members shared a strong desire to overcome geographic boundaries and more easily find and connect with peers working on similar issues. The network began by identifying strategies that would most successfully facilitate peer-to-peer exchange of information (on-the-ground lessons learned, technical approaches to restoration, relevant academic research, etc.) across place-based watershed partnerships.

XWN is unique to the partnerships referenced throughout this study – instead of a group work on a designated landscape together, it was a network that worked across partnerships. It was a valuable tool for sharing information across practitioners and geographies and deserves acknowledgement in this report.

A thorough review of XWN and lessons learned from the beginning to the end of XWN can be found here.

Cross Watershed Network: Lessons for Peer-Learning

Introduction

The Cross Watershed Network (XWN) began as a regional network that connected watershed practitioners across watersheds in the Southwest U.S. through information sharing, collective capacity building, and collaboration. Members of the XWN Steering Committee wrote this case study to provide "lessons learned" for others who are setting up and implementing communities of practice and peer-learning networks. The study outlines XWN's vision and accomplishments, approach to peer-learning and managing the network, and recommendations for future efforts.

A Peer-Learning Network to Advance Watershed Health

XWN was created to address a common need expressed by practitioners to increase collaboration among peers working in watersheds throughout the Southwest U.S. Founding members shared a strong desire to overcome geographic boundaries and more easily find and connect with peers working on similar issues. The network began by identifying strategies that would most successfully facilitate peer-to-peer exchange of information (on-the-ground lessons learned, technical approaches to restoration, relevant academic research, etc.) across place-based watershed partnerships.

At the time, active natural resource peer-networks were largely focused on land trusts, conservation corps and topics such as water quality, invasive species, and wildfire. There were few existing networks in the Southwest focused on place-based watershed partnerships and organizations. To meet this peer-to-peer need, core partners building the network collaboratively developed the XWN mission, vision, and geographic scope (through participant surveys, workshop discussions, and Steering Committee strategic planning).

- Mission: To help watershed practitioners across the Southwest maximize their effectiveness through information sharing, collective capacity building, and collaboration.
- Vision: Healthy watersheds supported by a vibrant network of practitioners collaborating across boundaries.

In its eight years as an active network (2012-2020), XWN successfully engaged over 500 practitioners from agencies, organizations, universities, and consulting groups working on ecological restoration, conservation, and related watershed management efforts. Participants represented five states: AZ, CO, NM, NV, and UT. Many initially joined the network through annual workshops; others were targeted for recruitment by Steering Committee members. Over the past eight years, XWN has facilitated 25 place-based peer-learning events and additional virtual engagement opportunities across the Southwest and achieved the following outcomes for practitioners, their organizations, and stakeholders:

- Fostered many new peer-to-peer connections, learning and information exchanges
- Developed long-term relationships and collaboratives
- Institutionalized peer learning approaches within and among organizations
- Tested virtual engagement methods
- Bolstered interest in creating state-based networks such as the Arizona XWN
- Guided and informed the development of the Western Collaborative Conservation Network (WCCN)

Key Events:

- Peer-to-peer exchange events:
- Six multi-day peer learning regional workshops:
- Verde Watershed Restoration Coalition (2013 - AZ)
- Escalante River Watershed Partnership (2014 - UT)
- Arkansas River Watershed Invasive Plants Partnership (2015 - CO)
- Gila Watershed Partnership (2017 - AZ)
- Save Our Bosque Task Force (2018 - NM)
- Virgin River Conservation Partnership (2019 – NV

Eight cross watershed visits:

- Colorado Riverfront Project (CO) and Verde Front (AZ) on the Colorado River in Grand Junction, CO (2014)
- Desert Rivers Collaborative (CO) and Southeast Utah Riparian Partnership (UT) on the Colorado River in Grand Junction, CO (2015)
- Desert Rivers Collaborative (CO) and Southeast Utah Riparian Partnership (UT) on the Colorado River in Cisco, Utah (2016)
- Canadian and Purgatoire Watersheds (CO/NM) at DeHaven Ranch in Roy, New Mexico (2016)
- San Rafael River Restoration Project in Green River, Utah (2016)
- Western Slope Conservation Center, Colorado Canyons Association and River Restoration Adventures for Tomorrow on the Gunnison River in Delta, Colorado (2016)
- Altar Valley Conservation Alliance and the Malpai Borderlands Group at Elkhorn Ranch in Arizona (2016)
- Middle Colorado Watershed Council along the Colorado River from Silt to De Beque, Colorado (2018)
- Ten topical learning sessions held across the Southwest

Peer-Learning Approach

XWN's approach has emphasized both peer-learning and the development of a community of practice, both proven strategies to achieve highly effective learning outcomes around sharing knowledge and building learning-based relationships. Peer-to-peer exchanges were supported by both in-person and virtual methods to help practitioners more easily find, connect, and learn from each other with an intentional focus on positioning practitioners to share their own knowledge and experiences. The focus of learning events was determined through participant surveys in order to tailor conference, workshop and cross visit agendas to current participant interests and needs. Participant interests focused primarily on watershed restoration, collaboration and engagement, fundraising, and other common challenges. Workshop design fostered active peer-to-peer problem solving and learning, constructive connections, and relationship building.

In-Person Peer-Learning Strategies

Workshops

The centerpiece of XWN's strategy was the convening of annual in-person peer-to-peer exchange workshops. The first workshop, held in 2013 in the Verde River watershed in central Arizona, was co-organized with the local watershed partnership, the Verde Watershed Restoration Coalition. XWN drew on its Steering Committee members to design and facilitate the inaugural workshops, using a highly participatory approach to foster peer-to-peer exchange. Workshops in subsequent years adapted this design and rotated states. Smaller, topic-specific workshops were also organized and often incorporated or added onto an existing conference or event. Workshops were well attended and consistently received highly positive evaluations from participants.

The annual peer-to-peer exchange workshop approach followed these general steps:

1) Select state and local watershed partners to co-host the next workshop
2) Convene a planning team comprised of XWN and co-host representatives
3) Survey the larger list of XWN participants about their challenges and interests in the coming year to guide the design of the workshop agenda
4) Develop the agenda, tailored to best address the needs of participants
5) Announce and open workshop registration (with a small registration fee, $25-40, to offset cost and help determine number of attendees, accommodations, etc.)
6) Secure co-sponsors to help fund the workshop, including providing travel scholarships.
7) Organize the field visit portion - half or full day tour of the host watershed to both learn about their programs as well as engage experienced participants in sharing their own lessons and problem-solving ideas to address local challenges.
8) Convene the workshop, with key agenda elements including: a set of world cafe sessions on priority topics, with facilitated tables/breakouts on key sub-topics, short presentations by experienced practitioners for each to set the stage, and an open space session to connect practitioners for practical problem-solving individual issues, a field visit, and networking and socializing time during longer breaks and one evening.

Benefits of the workshops and success factors:

- Built an active community of practitioners across watersheds

- Provided many in-depth peer-to-peer sharing opportunities that were highly interactive, and many site based, versus a conference of back-to-back presentations
- Valued a wide breadth of knowledge and not just traditional experts
- Engaged people in the field, exchanging experiences and building community
- Rotated which state hosted the workshop enabling new participants to engage, as well as provided on the ground experience in diverse watershed settings across the Southwest
- Design of a successful workshop methodology
- Outreach and messaging with a clear description/outcome
- Consistent use of and learning from post-workshop evaluations following each workshop
- Value of pre-workshop participant survey to guide agenda development tailored to meet the interests and needs of participants
- Use of volunteer professional facilitators to design and facilitate the workshops
- Challenges of the workshops:
- Lack of time to go into greater depth in each of the topics, given the breadth of participants' high priority interests
- Limited staff/facilitation capacity to synthesize and share a compiled set of lessons and methods
- Time and funding for participants to travel to other states

Cross Visits

Cross visits are focused, field-based exchanges between two or more groups, usually hosted at the site of the more established group. These have proved to be an effective way to foster more in-depth, targeted peer-to-peer learning and action on specific topics. These exchanges can be simple or more complex, and include a field component, a joint agenda, time for reflection, team building exercises, and planning next steps.

Over the past several decades, cross visits have stimulated the formation of many of the current collaboratives and initiatives in the West and beyond. Given the perceived effectiveness of these cross visits, and the need for more in-depth work on specific topics in XWN workshops, XWN decided to encourage additional cross visits on important issues facing watershed groups through a mini-grants incentive program. This opportunity stimulated numerous XWN partners self-organizing to submit proposals for matching funds to convene their own targeted learning exchanges. The application itself also served as a way for watershed partners to learn about how to organize a successful cross visit (in contrast to organizing a meeting or workshop). Continuing the XWN cross visit program would have been a high priority had additional funding been secured.

Virtual Peer-Learning Strategies

Website/Practitioner Directory

Another priority was to establish a website for practitioners and interested partners to access network information, upcoming events and workshops, and a way to connect virtually outside of in-person gatherings. A website with a practitioner directory function was proposed and a survey asked practitioners if they would use such a tool. With funding available for a website, and a high level of practitioner interest in a web-based search and connecting tool (similar to LinkedIn), the Steering Committee engaged a web designer to develop the XWN website and directory.

An additional strategy, called Linkers, was partially designed to provide a more personal alternative to the directory. Practitioners who were natural networkers would be asked to volunteer as "linkers" to help connect people with a relevant resource person based on the nature of their inquiry. While potentially useful in theory, creating an online service proved challenging; from finding willing volunteers (outreach time), to a cumbersome sign-up process (a long set of questions to vet and create a profile), to efficiently managing and tracking the match connections. As a result, the online match program did not realize its potential and was discontinued.

XWN was ahead of its time in a few ways. First, the vision for the virtual connecting aspect was there but the tools to implement it were not yet fully developed. The vision to have a social media-like experience for practitioners to find each other, aside from existing social media networks like Facebook or LinkedIn, was not readily available. Many government partners were also prohibited from accessing social networking platforms. However, eight years later, and accelerated by the coronavirus pandemic, virtual platforms now exist to serve more targeted networking functions (e.g., Mobilize).

Second, virtual learning was not yet common practice or easily accessed by many watershed practitioners, especially those in more rural settings. The COVID-19 pandemic has catalyzed a cultural movement to embrace virtual networking and learning. The technology and software are catching up to make these experiences interactive and valuable, and the availability of broadband and high-speed internet is becoming more widespread.

Managing the Network

Steering Committee and Staffing

A Steering Committee of XWN members was established to design and manage the network. The Steering Committee contributed significant volunteer time to XWN's primary programs and were assisted by one paid staff position and intermittent contracted support. RiversEdge West served as the primary fiscal agent and employer for staff and contractors.

Early on, there was grant funding to support Steering Committee members on a contract basis to provide expertise, staffing, and facilitation services. The Steering Committee also managed the staff position so that their priorities were driven by XWN rather than REW. This shared staffing approach allowed the group to utilize each other's strengths and spread the workload.

As is common when a coordinator or other support position is hired to take on tasks and responsibilities, a volunteer board often reduces its active involvement in program management. Over time the Steering Committee naturally migrated to relying more on the coordinator and REW, increasingly operating in more of an undefined, volunteer capacity. This shift put additional pressure on the coordinator to fulfill growing expectations and on REW to ensure the coordinator was well supervised and fiscally supported.

Though network coordination ebbed and flowed, Steering Committee participation and commitment was consistent throughout the lifespan of the XWN. Its composition include: place-based watershed partnership leaders grounded in the issues and topics of focus, professional facilitators whose collaboration expertise helped design both the network and peer-to-peer learning events, and regional support organizations with watershed, river and restoration expertise.

Support Organizations

- Deborah Campbell and Associates, LLC
- RiversEdge West
- River Management Society
- Southwest Decision Resources
- University of Utah- Environmental Dispute Resolution Program
- Utah Conservation Corps

Partnerships

- Dolores River Restoration Partnership
- Escalante River Watershed Partnership
- Gila Watershed Partnership of Arizona
- Verde Watershed Restoration Coalition
- Virgin River Conservation Partnership

Funding

The XWN annual budget ranged from $95,000 to $138,000 and relied on state and foundation grant funding, along with sponsorships for workshops. The main challenge with most state and foundation funding was aligning with their mission and geographic scope. When XWN was able to appeal to funders to support resource practitioners with a specific geographical or topical focus, funding requests were often successful. This success was apparent in the funding of annual workshops which provided direct benefit to certain regions, while support for virtual collaboration tools, for example, was more difficult to secure

The overall coordination of XWN was most challenging to fund. Some of XWN's early funders, who were enthused about the innovative and creative mission, later experienced donor fatigue and shifting priorities. In the natural resources sector, there is a small pool of regional funders. This made it challenging to secure sustained funding for XWN as a regional network.

Catalyzing Other Networks

As with many initiatives over time, it is important to remain nimble and relevant. As flexible as XWN was, the Network was unable to weather both decreasing funding and turnover of staff and Steering Committee members. XWN evolved to provide a tool kit and blueprint for other networks and entities looking to create collaborative networks for watershed and community-based conservation issues, and to increase the effectiveness of on-the-ground program activities.

XWN, for example, has stimulated and supported the development of three peer-learning networks, all of which have active involvement of several members of the XWN Steering Committee:

- Arizona XWN, a state-based network. This mid-scale approach (between local and regional watersheds) increases both funding opportunities and engagement that are difficult to obtain at a multi-state, regional level. State-based networks can also take advantage of the continuity within its boundaries and the increased likelihood of local practitioner participation in workshops. While every state is different, this smaller scale approach has proven to be effective in Arizona.
- Southwest Collaborative Support Network (SWCSN), a peer-to-peer regional network of facilitators, coordinators, and leaders of place-based collaboratives who share methods, practical tools, and lessons, and collaborate to solve common challenges.

- Western Collaborative Conservation Network (WCCN), a regional network supporting and linking community-based collaborative conservation efforts in forests, grasslands and watersheds. This network serves as an umbrella for smaller, state and place-based networks and collaboratives.

Lessons Learned in Peer-Learning

Peer-to-peer learning was a highly effective and valuable process. Workshop evaluations and testimonials consistently emphasized the value of peer-learning among practitioners. They expressed appreciation for targeted problem solving, meaningful interactions, and ongoing engagement and relationship building for the benefit of their work. While this was successful, there is always room to grow.

The following lessons learned by XWN could be valuable to other networks as they are established or evolve over time:

- Establish tangible and objective indicators of the network's impact: While it was evident that practitioners found value in the network and various workshops, what was not as evident is the actual on-the-ground impact. A large focus was put on the process of collaboration however, having some established metrics to define success would have been helpful for both continued participation as well as from a fundraising perspective. Success was defined by anecdotal evidence.
- Consider sub-regions (e.g., SW Colorado) or state-level convening: The regional scale of convening across five states proved to be challenging. Participants mostly travelled to nearby events so each workshop drew more people from the host state. Alternating states provided a way to reach deeper into that state but travel distance meant that the regional network could not fully engage its membership (in person) every year. Spending more time strategically at a more local scale would have been helpful in cultivating more participation, but this approach can be more resource intensive. The Arizona XWN has been successful at engaging important new partners with a state level focus (e.g., state agencies) as well as partners who would more readily participate within their state but seldom had the ability to travel out of state for workshops.
- The importance of defining workshop outcomes up front: The peer-to-peer workshops were well attended due to every workshop having an established topical focus and intended outcomes. This guided people on whether they were truly interested in participating. Active participants were thus more fully engaged and vested in the defined outcomes.
- Design content to be more topic-focused: XWN workshops focused on broad, overarching issues (e.g., watershed health) versus more specific topics (e.g., riparian restoration). This approach was useful for engaging new participants and conveying the integrated nature of watershed issues. It was challenging, however, to simultaneously address multiple topics with sufficient depth. Pre-surveys and methods like the world café were extremely helpful but these watershed-wide events inherently meant less time could be devoted to each topic. Cross visits were extremely helpful for this more in-depth and targeted engagement that resulted in greater practical usefulness to participants
- Provide a clear message behind the methods: The XWN intentionally embraced peer-to-peer learning and variations of this learning model to be as effective as possible. Peer-to-peer

learning is generally understood, however, clearer messaging about how this approach generates intended benefits and outcomes, as well as effectiveness metrics, would have been beneficial to participants.

- Use a pilot approach to test tools: A large upfront investment supported the design and launch of the website and practitioner directory, but it may have been wiser to test each tool and receive user input before launching the site (e.g., a social media platform). User input in the website development stage would have helped the XWN team make better informed decisions to support virtual learning and networking. Effective online linking, searching and participatory database functionality often needs more than a web designer's skill set.
- Use financial incentives to help with participation: XWN was successful in securing grants to incentivize participation in cross visits and workshops. Scholarships and matching funds were always appreciated by participants. This funding helped engage people who would not have been able to afford travel or time off to participate and helped diversify and expand participation.

Lessons Learned in Managing the Network

One of the most challenging aspects of XWN was managing the network. The Steering Committee and staff were committed, capable, and invested significant time in strategic planning and evaluation, which were critical to shaping and growing the network. In hindsight, some structural components, such as continuous role clarification and adaptation, improved tracking systems, and a stronger fundraising effort, would have been helpful in sustaining the XWN and its activities.

- Align and evolve leadership with network needs and scope: The needs of the network changed over time; however, the capabilities and expertise of the Steering Committee did not parallel changing needs. The Steering Committee focused on its expertise, e.g., leading peer-learning, workshop design and facilitation, and provided technical expertise on topics such as riparian restoration and river management. The host nonprofit, RiversEdge West, as a relatively small organization with a discrete focus on riparian restoration, had difficulty at times aligning with the broad XWN watershed-focused mission. XWN's longevity may have been better positioned with the recruitment of a fiscal sponsor/host organization with more capacity or a broader mission (e.g., a larger NGO or university). In addition, a more diverse Steering Committee membership with fundraising expertise, broader networks, and technical expertise on other topics of interest to the network would have been helpful as well.
- Clarify and promote the role of the host organization: REW was the fiscal sponsor for the network, but also provided other critical resources such as mentorship for the coordinator, continuity across organizations, Steering Committee cultivation, a practical perspective on day-to-day operations, and existing relationships with funders. This support is critical when organizing a collaborative across a broad geographic scope. It is also important that the host organization assign and support at least one full time staff member or a team in the coordinating role.
- Define roles and a plan for succession: Leadership and staffing is often a moving target as organizations evolve, with staff turnover and shifts in focus seen as contributing factors. XWN saw a rapid change in coordinator responsibilities and in overall staffing. It would have been prudent to frequently evaluate the scope of the coordinator's role as the Steering Committee's

active engagement decreased. In addition, it would have been helpful to redefine the roles of the Steering Committee as some members went from receiving some grant funding for their participation, to having to volunteer their time. Reassessment and reorganization would have helped the Steering Committee members better align capabilities and time commitments to navigate turnover.

- Coordinator or contracted facilitator: Contracting professional facilitation for the overall network, workshops, and initiatives, could be a successful and viable strategy for a network given the level of expertise needed and the need for consistent, long-term support for coordination with the host organization and assigned staff and interns.
- Establish and maintain a project and document management system: The Steering Committee was consistently in touch with practitioners through workshop evaluations and surveys which provided understanding of successes and feedback for improving the network. A consistent system for storing survey or evaluation data for efficient reporting would be important, as well as a spreadsheet with all metrics for tracking progress and preparing annual reports. XWN chose Google Drive for document storage and sharing which worked relatively well.
- Budget appropriately for technology: All websites require time and funding for ongoing marketing, maintenance, security upgrades, and content editing. Technology is always changing and to keep up, an active website needs a dedicated person, firm or organization to provide the necessary oversight. This could have been improved by building an adequate budget for the hard costs and articulating web responsibilities appropriately in the XWN Coordinator's job description.
- Take responsibility for setting fundraising goals and securing financial resources: It is important to develop a unified approach and understanding about fundraising and its associated challenges. Leveraging fundraising networks to garner sponsors and write grants takes time and capacity. The XWN could have benefited from the implementation of a sustainable funding stream such as a cost-share or membership model. In a cost-share model, key partners or Steering Committee members share the costs and responsibilities for fundraising. This creates a unified, vested interest in the ongoing success of the network. In the membership model, all participants, stakeholders, and beneficiaries, pay an annual membership fee. These ideas were discussed but not resolved given disagreement about charging for services or providing them free of charge. As a result, XWN was unable to secure sustainable revenue through fees, dues, subscriptions, or sustained grant support.
- Need for a champion: All great ideas need someone driving that idea forward, providing energy, expertise, and a drive to get things done and think outside the box. A champion sees a need or opportunity and leads the charge toward reality and sustainability.

Conclusion

From a widely expressed need, to a promising concept, to an inspiring and useful reality, XWN developed a successful approach to convening watershed practitioners across the Southwest through information sharing, collective capacity building, and collaboration. The network served as a community of practice and professional space for practitioners to engage in peer-to-peer learning and increase individual and collective effectiveness in the field. Creating connections across geographic, jurisdictional and disciplinary boundaries, instilling a philosophy of collaboration, and facilitating relevant and

interactive learning, XWN's successes and challenges as an innovative peer-to-peer network will hopefully continue to provide lessons and insights to similar future efforts.

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- Stacy Beaugh, Shannon Wadas, Rusty Lloyd, Daniel Oppenheimer, Season Martin (RiversEdge West, formerly Tamarisk Coalition)

Coordinator/Interns

- Lindsay Murdoch, Rae Robinson (at RiversEdge West)

Authors

Stacy Beaugh

Tahnee Robertson

Shannon Wadas

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