

**Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet**

Applicant: City of Steamboat Springs and Routt County

Water Activity Name: Common Data Repository and Water Resource Assessment for the Upper Yampa River Basin

Water Activity Purpose: Nonstructural Activity

County: Routt

Drainage Basin: Yampa

Water Source: Upper Yampa River Basin

Amount Requested: \$106,600

Source of Funds: Basin Account

Matching Funds: Yes, 50% will be provided by the applicants

Water Activity Summary:

The activity is the consolidation of the existing water quality data in the upper Yampa River Basin from the headwaters of the Yampa and Elk Rivers to a point below the confluence with Elkhead Creek in a web accessible format. An evaluation of that data into a published report on Basin water quality will follow. With that information a plan for additional data needs and public outreach will be completed. This activity is proposed to answer questions related to impacts from population growth, various development activities and natural sources of water constituents on the quality of water in the upper Yampa Basin. These questions have come from various governmental and citizen groups including the Steamboat Springs City Council, City Water Commission, County Commissioners and the County's Livability group, among others. The participants expect to receive a tool to help evaluate the existing water quality in the basin, identify areas and constituents of concern and to assess the need for additional data.

The need comes from the lack of a comprehensive report to answer questions regarding the management of water resources from a quality perspective. Recognizing that water quantity needs are tied to growth and that growth and development issues are tied to water quality the need exists for this comprehensive assessment.

The water quality in the upper Yampa Basin is generally recognized as superior in quality; however, the "208 report" published in 2002 and monitoring by the State Department of health identified several areas as needing more information and was placed on the monitoring and evaluation (M&E) list. In low water years the Division of Wildlife has been forced to put restrictions on the River through the City of Steamboat Springs due to temperature and subsequent dissolved oxygen problems. This has led to other closures of recreational uses of the river. This proposal would begin to pull together needed data for these and other water quality concerns.

Discussion:

The applicants did a good job providing a sound basis and need for the study. Currently, existing water quality data pertaining to the Upper Yampa basin is held by separate public entities, private

companies and others. The existing data is likely to be tailored to a specific entity's needs and is generally narrowly focused. Collecting this fragmented water quality data from the many disparate entities and compiling it into a web accessible database could provide benefits to decision makers, planners, water resource managers and others. This database would provide for a baseline assessment of water quality in the basin and a common platform to build upon as water quality data is collected in the future. This tool would allow for trend and spatial analysis, identify constituents of concern and the identification of specific data gaps.

As a request from the WSRA Basin Account, the applicant must meet all four of the Threshold Criteria of the WSRA Criteria and Guidelines provided below.

1. *The water activity meets the eligibility requirements outlined in Part 2 of the Criteria and Guidelines.*
2. *The water activity is consistent with Section 37-75-102 Colorado Revised Statutes.*
3. *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 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.*
4. *The water activity meets the provisions of Section 37-75-104(2)(c), Colorado Revised Statutes.*

After a thorough review of the application, staff believes that criteria 1-3 have been adequately meet. Concerning the second criteria, that the project must be consistent with 37-75-102 CRS (i.e. the water activity funded through the WSRA shall not negatively impact others water rights), the applicants provided relatively explicit language on their intent of this project. They state:

“We do not intend any of the data to be collected in County/City monitoring efforts to be used to impact water rights. We intend in the future to collect high quality data for the basis of collaborative efforts in defining current conditions and identifying significant water quality problems should they exist or alleviating undue concern if none are found.

To alleviate our concern about this data impacting water rights it is our understanding that Department of Health does not include jurisdiction over water rights should this data be used in a standards setting process. We reiterate that our intent is only to more fully understand the status of the quality of water in the Upper Basin and, should any significant problems be found, to work jointly with the Roundtable, as well as with other interested parties, on solutions.”

Staff had some concerns regarding the fourth criteria, that the project must be consistent with 37-75-104 (2)(c) CRS. In summary, this section requires that the Basin Roundtables develop basin-wide consumptive and non-consumptive water supply needs assessments, 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 waters where appropriate. In determining whether the project is consistent with 37-75-104(2)(c) CRS, staff had hoped to find a solid nexus between the development of a water quality database and meeting the basin's non-consumptive

and/or consumptive water supply needs. The applicants address this point on page 5 of the application:

“We think this proposal is in line with the language in CRS 37-75-104(2) to “develop a basin-wide consumptive and nonconsumptive water supply needs assessment.” Admittedly, this proposal does not directly deal with the quantity of water available. Many other studies are underway to assess the quantity needs of municipal, industrial, agricultural, energy and nonconsumptive uses from flow and volumetric standpoints. However, water quality issues are likely to increase in importance as these uses are further developed. It will be important to have an assessment of currently available data and plans for additional data collection in order to fill information gaps. The Roundtable can play an important role in funding this initial study and also in helping to guide future data collection efforts in the basin. Roundtable members are instrumental in managing the water resources in the basin and should therefore be key individuals in this effort. The project proponents are committed to continuing the data collection needs identified by this initial study.”

The applicant continues with tangible examples:

“The upper Yampa Basin generally contains exceptional water quality. However, concern over the temperature and associated dissolved oxygen levels causing closure of the Yampa River through the City of Steamboat Springs by the Colorado Division of Wildlife and the City. Similarly, Stagecoach Reservoir experiences low dissolved oxygen levels at depth in the summer months and this has led to its placement on the “Monitoring and Evaluation” list by the Colorado Department of Health. Although these occurrences are not directly related, they show potential linkages between water quality and quantity. For example, in the first instance additional storage and summer releases might help with fisheries issues through Steamboat. In the second the storage of water may simply create a situation where stratification occurs, as in many natural lakes, but may create issues for some entities that supply water and treat wastewater above Stagecoach Reservoir. Obviously water quantity and quality issues are related and even though the regulatory processes are separated, project proponents must deal with these issues to permit and construct projects. The data assembled as part of this project and collected by subsequent County/City efforts will form a basis for conversations within the basin seeking appropriate solutions to future water challenges.”

And on page 13 of the application it is stated that:

“The Yampa-White Roundtable in accepting this proposal has shown that in its judgment this project will be helpful in moving consumptive and nonconsumptive projects forward within the roundtable and the basin. Using basin monies for this project is an appropriate use of these funds in addressing needs identified in the 179 regulations.”

From the information provided to the CWCB, staff felt that the applicants have not yet made a complete argument regarding the connection between the development of the Common Data Repository and meeting the basin's non-consumptive and consumptive needs. How does this tool directly relate to sustaining or meeting the basin's nonconsumptive and/or consumptive needs? It is stated that a common database such as the one proposed can serve as a starting point for discussion among all water interests. While this may be true, there is no clear outline on how this relates to meeting the water supply needs in the basin. In addition, the applicant did not specifically reference why this particular river reach has been identified as a priority. Staff has reviewed SWSI and verified that water management alternatives for this river reach was discussed at the SWSI roundtable based on the recommendations from the CDOW. The following is an excerpt from Section 10 of SWSI:

“Yampa River Flow Enhancement – CDOW has identified this medium-priority project to maintain operational flexibility between the major users and suppliers of water to mitigate drought impacts to the fishery in the Yampa River (i.e., Stage Coach to Elk River). Successful re-operation/exchanges in 2002 allowed flow increases through the upper reach that minimized the effects of high water temperatures.”

The applicants also identify this reach as being a priority. Therefore staff understands that a nexus between the proposed study and the priority to improve/sustain aquatic life in this reach is a need for the applicants and the BRT. However, the specifics for this critical nexus has not been adequately articulated in the application (see issues/additional needs section below).

Issues/Additional Needs:

- Considering the purpose of WSRA is to assist all water users in addressing their critical water supply issues, a strong nexus to the basin's water supply needs is necessary. The applicant should describe how this tool directly ties the meeting of their non-consumptive and/or consumptive water supply needs. Please provide a conceptual outline of how this common database will be used to meet the water supply needs of the basin. In other words, once the data is collected and analyzed what actions are contemplated to address consumptive and/or nonconsumptive water supply needs. How might these actions be funded and implemented?
- Please provide a detailed project schedule.

Staff Recommendation:

Staff recommends approval of up to \$106,600 to assist with the costs associated with developing the Common Data Repository and Water Resource Assessment for the Upper Yampa River Basin. This recommendation is contingent on resolution of the items in the issues/additional needs section

All products, data and information developed as a result of this grant must be provided to 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. It should be noted that past costs can not be reimbursed.