

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)

Staff Recommendation:

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.

Yampa White Green Basin Roundtable
1475 Pine Grove Road, Suite 201a
Steamboat Springs, CO 80487

Chair: Jon Hill, Rio Blanco County Representative

June 25, 2015

Re: Yampa White Green BRT Agriculture Needs Study & Return Flow Preliminary Assessment

To Whom It May Concern:

On May 13, 2015, the Yampa White Green Basin Roundtable unanimously approved a preliminary assessment using \$13,250.00 of basin WSRA funds for a second phase of our Agricultural Needs Study (completed in 2005) focusing on the impacts to return flows when various efficiencies are put into practice. Using data and information from the Statewide Water Supply Initiative and other appropriate sources and in cooperation with the on-going Statewide Water Supply Initiative, Colorado State University will develop and propose a scope of work for a basin-wide assessment on agricultural return flow which will impact both consumptive and nonconsumptive water supply needs. The Basin Roundtable has actively sought, and will continue to seek throughout the proposed preliminary assessment, the input and advice of affected local governments, water providers, and other interested stakeholders and persons in establishing it's a full suite of data to inform the study. The recommended scope of work from this preliminary assessment shall be forwarded to the Interbasin Compact Committee and other basin roundtables for analysis and consideration after the General Assembly has approved the Interbasin Compact Charter.

Please do not hesitate to call me with any questions.

Sincerely,

Jon Hill



COLORADO WATER CONSERVATION BOARD



WATER SUPPLY RESERVE ACCOUNT APPLICATION FORM

Today's Date: June 25, 2015

Yampa White Green Basin Roundtable Phase II Agricultural Needs/ Return Flow
Preliminary Assessment

Name of Water Activity/Project

Routt County Conservation District

Name of Applicant

Yampa White Green BRT

Amount from Statewide Account: 0.00

Amount from Basin Account(s): 13250.00

Total WSRA Funds Requested: 13250.00

Approving Basin Roundtable(s)

(If multiple basins specify amounts in parentheses.)

FEIN 84-0658095

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Required Exhibits

- A. Statement of Work, Budget, and Schedule
- B. Project Map
- C. As Needed (i.e. letters of support, photos, maps, etc.)

Appendices – Reference Material

- 1. Program Information
- 2. Insurance Requirements
- 3. WSRA Standard Contract Information (Required for Projects Over \$100,000)
- 4. W-9 Form (Required for All Projects Prior to Contracting)

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Revised October 2013

Instructions

To receive funding from the Water Supply Reserve Account (WSRA), a proposed water activity must be approved by the local Basin Roundtable **AND** the Colorado Water Conservation Board (CWCB). The process for Basin Roundtable consideration and approval is outlined in materials in Appendix 1.

Once approved by the local Basin Roundtable, the applicant should submit this application **with a detailed statement of work including budget and schedule as Exhibit A** to CWCB staff by the application deadline.

WSRA applications are due with the roundtable letter of support 60 calendar days prior to the bi-monthly Board meeting at which it will be considered. Board meetings are held in January, March, May, July, September, and November. Meeting details, including scheduled dates, agendas, etc. are posted on the CWCB website at: <http://cwcb.state.co.us> Applications to the WSRA Basin Account are considered at every board meeting, while applications to the WSRA Statewide Account are only considered at the March and September board meetings.

When completing this application, the applicant should refer to the WSRA Criteria and Guidelines available at: <http://cwcb.state.co.us/LoansGrants/water-supply-reserve-account-grants/Documents/WSRACriteriaGuidelines.pdf>

The application, statement of work, budget, and schedule **must be submitted in electronic format** (Microsoft Word or text-enabled PDF are preferred) and can be emailed or mailed on a disk to:

Craig Godbout - WSRA Application
Colorado Water Conservation Board
1580 Logan Street, Suite 200
Denver, CO 80203
Craig.godbout@state.co.us

If you have questions or need additional assistance, please contact Craig Godbout at: 303-866-3441 x3210 or craig.godbout@state.co.us.

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Part I. - Description of the Applicant (Project Sponsor or Owner);

1. Applicant Name(s): Routt County Conservation District on behalf of the Yampa White Green Basin Round Table

Mailing address: 1475 Pine Grove Road Suite 201a, Steamboat Springs Colorado 80487

FEIN #: 84-0658095

Primary Contact:	Position/Title:		District Manager
Email:	thagenbuch@co.routt.co.us		
Phone Numbers:	Cell:	(970) 846-5607	Office: (970)879-0825
Alternate Contact:	Todd Hagenbuch		Position/Title: Routt Extension Agent
Email:	thagenbuch@co.routt.co.us		
Phone Numbers:	Cell:	(970) 846-5607	Office: (970)879-0825

2. Eligible entities for WSRA funds include the following. What type of entity is the Applicant?

☐

Public (Government) – municipalities, enterprises, counties, and State of Colorado agencies. Federal agencies are encouraged to work with local entities and the local entity should be the grant recipient. Federal agencies are eligible, but only if they can make a compelling case for why a local partner cannot be the grant recipient.

☒

Public (Districts) – authorities, Title 32/special districts, (conservancy, conservation, and irrigation districts), and water activity enterprises.

☐

Private Incorporated – mutual ditch companies, homeowners associations, corporations.

☐

Private individuals, partnerships, and sole proprietors are eligible for funding from the Basin Accounts but not for funding from the Statewide Account.

☐

Non-governmental organizations – broadly defined as any organization that is not part of the government.

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3. Provide a brief description of your organization

The Routt County Conservation District (RCCD) has over a 50 year history of working with local land-owners, ranchers, and community groups, as well as local, State, and Federal agencies. RCCD also operates the Upper Yampa Watershed coordinating group. The Watershed Group has recently completed a 2014 State of the Watershed Report and is currently working on the 2015 Watershed Plan.

Other major RCCD accomplishments include implementation of erosion control best management practices (BMPs) and water quality control projects, as well as public education. RCCD holds workshops and meetings, and conducts individual consultation to work with, and educate, the public on the protection of watershed resources. RCCD has a demonstration “River Trailer”, which it uses to educate Routt County students, conservation groups, and interested parties on the importance of natural resource conservation and water quality preservation. RCCD partners with NRCS on numerous natural resource, stream channel restoration, wetland protection, and watershed conservation programs.

The Routt County Conservation is currently utilizing WRSA funds for the Armstrong Creek Restoration Project, which is currently ongoing, with a scheduled completion date of November 2015.

4. If the Contracting Entity is different then the Applicant (Project Sponsor or Owner) please describe the Contracting Entity here.

5. Successful applicants will have to execute a contract with the CWCB prior to beginning work on the portion of the project funded by the WSRG grant. In order to expedite the contracting process the CWCB has established a standard contract with provisions the applicant must adhere to. A link to this standard contract is included in Appendix 3. Please review this contract and check the appropriate box.



The Applicant will be able to contract with the CWCB using the Standard Contract



The Applicant has reviewed the standard contract and has some questions/issues/concerns. Please be aware that any deviation from the standard contract could result in a significant delay between grant approval and the funds being available.

6. The Tax Payer Bill of Rights (TABOR) may limit the amount of grant money an entity can receive. Please describe any relevant TABOR issues that may affect the applicant.

N/A

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Part II. - Description of the Water Activity/Project

1. What is the primary purpose of this grant application? (Please check only one)

☐

Nonconsumptive (Environmental or Recreational)

☒

Agricultural

☐

Municipal/Industrial

☐

Needs Assessment

☐

Education

☐

Other

Explain:

2. If you feel this project addresses multiple purposes please explain.

This study will assess return flows which will have a nexus with future non-consumptive and consumptive needs.

3. Is this project primarily a study or implementation of a water activity/project? (Please check only one)

☒

Study

☐

Implementation

4. To catalog measurable results achieved with WSRA funds can you provide any of the following numbers?

New Storage Created (acre-feet)

New Annual Water Supplies Developed, Consumptive or Nonconsumptive (acre-feet)

Existing Storage Preserved or Enhanced (acre-feet)

Length of Stream Restored or Protected (linear feet)

Length of Pipe/Canal Built or Improved (linear feet)

Efficiency Savings (acre-feet/year OR dollars/year – **circle one**)

Area of Restored or Preserved Habitat (acres)

Other -- Explain:

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4. To help us map WSRA projects please include a map (Exhibit B) and provide the general coordinates below:

This project encompasses the entire Yampa, White and Green River Basin for the preliminary assessment.

Latitude:

Longitude:

5. Please provide an overview/summary of the proposed water activity (no more than one page). Include a description of the overall water activity and specifically what the WSRA funding will be used for. A full **Statement of Work** with a detailed budget and schedule is required as **Exhibit A** of this application.

The Yampa/White/Green Basin Roundtable (YWGBRT) has expressed interest in 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.

In March 2015, YWB Roundtable members contacted Colorado State University to discuss these matters. The YWG BRT sees this as a phase II of the 2005 Agricultural Need Study done with CDM Smith Engineering and Consulting. Conversations between CSU Professors Timothy Gates and Ryan Bailey and YWGBRT members occurred on 27 March, 6 April, and 9 April 2015. 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. Professor Gates was requested to submit this preliminary proposal for such a reconnaissance and scoping effort.

Part III. – Threshold and Evaluation Criteria

1. Describe how the water activity meets these **Threshold Criteria**. (Detailed in Part 3 of the Water Supply Reserve Account Criteria and Guidelines.)

- a) The water activity is consistent with Section 37-75-102 Colorado Revised Statutes.¹

Yes.

- b) The water activity underwent an evaluation and approval process and was approved by the Basin Roundtable (BRT) and the application includes a description of the results of the BRT's evaluation and approval of the activity. At a minimum, the description must include the level of agreement reached by

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the roundtable, including any minority opinion(s) if there was not general agreement for the activity. The description must also include reasons why general agreement was not reached (if it was not), including who opposed the activity and why they opposed it. Note- If this information is included in the letter from the roundtable chair simply reference that letter.

The YWG BRT unanimously approved the expenditure of WSRA funds on May 13, 2015.

¹ 37-75-102. Water rights - protections. (1) It is the policy of the General Assembly that the current system of allocating water within Colorado shall not be superseded, abrogated, or otherwise impaired by this article. Nothing in this article shall be interpreted to repeal or in any manner amend the existing water rights adjudication system. The General Assembly affirms the state constitution's recognition of water rights as a private usufructuary property right, and this article is not intended to restrict the ability of the holder of a water right to use or to dispose of that water right in any manner permitted under Colorado law. (2) The General Assembly affirms the protections for contractual and property rights recognized by the contract and takings protections under the state constitution and related statutes. This article shall not be implemented in any way that would diminish, impair, or cause injury to any property or contractual right created by intergovernmental agreements, contracts, stipulations among parties to water cases, terms and conditions in water decrees, or any other similar document related to the allocation or use of water. This article shall not be construed to supersede, abrogate, or cause injury to vested water rights or decreed conditional water rights. The General Assembly affirms that this article does not impair, limit, or otherwise affect the rights of persons or entities to enter into agreements, contracts, or memoranda of understanding with other persons or entities relating to the appropriation, movement, or use of water under other provisions of law.

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- c) The water activity meets the provisions of Section 37-75-104(2), Colorado Revised Statutes.² The Basin Roundtable Chairs shall include in their approval letters for particular WSRA grant applications a description of how the water activity will assist in meeting the water supply needs identified in the basin roundtable's consumptive and/or non-consumptive needs assessments.

Yes. See attached letter.

- d) Matching Requirement: For requests from the **Statewide Fund**, the applicants will be required to demonstrate a 25 percent (or greater) match of the total grant request from the other sources, including but not limited to Basin Funds. A minimum match of 5% of the total grant amount shall be from Basin funds. A minimum match of 5% of the total grant amount must come from the applicant or 3rd party sources. Sources of matching funds include but are not limited to Basin Funds, in-kind services, funding from other sources, and/or direct cash match. Past expenditures directly related to the project may be considered as matching funds if the expenditures occurred within 9 months of the date the application was submitted to the CWCB. Please describe the source(s) of matching funds. (NOTE: These matching funds should also be reflected in your Detailed Budget in **Exhibit A** of this application)

The request is for Basin funds, and does not have match.

² 37-75-104 (2)(c). Using data and information from the Statewide Water Supply Initiative and other appropriate sources and in cooperation with the on-going Statewide Water Supply Initiative, develop a basin-wide consumptive and nonconsumptive water supply needs assessment, conduct an analysis of available unappropriated waters within the basin, and propose projects or methods, both structural and nonstructural, for meeting those needs and utilizing those unappropriated waters where appropriate. Basin Roundtables shall actively seek the input and advice of affected local governments, water providers, and other interested stakeholders and persons in establishing its needs assessment, and shall propose projects or methods for meeting those needs. Recommendations from this assessment shall be forwarded to the Interbasin Compact Committee and other basin roundtables for analysis and consideration after the General Assembly has approved the Interbasin Compact Charter.

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2. For Applications that include a request for funds from the **Statewide Account**, describe how the water activity/project meets all applicable **Evaluation Criteria**. (Detailed in Part 3 of the Water Supply Reserve Account Criteria and Guidelines and repeated below.) Projects will be assessed on how well they meet the Evaluation Criteria. **Please attach additional pages as necessary.**

Evaluation Criteria – the following criteria will be utilized to further evaluate the merits of the water activity proposed for funding from the Statewide Account. In evaluation of proposed water activities, preference will be given to projects that meet one or more criteria from each of the three “tiers” or categories. Each “tier” is grouped in level of importance. For instance, projects that meet Tier 1 criteria will outweigh projects that only meet Tier 3 criteria. WSRA grant requests for projects that may qualify for loans through the CWCB loan program will receive preference in the Statewide Evaluation Criteria if the grant request is part of a CWCB loan/WSRA grant package. For these CWCB loan/WSRA grant packages, the applicant must have a CWCB loan/WSRA grant ratio of 1:1 or higher. Preference will be given to those with a higher loan/grant ratio.

Tier 1: Promoting Collaboration/Cooperation and Meeting Water Management Goals and Identified Water Needs

- a. The water activity addresses multiple needs or issues, including consumptive and/or non-consumptive needs, or the needs and issues of multiple interests or multiple basins. This can be demonstrated by obtaining letters of support from other basin roundtables (in addition to an approval letter from the sponsoring basin).
- b. The number and types of entities represented in the application and the degree to which the activity will promote cooperation and collaboration among traditional consumptive water interests and/or non-consumptive interests, and if applicable, the degree to which the water activity is effective in addressing intrabasin or interbasin needs or issues.
- c. The water activity helps implement projects and processes identified as helping meet Colorado’s future water needs, and/or addresses the gap areas between available water supply and future need as identified in SWSI or a roundtable’s basin-wide water needs assessment.

Tier 2: Facilitating Water Activity Implementation

- d. Funding from this Account will reduce the uncertainty that the water activity will be implemented. For this criterion the applicant should discuss how receiving funding from the Account will make a significant difference in the implementation of the water activity (i.e., how will receiving funding enable the water activity to move forward or the inability obtaining funding elsewhere).
- e. The amount of matching funds provided by the applicant via direct contributions, demonstrable in-kind contributions, and/or other sources demonstrates a significant & appropriate commitment to the project.

Tier 3: The Water Activity Addresses Other Issues of Statewide Value and Maximizes Benefits

- f. The water activity helps sustain agriculture & open space, or meets environmental or recreational needs.
- g. The water activity assists in the administration of compact-entitled waters or addresses problems related to compact entitled waters and compact compliance and the degree to which the activity promotes maximum utilization of state waters.
- h. The water activity assists in the recovery of threatened and endangered wildlife species or Colorado State species of concern.
- i. The water activity provides a high level of benefit to Colorado in relationship to the amount of funds requested.
- j. The water activity is complimentary to or assists in the implementation of other CWCB programs.

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Continued: Explanation of how the water activity/project meets all applicable **Evaluation Criteria**.

Please attach additional pages as necessary.

N/A

Part IV. – Required Supporting Material

1. **Water Rights, Availability, and Sustainability** – This information is needed to assess the viability of the water project or activity. Please provide a description of the water supply source to be utilized, or the water body to be affected by, the water activity. This should include a description of applicable water rights, and water rights issues, and the name/location of water bodies affected by the water activity.

The area of study for the preliminary assessment is the entire Yampa White Green Basin rivers and tributaries. In the preliminary assessment, the contractor will recommend which locations we should study further if we are to approve and fund the scope of work for the phase II Agricultural Needs Study.

2. Please provide a brief narrative of any related studies or permitting issues.

The 2005 Yampa White Green Basin Roundtable Agricultural Needs Study will be utilized extensively and possibly updated if the scope of work for phase II Agricultural Needs Study is approved after the completion of the preliminary assessment.

3. Statement of Work, Detailed Budget, and Project Schedule

The statement of work will form the basis for the contract between the Applicant and the State of Colorado. In short, the Applicant is agreeing to undertake the work for the compensation outlined in the statement of work and budget, and in return, the State of Colorado is receiving the deliverables/products specified. **Please note that costs incurred prior to execution of a contract or purchase order are not subject to reimbursement.** All WSRA funds are disbursed on a reimbursement basis after review invoices and appropriate backup material.

Please provide a detailed statement of work using the template in Exhibit A. Additional sections or modifications may be included as necessary. Please define all acronyms and include page numbers.

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REPORTING AND FINAL DELIVERABLE

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 statement 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.

PAYMENT

Payment will be made based on actual expenditures and invoicing by the applicant. Invoices from any other entity (i.e. subcontractors) cannot be processed by the State. The request for payment must include a description of the work accomplished by major task, and estimate of the percent completion for individual tasks and the entire water activity in relation to the percentage of budget spent, identification of any major issues and proposed or implemented corrective actions. The last 5 percent of the entire water activity budget will be withheld until final project/water activity documentation is completed. 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 help promote the development of a common technical platform.

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The above statements are true to the best of my knowledge:

Signature of Applicant: JACLYN BROWN (Affiliate)

Digitally signed by JACLYN BROWN (Affiliate)
DN: c=US, o=U.S. Government, ou=Department of Agriculture,
0.9.2342.19200300.100.1.1=12001002232190, cn=JACLYN BROWN (Affiliate)
Date: 2015.06.25 10:16:55 -06'00'

Print Applicant's Name: District Manager

Project Title: Yampa White Green Basin Roundtable Phase II Agricultural Needs/ Return Flow Study

Return an electronic version (hardcopy may also be submitted) of this application to:

Craig Godbout – WSRA Application
Colorado Water Conservation Board
1580 Logan Street, Suite 200
Denver, CO 80203
craig.godbout@state.co.us

Exhibit A
Statement of Work
Date: June 25, 2015

WATER ACTIVITY NAME –Yampa White Green Phase II Agricultural Needs/ Return Flow Preliminary Assessment

GRANT RECIPIENT –Routt County Conservation District

FUNDING SOURCE – Yampa White Green Basin Roundtable

INTRODUCTION AND BACKGROUND

The Yampa/White/ Green Basin Roundtable has expressed interest in 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),
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- (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.

In March 2015, YWG Basin Roundtable members contacted Colorado State University to discuss these matters. Conversations between CSU Professors Timothy Gates and Ryan Bailey and Roundtable members occurred on 27 March, 6 April, and 9 April 2015. 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. Professor Gates was requested to submit this preliminary proposal for such a reconnaissance and scoping effort.

OBJECTIVES

The objectives of the reconnaissance and scoping effort are (1) to evaluate the need for and (2) to define the nature of a project aimed at assessing the impact of current and altered irrigation practices on groundwater conditions and return flows in Colorado's Yampa and White River Basins. The effort, to be conducted by CSU personnel in interaction with YWB Roundtable members and other stakeholders, will include the following tasks:

TASKS

Provide a detailed description of each task using the following format

TASK 1 – Assessment

Description of Task

Complete all phases of the assessment process inclusive of research, meetings, communication, and data review.

Method/Procedure

Review pertinent reports, maps, databases, and modeling efforts that have addressed irrigation practices, groundwater conditions, return flows, and related properties in the Yampa and White Rivers and major tributaries;
Visit and inspect representative irrigated regions within the Yampa and White River valleys (one or two trips by Professor Gates and a graduate assistant);
Discuss (by telephone and/or in person) irrigation-related groundwater and return flow concerns with selected YWB Roundtable members and other key stakeholders; and

Deliverable

A brief written assessment of the need for and general nature of a project to describe and predict groundwater conditions and return flows under current and altered irrigation practices. The potential need to appraise changes in in-stream flows and impacts on water diversions will be addressed. Consideration will be given to a project encompassing the compilation and organization of existing data, field data collection, and development of computational models. The report would address issues that the YWB Roundtable would need to consider in defining and funding such a project. These issues would be associated with desired outcomes, geographic extent, basic methodology, level of detail, and duration.

TASK 2 – Administration

Description of Task

Administration of grant.

Method/Procedure

Provide point of contact for contractor. Prepare reimbursements and reporting.

Deliverable

Successfully administer the project.

REPORTING AND FINAL DELIVERABLE

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 statement 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.

BUDGET

Provide a detailed budget by task including number of hours and rates for labor and unit costs for other direct costs (i.e. mileage, \$/unit of material for construction, etc.). A detailed and perfectly balanced budget that shows all costs is required for the State's contracting and purchase order processes. Sample budget tables are provided below. Please note that these budget tables are examples and will need to be adapted to fit each individual application. Tasks should correspond to the tasks described above.

Total Costs				
	Labor	Other Direct Costs	Matching Funds (If Applicable)	Total Project Costs
Task 1 - Assessment	11100.00	1300.00	0.00	12300.00
Task 2 -Administration		950.00		950.00
In-Kind Contributions				
Total Costs:				13250.00

Example Titles

Example Project Personnel: Hourly Rate:	Dr. Gates	Dr. Bailey	Grad. Assistant	Undergrad. Assistant				Total Costs
Task 1 -	6670.00	1460.00	2220.00	650.00				11050.00
Task 2 -								
Total Hours:								
Cost:	6670.00	1460.00	2220.00	650.00				

Other Direct Costs						
Item:	Copies	Materials	Fee to admin contract 8%	Travel		Total
Units: Unit Cost:	No.			Miles		
Task 1 - Assess				1300.00		1300.00
Task 2 -Admin			950.00			950.00
Total Units:						
Total Cost:			950.00	1300.00		2250.00

In-Kind Contributions (If Applicable) N/a

SCHEDULE

Provide a project schedule including key milestones for each task and the completion dates or time period from the Notice to Proceed (NTP). This dating method allows flexibility in the event of potential delays from the procurement process. Sample schedules are provided below. Please note that these schedules are examples and will need to be adapted to fit each individual application.

Example 1

Task	Start Date	Finish Date
1	Upon NTP	NTP + 120 days
2	Upon NTP	NTP + 120 days

NTP = Notice to Proceed

PAYMENT

Payment will be made based on actual expenditures and invoicing by the applicant. Invoices from any other entity (i.e. subcontractors) cannot be processed by the State. The request for payment must include a description of the work accomplished by major task, and estimate of the percent completion for individual tasks and the entire water activity in relation to the percentage of budget spent, identification of any major issues and proposed or implemented corrective actions. The last 5 percent of the entire water activity budget will be withheld until final project/water activity documentation is completed. 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 help promote the development of a common technical platform.

Appendix 1

Reference Information

The following information is available via the internet. The reference information provides additional detail and background information.

- Water Supply Reserve Account main webpage:
 - <http://cwcb.state.co.us/LoansGrants/water-supply-reserve-account-grants/Pages/main.aspx>
- Water Supply Reserve Account – Basin Fund Application Details:
 - <http://cwcb.state.co.us/LoansGrants/water-supply-reserve-account-grants/Pages/BasinWaterSupplyReserveAccountGrants.aspx>
- Water Supply Reserve Account – Statewide Fund Application Details:
 - <http://cwcb.state.co.us/LoansGrants/water-supply-reserve-account-grants/Pages/StatewideWaterSupplyReserveAccountGrants.aspx>
- Colorado Water Conservation Board main website:
 - <http://cwcb.state.co.us/>
- Interbasin Compact Committee and Basin Roundtables:
 - <http://cwcb.state.co.us/about-us/about-the-ibcc-brts/Pages/main.aspx/Templates/BasinHome.aspx>
- House Bill 05-1177 – (Also known as the Water for the 21st Century Act):
 - <http://cwcbweblink.state.co.us/DocView.aspx?id=105662&searchhandle=28318>
- House Bill 06-1400 – (Adopted the Interbasin Compact Committee Charter):
 - <http://cwcbweblink.state.co.us/DocView.aspx?id=21291&searchhandle=12911>
- Senate Bill 06-179 – (Created the Water Supply Reserve Account):
 - <http://cwcbweblink.state.co.us/DocView.aspx?id=21379&searchhandle=12911>
- Statewide Water Supply Initiative 2010:
 - <http://cwcb.state.co.us/water-management/water-supply-planning/Pages/SWSI2010.aspx>

Appendix 2

Insurance Requirements

NOTE: The following insurance requirements taken from the standard contract apply to WSRA projects that exceed \$25,000 in accordance with the policies of the State Controller's Office. Proof of insurance as stated below is necessary prior to the execution of a contract.

13. INSURANCE

Grantee and its Sub-grantees shall obtain and maintain insurance as specified in this section at all times during the term of this Grant: All policies evidencing the insurance coverage required hereunder shall be issued by insurance companies satisfactory to Grantee and the State.

A. Grantee

i. Public Entities

If Grantee is a "public entity" within the meaning of the Colorado Governmental Immunity Act, CRS §24-10-101, et seq., as amended (the "GIA"), then Grantee shall maintain at all times during the term of this Grant such liability insurance, by commercial policy or self-insurance, as is necessary to meet its liabilities under the GIA. Grantee shall show proof of such insurance satisfactory to the State, if requested by the State. Grantee shall require each Grant with Sub-grantees that are public entities, providing Goods or Services hereunder, to include the insurance requirements necessary to meet Sub-grantee's liabilities under the GIA.

ii. Non-Public Entities

If Grantee is not a "public entity" within the meaning of the GIA, Grantee shall obtain and maintain during the term of this Grant insurance coverage and policies meeting the same requirements set forth in §13(B) with respect to sub-Grantees that are not "public entities".

B. Sub-Grantees

Grantee shall require each Grant with Sub-grantees, other than those that are public entities, providing Goods or Services in connection with this Grant, to include insurance requirements substantially similar to the following:

i. Worker's Compensation

Worker's Compensation Insurance as required by State statute, and Employer's Liability Insurance covering all of Grantee and Sub-grantee employees acting within the course and scope of their employment.

ii. General Liability

Commercial General Liability Insurance written on ISO occurrence form CG 00 01 10/93 or equivalent, covering premises operations, fire damage, independent Grantees, products and completed operations, blanket Grantual liability, personal injury, and advertising liability with minimum limits as follows: (a) \$1,000,000 each occurrence; (b) \$1,000,000 general aggregate; (c) \$1,000,000 products and completed operations aggregate; and (d) \$50,000 any one fire. If any aggregate limit is reduced below \$1,000,000 because of claims made or paid, Sub-grantee shall immediately obtain additional insurance to restore the full aggregate limit and furnish to Grantee a certificate or other document satisfactory to Grantee showing compliance with this provision.

iii. Automobile Liability

Automobile Liability Insurance covering any auto (including owned, hired and non-owned autos) with a minimum limit of \$1,000,000 each accident combined single limit.

iv. Additional Insured

Grantee and the State shall be named as additional insured on the Commercial General Liability and Automobile Liability Insurance policies (leases and construction Grants require additional insured coverage for completed operations on endorsements CG 2010 11/85, CG 2037, or equivalent).

v. Primacy of Coverage

Coverage required of Grantee and Sub-grantees shall be primary over any insurance or self-insurance program carried by Grantee or the State.

vi. Cancellation

The above insurance policies shall include provisions preventing cancellation or non-renewal without at least 45 days prior notice to the Grantee and the State by certified mail.

vii. Subrogation Waiver

All insurance policies in any way related to this Grant and secured and maintained by Grantee or its Sub-grantees as required herein shall include clauses stating that each carrier shall waive all rights of recovery, under subrogation or otherwise, against Grantee or the State, its agencies, institutions, organizations, officers, agents, employees, and volunteers.

C. Certificates

Grantee and all Sub-grantees shall provide certificates showing insurance coverage required hereunder to the State within seven business days of the Effective Date of this Grant. No later than 15 days prior to the expiration date of any such coverage, Grantee and each Sub-grantee shall deliver to the State or Grantee certificates of insurance evidencing renewals thereof. In addition, upon request by the State at any other time during the term of this Grant or any sub-grant, Grantee and each Sub-grantee shall, within 10 days of such request, supply to the State evidence satisfactory to the State of compliance with the provisions of this §13.

Appendix 3

Water Supply Reserve Account Standard Contract Information

NOTE: The standard contract is required for WSRA projects that exceed \$100,000. (Projects under this amount will normally be funded through a purchase order process.) Applicants are encouraged to review the standard contract to understand the terms and conditions required by the State in the event a WSRA grant is awarded. Significant changes to the standard contract require approval of the State Controller's Office and often prolong the contracting process.

It should also be noted that grant funds to be used for the purchase of real property (e.g. water rights, land, conservation easements, etc.) will require additional review and approval. In such cases applicants should expect the grant contracting process to take approximately 3 to 6 months from the date of CWCB approval.

The standard contract is available here under the header "Additional Resources" on the right side:

<http://cwcb.state.co.us/LoansGrants/water-supply-reserve-account-grants/Pages/BasinWaterSupplyReserveAccountGrants.aspx>

Appendix 4

W-9 Form

NOTE: A completed W-9 form is required for all WSRA projects prior execution of a contract or purchase order. Please submit this form with the completed application.