Water Supply Reserve Account – Grant and Loan Program Water Activity Summary Sheet September 24, 2013 Agenda Item 18(j)

Applicant: City of Canon City, Colorado

Water Activity Name: Royal Gorge Wildfire Water Quality Impact and Protection Project – Emergency

Mitigation, Stabilization, and Reclamation

Water Activity Purpose: Nonconsumptive

County: Fremont County **River Basin:** Arkansas

Water Source: Arkansas River

Amount Requested: \$460,940 (Statewide Account); \$24,260 (Arkansas Basin Account)

Matching Funds: \$437,500 cash (45%), \$50,000 in-kind (5%)

Staff Recommendation

Staff recommends approval of up to \$24,260 from the Arkansas Basin Account and \$460,940 from the Statewide Account to fund the Royal Gorge Wildfire Water Quality Impact and Protection Project.

Water Activity Summary:

This project will mitigate potential impacts to Arkansas River water quality caused by the Royal Gorge Fire. The Arkansas River below the fire affected watershed is the main source of water for the City of Cañon City, multiple providers of potable water, and various irrigation ditch companies.

The July 11, 2013 Royal Gorge fire in the Pinion/Juniper covered hills surrounding the Royal Gorge immediately west of Cañon City resulted in extremely rapid fire growth and large areas of high vegetation mortality, eventually burning 3,218 acres of the City's Royal Gorge Park. The Royal Gorge Bridge attraction, which had substantial infrastructure, is included within the 715 acres to be addressed in this project. Mitigation, reclamation, and stabilization activities will take place only on the 715 acres that directly impact water quality draining to the river. Modeling indicates that runoff from the burned areas can be expected to increase 4-fold, and sediment yield at the mouth of the burned area is predicted to change from 0-.45 tons/acre/year (pre-fire) to 2.5 tons/acre/year (post-fire).

The Cañon City Water Treatment Plant raw water intakes (along with three major irrigation ditches) are located approximately 2 miles downstream from the burned area. The City's water treatment plant pumps directly from the river and has no raw water storage. The City has three days of summer water storage available if intakes are shut down. It is likely that diversions downstream of the fire will need to shut down during storm events. Emergency stabilization of severely burned drainages is necessary to eliminate the threat to water supply.

The objectives of this project are to arrest the threats to water quality within the Arkansas River by conducting mitigation, stabilization, and reclamation efforts in the fire affected area. WSRA funds will be used for seeding, hydro-mulching, and seedling planting.

Threshold and Evaluation Criteria

The application meets all four Threshold Criteria.

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

Tier 1: Promoting Collaboration/Cooperation & Meeting Water Management Goals & Identified Needs: This activity addresses multiple needs of multiple entities (City of Cañon City, four agricultural ditch companies, and impacts to water providers from the burn area downstream to Pueblo Reservoir). Entities represented within this application include providers of potable water (including the City of Cañon City, the Florence Regional Water Authority (serving not only Florence and the surrounding area, but the towns of Rockvale, Coal Creek, and Williamsburg), the Board of Waterworks Pueblo, Pueblo West, Colorado Springs Utilities and the Fountain Valley Authority. Other stakeholders include agricultural ditch companies, recreational users (rafting companies, fishermen, the Arkansas Headwaters Recreational Area, etc.), and communities downstream that rely on the river as their water source. Implementation of this project will preserve water quality and maintain existing water supplies in the Arkansas River. Runoff containing debris and sediment will be reduced.

Tier 2: Facilitating Water Activity Implementation:

Without the benefit of this grant funding, it will be impossible for the City to leverage enough funds through partners to accomplish the breadth of work that must be accomplished to protect the water resources of the Arkansas River.

The amount of matching funds garnered both through revenues of the City and the pledges/contributions received by multitudinous agencies, as well as the demonstrable in-kind contributions for this project, well exceed the minimum match and reflect the dedication and importance of this project.

Tier 3: The Water Activity Addresses Issues of Statewide Value and Maximizes Benefits:

The increase in sediment and debris to the river has the potential to impair aquatic habitat, displace storage space in downstream reservoirs (Pueblo Reservoir), and damage agricultural water delivery infrastructure. Stabilizing the burn area and reducing sediment inputs is of benefit to the State of Colorado. The project compliments the CWCB's Watershed Protection and Restoration Program.

Issues/Additional Needs:

There are no additional needs or issues.

Staff Recommendation:

Staff recommends approval of up to \$24,260 from the Arkansas Basin Account and \$460,940 from the Statewide Account to fund the Royal Gorge Wildfire Water Quality Impact and Protection Project.

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 and Final Deliverable: 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. 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.