



Taylor Park Erosion Control & Riparian Restoration Project
Colorado Water Conservation Board – Water Plan Grant (POGG1-PDAA-202100002203)
Final Grant Report
July 15, 2022

Introduction

The National Forest Foundation (NFF) is the leading organization inspiring meaningful connections to our National Forests, the centerpiece of America's public lands. Working on behalf of the American public, the NFF leads forest conservation, watershed health, and sustainable recreation efforts on National Forest System lands. We believe these lands are an American treasure and are vital to the health of our communities, and we partner with and support the United States Forest Service and community partners to achieve stewardship projects on National Forests across the country. The NFF has a robust program of work in Colorado on the Grand Mesa, Uncompahgre, and Gunnison (GMUG) National Forest.

In August of 2020, the NFF received a \$30,000 Water Plan Grant from the Colorado Water Conservation Board (CWCB) to restore and protect streams and watershed health in Taylor Park, Colorado, in the Taylor River Basin on the Gunnison National Forest. The purpose of the project was to: 1) improve watershed health by stopping erosion and fragmentation of hillsides; 2) restore streams impacted by illegal motorized routes and prevent further degradation of these streams; and 3) implement the USDA Forest Service's 2010 Travel Management Plan decision while making it easier for the public to know which routes are authorized.

The NFF teamed with the USDA Forest Service (USFS) and High Country Conservation Advocates (HCCA) to close user-created routes in Taylor Park. The partners achieved this project goal by working with local heavy equipment operators to rip large segments of illegal routes and working with staff and volunteers to install signs and blockades to alert users to the closures, as well as stabilizing streambanks by planting willows with volunteer hand crews and restoring stream crossings to decrease erosion. The following narrative describes the accomplishments of the project.

Grant Accomplishments

The CWCB grant spanned the 2020 and 2021 field seasons, with some work occurring in June of 2022. Over that time, grant funds were used to support the following accomplishments:

- 13.6-miles of non-system (illegal) motorized routes closed and restored
- 3 illegal stream crossings closed and restored
- 20 worm fences constructed
- 6 tank traps constructed
- 12 water bars constructed
- 2 illegal camping areas closed and restored
- 5 miles of streambanks restored
- 500 willows planted
- 49.3 acres of wetlands protected
- 3,244 acres of terrestrial habitat protected

The accomplishments listed above were achieved through a combination of heavy equipment, staff time, and volunteer engagement. The NFF contracted with two separate operators (RangeWorks and Kenny Lovato) who provided the mechanized equipment required for ripping miles-long segments of illegal motorized routes. These contractors provided more than 120 hours of equipment time on the project. The closure methods included ripping with heavy equipment, followed by volunteer days and manual labor to install signs and construct fences. Heavy equipment was used to close 13.6-miles of non-system routes, including 3 illegal stream crossings and 2 large camping areas that were in historic wetland terrain (totaling 2 acres of closure). Additional accomplishments include planting 500 willows, restoration of .5 mile of streambank, construction of 12 water bars and 6 tank traps, and installation of more than 50 travel management signs.

Travel Management Closures

For this portion of the project, we utilized heavy equipment to rip and scarify 13.6-miles of non-system routes as identified by the Gunnison Ranger District (GRD) Hydrologist. Routes were ripped to 6"-8" in depth with a 4-prong dozer. In addition to ripping, we constructed 6 tank traps, which are a 3'-4' high mound of soil and a trench (1'-2' deep) on the other opposing side of the trench. These structures were built to discourage use of closed routes by motorized vehicles. Heavy equipment was used to build 12 water bars on steep routes that were closed. By constructing water bars on steep slopes, we improved watershed health by minimizing erosion and fragmentation of impacted hillsides. Heavy equipment was also used to close 2 campsites located within 100 feet of water. Closing these two campsites will allow the area to revert to historic wetland.



Above: Before (left) and after photos of illegal stream crossing closed with heavy equipment. Note the stream crossing was reduced to its natural width.



Above: Before (left) and after photos of a camping area too close to water that was closed by ripping, fencing, and signing the closure area. Red Mountain Creek is visible on the right side of the before image.



Above: Before (left) and after photos of a campsite located too close to water. The site was ripped, signed, and fenced to keep vehicles out of the area. The beaver dam on the photo right is expected to flood this site and restore the historic wetland footprint.



Above: Photos of equipment operator and USFS staff (left) closure of nearly 1-mile of non-system route behind Potholes #2 Reservoir in Taylor Park (right). This included naturalizing several illegal stream crossings.



Above: Before (left) and after photos of stream crossing restoration site after contractor reshaped banks and placed willow plugs.

Volunteer Engagement

For over four decades, High Country Conservation Advocates (HCCA) has been helping to steward public lands in Gunnison County. The NFF, USFS, and HCCA joined forces for 4 volunteer events to close non-system routes by hand.

- 4 volunteer stewardship events
- 21 volunteers engaged
- 120 volunteer hours
- 12 worm fences constructed
- 9 Travel Management signs installed
- 1.5 miles of illegal routes closed and restored



Above: Photos of volunteer event. Volunteers constructed worm fences, installed travel management signs, and protected wetlands in Taylor Park.



Above: Photos of volunteer events. Volunteers constructed worm fences, installed travel management signs, and restored wetlands in Taylor Park.

Restoration and Decommissioning Materials

The CWCB provided funding critical for the purchase of signs and materials used in the closure and restoration of degraded areas. The following materials were used to close illegal routes in Taylor Park:

- 227 wood poles
- 130 wood spacers
- 80 wood bucks
- 100 carsonite sign posts
- 60 u-channel sign posts



Above: Photo of approximately 120 wood poles used in the construction of worm fences (left) and photo of NFF, HCCA, and USFS staff working with volunteers to construct worm fences in Taylor Park.

Summary & Obstacles

The Taylor Park Erosion Control & Riparian Restoration Project was a success. The partners met the overall goal of improving watershed health in Taylor Park by closing many miles of unauthorized motorized routes. The foundation for success was established through strong partnerships, project coordination, volunteer participation, and user education. Project management was a shared responsibility between the NFF, USFS, and HCCA, and project implementation was made possible by these partners and contracted outfits.

The partners worked together to successfully decommission illegal routes and improve riparian habitat in an area known for extensive recreation use – not an easy feat. Illegal routes closed in 2020 and 2021 have not re-opened, though in rare cases some motorized users have driven around blockades. These areas have been attended to, and monitoring will be ongoing. Riparian restoration has been a success – the willows are growing, and stream crossings are being restored to a pre-disturbance condition. Overall, the project met the goals outlined in the grant application and the USFS 2010 Travel Management Plan.

Though the project was an overall success, some obstacles were encountered. The Covid-19 pandemic created challenges for partners to meet in-person and to engage more with volunteers that could have resulted in more workdays. The pandemic also affected contractor availability. The partners set-out to decommission 25-miles of illegal routes, but due to unforeseen circumstances that arose in 2020 and 2021, only 15 miles of routes were closed. Because of this, the NFF did not expend the full \$30,000 grant award.

Expenses & Matching Funds

In all, the NFF expended \$18,344.53 in grant funds. These funds were used to support volunteer events, contract with heavy equipment operators, and purchase much-needed supplies for the project. Cash matching funds (\$58,888.48) were provided by partner organizations such as RangeWorks that dedicated additional time and resources to implementation. Additional in-kind match (\$3,594) was contributed through volunteer labor (The NFF was unable to expend the full \$30,000 grant award due to the availability of partner organizations that were anticipated to play a bigger role in the project. The NFF, USFS, and HCCA are continuing with riparian restoration in Taylor Park in 2022 and turning their attention to long-term process based restoration and beaver dam analog techniques.

Contact Information

Joe Lavorini
Southwest Colorado Program Manager, NFF
jlavorini@nationalforests.org
720.670.6254