

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

Applicant & Fiscal Agent: Coalition for the Upper South Platte

Water Activity Name: Horse Creek Restoration Project

Water Activity Purpose: Nonconsumptive (Env/Rec) & M&I

County: Douglas

Drainage Basin: South Platte

Water Source: Horse Creek

Amount Requested/Source of Funds:

\$50,000	Metro Account
\$50,000	South Platte Basin Account
\$550,000	Statewide Account [*]
\$650,000	Total Grant Request

Matching Funds:

Basin Account Match (\$100,000) = 15.4% of total grant request (meets 5% min);

Basin Account & Applicant Match (\$1,322,045) = 203% of total grant request (meets 25% min);

Applicant/3rd Party Match (\$1,222,045) = 188% of total grant request (meets 5% min)

(refer to *Funding Summary/Matching Funds* section)

***Note:** The apparent discrepancy between the \$650,000 Statewide Account request indicated in the application and the \$550,000 Statewide Account request represented herein (and on the spreadsheet accompanying the Memo) can be attributed to the applicant agreeing to reduce their Statewide Account request by \$100,000 to accommodate the Statewide Account funding shortfall.

Staff Recommendation:

Staff recommends approval of up to \$50,000 from the Metro Account; and \$50,000 from the South Platte Basin Account; and \$550,000 from the Statewide Account to help fund the project titled: Horse Creek Restoration Project.
--

Water Activity Summary: WSRA funds, if approved, will be expended to: reduce erosion and flooding in Horse Creek, protecting public infrastructure and life safety; reduce approximately 50,000 tons per year of sediment moving downstream; improve habitat for threatened and endangered species (Prebbles Jumping Mouse), other species of concern, fisheries, and provide aquatic species passage from West Creek Reservoir to the mainstem of the South Platte River. These efforts are proposed to counteract the effects of the the Hayman Fire which burned over 137,000 acres of the Upper South Platte watershed in 2002, yielding long-term negative impacts to water infrastructure and environmental values downstream of the fire scar that continue today. The Horse Creek drainage was significantly damaged, and has had continued flooding, and high-levels of erosion, which delivers over 57,000 tons of excess sediment downstream in average years, and during high precipitation periods, has delivered hundreds of thousands of tons (primarily from streambank

erosion). This material has significant negative impacts on water supply infrastructure (particularly with the volume deposited in Strontia Springs Reservoir, but also affecting downstream diversions and flumes). It also has significant impacts on fisheries, and T&E species (this is a Prebbles Mouse habitat area.)

The Horse Creek Project will re-align approximately 2,000 feet of Horse Creek, restore sediment transport function within 6 sub-basins in the Horse Creek Project utilizing heavy equipment and hand crews, stabilize 2 additional sub-basins with hand crews, and replace three bridges in the project area. The new bridges will replace temporary culvert crossings that continue to fail in heavy flows, and destabilize the river with each failure, as well as acting as aquatic species blockage. The new bridges will be single span construction, to allow for debris to pass underneath the structure without damage, and will have weirs built above to direct the thalweg through the center of the channel.

Discussion: This project aligns well with several of the Goals and Measurable Outcomes as addressed in the South Platte Basin Implementation Plan. For example: Goal 1.9.4: South Platte Storage and Other Infrastructure; Goal 1.9.5: Water Quality; Goal 1.9.7 Environmental and Recreational; and Goal 1.9.8: Statewide Long-term Goals (SPBIP; Section 1.9: Goals and Measurable Outcomes, pages 1-24 thru 1-30). Furthermore, the SPBIP lists this effort as an IPP in Section 4.3.2.1: Reuse Identified Projects and Processes; Table 4-10: South Platte and Metro Provider's Reuse IPPs; page 4-25.

In addition this effort advances Colorado's Water Plan Reuse options as a means to close the supply-demand gap as highlighted in Chapter 6.3.2: Reuse (CWP; Chapter 6.3.2: Reuse; pages 6-75 thru 6-81), and promotes Water Quality goals as emphasized in Chapter 7.3: Water Quality (CWP; Chapter 7.3: Water Quality; pages 7-17 thru 7-33).

Issues/Additional Needs:

- The applicant should provide staff with a detailed monitoring plan that describes geomorphic and vegetative monitoring methodologies.
- The monitoring plan should conform to the CWCB Measurable Results Program's Standard Operating Procedures for Topographic Survey of Stream Channels.
http://cwcb.state.co.us/environment/watershed-protection-restoration/Documents/Survey_SOP_CWCB.pdf

Threshold and Evaluation Criteria: The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria:

This project has undergone review and evaluation and staff has determined that this request satisfies the Evaluation Criteria. Further analysis of the project, and how the project will meet Tiered Evaluation Criteria, is provided by the applicant in the WSRA Application.

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
319 Nonpoint Source Program	\$600,000	\$0	\$600,000
Denver Water	\$200,000	\$0	\$200,000
Aurora Water	\$200,000	\$0	\$200,000
Douglas County	\$50,000	\$0	\$50,000
Coalition for the Upper South Platte	\$0	\$172,045	\$172,045
Subtotal Applicant Match	\$1,050,000	\$172,045	\$1,222,045
WSRA Metro Account	\$50,000	n/a	\$50,000
WSRA South Platte Basin Account	\$50,000	n/a	\$50,000
WSRA Statewide Account	\$550,000	n/a	\$550,000
Total Project Costs	\$1,700,000	\$172,045	\$1,872,045

CWCB Project Manager: Chris Sturm

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.