



# COLORADO WATER CONSERVATION BOARD



## WATER SUPPLY RESERVE ACCOUNT 2009-2010 GRANT APPLICATION FORM

Name of Water Activity/Project	Approving Basin Roundtable	
Stakeholder's Cooperative Management Analysis for the Upper Arkansas River Basin	Amount from Statewide Account	
Total Amount of Funds Requested	Amount from Basin Account	\$42,000

### Application Content

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### Attachments

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

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### **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/approval is outlined in Attachment 1.

Once approved by the local Basin Roundtable, the applicant should submit this application, a detailed statement of work, detailed project budget, and project schedule to the CWCB staff by the application deadline.

The application deadlines are:

- Basin Account – 60 days prior to the bi-monthly Board meeting
- Statewide Account – 60 days prior to the March and September Board meeting

Board Meeting Dates	Basin Account Deadlines	Statewide Account Deadlines
3/17 - 3/18/2009	1/16/2009	1/16/2009
5/19 - 5/20/2009	3/19/2009	n/a
7/21 - 7/22/2009	5/21/2009	n/a
9/15 - 9/16/2009	7/15/2009	7/15/2009
11/17 - 11/18/2009	9/17/2009	n/a
January 2010	11/15/2010	n/a
March 2010	1/15/2010	1/15/2010
May 2010	3/15/2010	n/a

When completing this application, the applicant should refer to the WSRA Criteria and Guidelines available at: <http://cwcb.state.co.us/IWMD>.

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:

Mr. Todd Doherty  
Colorado Water Conservation Board  
Intrastate Water Management and Development Section  
WSRA Application  
1580 Logan Street, Suite 600  
Denver, CO 80203  
[Todd.Doherty@state.co.us](mailto:Todd.Doherty@state.co.us)

If you have questions or need additional assistance, please contact Todd Doherty of the IWMD Section at 303-866-3441 x3210 or [todd.doherty@state.co.us](mailto:todd.doherty@state.co.us).

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

1.	Applicant Name(s):	Southeastern Colorado Water Conservancy District		
	Mailing address:	31717 United Avenue Pueblo, CO 81001		
	Taxpayer ID#:		Email address:	jwb@secwcd.com
	Phone Numbers: Business:	719-948-2400		
	Home:	N/A		
	Fax:	719-948-0036		

2. Person to contact regarding this application if different from above:

Name:	James Broderick
Position/Title	Executive Director

3. Eligible entities that may apply for grants from the WSRA 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) – special, water and sanitation, conservancy, conservation, irrigation, or 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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4. Provide a brief description of your organization

The Southeastern Colorado Water Conservancy District was created under Colorado State Statutes on April 29, 1958, by the District Court of Pueblo, Colorado, for the purpose of developing and administering the Fryingpan-Arkansas Project. The District extends along the Arkansas River from Buena Vista to Lamar, and along Fountain Creek from Colorado Springs to Pueblo, Colorado. The District consists of parts of nine counties deriving benefits from the project.

The District is the legal agency responsible for repayment of the reimbursable costs of the project. In addition to administering this repayment responsibility, the District makes supplemental water from the Fryingpan-Arkansas Project available for use by approximately 280,600 acres of irrigated land under various private and mutual ditch companies, and for use by the many municipal and domestic water suppliers who directly serve the District's approximately 600,000 constituents. The District is governed by a 15 member board of directors representing the nine counties within the District. Each board member is appointed by the state's district court system. Director positions may also be elected if citizens petition the court for such an election. Members serve for four-year terms and are then subject to re-appointment.

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

Resource Based International ("RBI") is a company specializing in water resource planning, policy, and economics. The president of RBI is Paul Flack, who has been involved in the Colorado water business for twenty-five years. For the past fifteen years, he was the water resource manager for Colorado State Parks, working as a state-wide representative of the agency and for the Colorado Department of Natural Resources ("Department").

Resource Based International was founded in October of 2008, with an emphasis in resolving water allocation challenges in an equitable and efficient manner for the stakeholders involved. RBI has done work worldwide, focusing on water projects and transboundary South Africa and the Nile River Basin. In addition, the company has specialized in stakeholder issues on the Arkansas and South Platte Rivers for a variety of entities with short and long term needs to enhance their water operations.

RBI develops stakeholder analysis to assess existing river basin operations involving legal, institutional, economical and political parameters, and then identifies opportunities and recommendations that may potentially adjust this framework for the benefits of its stakeholders. A major goal of RBI's work is to recognize management opportunities that may not have been previously known to the stakeholder(s) or policy makers, and to offer recommendations to develop and implement these new strategies. Management alternatives often include a combination of social, environmental and economic considerations to ensure a comprehensive analysis, and provide for long term management sustainability.

RBI continues to be associated with the World Bank as a water allocation consultant, and has worked with all levels of government in the United States. The company is very familiar with Colorado water law and administration, has worked with federal, state and local permitting processes, and is experienced in river and reservoir operations, transbasin issues, and the goals and objectives of the Department. The company has worked with all sectors of the water community (agriculture, municipal, industrial, recreational, and environmental) and has a strong understanding of the interaction and overlapping demands between them.

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RBI has worked as the sole manager on many of its projects, but also has a strong reputation of working with other professionals, in associated technical disciplines, to obtain the highest level of expertise possible. The ultimate goal of RBI is to always provide water allocation systems that most effectively and efficiently provide benefits to the broadest range of participants.

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6. Successful applicants will have to execute a contract with the CWCB prior to beginning work on the portion of the project funded by the WSRA grant. In order to expedite the contracting process the CWCB has established a standard contract with provisions the applicant must adhere to. A copy of this standard contract is included in Attachment 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.

7. 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.

There are no TABOR limitations with regard to grant money involving the applicant.

### Part B. - Description of the Water Activity

1. Name of the Water Activity/Project:

“Stakeholder’s Cooperative Management Analysis for the Upper Arkansas River Basin ”

2. What is the purpose of this grant application? (Please check all that apply.)

☐ Environmental compliance and feasibility study

☐ Technical Assistance regarding permitting, feasibility studies, and environmental compliance

☒ Studies or analysis of structural, nonstructural, consumptive, nonconsumptive water needs, projects

Study or Analysis of:

☐ Structural project or activity

☐ Nonstructural project or activity

☐ Consumptive project or activity

☒ Nonconsumptive project or activity

☐ Structural and/ or nonstructural water project or activity

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3. 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.

WSRA funding will be used to develop a stakeholder supported analysis, in conjunction with CWCB's Decision Support System (ARKDSS) that will address specific user group needs and objectives regarding water management, policy, and planning in the Arkansas River basin. The analysis will be developed to integrate a defined list of stakeholder requests into an operations analysis that will eventually be combined and integrated with the DSS. The purpose of this analysis centers on the need for stakeholders to:

- a. Better understand the current and future management operations on the upper Arkansas River;
- b. Investigate the feasibility of various and specific management requests and modifications;
- c. Promote communication and interaction among stakeholders to implement alternatives; and
- d. Understand and communicate limitations of proposed management alternatives.

The process will include three main parts. Part 1 is to compile a list of selected stakeholders (using the stakeholder categories developed by CWCB) – with input from the advisory committee - and identify river operations that stakeholders classify as areas of potential adjustment to the current management.

Part 2 is to integrate the stakeholder/advisory committee suggestions into an operations analysis to identify constraints, and various terms and conditions related to incorporating these requests into the existing operation framework of the Arkansas basin. Suggested stakeholder modifications will be related to current operations by the U.S Bureau of Reclamation, municipal and agricultural water users, other vested water right holders, and operations resulting from various operational agreements.

Part 3 is to engage the stakeholder groups/advisory committee with the results of the feasibility analysis (analysis results) and categorize alternatives based on predicted successful implementation. In this phase, stakeholders/advisory committee will be supplied with information regarding strengths of the proposed requests, constraints of the operational system, partnerships and stakeholder alignment necessary to implement management alternatives, estimated costs associated with the alternatives, and a description of the overall ability to integrate specific recommendations with all other stakeholder groups. It is this overall integration process that will identify partnerships/alliances and new interactions among the stakeholders.

The end result of the study will provide insight into two fundamental management issues:

1. How best to move water in the upper basin in wet, dry, and median years; and
2. What areas of concentration should be further investigated to reach desired stakeholder results.

The study is not designed to duplicate goals and objectives of the ARKDSS, but rather the intention is to focus on chronic stakeholder management problems related to upper basin water operations, and develop specific solutions/recommendations to address them. It is primarily designed as a stakeholder participation study to assess possible outcomes in a direct and practical manner, linking participants and decision-makers into a comprehensive management plan. It is, however, anticipated that outcomes of the study can and will be used to better define ARKDSS scoping and provide information related to defining and refining data needs.

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The final deliverable utilizing WSRA funding will be a report to the Arkansas River Round Table identifying:

- a. A list of the stakeholders recommended management alternatives
- b. Feasibility analysis and an assessment of ease-of-implementation of these alternatives
- c. Recommendations for implementing the alternatives, based on predicted levels of success

### Part C. – 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.<sup>1</sup>  
The water activity proposed is consistent with Section 37-75-102 in all regards. The primary basis of the project is to use the state's recognition of water rights as private usufructuary property rights, and to ensure that the framework of the analysis is based on the certitude that no water right holder will be restricted to use or dispose of their water rights in manner permitted under the law.

Furthermore, the proposed water activity will not be implemented in any way to diminish, impair, or cause injury to any property right or contractual right created by intergovernmental agreements, contracts, stipulations among water parties to water court cases, conditions and terms in water decrees or any other similar documents. To the contrary, the fundamental precept of this water activity is to use existing water rights, conditional water rights, and contractual agreements as the framework in which all stakeholder input and project recommendations must comply. If input, analysis, recommendations, and results do not comply with terms identified in Section 37-75-102, then they will not be considered in any manner for purposes of this activity.

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<sup>1</sup> 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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- 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 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.

\*\*\* This information is included in the letter from the roundtable chair \*\*\*\*

- c) The water activity meets the provisions of Section 37-75-104(2), Colorado Revised Statutes.<sup>2</sup> Specifically describe how the water activity either furthers the Roundtable's basin-wide water needs assessment or meets a consumptive or non-consumptive water supply need identified in the Roundtable's working needs assessment.

The proposed water activity meets the provisions of the of Section 37-75-104(2) by integrating its results into the nonstructural methods for meeting the basin –wide consumptive and non-consumptive water supply needs. A major focus of the activity is to utilize input from all stakeholders and participants, including local government and water providers, to further the supply need assessment. This will be achieved by identifying new demands and objectives not previously categorized in the Roundtable assessment. The results of this activity can be used to meet basin-wide supply needs not previously considered. This activity will expand the participation and work with interested stakeholders that have not previously been active or had knowledge of the Roundtable assessment.

- d) Matching Requirement: For requests from the Statewide Fund, the applicants is required to demonstrate a 20 percent (or greater) match of the request from the Statewide Account. 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 Part D of this application.

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<sup>2</sup> 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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While no statewide funds are involved, the applicant has proposed a 20% matching fund of \$8,400; 50% to be provided by the applicant, and 50% to be provided by the Upper Arkansas Water Conservancy District.

### Part D. – 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 the name/location of water bodies affected by the water activity.

The proposed water activity is an upper basin project that includes all native and non-native supply sources to the Arkansas River above Pueblo Reservoir, and reservoir operations at Turquoise, Twin Lakes and Pueblo Reservoirs. The study will focus on transmountain diversion supplies from the Frying Pan-Arkansas Rivers Project, exchanges from the lower Arkansas River basin and Fountain Creek, and upper basin native-flow water rights.

The study area includes all waters associated with streamflows measured as inflow into Pueblo Reservoir, but the study area does not include lower basin storage or water rights below Pueblo Reservoir, except those involved in upstream exchanges from the lower basin and Fountain Creek.

The water supply sources mentioned above are not intended to be comprehensive or compulsory, but rather they provide a description and scope of the water sources and administration that are anticipated to be active in this particular water activity.

#### 2. Please provide a brief narrative of any related or relevant previous studies.

The applicant is not aware of related stakeholder studies pertinent to the Arkansas River Basin. However, the Arkansas River Decision Support System is a compatible study that will be able to utilize stakeholder input and assess socio-economic data. Stakeholder studies have been performed elsewhere in the state, most recently by the City of Greeley regarding the Halligan-Seaman Water Management Project located on the North Fork of the Cache la Poudre River. This study is relevant in the stakeholder approach and assessing the same kinds of data that is outlined in this study proposal.

Additionally, there have been numerous hydrological models developed by a variety of water providers pertaining to river operations on the Arkansas River.

## **Statement of Work**

**WATER ACTIVITY NAME –Stakeholder’s Cooperative Management Analysis for the Upper Arkansas River Basin**

**GRANT RECIPIENT – Southeastern Colorado Water Conservancy District**

**FUNDING SOURCE – Arkansas River Basin Account - \$42,000**

### **INTRODUCTION AND BACKGROUND**

The basis of this study originated as a result of a stakeholder meeting held by the Southeastern Colorado Water Conservancy District in March 2009. The purpose of the meeting was to discuss effects of seasonal water flows in the upper Arkansas River basin in years 2002-2008, and discuss potential alternatives to future flow management practices. The stakeholders agreed that water “movement” in the upper Arkansas was complex, and was not fully understood by the participants at the meeting. It was concluded that a “stakeholder” analysis should be developed to allow participants to predict the effects of proposed water activities, and that stakeholders needed to carry out a “risk management” analysis for such activities.

This study proposal is a direct outcome of this 2009 meeting. The objective of the study is to assess historical practices and evaluate new alternatives to reduce negative stakeholder impacts while, concurrently, increasing efficiency and benefits. As a result, study results are expected to: 1) encourage the identification of new partnerships; 2) promote better communication among participants, 3) broaden the understanding of the restrictions and operational limitations involved in upper river management, and; 4) provide more precise management guidelines for the Bureau of Reclamation and other water providers and users.

The Stakeholder’s Cooperative Management Analysis is a stakeholder supported investigation of past and current river operations in the upper the Arkansas River basin. This analysis will identify historic management strategies used during high, average, and low river flow years and assess the impacts of those strategies. Then, based on stakeholder inputs, a limited number of new management strategies to enhance impacts on fishery, recreational, agricultural and landowner components will be developed and assessed. New management alternatives, based on analysis outcomes, are likely to be dependent on collaborative and cooperative strategies involving specific stakeholders not previously identified as potential partners.

The study will focus on water supplies in the upper Arkansas River basin, especially as it relates to the operations involving transmountain diversions, municipal upstream exchanges from Pueblo Reservoir

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and Fountain Creek, releases from Turquoise and Twin Lakes Reservoirs, and storage levels in Pueblo Reservoir. Input from the stakeholders will be analyzed in the context of a river operations analysis that identifies the legal and institutional framework in which all management alternatives must be considered. Results of the analysis outputs will not only produce cooperative management alternatives that can achieve the highest level of stakeholder satisfaction, but it will also identify management and operational constraints in implementing specific alternatives.

This study will utilize the stakeholder's list and the Roundtable's executive committee developed for the recently initiated Arkansas River Decision Support System Feasibility Study (ARKDSS). In addition, individuals representing specific "technical" users (municipalities, State Engineer's Office, water districts, Bureau of Reclamation) and "socio-economic" users (recreational and environmental interests, and local and county officials) will be consulted regarding analysis outputs and study results.

The alternatives will be reviewed by the various stakeholders and final management alternatives will be ranked and categorized into a final report to the Arkansas River Roundtable.

### OBJECTIVES

List the objectives of the project:

1. Identify and assess (at a reconnaissance level) specific stakeholder-supported management alternatives for Arkansas River operations related to high, average, and low flow regimes.
2. Create a better understanding of the rationale and need for upper Arkansas River management among stakeholders.
3. Promote cooperation and collaboration of the stakeholders to more effectively and efficiently address the multiple needs and interests.
4. Provide and add data to the Roundtables consumptive and non-consumptive needs assessment
5. Develop an integrated water management system to address the project categories

### TASKS

Please note the proposed study process is not necessarily sequential, and that most work tasks will in progress concurrently. There will also be an iterative process between Tasks #2 and #3 to fully develop the analytical tools.

#### **TASK 1 – Stakeholder Appraisal**

##### Description of Task

The objective of this task is to solicit stakeholder/advisory (executive) committee evaluations and recommendations regarding past and current aspects of river management. The purpose of this solicitation is to categorize areas of concerns and objectives derived from the stakeholder surveys, and to identify specific river management impacts on specific water users, at specific sites in the upper basin (stream reaches or particular gauges) for each of the flow regimes. The focus of this task is to develop a stakeholder's assessments of river management impacts as they pertain to: 1) Bureau of Reclamation water management operations; 2) implementation of various stakeholder agreements and decrees for recreational and environmental purposes; 3) and municipal upstream exchanges.

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Based on results of the 2009 stakeholder meeting, and subsequent individual meetings with specific participants, it is anticipated that several key areas will need to be studied:

1. Releases from Turquoise Lake – use of the Mount Elbert conduit;
2. Reservoir elevations in Turquoise and Twin Lakes in late summer;
3. Identification of augmentation sources to offset well depletions;
4. Management alternatives for the Voluntary Flow Management Program during low, median, and high water years;
5. Management planning for Chaffee County's Recreational In-channel Diversion water right and associated water management planning for the FibArk Festival;
6. Spring-time flows to fishery enhancement between Twin Lakes and Pueblo Reservoirs
7. Exchange impacts on late summer flows at Wellsville;
8. Fill and spill sequencing, as it relates to the Winter Water Program and If-and-When storage contracts at Pueblo Reservoir.

### Method/Procedure

This task will utilize results of the stakeholder list surveys developed for the CWCB's Arkansas River Decision Support System Feasibility Study. A list of historical management practices and their related stakeholder outcomes will be documented and prioritized based on the significance of the management impacts and the number of affected participants. This list of operational practices and associated impacts will be given to the advisory committee for final review and approval. The list will provide the basis for the analysis procedure to develop management alternatives to enhance stakeholder results, if possible for the three flow categories. It is anticipated that up to five study scenarios, involving various locations in the upper basin, will be developed and analyzed for the three flow regimes.

### Deliverable

1. List of management concerns and associated operational alternatives that would, in the perspective of the specific user group, avoid or resolve current management issues, and/or enhance the efficiency of the water uses by the group.
2. One meeting with the ARKDSS advisory committee to approve selected study sites and number (up to five) management issues to be analyzed.

## **TASK 2 – Develop analytical tools incorporating a multidiscipline approach to address the hydrological, institutional legal, economical and social framework for Arkansas River water management.**

### Description of Task

The task is separated into three categories:

1. Review and assessment of historical streamflow conditions at strategic gage sites;
2. Compile and review strategic legal management obligation at specific river sites;

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3. Compile and review institutional and intergovernmental agreements/operating rules affecting annual river operations.
4. Perform a multi-discipline professional analytical analysis to comprehensively address the various aspects of each designated study case

### Method/Procedure

1. To assess hydrological conditions and water operations in the upper Arkansas River basin, it is anticipated a set of initial sites be utilized and will include Boustead Tunnel, Turquoise and Twin Lake Reservoirs, Wellsville, and Portland gauge sites. Based on a review of stakeholder inputs for management modifications, other useful gauge sites may be added. The final study sites will be selected by the advisory committee. The objective of this analysis is to quantify the amount of water at specific points of the river during typical dry, average, and wet years. Multiple years from the 1980-2008 historical record, will be selected and classified into each respective categories. Water quantification at each study site will include combining flow data that will include Fryingpan-Arkansas total imports, Bureau of Reclamation releases from upper storage, other upper storage releases, and municipal upstream exchanges. Data bases for this task will be consistent with those used in the ARKDSS.
2. A review of the most significant decrees, as recommended by the Division Engineer and the U.S. Bureau of Reclamation, will be conducted, and the management requirements to implement these decrees will be identified for the analysis exercise. It is anticipated that much of this information will be generated as part of the ARKDSS Feasibility Study.
3. Intergovernmental agreements, state and federal permits, and all other operating guidelines (e.g. Fry-Ark operating objectives) will be compiled and catalogued. Operating rules derived from these documents will be incorporated into the development of the working analysis.
4. An intensive review of existing water management models will be performed to obtain data or modeling capabilities for purposes of this study. Pre-existing data bases and models will be utilized to the extent possible, to ensure that duplicate information systems or analysis are not needlessly developed.
5. Economic, business-planning, statistical, and risk-assessment professional analysis and applications will also be reviewed and selected based on appropriateness and usefulness of such analysis in developing and evaluating alternatives to meet specified goals and objectives.

### Deliverable

1. Description of hydrologic conditions at strategically selected gage sites.
2. Development of a working river operations analysis incorporating key management criteria for Arkansas River annual operations for wet, average, and dry years.

### **Task 3 – Stakeholder – Development of Alternatives**

#### Description of Task

1. The purpose of this task is to incorporate stakeholder management alternatives into the operations analysis and evaluate their feasibility and ease-of-implementation for high, average, and wet years. A sensitivity analysis will be performed to identify critical parameters for each alternative.
2. This task will provide new management alternatives, based on stakeholder input and addressing socio-economic considerations, not previously included in the working analysis. Solutions may involve parameters not considered in traditional administrative practices. These parameters may involve linking users to form new collaborative partnership to resolve high or low flow conflicts, or they may promote the development of economic incentives to alter time and place of historical water operations, and/or, in the simplest manner, provide better communication among stakeholders to more efficiently utilize water supplies to meet a higher level of stakeholder goals. As a result, a more comprehensive management design is anticipated, describing new management policy involving stakeholder partnership and economic consideration.
3. This task will also provide a baseline for which certain stakeholder recommendations will not be recognized as viable for river basin management. It is anticipated that the certitude of the analysis framework, as determined by the legal and institutional constraints, will eliminate certain alternatives. However, elimination of alternatives will be accompanied by a definitive explanation regarding the constraints and management analysis that prohibits such implementation.

#### Method/Procedure

1. Stakeholder suggestions/alternatives will be entered into the working analysis and evaluated on a series of criteria that includes, but is not limited to :
  - a. Compliance with existing water right administration and other legal determinants
  - b. Compliance with existing agreements, permits, and operating regulations
  - c. Compatibility with federal, state, and local operating objectives and management

The criteria will be applied to the three flow regime scenarios (high, average, low) independently, recognizing that the criteria may manifest itself in a specific type of year, but not in the others.

2. Study results will be discussed and analyzed with respect to technical and socio-economic components in a series of teleconferences and meetings. The purpose of these discussions will be to assess the feasibility – from each stakeholder group- regarding the proposed management alternatives. Separate individual meetings (discussions) with specific participants is anticipated, but no more than five (5) of these individual conferences are expected.

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3. Alternatives will be classified as “feasible” or “non-feasible” based on the criteria listed above. Feasibility will be determined not only using current administrative practice, but will also consider new management strategies based on collaboration and cooperation among the stakeholders. Alternatives will link participants to develop new operational criteria that resolve or enhances overall water utilization.

If an alternative is evaluated to be “infeasible,” a description will be provided detailing the precise determinant(s) for this evaluation.

4. Alternatives classified as feasible will be identified, ranked by “ease-of-implementation” standards, evaluated for impacts on overall river management and efficiency, and integrated into Roundtable objectives and needs assessments.

### Deliverables

1. List of stakeholder alternatives
2. (3) Meetings with participating stakeholders to discuss hydrological results
3. (1) Meetings with Roundtable executive committee
4. List of infeasible alternatives
5. Ranking of “feasible” alternatives
6. Recommendations for implementation of “feasible alternatives”

## **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.



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Total Costs				
	Labor	Other Direct Costs	Matching Funds (If Applicable)	Total RoundTable Costs
Task 1 – Stakeholder Appraisal	6,000			
Task 2 – Develop Upper Basin Analytical Tools	15,000			
Task 3 – Stakeholder Alternative Development and Integration	\$18,500	\$2,500		
Total Cost (by category)	\$39,500	\$2,500	\$8,400	\$33,600
Total Costs of Project :	\$42,000			

## SCHEDULE

Task	Start Date	Finish Date
1	Upon NTP	NTP + 180 days
2	Upon NTP	NTP + 270 days
3	Upon NTP	NTP + 365 days

## 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:**

**Print Applicant's Name:** Southeastern Colorado Water Conservancy District

**Project Title:** Stakeholder's Cooperative Management Analysis for the Upper Arkansas River Basin

**Return this application to:**

Mr. Todd Doherty  
Intrastate Water Management and Development Section  
COLORADO WATER CONSERVATION BOARD  
1580 Logan Street, Suite 600  
Denver, CO 80203

To submit applications by Email, send to: [todd.doherty@state.co.us](mailto:todd.doherty@state.co.us)

**Attachment 1**  
**Reference Information**

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

Colorado Water Conservation Board (<http://cwcb.state.co.us/>)

Loan and Grant policies and information are available at – <http://cwcb.state.co.us/Finance/>

Interbasin Compact Committee and Basin Roundtables (<http://ibcc.state.co.us/>)

Interbasin Compact Committee By-laws and Charter (under Helpful Links section) –

<http://ibcc.state.co.us/Basins/IBCC/>

Legislation

House Bill 05-1177 - Also known as the Water for the 21<sup>st</sup> 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

General Information – <http://cwcb.state.co.us/IWMD/>

Phase 1 Report – <http://cwcb.state.co.us/IWMD/SWSITechnicalResources/SWSIPhaseIReport/>

**Attachment 2**  
**Insurance Requirements**

NOTE: The following insurance requirements taken from the standard contract apply to WSRA projects that exceed \$100,000 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**

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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.

**Attachment 3**  
**Water Supply Reserve Account Standard Contract**

NOTE: The following 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.

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### **Attachment 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.