

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
July 15-16, 2015
Agenda Item 18(a)

Co-Applicants: Colorado River Water Conservation District and West Divide Water Conservancy District

Fiscal Agent: Colorado River Water Conservation District

Water Activity Name: Kendig Reservoir Feasibility Evaluations

Water Activity Purpose: Multi-Purpose (potential for M&I, Agriculture, Environmental & Recreational, Hydropower, Augmentation Supplies & Stock Water)

County: Garfield & Mesa

River Basin: Colorado

Water Source: West Divide Creek

Amount Requested/Source of Funds: \$40,000 Colorado Basin Account (total grant request)

Matching Funds: Applicant Match (\$20,000/cash) = 33.3% of total study costs
(refer to *Funding Summary/Matching Funds* section)

Staff Recommendation:

Staff recommends approval of up to \$40,000 from the Colorado Basin Account to help fund the study titled: Kendig Reservoir Feasibility Evaluations.
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Water Activity Summary: WSRA funds, if approved, would be expended to fund an evaluation of the development costs and potential operation of a Kendig Reservoir concept that is supplied solely by native gravity inflow from West Divide Creek. Two potential reservoir sites (Lower Kendig and Upper Kendig) will be examined to determine which most satisfactorily meets basin needs. The proposed reservoir sites will undergo evaluation because the distribution of annual flows does not coincide with the distribution of annual demand. The selected reservoir site would store the early summer peak flows which would allow late season irrigation demands to be met more frequently; thus, water shortages are reduced. The storage could also be used to supply non-irrigation demands including industrial, domestic, environmental, recreation, and hydropower generation. Preliminary estimates reflect that an average of over 12,000 acre feet of native storable inflow occurs at the site annually, although storable inflow may be 2,000 acre feet or less in critically dry years. It is anticipated that the development of a 5,000 to 15,000 acre foot reservoir at these sites may be appropriate given the amount of storable gravity inflow of West Divide Creek. Although a larger reservoir would provide additional carryover storage for supply in dry years, a smaller reservoir may be more cost effective. Additional study is required to identify optimal reservoir sites, sizes, potential reservoir operation, the firm yield of the reservoir, geotechnical issues and project costs.

Discussion: Kendig Reservoir has been identified in the Colorado Basin Implementation Plan as a Top Project in the Middle Colorado Region (Section 3, Table 18, page 131) satisfying 3 of the BIP's major themes (Theme 1: Ecosystem Health – Protect and Restore Streams, Rivers, Lakes and Riparian Areas; Theme 2: Agriculture – Sustain, Protect and Promote Agriculture; and Theme 3: Safe

Drinking Water - Secure and Protect Safe Drinking Water for Today and Tomorrow; Executive Summary, page 16).

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: n/a

Funding Summary/Matching Funds:

	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
Colorado River Water Conservation District	\$10,000	\$0	\$10,000
West Divide Water Conservancy District	\$10,000	\$0	\$10,000
Total Match	\$20,000	\$0	\$20,000
Colorado WSRA Basin Account Grant	\$40,000	n/a	\$40,000
Total Study Costs	\$60,000	\$0	\$60,000

CWCB Project Manager: Brent Newman

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.