

**Water Supply Reserve Fund
Water Activity Summary Sheet
Request for Change of Grantee
March 11-12, 2020
Agenda Item 23(y)**

Current Grantee: Colorado State University – Colorado Climate Center

Proposed Grantee: Colorado River Engineering (CRE)

Water Activity Name: Continuation of Lysimeters in North Park to Determine High Altitude Hay Meadow Crop Coefficients

Water Activity Purpose: Agricultural

County: Jackson

Drainage Basin: North Platte

Water Source: n/a

Amount Requested: \$44,000 North Platte Basin Account (A portion of remaining funds - \$50,468.51)

Matching Funds: See attached memo dated September 11-12, 2014

Staff Recommendation:

Staff recommends approval of change of grantee from Colorado State University to Colorado River Engineering.
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Water Activity Summary: In order for the North Platte Basin to better quantify consumptive use in the basin, this project aims continue lysimeter measurements in the high altitude, hay meadow environment of North Park. Although lysimeters have been historically run in the basin, the data have been deemed questionable due to site exposure, infrequent watering and what appears to be a leak in one of the compensating lysimeters. This project will utilize the three existing weather stations to calculate American Society of Civil Engineers reference evapotranspiration ET. Two lysimeters have been installed side by side at the Cowdrey site for redundancy in case of failure. The lysimeters being collocated with the COW01 weather station allows for actual consumptive use from the meadow to be directly compared to Reference ET estimates calculated from the weather variables. These two measurements are then used to calculate crop coefficients for hay meadow environment. The lysimeters have been installed in an undisturbed soil column adjacent to the station. The two lysimeters and the hay meadow are equipped with soil moisture sensors in order to keep conditions in the lysimeters as close to field conditions as possible. The lysimeter platform includes a bi-directional pump that can add or remove water from the system to keep it in the same conditions as the field. Once data is collected for several seasons, a final report will be drafted which summarizes the work and reports on findings.

Discussion: The original grant was approved by CWCB during their September 11-12, 2014 meeting and expired December 31, 2019. This approval granted WSRF Funds to CSU to install and operate the lysimeters, and operate the CoAgMet station in North Park, however due to personnel changes at CSU they no longer have the expertise to operate the existing lysimeters, however Colorado River Engineering, hence the request for a change of grantee. While CRE will (with CWCB approval) assume responsibility for lysimeters operation, Colorado State University has applied for new WSRF Grant via the North Platte Basin Roundtable (see Agenda Item 22(x)).

Issues/Additional Needs: None

CWCB Project Manager: Craig Godbout

Dear Craig,

The North Platte Basin Roundtable voted unanimously on January 21, 2020 to allow the fiscal agent change between, C.S.U. and Colorado River Engineering, for the North Park CoAgMet weather station WSRF Grant. This grant is in compliance with our BIP Goals to maintain and maximize the consumptive use of water permitted in the Equitable Apportionment Decree and the baseline depletion allowance of the Three State Agreement

Thank you,

Ty Wattenberg

RT Chair.

Memorandum

To: Craig Godbout
From: Wendy Ryan
Date: 2/14/2020
Subject: North Platte Lysimeter Change of Fiscal Agent
Job #: 1133

In order to continue the lysimeter project in the North Platte Basin, Colorado River Engineering (CRE) is willing to act as the fiscal agent. CRE works on a time and material basis and invoices are sent once per month.

If you need any additional information or have any questions, please do not hesitate to contact me at (970) 625-4933 ext. 116.