

**Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet**

Applicant: Hinsdale County and the Upper
Gunnison River Water Conservancy District

Amount Requested: \$35,000.00

Water Activity Name: Lake San Cristobal
Control Outlet Structure Project

Source of Funds: Basin

Water Activity Purpose: Technical Analysis
regarding permitting feasibility study
/Environmental Compliance (see
Issues/Additional needs discussion)

Matching Funds: None

County: Hinsdale

Drainage Basin: Gunnison River

Water Source: Lake Fork Gunnison River

Water Activity Summary:

Hinsdale County and the Upper Gunnison River Water Conservancy District (UGRWCD) are examining the feasibility of constructing a new permanent control structure at the outlet of Lake San Cistobal. The control structure would regulate the lake level to provide releases of water from the lake and prevent failure of the lake outlet structure during flood events. The stored water resulting from this project will be used primarily as augmentation water within the Lake Fork of the Gunnison River. Other beneficial uses may include agriculture, recreation and possibly releases for instream flow purposes.

The feasibility study will consist of two analyses that will be performed simultaneously:

1. Estimate the firm yield of the 960 acre-feet of storage and develop an engineering report to support the water right application in case no. 03CW108 and,
2. Analyze the current and future market for water impounded by the structure.

According to the application, in 2003, a feasibility study was conducted to examine the potential enlargement of Lake San Cristobal. This study stated that in the 1950s the lake was altered from its natural condition when the Hinsdale County Road and Bridge Department constructed a rock and timber dam at the outlet. Two significant issues were made apparent in this study. First, there were significant wetlands on the perimeter of the lake which would be inundated by the proposed enlargement. The mitigation of these wetlands appeared to be cost-prohibitive for the project. In addition, the Colorado Water Conservation Board holds a Natural Lake Level (NLL) water right on Lake San Cristobal (4-77W3366) with an appropriation date of May 12, 1976 with an elevation of 8995.0 feet. After further investigation, it was determined that the dam constructed in the 1950s raised the lake elevation to 8992.5 feet from its natural elevation of 8990.0 feet. Based on these findings, the applicants believe that the NLL on Lake San Cristobal is incorrect and should be modified pursuant to Rule 9c (1) of the Rules Concerning the Colorado Instream Flow and Natural Lake Level Program. It should be noted that in 2003, the Upper Gunnison River Water Conservancy District claimed the additional 960 acre-feet impounded by the dam in water right application

4-03CW108, which the CWCB filed a statement of opposition to protect its NLL water right on Lake San Cristobal.

Discussion:

As identified in the major findings in SWSI, supplies are not necessarily where demands are located. If implemented, the location of this storage has the potential to address many important needs in the Lake Fork Gunnison basin. Lake San Cristobal is located relatively high in the basin, an important attribute when considering an augmentation source. Development in the Lake City area has placed significant pressures on the water supplies in the Lake Fork Gunnison River basin which is likely to continue in the foreseeable future. An upstream augmentation source such as San Cristobal Lake would augment out of priority depletions within the Lake Fork basin rather than utilizing downstream sources such as Blue Mesa Reservoir. Among other considerations, the CWCB holds instream flow water rights on the Lake Fork Gunnison River and many of its tributaries which could benefit both directly and indirectly from this project. Some discussions with CWCB Staff have included allocating a portion of the releases to support instream flow water rights in the Lake Fork Gunnison River.

Issues/Additional Needs:

- The applicant needs to address the threshold criteria, especially in regard to potential effects to the CWCB Natural Lake Level (NLL) water right.
- Pending resolution/receipt of analysis of the above the applicant should resolve the issues raised in case number 03CW108, including whether a non-natural lake level pool exists above the natural lake level. The outcome and logistics of this analysis could substantially change the purpose and outcome of this grant.
- A copy of the 2003 feasibility study referred to in the grant application was not provided. Please submit this information.
- The applicants describe this application as a 'technical analysis' although the application appears to have a structural component associated with outlet structure, please clarify.
- More specific budget breakdown is needed as well as more detail regarding the schedule of activities and key activities are needed.
- In this application, it was stated that the Hinsdale County Road and Bridge Department constructed a rock and timber dam at the outlet in the 1950s, yet the water right application in 4-03CW108 states the improvements occurred on June 1, 1990. Further clarification on this issue is needed.
- It was stated that this feasibility study/analysis will be used in part to support the water rights application in 4-03CW108. It is important to note that funds can not be used to reimburse past costs or for legal expenses related to the water right application in 4-03CW108.
- The current scope of work does not appear to include any effort to assess the outlet structure design and costs. Without this information it is unclear how Mr. Slattery can conduct a marketable yield analysis (i.e. without knowing the capital cost, the rate of repayment and marketability, the price of augmentation water can not be determined.) Please clarify.
- The applicant did not identify any TABOR issues; please confirm that this is not an issue.
- Please clarify why this report is provided to the Gunnison Roundtable rather than Hinsdale County and the Upper Gunnison Water Conservancy District. In addition, one tax payer identification number was provided but it appears that this is a co-application however the upper Gunnison appears

to hold the water right. Please clarify these relationships and why there does not appear to be any cost-share. Please confirm that this is the case.

- Please provide a resume for Ralph Grover.
- In the scope of work for Ralph Grover, please clarify which draft reports are to be reviewed. In addition, please clarify Mr. Grover's role in the preparation of the final report since it appears that Mr. Slattery is preparing the final report.
- Please provide the rate and level of effort in relationship to the tasks. Currently, the costs associated with the tasks are provided as a lump sum.
- In Attachment A of the grant application, in the third sentence, the project is described as raising the level of the lake above the NLL. However, in other parts of the application it appears that the applicant believes that a modification of the NLL is warranted. Please clarify.

Legal Issues

- The CWCB holds a NLL appropriation (4-77W3366) which the applicant is challenging based on the evidence provided in a feasibility study conducted in 2003. What legal issues are associated with this proposal?

Staff Recommendation:

Staff recommends approval of up to \$35,000.00 for the Lake San Cristobal Project contingent upon resolution of the items identified in the Issues/additional needs section. All products, data and information developed as a result of this grant must be provided to 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.