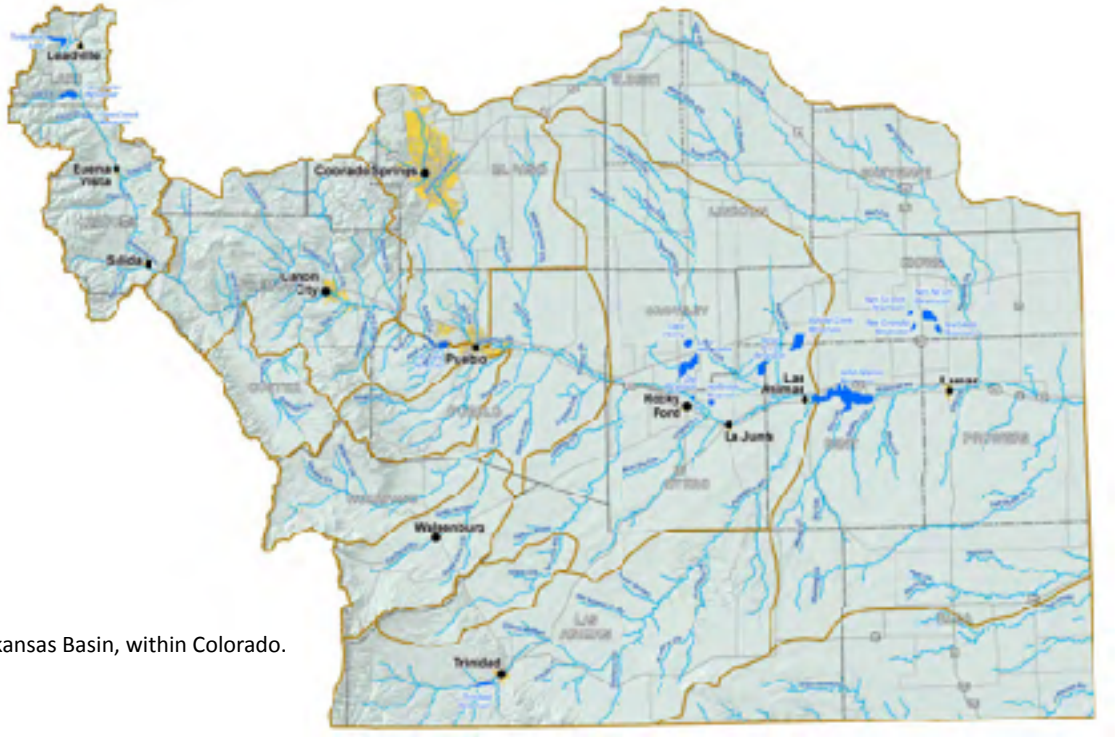
Arkansas River Watershed Collaborative
Collaborative Development Grant Final Report

Special thanks to the Colorado Water Conservation Board for primary funding for this project. Additional support came from the Arkansas Basin Roundtable, Lower Arkansas Valley Water Conservancy District, Colorado Springs Utilities, and other entities within the Basin. The Lower Arkansas Valley Water Conservancy District served as the Fiscal Host for the primary funding. Technical support and oversight of the project was provided by Coalitions & Collaboratives, Inc.

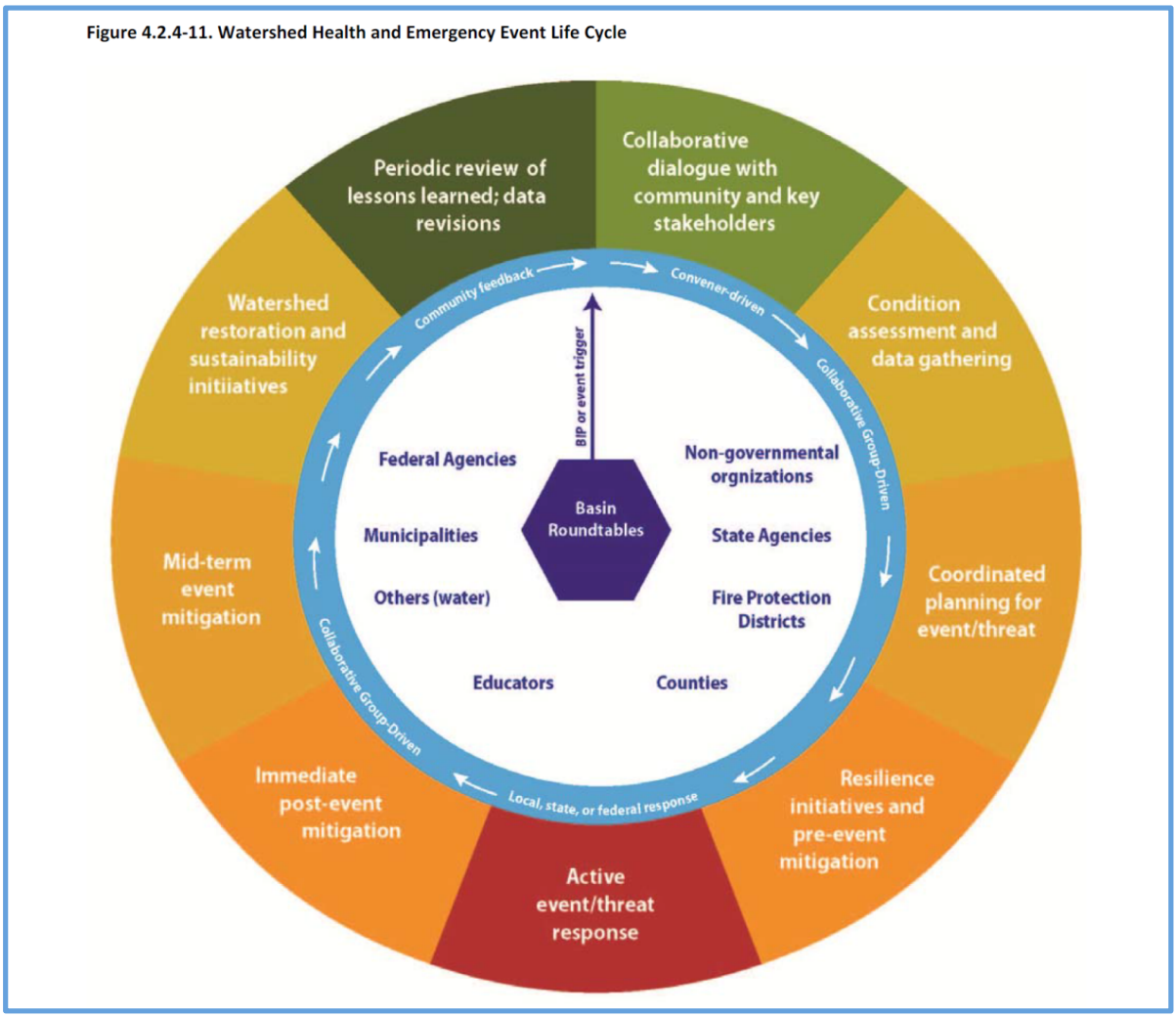
Background

In 2013 Governor John Hickenlooper issued Executive Order D 2013-05, which directed the Colorado Water Conservation Board (CWCB) to prepare a water plan for Colorado that would help guide water issues (such as the "gap", or need for additional water for municipal/ industrial use, while still maintaining agricultural supplies) in the state at least through 2050. As part of the process, the CWCB asked each of the nine Basin Roundtables around the state to work at the local level identifying their needs and gaps, and to develop a Basin Implementation Plan (BIP) for their respective regions. They also asked each Roundtable to identify specific projects, programs, and methods for meeting their needs, not only in the area of water supply, but also in Education, Participation & Outreach; Watershed Health, and Conservation Projects and Methods .



The Arkansas Basin, within Colorado.

The Arkansas Basin Roundtable (ABRT) took the watershed health aspect to heart, in part driven by several wildfires that occurred in the basin in the years leading up to the planning process. To address the watershed health portion of their process, the ABRT created a watershed health working group. The working group brought together a variety of stakeholders, including state and federal resource managers (such as Colorado Parks & Wildlife, the US Forest Service, the Bureau of Land Management, and the US Army Corps of Engineers), as well as local water providers, agricultural water users, and the environmental and recreation communities. The group worked "to build a new foundation of common interests and shared strategies to improve planning, response, and recovery related to wildland fire and subsequent flooding.[1]"
One of the goals of the ABRT-BIP was to foster watershed health collaboratives throughout the basin at the sub basin scale. To accomplish this, the ABRT members identified starting a basin-wide collaborative as a specific goal in the BIP. Each of the 19 counties in the basin included the watershed health collaborative as a priority in the Master Needs List.



The Watershed Health Working Group developed the "ring of fire" to help think about watershed health and emergencies, such as wildfire and flooding.

[1] WATERSHED HEALTH BASIN PLAN WORKING GROUP, Watershed Health Toolkit, 2014.

In 2015 the Arkansas River Watershed Collaborative (ARWC) officially started with a Water Supply Reserve Account (WSRA) Grant from the Colorado Water Conservation Board. The WSRA grant was titled Arkansas Watershed Health Collaborative. The Lower Arkansas Valley Water Conservancy District agreed to serve as the fiscal host, and to supply $10,000.00 or cash match toward the grant. They contracted with Carol Ekarius of Coalitions & Collaboratives, Inc (COCO) to serve the technical service provider who would oversee development of the collaborative and activities in fulfilling the project components, including hiring the Coordinator as a COCO employee.

The primary goals of that grant were to hire a coordinator who would help to develop a strategic plan, and to implement several demonstration projects. The following report will detail the successes, the failures, and the lessons learned of setting up a collaborative conservation organization at the 26,000-square-mile scale.

Coordination of ARWC

The ABRT created a hiring committee to search for a Watershed Coordinator. One of the specifics of the job was that the successful candidate would have to relocate to the basin if they did not already reside there. The position was advertised broadly, and the committee reviewed several dozen applications. Using a matrix, the committee members went through a review of all the applications, and narrowed the field to a top ten list. Individual committee members then had phone interviews several applicants each, and so that all ten received an interview with a committee member, as well as an interview with Carol. These applicants were scored again based on the phone interviews, and the top four were invited in for an in-person interview (though one backed out a day before the interviews.) Of the final three applicants, the committee selected Deb Phenicie to be the Coordinator. Deb has a great background, but she did not have good chemistry with many key members of the ABRT, and she ultimately refused to move to the basin, in spite of having agreed to when she took the job. This led to Carol removing her from the position after six months on the job.

Following the experience with Deb, the hiring committee agreed to just have Carol search for a new candidate and hire the most appropriate candidate. She re-advertised, checked with some of the top candidates from the previous round, and ultimately hired Candace Walker. Candace seemed like the ideal candidate. She was born and raised in the basin, and her father was Bill Tyner, Assistant Division Engineer for the Arkansas Basin in the State Engineers Office, so she knew water and water people in the basin. She was working as an adjunct professor at Pueblo Community College, and had done her masters work on fishery impacts in Pueblo Reservoir.

Candace was doing great, and ABRT members were much more comfortable with her, but only a month after starting, she came in and told Carol she had gotten offered a dream job, teaching marine biology in a tenure-track position at a college in Florida. This was actually quite a heartbreak, because Candace seemed like she would be a person who could take the organization where the ABRT wanted it to go.

After two strike outs, and having spent a significant portion of the coordinator's budget on people who didn't ultimately work out, Carol recommended to the ABRT that rather than rehiring for the time being, she would take on a more active day-to-day coordination role in getting the plan done, and the ABRT members agreed.

***Lesson Learned:* A Good Coordinator is Hard to Find!** The traits, temperament, and abilities required for a Watershed Coordinator are challenging to find. The person needs a good deal of technical understanding of water-related issues, but more importantly, successful watershed coordinators have the right personal chemistry to build trust and bring people together. We not only saw this with ARWC, but a number of coordinator positions that were filled across the Front Range about the same time to address the 2013 flood areas also found that finding the right people for those jobs was tough.

These positions typically require someone who can work independently, is highly self-motivated, and is both strategic and tactical in getting work done. The next time we are hiring for a coordinator, we plan to develop some self-tests that we can give to applicants that will hopefully get us closer to the ideal candidate on the first try.

Grant Tasks

The proposal included implementing five tasks, including several demonstration projects, designed to show how collaborative efforts could expand watershed health efforts in the basin. The Tasks were:

1. *Collaborative Development:* Organize and coordinate the development of a collaborative watershed health subcommittee through the Arkansas Basin Roundtable and the development of new or support for existing watershed groups.
2. *Data Review, Mapping, Sharing:* Review environmental, water supply, agriculture and recreation data (including data compiled during the BIP planning process for Watershed Health) from a variety of sources. Develop a process to include currently identified water supply priorities into relative emergency decision support systems, such as the Wildfire Decision Support System (WFDSS), Community Wildfire Protection Plans, etc. Identify knowledge gaps to address in the strategic plan.
3. *Strategic Plan:* Develop a basin-wide strategic watershed plan including projects, programs, and processes to be completed through 2020.
4. *Public Outreach and Education:* Create and implement an outreach plan for raising awareness of the Arkansas River Watershed Collaborative and other collaborative group(s) among elected officials, entities, citizens, and businesses in and around the basin and establish watershed education programs for youth.
5. *Watershed Health Projects:* Initiate the implementation of "on-the-ground" projects that benefits watershed health, water supply and water quality, and identify a prioritized project list for years 2016 through 2020, with strategies to implement one or more additional projects per year. Projects included:
    a. Tennessee Creek Forest Health & Fuel Mitigation
    b. Cucharas Pre-fire Planning for Post-fire Recovery
    c. Purgatoire Watershed Invasive Species Removal and Habitat Restoration

Activity Summary:

ACTIVITY	OUTCOMES
Task 1: Collaborative Development	• Hosted a series of 4 listening sessions around the basin; • Attended 9 meetings with various sub-basin groups and the nonconsumptive committee; • Attended 14 ABRT meetings
Task 2: Data	• Gathered pertinent data about the basin, • Developed ARWC GIS set • Reviewed and coordinated with BIP Coordinator on projects • Coordinated WFDSS/water infrastructure process and added data for 3 water providers to WFDSS • Completed GIS mapping of water infrastructure for Town of Victor
Task 3: Strategic Plan	• Developed a five year Strategic Plan • Developed an Annual Operating Plan
Task 4: Outreach	• Created a website and email notices to stakeholders • Co-convened the Water: Impacting Your Bottom Line workshop for farmers in the lower basin. • Presented at Ark Basin Forum twice • Presented at Greenway Fund annual forum • Presented at Sustaining Colorado Watersheds Conference • Created and presented student program to 650 students,
Task 5: ImplementationProjects	
Task 5a: Huerfano fire planning project	• Completed the Upper Cucharas River Watershed: Identification and Analysis of Post-Wildfire Sediment Basins Report—a pre-wildfire planning document for implementing post-fire activities
Task 5b: Forest mitigation	• Completed 450 home assessment visits with private property owners near Twin Lakes and Turquoise Reservoirs • Federal/utility partners treated 322 acres of public lands • Treated 52 acres of private land in the same areas
Task 5c: Tamarisk/Russian Olive Treatments	• Supported work by Purgatoire Watershed Partnership to complete 30 acres of invasive mitigation and reseeding

Outcomes—Collaborative Development

Overall, the Collaborative Development has been a great success. ARWC is becoming known among stakeholders, and is moving forward with incorporation as a nonprofit organization. Some of the ABRT members who were a bit reticent about even moving forward with ARWC early on seem to be accepting and have moved from fear of environmentalists taking over the world, to seeing that ARWC can be a real benefit to water community members and their interests in the basin.

ARWC has also provided connectivity and support to the other established groups (Purgatoire Watershed Partnership (PWP), Headwaters of the Arkansas Working Group, Greenway Fund), and has been a key partner in establishing a new group, the Lower Arkansas Water Quality Working Group.

Having ARWC in place, and having it connected to COCO also proved a great value during the 2016 wildfire season, when three fires—Hayden Pass, Beulah, and Junkins—burned in the basin in late summer and fall. Through ARWC-COCO, we were able to bring technical support to the counties and communities that were impacted.

In the early months of ARWC, we hosted three listening sessions (one in Pueblo, one in Salida, and one in LaJunta) with stakeholders. The listening sessions were designed to gather input for the development of the Strategic Plan. Group size ranged between 40 and 50 participants at each meeting, which was actually more than we had initially expected. Generally participants were very supportive of developing a basin-wide collaborative, and identified the following shared values through this process included:

1.) Seek representation from a wide diversity of basin stakeholders, including federal and state agencies, local government, private and non-governmental organizations, and citizens who are committed to maintaining healthy watersheds and economic prosperity in the Arkansas Basin.

2.) Support locally-driven initiatives and implementation of action-oriented efforts.

3.) Serve as a transparent champion for stewardship of resources, with an emphasis on best-available science, voluntary activities, and building funding availability and leverage for watershed health projects.

Outcomes—Data…

Of great interest to municipal water providers was the discussion of developing a process to include currently identified water supply priorities into the Wildfire Decision Support System (WFDSS). WFDSS is the GIS based tool used by wildland firefighters to make strategic and tactical decisions to manage large-scale fire events. This has been a great success so far (though work will be continuing for several years before this one is “put to bed.”)

We worked initially with the small town of Victor in Teller County. Perched on the side of Pikes

Peak, Victor was an ideal initial candidate to work with: the City is very vulnerable to wildfire devastating their water infrastructure; they were working on their Source Water Protection Plan; they had limited knowledge and resources and none of their infrastructure was GISed. Colorado Springs Utilities (CSU) Watershed Program staff and COCO's GIS coordinator worked with the City to GPS all features, and develop a prioritization system for that infrastructure. The data was then processed to be compatible with the USFS WFDSS system (metadata, coding, etc.). Finally, the USFS, ARWC, CSU, and the City of Victor, and the Colorado Department of Public Health & Environment's Source Water Coordinator (CDPHE-SW), went through a fire exercise utilizing the data. CDPHE-SW became strongly supportive, and has agreed to act as an intermediary as more utilities come on board.

With that success, CSU gathered their GIS data, processed it in similar fashion, and worked with CDPHE-SW and USFS to get it into WFDSS.

Next, COCO received a grant from the USFS to develop a new data tool that will allow water providers to collect the data on a tablet in a way that reduces post-collection processing by collecting comparable metadata to federal databases, and coding things consistently with the federal GIS codes. This product should be available in late summer/early fall of 2017.

ARWC presented information on this at the ABRT and there is strong interest. In partnership with the ABRT Public Education, Participation, and Outreach (PEPO) team, we will be hosting a workshop on May 23, 2017 for water providers in the basin to learn more about getting their data into WFDSS.

Outcomes—Strategic Plan

The Strategic Plan was adopted by the ABRT at their October, 2016 meeting, and the Annual Operating Plan was adopted in January, 2017. The plan is attached at the back of this document.

Outcomes—Public Education & Outreach

ARWC has created a website and participated in several different outreach events, such as doing presentations at the Arkansas Basin Forum, Creek Week, and the Greenway Fund Forum to name a few. We provided funding for school education programs to PWP (see the attached *Our Water, Our Watershed* report). Carol attended meetings of the Greenway Fund, PWP, and HAWG (the three existing watershed coalitions in the basin) to update them on ARWC.

Our most significant outreach event was a one-day workshop at Otero Junior College entitled "Water Quality in the Lower Arkansas Basin: Impacting your Bottom Line." This workshop was geared toward ag producers in the valley, and had over 70 participants, with about 50 of those being farmers. We partnered on this workshop with other groups that are participating in the Lower Ark Water Quality Work Group (LAWQWG), including the Colorado Watershed Assembly, the ABRT PEPO committee, the Lower Ark Valley Water Conservancy District, Colorado Department of Agriculture, CWCB, CDPHE, and EPA. Everyone was happy (and a bit surprised) by the response of the farmers to the workshop. We received great feedback through a survey, and the farmers are very interested in how they can improve irrigation management and soil health.

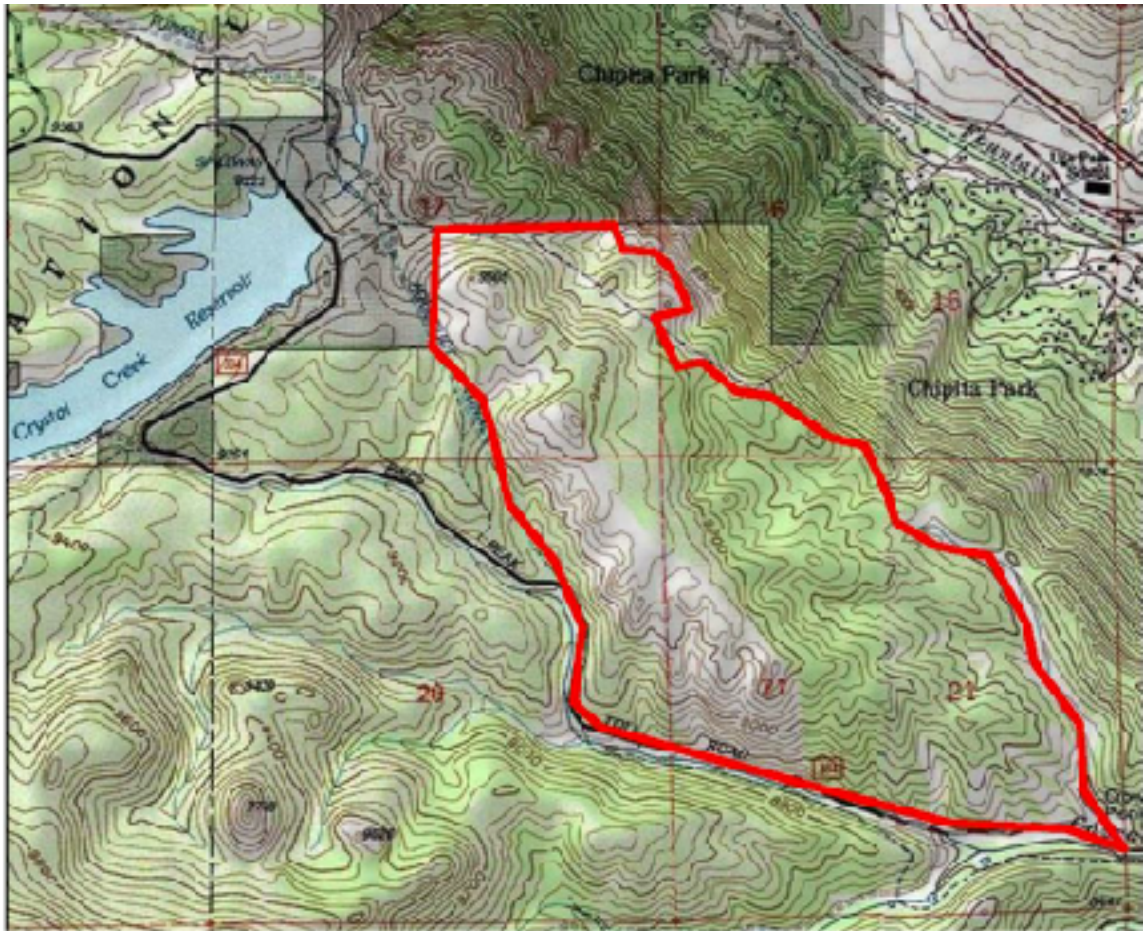
Outcomes—Projects

1. **Tennessee Creek Forest Health & Fuel Mitigation:** This project ran into some challenges, but overall we feel that it was successful. Our original goal was 179 acres of federal-lands treatment in Lake County, known as the Tennessee Creek project, and 52 acres implemented by ARWC on private lands also around significant water resources in Lake County. The challenge was that we were showing acres the USFS would be treating in Tennessee Creek with water provider dollars (from CSU and Aurora) as match, but the project was appealed just prior to implementation by an out-of-state environmental group. The USFS is currently contracting and will implement the Tennessee Creek project this summer. In the meantime, the water providers had funding available, and they worked with the USFS to implement other acres on federal lands. Our original goal was 400 acres of federal treatment and 50 acres implemented by ARWC on private lands around significant water resources in Lake County.

   In spite of this challenge, the utilities and USFS were able to move funds around to some significant and already NEPA-ed acres. For example, they created the Morrison Creek Fuel Break, directly across the river from the Otero Pump Station (pre- and post-project photos below). This was a 132 acre fuel break.

   The USFS also completed 190 acres of treatment near Crystal Creek Reservoir (on Pikes Peak —map next page), which was another high priority for Colorado Springs.

This makes the total federal lands treatment accomplished during the period at 322 acres, compared to our goal of 197 acres—though in different locales in the watershed. The USFS, water providers, and other stakeholders also began work on a comprehensive NEPA process for a 60k acre landscape in the Upper Monument Creek watershed (north of the Air Force Academy into southern Douglas County).



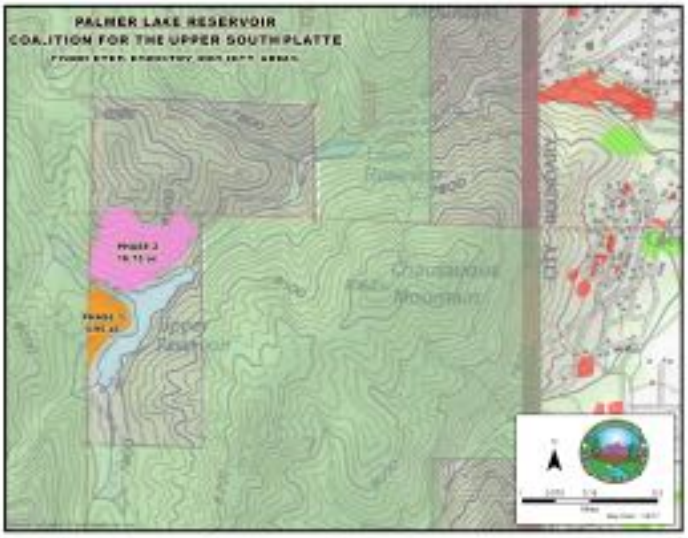
Lesson Learned: **Federal Agencies Need to be Truly Shovel Ready!** The Feds go through a long planning process under NEPA, and then once the decision is signed they are open to an appeal. If we plan to include specific projects as match in the future, we need to be absolutely sure they are past the appeal stage and ready to be actually implemented.

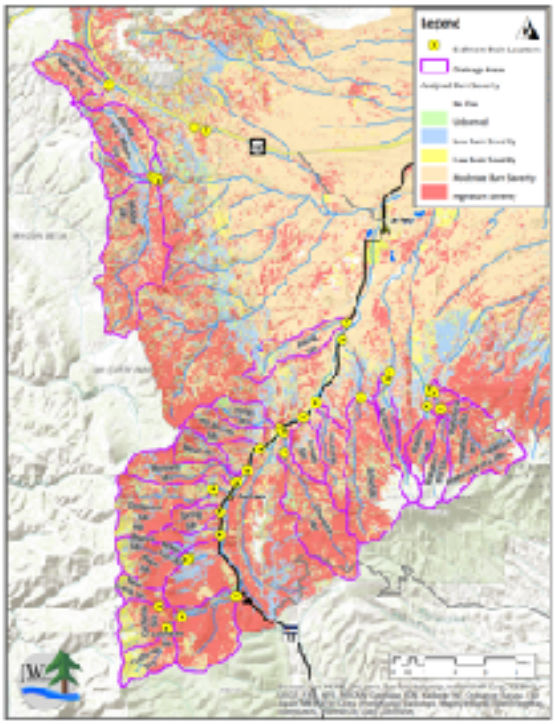
Our commitment for ramping up acreage on private lands was to complete at least 50 acres in the vicinity of water resources in Lake County. We did this by treating 41.6 acres close to Twin Lakes Reservoir on State Trust Lands, 2.1 acres at the confluence of Rock Creek and Lake Fork Creek, and completing ~21 acres of private property through working directly with landowners on five neighborhood fuels reduction programs with our chipper in the Pan-Ark and Beaver Creek subdivisions. We have found in the past that the chipper program is a great entre' to working with private property owners on a more robust scale.

Utilizing the SWIFT crew from Buena Vista Corrections to implement the primary treatment project saved some funds, so we were able to hire a Forester to work seasonally in Lake County. She focused last summer on performing home assessments (450 total) in various subdivisions, and on doing extensive community outreach (attending the County Fair, various HOA annual meetings, and other community events in Lake County). The home assessments and outreach are critical for building a future list of potential treatment acres. One of the more exciting opportunities moving forward is that we have created a relationship with the owners of a large parcel at the confluence the North Fork of Lake Creek and Half Moon Creek. This confluence area was rated at the highest priority in the Headwaters of the Arkansas Wildfire Watershed planning initiative, completed by Brad Piehl from JW Associates in 2001. The opportunity that the WSRA grant provided to ramp up work in this area will provide work in years to follow in this critical subdrainage.

Lake County, which has struggled to get traction for wildfire mitigation was very appreciative, and provided significant in-kind support, providing an office, computer equipment, a truck, radios, etc. Dan Dailey, the County Fire Chief, said, " ".

One other opportunity that we were able to take advantage of was working on private-acre treatments associated with the the Upper Monument Creek project. ARWC, through COCO, was able obtain funding to treat 21.7 acres around Palmer Reservoir.





2. **Cucharas Pre-fire Planning for Post-fire Recovery:** The Huerfano Water Conservancy District was the lead on this project. They completed the analysis and design for post-fire debris basins, identifying 36 places as shown on the map at left, where basins would make sense after a fire. The plan also includes planning information on implementing such projects. The full report is quite long, at 161 pages, so it is not attached, but is available at *http://www.jw-associates.org/Resources/Cucharas%20SB%20Report%20V3.pdf*

3. Purgatoire Watershed Invasive Species Removal and Habitat Restoration:

This project also ran into a NEPA challenge. Our original proposal was to treat invasive phreatophytes both in Trinidad in partnership with PWP, and down in the lower basin on USFS lands within the Comanche National Grasslands. The USFS also were planning to move some fencing to protect riparian areas along the Purgatoire River, and to obliterate an old stock pond that was keeping water from reaching a wetland adjacent to the river. Unfortunately, they bundled everything into one NEPA decision, which was also appealed. They are working through the appeal process, and we will look for opportunities to work with them in the future once they have shovel ready projects. We were able to complete the 30 acres of invasive phreatophyte treatment, by working with PWP to increase the acres completed in their Boulevard Addition Project. PWP performed mastication of the existing vegetation, painting stumps with a herbicide, and then completed revegetation.

Lesson Learned: **Say it Again—Federal Agencies Need to be Truly Shovel Ready!**

Before

After