

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
November 19-20, 2014
Agenda Item 11(e)

Applicant & Program Sponsor: Colorado River Water Conservation District

Water Activity Name: Yampa/White/Green Basin Implementation Plan – Phase 2

Water Activity Purpose: All inclusive

County: n/a

Drainage Basin: Yampa/White/Green

Water Source: Yampa/White/Green Rivers & tributaries

Total Amount Requested: \$80,000

Source of Funds: \$80,000 Yampa/White/Green Basin Account

Matching Funds: n/a

Staff Recommendation:
Staff recommends approval of up to \$80,000 from the Yampa/White/Green Basin Account to help fund the study titled: Yampa/White/Green Basin Implementation Plan – Phase 2.

Water Activity Summary: WSRA funds will be expended to complete the Yampa/White/Green Basin Implementation Plan – Phase 2 that conforms to the Basin Implementation Plan Guidance Document, with the Colorado River Water Conservation District acting as the applicant and program sponsor. The Draft Yampa/White/Green Basin Roundtable Basin Implementation Plan was delivered to the Colorado Water Conservation Board on the July 31, 2014 deadline. At the time of delivery, the Plan acknowledged that it was a draft only. Additional time and resources are required to provide a completed Basin Implementation Plan. Proposed Phase 2 tasks include: Refining the projects and methods study model and reevaluating scenarios to be addressed with future modeling; Adding new identified projects and processes to the model and re-assessing the results; Looking for opportunities for multi-purpose projects and operations of projects with willing proponents; and Facilitating public engagement and education to help build consensus on the identified projects and processes.

Discussion:

No additional discussion is needed.

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:

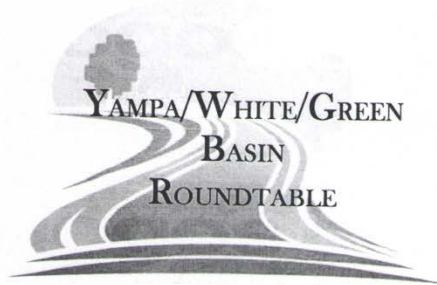
n/a

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.



July 8, 2013

Colorado Water Conservancy Board
Attn: Craig Godbout
1580 Logan Street, Suite 200
Denver, CO 80203

Re: \$80,000 for Basin Implementation Plan

Dear Craig:

The Yampa/White/Green Basin Roundtable held a meeting on October 8th, 2014 wherein the Board unanimously voted to give the aforementioned Program the sum of \$80,000 for continuing work on the Basin Implementation Plan. The funds are to be given from the Yampa/White/Green Basin account.

Please consider this letter as your notice of the granting of funds.

Sincerely,

Jon D. Hill
YWG Basin Chairman

Cc: Dan Birch

October 7, 2014

Tasks, Budget and Schedule

This scope of work is for Phase II of the Yampa/White/Green Basin Implementation Plan (BIP). Phase II is expected to start as soon as the contract for this work has been executed and to continue through April 2015. The following tasks for this phase were identified in the July 31, 2014 draft of the BIP.

- Refine the Projects and Methods Study Model and reevaluate scenarios to be addressed with future modeling.
- Add new Identified Projects and Processes to the model and re-assess the results.
- Look for opportunities for multi-purpose projects and operations of projects with willing proponents.
- Facilitate public engagement and education to help build consensus on the Identified Projects and Processes.

AMEC staff participated in two phone calls to identify the tasks that will be conducted in Phase II. The first phone call was with the BIP subcommittee and was held on August 12, 2014. The second phone call was with Rio Blanco Water Conservancy District's representatives and engineers and was held on September 2, 2014. AMEC met with the BIP committee at Carpenter Ranch on October 6th and discussed the draft scope of work that was submitted on September 18, 2014. Based upon the feedback received so far, the following tasks have been identified. Each bullet below includes a brief description of work, budget and proposed deadline.

1. Provide a detailed review and critique of the Project and Methods (P&M) model. This review will focus on the basic structure of the model to ensure that the model functions correctly. In conjunction with this review, AMEC will investigate why some of the IPPs have increased the modeled shortage. This review will not include a detailed review of modeled water rights' information and operations for all nodes in the Yampa and White models. Based on the feedback received from the BIP committee on October 6, 2014 AMEC will also conduct a work session with the BIP committee to discuss the operations and assumptions used in P&M models for the IPPs identified in the BIP. AMEC will prepare a memorandum to describe its findings. This memo will be provided to the BIP subcommittee and will then be updated once to address edits by the BIP committee. (budget=\$29,562, due within 3 months of contract execution).
2. AMEC will modify IPPs in the P&M models as described below (\$20,829).
 - a. AMEC will investigate the impact of changes in the Yampa consumptive use IPPs described below on a selected set of nonconsumptive use nodes that were modeled in the Yampa P&M model. At this point the nonconsumptive use nodes that will be investigated have not been identified yet. Thus, **the required budget for this task has not been finalized.** (due 3 months after the contract has been executed).
 - b. AMEC will modify water rights, assumptions and operations of Milk Creek Reservoir as provided by Tri-State Generation & Transmission Association (Tri-State) and agricultural users (due within 4 months of contract execution).
 - c. AMEC will implement the changes to Morrison Creek project, Stagecoach Reservoir and Yamcolo Reservoir as provided by Upper Yampa Water Conservancy District (UYWCD). It is assumed for this scope of work that the UYWCD will provide the final information for these reservoirs above in the same format required by StateMod (operating rules, baseflows, water rights, etc, (due within 4 months of contract execution).
 - d. AMEC will simulate the two operational scenarios of Wolf Creek Reservoir as described in the White River Storage Feasibility study report dated April 2014, prepared by W.W. Wheeler, (due within 4 months of contract execution).



October 7, 2014

- e. AMEC will review the hydro power rights for Taylor Draw reservoir in the P&M model, and if needed will modify those rights and their operations so that they are accurately represented in the P&M model, (due within 4 months of contract execution).
3. AMEC will modify the baseline scenario, the dry future scenario and the dry future IPP scenario to incorporate the changes described above. (budget=\$8,544, due within 5 months of contract execution).
4. Concerns were raised during the May 29, 2014 meeting that was held in Steamboat Springs regarding averaging modeled water supply, demand and shortage over the entire 56-year simulation period (and presenting these results in the BIP). Specifically some members of the subcommittee suggested that the average of a shorter and representative dry period be presented in the BIP instead. AMEC staff will analyze this scenario, discuss with the Subcommittee and update the BIP accordingly, (budget=\$6,272, due 5 months after the contract has been executed)
5. It has been assumed for this scope of work that that AMEC will use the same exact scenarios there were presented in the July 31, 2014 draft, namely, the baseline, the dry future and the dry future IPP scenarios. The dry future IPP scenario will have all IPPs operating at the same time.
6. AMEC will modify the BIP report to include the above changes, (budget=\$17,432, due 6 months after the contract has been executed).
7. In addition to the work session described above under Task 1, AMEC will participate in up to ten meetings (by phone) with the BIP committee (up to 1.5 hours each), and three face to face meetings in the Yampa River Basin. (budget=\$18,801, by end of project)
8. The details for the public education and outreach task have not been finalized yet. Therefore, for now it has been assumed that \$6,000 will be required for this task, (budget=\$6,000, by end of project)
9. This scope of work includes the following project management activities necessary to administer the project(budget=\$13,792, by end of project):
 - A maximum of eight progress reports and eight project invoices.
 - Project management and administration until end of April 2015.
 - Internal Meetings to discuss work progress.
 - Project invoicing and administration

Total amount for tasks described above = \$121,232. The remaining budget under the CRWAS contract that can be used for this work = \$32,000. The remaining budget under the BIP contract = \$26,000. Contingency=\$17,000.
Additional budget needed = \$121,232-\$32,000-\$26,000+\$16,768 (contingency) = \$80,000.

Consultant Team Roles

Our consulting team will remain the same. The roles of the primary team members for this phase are described below.

- AMEC – As the project leader, AMEC will take the lead on coordinating efforts with the Consultant Team and will be the primary contact with the BIP representatives. AMEC will provide the technical and modeling support and will be responsible for finalizing the BIP report.
- Community Agriculture Alliance – Provides the local presence necessary to achieve a successful BIP that is representative of the local basin. Community Agriculture Alliance will take the lead on facilitating the BRT/stakeholder meetings in addition to assisting the BRT in the public outreach process.
- Canyon Water Resources, LLC - Provides knowledge of the White River Basin including water rights administration, consumptive and non consumptive needs, and knowledge of energy needs in the basin.

