

FINAL REPORT

Taylor Park, Gunnison County

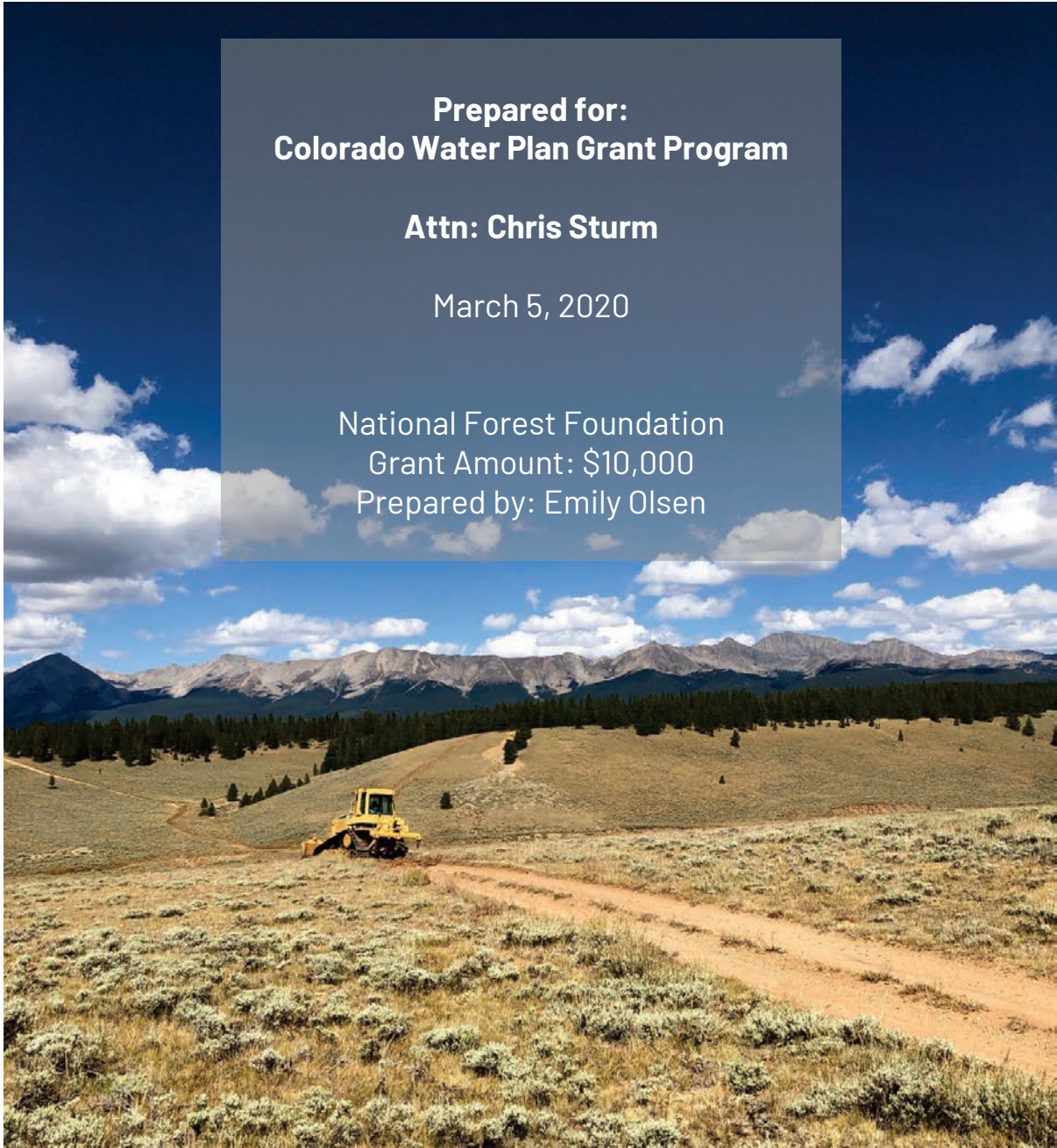
Watershed Erosion Control & Stream Restoration Project

Prepared for:
Colorado Water Plan Grant Program

Attn: Chris Sturm

March 5, 2020

National Forest Foundation
Grant Amount: \$10,000
Prepared by: Emily Olsen



Photos in this report were taken by Ashley Hom, USDA Forest Service



National Forest Foundation
390 Union Blvd, Ste 400
Denver, CO 80228

March 5, 2020

Mr. Chris Sturm
Colorado Water Conservation Board
Department of Natural Resources
1313 Sherman St., Rm. 721
Denver, CO 80203

RE: Final Report for Colorado Water Conservation Board 2019 State Water Plan grant to support Taylor Park, Gunnison County Watershed Erosion Control and Stream Restoration Project.

Dear Mr. Sturm:

The National Forest Foundation is pleased to submit our final report for the *Taylor Park, Gunnison County Watershed Erosion Control and Stream Restoration* project. Within this report we summarize the grant and project, and address the requested reporting elements.

Grant summary

- NFF was awarded \$10,000 through the Colorado State Water Plan grant program to support an "Environmental and Recreation" project: Taylor Park, Gunnison County Watershed Erosion Control and Stream Restoration Project
- Grant was awarded to NFF by CWCB on 9/10/19 via Purchase Order # POGG1,PDAA,202000002218
- Purchase order is effective from 9/9/2019 to 6/30/2020

Thank you for your confidence in our organization to complete this project. We are grateful for the opportunity to implement this important work in coordination with the USDA Forest Service, Gunnison Ranger District. Please don't hesitate to contact me if you have any questions or concerns.

Regards,

Emily Olsen
Colorado Program Manager
National Forest Foundation

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A. Introduction

In September and October 2019, the National Foundation (NFF) and Gunnison Ranger District of the Gunnison National Forest (Forest Service) completed phase I of a broader watershed health and erosion control project in the Taylor Park area of Gunnison County, Colorado. The project involved ameliorating “Illegal” or unauthorized roads and routes created by Off-Highway Vehicles (OHVs) and other recreational users in the Taylor Park area of Gunnison County, Colorado.

B. Background

In part due to lack of understanding about the problematic impacts to water quality, and issues related to delineation and signage of authorized trails, OHVs create dozens of “illegal” or unauthorized routes annually in the Taylor Park area, leading to extensive erosion and problematic stream crossings across this important landscape. *For a map of the landscape, please see Appendix A.*

Beginning in 2018, the Gunnison Ranger District began a concerted effort to begin closing unauthorized routes in a systemic and holistic manner, and restoring surround areas of National Forest land. Beginning in 2018 the NFF joined the effort as a partner to assist with implementation.

The USDA Forest Service began taking steps to solve this issue in 2010, when Grand Mesa, Uncompahgre and Gunnison National Forests leadership signed a *Record of Decision (ROD) for Gunnison National Forest Travel Management* (ROD, 2010). The ROD has authorized this and other forthcoming implementation in the Taylor Park area. It ROD recognized that some fragile environments or important habitat areas would not allow designated roads or trails to remain open to motorized and/or mechanized public travel to reduce the risk of adverse impacts to water, soil, wildlife and other resources. As stated by the Forest Supervisor at the time, “I have determined that those closures are necessary to protect the environment or the natural resources that depend upon those important habitats” (ROD, page 1).

The public was heavily involved in the travel management process. The Forest Service began the public participation portion of the travel analysis process in the spring of 2006 to define the existing or current transportation system and assess the existing motorized and non-motorized uses on the Gunnison National Forest. After receiving approximately 1,000 letters, emails, and maps from the public commenting on use preferences for specific routes and recreation or access needs, the Forest Service interdisciplinary travel

analysis team began the analysis process and developed a proposed action that would designated routes to remain open for public travel on the Gunnison National Forest.

The Gunnison Basin Roundtable Implementation Plan (BIP, 2015), built comprehensively on other Forest Service planning efforts and proposed a series of actions to specifically address water quality and many other issues in broader Gunnison Basin, including the Taylor Park Area. The NFF and project partners recognize that our Taylor Park project is helping to protect existing uses in the Gunnison Basin, including recreation and tourism near Taylor Park, thereby achieving the first goal of the BIP. The BIP confirms the importance of the Taylor Park area for water-related recreation, stating that it hosts "...a robust recreational economy, much of which is tied directly to water. The Gunnison Basin has an abundance of world class fishing and boating (BIP, page 26). The Taylor Park project also compliments the 5th goal of the BIP, focused on quantifying and protecting environmental and recreational water uses. The BIP includes the Taylor River as one of the environmental and recreational focus segments (BIP, page 77).

Finally, the Colorado Water Plan (CWP, 2015) discusses the need to promote protection and restoration of water quality, stating, "the protection and restoration of water quality should be a key objective when planning for Colorado's current and future consumptive, recreational, and environmental water needs" (CWP, Critical Action Plan, page 12) and also emphasizes that "efficient and effective water infrastructure promoting smart land use; and a strong environment that includes healthy watersheds, rivers and streams, and wildlife." (CWP, page 6).

C. Methods

The NFF utilized contractors and USDA Forest Service staff expertise to close the routes with signs and boulders, and then restore the road bed to a natural state in a number of priority areas. The work took approximately 2 weeks to complete from start to finish.

To accomplish the work, we contracted with a heavy equipment operator to close the road bed. Forest Service staff then reseeded ripped areas with native seed mixes and revegetated and restored other areas of former road bed. In partnership with Gunnison County, who procured and delivered boulders to the project site, Forest Service staff placed boulders to repair stream crossings and also transplanted hundreds of willows.

Specific methods employed in the process to close routes included:

- Utilizing a Cat D6N dozer to construct tank traps and water bars where necessary to discourage motorized traffic and minimize future erosion in road closure areas.
- Ripping existing compacted road surface to promote natural vegetation.
- Improving water crossings by utilizing an excavator to redirect upper flows and repair single track tire ruts.
- Channelizing flow to original width by using rocks, logs and other native materials.
- Helping restore native vegetation by utilizing harvested native materials.
- Helping restore disrupted areas and improving stream crossings by placing boulders (provided by Gunnison County), transplanting willows, and other activities.

All worked performed was overseen by Forest Service employees and abided by by all laws and regulations pertaining to the management and protection of National Forest System (NFS) lands and adhere to relevant National Environmental Policy Act (NEPA) documentation.

D. Results

The primary results achieved through this project involved closure of unauthorized routes to benefit water quality in the Taylor Park area. **Through this project, 12 miles of illegal routes and roads were properly closed.** *Before and after photos of selected sites are included in Appendix B.*

E. Conclusions and Discussion

We are happy to share that our objectives for the project were successfully met. Aside from achieving the tangible results such as miles of authorized routes closed, we also achieved less tangible objectives. For example, workforce capacity to implement technical projects in rural Colorado can sometimes be challenging. In this case, Forest Service staff were able to work very closely with and learn from highly skilled contractors on the project, thereby increasing local agency capacity to plan and potentially implement future projects. We also developed a good relationship with our contractor, and anticipate working with them more regularly on future projects.

In terms of lessons learned, a few things come to mind that are procedural. First, at the start of the project, the contractor mistakenly hit a buried utility line. After making contact with the utility company, we discovered that the line was not in use and was a nonissue. However, the situation could have been problematic, and the error spoke to the level of experience of Forest Service staff overseeing the project. They learned the very important lesson that you must check for utility lines before proceeding, and will likely never make a similar mistake. Second, the NFF had issues securing the relevant insurance for our grant, a problem which we didn't anticipate. Since this the first CWCB grant we've received in several years, we learned many valuable granting/contracting lessons that we will be able to use moving forward so that we are an effective partner to both CWCB and our Forest Service partners.

F. Actual Expense Budget

Actual expenses:

Tasks- Closure of Illegal Routes and Stream Crossing Improvements	Total Budgeted Cost	Total Actual Cost	CWCB Funds	Matching Funds (Cash)	Matching (in kind)
Heavy Equipment Rental to complete road/route ripping and restoration work to improve stream crossings	\$15,570	\$18,200	\$8,000	\$4,000	\$6,200
Boulder Procurement & Placement	\$3,000	\$2,112			\$2,112
Signage Design & Printing	\$1,000	\$1,500			\$1,500
Willow procurement and placement	\$1,500	\$1,000			\$1,000
TOTAL	\$21,250	\$22,812	\$8,000	\$4,000	\$6,000

Narrative: Project expenses included Forest Service time to manage and plan the project, including a GPS contract to identify unauthorized routes, a contract with a heavy equipment operator, and expenses related to procuring, hauling and placing materials and supplies including boulders, signage, hardware, posts, willows, and native seed mix.

We did not secure the anticipating matching cash funds. As a result, most of our funding shifted toward in-kind expenses. As a result, we did not meet the minimum requirement for cash funds from CWCB, and covered some of our direct expenses with funds from NFF individual donors.

Matching funds:

- USDA Forest Service - \$6000 in-kind staff time match and \$2,700 in-kind match to purchase materials, supplies and GPS services
- Gunnison County - \$2,110 in-kind match to procure, haul and place boulders
- National Forest Foundation - \$4,000 cash match (funding raised from individual donors in Colorado).

G. Appendix

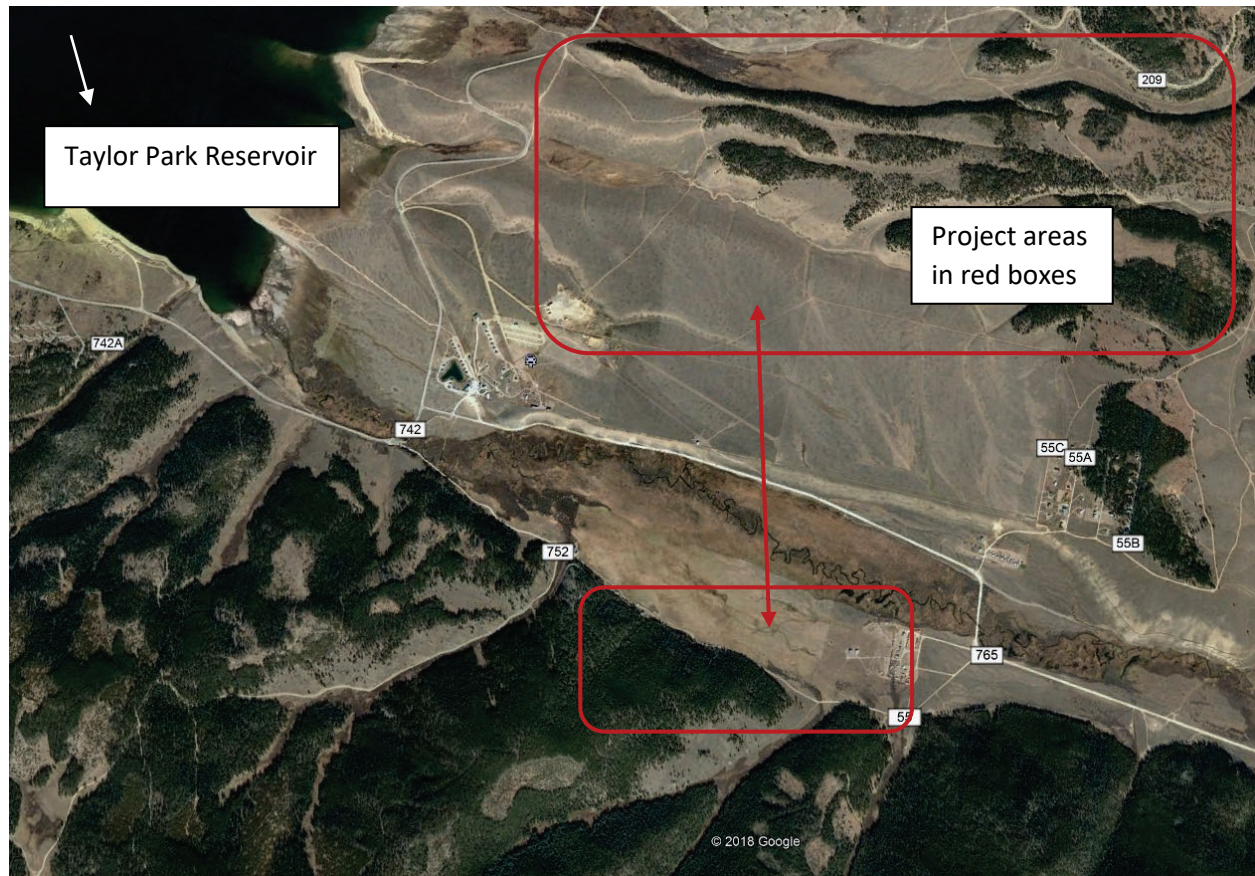
Please see the following appendices:

- Appendix A: Project area map
- Appendix B: Project photos

H. References

1. *Record of Decision for Gunnison National Forest Travel Management Environmental Impact Statement* (2010), available at: https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5182945.pdf.
2. *Gunnison Basin Roundtable Implementation Plan* (2015), available at: http://www.colorado.gov/pacific/sites/default/files/GBIP_4-17-15-FINAL_no-appendices_2.pdf.
3. *Colorado's Water Plan* (2015), available at: <https://www.colorado.gov/pacific/cowaterplan/plan>.

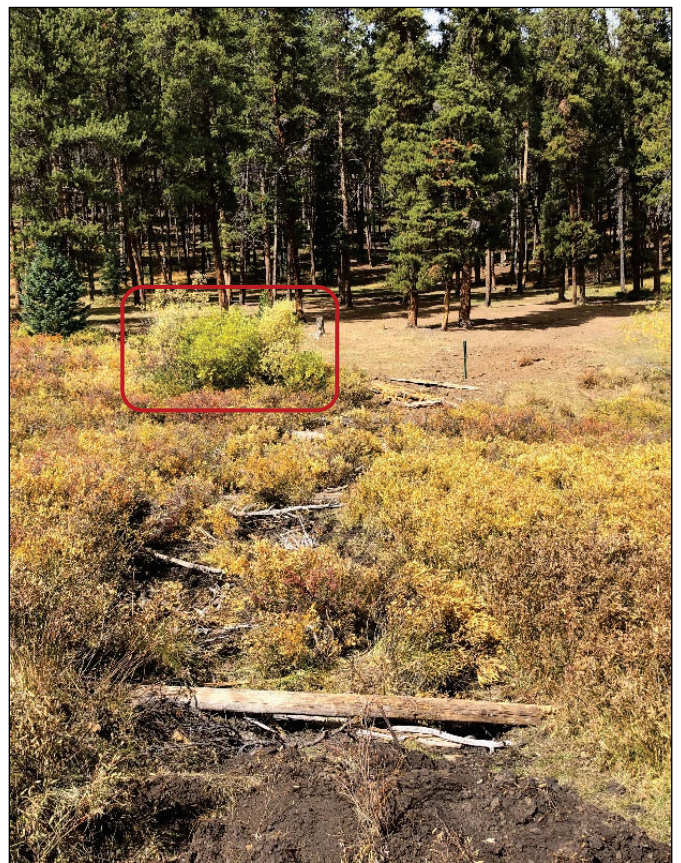
Appendix A: Taylor Park, Gunnison County Watershed Erosion Control & Stream Restoration Project



Appendix B: Photos of Taylor Park Erosion Control Project



Above and below photos are before and after photos of an illegal stream crossing in Taylor Park, behind Holts cabin area (red rounded rectangles are for comparison reference points). An excavator was used to pull in slash, place root wads and transplant willows.





The photo above left is of heavy equipment work on the restoration of the stream crossing. Photo on right is an example of the beginning of a illegal routes close in the area behind Holts cabins.





Photos above are before and after of a long illegal route we ripped with a dozer. We also seeded before and after the dozer with a native 4 seed mix. Photos below are also in Taylor Park, near the photo location above. This was a steep hill and we ripped, seeded, and pulled in slash to slow erosion. We also pulled up the sediment plum at the base which was washing into a fen downstream.





The before and after photos above and below are the same hill, above is the view looking downhill. Below photos are looking up hill. This hill was ripped, seeded and slashed.











