

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

Applicant: Pagosa Lakes Property Owners Association

Water Activity Name: Pagosa Lakes Area Village Lake Dam Outlet Pipe Repair Project

Water Activity Purpose: Structural Water Project

County: Archuleta

Drainage Basin: San Juan

Water Source: San Juan River

Amount Requested: \$25,000

Source of Funds: \$25,000 Southwest Basin Account

Matching Funds: \$123,338 Applicant, \$25,000 Southwest Water Conservation District, In-Kind – Pagosa Area Water and Sanitation District

Staff Recommendation
Staff recommends approval of up to \$25,000 from the Southwest Basin Account to help complete the Pagosa Lakes Area Village Lake Dam Outlet Pipe Repair Project.

Water Activity Summary:

This project seeks to rehabilitate a failing outlet pipe on the Village Lake Reservoir and Dam (aka Town Center Dam). In 2007, a video inspection of the pipe revealed serious decay and corrosion. In 2008, the Colorado Division of Water Resources issued a Conditional Full Storage status to the structure, conditional on the outlet pipe being repaired in the near future. The outlet pipe is a 172 foot long, 24 inch diameter horizontal corrugated metal pipe (CMP) that runs underneath the dam and allows for the safe drawdown and reservoir level control. The State Engineer has determined that the degradation of this CMP could lead to potential dam failure. The Association has been required to make a repair to maintain use of this 700 acre-foot reservoir.

Village Lake is one of several lakes in the Pagosa Lakes area of Archuleta County. The water is owned and managed by the Pagosa Area Water and Sanitation District (PAWSD), but the dams and real property that the reservoirs are situated on are owned by the Pagosa Lakes Property Owners Association. Water in the reservoirs is utilized by PAWSD for municipal drinking water, irrigation, fire suppression, etc. The water in the Pagosa Lakes reservoirs provides drinking water to well over half the population of the county and the reservoirs are extremely important storage for the system. Should a dam ever fail, such as Village Lake Dam, the consequences would be wide reaching and a number of emergency water conservation restrictions would become immediately necessary.

If the dam is not repaired in a timely manner the Colorado Division of Water Resources will begin implementing mandatory storage restrictions on the dam. The SEO has already approved the design of the proposed improvements.

The project entails: (1) the installation of a cured in place plastic liner (CIPP) in both the outlet conduit and the vertical service spillway riser pipe, (2) the repair of the reinforced concrete baffle blocks located at the outlet works discharge structure, and (3), modifying the trash rack located at the top of the service spillway riser pipe

Discussion:

This project seeks to maintain important existing infrastructure for municipal water supply in Archuleta County. With an existing Conditional Full Storage status issued by the SEO the proposed repairs are necessary to avoid looming mandatory storage restrictions. The project meets an important identified water supply need in the Southwest Basin.

Issues/Additional Needs:

No issues or additional needs remain.

Staff Recommendation:

Staff recommends approval of up to \$25,000 from the Southwest Basin Account to help complete the Pagosa Lakes Area Village Lake Dam Outlet Pipe Repair 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: 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.