

Water Supply Reserve Fund – Grant and Loan Program
Water Activity Summary Sheet
May 17-18, 2017
Agenda Item 11(b)

Applicant & Grantee: Trinchera Irrigation Company

Water Activity Name: Phase II – Engineering Services for Mountain Home Reservoir Dam Outlet Works Upgrade

Water Activity Purpose: Agricultural Study

County: Costilla

Drainage Basin: Rio Grande

Water Source: Trinchera Creek

Amount Requested: \$70,000 Rio Grande Basin Account

Matching Funds: Applicant Match = \$30,000

- 42.9% of the Basin Account request (meets 25% min)
- 30% of the total project cost of \$100,000

Staff Recommendation:

Staff recommends approval of up to \$70,000 from the Rio Grande Basin Account to help fund the project: Phase II - Engineering Services for Mountain Home Reservoir Dam Outlet Works Upgrade
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Water Activity Summary: WSRF grant funds, if approved, will help Trinchera Irrigation Company (TIC) engineer and design replacement gates at Mountain Home Reservoir and ultimately restore severely deteriorated outlet works at the dam. Restoring the outlet works stops costly water losses, provides decreed surface flows for irrigation, reduces reliance on groundwater pumping, and meets several consumptive and nonconsumptive criteria of the Rio Grande Basin plan for meeting future water demands. TIC will complete Phase II engineering studies prior to undertaking the state-mandated repair and replacement of two, possibly all three, gates at Mountain Home Reservoir (gate #1 operates poorly and the other two have not been opened in several decades). TIC has a long-standing agreement with Colorado Parks and Wildlife (CPW) to make every effort to avoid emptying the reservoir or reducing its level lower than the 653 acre-foot (AF) conservation pool. Funds will be used to (1) evaluate alternatives, long term improvements, and develop engineering recommendations and safe storage methods; (2) develop construction cost estimates; (3) develop a Loan Feasibility Study Report and CWCB Loan Application; (4) conduct site reconnaissance; (5) develop preliminary design drawings and specs; (6) draft and deliver final design, construction schedule, and cost estimate.

Discussion: CWCB previously funded \$25,000 for Phase I, the feasibility and preliminary field studies, which was completed in July 2016. Upon completion of this Phase II engineering study, TIC intends to submit a Phase III application requesting funds from both the Basin and Statewide accounts to include a CWCB loan component. Mountain Home Lake is a State Wildlife Area, providing valuable recreational and environmental assets in Costilla County, in which only 2% of the land is public. Depending on the storage elevation the gate leakage has resulted in an average of 170 AF/month of storage water loss over the past ten years, or 1,190 AF annually. At a CWCB-

acknowledged estimated valuation of \$250 per AF, this is a one year loss of \$297,500, or almost \$3 million over the past decade. A majority of the acreage served by TIC can be irrigated with both surface and ground water, but for the past ten years, due to drought conditions, TIC has had to prematurely release water from Mountain Home during irrigation season, tapping reservoir supplies sooner than necessary to meet shortfalls in late summer and early fall. The Mountain Home project is listed in the Rio Grande Basin Implementation Plan (IPP #12) as meeting three basin needs and five basin goals (#4-7, 14). Additionally, this project assists in several Colorado Water Plan Critical Goals and Actions as identified in the following targets: *10.3.A. Supply-Demand Gap*: Protect and develop compact entitlements and manage risks, *10.3.E. Storage*: Prioritize grants to support the implementation of BIP-identified multi-purpose projects, and *10.3.F. Watershed Health, Environment, and Recreation*.

Issues/Additional Needs: No issues or additional needs have been identified.

Eligibility Requirements: The application meets requirements of the three subsections of the Eligibility Requirements: General Eligibility, Entity Eligibility, and Water Activity Eligibility.

Funding Match Requirements: This application meets the Basin Account Matching requirements.

Evaluation Criteria: This activity has undergone review and evaluation and staff has determined that it satisfies the Evaluation Criteria. Please refer to Basin Roundtable Chair's Recommendation Letter and the WSRF Grant Application for applicant's detailed response.

Funding Summary / Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-Kind</u>	<u>Total</u>
Trinchera Irrigation Co.	\$13,000	\$0	\$13,000
Trinchera Blanca Foundation	\$17,000	\$0	\$17,000
Subtotal	\$30,000	\$0	\$30,000
WSRF Rio Grande Basin Account	\$70,000	\$0	\$70,000
Total Project Costs	\$100,000	\$0	\$100,000

CWCB Project Manager: Megan Holcomb

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. Information will 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 WSRF Criteria and Guidelines, staff would like to highlight additional reporting and final deliverable requirements specified 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: The applicant shall provide the CWCB a final report summarizing project completion that may contain photographs, meeting summaries, and engineering reports.

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 a professional engineer licensed by the State of Colorado to practice engineering.