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Dolores River Restoration Partnership

Southwest Conservation Corps (SCC) Final Report



SCC Spring 2012 Dolores River Restoration Crew

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Boots on the Ground

Executive Summary

The Southwest Conservation Corps (SCC) as a member of the Dolores River Restoration Partnership (DRRP) completed another successful spring season of watershed restoration work within the Dolores River Basin. The Colorado Healthy Rivers Fund supported three weeks of corps work that was complimented by seven weeks of match funding to create a 10 week spring season for an eight-person Dolores River Restoration Crew.

The DRRP has focused on widespread infestations and impacts of tamarisk trees in the riparian corridor of over 184 miles of the Dolores River and its tributaries. This report represents only one phase of this multi-year collaborative effort to remove tamarisk and other invasive plants within the river basin. In order to mitigate the impacts of tamarisk and invasive species, SCC engages and trains groups of young adults to safely operate chainsaws, apply herbicide, cage cottonwoods and plant native vegetation such as willows. SCC's mission is to empower individuals to positively impact their lives, their communities and the environment through meaningful conservation projects as the Dolores River restoration program. The Dolores River Restoration Crew is in its third year of existence and recently completed its 6th season of restoration focused project work.

Continued support from the Colorado Health Rivers Fund has allowed the Dolores River Restoration Crew to fire up chainsaws in Disappointment Creek, one of the main tributaries to the Dolores. Disappointment Creek is the first major tributary in the system that is heavily infested with tamarisk, and thus represents a heavy seed source for all areas downstream. During the ten-week season, the SCC crew removed 18.65 acres of tamarisk along one mile of Disappointment Creek. These activities were complimented by the caging of cottonwoods to protect this valued species from beaver predation.

As in years past, the spring project work will be followed up by slash pile burning by the Tres Rios BLM during the winter months. Both a watershed wide monitoring program and site specific monitoring will continue to take place this summer to assess native vegetation response to tamarisk removal, as well as efficacy monitoring to determine success of herbicide treatment. Monitoring will determine if continued follow up treatment and re-vegetation is necessary under adaptive management protocols. Monitoring will continue in this method for five years in Disappointment Creek and throughout the watershed.



Burning Slash Piles in Disappointment Creek, Spring 2011

Project/Partnership Background

Spring project work along the Dolores in 2012 by the Southwest Conservation Corps continues the vision of the Dolores River Restoration Partnership: *A Dolores River watershed that is dominated by native vegetation - where the threats from tamarisk and other associated invasive species have been mitigated and the riparian areas of the watershed continue to become more naturally functioning, self-sustaining, diverse, and resilient over time.*

The DRRP began to meet in 2008 as the Dolores Public Lands Office (DPLO), The Southwest Conservation Corps, the Canyon Country Youth Corps (CCYC), the Nature Conservancy (TNC), the Tamarisk Coalition (TC), and the Walton Family Foundation (WFF) advanced discussions surrounding restoration activities on the Dolores. A successful pilot project in 2009 engaged the two corps mentioned above to treat the Dolores from Dove Creek Pump Station to Disappointment Creek, where infestations increased in size and cover. Tamarisk removal in Disappointment Creek began at this time, as did work on private lands in the Slickrock area.

During 2010, the DRRP worked tirelessly to engage many new partners and add organizational structure. The BLM offices of Grand Junction, Uncompahgre, and Moab were engaged, oriented and assisted with the formation of implementation plans for respective office management areas. Private landowner contacts continued to be made, and permissions gained. DRRP engaged the NRCS and began conversations surrounding collaboration with the DOW, USFS, USFWS, Counties, Conservation Districts and more.

In early 2010 a Corps River Restoration Director position was created through SCC and the partnership to help manage work on the ground, coordinate CCYC and SCC crews with project partners, develop training and restoration practices/resources and bring the Western Colorado Conservation Corps (WCCC) of Grand Junction into the partnership to add workforce capacity. This director is responsible for representing corps in the partnership, coordinating between the various entities, serving on the Core Team, the funding sub-committee, and chairing the outreach and education sub-committee. Western Colorado Conservation Corps was brought on board and a 3 corps, 50 person, joint training occurred to kick off the fall 2010 work season on the Tres Rios and Grand Junction BLM Districts. Crews work spring and fall seasons that begin with two weeks of training on chainsaw use, herbicide application, riparian ecology, invasive species identification, orientation to the DRRP, and project scope.

A Core Team retreat in early 2011 solidified the structure of the DRRP by identifying and recording roles and responsibilities of partnership entities. A facilitator was hired, sub-committees were identified, chairs assigned, and structures for communication, fundraising, action plans and processes were agreed upon. A Memorandum of Understanding was finalized and signatures gathered. Bi-annual meetings with the full partnership were determined to take place in spring and fall of each year. A website went live in fall 2011 (<http://ocs.fortlewis.edu/drrp/>). A monthly newsletter reports to partners on progress, funding updates, outreach, and more.

The 2012 season began with a higher level of organization and structure than previous years due to increased efforts from all partners. Three corps (30 person) training on the Ruby-Horsethief section of the Colorado with BLM river manager Troy Schnurr, in preparation for a raft supported tamarisk removal season below the San Miguel/Dolores confluence and continued work in Disappointment Creek.

All of this organization is helping the partnership get close to its overall goal of treating approximately 1,900 acres in the Dolores River Basin, reducing tamarisk cover to 5%.



Spring Training on the Colorado



Herbicide Training

Project Budget History and Outlook

In 2009 the WFF funded \$180,000 and in 2010, \$240,000 to SCC, CCYC, and WCCC to support implementation of the Corps' river restoration program. In addition to funding work on the ground the WFF provided a grant to fund the Corps River Restoration Director's focus of developing the Corps' capacity to complete river restoration work.

The CO BLM contributed \$72,000 in ARRA funds to the project for 2010–2011 and received a BLM Youth Initiative grant for \$10,000 for implementation in 2010. Funding from the Packard Foundation in the amount of \$250,000, the Colorado Water Conservation Board in the amount of \$100,000, Grand Junction BLM in the amount of \$20,000 and Moab BLM in the amount of \$100,000 contributed to significant progress on project work throughout the watershed.

For the 2011 work season, in addition to the CHRF support, WFF funded \$229,800 for the three corps to implement projects on each of the BLM offices. The Dolores BLM was awarded an additional \$14,000 in Youth Initiative funds for fall 2011. This corps specific funding is complimented by other partnership funds of \$70,000 to support contractors and other DRRP needs. A \$20,000 grant from the El Pomar Foundation also supported work in fall of 2011.

Funding in 2012 for the DRRP includes Colorado State Forest Service, Colorado River District, Colorado Species Conservation Fund, Colorado Department of Health and Environment, Colorado BLM, Utah BLM, USFS Partners for Fish and Wildlife, Walton Family Foundation, National Partnership for Environmental Community Action, National Fish and Wildlife Federation. The DRRP funding sub-committee is constantly keeping on top of available funding sources and working to apply for these on an on-going basis.

Colorado Healthy Rivers Fund Budget

Description (SCC 10 week DRRP program)	Dates	CWCB Funds	Other Funding Cash (Walton Family Foundation or BLM)	Other Funding In-Kind (SCC and its members time)	Total
SCC Crew for 3weeks and 1 day (\$6,300/week)	4/2/12-4/16/12	\$20,000		\$11,877	\$31,877.00
SCC Crew for 6 weeks and 4 days (\$6,300/week)	3/19/12-5/18/12		\$43,000	\$27,713	\$70,713.00
Herbicide Applicator	3/19/12-5/18/12		\$5,760		\$5,760.00
TOTALS		\$20,000	\$48,760	\$39,590	\$108,350

Project Implementation

SCC crews are compiled of two leaders and six members. They are trained and provided transportation for personnel and equipment, supplied with personal protective equipment, chainsaws, camping equipment and food. A contract BLM seasonal (certified applicator) worked along the crews to apply herbicide, providing all equipment and supplies, as well as monitoring application rates and progress. Crews typically high-stump the tamarisk, removing the biomass (slash piling) and return to low stump and apply herbicide, minimizing the timing between cutting and application for best results. The crew worked an eleven-day, 80 hour hitch schedule with four days off between hitches.



Justin Marler (Tres Rios BLM) Lines out the Crew



Removing tamarisk in Disappointment Creek

In response to the heavy presence of tamarisk leaf beetles in Disappointment Creek, Mike Jensen of the Tres Rios BLM, using a cross-section study prepared by Chris Massingill of Mainstream Contracting along with information from the Tres Rios Hydrology and Ecology staff, designed a prescription for crews to work alongside the beetles. The prescription entails establishing bank height and distance from the creek where riparian vegetation such as willows and other riparian obligates are most likely to exist, and then clearing tamarisk which is encroaching on these areas. This leaves the majority of the upland tamarisk for the beetles- the other workforce in the mix on Disappointment Creek-while providing open habitat for the natural establishment and recruitment of priority riparian vegetation. In addition to this approach, crews cleared tamarisk to create a wildfire buffer 50 feet from the drip line of any cottonwood, piling slash to be burned in winter by BLM fire crews.

Spring 2012 Project Accomplishments

- 18.65 Acres of tamarisk treated
- 25 cottonwoods, gooding willow and box elder maple caged
- 2,560 hours of work completed
- 8 young adults employed
- 6 members earned AmeriCorps Education Awards totaling \$8,772
- 88 hours of training (previous to the work season)
- 6 new sawyers trained, all members gained experience applying herbicide
- Crew attended Gov't Resume Training (how to apply for federal land management positions)
- 26 hours of additional education per member

Overall Corps DRRP Accomplishments Since 2009

- Acres treated: 379
- Number of young adults engaged in service (and jobs created): 104
- Number of Native American young adults employed: 37
- Number of young adults hired from the Dolores Watershed: 52
- # AmeriCorps education awards: 40 awards, over \$66,509
- Average hours of official training per member: 99
- Average hours of additional education per member: 65
- Percentage of members interested in jobs with Land Management Agencies: 60%



Hauling Slash



In the Thick of It!

Follow Up Monitoring and Restoration

There are two types of monitoring protocols being used in the Dolores River Restoration Partnership's projects. The first is meant to gauge the vegetative habitat response of the entire watershed to combined efforts of individual restoration sites. This "watershed-wide monitoring" occurs at 40

representative sites throughout the basin, ten being located in each of four BLM Field Offices. These sites will be monitored between July and August each year for the next four years using line intercept and quadrant methods to determine vegetative response to treatments. Future monitoring frequency is yet to be determined.

The second type of monitoring is a “rapid project assessment” meant to establish whether or not individual project sites are responding to treatments as expected (i.e. whether or not they are on the way to success). This monitoring effort will occur every year and will rotate through project sites so that each site is visited every few years. This protocol is very user friendly and is intended to be carried out by interns, volunteers, etc. with the purpose of evaluating the native vegetation response to treatments at all sites over time. This will be coupled with the watershed wide protocol in order to get a better picture in different stretches of the Dolores (including Disappointment Cr.) and to inform adaptive management needs.

Adaptive management applies information learned from monitoring to benefit future restoration efforts. This is an on-going process where implementation and monitoring inform maintenance of a restoration site and improved implementation methods at new sites.

In Disappointment Creek there is a healthy suite of native vegetation which is likely to naturally re-vegetate with natives (known as passive re-vegetation). Last winter, slash piles built in 2009 and 2010 were burned by the forest service fire crew. The piles created this year will be burned in winter to remove the biomass. Follow-up visits, combined with the monitoring discussed above will determine seeding needs for burn areas, and if tamarisk re-sprout treatment will be necessary.

This year, in partnership with the Tres Rios (formerly Dolores) BLM, SCC and the DRRP have developed an internship program to follow up initial treatments. The focus of these two interns will be to work with Justin Marler (Seasonal Weed Staff) and Mike Jensen (Invasive Species Coordinator) to continue inventory, monitoring and re-treatment along the Dolores corridor in treatment areas to assure continued efforts to restore these areas to a point of normal maintenance. The five-month positions are a next step for corps members and an avenue for them to move into positions with land management agencies.



Before...



After.



Worksite



Saw Maintenance in Camp