Scope of Work

GRANTEE and **FISCAL** AGENT (if different) -

PROJECT NAME – Hartland Dam Modification

GRANT AMOUNT - \$53,100.00

INTRODUCTION AND BACKGROUND

The Lower Gunnison River Fish Passage Restoration Project will design and implement a fish passage dam modification eliminating the last major fish blockage in the lower Gunnison River.

Reconnecting fragmented river habitat is expected to result in increased upstream populations of three target fish species (roundtail chub, flannelmouth sucker, and bluehead sucker). These species are named "species of concern" in Colorado and neighboring western states due to an observed decline in range and number within the Colorado Plateau region. The Hartland fish passage should also increase populations of other native fishes in this section of the river, including potentially the endangered pikeminnow and razorback sucker, which inhabit the lower Gunnison River. The total potential river and riparian area habitat improved as a result of the dam modification is approximately 230 river miles, which is the total distance between the Hartland Dam, and the Paonia and Crystal dams on the North Fork and Gunnison main stem, respectively. At the same time, this project will protect Hartland Irrigation Company's senior water rights, improve navigational safety on the river, and reduce private property trespassing issues.

OBJECTIVES

Overall objectives of the entire project, including the three tasks noted above, as well as additional tasks funded by other resources, are given in this section. The three specific tasks to be completed with CWCB funds are given in detail, in the next section.

Overall project objectives are:

- Increase habitat connectivity and total numbers of the target species upstream of the current dam by constructing a fish passage;
- Maintain Hartland Irrigation Company's decree while protecting the company from liability and limiting maintenance costs;
- Protect adjacent landowner from liability;
- Stabilize the downstream east bank of the river;
- Reduce danger to boaters while increasing resource-based tourism in the area.

TASKS

TASK 1 – [Grouted boulder Cutoff and Dam Connection]

Funds from this grant will be used for the grouted boulder cutoff and dam connection scheduled to begin October 23, 2011. Construction of the cutoff walls as shown on the drawing using grouted boulders (in place of steel sheet pile). Work includes excavation, furnishing and placing boulders, furnishing and placing grout, furnishing and placing liner and geotextiles, backfill,

subgrade preparation, steel members used for connection at the existing dam, and other miscellaneous items needed to complete the cutoff walls.

<u>Deliverable</u>

Invoicing to CWCB with copies of contractor invoices signed off by the inspector and engineer as verification of work completed.

REPORTING AND FINAL DELIVERABLE

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 statement 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.