

# South Platte Basin Implementation Plan Scope of Work

**South Metro Water Supply Authority** 

Project Number 050/225388

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#### **Purpose**

The purpose of this Scope of Work is to prepare a South Platte River Basin Implementation Plan (SP-BIP) for the Metro and South Platte Basin Roundtables (the Roundtables or two BRTs). The SP-BIP will be used by the State of Colorado in developing "Colorado's Water Plan" (CWP) and by water users and other stakeholders in the South Platte basin to meet the basin's long-term water supply needs. The SP-BIP will be based on previous work, supplemented with new analysis, and will articulate the major themes and concepts that the Metro and South Platte Roundtables would like included in the CWP. The SP-BIP will be developed through close interaction with the two BRTs and other interested parties and programs as provided below. The timing and content requirements set by the State through the Colorado Water Conservation Board (CWCB) will largely determine the level of detail incorporated in the SP-BIP. The State's process for development of the CWP continues to evolve and may require adjustments to this SP-BIP work scope if mutually agreeable to the South Metro Water Supply Authority (SMW) as the contracting/ fiscal agent, the two BRTs and HDR. The development of the SP-BIP will also require coordination with other programs, especially the work to be performed separately from this contract by the BRTs' Non-consumptive consulting team (NCT) as described in the "Coordination with Other Programs" section below.

#### **Scope Development Process**

This Scope of Work (Scope) for the SP-BIP was developed based on the Request for Proposal (RFP) issued jointly by the South Platte and Metro Basin Roundtables (BRTs), the HDR proposal submitted in response to the RFP, supplementary information and guidance documents issued by the CWCB (including the Staff Memo for the November CWCB Board meeting, the December 2013 "Basin Implementation Planning" newsletter and a December 2, 2013 scoping meeting with representatives of the two BRTs). It was concluded at the December 2<sup>nd</sup> meeting that the consulting team should present overviews of the proposed program to prepare the SP-BIP at the December 10 South Platte BRT meeting and the December 11 Metro BRT meetings. It was also concluded that the consulting team should participate in the December 12 meeting called by the CWCB to clarify the process and details for all the basin implementation plans and a December 13 meeting also called by the State to clarify their inputs to the SP-BIP. It is anticipated that this base Scope of Work may need to be modified though mutual agreement to respond to the State's evolving processes for development of Colorado's Water Plan (CWP).

#### **Coordination with Related Programs**

The execution of this Scope will involve coordination with other programs and processes as follows:

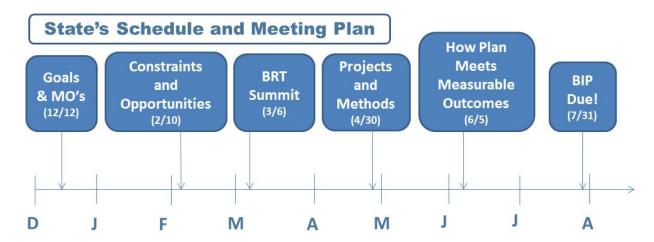
1. Nonconsumptive Needs and Uses. Concurrently with the execution of this Scope, the South Platte and Metro BRTs, through a second fiscal agent, Ducks Unlimited, are in the process of contracting with a consulting team to develop information on non-consumptive water needs and uses in the South Platte basin (the Nonconsumptive Use Team or NCT). Information from this process is to be integrated into the SP-BIP and will require coordination between the two consulting teams. This Scope of Work and associated budget estimates are based on receiving input from the NCT in formats that can be readily integrated into the SP-BIP and that the two BRTs are fully satisfied with the NCT approaches and work products. The HDR Team will

integrate the NCT inputs in the SP-BIP without additional QA/QC and will append the NCT documents to SP-BIP as independent work products.

- 2. <u>Stakeholder Meetings/ Input</u>. The quality of river basin and water supply planning processes can be significantly enhanced and better understood if the scope and interim work are presented to various interested groups in their customary settings and provisions are included to engage a limited number of these groups as the work progresses and as defined in Task 200 below.
- 3. Other Basin Implementation Plans (BIPs or Plans). Plans are being concurrently developed for the State's other river basins and this Scope includes coordination and meetings with other BRTs and the consultants developing these plans to the extent provided in Task 200. This engagement is in addition HDR Team attendance at the four coordination meetings being planned by the CWCB as outlined in the December 2013 "Basin Implementation Planning" newsletter.
- 4. <u>Interaction with CWCB and other BIP Consulting Teams.</u> The CWCB may identify the need for additional interaction or information exchange between the agency and/or Basin Implementation Plan consulting teams. This Scope includes provisions only for specified levels and types of coordination as specified in Task 200.
- 5. <u>Interaction with the State's other programs</u>. Based on input received at the December 13 coordination meeting with CWCB and its consultant (CDM-Smith) for its State Water Supply Initiative (SWSI) and Inter-Basin Compact Committee (IBCC), it is HDR's understanding that important input and documents will be received in timely fashion as provided in the meeting summary and other correspondence between the State and the two BRTs.

#### Schedule

Presented below are the State's currently planned meetings with the BRTs and their BIP consulting teams. These meetings lead up to the State's target date for submission of the BIPs to them by July 31, 2014.



To accomplish the State's scheduled with submission of a "draft" SP-BIP by July 31, 2014, milestones for the SP-BIP are being developed an will be communicated with the two BRTs in accordance with the Communication Plan (Task 200) to be submitted to the two BRTs in December 2013. This Communication Plan will provide the schedule for HDR's submittals to the two BRTs, the review schedules for the two BRTs and the due dates for HDR's submittal of final work products.

#### **BRT Involvement and Direction**

Continuous involvement of the two BRTs will be needed to meet the State's desired timeline and to develop a balanced plan that reflects the diverse interests in the basin as represented by the BRTs. HDR's successful execution of this Scope will require that a designated representative of each basin roundtable and its fiscal agent be available continuously to provide input and direction and that a "core" BIP Committee representing the BRTs is available for brief weekly status conference calls and bi-weekly "shared screen" calls. Consistency in attendance at these calls and meetings is important in meeting the State's desired schedule.

Additional input from the greater BRT membership will be solicited through the use of the online tool Mind Mixer. BRT members will be provided a link to the site and instructions on how to participate. This will allow for members to provide separate comments and respond in accordance with their daily schedules. Pertinent questions will be posed to them and responses will be requested to meet the SP-BIP development schedule.

#### **Work Tasks**

The program for executing the coordination program described in general above is detailed in Task 200 below. In addition to this task, the Scope includes five additional tasks as provided below. The level of detail and analysis prescribed in these tasks is constrained by the schedule for completion of the CWP and the tools (for example, hydrologic models) available to perform detailed work. In many cases, the Scope is heavily focused on the compilation and presentation of considerable existing analyses rather than the execution of new/ original analysis. The primary references that will be used for each primary task are listed in a table at the end of the Scope.

Task 100 – Project Management and Administration

Task 200 – Communication and Stakeholder Outreach

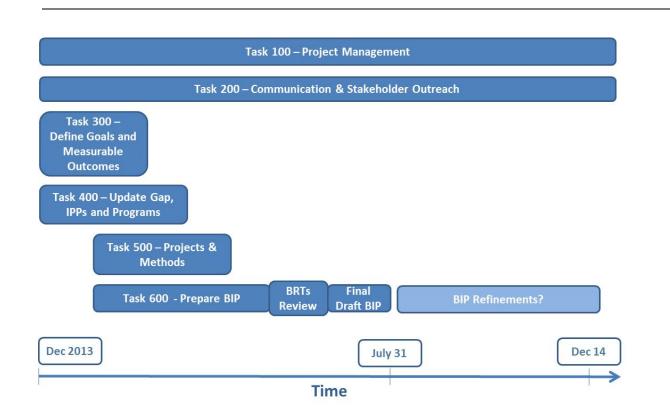
Task 300 – Define Goals and Measurable Outcomes

Task 400 – Update the Water Supply Gap, IPPs, Watershed Health and On-going Programs

Task 500 – Projects and Methods for Future Water Supply Options

Task 600 – Prepare Basin Implementation Plan

Shown below is the general arrangement of the work tasks needed to submit an SP-BIP to the State by July 31, 2014.



#### TASK 100 – PROJECT MANAGEMENT AND ADMINISTRATION

This task consists of the overall management of the project and will include the monitoring and control of the project budget, scope of work and schedule, management of the project goals and objectives, management and coordination of resources including staff scheduling, invoicing, coordination and management of team members. Management effort for each subsequent primary task (i.e., Task 200, Task 300, etc.) will be included under those tasks. This task will also include implementation of HDR's Quality Assurance (QA)/Quality Control (QC) program to ensure completion of internal QA/QC on primary deliverables before they are submitted.

### **Methods and Assumptions:**

- 101. <u>Develop internal Project Guide</u> to be used by team members. The guide will document Project activities, constraints, guidelines, budget and schedule.
- 102. Quality Control Plan. Develop Quality Control Plan to be incorporated into project guide
- 103. <u>Project Management Calls</u>: Weekly project status calls will be conducted with the BIP Committee to update the status of the tasks. They will alternate between short-duration (30 minutes) conference calls and more in-depth calls using screen-share technology to review key issues as they develop. Assume 2-4 designees from the BRTs will provide primary contact and communication for the rest of the BRT membership. HDR will prepare agendas, facilitate each call, and prepare brief summaries with action items. If an online tool such as Mind Mixer is used, assume forty hours for one HDR staff person to manage content and comments received. Assume bi-weekly conference calls with the executive committee for input and more in depth updates.

### TASK 200 - COMMUNICATION AND STAKEHOLDER OUTREACH

**Purpose.** In accordance with the Integrated Scope of Work from the RFP, "The Metro and South Platte Basin Roundtable Education Liaisons will work with their basins to develop Education Action Plans that reach out to decision makers and potential project proponents. These plans will help the decision makers to understand the status of the basin's consumptive and non-consumptive needs, planned projects, current river operation and opportunities and constraints associated with different hydrologic cycles."

The purpose of this Task 200 is to articulate the communication plan for working with the BRTs, to support the BRTs with the stakeholder outreach component of the BIP, and to facilitate data gathering and public involvement resulting in a defensible document.

**Background.** The South Platte Basin is comprised of a diverse group of stakeholders whose involvement and support of the Basin Implementation Plan (BIP) will be vital. Successful engagement of these stakeholders will

depend on the implementation of the identified outreach strategy and tools. This task is intended to cover the following responsibilities presented in the RFP:

### **BRT Consultant Responsibilities from the RFP**

#### **Education, Participation, and Outreach**

- Solicit input from stakeholders on water solutions and needs
- Educate decision makers on water solutions and needs
  - Conduct regional workshops with separate M&I, Agriculture, and nonconsumptive meetings if needed to both educate and receive input
  - o Demonstrate commonalities among stakeholders and regions for broader and multi-purpose projects
  - o Provide a facilitator for these discussions
  - o Identify ways in which stakeholders can participate in the BIP
- Request input from decision makers on legislation and solutions
- Identify ways to get public involvement

The RFP also indicates that CWCB Responsibilities are as follows: "CWCB will provide support to the education liaisons and the BRTs. In addition, CWCB will provide the consensus messages, contact information for decision makers and other support."

**Methods and Assumptions.** The South Platte Basin Roundtables represent a diverse constituent base and stakeholders who will require unique communication and outreach strategies. These targeted strategies will be implemented in a strategic and timely manner for efficient use of time and budget.

- 201. <u>Monthly Basin Roundtable Meetings.</u> Assume two roundtable meetings each month (one South Platte Roundtable, one Metro Roundtable). Attendance at each regularly scheduled Basin Roundtable meeting by up to three team members.
- 202. <u>Joint South Platte and Metro Roundtable Meetings.</u> Assume one joint meeting of the SPBRT and MBRT membership to review the Draft Final BIP to be delivered to CWCB in July 2014. Assume the option of a satellite conference (with a remote location arranged in SPBRT area, and additional location in the Denver Metro area) with duration of four (4) hours. Assume attendance by up to four (4) HDR staff at primary location, one (1) at satellite location. Meeting will provide a final update to the membership before the July 2014 submittal of materials to CWCB for incorporation into Colorado's Water Plan.
- 203. <u>Scoping and Kickoff Meetings with BRT Representatives</u>. Assume up to two meetings with BRT representatives to finalize approach for the SP-BIP attended by up to two HDR team representatives.
- 204. Meetings with Other Identified Stakeholder Groups
  - 204.1 <u>Agricultural Community</u> Assume one (1) targeted meeting with stakeholder(s) identified by the BRT's to solicit input on the BIP. Assume attendance by up to four (4) HDR staff, and several BRT members. Assume that HDR will send e-mail invitations for the

- meetings, identify the meeting space and provide conference call services, where appropriate.
- 204.2 <u>Business community</u> Assume one (1) targeted meeting with stakeholder(s) identified by the BRT's to solicit input on the BIP. Assume attendance by up to four (4) HDR staff, and several BRT members. Assume that HDR will send e-mail invitations for the meetings, identify the meeting space and provide conference call services, where appropriate.
- 204.3 <u>Non-profit community</u> Assume one (1) targeted meeting with stakeholder(s) identified by the BRT's to solicit input and provide education on the BIP. Assume attendance by up to four (4) HDR staff, and several BRT members. Assume that HDR will send e-mail invitations for the meetings, identify the meeting space and provide conference call services, where appropriate.
- 204.4 <u>Public Officials</u> (Summer 2014 once the BIP has been drafted) Outreach for the local public officials will be developed and closely coordinated with members of the BRTs. HDR will provide talking points for BRT members to deliver to their local elected public officials. Assume two (2) different stakeholders messages for BRT members to deliver (one prior to the release of the Draft Final BIP in July 2014, one after July 2014). Assume 8 hours for two (2) HDR staff to develop messaging for elected public officials.
- 204.5 <u>General Public</u> (Summer 2014 once the BIP has been drafted) Assume development of an online meeting tool to provide information on the BIP process, the purpose of the BIP and how it has been developed. Assume direct cost for online meeting tool in addition to 40 hours for HDR staff to develop content and 40 hours for coordination to create the site. Assume the use of one of the BRT member organizations that can provide video services; HDR will provide script and video editing. Once developed, the online meeting will also serve as a tool to facilitate the compilation of comments from the general public. This tool will either be posted directly to the Colorado Water Plan website designated to the *SP* BIP or will be hosted through a separate web page. HDR will continue to document and analyze public comment submitted through the online meeting tool at a rate of four (4) hours per month.
- 204.6 <u>Interbasin Meetings</u>. Assume two (2) meetings of 2-4 hours in duration with representatives outside of the South Platte basin. Assume that one of these meetings is held with representatives from the Republican River Basin, specifically water providers and leadership. Assume that HDR provides 2 staff to schedule, plan and facilitate these meetings with the attendance of at least two (2) SP BIP Committee members. Assume 8 hours for HDR staff to develop material for these meetings. Assume that HDR will send email invitations to the meetings, identify the meeting space and provide conference call services, where appropriate.
- 205. <u>CWCB Board Meetings</u>. HDR will help develop agendas and presentation materials for up to three (3) CWCB Board meetings and will participate with up to three team members. Brief meeting summaries and action items will be prepared for each meeting.

- 204 <u>IBCC Meetings</u>. HDR will help develop agendas and presentation materials for up to three (3) IBCC meetings and will participate with up to three team members. Brief meeting summaries and action items will be prepared for each meeting.
- 205 <u>Post-Draft BIP Activities</u>. Following the submission of a Final Draft BIP to the State on July 31, 2014, additional public involvement and outreach may be warranted to explain and revise the SP-BIP prior to the submission of the draft CWP to the Governor on December 10, 2014. HDR will help the two BRTs strategize on potential outreach activities and help develop agendas and presentation materials for up to three outreach meetings to be attended by up to three HDR team members. Brief meeting summaries and action items will be prepared for each meeting.

#### Deliverables.

- 1. A BRT Communication Plan will be prepared to provide concise information for the membership of the BRTs including a schedule of the meetings, and contact information. The communications plan will also include an overview of stakeholder groups for public involvement, education and outreach as well as suggested methods. It is anticipated that this will be provided to the BIP Committee by the first week of January 2014. Communication Plan will include a media strategy that will allow for two (2) press releases. Assume that the BRTs have a designated spokesperson; HDR will be available for media prep and provide talking points. HDR will not interact with the media on behalf of the SP-BIP.
- 2. HDR will attempt to provide material that requires action by the BRTs at least one week in advance via e-mail. Assume one (1) round of edits per submittal.
- 3. HDR will attempt to provide agendas and informational materials that do not require action by the BRTs, at least 2 days in advance via e-mail. Limited hardcopies focused on summary material may be provided.

### TASK 300: DEFINE GOALS AND MEASURABLE OUTCOMES

**Purpose and Background.** This task is required to provide information requested by the State to help guide the development of the CWP.

**Methods and Assumptions**. Goals and Measurable Outcomes will be developed through the Task 200 activities and in close coordination with the CWCB, specifically through the completion of the BIP Integrated Scope of Work Phase I being completed by CWCB and their consultant CDM Smith. The Phase I SOW includes the development of Goals and Measurable Outcomes and, as follow-up item from the December 13<sup>th</sup> coordination meeting with the CWCB, additional information has been provided by the State for the BRTs to adapt into the SP-BIP. Additional information that may be helpful in developing the Goals and Measurable Outcomes includes the 2011 Basin Reports, SWSI 2010, SWSI 1, the IBCC efforts, the Basin Roundtable Summits, recent basin discussions, and the Phase I Integrated SOW. The CWCB will continue to support the BRT's in finalizing their sections to inform the Colorado

Water Plan. The HDR Team will prepare an initial draft of basin goals and measurable outcomes, solicit input from the BRTs through the Task 200 outreach program and integrate the results into the SP-BIP.

**Deliverables**. Draft and Final Goals and Measurable Outcomes technical memoranda formatted for inclusion in the Draft SP-BIP.

#### TASK 400 - UPDATE THE WATER SUPPLY GAP, IPPS, WATERSHED HEALTH AND ON-GOING PROGRAMS

**Purpose.** This task will update information on the South Platte basin: a) water supply gap; b) identified projects and processes (IPPs); c) watershed health and d) on-going water management programs. The water management program update will include programs focused on both consumptive and nonconsumptive uses. Due to schedule constraints for development of the BIP, descriptions of on-going programs will need to be based on information to be provided by South Plan basin water agencies and NGOs. Information on non-consumptive water uses and needs is to be provided by the Nonconsumptive Team (NCT) under a separate contract with Ducks Unlimited operating as the "fiscal agent" for the CWCB and the two BRTs. Task 400 will involve coordinating schedules and informational needs with the NCT and incorporating the information they provide into the BIP.

Important objectives for this task include obtaining updated information on: a) existing programs and how successful they have been and b) the potential for expanding them. More specifically, this task will:

- (1) Update the estimated Municipal and Industrial (M&I) and agricultural water supply gaps in 2050 to refine the location and timing for additional consumptive projects and methods for meeting the future water supply needs within the South Platte River basin.
- (2) Identify potential projects and methods for potential consumptive uses needed to meet updated water supply gaps.

**Background.** Colorado's population surpassed 5 million people in the summer of 2008, and it is expected to double to 10 million people by 2050. The majority of the growth will be on Colorado's Front Range, specifically within the South Platte River Basin. This population growth will drive a significant need for additional water to meet future M&I demands. The CWCB updated the Statewide Water Supply Initiative (SWSI) projections in 2010 for additional water by 2050 to meet M&I needs with passive conservation included. The CWCB also updated the M&I Gap Analysis in June 2011 identifying the location and timing of the M&I Gap by basin and county.

Water providers within the South Platte and Metro Basins have ongoing water supply and management activities – known as Identified Projects and Processes (IPPs) – to address the increasing water demands. These IPPs, which are outlined in SWSI 2010 and the 2011 M&I Gap Analysis, are categorized as follows:

- Grow into existing supplies
- Conservation
- Reuse of existing or future consumable water supplies
- Agricultural transfers
- New water supply projects

### **South Platte Basin Implementation Plan**

### Exhibit A – Scope of Work

Even if water providers are fully successful in implementing all of their IPPs, they can only meet a portion of the identified need, leaving a "gap" in water supply needs. To the extent these IPPs are unsuccessful; the gap will be larger and will occur sooner.

**Methods and Assumptions**. Utilizing the listed reference documents, direct input from members of both South Platte and Metro Basin Roundtables, and input received from other stakeholders through public outreach activities, update each of the following water supply and management activities within the South Platte and Metro Basins:

#### 401. Conservation

- 401.1 Review existing M&I conservation programs, methods, and regulatory requirements in relation to existing IPPs and incorporate information from the Metro RT Conservation White Paper.
- 401.2 Identify potential opportunities or methods, if any, for expansion of M&I conservation practices based on input from the South Platte water supply agencies and the most recent assessments made by the CWCB.

### 402. Reuse

- 402.1 Review existing M&I reuse programs, methods, and regulatory requirements in relation to existing IPPs. Review situations where identified IPPs involving reuse supplies (such as the WISE project) may be double counting potential yields for reuse programs.
- 402.2 Identify potential opportunities or methods, if any, for expansion of M&I reuse practices based on input from the South Platte water supply agencies.

### 403. <u>Identified Projects and Practices</u>

- 403.1 Review current status of each South Platte Basin and Metro Basin IPP identified in SWSI 2010 and June 2011 Basin M&I Gap Analysis (34 for Metro Basin and 21 for South Platte Basin) with project sponsor(s) in order to:
  - Confirm yield assumptions and anticipated implementation dates
  - Identify issues/constraints associated with project implementation
- 403.2 Develop a list of any IPPs that were not included in SWSI 2010.
  - To the extent possible, utilize yield projections from project sponsor(s). If yield projections are not available, develop yield projection using same methodology from SWSI.
- 403.3 Update list of IPPs and associated yield assumptions as needed to refine the 2050 M&I water supply and water demand gap calculations for the South Platte and Metro Basins. This information will be needed to more accurately define the location and timing for additional consumptive projects and methods needed to close the gap.

### 404. <u>Agricultural Needs and Alternative Transfer Methods (ATMs)</u>

- 404.1 Review Agricultural water supply needs within the Basins.
- 404.2 Review status of ATMs within Colorado (i.e., CWCB pilot programs, Flex Water Market proposed House Bill in 2014).
- 404.3 Develop database for agricultural needs, supplies and gaps. It is anticipated that this database would be similar to the M&I database and will consider the approaches being developed by the Arkansas and Gunnison BRTs including the consideration of the general relationship between agricultural diversions and return flows with meeting

# non-consumptive needs. It is not anticipated that explicit hydrologic or water allocation modeling will be done to evaluate these relationships.

- As a component of public outreach effort, collaborate between M&I water users
  that have Agricultural Transfers as IPPs and agricultural water users to develop a
  reconnaissance analysis of viable potential projects and estimate the potential yield
  from potentially viable ATM projects.
- 405. <u>Watershed Programs</u> The Integrated Scope of Work from the RFP defined activities that should be conducted by the BRTs that will involve working "closely with local, state, and federal land agencies to identify watershed protection projects and methods that would protect critical water supply from being harmed by fire or other hazards or mitigate damages already incurred." A wide range of activities were then provided for the BRTs to address. The Integrated Scope of Work assigned very limited activities to the BRT Consultant as enumerated below and estimated only \$5,000 in fee to perform them. It is assumed that the BRTs will determine the extent to which they will execute the remainder of the work. The primary watershed health issue highlighted in the Integrated Scope of Work was fire-related hazards. The Scope was drafted prior to September's devastating South Platte basin flooding and this very major issue could be considered among "other hazards" cited above. It is also likely that important information may be developed by the NCT and provided for inclusion in the SP-BIP. Therefore, the activities to be performed under this SOW are as follows:
  - 405.1 As a component of the public outreach effort, conduct a facilitated meeting to determine where additional Watershed Protection Plans need to be developed within the South Platte Basin that provide specific actions needed to protect reservoirs, intakes, water transportation and distribution structures, and other facilities from high-severity wildfires.
  - 405.2 Identify potential watershed health issues including degradation of water quality and diminishing environmental and recreational qualities in the South Platte River basin.

### 406. Non-consumptive Uses and Needs

- 406.1 Coordinate with the NCT on schedule and their anticipated information and work products to be incorporated into the BIP
- 406.2 Incorporate NCT information into the updated gap analysis
- 407. <u>Incorporate Updated Consumptive and Non-consumptive Gap Analysis</u> Work with CWCB to incorporate the most recent Gap Analysis completed under the Integrated Scope of Work— Phase 1. This new data will be incorporated into the existing gap analysis done through the Gap Analysis Memorandum (June 22, 2011). Additional analysis on the consumptive and non-consumptive gap is not anticipated as a component of this scope of work.

### Deliverables.

1. Technical memorandums for Tasks 401 through 407 formatted as sections for the SP-BIP. It is anticipated that each technical memo will be approximately 5-15 pages long.

### TASK 500 - PROJECTS AND METHODS FOR FUTURE WATER SUPPLY OPTIONS

**Purpose.** This task builds on the information developed in the previous two tasks to identify potential options to meet future South Platte basin consumptive and non-consumptive water needs. Per the Integrated Scope of Work in the RFP, "The Metro and South Platte Roundtables will identify projects and methods that meet their future water supply needs. The initial focus of the basin implementation plans are on in-basin projects, including conservation. One of the goals identified by SWSI and the IBCC is to develop additional multi-purpose, regional, or cooperative projects that meet the needs."

**Background.** The Integrated Scope of Work in the RFP also indicates that the CWCB will support the BRTs in "examining opportunities and constraints and going through a decision process to determine which projects and methods should be implemented." The BRTs are invited to make requests to the CWCB for any stakeholder meetings to further develop projects and methods. The CWCB will help host and provide leadership in stakeholder workshops to further explore which projects and methods could be developed that meet the basin's needs. The CWCB also indicates that it will recalculate the gap to assist the consultant.

**Methods and Assumptions**. Colorado's Water Plan will be enhanced if consistent, or at least similar, methods of developing solutions are used by all of the basins. The Basin Implementation Plan guidance documents and most recent "fact sheet" issued by the CWCB and the meetings to be hosted by them will enhance the ability of the State to integrate the basin plans into a single coherent document. The HDR Team will work closely with the CWCB representatives to adapt the State's proposed processes to the SP-BIP.

- 501. <u>Conservation, Reuse and IPPs</u>. For the SP-BIP, the level of additional municipal and industrial conservation and reuse and the degree to which IPPs might contribute to reductions in the consumptive use supply gap that were developed in Task 400 will be used to determine the potential magnitude of additional water supply that may be needed. It is anticipated that the timing and general location of the additional water conservation, reuse and IPPs will be consistent for the alternative levels of water demands and alternative configurations of water supply projects and methods to be considered in this task.
- 502. <u>Agricultural Transfers and Alternative Transfer Mechanisms</u>. For the SP-BIP, the degree to which agricultural water needs are impacted by potential transfers and ATMs will be capped in accordance with the Goals and Measurable Objectives defined in Task 300.
- 503. <u>Non-consumptive Use.</u> Working closely with the NCT, a timeline will be developed for anticipated deliverables to be evaluated and incorporated. As a separate report, the NCT's non-consumptive use report will be reviewed approved by the BRT's and will be incorporated into the final BIP by HDR.
- 504. Addressing the Water Supply Gap. Based on the previous SWSI and BRT work, it is anticipated that there will continue to be unmet municipal, industrial, agricultural, recreational and environmental water needs in the South Platte Basin even with full implementation of current and updated IPPs and expansion of conservation and reuse programs. Further quantification of nonconsumptive uses (NCU) may also affect the performance of previously identified projects and new supply options. Therefore, this task will identify and analyze multi-purpose, regional,

and collaborative projects to enhance supplies for the varied purposes and meet the basin's identified gaps. To develop new M&I and nonconsumptive opportunities, a reconnaissance analysis of potentially viable projects that meet the basin's water supply gaps in accordance with the identified goals and measurable outcomes will be performed. "Projects and Methods" with multi-benefit aspects will be considered including those that can help address a portion of the agricultural shortages. (A good example of this is the already defined IPP of Chatfield Reallocation where CCWCD will receive water for well augmentation and upstream water providers will receive water for municipal uses.) This concept is identified in the CWCB draft Goal and Measurable Outcomes.

Concepts for developing potential interbasin projects and methods will consider multipurpose projects and programs to address issues in both river basins based on an approach of letting identified issues (including the Goals and Measureable Objectives from each basin) drive the potential solutions. The work will focus on identifying the benefits and challenges of two types of concepts as follows:

- a. One large interbasin project that helps meet the basin's identified water supply gaps
- b. A series of smaller projects which collectively help meet the basin's identified water supply gaps

New supply projects involving transbasin supplies will likely involve variable concepts and performance affecting the yields available to the South Platte. The variability in performance and water deliveries may result from hydrologic variability, complex operational constraints, flexibility in future operations including those that may result from adaptive management processes and other factors. The two types of concepts for interbasin projects may also be combined with potential opportunities to incorporate conjunctive use of surface and groundwater supplies. Other methods to enhance the performance and reliability of the interbasin supplies include combining them with interruptible supply agreements and ATMs, surface storage, and ASR opportunities. A key element in the assessing the attractiveness of these types of projects will be characterizing the need for near-term selection of concepts and/or projects versus preserving options to pursue in the future. Potential types of funding that may be available for multi-purpose projects will also be discussed. It is not anticipate that modeling of project yields would be performed for these concepts.

#### Deliverables.

1. Technical memorandums for Tasks 501 through 504 formatted as sections for the SP-BIP. It is anticipated that each technical memo will be approximately 5-15 pages long.

#### **TASK 600: PREPARE BASIN IMPLEMENTATION PLAN**

**Purpose.** This task will summarize the work performed under this contract.

**Background.** The State's schedule for the development of the BIPs is to have them completed by July 31, 2014. The SP-BIP will be developed to maximize the useful information to be provided for the development of the CWP in a timely basis. It is believed that additional input from the BRTs will be needed from the BRTs from July 31 through the submittal of the draft CWP to the Governor on December 14, 2014 and beyond as the CWP is finalized.

**Methods and Assumptions**. Technical memos and workshop presentations will be organized to facilitate incorporation into the CWP according the following Table of Contents provided in the CWCB's BIP Draft Guidance document (no date). It is assumed that key input for Sections 1, 2, and 3 outlined below will be provided by the CWCB within the Phase I BIP Integrated SOW. Similarly, the information for Section 4.7 and key portions of Section 5 will be developed by the NCT. In addition, Sections 5 and 6 of the BIP will be defined by the CWCB and incorporated in the BIP. As the SP-BIP is drafted, the HDR Team will also coordinate with the CWCB to update Basin Fact Sheets based on the content of the SP-BIP.

xecutive Sui	mmary						
Section 1	Basin Goals and Measurable Outcomes						
Section 2	Evaluate Consumptive and Nonconsumptive Needs 2.1 Nonconsumptive Needs 2.2 Consumptive Needs						
Section 3	Evaluate Consumptive & Nonconsumptive Constraints and Opportunities 3.1 Current Basin Water Operations and Hydrology 3.2 Water Management and Water Administration (Optional) 3.3 Hydrologic Modeling (Optional) 3.4 Shortages Analysis						
Section 4	Projects and Methods 4.1 Education, Participation & Outreach 4.2 Watershed Health 4.3 Conservation Projects and Methods 4.4 New Multi-Purpose, Cooperative, and Regional Projects and Methods 4.5 M&I Projects and Methods (i.e. projects, conservation, reuse, drought planning) 4.6 Agricultural Projects & Methods 4.7 Nonconsumptive Projects and Methods 4.8 Interbasin Projects and Methods (optional)						
Section 5	Implementation Strategies for the Projects and Methods						
Section 6	How the plan meets the Roundtables' Goals and Measurable Outcomes						

### Deliverables.

1. Draft and Final South Platte Basin Implementation Plan.

## **Primary Reference Documents**

Date	Document Title	TASK 100: PROJECT MANAGEMENT AND ADMINISTRATION	TASK 200: COMMUNICATION AND STAKEHOLDER OUTREACH	TASK 300: DEFINE GOALS AND MEASURABLE OUTCOMES	TASK 400: UPDATE WS GAP, IPPS, WATERSHED HEALTH AND ON-GOING PROGRAMS	TASK 500: PROJECTS AND METHODS FOR FUTURE WATER SUPPLY OPTIONS	TASK 600: PREPARE THE BASIN IMPLEMENTATION PLAN
2010	IBCC Report			Χ		Х	
2004	SWSII			Χ		Χ	
2010	SWSI Update		Х	Χ	Х	Χ	
	<ul> <li>M&amp; I Demand Data</li> <li>Final Gap Analysis         <ul> <li>Calculations</li> </ul> </li> <li>Agricultural         <ul> <li>Shortages by water</li> <li>district map</li> </ul> </li> </ul>						
June 2011	South Platte Basin Report		Х	Х	Χ	Х	
	Flaming Gorge Task Force Final Report					Х	
2004	South Metro Study Board Report		Х		Х		
	East Slope Paper and Polling Report		Х	Х			
6/22/11	Gap Analysis Memorandum		Х	Χ	Х	Х	
June 2011	Metro Basin Report		Х	Х	Х	Х	
June 26, 2013	Douglas County Rural Water Supply Feasibility Study				Х		
05/25/12	Metro Roundtable Water Supply Paper		Х			Х	
	Metro Roundtable Reuse Paper		Х			Х	
11/14/11	Metro Roundtable Conservation Paper		Х			Х	
	Non-consumptive Database and Mapping				Х	Х	
	Basin Needs Decision Support System (BNDSS)			Х	Х		
2011	Basin Roundtable Portfolio and Trade-off Results		Х	Х			
	Summary of all Current Agricultural Demands and Projects—2050			Х	Х		

Date	Document Title	TASK 100: PROJECT MANAGEMENT AND ADMINISTRATION	TASK 200: COMMUNICATION AND STAKEHOLDER OUTREACH	TASK 300: DEFINE GOALS AND MEASURABLE OUTCOMES	TASK 400: UPDATE WS GAP, IPPS, WATERSHED HEALTH AND ON-GOING PROGRAMS	TASK 500: PROJECTS AND METHODS FOR FUTURE WATER SUPPLY OPTIONS	TASK 600: PREPARE THE BASIN IMPLEMENTATION PLAN
	(Spreadsheet)						
June 2013	Joint South Platte and Metro Basin Roundtable White Paper		Х		Х		
	OTHER DOCUMENTS NOT PUBLIC/ACCESSABLE						
Dec. 2013	Goals and Measurable Outcomes		Х				
On-Going	CWCB PEPO Workshop minutes/Notes		Х				
	Regional & Water Provider Master Plans		Х			Х	
	Water Conservation Plans		Х			Х	
	CWCB/CDM Updated Gap Analysis					Х	

### South Platte Basin Implementation Plan

### Exhibit A – Scope of Work

### Summary of Deliverables through July 31, 2014

#### Task 1:

1. Weekly summaries/ action items (34 total)

#### Task 2:

- 2. Communication Plan
- 3. Status reports and/or brief presentations for six Monthly BRT meetings (12 total)
- 4. Summaries/ action items from six Monthly BRT meetings (12 total)
- 5. Presentations for up to two Inter-basin BRT meetings (2 total)
- 6. Summaries/ action items from up to two Inter-basin BRT meetings (2 total)
- 7. Materials for review at up to seven (7) Stakeholder meetings
- 8. Summaries/ action items from up to seven (7) Stakeholder meetings
- 9. Materials and/or presentations at up to three (3) CWCB Board meetings
- 10. Materials and/or presentations at up to two (2) IBCC meetings

#### Task 3:

11. Goals and Measurable Outcomes Tech Memo (formatted for BIP Chapter)

#### Task 4: (six tech memos)

- 12. Task 401 Conservation Tech Memo formatted as a section for the SP-BIP
- 13. Task 402 Resuse Tech Memo formatted as a section for the SP-BIP
- 14. Task 403 IPP Tech Memo formatted as a section for the SP-BIP
- 15. Task 404 Ag and ATM Tech Memo formatted as a section for the SP-BIP
- 16. Task 405 Watershed Tech Memo formatted as a section for the SP-BIP
- 17. Task 406 Nonconsumptive Tech Memo formatted as a section for the SP-BIP (relying on information form the NCT)
- 18. Task 407 Update Gap Analysis Tech Memo formatted as a section for the SP-BIP

#### **Task 5:** (four tech memos)

- 19. Task 501 Conservation, Reuse and IPP Tech Memo formatted as a section for the SP-BIP
- 20. Task 502 Ag and ATM Tech Memo formatted as a section for the SP-BIP
- 21. Task 503 Nonconsumptive Tech Memo formatted as a section for the SP-BIP (relying on information form the NCT)
- 22. Task 504 Addressing the Water Supply Gap Tech Memo formatted as a section for the SP-BIP

### Task 6:

- 23. Draft BIP
- 24. Final BIP