Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
Agenda Item 29b

Applicant: Lake San Cristobal Water Activity Enterprise (LSCWAE)

Water Activity Name: Lake San Cristobal Outlet Structure

Water Activity Purpose: Structural water project or activity

County: Gunnison County

Drainage Basin: Gunnison River

Water Source: Gunnison River

Amount Requested: $150,000 (Gunnison Basin Account)

Matching Funds: $432,660 (74% of Project Costs)

Staff Recommendation
Staff recommends approval of up to $150,000 from the Gunnison Basin Account to install a structure at the outlet of Lake San Cristobal for water storage augmentation contingent on resolution of the items in the issues/additional needs section.

Water Activity Summary:
This grant request funding will be used to install a structure at the outlet of Lake San Cristobal for water storage augmentation. This project will also allow the Lake San Cristobal Water Activity Enterprise to monitor and enhance river flow for fisheries and maintain wetlands. Lake San Cristobal is Colorado's second largest natural lake and is located on the Lake Fork of the Gunnison River in Hinsdale County, Colorado. It is located approximately 3.5 miles SE of Lake City.

The existing outlet structure consists of large boulders placed in the stream channel at the lake's outlet. The boulders are removed by Hinsdale County Road and Bridge staff during the spring runoff, approximately April to June, each year to allow runoff flow to enter the Lake Fork. Operational level for the proposed outlet during spring runoff will be 8992.0 which is the approximate current stream channel elevation. A new outlet structure will be constructed at the site of the boulder outlet structure to provide water storage for the owner. When filled to the high water line, Lake San Cristobal will encompass approximately 341 surface acres and store approximately 951 acre-feet in the operational level between 8992.0 and 8995.0.

The jurisdictional height of the outlet structure will be 3 feet at the outlet crest elevation of 8995.0 feet with a related surface area of 341 acres. Reservoir volume control will be regulated by the operation of four 16-foot Obermeyer™ gate sections either in unison or individually to provide continuous flow into the Lake Fork of the Gunnison River as mandated by the Operations Plan. The gate sections can be operated either by remote control or manually on site. This will allow emergency management of the outlet or when the owner needs to release reservoir storage to downstream water rights to offset junior depletions.

The proposed structure will consist of a concrete foundation installed in the native gravel soils at the outlet with four (4) 16-foot Obermeyer™gate sections anchored onto the concrete foundation. The operation of each gate is controlled

by a dedicated air-supply line from an in-ground control vault in the adjacent parking lot to the west of the outlet. Each gate can be operated independently or in unison depending on the LSCWAE's operations plan. In the event of air loss, the gates will deflate and lower to the minimum operations level of 8992.0 feet. Alarms, linked to the UGRWCD office in Gunnison, Colorado, and located on the air lines in the control vault will warn the operator of air loss so that the gates can be mechanically stabilized to prevent further water loss.

Threshold and Evaluation Criteria
The application meets all four Threshold Criteria. No statewide funds are being requested; therefore the evaluation criteria do not apply.

Funding Overview
The applicant is requesting grant funding in the amount of $150,000 from the Gunnison Basin Account. Funding from the WSRA constitutes 26% of the overall project cost ($582,660). The applicant has indicated matching funds of $582,660.

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 Cristobel Lake would augment out of priority depletions within the Lake Fork basin rather that utilizing downstream sources such as Blue Mesa Reservoir.

The Water Supply Planning Section is aware of the on-going negotiations between the Instream Flow Section and the Upper Gunnison River Water Conservancy District related to the CWCB's Natural Lake Level water right on Lake San Cristobal. During this meeting, the Board will be asked to conduct a preliminary review of the proposed pre-trial resolution to determine whether the natural environment of Lake San Cristobal in the Gunnison River Basin could be preserved to a reasonable degree with the proposed injury if the applicant provides the proposed mitigation. This is the first of two required meetings for the Board to approve an Injury with Mitigation proposal. It is anticipated that the Board will be asked for its final determination at its July 2010 meeting.

Issues/Additional Needs:
- Considering that the applicant's reliance upon $582,660 from other funding sources, staff recommends that this funding is contingent upon the applicant's ability to secure the remaining $582,660.
- Staff recommends that approval is contingent upon the Board's approval of an Injury with Mitigation proposal for the Natural Lake Level water right for Lake San Cristobal.

Staff Recommendation:
Staff recommends approval of up to $150,000 from the Gunnison Basin Account to install a structure at the outlet of Lake San Cristobal for water storage augmentation contingent on resolution of the items in the issues/additional needs section.

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: 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.

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.

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.