

**Water Supply Reserve Account – Grant and Loan Program**  
**Water Activity Summary Sheet**  
**March 16-17, 2016**  
**Agenda Item 14(g)**

**Applicant & Fiscal Agent:** Fountain Creek Watershed Flood Control and Greenway District

**Water Activity Name:** Evaluation of Flood Control Alternatives for the Fountain Creek Corridor

**Water Activity Purpose:** Multipurpose

**County:** El Paso / Pueblo

**Drainage Basin:** Arkansas

**Water Source:** Fountain Creek

**Amount Requested/Source of Funds:** \$8,800 Arkansas Basin Account  
\$33,000 Statewide Account  
\$41,800 Total Grant Request

**Matching Funds:** Basin Account Match (\$8,800) = 21% of total grant request (meets 5% min);  
Applicant/3<sup>rd</sup> Party Match (\$37,500) = 89% of total project costs (\$79,300)  
Basin Account Match & Applicant Match (\$46,300) = 111% of total grant request (meets 25% min)  
(refer to *Funding Summary/Matching Funds* section)

<b>Staff Recommendation:</b>
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Staff recommends approval of up to \$8,800 from the Arkansas Basin Account; and \$33,000 from the Statewide Account to help fund the project titled: Evaluation of Flood Control Alternatives for the Fountain Creek Corridor.
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**Water Activity Summary:** WSRA funds, if approved, will be expended to fund the project titled: Evaluation of Flood Control Alternatives for the Fountain Creek Corridor. This project evaluates alternatives to protect productive agricultural, commercial and residential land and aquatic and riparian habitat along the Fountain Creek corridor from flood damage and excessive sediment transport. It will simultaneously examine whether infrastructure utilized to meet these nonconsumptive objectives can also be used to meet water supply needs through enhanced exchange opportunities, augmentation or direct use, and provide for additional aquatic and riparian habitat and recreational opportunities.

The water activity will evaluate alternatives for structural and non-structural improvements in the Fountain Creek corridor from Colorado Springs to the confluence with the Arkansas River. The water activity will progress the design and construction of habitat-sensitive restoration techniques that will stabilize the creek bank, reduce flooding and erosion and sediment transport while improving water quality and protecting viable agricultural land, commercial facilities, residential properties, aquatic habitat, wildlife habitat and wetlands. The activity will also evaluate whether detention facilities or a

mainstream dam can constitute a viable means of storing water to meet current and future water supply needs by adding to exchange opportunities (potentially as part of a leasing/fallowing program) or serving as augmentation or direct use reservoirs, without injuring downstream water rights. The water activity will consider water rights along Fountain Creek and pertinent stretches of the Arkansas River to ensure that existing water rights are not injured if flood control or multi-use facilities are constructed in the Fountain Creek Corridor. Meetings will be held with ditch associations, canal companies, Water Division No. 2 representatives and independent water rights holders to keep the communities informed throughout the execution of this water activity and seek input that will be valuable in establishing credible alternatives for analysis.

## OBJECTIVES

1. Meet with holders of decreed water rights to discuss issues/concerns associated with the construction of infrastructure designed to meet project objectives, including the potential need to provide augmentation supplies so as to prevent material injury to any decreed water rights.
2. Assemble, review and summarize flood control and sediment management alternatives evaluated and described in previous reports by the District, USGS, the USACOE and others.
3. Assemble and summarize previous design information and costs estimates for projects similar to the candidate alternatives including the development of a fatal flaw analysis of costs associated with the operation of the analyzed alternatives.
4. Identify implementation issues, in addition to those referenced in #1 above, for the candidate alternatives.
5. Prepare graphics or animation to visualize the effects of implementation of candidate alternatives on properties in the flood pool during floods of 4 different magnitudes (10, 50, 100 and 500-year).
6. Identify and evaluate any potential opportunities for the use of the candidate alternatives to assist in meeting consumptive and non-consumptive needs, including a preliminary analysis of any fatal flaws associated with such use.
7. Compare the candidate alternatives conceptually and analytically using existing information.
8. Formulate and analyze options or combination of options to form feasible alternatives that meet project objectives.

**Discussion:** This project meets the goals and objectives identified in the Arkansas Basin Implementation Plan, aligning with all three of the basin themes identified. The project also aligns with the critical actions identified in Chapter 10 of Colorado's Water Plan, especially actions related to storage, water supply and demand gap, and watershed health.

**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:**

This activity has undergone review and evaluation and staff has determined that it satisfies the Evaluation Criteria. Please refer to WSRA Application for applicant's detailed response.

**Funding Summary/Matching Funds:**

<b><u>Funding Source</u></b>	<b><u>Cash</u></b>	<b><u>In-kind</u></b>	<b><u>Total</u></b>
Fountain Creek District	\$25,500	\$0	\$25,500
Colorado Springs Utilities	\$0	\$12,000	\$12,000
Subtotal Matching Funds	\$25,500	\$12,000	\$37,500
WSRA Arkansas Basin Account	\$8,800	n/a	\$8,800
WSRA Statewide Account	\$33,000	n/a	\$33,000
<b>Total Project Costs</b>	<b>\$67,300</b>	<b>\$12,000</b>	<b>\$79,300</b>

**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.