

# Arkansas Basin Implementation Plan Update

## Work Plan

### Purpose

This Basin Implementation Plan (BIP) Update Work Plan describes the tasks, timelines and milestones, and budget for the Local Expert (LE) and General Contractor (GC) responsibilities.

This Work Plan describes:

- the processes and analyses necessary to develop the required content to update the BIP,
- desired basin-specific studies,
- topics and processes for collaboration with the roundtables, and
- specific work activities that will be carried out by the LE and GC team.

This Work Plan incorporates review and evaluation of the assumptions and outputs from the Analysis and Technical Update to the Colorado Water Plan (Technical Update) and considers refinements that may be undertaken. This Work Plan describes a program of work and the approach to address:

- Agricultural Needs,
- Municipal and Industrial Needs.
- Non-consumptive, Environmental and Recreational (E&R) Needs, and
- Forest and Watershed Health Goals.

Of particular interest in the Arkansas Basin is outreach, identification and conceptualization, and cost development for projects serving smaller, rural communities that may not have been adequately addressed in or omitted from the 2015 BIP.

### Work Plan

#### Introduction

The principal goals of the BIP update for the ABRT are summarized as follows:

- Identifying and defining the critical resource and infrastructure gaps of the rural, underserved counties, cities, and towns throughout the Arkansas Basin;
- A revised Master Needs List, alternatively known as the Projects List or IPPs, with previously tabulated projects updated with the best available information, projects completed or no longer being pursued screened out, and projects that were missed or have been identified since the 2015 BIP added.
- An updated BIP that has as its foundation that set of local projects arising from local jurisdictions into a basin-wide perspective incorporating the values of the diverse localities of Colorado's Arkansas River Basin.

#### Methodology

The ABRT has a number of standing working committees comprised of engaged members that reflect the multi-faceted interests and needs of the Basin. These are:

- Environment and Recreation — Chair: ~~Amber Shanklin~~ Bob Hamel
- Public Education, Participation and Outreach (PEPO) — Coordinator: vacant
- Arkansas River Watershed Collaborative (ARWC) — Executive Director: vacant
- Needs Assessment — Chair: Abby Ortega
- Executive Committee — Chair: Mark Shea, Vice Chair: Mike Weber

Additionally, like the other Basin Roundtables, the ABRT has representatives that sit on the IBCC and CWCB as well as agency staff representing CPW, DWR, and CWCB.

Finally, the ABRT has formed a Coordinating Committee (CC) that will serve as the primary interface with the LE consultant team. Its members are:

- Mark Shea, Mike Weber, Amber Shanklin, and Amber Weber

These members represent the geographic breadth of the basin and also serve on or lead the ABRT standing committees. The LE consultant team in collaboration with the coordinating committee members will rely on key members of these standing committees to identify, facilitate, and bring forth the information and understandings necessary to achieve the above stated goals.

More specifically, it is recognized that roundtable members are also involved in numerous other agencies, governing bodies, standing committees, non-profit organizations, and groups of various kinds. These gatherings meet at regular intervals (i.e., monthly, bi-monthly, quarterly, etc) at locations throughout the Basin. Examples include city or town councils, county commissions, ditch and reservoir company boards of directors, and conservancy district boards. To the greatest extent possible the LE Consultant team and the CC will seek to use those meetings as avenues for outreach and engagement to request and receive project information and input on the BIP update.

The following tasks will be undertaken to update and collect Project data.

- Disseminate existing project data to appropriate RT members and stakeholders that can provide information, quantitative data, and ask the necessary and pertinent questions.
  - LE: Organization and editing of project information incorporating input from Basin stakeholders, technical and costing analyses, data gathering, and synthesis of all inputs. Conduct stakeholder engagement across all available media including in-person and virtual meetings and electronic communications. Evaluate updated projects with respect to sub-region and basin-wide goals and objectives in preparation for 'Tiering' analysis.
  - GC: Provision of the original and CWP-adapted project lists. Provision of SharePoint and GoToMeeting collaboration tools. Provision of and technical support for application of CWCB project costing tools. Consultation on best-practices and alignment of statewide process and inter-basin coordination. Liaison with CWCB.
- Solicit and collect information and data on new projects conceptualized in the last 5 years since the initial BIP was developed.
  - LE: Conduct outreach and interview process across existing and new stakeholders to identify and define new projects. Collect information and quantitative data to enable conceptual design and costing analysis of identified projects. Evaluate projects with respect to sub-region and basin-wide goals and objectives in preparation for 'Tiering' analysis.
  - GC: Provision and technical support for application of CWCB project costing tools. Consultation on best-practices and alignment of statewide process and inter-basin coordination. Liaison with CWCB.
- Perform those analyses and calculations needed to 'flesh-out' projects where supported by available or obtainable data and the articulated needs of the project proponent(s).
  - LE: Determine data gaps and evaluate available project information to populate a complete set of comparative data and criteria for identified projects. Prepare cost estimate using the CWCB costing tools. Conduct site-specific evaluations and identify need for "special studies" of topics, projects, or issues identified in the stakeholder engagement process. An initial breakdown of the \$20,000 allocated for these studies is proposed as \$10,000 for assessment and development of projects meeting rural community needs and \$10,000 for scoping assessments to define future work and co-funding opportunities for a) updated agricultural economic output, b) environmental

and recreational needs and economic output, and c) and forest health evaluations and management planning including potential participation in statewide collaborative efforts.

GC: Provision and technical support for application of project costing tools. Consultation on best-practices and alignment of statewide process and inter-basin coordination. Liaison with CWCB.

- Prioritize and score Basin projects consistent with the Tiering Matrix system developed by the CWCB Implementation Working Group.

LE: Using information and data gathered in completed prior phases, evaluate projects for placement in Tiers I – IV in accordance with planning factors, core project data, needs assessment, and prioritization considering Roundtable values and goals.

GC: Technical support regarding use of the Tier Matrix. Review for consistency with strategy of Implementation Working Group. Consultation on best-practices and alignment of statewide process and inter-basin coordination. Liaison with CWCB.

### **Basin Roundtable Engagement**

To facilitate engagement with local jurisdictions and assure comprehensive information gathering across the basin, six (6) planning sub-regions have been defined. These sub-regions represent not only efficiency for travel and meeting efficiency but also some geographic, water use, and stakeholder similarities. For convenience, county boundaries are used to define collections and transitions from one sub-region to the next. They are defined as follows:

1. Upper: Headwaters downstream to Chaffee-Fremont County line includes Chaffee, Custer, Lake, and Saguache counties
2. Central: Fremont and Pueblo counties along the Arkansas River
3. Lower: Mainstem of Arkansas from Pueblo – Otero/Crowley County line to the state line includes Bent, Crowley, Otero, and Prowers counties
4. Northeast: Tributary watersheds north of the mainstem includes Cheyenne, Kiowa, Lincoln counties
5. Southeast: Tributary watersheds south of the mainstem comprised of the Purgatoire and Huerfano-Cucharas basins includes Huerfano, Las Animas, and Baca counties
6. Fountain Creek: Northern tributary watershed includes El Paso, Elbert, and Teller counties

In consultation with the Coordinating Committee, the following schedule of meetings for stakeholder engagement has been determined. The number or frequency of some of these activities may be adjusted as needed.

- Bi-weekly meetings of the Coordinating Committee with the LE team to provide regular review, coordination, feedback, progress reporting, and interim decision-making.
- Six (6) sub-region workshops will be conducted at locations dispersed around the basin to facilitate access and engagement. Each workshop will be designed to address topics unique to particular sub-regional planning areas as well as integrate with basin-wide goals for the BIP Update. The dates and venue (digital or in-person) will be determined in collaboration with the CC.
- Monthly updates to the ABRT Executive Committee and general Roundtable membership.
- Bi-weekly briefs with the GC (Brown & Caldwell) to discuss progress, address emergent issues, and facilitate project management.
- Meetings of opportunity where Roundtable members are engaged as part of their employment, service, or voluntary activities as described above.
- Coordination meetings between the GC and LE team, such as Cross-Basin workshops or topical discussions such as Forest Health, as may be organized by the GC and CWCB.

### **Key Issues**

It is understood that since completion of the 2015 BIP numerous issues, projects, and new perspectives have developed statewide and within the Basin considering:

- Completion of the Colorado Water Plan
- Completion of the Technical Update
- On-going growth in municipal demands across urban, suburban non-incorporated, and rural areas
- Changes and challenges to sustaining agriculture and related rural economies
- Changes to regulatory frameworks and standards with respect to water quality
- On-going development and changes in social values with respect to environmental stewardship
- On-going development and changes in social values with respect to recreational uses of water both in-stream and on-reservoir or 'flatwater'
- Forest health with respect to wildfire risk, water supply security (both quantity and quality) for consumptive and non-consumptive uses, and ecosystem services
- Developing perspectives on climate change impacts and adaptation
- Forward-looking perspective regarding statewide planning processes including the update to the Colorado Water Plan
- Forward-looking perspective regarding state-level negotiation processes regarding Colorado and Arkansas River Compact Compliance

With these key issues in mind and considering the updated Project List, the ABRT BIP update will focus on strategies to reduce or manage the projected gaps between available supplies and estimated demands. This effort will recognize that identified projects supporting such strategies include a breadth of needs like supply and storage development, water sharing arrangements, and water rights adjudication (including legal and engineering tasks), infrastructure development and renewal including storage, and non-consumptive needs related to natural resource protection including forest health.

The gap management strategies must be adaptable to the five 2050 planning scenarios projected in CWCB's Technical Update. Central to this analysis is the understanding that the basin has been over-appropriated from the earliest days of its territorial settlement and has relied on the prior appropriation doctrine and later imported trans-basin water to allocate available supplies among competing demands. This reality has not changed and will likely be more severe given changes in climate and attendant supplies, growth in municipal, industrial, and agricultural demands.

The BIP update will define, develop or update metrics and monitoring necessary to implement the plan going forward.

### **Components of the Updated BIP**

The updated BIP will provide a strategic framework within which the identified and prioritized projects will be planned for completion (for currently underway projects or programs) or for implementation and development (for projects in the concept or planning phase). At the same time, this strategic framework and implementation plan will identify funding sources including but not limited to statewide and Basin funding programs of the CWCB aligned with the updated cost estimates developed as part of the Project updates. The strategic framework will include:

- Revised goals and measurable outcomes for implementation of the BIP;
- Metrics for monitoring of basin conditions and trends;
- Strategy for quantifying water supplies using the results of the Technical Update and other available data sources
- Strategies for meeting future municipal water needs under various scenarios with particular focus on new and rehabilitated infrastructure needs in rural communities
- Strategies for meeting future agricultural water needs with particular focus on the viability and sustainability of rural economies
- Strategies for managing risks to Environmental & Recreational needs considering supply conditions and economic factors

The BIP Update will be documented in two volumes: Volume I, Basin Strategies; and Volume II, Supporting Information. The following tasks will be undertaken to prepare the BIP Update.

- Engage in cross-basin workshops allowing for coordination, collaboration, and education among all of the basins, and assuring some statewide consistency.
  - LE: Participate in two remaining cross-basin workshops with the CWCB, GC, and LEs from the other basins. (Two such workshops have already been conducted.)
  - GC: Prepare agenda and materials for the two remaining workshops in coordination with the CWCB, and conduct the workshops.
- Engage the Coordinating Committee, Executive Committee and the full ABRT in reviewing emerging issues since the last BIP, confirming basin goals, developing strategies to reduce or manage projected water supply gaps for the five projected growth scenarios, and meet other basin goals such as mitigating risks to water quality and promoting healthy watersheds throughout the basin.
  - LE: Provide background on the Technical Update, help brainstorm, document, and refine possible strategies with the committees and RT members, and identify or prepare the information needed to support those strategies gaining the most support. This will be accomplished through up to 12 biweekly meetings with the Coordinating Committee and up to six monthly meetings with the Executive Committee and ABRT.
  - GC: Serve as a resource to the LE on the Technical Update, provide support for developing basin strategies and possibly, prepare supplemental information related to the GC team's expertise.
- Prepare BIP Update, Volume I: Basin Strategies.
  - LE: Provide technical support to the GC with references to Volume II, and review Volume I.
  - GC: Develop draft Volume I based on input from the Committees and full ABRT, and issue for public comment.
- Prepare BIP Update, Volume II: Supporting Information.
  - LE: Prepare supporting information, cataloging "evergreen" (unchanging) information that is referenced for the BIP Update, and updating or developing the information specific to this BIP Update. Draft Volume II in coordination with the Committees and full ABRT for review by the GC, and issue for public comment along with Volume I.
  - GC: Provide input on Volume II consistent with statewide direction, and review a draft of Volume II.
- Finalize BIP Update.
  - LE: Review and incorporate public comments into Volume II in coordination with the GC. Finalize Volume II through up to four biweekly meetings with the Coordinating Committee and up to two monthly meetings with the Executive Committee and ABRT.
  - GC: Review and incorporate public comments into Volume I in coordination with the LE. Finalize Volume I through up to four biweekly meetings with the Coordinating Committee and up to two monthly meetings with the Executive Committee and ABRT.

## Schedule and Budget

See attached Table 1 (*pending further input from CWCB & GC*).