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

Applicant: Rocky Mountain Field Institute

Water Activity Name: Bear Creek Sedimentation Mitigation Project (Phase I)

Water Activity Purpose: Nonconsumptive

County: El Paso County **River Basin:** Arkansas

Water Source: Bear Creek

Amount Requested: \$85,000 (Statewide Account); \$15,000 (Arkansas Basin Account)

Matching Funds: \$140,000 cash (40% - US Fish and Wildlife Service, Western Native Trout Initiative, Trout

Unlimited), \$109,000 in-kind (31% - Co Parks & Wildlife, CH2MHill, et al)

Staff Recommendation

Staff recommends approval of up to \$15,000 from the Arkansas Basin Account and \$85,000 from the Statewide Account to fund the Bear Creek Sedimentation Mitigation Project (Phase I). This approval is contingent upon the applicant addressing the issues identified in the Issues/Additional Needs of this summary sheet.

Water Activity Summary:

Just west of Colorado Springs, Bear Creek holds the only remaining population of greenback cutthroat trout (Metcalf 2012). As the highest priority site for conservation of the greenback, project partners have been working to better manage activities within this high-value watershed and minimize impacts to the fish and its habitat. Our goal is to ensure a thriving population of greenbacks in a watershed that will be resilient to changing climate conditions. One of the key issues in the watershed is sedimentation and its potential impact on stream conditions. An unpaved, gravel road adjacent to the stream is a known source of sediment. The Bear Creek Sediment Mitigation Project (Phase I) will restore in-stream fish habitat and concurrently begin to address the sources of sediment from the road system. Phase I of the project will accomplish these tasks:

- 1) Restore .75 mile of in-stream fish habitat and restore channel function
- 2) Stabilize one ephemeral draw that contributes excessive sediment into Bear Creek
- 3) Address the cause of degradation: Prioritize, design and implement highest priority sediment control features on High Drive to reduce sediment delivery into Bear Creek

Threshold and Evaluation Criteria

The application meets all four Threshold Criteria.

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

<u>Tier 1: Promoting Collaboration/Cooperation & Meeting Water Management Goals & Identified Needs:</u>
Bear Creek Sediment Mitigation Project (Phase I) is a largescale collaborative effort between governmental entities, nonprofit organizations, and advocacy groups that have been working in partnership since 2009. The project not only includes three government landowners including the US Forest Service, City of Colorado Springs, Colorado Springs Utilities, Colorado Parks and Wildlife, and the US Fish & Wildlife Service.

Nonprofit partners include Rocky Mountain Field Institute and Trout Unlimited. Advocacy groups

representing recreational interests include the Colorado Motorcycle Trail Riders Association and numerous other partners that have participated in a stakeholder roundtable process.

Tier 2: Facilitating Water Activity Implementation:

Funding from WSRA ensures the completion of project objectives. Significant cash and in-kind matching funds are being contributed to this project, displaying a high degree of commitment from partners. Project partners have contributed the fullest extent of funding they have available, and as such, WSRA funds are requisite for completing project objectives.

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

The project meets the need of assisting in the recovery of a federal and state-listed species – the greenback cutthroat trout. A recent genetic study identified the cutthroat trout in Bear Creek as the only remaining population of greenbacks. This cutthroat subspecies was originally native to the South Platte basin, however currently no known populations of this subspecies exist in that basin. The population in Bear Creek was apparently transplanted from the South Platte basin to Bear Creek (Arkansas basin) around 1880 by a private individual.

The greenback cutthroat trout are found in a mere 4 miles of habitat within Bear Creek which creates a very vulnerable situation for this population. The lower mile of this important habitat, where the stream parallels High Drive, is particularly at risk. Sediment from High Drive has reduced trout habitat to unacceptable levels and this portion of the population has been drastically limited. This highly degraded reach is the focus of this project. Recovery efforts for this subspecies will be directed at the South Platte basin. Although a formal recovery plan for this subspecies has not been completed, translocation of the fish to the South Platte drainage will begin in 2013. Land and water management in the South Platte basin will need to be considered in the recovery of this species. As such, this subspecies will, in the long run, be more critical to native cutthroat management in South Platte basin, and an important component of the entire Colorado native cutthroat trout conservation/recovery program.

The stabilization of the creek and drainage is complimentary to the CWCB Watershed Restoration Program.

Issues/Additional Needs:

- The applicant should provide staff with a detailed monitoring plan that describes geomorphic and biologic monitoring methodologies.
- The monitoring plan should conform to the CWCB Measurable Results Program's <u>Standard Operating Procedures for Topographic Survey of Stream Channels</u>.
- All proposed river channel work should conform to the CWCB <u>Rules and Regulations for Regulatory Floodplains in Colorado</u>

Staff Recommendation:

Staff recommends approval of up to \$15.000 from the Arkansas Basin Account and \$85,000 from the Statewide Account to fund the Bear Creek Sedimentation Mitigation Project (Phase I). This approval is contingent upon the applicant addressing the issues identified in the Issues/Additional Needs of this summary sheet.

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.