

**Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
Agenda Item 14.c**

Applicant: Lake Fork Valley Conservancy (LFVC)

Water Activity Name: Henson Creek and Lake Fork Confluence Channel Improvement Project

Water Activity Purpose: Non-consumptive and Agricultural

County: Hinsdale

River Basin: Gunnison

Water Source: Henson Creek and Lake Fork of the Gunnison River

Amount Requested: \$260,111 (Statewide Account); \$28,975 (Gunnison Basin Account)

Matching Funds: \$295,951 (\$51,941 existing cash - \$39,201 from CWCB Watershed Restoration Program, \$51,210 in-kind, \$192,800 pending cash from GOCO grant application)

| Staff Recommendation |
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| Staff recommends approval, upon the condition of addressing concerns specified below in the Issues/Additional Needs section, of up to \$28,975 from the Gunnison Basin Account and \$260,111 from the Statewide Account to help fund the Henson Creek and Lake Fork Confluence Channel Improvement Project. |

Water Activity Summary:

The Lake Fork Valley Conservancy is proposing river improvements along a half mile stretch of lower Henson Creek and its confluence with the Lake Fork of the Gunnison, in and near the Town of Lake City. This is Phase I of a three phase project to improve the river through Town. In the Phase I project area, 2040 feet of the project reach along Henson flows through the Town and 560 feet of river is under BLM jurisdiction, but the Town leases the property along the river from the BLM for their trail system. The lower Henson has been impacted from historic mine tailing impoundment failures, creating a braided and unstable channel with high sediment bed load movement.

The purpose of this project is to realign areas of the channel where the river is threatening the Town irrigation head-gate and ditch, stabilize banks to reduce erosion that are undermining public trails, repair riparian areas, enhance fisheries and increase public access to the river. The project involves construction of 6 cross vanes, 19 vanes, 16 sills and one rock wall terrace extended out into the river channel at the confluence. Surrounding riparian areas will be re-vegetated. A trail extension will be built on the terrace.

The overall goal of the Project is to enhance and protect the utilization, ecological health and recreational quality of the Lake Fork of the Gunnison and its main tributary, Henson Creek, in the vicinity of Lake City.

There are 5 main objectives of the project:

- 1) Improve bank stability along the lower Henson and at the confluence with the Lake Fork of the Gunnison;
- 2) Enhance fisheries by increasing over-wintering and drought habitat;
- 3) Improve public recreation opportunities through safer access, better fisheries and boating, and extension of usable space at Memorial Park.
- 4) Facilitate full utilization of the Town of Lake City's Irrigation Ditch water right;
- 5) Improve organizational performance and accountability to manage restoration projects.

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:

The project has a committed and diverse stakeholder group. The design phase of this project was financially supported by the CWCB Watershed Restoration Program, the Water Quality Control Division – EPA 319 Program, the Lake Fork Valley Conservancy, Hinsdale County, the Town of Lake City, the BLM, and many other organizations and agencies. These stakeholders continue to support the implementation phase of the project. The project will benefit non-consumptive and consumptive needs. The Gunnison Basin's Environmental and Recreational Non-Consumptive Needs Assessment mapped many attributes for Henson Creek and the town reach of the Lake Fork of the Gunnison. The attributes include flannemouth sucker, bluehead sucker, significant riparian and wetland plant communities, CWCB in-stream flows, rafting/kayaking, waterfowl hunting, and fishing. The project will improve habitat by structuring a channel that makes the best use of the available flows, which include CWCB in-stream flow rights. The design will effectively transport sediment through what is now an aggrading reach, which has caused flood concerns. The project addresses consumptive needs by improving diversions at the Town of Lake City's irrigation head-gate.

Tier 2: Facilitating Water Activity Implementation:

Funding this project will make a significant difference for facilitating an important resource management action as identified in the LFVC's Ten Year Strategic Watershed Plan. This stretch of river has degraded steadily since tailing dam impoundment breaks in the 60's and 70's. This action, combined with LFVC's work to improved water quality in this impaired stream through abandoned mine cleanup, effectively addresses both the chemical and physical fisheries habitat.

WSRA funds will support the initial phase of the overall river project, and help the LFVC to demonstrate that river enhancement is of great value to the Lake City community. This in turn will leverage future fundraising efforts for subsequent phases of restoration work downstream on the Lake Fork.

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

The project compliments the efforts of the CWCB Watershed Restoration Program by implementing a design to improve ecological function while protecting life and property from flood damage. The project also compliments the CWCB in-stream flow rights for this reach by constructing a channel that makes the best use, i.e. pool habitat, of the available flows. Fishing and boating opportunities will be improved, which will benefit the local economy. The Town's water rights will also be maximized through implementation of the project.

Discussion:

The project supports varied needs which include channel stabilization, fishery enhancement, improve recreational access, and improved consumptive water supply delivery. The project represents a unique opportunity to bring together several CWCB program areas. The initial design was supported by the CWCB Watershed Restoration Program. The design focuses on creating habitat and transporting sediment with the flows available, which include in-stream flow water rights. Finally, the project implements the protection and enhancement of attributes identified in the basin non-consumptive needs assessment while preserving and improving the diversion of irrigation water rights.

Issues/Additional Needs:

- The applicant should provide staff with a detailed monitoring plan that describes geomorphic and vegetation monitoring methodologies.
- The monitoring plan should conform to the CWCB Measurable Results Program's Standard Operating Procedures for Topographic Survey of Stream Channels.
- Macroinvertebrate sampling should conform to State Water Quality Control Division protocols.
- All proposed river channel work should conform to the CWCB Rules and Regulations for Regulatory Floodplains in Colorado
- The applicant should provide a strategy for re-vegetation if the GOCO grant application does not get funded.

Staff Recommendation:

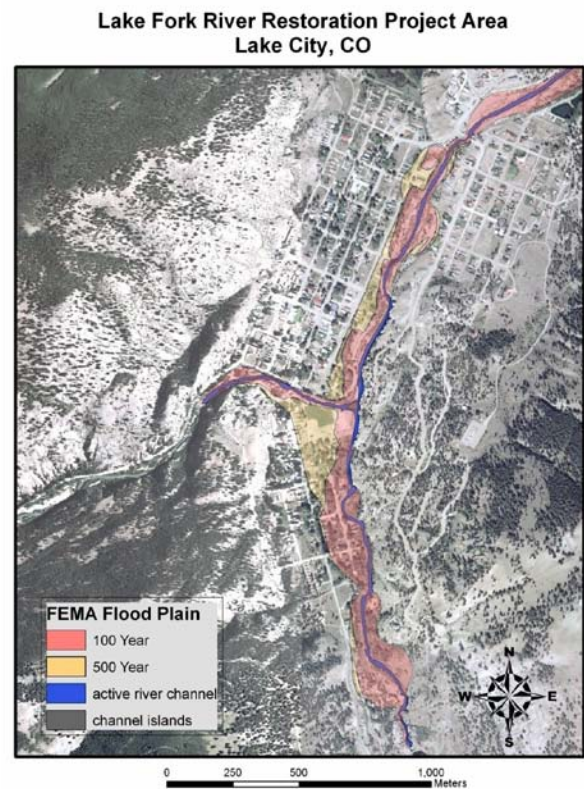
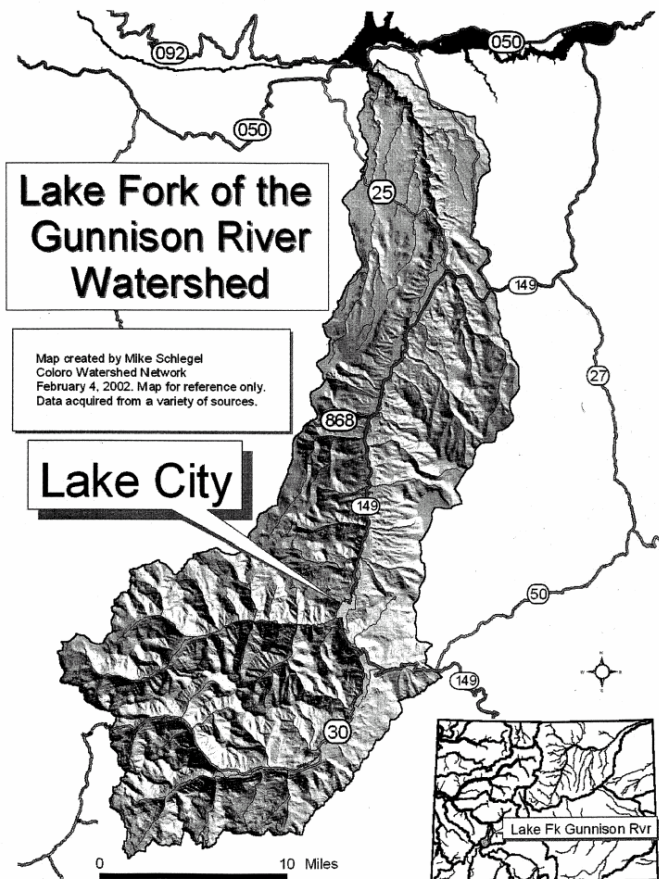
Staff recommends approval, upon the condition of addressing concerns specified below in the Issues/Additional Needs section, of up to \$28,975 from the Gunnison Basin Account and \$260,111 from the Statewide Account to help fund the Henson Creek and Lake Fork Confluence Channel Improvement Project.

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.

Location Map:



Camille Richard, January 5, 2011