SECTION 1 GENERAL INFORMATION

1.1 Introduction

The South Platte Basin and Metro Roundtables, in collaboration with the Colorado Water Conservation Board and through the Lower South Platte Water Conservancy District acting as fiscal agent, request proposals from qualified consulting firms for the South Platte Regional Water Development Concept (SPRWDC) Pre-Feasibility Study (Study).

The study is being initiated directly from a Water Supply Reserve Fund grant approved by the South Platte and Metro Roundtables in addition to approval from the Colorado Water Conservation Board titled "South Platte Regional Water Development Concept Pre-Feasibility Study". The grant application, as well as additional information on the South Platte Basin including the South Platte Basin Implementation Plan, the state of Colorado's Water Supply Planning Process, and Colorado's Water Plan can be found at: http://southplattebasin.com/ and https://www.colorado.gov/cowaterplan

1.2 Information for Respondents

The Scope of Work for the Request for Proposal (RFP) describes the services required for this study, and is included as Attachment A. Copies of this RFP may be obtained as follows:

<u>By E-mail</u> Attention: Mr. Joe Frank Subject Line: RFP 2018 South Platte Regional Water Development Study jmfrank@lspwcd.org

By Direct weblink

http://southplattebasin.com/

Proposals shall be submitted as instructed in the Proposal Submittals Section of the RFP, and will be accepted until **12:00 noon, October 24, 2018.**

1.3 Pre-Submittal Meeting

A pre-submittal meeting will be held at **9:00 A.M. on October 2, 2018** at the Aurora Central Library, located at 14949 E. Alameda Parkway in Aurora. The project proponents, including Lower South Platte Water Conservancy District, CWCB, and other entities providing in-kind support to the project, will provide an overview of the RFP process and discuss the scoped tasks. Questions from prospective consultants will be answered during the meeting. Documentation of the questions and answers from this meeting will not be maintained or made available to prospective consultants; attendance at this meeting is strongly recommended.

1.4 Request for Clarification

Requests for clarification concerning the RFP shall be submitted in writing and must be received by **5:00 P.M. on October 5, 2018**. Requests submitted via phone will not be accepted. Responses to requests for clarification will be done in writing, for the benefit of all prospective respondents, in the form of a supplement and without identification of the source of any inquiry. All requests for clarification shall be directed to:

<u>By E-mail</u> Attention: Mr. Joe Frank Subject Line: RFP 2018 South Platte Regional Water Development Study <u>jmfrank@lspwcd.org</u>

SECTION 2 PROPOSAL INSTRUCTIONS

2.1 Proposal Submittals

Proposal submittals shall be clear, accurate, and comprehensive. Submittals shall be a maximum of 30 pages (8 $\frac{1}{2}$ X 11), exclusive of the title page, index and/or table of contents, front and back covers, section dividers, references, and resumes. Sections 1, 2 and 3 of the submittal (listed below) shall constitute no more than 10 pages of the submittal. Consultant can include 11x17 tri-fold pages, each one counting as two pages of the 30 page limit. Minimum font size shall be 12 point. Resumes for only key members of the consultant shall be included; resumes will be a maximum of 2 pages each. Excessive or irrelevant material will not be favorably received.

Submittals shall be organized and numbered in the order presented below.

- **Section 1 Firm History and Background**. Include a brief history of the company and provide any background information that may be relevant to the South Platte Regional Water Development Concept Pre-Feasibility Study efforts. If your company has provided services in the South Platte Basin or Metro area, highlight this experience in the proposal and provide the appropriate details of the projects in Section 3.
- **Section 2 Project Team Qualifications.** List key personnel and their role in the project. Provide resumes as an appendix. If sub-consultants are included, identify prior experience working with them as a team and summarize their qualifications.
- **Section 3 Related Work Experience and Special Expertise**. Provide a detailed description of related work experience and any special expertise offered by the company that could aid in completing the study. Include relevant project description, client references, consultant's personnel involved and tasks performed.
- **Section 4 Proposed Project Approach.** Using the attached Scope of Work as a guide, include a description of the company's proposed approach to complete the project within the available budget of \$335,000. Include an outline of the study, the proposed methodology for each section, interim and final deliverables, and a strategy to coordinate this effort with the South Platte Basin BIP, South Platte Storage Study, and the Colorado Water Plan. Include all relevant project approach information from conceptual level through final presentation.
- Section 5Estimated Schedule. Based on the consultant's proposed approach,
provide an estimated schedule by task to complete the project. The final
report is due to the Task Force, South Platte Basin Roundtable, Metro

Roundtable, and Colorado Water Conservation Board by **December 31**, **2019**.

Section 6 Fee Schedule. The Respondent shall submit a proposed fee schedule and estimated budget by task. Respondent's fee schedule shall contain an hourly billing rate for all job classifications and shall identify all items for which a client may be billed in the normal course of a project, as well as any mark-ups on sub-consultants. Any other charges incurred during the normal course of a project should be identified along with the terms for reimbursement/cost recovery. The fee schedule shall be valid through the end of the project. Budget estimates by task were required for the WSRP grant application and serve as guidelines for the relative effort envisioned for each task; these estimates are included in Attachment A. Prospective consultants may propose task budgets that differ from these estimates based on their project approach, however total project costs may not exceed \$335,000.

Two hard copies and one digital copy of the submittal shall be enclosed in a sealed package, and the package marked "proposal" and addressed as directed below. Each package shall be legibly marked in the upper left-hand corner with the name and address of the Respondent.

Submittals will be accepted until **12:00 noon, October 24, 2018**. Submittals received after this time and date will not be accepted and will be returned unopened.

Submittals shall be sent to the following address (faxes and e-mails not accepted):

By mail or in person to: Lower South Platte Water Conservancy District 100 Broadway Plaza, Suite 12 Sterling, CO 80751 Attention: Mr. Joe Frank, General Manager Re: RFP 2018 South Platte Regional Water Development Study Or to: Aurora Water Aurora Water Aurora Municipal Building 1515 E. Alameda Pkwy., Suite 3600 Aurora, CO 80012 Attention: Ms. Dawn Jewell, South Platte Basin Program Supervisor Re: RFP 2018 South Platte Regional Water Development Study

The Colorado Water Conservation Board and the South Platte and Metro Roundtables reserve the right to reject any or all proposals, including without limitation the rights to reject any or all non-conforming, non-responsive, unbalanced or conditional proposals and to reject the proposal of any consultant if the Roundtables believe that it would not be in their best interest to make an award to that consultant, whether because the proposal is not responsive or the consultant is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by the Roundtables.

SECTION 3 SELECTION PROCESS

3.1 Proposal Evaluation

To receive consideration, all responses must be received before the closing time specified in the proposal instructions portion of the RFP. Proposal evaluations will occur following the schedule in 3.2 below.

The following factors will be used for the evaluation and selection of the Consultant. The order of the listed criteria is not indicative of their priority, weighting or importance.

A. Team Qualifications

- a. Respondent's team personnel experience, track record, and specific roles in carrying out similar projects awarded in the past 10 years.
- b. Description of qualifications, training experience, education and licenses of the key personnel who will be assigned to the study.
- c. Respondent's organizational matrix specific to this project.

B. Project Approach and Methodology

- a. Respondent's proposed approach to the attached Scope of Work.
- b. The completeness and competence that the Respondent gives in addressing the Scope of Work section and demonstrating their ability to accurately complete the project.
- c. Discussion of constraints, problems, and issues that should be anticipated during the performance of services and suggested approaches to resolving these problems.
- d. Project sequence illustrating specific tasks including participation of provided personnel.
- e. Proposed approach to coordinate this study with the South Platte Basin Implementation Plan, South Platte Storage Study, and Colorado's Water Plan.

C. Project Management Approach

- a. Project Management approach to developing objectives and design criteria to meet both short-term and long-term objectives.
- b. Discussion on how project management responsibilities will be divided between consultant, sub-contractors (if applicable), and project proponents providing inkind services.
- c. Discussion on how the project's overall strategic direction will be maintained throughout the project's duration, with appropriate deference to the original thinking and efforts that have lead up to this current evaluation of SPRWDC.
- d. Discussion on cost control, schedule control, and quality control procedures to ensure that the project objectives are met.
- e. Schedule and general approach to preparing reports and presentations to the Colorado Water Conservation Board and the South Platte and Metro Roundtables.

D. Value

a. Fee schedule. Selection will not be based on lowest cost, rather cost in relation to qualifications and approach will be taken into account to ensure the best value is obtained.

3.2 Selection Process

Proposals shall be reviewed by the project proponents; individuals currently serving on the South Platte Regional Water Development Concept Task Force (Task Force), and the CWCB. Project proponents are defined as those providing in-kind services to support the project, and include:

- Lower South Platte Water Conservancy District (Grant Applicant and Fiscal Agent)
- Aurora Water
- Denver Water
- Northern Colorado Water Conservancy District
- Prewitt Operating Company/North Sterling Irrigation District
- South Metro Water Supply Authority
- St. Vrain Lefthand Water Conservancy District

Once the proposals have been reviewed, a shortlist of qualified respondents will be developed. Short-listed respondents will be selected based upon an evaluation of their qualifications, proposed approach, and value as determined by the selection team.

Each respondent selected for the shortlist may be required to give a presentation to the selection team outlining at a minimum their qualifications, the organizational structure specific to this project, proposed project approach, coordination approach, cost control measures, and scheduling methods. If the selection team opts to hear presentations, such presentations will be limited to 30-minutes followed by a 30-minute question and answer period. Presentations are to be in PowerPoint format. Consultant presentations, if necessary, will take place on **November 16, 2018** at the Aurora Central Library, 14949 E. Alameda Parkway in Aurora.

A final selection will be made either after review of written proposals or, if needed after short-listed consultant presentations. This means that final selections may be based on written proposals only or a combination of written proposals and presentations.

After a Consultant is selected, contract award will be contingent upon successful negotiation and formal approval of a final Scope of Work. If the Colorado Water Conservation Board and the South Platte and Metro Roundtables cannot reach an acceptable agreement with the top ranked Consultant, they may negotiate and contract with the second ranked Consultant.

The selection schedule is as follows:

•	Release RFP	September 21, 2018
•	Pre-Submittal Meeting	October 2, 2018
•	Request for Clarification	October 5, 2018
•	Written Responses to Questions	October 12, 2018
•	Proposal Submittals Due	October 24, 2018
•	Short-List Notification (if needed)	November 7, 2018
•	Short-Listed Presentations (if needed)	November 16, 2018
•	Anticipated Notice to Proceed	December of 2018

Attachment A

South Platte Regional Water Development Concept Pre-Feasibility Study

Scope of Work

Introduction and Background:

The South Platte Regional Water Development Concept (SPRWDC) collectively refers to four potential concepts to develop water supplies in the South Platte River basin via a regional, collaborative, multi-objective approach to water resource management in the basin. SPRWDC envisions multiple storage facilities and additional conveyance capacity strategically positioned throughout the Basin and operationally linked. This infrastructure network would store unappropriated native flow, reusable supplies, water derived from ATMs, and excess augmentation plan water in portions of the Basin where water is most available. These supplies then would be delivered, either directly or by exchange, to specified "demand gateways" to meet diverse municipal, agricultural, environmental and recreational demands. All four concepts envision development of new water supply storage¹. They differ, however, in the amount of new storage and new infrastructure (e.g., pumps, pipelines, etc.) required to move the water from storage facilities to places where demands are likely to materialize in the future.

The SPRWDC was contemplated in its current form by the South Platte Regional Opportunities Working Group (SPROWG) in 2017; however the concepts themselves build upon high-level analyses undertaken since 2015. Documentation and materials developed during this most recent effort are available on the South Platte River Basin Roundtable's website (<u>http://southplattebasin.com/)</u>.

Project Objectives:

The project will achieve the following five objectives:

- 1. Refine understanding of specific municipal, agricultural, and environmental/recreational water supply demands (e.g., timing, amount, location, quality) the SPRWDC could meet, and at what cost.
- 2. Optimize operation of the concepts based on revised demands and investigate options for flexible operation (including water markets or banking) and phasing as demands materialize and/or grow over time.
- 3. Develop options for an organizational or institutional structure best suited to support development and operation of the concept.
- 4. Develop an outreach and education plan to facilitate broad and sophisticated public understanding of the SPRWDC and its benefits.
- 5. Position the SPRWDC by the end of 2019 for serious consideration about whether and how it will be implemented.

Project Tasks:

The following summarizes the project tasks as contemplated during the grant application phase. Prospective consultants should consider these tasks as general guidelines, and are encouraged to provide creative or innovative approaches other than those presented below to achieve the project objectives. Note that the percentage of budget associated with each task is based on the grant

¹ Although modeled as large reservoirs experiencing evaporative losses; storage opportunities in the SPRWDC could consist of aquifer storage and recovery; a series of smaller reservoirs or gravel pits; or enlargements of existing reservoirs.

application and are relative to a total budget of \$335,000. Prospective consultants can propose alternative budget allocations per task based on their respective approaches.

Task 1 - Task Force (~4 percent² of project funds)

Continue to broaden public understanding of the SPRWDC through coordination with the Task Force. The Task Force consists of South Platte and Metro Basin Roundtable members, water resource professionals (including the project proponents), and other stakeholders in the Basin. The Task Force has been a driving force in developing the work plan and WSRF grant application to date. This task envisions the selected consultant continuing to coordinate with the Task Force to keep them apprised of the project progress; expand the Task Force to further educate prospective participants or stakeholders on the SPRWDC; and utilize knowledge and expertise of those on the Task Force throughout the project.

Method/Procedure:

Coordinate and conduct six meetings with the Task Force over the duration of the project to present project progress and allow for the review of work products by the Task Force. The current list of Task Force members will be provided to the selected consultant.

Deliverable:

The deliverable for this task will be a Task Force that has met regularly over the duration of the project (schedule to be determined); which has contributed meaningfully to the refinement of the SPRWDC; and has helped others who may not be as familiar with the SPRWDC to understand its potential benefits as an alternative to other sources of water supply. This deliverable will be measured by notes, handouts, presentations, meeting summaries (as may be needed) or other materials requested by the Task Force.

Task 2 - Organizational Framework/Institutional Structure (~12 percent of project funds) The intent of this Task is to develop information that can inform and support future consideration by the Task Force and other appropriate entities of an organizational framework/institutional structure best suited to support, develop, and operate the SPRWDC. The goal is for the selected consultant to use their expertise in law, policy and organizational analysis to identify, describe, and analyze different types or models of organizations/institutions capable of supporting the development, operation, financing, ownership, and governance of the SPRWDC, provide examples of each, and evaluate their relative strengths and weaknesses.

Method/Procedure:

For ease of communication, the development, operation, financing, ownership, and governance of the SPRWDC will be referred to as "desirable management capacity" and work associated with this task will be referred to as "desirable management capacity analysis." The analysis will involve the following methods/procedures:

a. The selected consultant will identify, describe, and analyze up to five types or models, with representative examples, of organizations/institutions capable of providing desirable management capacity. The selected consultant will consider organizations/institutions currently in existence and functioning in Colorado, as well as those elsewhere in the United

² The WSRF Grant Application outlined the creation of and coordination with the Task Force to develop the work plan and grant application. This work has been completed and is not anticipated as a part of Task 1 summarized herein. The percentage of budget indicates the remaining project funds available for the Task 1 effort.

States, drawing upon relevant information from literature, interviews/phones calls, and direct experience. The selected consultant will also consider whether and how existing Coloradobased organizations/institutions could be expanded or altered to provide desirable management capacity. Finally, the selected consultant will consider whether any given organization/institution (e.g., new, existing, or some hybrid) might be phased in over time as components of the SPRWDC are developed in response to growing demand. At a minimum, for each example of an organizational/institutional type or model, the requested analysis should provide the following information (to the extent applicable):

- i. organizational/institutional mission/function
- ii. organizational/institutional history, including principal reason(s) for creation
- iii. service area
- iv. principal assets, if any
- v. legal authorities
- vi. budget history and revenue mechanism(s)
- vii. governance/decision-making processes
- viii. organizational chart
- ix. nature and quality of relationship to general and special purpose governments that may deliver services/govern within service area
- x. significant adaptations to changing circumstances experienced over the life of organization/institution and how these adaptations have been addressed by those in decision-making capacities
- xi. phasing considerations
- b. The selected consultant will distill characteristics of organizational function and form common to successful regional water organizations/institutions, and report on findings as an early deliverable of this task. Information contained in this early deliverable will be used to inform preparation of a series of questions to be asked of potential participants/end-users/beneficiaries of SPRWDC waterduring focused technical outreach that is envisioned as part of Task #3, as well as outreach conducted to ascertain better information regarding demands envisioned as part of Tasks #4 and #5. Questions will be designed to elicit information from potential participants/end users/beneficiaries regarding "desirable management capacity" characteristics they would value most in an organization designed to implement the SPRWDC.
- c. The selected consultant will rank (e.g., high, medium, low) each identified organizational/institutional type or model based on criteria to be developed in consultation with project proponents and the Task Force. Example criteria may include: relative ease of establishment, relative consistency with existing organizations/institutions, relative efficiency of operations, relative transparency of governance structure/processes; and degree with which a given organizational/institutional type or model reflects preferences gleaned from discussions envisioned as parts of Tasks #3-5.
- d. The selected consultant will include summary tables that allow easy comparisons between identified organizational/institutional types or models, with examples being used to help illuminate points of comparison and contrast. Relative ranking of organizational/institutional types or models, using criteria to be identified, should be provided in a side-by-side comparative table. For ease of use and comprehension, description of each option shall be limited to two to three pages.

- a. Technical memorandum describing up to five types or models, with representative examples, of organizations/institutions capable of providing desired management capacity.
- b. Technical memorandum summarizing characteristics common to successful regional water management/development organizations/institutions. The selected consultant will produce this deliverable on a schedule that allows the information to be used in meetings envisioned as part of Tasks #3-5, described below.

Task 3 - Municipal and Industrial Demands (~15 percent of project funds)

The intent of this Task is to improve current understanding of municipal and industrial demands that might be served by the SPRWDC, deepen and broaden understanding of the SPRWDC among potential municipal and industrial participants/end-users/beneficiaries, and gather information to inform work to be performed in Task #2. The selected consultant will develop and execute "entity-specific" meetings with a wide range of municipal utilities, industrial users, special districts, rural domestic water supply organizations, and other similar organizations operating in regions of the South Platte Basin likely to experience high rates of growth in future water demand.

The purposes of these meetings are to:

- reach out to and educate potential municipal and industrial participants/endusers/beneficiaries (referred to as potential municipal entities) of Concept water regarding the SPRWDC's potential to help address unmet municipal and industrial demands in the South Platte Basin; and
- gather more specific information on volume, timing, quality, opportunities for reuse, and locational parameters that will characterize the demand profiles of prospective municipal and industrial end-users of SPRWDC water.

<u>Method/Procedure:</u>

The selected consultant will:

- a. Identify and contact representatives of potential municipal entities with assistance from the project proponents and Task Force members, in order to secure meetings to:
 - i. further introduce potential municipal entities to SPRWDC; and
 - ii. acquire information related to demands and desirable characteristics of the organization/institution that may be created/adapted to implement the SPRWDC (see Task #2 above).

Multiple meetings are assumed to be necessary to complete this Task.

- b. Prepare for meetings by, in part, developing a brief (i.e. 1-2 pages) operational summary that describes how the SPRWDC could address challenges associated with the entities' ability to develop new water supplies while lessening pressures to secure these supplies through permanent dry-up of irrigated agricultural land in the South Platte Basin.
- c. Conduct meetings and any follow-up that may be needed, including revising operational summaries as may be necessary to reflect the results of the meetings, noting entities' willingness/interest, or lack thereof, in helping to refine the SPRWDC to a point where decisions regarding its implementation can be made, and documenting any concerns that may be expressed about the SPRWDC.

- a. Background documents: While remaining attuned to the need for discretion around any information that is proprietary or simply private, and to the extent advisable and consistent with good practice, the selected consultant will prepare a brief operational summary in advance of and in preparation for each potential municipal entity outreach meeting, that includes:
 - i. a general articulation/description of the SPRWDC and how its yield might augment the entities' existing water supply portfolio
 - ii. a description of how the SPRWDC could address disadvantages that may be embedded in the potential municipal entity's future water supply plans (i.e., "buy and dry" that leads to a loss of irrigated acres; single-purpose/user water development strategies that overlook partnership opportunities; and scale economies that could come from multipurpose/user approaches)
- b. Revised operational summary that reflects the following information:
 - i. After each potential municipal entity meeting, the selected consultant will revise the operational summary with information as to what has been learned about the entity's future water demand profile (e.g., timing, quantity, location, and quality of future water supplies) and the "desirable management capacity" characteristics, if any, the potential municipal entity likely would want reflected in a partner organization whose purpose is to implement the SPRWDC.

Task 4 - Agricultural Demands and Supplies (~9 percent of project funds)

The intent of this Task is to refine the current understanding of agricultural demands and supplies that might be served by and contribute to the SPRWDC, deepen and broaden understanding of the SPRWDC among potential participants/end-users/beneficiaries, and gather information to support completion of Task #2. The selected consultant will characterize current and future agricultural shortages in Districts 1, 2, and 64 at a level of detail sufficient to make determinations about whether and how the SPRWDC water not used by potential municipal entities could be used to meet some agricultural demands. The selected consultant will also characterize how SPRWDC water derived from ATMs and unused recharge credits could be made available for use by the SPRWDC in ways mutually beneficial to irrigators and other SPRWDC beneficiaries.

Method/Procedure:

- a. The selected consultant will conduct an analysis of agricultural irrigation demands in Districts 1, 2, and 64, using SWSI, the BIP, information from the Northeast Colorado Water Cooperative, existing research on Alternative Transfer Methods, the South Platte Decision Support System, and other relevant data. Information to be provided shall include specific water-short ditches, water-short augmentation plans, and other agriculturally-related water uses that might benefit from increased supplies from the SPRWDC. Additionally, the consultant will summarize the frequency, seasonality, degree to which these ditches, augmentation plans, and other uses are water short, to the extent known, including a description of the type of shortage (i.e. augmentation supply limitation, hydrological shortage, legal shortage) and the total number of acres are shorted.
- b. The selected consultant will review the results of this analysis with irrigators and/or augmentation providers in up to three meetings, to be convened with assistance from the South Platte Roundtable members, and will revise the information produced through Task #4a, as necessary, to reflect additional information generated though these meetings.

- c. The selected consultant will describe additional SPRWDC components and operational characteristics, if any, that would allow the SPRWDC to meet at least some unmet agricultural demands in Districts 1, 2, and/or 64. Further, the consultant will be directed to summarize the extent and frequency with which unmet agricultural demands could be met by the SPRWDC, as it may be adjusted based on additional information. Information should be developed in such a way that can be easily incorporated into revised SPRWDC modeling (see Task # 7).
- d. The selected consultant will identify potential reaches or regions along the South Platte from which SPRWDC water derived from Alternative Transfer Methods (ATMs) and unused recharge credits could be generated and describe how water supplies derived from these sources could be stored, conveyed and utilized via the SPRWDC. It is noted that there are many water court considerations and legal challenges associated with potentially making use of ATMs and unused recharge credits in the SPRWDC. An evaluation of these constraints is not anticipated in this task due to budget limitations; rather these constraints should be identified and discussed in the technical memorandum developed for this task. The selected consultant will recommend additional work, if any, that could be conducted in the future to advance and catalyze a market for ATMs or other compensated exchanges of water rights in association with the SPRWDC, as well as additional work needed to support inclusion of unused recharge credits into Concept water supplies. Pending the results of this effort, the consultant may incorporate revised estimates of ATMs and excess recharge credits in the SPRWDC modeling (see Task #7).

Technical memorandum containing information described above for inclusion in the Final Report.

Task 5 - Environmental and Recreational Demands (~8 percent of project funds) The intent of this Task is to refine current understanding of environmental and recreational attributes and associated water supply needs that might be served by the SPRWDC, deepen and broaden understanding of the SPRWDC among stakeholders interested in advancing regionally important environmental and recreational water-related objectives, and gather information to support completion of Task #2. The selected consultant will identify and describe environmental and recreational attributes and associated water demands that could be met by SPRWDC operations, or otherwise addressed in the configuration, design, and construction of the SPRWDC, thereby addressing targeted environmental/recreational opportunities/needs unlikely to be addressed in the foreseeable future in the absence of the SPRWDC.

Method/Procedure:

- a. The selected consultant will use methodological approaches described in the South Platte/Metro BIP, Appendix D, to determine environmental and recreational attributes most likely to benefit by being incorporated into the planning and development of the SPRWDC.
- b. The selected consultant will consider, specifically and at a minimum, the following environmental/recreational opportunities/needs:
 - i. Platte River Recovery Implementation Program considerations
 - ii. Wetland/riparian habitat value creation/enhancement
 - iii. Aquatic habitat creation/enhancement
 - iv. Potential mitigation opportunities to address negative impacts to identified environmental or recreational attributes that may arise due to construction and operation of the SPRWDC.

- c. The selected consultant will review the results of this analysis with environmental and recreational representatives of the Roundtables, and other organizations that may be identified in consultation with the project proponents and the Task Force, in up to three meetings and will revise information developed as part of this Task to reflect additional information generated though these meetings.
- d. The selected consultant will describe additional SPRWDC components and operational characteristics, if any, that would allow the Concept to meet identified water demands associated with targeted environmental and recreational attributes. Pending the results of this effort, the consultant may incorporate environmental and/or recreation demands in the SPRWDC modeling (see Task #7).

Technical memorandum containing information described above for inclusion in the Final Report.

Task 6 - Water Treatment Strategies (~15 percent of project funds)

The intent of this task is identify a variety of water treatment strategies, ranging from highly engineered approaches to minimally engineered approaches that rely instead on managed natural systems to the greatest degree possible to achieve water quality objectives. These objectives will be defined early in the project by the selected consultants in consultation with the project proponents and the Task Force. The selected consultant will identify and analyze a range of up to five strategies, including conceptual-level costs, for addressing the water quality implications of the SPRWDC in both the near-term and longer-term. The strategies should incorporate any pertinent information obtained from outreach efforts under Tasks #3, #4, and #5.

Method/Procedure:

The selected consultant will, at a minimum, address the relative benefits and costs of a range of possible water quality treatment strategies, including:

- a. Treating water of typical South Platte River quality to known treatment standards using existing technologies and brine disposal strategies. For comparative purposes, this analysis might be viewed as the "baseline analysis" against which other strategies are compared. At a minimum, the baseline analysis shall include current water quality conditions along the South Platte River.
- b. Treating water of typical South Platte River quality to applicable treatment standards using a combination of natural pre-treatment options such as surface water blending and aquifer filtration in concert with other engineered treatment technologies and brine disposal strategies.
- c. Managing water quality typical of the South Platte River by developing a program to invest in non-point source reduction methods and strategies, potentially at multiple scales throughout the basin and focused on water quality constituents to be determined in consultation with the project proponents and the Task Force. The selected consultant will give further consideration to how such a program could be combined with other strategies such as natural pre-treatment (see Task #6b above) and existing treatment technologies and brine disposal strategies (See Task #6a), to achieve water quality objectives.

Deliverable:

Technical memorandum that describes each option included in the evaluation and compares costs and relative feasibility of all options.

Task 7 - SPRWDC Refinement and Modeling (~9 percent of project funds)

It is the intent of this task to adjust/refine the SPRWDC's infrastructure configuration and/or supply and demand assumptions to reflect new information, including information available from the South Platte Storage Study, information derived from Tasks #3-6, and other sources. The selected consultant will make adjustments/refinements to the SPRWDC modeling and re-evaluate its capacity to meet projected municipal, agricultural and environmental/recreational demands. As part of this task, the selected consultant should consider potential phasing opportunities in response to growing demands. Within the limitations of budget and schedule, the selected consultant will offer recommendations regarding preferred locations and capacities of discrete infrastructure components.

Method/Procedure:

The selected consultant will use the existing SPRWDC spreadsheet models³ for this task. The model will be provided to the consultant for their use in conducting the work for this task. Model refinements will consider the following:

- a. Input from the project proponents and Task Force;
- b. New information and refined understanding of demands derived from completion of Tasks #3-6;
- c. Relevant existing information resources, especially that contained in the recently completed South Platte Storage Study, regarding location/operation of new storage capacity (above and below ground) that corresponds with the SPRWDC hypothetical storage facilities;
- d. Ways to maximize exchange potential to efficiently "re-position" water in the basin for beneficial use without contributing to permanent dry-up of currently irrigated land, in conjunction with direct conveyance by pipeline
- e. Potential to phase the concept, particularly in relation to the timing of demand projections gleaned from tasks #3-6 and to cost considerations to be illuminated as part of Task #9.

Deliverable:

- a. Technical memorandum that describes key components of a refined/adjusted SPRWDC, how these components remain operationally linked, and new modeling results.
- b. Revised SPRWDC spreadsheet models.

Task 8 -Outreach and Education Plan (~9 percent of project funds)

The intent of this task is to plan for and support outreach and educational actions needed to deepen and broaden understanding of the SPRWDC and its potential benefits. The selected consultant will deploy relevant public relations and communication expertise to work with the project proponents and the Task Force to develop and, as resources permit, implement an outreach and education plan to complement and broaden outreach/education benefits derived through Task #1 and Tasks #3-5.

³ The SPRWDC spreadsheet models simulate the storage and allocation of concept water to meet demands under three concept alternatives, resulting in a range of concept yield. The spreadsheet models rely on information derived from the South Platte River Point Flow Model, which includes daily streamflow, diversions and call record information from the Denver gage to the Stateline gage along the South Platte River.

Method/Procedure:

In addition to working closely with the project proponents and the Task Force, the selected consultant will consider how existing outreach and communication resources that have been developed to support Statewide and Roundtable-specific water-related outreach and education activities, such as the <u>southplattebasin.com</u> website, mailing lists and calendars, can be used to develop and support implementation of the SPRWDC Outreach and Education Plan. To the extent budget and schedule limitations allow, the selected consultant will be encouraged to engage Roundtable members; other interested South Platte Basin Stakeholders; CWCB staff; and Water Education for Colorado staff to help implement Outreach and Educational actions identified in the Plan. It is expected that the selected consultant will interact with and utilize existing resources available from the South Platte and Metro BRT, specifically the Public Education and Public Outreach (PEPO) coordinators.

Deliverable:

- a. Outreach and education plan and, to the extent resources allow, its implementation plan. If available budget is insufficient to implement the plan, the deliverable will consist of the plan and an estimate of costs to implement the plan, along with an implementation budget.
- b. Consultant will compile copies of meeting agendas, content, mailing list, sign in sheets and other documentation such as survey responses or e-mail inquiries relating to the SPRWDC

Task 9 - Updated Cost Estimates (~10 percent of project funds)

It is the intent of this task to develop updated, conceptual-level cost estimates of the SPRWDC, taking into account any refinements to the configuration of the SPRWDC made as part of Task #7. The selected consultant will build on existing SPRWDC cost analyses, which will be made available to the selected consultant. Based on Task #3-5 findings related to the timing of future water demands and refinements to the SPRWDC, the selected consultant will also consider the cost implications of different approaches to phasing development of the SPRWDC.

Method/Procedure:

- a. Using the results of the refined SPRWDC modeling effort and original concept cost estimates (to be provided), the selected consultant will develop estimated costs for each of the concept infrastructure components. Treatment cost estimates will be included but presented separately due to likely disparities in the detail of understanding, even after completion of Task #6, of treatment infrastructure requirements in comparison with other SPRWDC infrastructure elements. These disparities notwithstanding, the selected consultant will make all reasonable efforts to ensure that cost estimates will be informed by the results of Task #6.
- b. Cost estimates will include design/build costs for each element, operational and maintenance costs, and projections of likely permitting costs.
- c. Cost estimates will normalize costs on an acre-foot basis for comparison to other water supply options.
- d. Cost estimates will consider how development of the SPRWDC could be phased to remain responsive to changing demands over time. Conversely, cost estimates will consider scale economies that may be achieved over the Concept's lifecycle by developing portions of the SPRWDC in advance of projected need.

Technical memorandum summarizing cost estimation methods and findings.

Task 10 - Final Report (~3 percent of project funds)

It is the intent of this Task to prepare a final report on work and work products associated with Tasks #1-9.

Method/Procedure:

The selected consultant will prepare a final report that summarizes options and information generated by Tasks #1-9 in an executive summary and organizes task-specific technical memorandum into appendices to the report.

Deliverable:

Final Report with appendices

Task 11 - Project Management (~6 percent⁴ of project funds)

Project management capacity will be necessary to manage and coordinate a team of consultants with diverse expertise and likely employed by several independent firms to adequately address all tasks.

Method/Procedure:

The selected consultant will designate a primary consultant with responsibility for management of subcontractors, invoicing, providing progress reports, engaging and interacting with the project proponents and the Task Force, and otherwise managing the project to successful conclusion. In essence, the selected consultant will put their Project Management Plan (Refer to Section 3.1.C) into action. This task envisions up to three consultant presentations to the CWCB, the Metro and South Platte Basin Roundtables, and/or other relevant groups. This task also envisions being responsive to communication/outreach needs/opportunities as they arise, within reason and limitations of budget and schedule, by working with the project proponents and the Task Force to determine which needs/opportunities to address and how best to address them as they arise. Ideally, the Expanded Outreach and Education Plan provided for by Task #8 will serve as a source of guidance with respect to which outreach/education opportunities should be addressed in what manner.

Deliverables:

Deliverables for this task will be associated with the specific project management components; including presentation materials, invoices, progress reports, schedules, and communications with the project proponents and others involved in the project effort.

⁴ The WSRF Grant Application outlined Grant Administration as part of Task 11. This work will be completed by the Lower South Platte Water Conservancy District and the budget associated with this effort has been removed from the RFP. The percentage of budget indicates the remaining project funds available for the Task 11 effort to be completed by the selected consultant.