

**Water Supply Reserve Account – Grant and Loan Program**  
**Water Activity Summary Sheet**  
**July 15-16, 2015**  
**Agenda Item 18(e)**

**Applicant & Fiscal Agent:** Routt County Conservation District

**Water Activity Name:** Yampa White Green Phase II Agricultural Needs/Return Flow Study

**Water Activity Purpose:** Agricultural/Study

**County:** Rio Blanco, Moffat, Garfield and Routt

**Drainage Basin:** Gunnison

**Water Source:** n/a

**Amount Requested/  
Source of Funds:** \$13,250 Yampa/White/Green Account (total grant request)

**Matching Funds:** n/a  
(refer to *Funding Summary/Matching Funds* section)

<b>Staff Recommendation:</b>
------------------------------

Staff recommends approval of up to \$13,250 from the Yampa/White/Green Basin Account to fund the study titled: Yampa White Green Phase II Agricultural Needs/Return Flow Study.
---

**Water Activity Summary:** WSRA funds, if approved will be expended to conduct a reconnaissance level scoping effort to better understanding the current magnitude and patterns of return flows from irrigation to Colorado’s Yampa and White River Basins and in predicting changes in return flows that are likely to occur under altered irrigation practices. Such alterations might include:

- (1) Increased application efficiency on existing irrigated lands (through adoption of sprinklers or improved surface irrigation techniques),
- (2) Reduced canal seepage through sealing and/or lining,
- (3) Retirement of irrigated land,
- (4) Rotational fallowing of irrigated land, and
- (5) Expansion of irrigated land.

The associated characteristics and effects on groundwater levels and related conditions (e.g. alteration of hydraulic gradients affecting return flow rates, reduced non-beneficial consumptive use, decrease in soil salinization and waterlogging, reduced extent of wetland and riparian areas) under irrigated alluvial land are also of concern. The YWG BRT sees this as Phase II of the 2010 *Agricultural Water Needs Assessment* conducted by CDM Smith Engineering and Consulting. It was decided that a reconnaissance and scoping effort is needed to clarify the required extent and level of detail for a prospective project aimed at addressing the return flow and groundwater issues.

**Discussion:** This project aligns with 5 of the Goals and Measurable Outcomes (refer to Section 1: Basin Goals and Measurable Outcomes; Subsections 1.2.3, 1.2.4, 1.2.5, 1.2.7, and 1.2.10; pages 1-7 thru 1-13) identified in the Yampa/White/Green Implementation Plan. While this effort has not been identified as a Project and Method, or an IPP in the BIP, it was considered as one of the “*Next Steps*” to undertaken by the Roundtable.

The CWCB, in 2007 approved \$201,410 for Moffat County to conduct the *Agricultural Water Needs Assessment* that was completed in 2010.

**Issues/Additional Needs:** No issues or additional needs have been identified.

**Threshold and Evaluation Criteria:** The application meets all four Threshold Criteria

**Tier 1-3 Evaluation Criteria:** n/a

**Funding Summary/Matching Funds:** None provided

**CWCB Project Manager:** Craig Godbout

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.