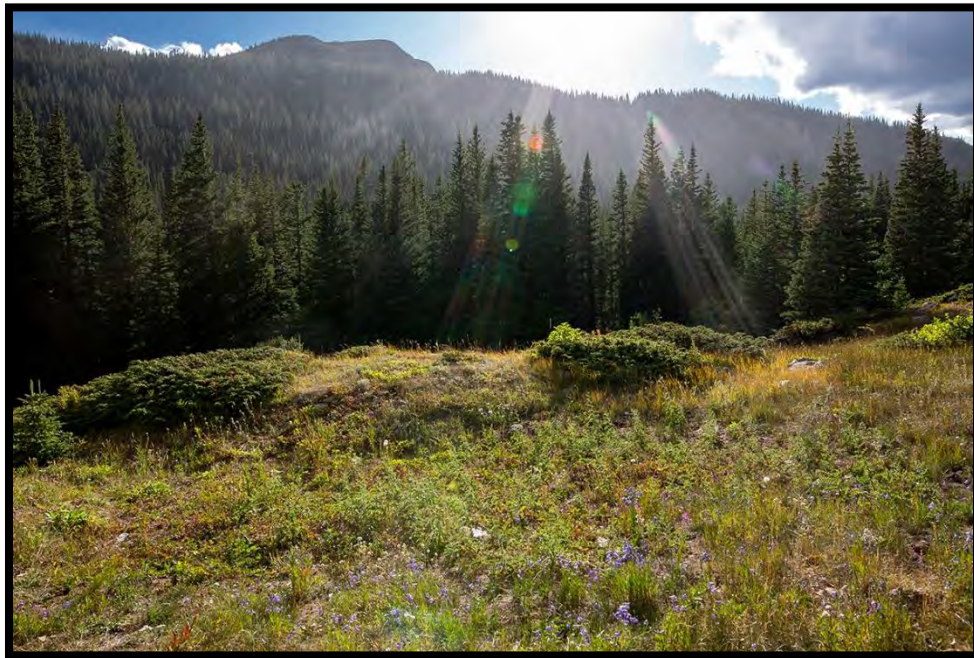


FINAL REPORT: Expansion of the Northern Colorado Fireshed Grant (CWRP) & Boulder County Forest Collaborative Education & Outreach (CWP)



Prepared for: Colorado Water Conservation Board; Colorado Water Plan
Attn: Chris Sturm
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Boulder Watershed Collective (previous fiscal agent: Four Mile Fire Protection District)

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Introduction

The Boulder Watershed Collective's (BWC) mission is to cultivate partnerships, promote community stewardship, and revitalize social and ecological systems within the Boulder Creek watershed and beyond. BWC works to improve the health and function of the watershed with a social and ecological approach, integrating landscapes and communities to find viable solutions for protecting, conserving and restoring our watershed. Climate change, prolonged drought, increasing development in the wildland urban interface and other factors are increasing the threat of severe wildfire across the West. Increasing severity of wildfire and greater awareness and concern within the community prompted us to begin looking at how BWC could take an active role in coordinating solutions to for these issues. By 2018 BWC was aware of multiple agencies in Boulder County conducting wildfire mitigation, but not in a coordinated manner. Through conversation with other watershed groups in the region, BWC decided that it was an appropriate time to begin coordinating wildfire related work at a watershed scale.

In 2019 BWC gathered an initial group of local partners in a working group called the Boulder County Forest Collaborative. By 2020 the Northern Colorado Fireshed Collaborative was gaining momentum and the US Forest Service and Boulder County Commissioners had developed a Boulder County Fireshed group. The Boulder County Forest Collaborative and the BWC adapted to this changing collaborative network and integrated our work into these two organizations.

Background, Methods & Results

BWC's approach to working with communities is to make a long-term commitment to the community, engage with existing processes or agencies and expand from there to co-create multi-objective projects. This approach is intensive, time consuming, and varies between communities.

Methods included the development of a [Community Engagement Strategic Plan](#) and an incremental approach to education and engagement. Since 2020 we have partnered with the University of Colorado's Masters of the Environment program to host a group of graduate students for their Capstone project. Each students dedicates ten hours per week to our project during the school year and 30 hours per week during the summer. This partnership allows us to drastically increase our capacity of community engagement. Each year the students have focused on wildfire planning and community engagement in a different community within the Boulder Creek watershed. Capstone projects have included:

- Development of the Boulder County Forest Collaborative (2020),
- [Gold Hill Collaboration on Wildfire and Forest Health](#) (2021),
- Wildfire Resilience in Nederland, Colorado (2022).

The project objectives include:

1. Increase public understanding of watershed health and function and the connection between upland forests and water quality and quantity.
2. Develop baseline metrics for evaluation. Baseline metrics will help to better understand a community and individual perspectives related to forest health and ecology, forest management tools and wildfire risk. Surveying will be completed pre-project and repeated at the end of the project to assess whether learning has occurred, if that learning has translated into action and in

what ways behaviors or perspectives have been altered. Pre-project surveying will help to focus education efforts on specific areas which will create action or behavioral change.

3. Increase private landowner participation in forest restoration and wildfire mitigation programs. It is anticipated that through increased and targeted outreach and education programs more private landowners will become more aware and motivated to better manage the forested lands they own.
4. Create community level forest restoration projects. Climate change is altering the typical ways that wildfire mitigation has previously occurred. Emphasis needs to be on larger scale projects that create landscape continuity in order to protect water sources from severe wildfire.

Results: Results are detailed below by project task.

Colorado Watershed Restoration Program

Task 1: Expansion of the Northern Colorado Fireshed

BWC has been part of NOCO Fireshed since 2019 and has participated in the growth and development of the organization. The grant funds allowed BWC staff to participate in meetings and conversations which continue to grow and formalize the Fireshed organization and network. Currently, BWC is on the Community Engagement and Outreach (CEO) steering committee, the Operations Committee and the Adaptive Management and Monitoring committee. BWC participates in quarterly steering committee meetings and quarterly full Fireshed meetings.

BWC is also highly involved in the Boulder County Fireshed, a more localized stakeholder organization nested within the NOCO Fireshed. The Boulder County Fireshed was formalized in 2020 with a [Memorandum of Understanding for Collaboration and Coordination to Improve Forest Health and Reduce Wildfire Risk in Boulder County](#). Since the Marshall Fire, the group has added numerous stakeholders from eastern municipalities and fire districts to incorporate the needs of urban and grassland communities.

Task 2: Implementation Plan

Developing an implementation plan across the watershed has been an ongoing effort. We began this collective process by developing a [Mitigation Map](#) so that all partners could see completed mitigation treatments by multiple agencies across the landscape. Other planning documents integrated into implementation planning include numerous Community Wildfire Protection Plans, USFS Potential Operation Delineations (PODs), a local priority landscapes mapping project, Source Water Protection Plans, the [Quantitative Wildfire Risk Assessment](#) (Colorado Forest Restoration Institute) and the [Sediment Source and Storage for Disaster Planning](#) completed by Watershed Science and Design. Reviewing and discussing these documents with agency partners and communities, coupled with continual discussions about values and priorities at multiple scales has led to the development of an implementation plan for BWC (in conjunction with partners). These maps are available in the google folder: [Implementation Plan Maps](#).

Task 3: Education & Outreach

This task was combined with the Fireside Chat (Task 2) in the CWP Outreach Grant. See below.

Colorado Water Plan Grant Outreach:

Task 1: Survey & Baseline Metrics

This task changed form between the grant application and the end of the project. The initial project partners (Patricia Champ and James Meldrum) were unable to participate. Instead, we partnered with the CU Center for Sustainable Landscapes and Communities and CU graduates to create a survey focused on City of Boulder neighborhoods. Additionally, we conducted survey's in the primary mountain communities we worked in: Gold Hill, Coal Creek Canyon and Nederland. These individualized community survey contributed to our understanding of variable community values and barriers related to wildfire mitigation. The survey results contributed to the development of our implementation planning and project development.

Task 2: Fireside Chats

The grant was received just before covid began. Covid required that we alter our original engagement plans for Fireside Chats. In 2020 and 2021 many of our engagement events were webinars and other virtual forms of engagement. In late 2021 we began to integrate outdoor field trips. A comprehensive list of forest and wildfire related engagement is listed below.

1. [A Wild Watershed Podcast](#)
2. Videos: [Hike with A Forester](#)- 1) Front Range Forest Restoration, 2) Front Range Tree Species ID.
3. [Take a Hike: Shanahan Ridge](#)
4. [Western Water Resources and Wildfires](#) (Sept 24, 2020)
5. [2020 Wildfire Panel and Discussion](#) (Nov 30, 2020)
6. [Home Wildfire Preparedness Workshop & Discussion](#) (May 26, 2021)
7. [Water on the Edge](#) (March 2020)
8. [A Holistic Approach to Wildfire Mitigation](#) (April 2020)
9. [Drought and Wildfire Preparedness](#) (April 2020)
10. [Wildfire Forecast and Preparation in the Peak-to-Peak Region](#) (April 19, 2021)
11. [Gold Hill Forest Restoration Project Presentation](#) (June 22, 2021)
12. [Nature Journaling](#) (Aug 14, 2021)
13. [Living With Wildfire: Modeling Community Engagement in Gold Hill](#) (2021)
14. [Imagining 2025 in Gold Hill, Colorado. A Vision for a Wildfire Adapted Future](#) (2021)
15. [Community Conversations: Neighborhood and Community Leader Summary Report 2021](#)
16. [Centering Indigenous Perspectives on Environmental Leadership](#) (Oct 11, 2021)
17. [Gold Hill Bird Monitoring \(2021\)](#)
18. [Gold Hill Wildlife Picture Index \(2021\)](#)
19. [Kelly Dahl Forest Restoration field trip with the USFS](#) (Oct 14, 2021)
20. [Copperdale & Camp Eden Visioning Workshop](#) (Jan 24, 2022)
21. [Wildfires & Watersheds](#) (With CSU Extension Gilpin County- Feb 3, 2022)
22. [Wild Bear Climate Action Series](#) Presentation (Feb 20, 2022)
23. [Pinecliffe Fuels Reduction Webinars](#) (4 meetings Feb thru May)
24. [Gold Hill Town Meeting presentation](#) (Feb 16th & Mar 11, 2022)
25. [Colorado Riparian Association happy hour: Marshall Fire](#) (Feb 17 2022)

26. Living With Wildfire webinar 1: [Studying Air and Water Contaminants After the Marshall Fire](#) (Mar 31, 2022)
27. Living with Wildfire webinar 2: [Fire Adapted Ecosystems and Our Built Environment](#) (Apr 28, 2022)
28. [Understanding Perceptions of Officials to Wildfire Risk in Estes Park, Colorado](#). Worcester Polytechnical Institute student research project. (May 4, 2022)
29. Supporting Community Engagement in Wildfire Planning in Boulder County, Colorado. Worcester Polytechnical Institute student research project. (May 4, 2022)
30. Reynolds Ranch Forest Restoration Tour (May 28, 2022)
31. Living with Wildfire: Preparedness Workshop 1 (July 9, 2022)
32. [Cooperation in Nature Hike: Ponderosa Forests](#) (July 12, 2022)
33. Burning Issues: How to Prepare your Farm/Ranch for the Next Wildfire (Aug 20, 2022)
34. [Forest Bathing](#) (September 22, 2022)

Task 3: Landowner Outreach

This task has been incredibly successful. BWC has engaged with hundreds of residents within the Boulder Creek watershed. This engagement has led to increased awareness of critical watershed and wildfire concepts. Engagement methods vary widely depending upon community needs and interests. BWC strives to integrate adaptability and flexibility into staff workplans so that we can address gaps in services and respond to emerging needs within the community. This approach has been successful and allows us to continually build new partnerships and assist the community where they need it.

BWC has completed planning and acquired funding for 771 acres of forest restoration and wildfire mitigation treatments across 113 private properties. Additionally, BWC has influenced approximately 293 acres by connecting those landowners to other agencies who can work with the landowner to complete planning and grants for mitigation projects.



Task 4: Network/Asset Mapping

A Fire District Asset Mapping Project was conducted regarding [Wildfire Public Safety & Mitigation](#). Interviews were conducted with mitigation specialists, vegetation managers and fire chiefs within the Boulder Creek Watershed to better understand how fire protection districts and other wildfire agencies can increase the pace and scale of wildfire mitigation projects across Boulder County. Interviews were transcribed and coded to find dominant themes across agencies. These themes have been captured in the linked webpage to assist partners in planning and resource development.

Conclusions and Discussion

This project and the tasks within it have been incredibly successful. Success can be attributed, in part, to the work of BWC staff and partners, but also to the shift from state and federal agencies to focus resources and funding on local wildfire risk reduction capacity and projects. Since this grant began four years ago, BWC has seen a shift in public perception and behavioral changes.

Actual Expense Budget

Task	Description	Total Funds Spent
	<u>Co Watershed Restoration Tasks</u>	
1	Northern Colorado Fireshed	\$18,666.13
2	Boulder County Implementation Plan	\$36,333.87
	<u>Water Plan Tasks</u>	
3	Survey	\$8,447.52
4	Fireside Series4407.19, 14258.94	\$17,850.04
5	Landowner Outreach	\$12,741.65
6	Network Mapping	0
7	Develop Outreach Materials	\$1,303.89
	TOTAL	95,343.10

Match

Agency	Task	Grant	Cash Match
CWRP/CWP grant	Outreach & Planning	\$95,380	
2020 CU Masters of the Environment Group	Outreach & Education		\$22,840
2020 Interns	Outreach & Education		\$9,108
Wonder Labs	Outreach & Education		\$10,000
Action & Implementation for Mitigation (AIM)	Implementation Planning		\$28,283
Coalition for the Poudre River Watershed	Outreach & Education for Implementation Planning		\$34,512
Boulder County	Outreach & Education		\$20,000
TOTAL			\$124,743