



THE ATLAS OF COLLABORATIVE CONSERVATION IN COLORADO



WARNER COLLEGE
OF NATURAL RESOURCES
COLORADO STATE UNIVERSITY

CENTER FOR COLLABORATIVE CONSERVATION

WELCOME TO
COLORFUL
COLORADO





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Acknowledgements

We gratefully acknowledge all who have helped shape this project and report by generously providing information and support. The following individuals contributed technical support and editing: Rich Alper, Catherine Craft, Rachel Eisenstadt, Trevor Even, Louisa Gibson, Kevin Jablonski, Heather Knight, Sophia Lynn, Sarah McCarthy, Tim Reader, Kim Skylander and Sandi Good. The following organizations provided valuable information and expertise: CitSci.org, Colorado Forest Restoration Institute, Colorado Parks & Wildlife, Colorado State University's Geospatial Centroid, CSU's Colorado Water Institute, Colorado Watershed Assembly, and the Colorado Water Conservation Board. The following collaboratives provided interviews, allowed us to visit project sites and/or sit in on meetings: Animas Watershed Partnership, Barr Lake and Milton Reservoir Watershed Association, Big Thompson Watershed Coalition, Big Thompson Watershed Forum, Chama Peak Land Alliance, Coalition for the Poudre River Watershed, Coalition for the Upper South Platte, Colorado Renewables and Conservation Collaborative, Culebra Range Community Coalition, Desert Rivers Collaborative, Dolores River Dialogue, Dolores River Restoration Partnership, Gunnison Basin Sage-Grouse Strategic Committee, Gunnison Climate Working Group, Gunnison Sage-Grouse Working Group, High Country Forest Collaborative, Laramie Foothills Project, Little Thompson Watershed Coalition, Mountains to Plains Energy By Design, Northwest Colorado Riparian Restoration Partnership, Owl Mountain Partnership, Peaks to People Water Fund, Rio Grande Watershed Emergency Action Coordination Team, River Protection Workgroup, Roaring Fork Conservancy, San Juan Headwaters Forest Health Partnership, San Juan-Chama Watershed Partnership, South Platte Basin Roundtable, St. Vrain Creek Coalition, Summit County Forest Health Task Force, The Poudre Runs Through It, Upper Colorado River Endangered Fish Recovery Program, Upper South Platte Partnership, and the Watershed Wildfire Protection Group. Finally, we wish to thank all the Colorado collaboratives for the valuable work that they do as well as for providing information through their websites and documents for this study.

Executive Summary

The Atlas of Collaborative Conservation in Colorado charts the landscape of the state's many collaborative conservation initiatives, which are incredibly diverse in form and function. In this report, we compare and contrast the problems and issues collaboratives form to address, the activities they work on together, their founding leadership and members, and how they organize themselves. The report, which is unique in its statewide focus on such a broad range of collaboratives, adds to a growing body of knowledge about how collaboration happens at different scales and in different regions.

We found that Colorado is rich with collaboratives, working on a wide array of issues. Over the last 40 years, more than 180 collaboratives have formed, with at least 157 still active today. They come together to address complex environmental and social issues that one organization or individual cannot address alone. These issues are usually wide-ranging and cross ownership boundaries, like flowing water, wildfires, migrating fish and wildlife, or weed spread. Collaboration is often triggered by government policies associated with these issues (like regulatory threats, funding incentives, or mandates), and also by environmental problems, risks, or crises that impact safety, life, and property. The people responsible for bringing collaboratives together represent individuals, industry, non-government organizations, and government agencies. They can work at the local, state, federal and tribal level, and can be combinations of government and non-government organizations. By working together with different kinds of members, collaboratives harness the power of broad and intersecting networks, pooled brain power and financial resources, and diverse decision-making authority. Together, they are learning and sharing information through monitoring, research and education, planning for change and resilience, developing and piloting innovative conservation tools and technologies, and strengthening relationships across the state of Colorado and beyond.

INTRODUCTION



What is Collaborative Conservation and Why Do We Do it?

We define collaborative conservation as a way of working together, over significant periods of time, to conserve and manage the natural resources that people depend on and care about. People representing government agencies, nonprofits, businesses, or just themselves collaborate by working together to decide how to use and manage land and water, wildlife, forests, and more. Collaboration often means partners pool their resources and create shared goals, processes, and structures to support their new, joint work. Collaborative groups often explore, prioritize, deliberate on, and implement the solutions they have developed together.¹ Collaboration is not the only way to achieve desired conservation goals; other tools include advocacy, litigation, regulatory negotiations, and short-term partnerships. Sometimes these collaboratives are informal coordinating groups, other times they become major nonprofit organizations or governmental task forces.

Collaboration can be particularly useful for addressing problems that:

- Cross ownership boundaries, like wildlife that moves from public to private land (and back),
- Have high levels of uncertainty, missing information, or are viewed differently by participating stakeholders,
- Involve tradeoffs, like balancing the needs of competing people and wildlife,
- Fail to be resolved with other approaches, like litigation.

The promise of collaboration is that it can generate new and creative solutions. It can ensure that solutions to problems are owned by stakeholders and fit local

situations. This occurs because collaboration brings together people with different values who have access to different sources of information, and often people with different levels of power to make decisions.²

Collaboration works better for some problems than others.³ When trust is low, resources are scarce, or problems are complex, collaboration can be critical for generating workable solutions that last. Collaboration can build much needed trust so that diverse stakeholders find common ground to address our most difficult and complex problems. Diverse participants bring different viewpoints and values to collaborative discussions. They also bring different networks of people to build a wider coalition for problem solving. Collaborative groups also can pool financial resources, which are often needed to solve more difficult problems. Collaboration among diverse participants can ensure buy-in to solutions that are less vulnerable to political change and thus more long-lasting. Successful collaboration can also build community spirit and strength, and ensure that participants collaborate more often on new problems in the future.

Collaboration can also be challenging. It is time and resource intensive. The outcomes can vary a lot and are hard to measure. The return on investment in collaboration can take years to become apparent. Difficult problems requiring collaboration are often conflictual and thus participants have to work hard to resolve conflicts and build trust. Not everyone at the table has the same power to make decisions, which has to be recognized and discussed at length in collaboratives. Sometimes collaboratives may create innovative solutions, but if they do not have right people at the table, they may find they lack the authority to implement them.

¹ Emerson & Nabatchi, 2015

² Huxham, 2000

³ Bodin, 2017

Purpose of This Report

In this report, we present findings from a study of collaboratives across that state of Colorado, exploring the following questions:

- How many collaboratives are there, and where are they?
- What issues do collaboratives address?
- How do they define where they work?
- What do they do together?
- When and why do they form?
- Who participates?
- How are they organized?

Each collaborative in Colorado is unique. This report does not describe each one in depth, but rather describes the more general landscape of collaboration in the state, with some examples. We hope this is useful to the people who collaborate on-the-ground to improve the health of Colorado landscapes and rivers, and their supporters who fund collaborative work or make policies that influence collaborative conservation in Colorado.

Information Used in This Report

In order to identify as many collaboratives as possible, we asked members of collaboratives to refer us to groups they knew about. We also gathered information at meetings and conferences and extensively searched for websites, databases, reports, statewide plans, and other documents about collaboratives. We included those groups that met these criteria:

- 1) Groups that include three or more kinds of members, from public agencies, private industry, nonprofit organizations, and/or individuals (categories are described in the section on membership),
- 2) Groups that engage in a sustained process of interaction spanning two or more years,
- 3) Groups that work partly or wholly in Colorado,
- 4) Groups that address problems concerning natural resources, ecosystem health, or conservation,
- 5) Groups with documented information online or in print about their history, purpose, strategies, and membership.

We found 183 active and inactive collaboratives that met the first four criteria, but limited our analysis⁴ to the 123 initiatives that also met the fifth.⁵ We used both information online or in published books and articles. We analyzed this information using content analysis.⁶

⁴ We included all 183 collaboratives in our map and analysis of main environmental issues and year started.

⁵ Our criteria excluded some long-standing partnerships and organizations that do important work through and for collaboration, such as some inter-governmental partnerships. These include government agency partnerships (like the Keep it Clean Partnership), community-based alliances with fewer than three kinds of member affiliations (like the San Juan Citizens Alliance and Friends of the Dillon Ranger District), and “bridging” organizations that foster collaboration by connecting people, resources, and knowledge (like the Colorado Watershed Assembly).

⁶ Content analysis is defined as “a research technique for making replicable and valid inferences from texts...to the contexts of their use” (Krippendorff, 2004, p. 18). We analyzed hundreds of sources to generate these data, primarily: strategic plans, resource management plans, bylaws/charters, member rosters, maps, reports, websites, published case studies, blog posts and news articles. We then used nonparametric statistical techniques for analysis (chi-square analyses, Kruskal-Wallis H tests, and Mann-Whitney U tests). See greater detail in Huayhuaca (2019).

COLLABORATIVE CONSERVATION IN COLORADO



How Many Collaboratives Are There, and Where Are They?

The [map](#)⁷ below (Fig. 1) shows 183 points representing each collaborative we found in Colorado. The location of each point is where each collaborative has their main project sites, meetings, headquarters, or mailing addresses, depending on the information available.⁸ We grouped and color-coded collaboratives by their main environmental issue.

It is clear that there are more points clustered along the densely populated eastern slope of the Rocky Mountains (the Front Range), with many located in the southern part of the western slope, and fewer in northwest Colorado. There are very few points in the eastern plains. As one would expect, there are generally more collaboratives where there are more people and thus support organizations and partners for collaboration. Unexpectedly, southwestern Colorado has more collaboratives than one would expect with its low population.

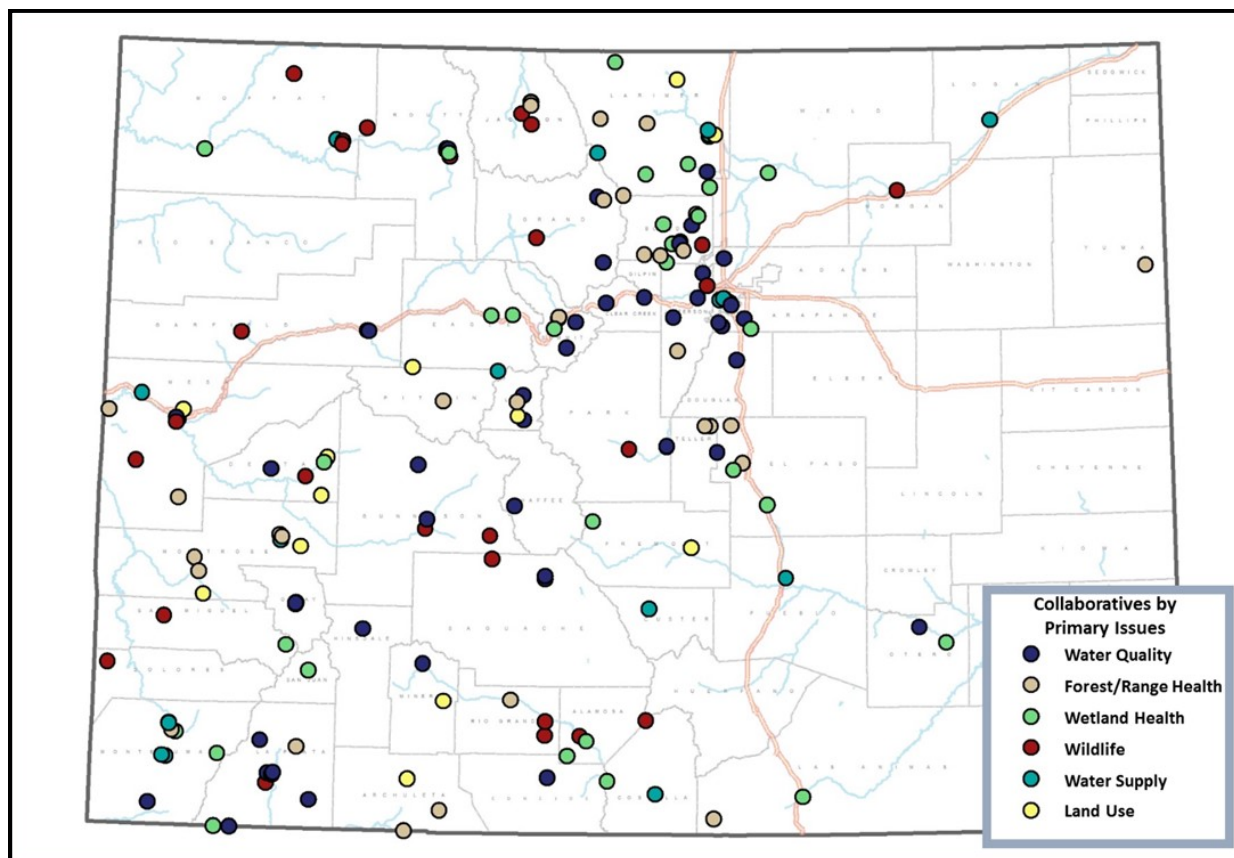


Figure 1. Location of Colorado's collaborative conservation initiatives by the main issue they address (N=183).

⁷ For an interactive map and full listing of the collaboratives in Colorado, please visit: <https://collaborativeconservation.org/program/discover/atlas-of-collaborative-conservation/>

⁸ Many collaboratives regularly change meeting locations to capture greater geographic representation within their boundaries of concern, which is not captured by this graphic.



What Environmental and Social-Economic Issues Do Collaboratives Address?

Environmental issues. The map (Fig. 1) also shows the main environmental management or conservation issue of concern of Colorado's collaboratives soon after they formed⁹ (see Boxes 1-11 for examples):

- **Water quality:** Focused on pollution or poor water quality in surface or subsurface waters, or surface and groundwater reservoirs
- **Forests and rangelands:** Focused on forested ecosystems (montane/sub-alpine forests and montane shrublands) and/or rangeland or grassland ecosystems (pasture and grasslands, semi-desert shrubland, pinyon-juniper woodlands, or plains agricultural lands)
- **Wetlands:** Focused on aquatic ecosystems (wetlands and marshes, riparian areas, stream channels, or natural and artificial reservoirs)
- **Fish and wildlife:** Focused on the conservation and management of fish and wildlife (including birds)
- **Water supply:** Focused on the administration of water quantity, water rights, water storage and infrastructure, and changing or redirecting water flows
- **Land use:** Focused on real estate or the transfer of surface or sub-surface rights; rights to use and access land for different purposes, including energy development; or land-use change, local/regional identity and sense of place

⁹To assign collaboratives to main environmental issue categories, we analyzed statements about missions, goals, and major activities. While there is overlap between the categories, they are fairly distinct in terms of the policies and regulations associated with their management.

More collaboratives address water quality as a main issue than any other issue (Fig. 2), with 47 groups (26%), such as the **Upper Arkansas River Restoration Core Team**. The second most common type of main issue for collaboratives when combined¹⁰ is forest and/or rangeland health, with 37 groups (20%), such as the [2-3-2 Cohesive Strategy Partnership](#),¹¹ the **Owl Mountain Partnership**, and the **Uncompahgre Plateau Collaborative Landscape Restoration Program**. Thirty-one collaboratives focus on wetlands ecosystem health (17%, like the [Purgatoire Watershed Partnership](#)¹²) and 28 collaboratives focus on fish and wildlife issues (15%, like the [Upper Colorado River Endangered Fish Recovery Program](#)¹³, Box 2). Only 21 groups (11%) focus on water supply and administration issues, like the [Sangre de Cristo Acequia Association](#).¹⁴ Only 19 collaboratives (10%) focus on land use as their main environmental issue, like the **Emerald Mountain Partnership**.

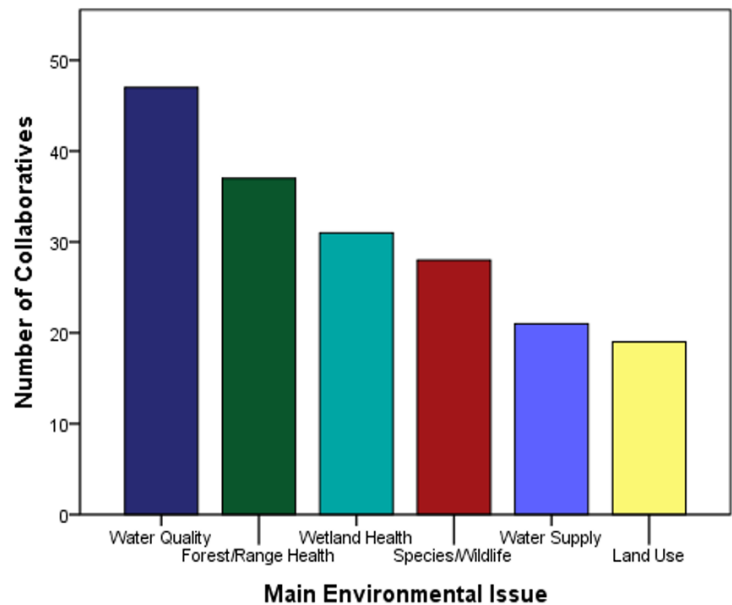


Figure 2. Main environmental issue that each Colorado collaboratives formed to address (N=183).

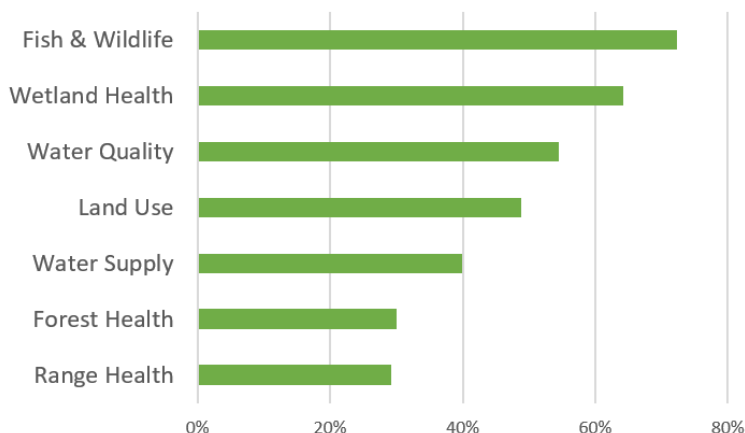


Figure 3. Percentage of collaboratives addressing any environmental issue (with forest and range ecosystem health split), regardless of whether it is their main issue or not (n=123).

Most collaboratives address more than one environmental issue. Once we accounted for all the issues collaboratives work on, it strongly changed the importance of the types of issues that collaboratives address (Fig 3). For example, The [Coalition for the Upper South Platte](#)¹⁵ formed to address water quality issues, but has a broad scope of issues that includes forest and wetland health, land use, and water supply. When we look across all issues that collaboratives address, not just their single main issue, more collaboratives include fish and wildlife issues than any other issue. Water supply is the issue least commonly addressed across all of the collaboratives.¹⁶ Also, many collaboratives change the issues they focus on over time. For example, the **Culebra Range Community Coalition** formed to address forest health issues, but later shifted their main focus to broader watershed health.

¹⁰ We combined these two categories because we found only one group that focused on rangeland ecosystem health as a main issue without also addressing forest health.

¹¹ <http://232partnership.org>

¹² <https://www.purgatoirepartners.org>

¹³ <http://www.coloradoriverrecovery.org>

¹⁴ <https://www.coloradoacequias.org>

¹⁵ <https://cusp.ws>

¹⁶ Collaboratives often express concern about abundance and protection of water supply, but do not directly address that issue, partly because it is legally complex and involves many different decision makers.

Social and economic issues.

In addition to addressing one or more environmental issues, almost all collaboratives address one or more social or economic issues (Fig. 4). Here is the list, from most to least frequent:

- **Livelihoods/Economy:** Protecting or improving economic conditions, usually associated with resource-based livelihoods like agriculture, ranching, logging, mining, or tourism
- **Recreation/Cultural Values:** Protecting or improving recreation opportunities, aesthetics or other cultural values associated with the environment
- **Infrastructure:** Maintaining, improving physical infrastructure, such as water delivery mechanisms, power lines, reservoirs and canals, trails, or buildings
- **Property Rights:** Protecting or expanding land, water, or sub-surface property rights
- **Safety/Vulnerability:** Protecting safety, health, life, and property (including infrastructure); reducing vulnerability or improving a community's ability to respond to and recover from emergencies and disturbance events
- **Liability/Compliance:** Increasing a community's ability to comply with rules and regulations, enhancing local control, or reducing potential for liability

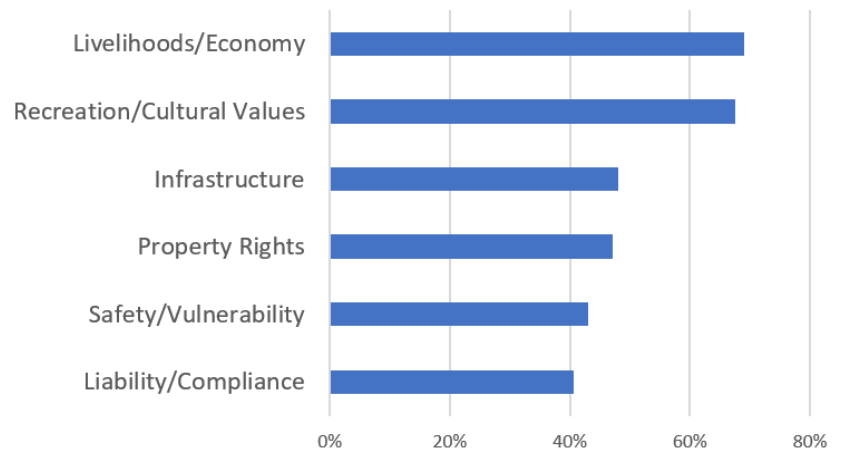
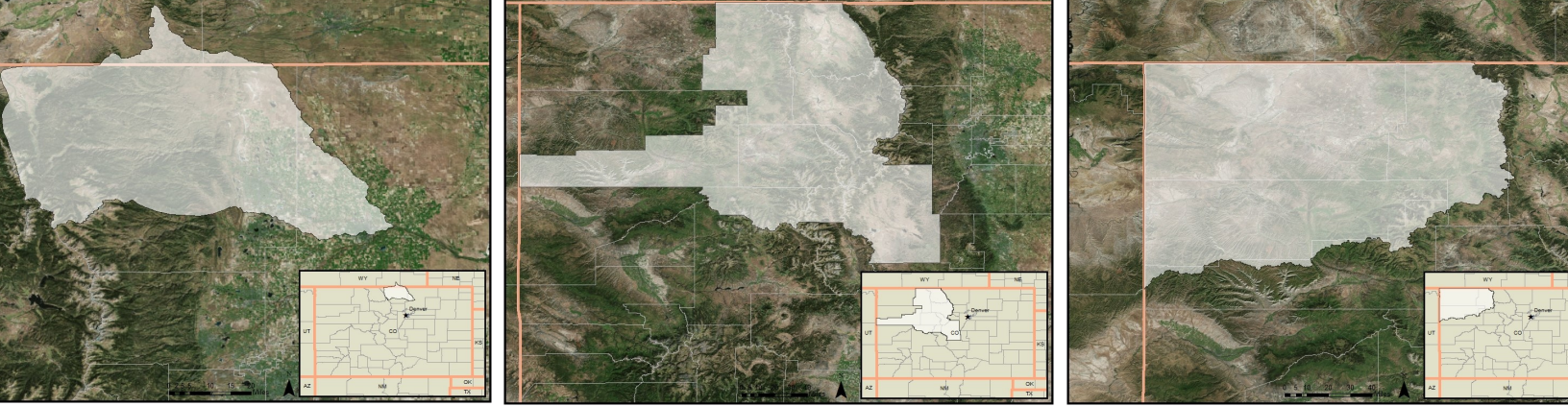


Figure 4. Percentage of collaboratives addressing each social-economic issue (n=123).





How Do Collaboratives Define Where They Work?

Collaboratives differ in how they define where they work. The boundaries that collaboratives choose to work within both reflect and influence their issues of concern, the kinds of members involved, and their strategies for achieving their goals (Fig. 5).

“Watershed groups” are the most common form of collaborative, defining their work areas inside of watershed or river basin boundaries, which are delimited by topography and water drainage. Some groups cover small watersheds, like the Coal Creek Canyon watershed (only 15 square miles¹⁷), others span large river areas like the Upper Colorado River Basin, at over 100,000 square miles. Collaboratives that focus on water quality most commonly use watershed boundaries.

Many groups define their work areas by jurisdictional boundaries, like private and public property lines, county lines, or other boundaries that indicate who has authority to make decisions within a given area. Sometimes they work in a single public lands boundary (like a national forest) or a single county, but they often weave together multiple kinds of properties and jurisdictions. They cross the boundaries because their issue of concern (like water, fire) crosses multiple boundaries as well. Collaboratives focused on forest and rangeland

health, water supply, and land use often use these kinds of boundaries. Sometimes the boundary is defined more by the ecological problem, which can be very large (like a bird migration corridor or an area affected by invasive species) or very small (like a polluted site).

It’s not uncommon for collaboratives to change their boundaries over time. For example, the multi-county boundaries of the [High Country Forest Collaborative](#)¹⁸ expanded to encompass more counties as the beetle infestation spread (Box 1).

Colorado’s collaboratives differ in size from about three-square miles (the area covered by the activities of the **French Gulch Remediation Opportunities Group**) to thousands of square miles covering multiple states (like the [Playa Lakes Joint Venture](#)¹⁹, which covers about 300,000 square miles across six states). Half of the collaboratives are less than 1,500 square miles in extent, and 90% are less than 10,000 square miles. The median size is 1,417 square miles.

The size of the area covered by a collaborative can be challenging, whether large or small. With so much of collaboration focused on interaction, collaboratives working across a large area face challenges getting people to drive long distances to their meetings, even

¹⁷ Collaboratives use different units to describe their area, including square miles, river miles, acres, hectares, and kilometers. The majority used square miles, so we converted other measurements into square miles.

¹⁸ <http://www.highcountryforest.org>

¹⁹ <http://pljv.org>

if they move their meeting locations periodically. Small-scale collaboratives often struggle with scaling up their efforts. Rural collaboratives with remote project sites may struggle to draw attention and resources to their efforts, while collaboratives in urban areas struggle to stand out as they compete in a more congested landscape of collaboration.

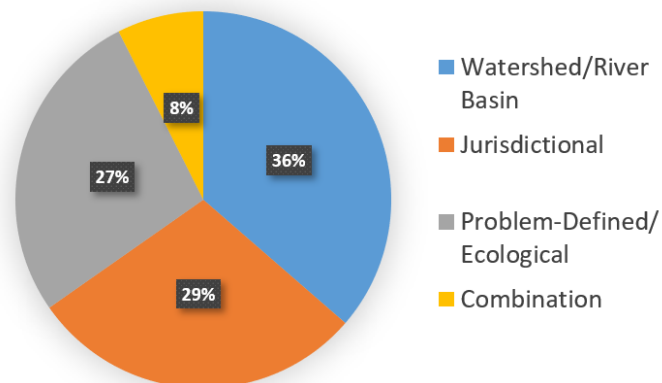


Figure 5. The kinds of boundaries used by collaboratives to define where they work (n=121)

Box 1: High Country Forest Collaborative

Originally called the **Colorado Bark Beetle Cooperative**, this group got its start in 2005 as the impacts of the Mountain Pine Beetle epidemic (which started in 1998) became apparent. Government officials and others recognized that the dead trees killed by bark beetles were a wildfire risk that threatened life, property, infrastructure, water supply, and the local tourism-based economy. It started out as an interagency cooperative between county governments and federal and state agencies, who initially worked together to publish a report assessing the extent of the problem and potential strategies. In 2007 or 2008 they began expanding their participation to include more local government and non-government stakeholders, like the timber industry and environmental nonprofits. The collaborative gained members and momentum because the decline of forest health was highly visible and risks to shared values were clear. They became a nonprofit in 2010 and adopted bylaws around the same time, establishing a steering committee and working groups. They enjoyed a lot of success between 2007 and 2010. Much of their work at that time focused on influencing state and federal policies to improve forest health, mitigating wildfire, reducing barriers to effective management, and creating incentives for private

sector solutions. They initiated and supported several bills introduced in the state legislature, that promoted biomass energy development, standardized wildfire protection plans, and gave liability immunity to volunteer firefighters, for example. They also advocated for federal funding, procuring millions of dollars to support forest treatments carried out by others on public lands. Their momentum slowed as they achieved several of their original goals and the sense of urgency surrounding the beetle epidemic declined. While they succeeded at obtaining project funds, they had few resources to support their operations, and they thus had to rely on volunteer leadership and limited in-kind administrative support. The large area within their boundaries (defined as a nine-county area spanning over 10,000 square miles) posed challenges for meeting attendance, particularly for non-government members. While they continue to focus on influencing policy, in 2014, they shifted to defining and promoting forest and community resilience. They changed their name in 2015 to de-emphasize the bark beetle. They continue to host annual Forest Summits (their first was in 2011), which attract people from all over the state to network and learn from each other.

What Do Collaboratives Do Together?

Collaboratives are dynamic and often go through stages of development (though at different rates, and not always in the same order).²⁰ Most begin by defining the problems and issues together, and then they decide what they will work on and how they will work on it. This means they set goals, build consensus or negotiate agreements, weigh options, assign roles, and so forth. They also usually decide together how they will govern and administer themselves.²¹ Here, we focus on the activities they agree to work on to achieve their goals. Some of these activities improve how their organizations work and all collaboratives also work to improve environmental and social-economic conditions of interest.

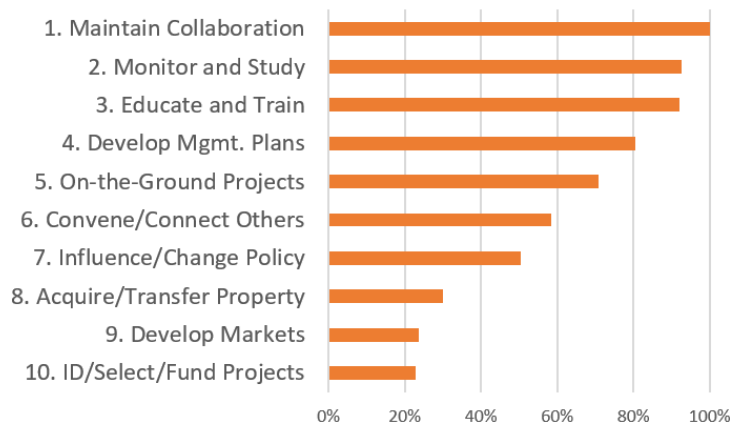


Figure 6. Different kinds of activities that collaboratives work on together by % of collaboratives who work on each activity (n=123).

Colorado's collaboratives work on a range of activities, from restoring streams and forests to lobbying the US Congress (Fig. 6).²² Collaboratives may coordinate their individual efforts in addition to creating new projects to work on together.

1. Maintaining collaboration (100% of collaboratives do this)

Colorado's collaboratives all put effort into making their collaborations work better. Many groups work to sustain the collaborative as an organization by writing grants, recruiting new members, building organizational identity, developing budgets and strategic plans, and reporting on their efforts. Some, like the [Western Colorado Landscape Collaborative](#)²³, help administrate other collaboratives as well.

2. Creating knowledge through monitoring and studies (93% of collaboratives do this)

Most Colorado collaboratives also actively learn together and generate new knowledge by conducting monitoring and different kinds of studies. A full 70% of collaboratives in Colorado monitor the natural resources they are trying to conserve. Three quarters of collaboratives work together on scientific reports, conduct surveys, or develop tools and technology to support decision-making and improve outcomes. Sometimes collaboratives work together (usually in sub-committees) to design and conduct a research study, monitor conditions, or develop a new tool or technology. Other times collaboratives pool financial resources to commission a study that they later interpret together. Or they create a new method to coordinate learning, like developing a new monitoring protocol to guide independent data collection, or create a new platform to manage and share data. The [Colorado Data Sharing Network](#),²⁴ collaboratively developed by the [Colorado Water Quality Monitoring Council](#),²⁵ is an example of such a platform.

²⁰ Selin & Chavez, 1995

²¹ Some exceptions are groups initiated with pre-ordained rules and objectives, like those designated under the Federal Advisory Committee Act.

²² We reduced the number of categories from 17 to 10 by combining categories within activities 1 (Maintain Collaboration), 2 (Monitor

and Study), 3 (Educate and Train), 5 (On-the-Ground Projects), and 7 (Influence/Change Policy).

²³ <http://www.westerncolc.org>

²⁴ www.coloradowaterdata.org

²⁵ <http://www.coloradowaterquality.org>

3. Engaging communities through education, outreach, and training (92% of collaboratives do this)

Almost all Colorado collaboratives work on education and outreach, but their objectives often differ. Many groups try to raise awareness to influence behavior in some way, such as educating homeowners about wildfire mitigation, or distributing information about how to slow the spread of weeds. Over the long term, collaboratives try to inspire community members to commit to a place and its stewardship, or to include new or under-represented communities of people. Some collaboratives form to educate themselves about important issues so that they have more say on these issues. Many groups develop and distribute educational materials online or provide information to the general public at festivals and public events. Some deliver targeted educational programs in classrooms and other venues. About 25% of groups coordinate their members to deliver services and expertise to particular stakeholders. At least 15% coordinate and deliver skill-building activities, facilitate peer-to-peer training, coordinate field trips and site visits, or provide student internships.

4. Planning (81% of collaboratives do this)

Colorado collaboratives often work together to develop plans to manage resources, protect watersheds, mitigate wildfire, reduce nonpoint source pollution, and so forth. The role of collaboration in planning varies. Sometimes existing collaboratives lead the development of the plan, often (but not always) involving a public process. Several short-term collaborations have been established to convene a public planning process, eventually spinning-off into longer-term collaborative organizations. The [Little Thompson Watershed Coalition](http://ltwatershed.org)²⁶ and other Front Range watershed groups, for example, formed following the 2013 floods, and are now long-term

collaborative watershed groups. Collaboratives often contract with an external party to write the plan, but some groups develop plans themselves. Some groups help others plan. For example, [Wildfire Adapted Partnership](http://www.wildfireadapted.org) (formerly **Firewise of Southwest Colorado**)²⁷, provides expertise and support as a service to communities trying to develop Community Wildfire Protection Plans. Finally, sometimes government agencies establish a collaborative process or committee to provide formal input into their planning process (like the Routt County Water Committee). We found 99 collaboratives that engage in planning activities, excluding strategic planning. Of these, at least 86 have released their plans publicly.

5. Getting projects done on the ground (71% of collaboratives do this)

Collaboratives in Colorado often do on-the-ground resource management or conservation projects, through coordination, joint implementation or other arrangements among members. Common projects include restoring or reclaiming damaged or polluted sites, managing weeds and invasive species, improving habitat, and reducing environmental risks (like fire) to people and infrastructure. Collaboration allows groups to plan larger pilot projects, reach wider agreement on priority project sites, or raise and leverage more funding or in-kind services. Collaboration is a way to coordinate independent projects to scale-up the impacts of joint work. For example, the [Upper South Platte Partnership](https://uppersouthplattepartnership.org)²⁸ came together to pool project funds and strategically prioritize forest fuel reduction treatment sites in order to maximize project impacts and reduce the watershed's vulnerability to wildfire. Collaboratives often coordinate permits and contracts, track accountability measures, and report on progress. Collaboratives can also coordinate volunteer work teams, or work together more directly to break ground on a project.

²⁶ <http://ltwatershed.org>

²⁷ www.wildfireadapted.org

²⁸ <https://uppersouthplattepartnership.org>



6. Convening people outside the collaborative (59% of collaboratives do this)

As mentioned earlier, all Colorado collaboratives learn, negotiate, and make decisions among members of the collaborative. However, many also do relationship-building, trust-building, or collaborative learning for a broader set of stakeholders. They coordinate public discussions, debates, and opportunities for participants to learn about issues together. For example, the Sangre de Cristo Acequia Association (which is also an advocacy organization) provides dispute resolution services for acequias²⁹ and individual water users. The **Clear Creek Watershed Forum** (which later became the [Clear Creek Watershed Foundation](#)³⁰) brought stakeholders together from across the watershed to share their knowledge and values, and to resolve conflict related to water quality policy and management. Convening activities like these differ from education (#3) because meetings recur over some period of time and (theoretically) involve more interaction.

7. Influencing policy or developing new rules and standards (50% of collaboratives do this)

Half of Colorado's collaboratives work to influence public policy (the actions of local, state, federal, or tribal government) more directly than through planning or information sharing. Sometimes governments convene formal advisory committees to provide input on public policy, like the long-standing

[Resource Advisory Councils](#)³¹ convened by the Bureau of Land Management (BLM). Sometimes collaboratives develop binding or non-binding standards to guide their members' behavior to avoid or pre-empt the government making decisions for them. One example is the [Animas River Stakeholders Group's](#)³² early work developing water quality standards (Box 5); another is the efforts of the **Colorado Renewables and Conservation Collaborative** to develop best management practices for the wind energy industry to protect wildlife. While many collaboratives prefer to remain politically neutral in order to appeal to a broader audience, sometimes they advocate for policies that affect their issues of concern (Box 1). Here they influence the actions or decisions of the government through lobbying, endorsements, recommendations, public comments or otherwise working together to put pressure on government. A few collaboratives (like the [Bear Creek Watershed Association](#)³³) have vested authority from the government to implement regulations to control water pollution, essentially acting as agencies with government and non-government members.

8. Coordinating or supporting property acquisitions and transfers (30% of collaboratives do this)

Collaboratives in Colorado may work together to conserve, protect, or enhance the value of a natural resource through property transactions, much like land trusts do. Collaboratives like the **Laramie Foothills**

²⁹ The term acequias refers to a community-based system of irrigation and water sharing introduced by Spanish and Mexican farmers before Colorado became a state. The 2009 Acequia Recognition law (amended 2013) gave this longstanding cultural and legal institution recognition and protection in the state of Colorado.

³⁰ <http://clearcreekwater.org>

³¹ <https://www.blm.gov/get-involved/resource-advisory-council/near-you/colorado>

³² <http://animasriverstakeholdersgroup.org>

³³ <http://www.bearcreekwatershed.org>

Project, the [Chama Peak Land Alliance](#)³⁴ (Box 11), and the **Yampa River System Legacy Project** have used property easements to “stitch together” larger areas of habitat, preserve beloved landscapes, and improve access to recreational opportunities. Water rights transactions are more complicated. The **Upper Colorado River Endangered Fish Recovery Program** is a long-standing collaboration between the state, irrigators, anglers, and other organizations to coordinate storage and release of water at critical times during the year to support biodiversity conservation and recreation in a section of the



Colorado River known as the 15-mile reach (Box 2). Collaboratives often play a supporting or coordinating role in property transactions, by applying for or providing grants to purchase easements, coordinating 'groundwork' with willing landowners, or building support within the community for the use of easements.

9. Developing new markets (24% of collaboratives do this)

Almost a quarter of Colorado’s collaboratives have worked together to develop, deliver, and/or promote market innovations to solve problems. For example, some collaboratives work on creating new markets for over-abundant commodities like dead and dying timber in forests, or they incentivize species conservation or reduce pollution. Some groups only investigate the potential for market-based solutions, while others create new programs to carry out their solutions, such as the [Peaks to People Water Fund](#)³⁵ or the [Colorado Habitat Exchange](#).³⁶

10. Identifying and funding projects (23% of collaboratives do this)

Some groups in Colorado collaborate to find projects that fit the goals of government policy and/or connect projects to funding sources. For example, early work of the state’s [Basin Roundtables](#)³⁷ identified existing water supply projects within each basin, some now funded through the state’s Water Supply Reserve Fund (Box 6). The state also has several active [Wetland Focus Area Committees](#)³⁸ (modeled after the **Joint Ventures**, Box 3) that help find projects to conserve or enhance wetland habitats. They then work with landowners and partners to obtain funding, often leveraged with funds from the state’s Wetlands Program, to get projects done on the ground.

³⁴ <https://chamapeak.org>

³⁵ <https://peakstopeople.org>

³⁶ <https://www.thepwc.org/habitat-exchange>

³⁷ <https://www.colorado.gov/cowaterplan>

³⁸ <http://cpw.state.co.us/aboutus/Pages/WetlandsCommittees.aspx>

Box 2: The Upper Colorado River Endangered Fish Recovery Program

In the mid- to late-1970s, conflict was escalating over water rights and declining fish health in the Colorado River Basin. The U.S. Fish & Wildlife Service (USFWS) determined that any further depletion of water from the upper basin of the Colorado River would result in jeopardy to four native fish species listed under the Endangered Species Act. Water users like the Colorado River Water Conservation District were concerned that the government would link reduced stream flows to continued water development and force them to halt water use to secure instream flows. After years of failed litigation, federal agencies, states, environmental groups, and water users began negotiations to prevent a federally mandated moratorium on water development, leading to a Cooperative Agreement that eventually became known as the **Upper Colorado River Endangered Fish Recovery Program (UCREFRP)**.

UCREFRP is a collaborative decision-making process that aims to restore native fish populations across the basin while maintaining current levels of water use for

economic purposes. Within Colorado, this collaborative effort in the Colorado sub-basin focuses on a 15-mile stretch of river. This 15-mile reach provides valuable spawning habitat for two endangered fish, the Colorado pikeminnow and the razorback sucker. Partners in UCREFRP collaborate by voluntarily coordinating reservoir operations to time releases and increase water flows during summer months (spawning season). They coordinate flows through a weekly phone call from early spring to October or November. The phone call includes many key stakeholders (usually 30 or 40), who share information about current and projected water flows and reservoir water levels. They then decide together on the quantity and timing of water released to flow in every tributary of the main stem of the Colorado River, and when. Stakeholders in the partnership include farmers, ranchers, water managers, state water administrators, and representatives from USFWS, the Bureau of Reclamation, and the BLM, to name a few.³⁹

³⁹Huayhuaca, Boone & Ryder, 2017





Box 3: The Joint Ventures

In the mid-1980s, duck and other waterfowl populations in the U.S. and Canada crashed as a result of habitat loss and alteration caused by urbanization, agriculture, and industrial activities. In 1986, the North American Waterfowl Management Plan (NAWMP) established a set of shared waterfowl conservation goals and proposed actions for the U.S., Canada, and later Mexico. This policy drove formation of collaborative work because regional implementation was key to meeting the international scope of objectives laid out in NAWMP, and thus collaboration was a major theme throughout the original plan. Funds to implement NAWMP were appropriated through The North American Wetlands Conservation Act of 1989 (NAWCA), allowing the U.S. Fish & Wildlife Service to provide matching grants for wetlands acquisition or projects to protect and restore migratory bird habitat, domestically and internationally, in keeping with the goals of NAWMP. NAWMP established several **Joint Ventures** as "a means for governments and private organizations to cooperate in the planning, funding and implementation of projects to preserve or enhance waterfowl habitat."⁴⁰ Joint Ventures are multi-stakeholder, voluntary partnerships that operate at a

regional level (usually multi-state or international) to promote collaborative partnerships, develop landscape-level habitat conservation plans, and leverage funds to implement projects. Each Joint Venture has unique attributes, but certain aspects are common to all of them as defined by federal statute (Joint Ventures for Bird Habitat Conservation Act of 2013), such as their governance by a management board, eligibility criteria for partners, guidelines for membership, basic functions and responsibilities, and reporting requirements. Basic funding for the Joint Ventures comes from congressional appropriations, administered by USFWS. The Joint Ventures draw on other sources of funding, and importantly they serve as a source of funds for local initiatives. For projects that explicitly benefit migratory bird habitat, they can match funds of up to \$1 million from NAWCA. As of 2017, there are 22 Habitat Joint Ventures and two Species Joint Ventures across the three signatory countries, and 18 Habitat Joint Ventures nationwide. Two of these Joint Ventures cover portions of Colorado: the **Intermountain West Joint Venture**, west of the continental divide, and the **Playa Lakes Joint Venture** covering a large portion of the eastern plains.

⁴⁰ U.S. Fish & Wildlife Service, 1986, p. 14

When Did Collaboratives Form?

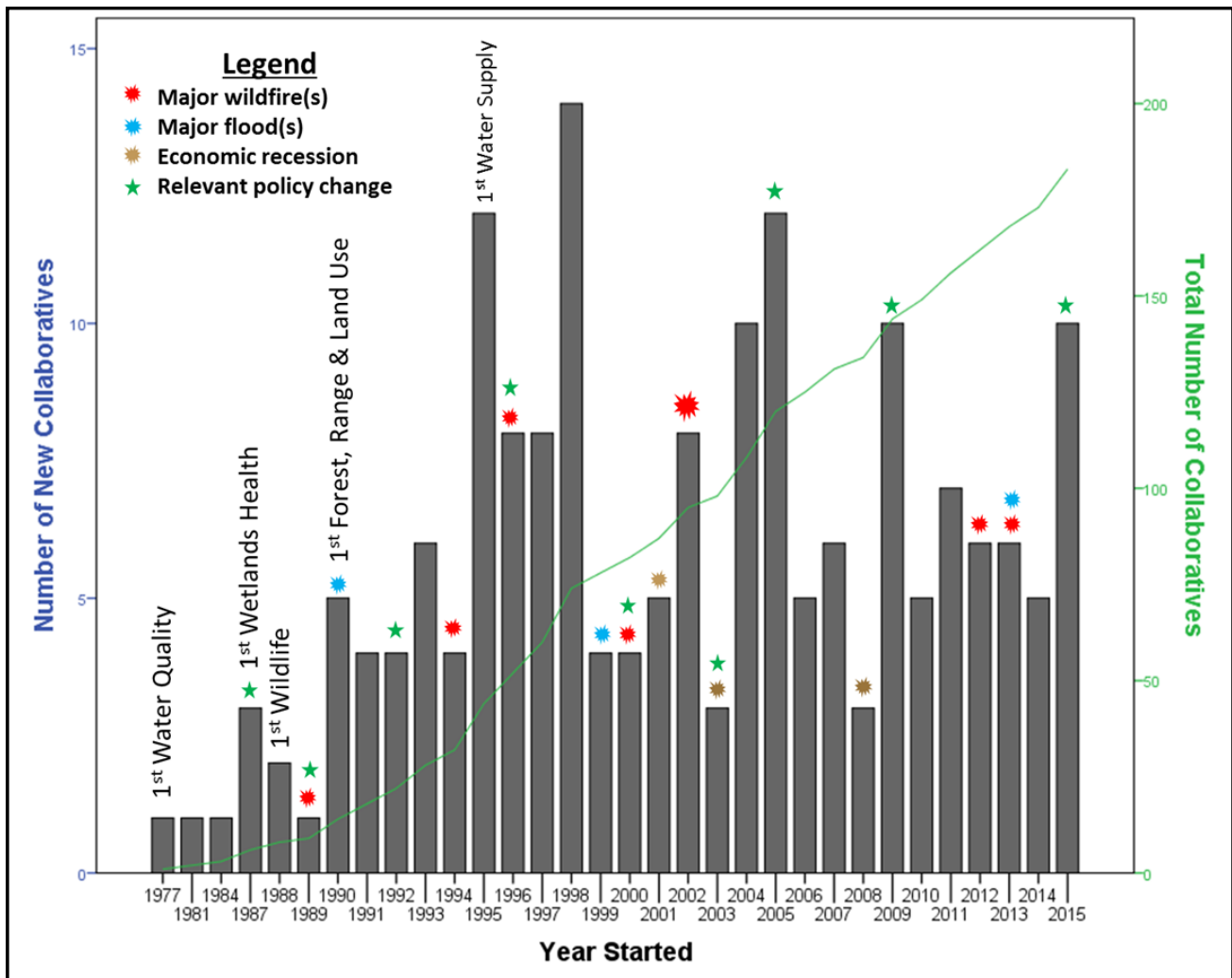


Figure 7. Timeline of number of collaboratives established in Colorado each year between 1977 and 2015, showing major events that may have affected their formation (N=183).

Colorado's collaboratives began in the 1970s, growing rapidly in number over time (Fig. 7). The oldest collaboratives are water quality associations and authorities, with the first started around 1977, and others in the 1980s and early 1990s. These were distinct from traditional water quality planning or management agencies (like a regional Council of Governments, general purpose local governments, or special districts) because, for the first time, they involved stakeholders from several jurisdictions as well as non-government stakeholders working together within a natural watershed boundary.



The concept of “ecosystem-based management,” as well as the idea of the watershed as a natural planning unit gained traction throughout the 1980s, and the first watershed groups focusing on riparian or ecosystem health, such as the **Badger Creek Watershed Project**, emerged in the late 1980s. The first two collaboratives focusing on biodiversity conservation at a large landscape scale appeared in 1988-1989 (the **Upper Colorado River Endangered Fish Recovery Program** and the **Playa Lakes Joint Venture**, Boxes 2 and 3), with at least 19 more forming over the next 10 years. The first group that focused primarily on forest health (specifically wildfire mitigation) emerged the year following the Black Tiger Forest Fire in 1989 (the **Boulder County Wildfire Mitigation Group**), which was, at that time, the most destructive fire in the state’s history.

The 1990s was a turbulent decade, when the number of new collaborative initiatives sharply increased, both in Colorado and across the country. High profile disputes elsewhere in the nation pitted livelihoods against spotted owls and old-growth forests. The second sagebrush rebellion⁴¹ renewed resentment of federal authority, while in opposition, environmental advocacy groups pressured the federal government with drawn-out legal battles and citizen suits to ensure enforcement of the “green laws” of the 1970s (like the Endangered Species Act and the Clean Water Act). Rapid demographic change in the west further deepened cultural divides. Colorado experienced the third fastest population growth rate in the U.S., at

almost 31% over the decade, which coincided with a period of robust economic growth.⁴² The benefits of this boom, however, were unevenly distributed and communities that had relied on traditional resource-based economies (like the timber industry) struggled with this rapid change. While this kind of turbulence certainly damaged relationships in some communities, several in Colorado responded proactively by starting cross-sector collaborations to address the negative economic and ecological impacts of changing land uses on both public and private lands (like the **Ponderosa Pine Forest Partnership** and the [Public Lands Partnership](http://www.publiclandspartnership.org)⁴³).

The first two decades of the 21st century have seen not only continued population growth, but increasingly warm temperatures and dry conditions, leading to concerns over water supply and demand gaps. Warmer winters coupled with years of fire suppression set the stage for multiple outbreaks of native bark beetles that have gradually devastated millions of acres of forests. Already a severe drought year, 2002 also marked the Hayman Fire, still the state’s largest. Five major forest fires in the 1990s more than tripled to 16 by 2008, with 17 more by the end of 2013. The rate of formation of collaborative initiatives addressing safety and vulnerability issues has increased sharply since the beginning of the millennium. Ten such collaboratives formed between 1990 and 1998, 21 formed between 2001 and 2009, and 22 more between 2010 and 2015.

⁴¹ A second wave of a movement that started in the 1970s, which sought to increase state and local control of federally owned lands in the western United States.

⁴² Kendall, 2002

⁴³ <http://www.publiclandspartnership.org>

Why Do Collaboratives Get Started?

The last section highlighted a few of the big trends happening in Colorado over the last few decades that helped set the stage for collaboratives to emerge. Each collaborative formed as a result of different conditions and circumstances, or catalysts. These catalysts include government policies, the severity of the environmental problem, the quality of founding leadership and others. These catalysts motivate, incentivize or lower the barriers to working together. Catalysts influence many aspects of collaboration, like the kinds of stakeholders involved early on, the initial momentum of the group, the kinds of funding available to a collaborative, and the level of conflict or agreement between stakeholders at the outset.⁴⁴

Policy Catalysts. Government policies, programs, and regulations at the federal, state, or local level have catalyzed at least 64% of Colorado's collaboratives (Fig. 8). Of these, most policy-driven catalysts (45%) come in the form of concerns about government interventions that drive collaboration. Sometimes just the threat of a policy's implications (like lawsuits, concerns about private property rights, imposed standards, or penalties associated with non-compliance) can motivate groups to collaborate pre-emptively. This is

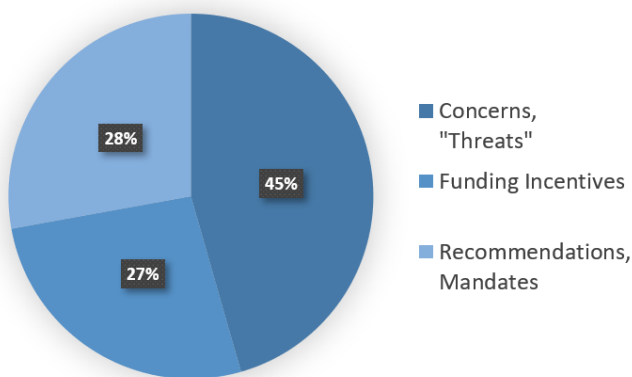
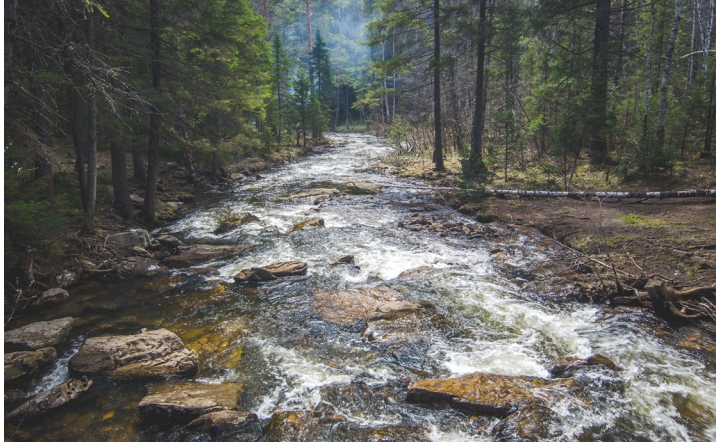


Figure 8. The kinds of policy-related catalysts that lead to the formation of collaboratives (n=79).



particularly common when the main issue is fish and wildlife conservation or water quality (Boxes 4 and 5), in part because of regulatory “hammers” like the Endangered Species Act and the Clean Water Act.⁴⁵ In other cases, government regulations, programs, or policies can promote collaboration by providing funding (27% of cases have this catalyst) to get collaborative projects off the ground or to support a coordinator position for the collaborative (Boxes 3 and 7). For example, the Collaborative Forest Landscape Restoration Program (CFLRP, created by Congress in 2009) provided a source of funding for collaborative, science-based efforts to restore forest health, reduce wildfire risks, and increase local communities' economic wellbeing. Two established collaboratives (the **Uncompahgre Partnership** and the **Front Range Roundtable**) received funding from this program and consequently created two new long-term collaborative partnerships: the Uncompahgre and Front Range CFLRPs. Finally, policy drives collaboration through recommendations or mandates (28%), like the [Big Thompson Watershed Forum](https://btwatershed.org)⁴⁶ (recommended in a study conducted by the North Front Range Water Quality Planning Association), or the **Basin Roundtables** (Box 6).

⁴⁴ Bryson et al, 2006; Emerson & Nabatchi, 2015

⁴⁵ Nie, 2008

⁴⁶ <https://btwatershed.org>

Box 4: The Sage-Grouse Working Groups

The Endangered Species Act has been an important policy-related catalyst for collaboration around sage-grouse conservation in the U.S. West. Over 60 local working groups in nine U.S. states have been convened since the mid-1990s,⁴⁷ 14 of which are in Colorado. Once an abundant game species, hunting greatly decreased numbers of sage-grouse following European settlement. Remaining populations now face major rangewide threats from habitat loss and fragmentation, as well as threats from predation and genetic diversity loss.⁴⁸ Working groups for six Gunnison sage-grouse, one Columbian sharp tailed grouse, and five greater sage-grouse produced conservation plans between 1995 and 2004, with some groups still active today. The first was the **Gunnison Sage-Grouse (GSG) Working Group**, which involved the BLM, local stockgrowers, Colorado Parks & Wildlife, other federal public land managers, environmental groups, and citizens. They were community-based, informal and voluntary, and made decisions by consensus. Their conservation plan proposed over 200 conservation actions that could halt or reverse the decline. Like many local sage-grouse working groups, they had difficulty implementing the plan once it was developed.⁴⁹ The **Gunnison Basin Sage-grouse Strategic Committee (GBSGSC)** emerged in 2005 as the GSG Working Group was gradually disbanding. Convened by the Gunnison County government, this successor group aims to increase implementation. The board of county commissioners appoints members, and they target



senior-level agency staff while maintaining sub-committees for field-level expertise. Members of the new committee report that they are more successful at implementing conservation actions because the GBSGSC has:⁵⁰

- Majority rule rather than consensus-based decision-making to prevent stall-outs when deliberating,
- A more formal organizational structure, documented procedures, and membership rules to ensure that members have the authority to make decisions on behalf of their agency or organization,
- At least one core member tasked with collaborative administration duties, and
- Convening leadership at the county level, which elevates the perceived legitimacy of the collaborative, as well as its transparency.

⁴⁷ Belton & Jackson-Smith, 2010

⁴⁸ Colorado Parks & Wildlife, 2011

⁴⁹ Belton and Jackson-Smith (2010) surveyed members of 53 sage-grouse local working groups found that 20%-30% were unsuccessful (and fewer than 10% were very successful) at funding projects or implementing planned projects on the ground. They identified four major success factors for implementation: more local authority to implement plans, neutral facilitation, early stage accomplishments, and a sense of local ownership over the plan.

⁵⁰ Cochran, Houck & Peterson, 2017

Box 5: The Animas River Stakeholders Group

The **Animas River Stakeholders Group (ARSG)** is one of the most studied collaboratives in Colorado and is an early example of a collaborative driven by water quality policy.⁵¹ Heavy metal loading from a combination of natural geological conditions and past mining (with 400 abandoned mines in a 200 square mile area) had long impaired water quality in the Upper Animas River watershed. ARSG formed in 1994 when the Colorado Water Quality Control Division (WQCD) reevaluated and upgraded water quality standards and classifications for segments of the river basin. Experience with conflict-ridden mine cleanups and lawsuits meant that the WQCD wanted to encourage voluntary participation from local citizens and mining interests. In addition to avoiding state-imposed standards, what really got stakeholders to the table was the looming threat of designation under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), also known as the Superfund Program, which can be invoked by the Environmental Protection Agency. Local stakeholders felt this designation would hurt

the local tourism industry, but they also wanted to keep the federal government out of their business. In the years since they started, ARSG has developed a remediation plan, recommended feasible water quality standards (which were adopted in 2001), monitored water quality, and continued to implement remediation projects throughout the Upper Animas River Basin. They also conduct some public education about environmental issues and have helped champion Good Samaritan legislation in order to expand the right of citizen-based groups like theirs to do reclamation work in areas contaminated by mining. Their efforts contributed to increases in trout populations and diminished heavy metals in portions of the watershed. Their progress was temporarily halted in 2015 when 3 million gallons of wastewater and tailings dumped into Cement Creek (a tributary of the Animas), during the Gold King Mine spill. Although the river has since returned to pre-event conditions,⁵² Silverton and San Juan County finally accepted Superfund money after years of avoiding listing in the upper river basin.

⁵¹ For detailed case studies, see Coughlin et al. (1999) and Koontz et al. (2004).

⁵² U.S. Environmental Protection Agency, 2018





Box 6: The Basin Roundtables

Water supply and appropriation are among Colorado's most contentious and politically charged natural resource challenges. Colorado's nine **Basin Roundtables (BRTs)** represent a state government-mandated, formal collaborative governance model intended to address long-standing tensions between a) the tradition of local-level authority and control over water provision and planning, b) the primacy of water rights and adherence to the Doctrine of Prior Appropriation,⁵³ and c) the need for state-level water supply planning in the face of change and uncertainty. Facing concerns over projected population growth and prolonged drought as they began a strategic planning phase, the Colorado Water Conservation Board began holding meetings in 2001 in each of the state's major river basins to identify issues about water supply and demand. The state agency recognized early on that a top-down approach would not only fail to identify the unique challenges within each basin, but that it would meet resistance from local or regional water users and institutions interested in keeping control as decentralized as possible. Nine BRTs were officially initiated in 2005 by the state's General Assembly with the Colorado Water for the 21st Century Act. The Act established these roundtables "to facilitate continued discussions within and between basins on water management issues, and to encourage locally driven collaborative solutions to water supply challenges."⁵⁴ Among their accomplishments, the BRTs have identified and supported water development and conservation projects through the production of eight Basin Implementation Plans. In 2015, they released the collaboratively developed Colorado Water Plan. A 2016 survey of participants⁵⁵ revealed that the BRTs have been successful at reaching consensus, fostering collaborative learning, and increasing the diversity of perspectives on water governance, but that they also face challenges in moving from planning to implementation.

⁵³ This is a legal doctrine of water rights that establishes a 'first in time, first in right' priority system for accessing scarce water resources and imposes standards of 'beneficial use' to apply and retain rights to water use. See Jones and Cech (2009) for primer on Colorado's interpretation of the Doctrine of Prior Appropriation.

⁵⁴ Colorado Revised Statutes 37-75-104. This statute also created the **Interbasin Compact Committee (IBCC)**, a higher-level collaborative water governance entity consisting of representatives from each BRT, plus members appointed by the governor; the Colorado House of Representatives Committee on Agriculture, Livestock, and Natural Resources; and the Colorado Senate Committee on Agriculture, Natural Resources, and Energy.

⁵⁵ Koebele, 2017

Environmental catalysts. Many (54%) of Colorado’s collaboratives form because of an environmental problem that needs to be addressed.⁵⁶ These problems have different levels of severity. A major crisis, like a flood, fire, or major contaminant spill that directly affects well-being, health, life or property, can drive rapid formation of a collaborative (Fig. 9). High severity crises only catalyze collaboration in about 22.4% of groups with this kind of catalyst (Box 7). The same percentage of Colorado’s collaboratives formed in response to medium severity environmental problems, like widespread fish kills, algal blooms or forests devastated by beetles, which can affect well-being, health, or property indirectly or over a longer time span (Box 1). The majority of collaboratives (55% of groups) form in response to a low severity catalyst, a localized or recurring environmental problem that demands cooperation across ownership boundaries, like streambank erosion or the spread of weeds (Box 8). While the problem itself may be severe, like localized severe erosion, it is ‘low-severity’ because it is not described as a risk to human health, life, or property.

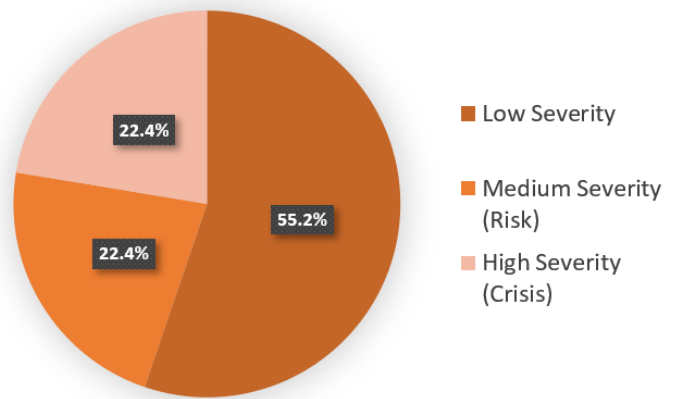


Figure 9. Levels of severity of environmental problems that lead to the formation of collaboratives (n=67)

There are other catalysts of collaboration in Colorado as well, which we broadly grouped as incidents that reveal a need, or present an opportunity, to work together. Collaboration arises from a need in situations when there is not enough capacity to “do it alone” (Box 9). Collaboration may also arise when other, non-collaborative approaches have failed, making collaboration necessary or desirable (Box 2). Opportunities or positive situations can also trigger collaboration, like a non-government funding opportunity, or the presence of charismatic leaders who recognize the problem and push for a collaborative solution and are sometimes called ‘champions’ or ‘collaborative entrepreneurs’⁵⁷ (Boxes 8, 10, and 11).

⁵⁶ Specifically, these are problems in which environmental conditions have degraded to a point where multiple stakeholders recognize the problem, either gradually or rapidly, and decide to address it together.

⁵⁷ Selin & Chavez, 1995

Box 7: Collaboration After a Crisis



Crisis events like fires and floods are powerful motivators for collaboration. A crisis focuses attention on environmental problems. Shared anxieties about the impacts of a crisis can galvanize people to contribute their time and resources to work together on a problem that they might not have realized existed before. Crises often come with an influx of emergency funding from government sources. For example, Colorado's Front Range experienced historic flooding in September, 2013. The floods affected 18 counties, killed 10 people, destroyed infrastructure, homes, and business, and caused billions of dollars in damages.⁵⁸ There was already a statewide dialogue underway about the value of collaboratives for improving watershed health through annual watershed conferences and the development of the Colorado Water Plan. Increasingly frequent and costly natural disasters highlighted collaboratives' potential for improving community resilience as well. Following the floods,

the U.S. Department of Housing and Urban Development approved funding for the Watershed Resilience Pilot Program, jointly developed by the Colorado Water Conservation Board and Department of Local Affairs. The program supported long-term approaches to flood recovery, risk mitigation and community development (including restoration projects and, importantly, support for organizational capacity). The funding supported some existing watershed groups, like the [Coalition for the Poudre River Watershed](https://www.poudrewatershed.org),⁵⁹ but it also helped several new coalitions emerge, like the [Middle South Platte River Alliance](https://www.middlesouthplatte.org),⁶⁰ the [Big Thompson Watershed Coalition](http://www.bigthompson.co).⁶¹ The 2015 Colorado Water Plan recommends that watershed and forest groups play a role in preventing and mitigating emergency events through pre-event planning, and implementing pre-event risk mitigation projects and post-event damage mitigation projects (in addition to long-term restoration and monitoring).⁶²

While disaster events can mobilize energy and resources to address immediate environmental problems, collaboratives forged in crisis face unique challenges, like sustaining momentum and finding funding after the crisis has passed. These collaboratives need to hit the ground running, simultaneously developing the structures necessary to support a collaborative organization, building trust among stakeholders, planning and implementing post-disaster restoration projects, all while navigating complex grant requirements and constraints.⁶³

⁵⁸ Colorado Water Conservation Board, 2014

⁵⁹ <https://www.poudrewatershed.org>

⁶⁰ <https://www.middlesouthplatte.org>

⁶¹ <http://www.bigthompson.co>

⁶² Colorado Water Conservation Board, 2015

⁶³ Mui et al., 2016

Box 8: Dolores River Restoration Partnership

The **Dolores River Restoration Partnership (DRRP)** started to address a large-scale weed problem that built on momentum and relationships developed through previous projects. DRRP came together in 2009 to plan and implement the treatment of invasive, non-native species like tamarisk and Russian knapweed. These plant weeds degrade riparian habitats and campsites, and increase the risk of wildfire along a 175 mile-stretch of river that crosses into Utah, much of it on remote public land. One of the founding leaders, The Nature Conservancy, had previously worked on a tamarisk control project on the San Miguel River with partners like the BLM, landowners, and Southwest Conservation Corps. For the new partnership, TNC obtained a grant to begin an action planning process, and brought the **Tamarisk Coalition** (a bridging organization based in Grand Junction, now called [RiversEdge West](https://riversedgewest.org)⁶⁴) into the fold to develop the plan. The core team of members (The Nature Conservancy, Tamarisk Coalition, BLM, and the Southwest Conservation Corps) coordinated the work of a larger set of members organized into subcommittees (including other federal, state, and local agencies, environmental organizations, landowners, and a private foundation). Their 2010 Memorandum of Understanding (MOU, renewed in 2015) outlines membership roles and responsibilities. Through a collaborative action planning process, they developed relationships and commitment to their shared goals. Their ecological goals focused on reducing the impacts of invasive species and increasing the acreage of healthy riparian ecosystems by implementing restoration projects,



monitoring their success, and maintaining project sites. They also set social and economic goals, like improving the aesthetic and recreational experience along the river corridor and providing restoration training and job opportunities for youth in the area. They also coordinated research projects, education and outreach. DRRP was deliberate in structuring their learning processes. They had diverse stakeholder representation, with different kinds and levels of knowledge, so they developed a shared language to understand one another and share information. They also worked on learning through evaluation and reflection on lessons learned. They revisited progress on their goals in 2012 and transitioned from implementation to maintenance and monitoring.⁶⁵ DRRP was proactive and successful because they had a relatively high degree of coordinating capacity and strong, collaborative leadership.

⁶⁴ <https://riversedgewest.org>

⁶⁵ Oppenheimer et al., 2015

Box 9. Lake County Open Space Initiative

In 1997, over 7,000 acres of historic ranchlands went up for sale in Lake County, Colorado. Like many communities in Colorado in the 1990s, Lake County's economy was in a period of transition from resource extraction to recreation and tourism. The threat of subdivision and sprawl raised concerns about potential impacts to the county's economically valuable views, cultural heritage, habitats and other natural assets. Lake County's "limited financial resources and planning staff" meant that they needed to partner to acquire and protect those assets. The Board of County Commissioners created the multi-partner **Lake County Open Space Initiative (LCOSI)**. Their 2001 MOU includes signatories from federal and state agencies, local governments and districts, private industry and businesses, environmental and other

community organizations, and Colorado Mountain College (which provided coordinating and administrative support). The purpose of the partnership was to identify priority properties to conserve as open space. They also collaboratively developed an ecosystem management plan to guide the actions of partners who controlled the lands within the open space. LCOSI released their plan in 2006, with additional participation from private landowners and individuals. The ambitious, multi-jurisdictional plan set goals for habitat preservation and improvement, recreation, historic preservation, ecosystem restoration, water supply, and water quality.



Box 10: San Juan Headwaters Forest Health Partnership

This proactive forest collaborative started out as the **Upper San Juan Mixed-Conifer Workgroup** following a 2009 workshop that promoted collaboration among stakeholders in southwest Colorado. The Pagosa Ranger District (U.S. Forest Service) and the [Colorado Forest Restoration Institute](https://cfri.colostate.edu)⁶⁶ (a Colorado State University center that partners with many forest and watershed collaboratives around the state) convened this collaborative. They began by sharing stakeholder perspectives and developing science-based collaborative priorities for management and monitoring of mixed-conifer tree stands within the Pagosa Ranger District. However, their scope soon expanded to include other forest types, nearby private lands, and issues including wildfire risks and potential impacts to water quality, economic opportunities for the forest products industry, property development in

forested areas, and community resilience. The group is informal and involves diverse members and partners, including federal, state, and local governments; environmental, recreation, and other community-based nonprofits; ranchers and tree farmers, Homeowner's Associations (HOAs), local businesses, and scientists. Their main activities are wildfire mitigation project planning and implementation, and citizen science monitoring engaging K-12 students. They also provide educational forums and field trips for community members to increase their engagement and awareness about forest health issues and the challenges of forest management. The [Mountain Studies Institute](http://www.mountainstudies.org)⁶⁷ (a local bridging organization that partners on many collaborative projects) provided a part-time coordinator since 2013. This has been important for the group's survival.

Founding leadership. All collaboratives have one or more founding leaders who help catalyze collaboration.⁶⁸ Founders are the individuals, organizations, and/or government agency personnel who recognize the problem as one that can be solved by collaboration, and who then motivate people to collaborate. Founders may spearhead collaboration from within local communities, or they may encourage collaboration with governments or non-government organizations (NGOs) outside communities. They may or may not participate in the collaborative once it is established.

We identified 10 categories of government agency, organization, and individual "types" to describe both the founders and members of collaboratives (Table 1). We then grouped founders into four broader categories: upper level government, local

government, non-government, and mixed (government and non-government) founders. Founders come about equally from these four categories (Fig. 10).

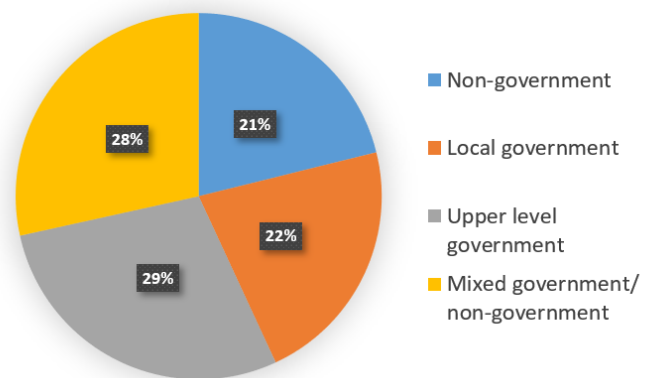


Figure 10. Kinds of founding leadership of collaboratives (n=123).

⁶⁶ <https://cfri.colostate.edu>

⁶⁷ <http://www.mountainstudies.org>

⁶⁸ We know anecdotally that founding leadership can sometimes be

the critical catalyst that sparks collaboration, but we found documents to be unreliable sources for consistently determining the importance of founders relative to other catalysts.

Table 1. Categories used for both founding leadership and member types.

Upper Level Government Categories	<ul style="list-style-type: none"> • Tribal (like the Water Quality Division of the Ute Mountain Ute Tribe) • Federal (like the Natural Resources Conservation Service, U.S. Forest Service, or Bureau of Reclamation) • State (like the Colorado Parks & Wildlife, or the Colorado Water Conservation Board)
Local Government Category	<ul style="list-style-type: none"> • Local governments include regional, county and municipal governmental agencies, and quasi-government⁶⁹ organizations like soil conservation districts, water conservancy and conservation districts, utilities, ditch and reservoir companies, and other special districts
Non-Government Categories	<ul style="list-style-type: none"> • Private industry and business (including trade and business associations) • Farmers, ranchers and large landowners (including agricultural associations) • Environmental and recreational nonprofits • Colleges and universities (including Extension) • Other organizations (including other collaboratives) • Individuals, private citizens, homeowners (including HOAs)
Mixed Government and Non-Government	<ul style="list-style-type: none"> • Non-government individuals or organizations plus local and/or upper level governments

Founders can play a large role in shaping the membership and agenda of collaboration.⁷⁰ The founder's home organization influences who chooses to join the organization. For example, collaboratives with upper-level government founders have significantly more upper-level government members than collaboratives with other kinds of founders; likewise, local government founders have significantly more local government members, and non-government founders from within the community have significantly more non-government members.

⁶⁹ "Quasi-governments" are backed or supported by governments but managed privately or independently and provide some sort of service.

⁷⁰ Takahashi & Smutny, 2002

Many of the NGOs that have served as founding leaders can be described as bridging organizations, meaning that they bridge divides by strategically linking people with each other, with knowledge and expertise, and with resources.⁷¹ The Nature Conservancy has provided founding leadership for a few of Colorado’s collaboratives, including the **Laramie Foothills Project** and the **Gunnison Climate Working Group**. More often, bridging organizations play a supporting role in collaboratives. Sometimes this involves providing in-kind support for collaboration in the form of a part-time coordinator, like the support provided by RiversEdge West, Colorado Mountain College, or Mountain Studies Institute (Boxes 8, 9, and 10). Or they may take the lead in a technical sub-committee that requires specialized knowledge, like the monitoring and collaborative process expertise provided by CSU’s Colorado Forest Restoration Institute to many forest partnerships (Boxes 1, 10, and 11). Sometimes collaboratives take on the role of bridging organizations (for example, the **Public Lands Partnership** convened the **North Fork Coal Working Group** in 1998 to address local issues related to a projected increase in coal production in the area). The **Coalition for the Upper South Platte** created a spin-off bridging organization called [Coalitions and Collaboratives, Inc.](https://co-co.org),⁷² which provides mentorship and administrative support to other groups.

Who Participates in Collaboratives?

Founders may kick start collaboration, but it’s the people who remain engaged and do the actual work of collaboration who have the biggest influence over the ability of the collaborative to achieve its goals. Members are regular participants who have a role in the decisions and activities of a collaborative.⁷³

Local government representatives are the most common types of members, with at least one included in 85% of Colorado’s collaboratives (Fig. 11), and they make up on average 26% of collaborative’s total membership across the state (Fig. 12). Federal government and nonprofits are members in 77% of collaboratives and make up 14% and 13% (respectively) of total membership. Representatives of tribal government are least common⁷⁴ as members of collaboratives (5%). When the definition of membership is expanded to include partners (people who provide support, expertise, or participate in ad hoc committees on an intermittent basis), the percentage of collaboratives partnering with local government rises to 95%, with state governments to 91%, with federal government to 90%,

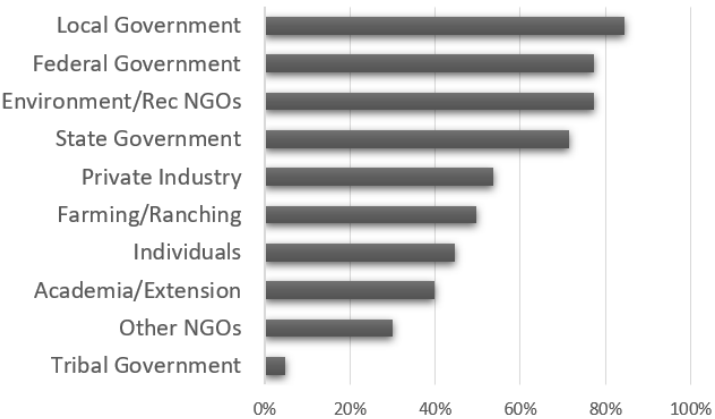


Figure 11. Number of different kinds of members represented in each member type (n=123). Rec = recreation

⁷¹ Crona & Parker, 2012

⁷² <https://co-co.org>

⁷³ Using the same categories described above, we used member rosters and lists to analyze this aspect of collaboration.

and with nonprofits to 85%. The number of collaboratives that partner with tribal government almost doubles to 9%.

Using the same categories described above, we used member rosters and lists to analyze this aspect of collaboration.

Colorado has two federally recognized tribes (Southern Ute and Ute Mountain Ute), as well as other nations native to the state. The numbers we report only include representatives of agencies within the two federally recognized tribes, as we do not have data about the number of members with non-government tribal affiliations.

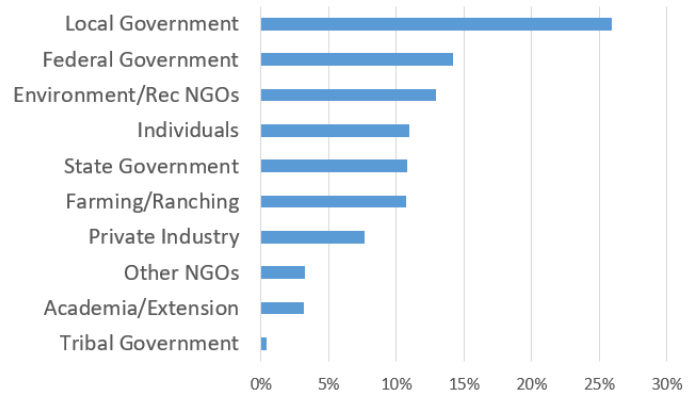


Figure 12. Average percent of different types of members represented in each collaborative, based on member lists (n=103 collaboratives).

Members of collaboratives bring with them not only their unique skills and connections, but also certain levels of decision-making authority from their home organizations, agencies, or other affiliations. These assets influence the ability of the collaborative to implement joint decisions and achieve the environmental outcomes of interest. For example, the set of activities that a community-based collaborative can undertake depends on who owns the land or resources of concern (Box 11). Likewise, an agency-based partnership may be able to coordinate planning and implementation on the lands they manage, but they also need to build community support and buy-in for their work to be successful.

Groups focusing on different environmental issues often have a different mix of members (Fig. 13). For example, collaboratives that address fish and wildlife and forest range health have more state and federal representatives (blue). Water supply and water quality groups have a larger proportion of local government representatives (orange). Groups focused on either wetland ecosystem health and/or land use have the highest proportion of non-government members (green).

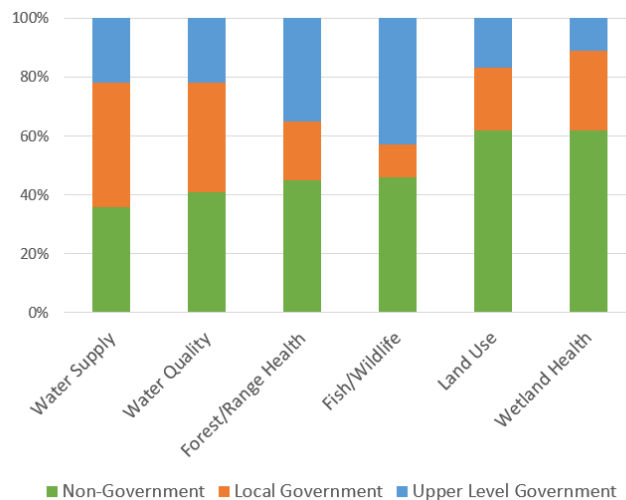


Figure 13. Member composition by the collaborative's main environmental issue of focus (n=100).



Box 11: Community-Driven Collaboratives

The **Chama Peak Land Alliance**, a community-driven group, formed in 2010 to prevent land fragmentation, protect habitats and biodiversity, and support local ranching and agricultural livelihoods on the Colorado - New Mexico border. Their board is comprised mainly of ranchers and other non-government representatives. Their focus on private lands has allowed them to successfully protect resources and implement projects. As their set of issues expanded over time to include watershed resilience, forest health, and water quality, they established a spin-off partnership to include state and federal public lands managers.

A different community-driven group, [Saws and Slaws](http://sawsandslaws.org)⁷⁵ (short for Chainsaws and Coleslaws) has implemented fuels treatments and wildfire mitigation projects on 138 sites (as of 2016) in and around Boulder County, Colorado. They focus on increasing defensible space around the homes of private property owners (who pay a fee) in the “wildland urban interface” (a transition zone between developed settlements and undeveloped lands). Since their start in 2011, they have trained and organized volunteers to do fuel treatments around homes, removed fuels by chipping and slash pile

maintenance, done education and awareness raising, and given community presentations. Their “block party” model of working together also achieves community-building goals by doing volunteer work sessions in the morning with a potluck in the afternoon. This is an example of an informal group that involves collaboration and partnerships, but that has gradually become a community-based, nonprofit organization.

The [Summit County Forest Health Task Force](https://foresthealthtaskforce.org/)⁷⁶ is another community-driven group that emerged to address the landscape-level impacts of pine bark beetles on forested lands in Summit County, Colorado, much of which fall within the Dillon Ranger District. U.S. Forest Service representatives attend meetings on an intermittent basis, but core membership is made up of NGOs and individuals. Their potential for impact is somewhat limited because they are a local citizen-driven initiative focused on a public lands problem, which fall on lands that local citizens do not control. However, they continue to play an important role in educating and engaging the community, increasing citizen involvement in forest health issues, and running a citizen science monitoring program.

⁷⁵ <http://sawsandslaws.org>

⁷⁶ <https://foresthealthtaskforce.org/>

How are Collaboratives Organized?

Colorado's collaboratives display a wide variety of organizational arrangements and forms. The way they organize is shaped by the collaborative's purpose, their issues (and associated policies), their founders (and associated affiliations, resources, expectations, and limitations), the size and diversity of membership, and their "age" (or length of their activity). Sometimes organizational structure emerges in an ad hoc way or founders, members, or facilitators can design the structure and process intentionally.

Collaboratives commonly develop rules to guide membership and decision-making processes. While most collaboratives have "open membership" that determines who can participate in meetings,⁷⁷ a core set of members comprising boards or committees often makes most of the decisions. Several of Colorado's collaboratives rely on informal rules or "handshake" agreements, but most⁷⁸ formalize their rules in official documents, such as bylaws, a charter, or a memorandum of understanding (MOU). Documents like these can clarify the roles and responsibilities of members, assuming they are not simply shelved and forgotten (lack of clarity on these points is a commonly reported challenge for many groups). A few groups have their rules formalized in statute, like the Resource Advisory Councils and the Basin Roundtables.

Collaboratives range in form from loose networks, to formal organizations, to quasi-agencies. Colorado's collaboratives fall into three broad legal categories:⁷⁹

nonprofits (56% of collaboratives), unincorporated or fiscally sponsored associations (33%), and other legal designations (11%, Fig. 14). Some start informally and then formalize into a nonprofit corporation at some point in their development. Over a quarter of these do so within a year of formation, but a third wait five years or more before becoming nonprofits. Rather than creating a new, formal organization, many cross-sector collaboratives seek fiscal sponsorship from established nonprofit organizations, which extends to the collaborative (or the collaborative project) legal and tax-exempt status, and allows them to apply for grants. The remainder of collaboratives had other legal designations, specifically local public bodies or local authorities (defined by Colorado statute), or formal committees chartered under the Federal Advisory Committee Act.

There are benefits and drawbacks when collaboratives formalize through rules and organizational arrangements. On the one hand, it can clarify expectations, improve accountability, increase the likelihood that groups will deliver on their goals, and improve the chances of securing more resources in the future.⁸⁰ Clear process guidelines can be especially helpful for groups with a diverse mix of government and non-government members (Box 8). On the other, the process of agreeing on such arrangements takes a lot of time and financial resources to establish and maintain, which can come at the expense of progress on other

⁷⁷ Colorado's Sunshine Law for open meetings states that meetings where any public business is discussed, and which involves two or more members of any state public body, must be open to the public.

⁷⁸ Due to our method of data collection, our sample is likely biased towards those groups that have formalized their rules through documentation. However, it is unclear how many collaboratives follow the rules they establish for themselves in these documents.

⁷⁹ These designations are based on the legal standing of the association to enter into agreements, be sued, and so forth.

⁸⁰ Imperial & Kootnz, 2007

⁸¹ Bonnell & Koontz, 2007



goals.⁸¹ The most informal groups we observed had relatively homogeneous membership and a collective understanding of how they should address their shared issues of concern.

The line between a collaborative and some other kind of organization is blurry and subject to change. Collaboration can be a phase in the development of a more formal organization⁸² (like the multi-year collaboration that led up to the nonprofit, **Peaks to People Water Fund**). Or it can be a phase of learning, trust-building, and coordination before a group adopts a shared stance on issues that they believe will promote the public good⁸³ (like the work of the **Poudre Valley Community Farms** project to promote local food production). Or collaboration can define a group brought together by a process that lasts for years until they disband (like the multi-year process of negotiation and policy influence undertaken by the **River Protection Workgroup**⁸⁴).

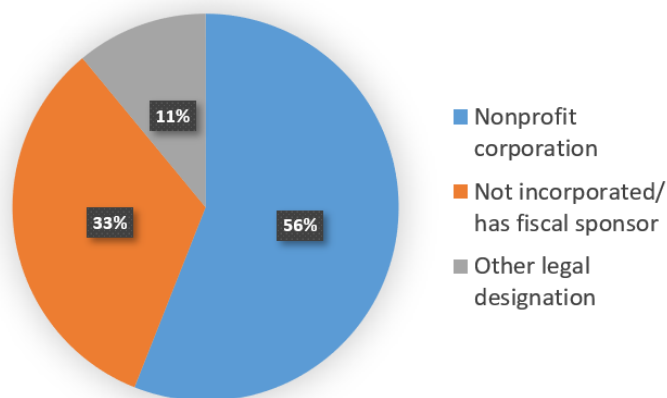


Figure 14. Kinds of legal status of collaboratives (n=122).

⁸² Imperial & Koontz, 2007

⁸³ Andrews & Edwards, 2004

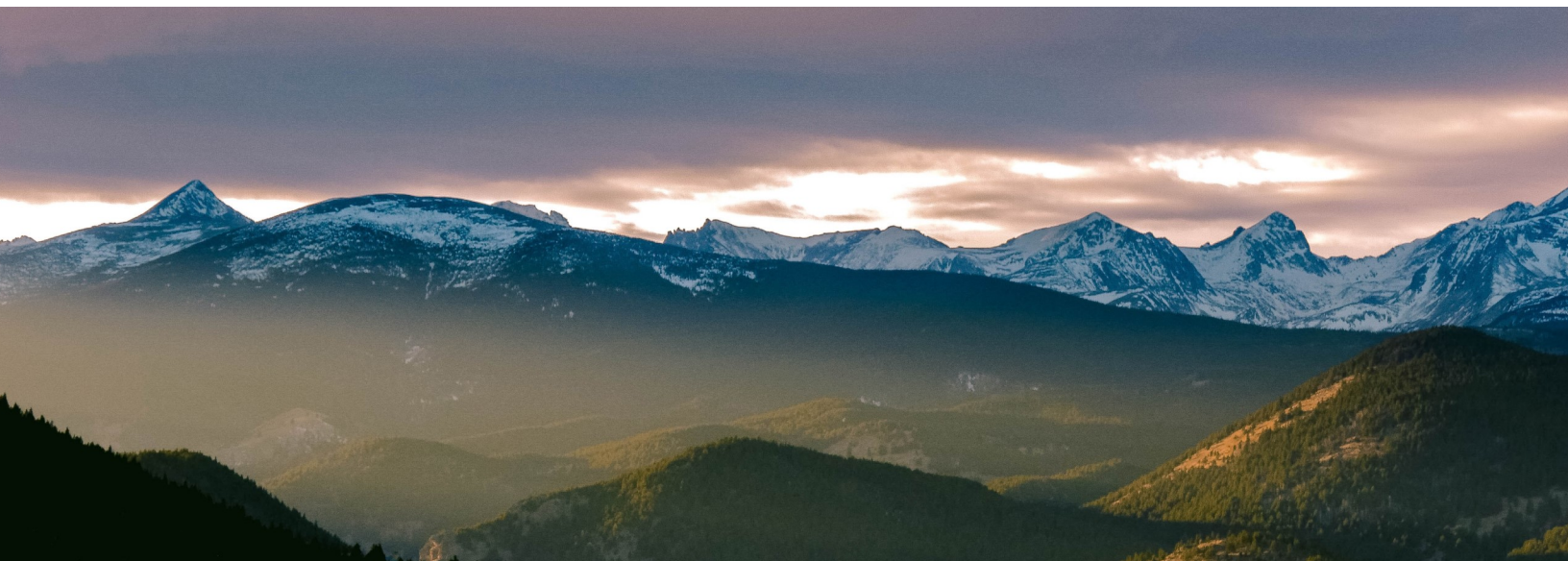
⁸⁴ <http://ocs.fortlewis.edu/riverprotection>

CONCLUDING INSIGHTS



We found that Colorado is rich with collaboratives, working on a wide array of issues. Over the last 40 years, more than 180 collaboratives have formed, with at least 157 still active today. They come together to address complex issues that one organization or individual cannot address alone. These issues are usually wide-ranging and cross ownership boundaries, like flowing water, wildfires, migrating fish and wildlife, or weed spread. In many cases, collaboration is triggered because of environmental problems associated with these issues. Sometimes, the problem reaches the point of crisis (or the risk of crisis) before people decide they need to address it together. Concerns about regulations are the most common catalyst for collaboration. Over 90% of collaboratives create and share knowledge and information through activities like monitoring, conducting research or commissioning studies, educating the public, and training volunteers and practitioners to achieve their goals. A full 81% develop conservation and management plans, and 71% coordinate or jointly implement projects on-the-ground. NGOs or individuals, local and upper-level government, and mixed government and non-government founding leaders are about equally responsible for establishing Colorado's collaboratives. Collaboratives bring together different kinds and combinations of members to expand their access to resources, knowledge, people, and authority.

Here we highlight one aspect that sheds some light on the patterns of collaboration. It appears to matter if either competition or collectivism motivated the collaborative to start.⁸⁵ Collectively motivated collaboratives come together to meet shared needs and achieve mutually beneficial results. This doesn't mean there isn't conflict, only that there is more consensus about what the problem is early on. The **Coalition for the Poudre River Watershed** (Box 7) is an example of such a group. Other collaboratives emerge to resolve contested, conflicting, or competing needs among stakeholders. For these groups, at least a partial aim of collaboration is to build a shared understanding of the problem. The **Basin Roundtables** (Box 6) exemplify this kind of motivation. Table 2 summarizes how some of the features of collaboratives differ by their motivation for collaborating.⁸⁶



⁸⁵ See Huayhuaca (2019) for details. While these categories emerged from the data, similar concepts have been proposed in the literature; see, for example, Gray (1989) and Selin & Chavez (1995).

⁸⁶ We were able to make this distinction for 103 collaboratives based on descriptions of their origins and reasons for coming together.

Table 2. Characteristics of collaboratives most associated with collective and competing motivations for collaborating ($p < 0.05$). For further discussion of analyses and results, see Huayhuaca (2019).

	Collaboratives motivated by collective needs (n=62)	Collaboratives motivated by competing needs (n=41)
Environmental issues	<ul style="list-style-type: none"> • Water quality • Wetland ecosystem health • Forest/range ecosystem health 	<ul style="list-style-type: none"> • Land use • Fish & wildlife • Water supply issues
Social-economic issues	<ul style="list-style-type: none"> • Safety or vulnerability issues 	<ul style="list-style-type: none"> • Livelihoods/economy • Property rights • Liability/compliance issues
Catalysts	<ul style="list-style-type: none"> • Low, medium, and high severity environmental catalysts • Financial needs 	<ul style="list-style-type: none"> • Policy-related concerns or threats
Founding leaders	<ul style="list-style-type: none"> • Non-government • Local government 	<ul style="list-style-type: none"> • Upper-level government
Membership	<ul style="list-style-type: none"> • Fewer kinds of member types represented • Smaller total number of members 	<ul style="list-style-type: none"> • More kinds of member types represented • Larger total number of members
Kinds of activities	<ul style="list-style-type: none"> • Creating new knowledge through monitoring • Developing markets • Implementing/coordinating projects 	<ul style="list-style-type: none"> • Influencing, changing, or developing policies • Coordinating or supporting the acquisition or transfer of property rights
Legal status	<ul style="list-style-type: none"> • Nonprofit 	<ul style="list-style-type: none"> • Not incorporated or fiscal sponsorship • Other legal designation

Collectively motivated collaboratives tend to be driven by environmental problems like degraded ecosystems or polluted water that are either too widespread or expensive to fix alone, or severe enough to cause concerns about safety. They are more likely to be started by leaders from non-governmental organizations, members of the community, or from local government. Their membership tends to be smaller and less diverse, and they often formalize into nonprofits. They are more likely to implement monitoring and on-the-ground projects, as well as work on developing new markets.

The kinds of problems that bring together people with competing needs are different. Property rights, economic wellbeing, and concerns associated with liability and regulatory noncompliance have big implications for land use, water supply, and conservation of fish and wildlife. These collaboratives have larger and more diverse membership, and they often use formal arrangements to structure their collaboration, rather than forming a nonprofit. The importance of regulations and property rights in their main issues cause them to focus on policy- and property-related activities.

Whether working collectively or in competition, all these groups act jointly to create environmental collective goods, like reducing the risk of catastrophic wildfire or contaminated water, or creating reliable water supplies, conserving biodiversity, or supporting healthy, working landscapes. A big difference between these two motivations may lie in the social issues of concern, and how joint action on environmental issues affects trade-offs for stakeholders. For example, trade-offs occur when stakeholders' livelihoods involve competitive uses of a resource, such as rafting companies who want instream flows, and irrigators who put their water rights to beneficial use (in the legal sense) by extracting water from the stream. Collaboration between stakeholders with different levels of power and legal authority related to a resource can also create trade-offs, which is often the case for groups addressing property rights issues. Competition between stakeholders increases the transaction costs of collaboration, requiring greater investment in trust-building, conflict management, and so forth. Perhaps this is why we found fewer collaboratives addressing land use and water supply and administration as main

environmental issues, both of which were associated with property rights issues.

On the other hand, everyone benefits from joint actions that reduce vulnerability to disaster or increase public safety. The trade-off here is that cooperators cannot exclude non-cooperators from “free riding” on their efforts. Free riding occurs when some people benefit from an action but do not bear any of the costs of implementing that action. This free rider problem becomes more difficult as the numbers of stakeholders increase and reduce the group's ability to agree on a course of action.⁸⁸ The fact that there are so many collectively motivated groups in Colorado means that the free rider problem can be overcome by collaboration, but this may explain why collectively motivated groups have significantly fewer members (and types of members) than those driven by a competing motivation.

Our findings leave many questions open for future research. What explains the relationships we have observed? Do they affect the outcomes of collaborative activities, and if so, how? Will big shifts in policy currently underway lead to fewer collaboratives (because of relaxed regulations) or more collaboratives (because of fewer funding sources)?

The aim of this report was to ask and answer ‘who-what-when-where-why’ questions about collaborative conservation groups in the state of Colorado—because our state has many collaboratives and thus is a particularly good place to ask these questions. A recent systematic review of cases of collaboration nationwide⁸⁹ shows that collaboratives can be found in every state, but that Colorado has the third greatest number of collaboratives groups, as

⁸⁸ Ostrom, 1990

⁸⁹ Wilkins et al., 2019



documented in the peer-reviewed literature (after California and Massachusetts). Our study is the first to focus at the state level and to include such a broad range of groups, but there are other inventories and studies of more narrowly defined collaboratives at the state level⁹¹ and at a regional or national level.⁹² The project will never be complete, as long as people continue to find collaboration useful and necessary.

⁹¹ The Colorado Watershed Assembly maintains a database of watershed coalitions by basin with brief descriptions of each (<http://www.coloradowater.org>). The Colorado Water Quality Control Division (2002) included an inventory of water quality initiatives in the 2002 Status of Water Quality in Colorado Report. Fernández-Giménez et al. (2004) did a comparative inventory of rangeland collaboratives in Arizona.

⁹² For example, Yaffee et al. (1995) compared ecosystem management partnerships across the U.S., and the New Watershed Sourcebook (Kenney et al., 2000), is an inventory of collaboratives focused on water quality and watershed health, also nationwide. Moseley et al. (2011) compared community-based organizations, including many forest collaboratives, in the western U.S. region.

Box 12: Challenges and Lessons Learned from Colorado's Collaboratives

As this report has shown, there is a lot of diversity in the forms and functions of collaboratives in Colorado. Some of the challenges faced by collaboratives are unique to their issues and circumstances, which we have highlighted in a few examples throughout the report. However, they do share many challenges in common. Long term, sustained funding, especially for staff, is in short supply. Piecemeal project funding is more readily available, but often comes with constraints on how the funds can be used. Coordinating support is critical for sustaining momentum between meetings, but funding for hiring coordinators or support staff is harder to come by than funding for projects. Many groups rely too much on volunteers, partly because funding for permanent staff is hard to obtain. Governments and other funders could help address this problem by relaxing spending constraints and allowing grant awards to pay for staff and organizational capacity, such as those provided through the **Watershed Resilience Pilot Program** (Box 7). For groups that have access to them, bridging organizations (discussed earlier) also help fill capacity gaps. Federal and state agencies sometimes contribute staff (or even develop specific partnership coordinator positions, in the case of the U.S. Forest Service) to support and facilitate collaborative activities. State-level coordination of plans, projects, monitoring, and adaptive management strategies (as recommended in the Colorado Water Plan)⁹³ could also help fill some capacity gaps, as well as improve the likelihood of plan implementation.⁹⁴

Broad participation is an important advantage of collaboration, but many collaboratives face challenges recruiting and maintaining desired members. Individuals, landowners, tribal members, low-income community members, and other people whose participation in a collaborative initiative is voluntary and uncompensated are often under-represented in membership relative to salaried employees. Businesses and industry representatives are often also under-represented in collaboratives. Reaching across boundaries or outside of networks to recruit new kinds of partners is difficult because collaboratives tend to

first recruit people they know and are often run by volunteers with limited time to seek out new members. Recruiting members of any kind is especially difficult if there is not a pressing need, which can hamper efforts to collaborate proactively. Even the most dedicated members can burnout, and agency personnel are reassigned to new places. Many collaboratives struggle at some point with member turnover and loss of momentum. The personalities at the table are a wild card dealt to all collaboratives. Even if people agree on the problem, there are likely a slew of things they don't agree on. Conflict and in-fighting can slow down an already time-intensive process.

Below we share a few best practices described by some of Colorado's collaboratives:

- Start with small wins, and showcase these accomplishments when going after funding,
- Even if a full-time director or paid facilitator isn't possible, in-kind coordinating support from local or state government personnel, from local or regional bridging organizations, or from colleges and universities can make a big difference for a collaborative's success,
- Do a stakeholder analysis to understand who the stakeholders in the collaborative are, where conflicts may lie and who is missing,
- Invite everyone, knowing not everyone can participate; work hard to get more participation at critical times,
- Do a situation assessment as the collaborative begins to understand the history and context of different issues, what has worked in the past and what has not and what people think would be a fruitful path of action in the future,
- If issues are particularly contentious or there are a lot of different perspectives around the table, a skilled facilitator can help keep the group from dissolving into intractable conflict, and
- Focus on the 80% you have in common and leave behind the 20% you do not have in common.

⁹³ Colorado Water Conservation Board, 2015.

⁹⁴ The Oregon Watershed Enhancement Board

(<https://www.oregon.gov/oweb/Pages/index.aspx>) provides an example of state-level coordination of watershed groups.



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