

**Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
May 2014 Agenda Item 32a**

Applicant: Conejos Water Conservancy District

Water Activity Name: Conejos River System Confluence Management Project

Water Activity Purpose: Structural Project (Agricultural)

County: Conejos

Drainage Basin: Rio Grande River

Water Source: Conejos River

Amount Requested: \$295,000 (\$280,000 Statewide Account and \$15,000 Rio Grande Basin Account)

Matching Funds: \$102,000 from Ephraim Ditch Company; \$102,000 from Sanford Canal Company; \$17,000 from East Bend Ditch Company; \$45,000 from NRCS; \$21,000 from Conejos Water Conservancy District. Total Matching Funds \$287,000 or 49% of project cost.

Staff Recommendation
Staff recommends approval of up to \$280,000 of Statewide WSRA funds and up to \$15,000 of WSRA funds from the Rio Grande Basin Account to help complete the Conejos River System Confluence Management Project.

Water Activity Summary:

The Conejos Water Conservancy District (District) is a public, quasi-governmental entity whose boundaries cover approximately 86,000 acres of land that are capable of being irrigated. The District plays a critical role in the management of flows on the Conejos River and its tributaries, ensuring that enough water is available to meet agricultural needs and satisfy Colorado's obligation to the Rio Grande Compact. The District has taken a proactive "whole river" system approach to water management and, over the past few years, has improved the efficiency and stability of many diversions, developed real-time water management data, and studied the effects on return flows from irrigated areas from groundwater withdrawals.

The proposed project extends the whole river strategy to where the Main Stem and the North Branch of the Conejos River converge with the San Antonio River – an area known as The Confluence. The Confluence is the last line of defense for the Colorado Department of Water Resources (DWR), which administers the Rio Grande Compact. This project will involve the Ephraim Ditch, Sanford Canal, and the East Bend Ditch and will (1) improve, replace, or install new diversion structures on critical reaches of the Conejos River; (2) extend the growing network of electronic gauging stations and automated control gates within the District; and (3) gain precise knowledge about water flows in this complex region by installing additional web-based telemetry to these three ditch systems.

Threshold and Evaluation Criteria

The application meets all four Threshold Criteria.

Funding/Match Summary:

<u>Funding Source</u>	<u>In-Kind</u>	<u>Cash</u>	<u>Total</u>
Ephraim Ditch Company	\$0	\$102,000	\$102,000
Sanford Canal Company	\$0	\$102,000	\$102,000
East Bend Ditch Company	\$17,000	\$0	\$17,000
NRCS	\$45,000	\$0	\$45,000
Conejos Water Conservancy District	\$0	\$21,000	\$21,000
WSRA Rio Grande Basin Account	\$0	\$15,000	\$15,000
WSRA Statewide Account	\$0	\$280,000	\$280,000
Total	\$62,000	\$520,000	\$582,000

The application articulates how the project meets the Evaluation Criteria as summarized below:

Tier 1: Promoting Collaboration/Cooperation & Meeting Water Management Goals & Identified Needs: The

Conejos River System Confluence Management Project is a collaborative effort involving numerous entities, particularly the Ephraim Ditch Company, Sanford Canal Company, and the East Bend Ditch Company. The District is also collaborating with Trout Unlimited (TU) to incorporate fish friendly designs and other measures to protect riparian habitat and water quality. Further, the District's collaboration with DWR for telemetry and gauging technologies remains an ongoing process. Through this cooperative process this project addresses multiple consumptive and non-consumptive needs by creating a management system that is participative, transparent, effective, and sustainable. This project seeks to protect and more efficiently use senior agricultural rights identified as critical by the Rio Grande Basin Roundtable. Due to the nature of the Rio Grande Compact administration these rights are particularly vulnerable without accurate measurement and forecasting tools.

Tier 2: Facilitating Water Activity Implementation: The District was approached separately by the Ephraim Ditch, Sanford Canal, and the East Bend Ditch seeking assistance with their diversions off the Conejos River. Each presented similar problems of needed rehabilitations but lacking the financial and technical abilities to take on a project on their own. By combing these projects into a single project through the District, financial savings were achieved. Both the Ephraim Ditch and Sanford Canal are seeking loans through the CWCB to help cover their cost, and the East Bend ditch is providing materials and labor. The District is providing practical and administrative help and they have been able to secure grant funds through NRCS. However, without the requested WSRA grant funds this Project would no longer be feasible because the three ditches, and their shareholders, do not have the financial capability to implement the project on their own.

Tier 3: The Water Activity Addresses Issues of Statewide Value and Maximizes Benefits: In regards to agriculture, the Project will help sustain approximately 10,000 irrigated acres that are unable to divert their full decree, and who will no longer be able to rely on groundwater pumping. The environment will benefit because water quality and channel stability on the Conejos River are currently being negatively impacted by the ditches resorting to the age-old methods of piling rocks, trees, and cinder blocks in order to make a diversion into their ditches. The Project will also benefit compact waters because the complexity of three major streams converging in one place and the historic inability to know where the water is or efficiently monitor and control its flow, has contributed directly to the known and persistent over-payment to the Rio Grande Compact. As the Project is located only 12 miles from the Rio Grande compact measurement point, improving water management here will directly assist in the administration of Compact-entitled waters. The Project will benefit threatened or endangered species because, by working with Trout Unlimited, the District's Whole River Strategy complements and assists TU's work to recover the threatened and endangered cutthroat trout in the Conejos River System. Finally, the funds requested provide a high level of benefit to Colorado by improving the management of compact-entitled

waters, by significantly reducing groundwater pumping, and by assisting DWR and the District to more accurately establish curtailments on the Conejos system, and help prevent overpayment to the Rio Grande Compact.

Discussion:

As identified in the SWSI findings, small agricultural water users often lack the financial ability to adequately address infrastructure needs without financial aid. The multiple entities involved in this Project need additional financial resources to make the required improvements to fully utilize its existing water rights. As such, this collaborative group has worked to carefully leverage local, state, and federal funds to execute this project. In addition, the SWSI Management Objectives, of the SWSI Phase II Report: Addressing the Water Supply Gap Technical Roundtable, include to “sustainably meet agricultural demands.” That management objective is directly met through this activity. The proposed project effectively meets the objectives of HB 1177 and consumptive and non-consumptive needs of the Rio Grande Basin by rehabilitating existing infrastructure to preserve agricultural water use while restoring critical habitat and reducing sediment load.

The requested WSRA funds would help implement an innovative and collaborative project to more efficiently meet identified consumptive needs in the Rio Grande Basin. Resulting efficiencies would serve to sustain agriculture while assisting DWR to more effectively meet Colorado’s obligations under the Rio Grande Compact. As such, the proposed project does an excellent job of meeting criteria established for the WSRA program.

Issues/Additional Needs:

No issues or additional needs have been identified.

Staff Recommendation:

Staff recommends approval of up to \$280,000 of Statewide WSRA funds and up to \$15,000 of WSRA funds from the Rio Grande Basin Account to help complete the Conejos River System Confluence Management Project.

All products, data and information developed as a result of this grant must be provided to 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 or certified by a professional engineer licensed by the State of Colorado to practice Engineering.