

**Water Supply Reserve Account – Grant and Loan Program**  
**Water Activity Summary Sheet**  
**Agenda Item 32.g**

**Applicant:** Florida Mesa Canal Companies (Florida Canal, Florida Farmers Ditch, Florida Enlargement Ditch, and the Florida Co-operative Ditch Company)

**Water Activity Name:** Canal Seepage Reduction Program

**Water Activity Purpose:** Technical Assistance for Feasibility Studies; Study and Implementation Structural, Consumptive Water Project

**County:** La Plata County

**Drainage Basin:** Animas River

**Water Source:** Florida River

**Amount Requested:** \$775,000 (Statewide Account)

**Matching Funds:** Approximately \$200,000

<b>Staff Recommendation</b>
Staff recommends approval of up to \$775,000 from the Southwest Basin Account to partially fund the Canal Seepage Reduction Program for the Florida Mesa Canal Companies.

**Water Activity Summary:**

This application seeks the remainder of funds originally requested from the WSRA Statewide Account in September 2009 (\$1,000,000). Due to limited funds available at the time a reduced amount of \$225,000 was recommended by staff and approved by the board. In addition, staff recommended that the applicant reapply for additional funds when available. As part of the \$225,000 award, the CWCB board requested an analysis of potential impacts of ditch lining and associated seepage reduction on nearby domestic water wells. This well impact analysis concluded that given the location of the proposed ditch lining section no significant impacts to domestic water wells are anticipated. A copy of the Well Impact Study is included with the application materials.

A previous phase of the project has been ongoing after being awarded \$100,000 in March 2009 from the Southwest Basin Account. That phase included: a ditch loss study; the installation of gauging station telemetry, water measuring devices, and automated gates; and a hydropower feasibility study. The ditch loss study and equipment installation have been successfully completed as detailed in reports submitted to CWCB staff. The current application involves the design and installation of canal lining in strategic sections of the system identified by the recently completed ditch loss study.

The conveyance system of the Florida Mesa Canal Companies suffers from heavy seepage and administrative waste. A 1988 U.S. Bureau of Reclamation (USBR) Study calculated this waste to be 8,400 acre-feet per year. Florida Water Conservancy District (FWCD) water monitoring program records indicate that over the last seven years system losses have averaged 24 percent, or 11,600 AF per year. In 2006, the FWCD and the Florida Mesa Canal Companies undertook a Water Conservation and Management Plan. During the planning process, the increase in efficiency of the Canal Conveyance System was identified as a goal of both the FWCD and the Florida Canal Companies. For 2009, the Canal Companies have doubled their assessments in order to begin to improve the efficiency of the canal conveyance system.

If approved, these grant funds would help fund the engineering design, define project sections from the ditch loss study, provide for preliminary environmental permitting (wetlands delineations and archeological

surveys), preliminary engineering design, final engineering design, preparation of project plans and specifications, and services during bidding, construction of canal and ditch lining and the acquisition of water rights.

#### *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: By increasing the efficiency of the Florida Mesa system, supplemental releases from Lemon Reservoir will be reduced. This reduction in releases will increase water available for the agricultural users and for future beneficial uses in the basin including: augmentation, M&I, water for fish and wildlife habitat, recreation, wetlands, etc. Numerous entities are involved with this project as identified in the application. This project meets important needs identified by SWSI and the Southwest Basin Roundtable.

Tier 2: Facilitating Water Activity Implementation: Despite doubling their assessments the Florida Mesa Canal Companies do not have the resources to fund a project of this magnitude. The companies have successfully completed other projects and the initial tasks of the project. The companies are also leveraging State funds with other local and federal monies. An adequate match from various sources is provided as detailed in the application.

Tier 3: The Water Activity Addresses Issues of Statewide Value and Maximizes Benefits: This project helps sustain agriculture through the more efficient conveyance of irrigation water. The companies all have water rights with appropriation dates that predate the Colorado River Compact. In addition, return flows that accrue to the Animas and Florida River may not be utilized before entering New Mexico. Thus this activity promotes maximum utilization of state waters. Per final decree, water supplies from this project may be used for wetlands, wildlife, and augmentation, potentially making more water available for the two ISF reaches in the Florida River.

#### *Funding Overview*

Grant funding in the amount of \$775,000 is requested from the Statewide Account. The applicant is providing \$41,703 cash in matching funds plus \$9,000 in-kind matching funds for Phase 2 of the project. The FWCD has expended \$19,700 for the development of new water rights. In addition, \$100,000 from the Southwest Basins Roundtable and a \$30,000 water conservation field services program grant from the USBR is also included as matching fund. The applicant has been encouraged to reapply for a \$300,000 grant from the USBR during the current fiscal year. As this water activity progresses additional funding sources will be pursued.

#### **Discussion:**

As identified in the SWSI findings, agricultural water users often lack sufficient funding to adequately address infrastructure needs without financial aid. The applicant did a good job relating this project to the needs of the basin, most specifically findings from SWSI and in the Water Supply and Needs Report for the Dolores/San Juan/San Miguel Basin (June 2006). The SWSI findings for the Southwest Basin specifically recommend improved agricultural conservation (efficiency) including ditch lining programs to increase delivery to users and provide agricultural firming.

The proposed project effectively meets the objectives of HB 1177 and the consumptive needs of the Southwest Basin by rehabilitating existing infrastructure to achieve significant savings of agricultural water. As identified in the FWCD Water Conservation and Management Plan, the proposed project would increase conveyance efficiencies and firm up agricultural water deliveries through canal lining, conservation, and more efficient administration.

**Issues/Additional Needs:**

The application mentions benefits that may accrue to two in-stream flow water rights on reaches of the Florida River that are currently administered as non-critical. The Stream and Lake Protection Section of the CWCB encourages the applicant to provide additional detail on how water from the project could be made available to help these in-stream flows and pursue implementation as appropriate.

**Staff Recommendation:**

Staff recommends approval of up to \$775,000 from the Southwest Basin Account to partially fund the Canal Seepage Reduction Program for the Florida Mesa Canal Companies.

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.