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March 9, 2016

Bruce Whitehead, Executive Director
SWCD
841 E. 2nd Ave.
Durango, CO 81301

Dear Mr. Whitehead,

Thank you for contributing funds to our Navajo River Restoration project. Attached please find our Final Report.

Let me know if you have any questions!

Thank you,

A handwritten signature in blue ink that reads "Cynthia Purcell". The signature is fluid and cursive, with the first name being more prominent.

Cynthia Purcell
San Juan Conservation District

FINAL REPORT
NAVAJO RIVER IN-STREAM, RIPARIAN & WETLAND IMPROVEMENT PROJECT
2016

Project Overview:

The San Juan Conservation District (SJCD) and the USDA Natural Resource Conservation Service (NRCS) are leading the charge in helping to alleviate the consequences the Oso Diversion is having on the Navajo River's ecosystem. The SJCD and NRCS partnered with landowners from the Oso Diversion to Highway 84 in the hopes of creating a more diverse river system where aquatic species can once again thrive.

The Oso Diversion was installed in the 1960's to divert water from the Navajo River to the Rio Chama Watershed for domestic and agricultural use in New Mexico. This diversion eliminated flushing flows and the Navajo River now consistently flows 55-85 cfs. Sediment that passes through the Oso diversion is very fine, causing the stream channel to become embroccated (like concrete). These lower flows have resulted in shallower stream depths and a higher temperature environment less suitable for aquatic habitat. The diversity of habitat structure types is limited and the river, for the most part, is one long riffle with few deep pools. The riparian area along the river has been reduced to a thin strip along the banks, due to the absence of periodic flooding of the floodplain, management practices along the river and development pressures. This has also adversely affected the off-channel wetland habitat within the river system.

NRCS, in conjunction with the San Juan Conservation District and other partners, held several landowner meetings with property owners along the Navajo River from the Oso Diversion to Highway 84 to discuss their concerns about the current state of the river. Meetings were also held with potential partners of this project including the Bureau of Reclamation, Chama Peak Land Alliance and US Fish and Wildlife Service. A field review was conducted of the current condition of the river and this data was used to develop a plan with treatment alternatives for restoration of the river. These alternatives, along with cost estimates, were presented to the property owners for their consideration. The landowners then chose from the alternatives, based on their concerns and financial resources. The San Juan Conservation District then submitted a Targeted Conservation Proposal with the total project cost estimate to NRCS to restore this portion of the Navajo River. This proposal was approved for funding in 2014 under the Environmental Quality Incentive Program (EQIP). Nine landowners then applied for cost-share funding under EQIP. Eight of the landowners were approved.

The NRCS worked with four landowners in the past within the area between the Oso Diversion and Highway 84. The improvements provided increased aquatic habitat, wetland habitat, and riparian area condition. These efforts were expanded to include an additional 8 landowners that began improvements in 2015. This project impacted a continuous 6.75 mile stretch along the Navajo River. Continuity in the restoration projects means that the aquatic species will have the ability

to migrate up and downstream and water quality will not be degraded and warmed while flowing between restored areas. As the restoration initiative in this stretch of the Navajo is occurring now, the SWCD funds were critical to make this project work. SWCD's investment in this project helped fill in the gaps on the way to a restored watershed.

SJCD, in cooperation with NRCS, requested funding to provide assistance to the landowners along this 6.75 mile stretch of the Navajo River, to implement practices to improve the instream aquatic habitat, riparian and wetland areas. Diversity was created in habitat structure by installing rock and wood structures to increase channel depth, pool habitat and in-stream meandering. There was also an improvement in aquatic habitat that benefited native fish species, including the Roundtail Chub, as well as trout species. The riparian area was increased and improved by fencing out livestock along the river to control grazing and through the planting of woody vegetation, such as willows and cottonwoods. Shallow wetlands were created by enhancing low areas and installing small channels to and from these areas to the river. These wetlands, along with the entrance and exit channels, provided fish spawning habitat and increased habitat for the Northern Leopard Frog and migratory waterfowl. There are also a few Colorado River Cutthroat populations in the Navajo River and a few tributaries above the Oso Diversion. Our work didn't directly affect those populations as the Oso Diversion acts as a barrier. However, watershed health transcends barriers and a healthier Navajo River will mean all species that rely on its waters will be better off. Please see the attached maps/photos of the restoration areas and practices that were installed.

The need for riparian restoration along this stretch of the Navajo River is of utmost importance to many conservation groups, as evidenced by the amount of work which has already occurred in this area.

We are working in a landscape that is fortunate to have a network of landowners working collaboratively across their fence lines. The Jicarilla Apache Tribe has completed significant amounts of stream restoration work on lower portions of the river in NM targeted at development of Roundtail Chub habitat, so we are in a sense coordinating across borders (and Nations). Additionally, the Southern Ute Tribe has conducted Roundtail Chub monitoring activities on lower portions of the Navajo River and hope to begin restoration efforts in the near future.

The SWCD funding helped defray the amount of money needed from private landowners that was not covered by program (NRCS or partner) funding. In order to distribute the SWCD funds in the most equitable manner, we took the total of the entire project and determined the percentage each participant paid for their portion of the project. This percentage was used to divvy up the SWCD funds. SJCD provided in-kind project administration. NRCS provided cash funding through the EQIP program and engineering/technical support. Rocky Mountain Bird Observatory provided technical support. Chama Peak Land Alliance and Friends of the Navajo provided outreach and coordination of landowners. Bureau of Reclamation provided previous monitoring data of the area. Colorado Parks & Wildlife provided technical support and future monitoring data. US Fish & Wildlife Service provided planning support. We also secured grant funds from GOCO via the Colorado Cattlemen's Agricultural Land Trust to perform restoration work on two of the properties, XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX.

Budget:

Entity	Budgeted Cash Contribution	Actual	Budgeted In-Kind Contribution	Actual
NRCS	\$281,834 (EQIP)	\$293,922 (EQIP)	\$13,440 (Engineering/Tech)	\$18,200 (Engineering/Tech)
Landowners	\$64,201	\$60,008		
San Juan Cons District				\$3,500 (Admin)
US Fish & Wildlife Service			\$700 (Planning Assistance)	\$700 (Planning Assistance)
Rocky Mountain Bird Observatory (RMBO)			\$4,550 (Engineering/Tech)	\$5,670 (Engineering/Tech)
Chama Peak land Alliance/Friends of the Navajo			\$2,625 (Landowner Education/Tour/Willow Planting)	\$3,185 (Landowner Education/Tour/Willow Planting)
Colorado Parks & Wildlife Wetland for Wildlife Grant	\$18,065	\$18,065	\$2,880 (Fish Study/Tech)	\$0 to date Fish Study to occur in the future (\$2,880)
Colorado Cattlemen's Agricultural Land Trust (CCALT)/GOCO Grant	\$25,000	\$14,000		
SWCD	\$25,000	\$25,000		
TOTAL PROJECT CONTR.	\$414,100	\$410,995	\$24,195	\$34,135