Water Supply Reserve Account – Grant and Loan Program Water Activity Summary Sheet September 11-12, 2014 Agenda Item 13(0)

Applicant & Program Sponsor: Trout Unlimited

Water Activity Name: Redburn Ranch Diversion Dam Project

Water Activity Purpose: Nonconsumptive & Agricultural Implementation

County: Montezuma

Drainage Basin: Southwest

Water Source: Dolores River

Total Amount Requested: \$148,500

Source of Funds: \$50,000 Southwest Basin Account; \$98,500 Statewide Account

Matching Funds: Basin Account Match (\$50,000) = 34% of total grant request

Basin Account & Applicant Match (cash & in-kind: \$211,000) = 142% of total

grant request

Applicant Match (cash & in-kind: \$161,000) = 52% of total project costs

(refer to Funding Summary/Matching Funds)

Staff Recommendation:

Staff recommends approval of up to \$50,000 from the Southwest Basin Account and \$98,500 from the Statewide Account to help fund the project titled: Redburn Ranch Diversion Dam Project.

Water Activity Summary: The Redburn Ranch is a large farm and ranch operation mid-way up the river between Dolores and Rico. The ranch was placed in a conservation easement with Montezuma Land Conservancy in 2006. The Ranch maintains a large cobble push-up dam that spans the main stem of the Dolores and requires repair with heavy equipment every year after spring runoff. This dam blocks fish passage for the majority of the year, except in the early spring when it is degraded by high flows until it is rebuilt again after the high water recedes. Fry (young fish) have been observed being stopped from moving downstream by the dam on multiple occasions and it is a barrier to fish migration upstream as well. At low water, the permeability of the cobble dam makes it difficult for the ranch to access its full water right, often requiring plastic to be placed on the face of the dam.

Trout Unlimited (TU) has been in discussions with the ranch manager for over a year and has completed an initial survey and a design, and has estimated work for three possible options. The dam is located on Forest Service Land just upriver from the Ranch. Forest Service personnel have been involved in the project from the beginning, support the project, and are helping to ensure any required analysis and permitting is streamlined.

The implementation of the project requires the replacement of the current cobble pushup dam with a series of four stepped large rock cross vein weirs capable of passing flood flows and sediment loads, allowing for fish and safe boat passage while ensuring the landowner's reliable access to their full water right, even at low water. The project also requires re-grading of the channel and importing and placing large cobble fill between the rock weirs to ensure channel stability. The head gate and

associated structure has begun to settle and needs to be reconstructed to work with the new diversion system.

Discussion:

No further discussion is required

Issues/Additional Needs:

No issues or additional needs have been identified.

Threshold and Evaluation Criteria:

The application meets all four Threshold Criteria

Tier 1-3 Evaluation Criteria:

- Tier 1: (a & b) This activity addresses consumptive needs by improving agricultural water deliveries and addresses nonconsumptive needs by improving fish connectivity and passage, and providing safe recreational boat passage. This activity also addresses the needs of multiple interests, such as agricultural interests of Redburn Ranch, recreational interests of Trout Unlimited, and recreational and environmental interest of the USFS. As funding contributors, the Natural Resource Conservation Service, the Southwestern Water Conservation District, the USFWS, Colorado Parks and Wildlife, and GOCO exhibit their support of this project.
 - (c) This activity addresses the environmental and recreational gap as identified in the 2010 Southwest Basin Report Basinwide Consumptive and Nonconsumptive Water Supply Needs Assessment, and the 2014 Southwest Basin Implementation Plan.
- Tier 2: (d) The combined WSRA funding from the Statewide and the Basin accounts makes up half of the anticipated project budget and the largest single source of funds. Without the combined WSRA funds, the group has no other funding source to leverage the public and private funding sources against, and the project could not be completed.
 - (e) 52% non-WSRA match provided by the applicant and 3rd parties represents a significant and appropriate commitment to the project.
- Tier 3: (f) The Redburn Ranch project helps sustain agriculture & open space by enhancing the viability of a working ranch and farm enterprise. This activity addresses the environmental and recreational gap by improving fish connectivity and passage, and providing safe recreational boat passage.
 - (g) n/a
 - (h) Project implementation may assist in the recovery of the blue headed sucker, a species of concern in Colorado.
 - (i) A 52% non-WSRA or match provided by the applicant and 3rd parties provides a high level of benefit to Colorado.

(j) This activity compliments CWCB's Healthy Rivers Funds, and efforts by CWCB's Lake and Stream Protection Section.

Funding Summary/Matching Funds:

	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
WSRA Southwest Basin Account	\$50,000	n/a	\$50,000
WSRA Statewide Account	\$98,500	n/a	\$98,500
Southwest Water Conservation District	\$40,000	\$0	\$40,000
Natural Resources Conservation Service	\$40,000	\$0	\$40,000
USFWS	\$25,000	\$0	\$25,000
Colorado Parks and Wildlife	\$10,000	\$0	\$10,000
GOCO	\$15,000	\$0	\$15,000
Trout Unlimited	\$25,000	\$2,000	\$27,000
Redburn Ranch	\$1,000	\$3,000	\$3,000
Total Study Costs	\$304,500	\$5,000	\$309,500

All products, data and information developed as a result of this grant must be provided to the CWCB in hard copy and electronic format as part of the project documentation. This information will in turn be made widely available to Basin Roundtables and the general public and will help promote the development of a common technical platform. In accordance with the revised WSRA Criteria and Guidelines, staff would like to highlight additional reporting and final deliverable requirements. The specific requirements are provided below.

Reporting: The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of the executed contract. The progress report shall describe the completion or partial completion of the tasks identified in the scope of work including a description of any major issues that have occurred and any corrective action taken to address these issues.

Final Deliverable: At completion of the project, the applicant shall provide the CWCB a final report that summarizes the project and documents how the project was completed. This report may contain photographs, summaries of meetings and engineering reports/designs.

Engineering: All engineering work (as defined in the Engineers Practice Act (§12-25-102(10) C.R.S.)) performed under this grant shall be performed by or under the responsible charge of professional engineer licensed by the State of Colorado to practice Engineering.