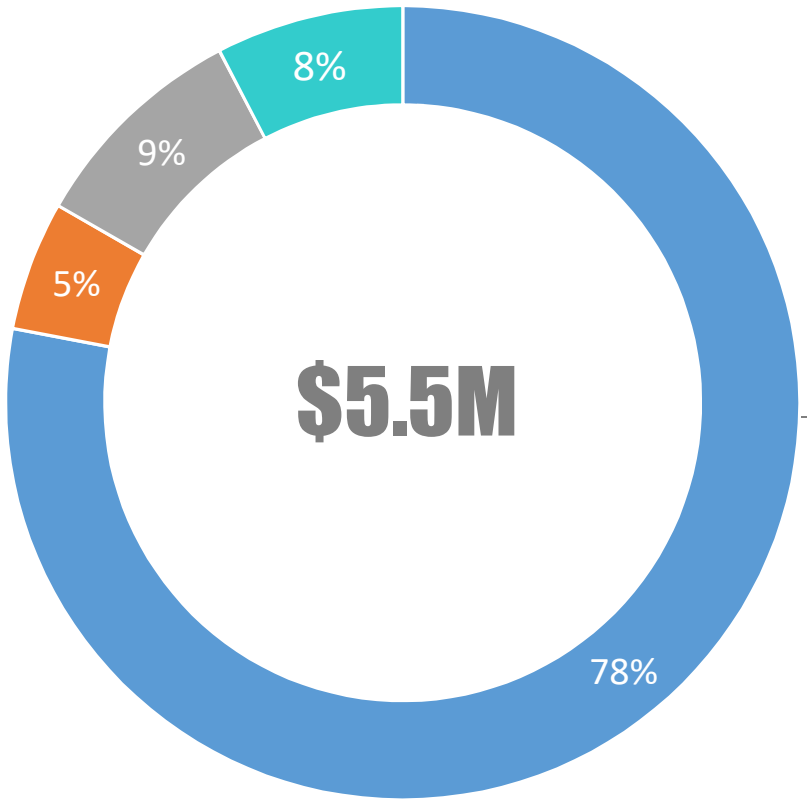

IMPLEMENTATION
WORKING
GROUP
MAY 21,2019
GREG JOHNSON, RUSS SANDS & MEGAN HOLCOMB

AGENDA

- Budget + Timeline
- IWG Work Products
- Draft Recommendations



Intent to provide about half of these dollars to fund roundtable BIP updates

- ~ 65% of the average cost of the 2015 BIPs.

BIP + CWP Updates/Mgmt
HB1051
IPP Database
Innovation & Outreach

GENERAL CONTRACTOR

RFP PROCESS

- Working to have the RFP out soon.
- Inviting chairs to be on the selection committee.
- General Contractor to hire “local experts”:
  - Local experts on the basin who are chief integrators
  - May need other local advisors/may not.
  - Local expert may be the GC.

2018-2019

- Basin Implementation Plan updates initiated in 2018
- Implementation Working Group (IWG) kick-off in Dec. 2018
- Conclude the IWG and Technical Update in July of 2019.
- Joint IBCC + Board Meeting on July 18, 2019.

LONG-TERM
TIME LINE

YEAR 1
Procurement & Project Lists

YEAR 2
Document Updates

2019 SEPT — **2020 SEPT** — **2021 SEPT**

C-9

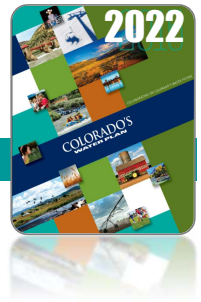
HIRE CONTRACTORS — SEPT '19 – JAN '20

UPDATE IPPS — FEB '20 – AUG '20

ANALYZE + UPDATE BIP DOCUMENT — SEPT '20 – SEPT '21

C-9

WATER PLAN UPDATE — NOV '20 – NOV '22



Cary Denison
Kevin McBride
Barbara Vasquez
Mike Weber
Daniel Boyes
Ken Neubecker
Frank Kugel
Casey Davenhill
Mike Shimmin
Mely Whiting
Joanne Fagan
Beverly Spady
Emma Reesor
Judy Lopez
Heather Dutton
Elise Bergsten
Jackie Brown
Sean Cronin
Kent Crowder
Jim Pokrandt
Lisa Darling
Phil Johnson
Garret Varra
Barbara Biggs
Ty Wattenberg
Emily Logan
Amber Shanklin
Abigail Ortega

IMPLEMENTATION WORKING
GROUP OUTPUTS

DATA NEEDS

1

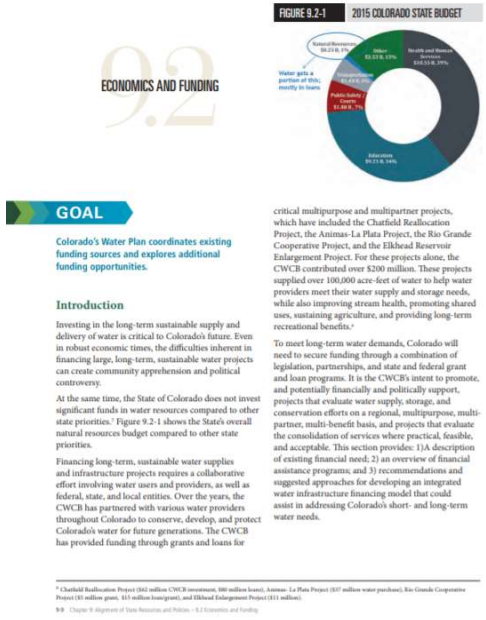
1. Project ID
2. Project Name
3. Description
4. Basin
5. M&I Needs (% funds)
6. Agriculture Needs (% funds)
7. E&R Needs (% funds)
8. Admin Needs (% funds)
9. Multiple Needs
10. Water Source (GNIS Name)
11. Water Source (GNIS ID)
12. Water Destination
13. Latitude
14. Longitude
15. Project Phase
16. Estimated Water Yield
17. Yield Units (Capacity)
18. Estimated Cost
19. Lead Contact
20. Lead Proponent

WATER RIGHTS + PERMITTING

COST NEEDS

2

Basin	Percent of IPPs with Cost Data
Arkansas	4%
Colorado	2%
Gunnison	28%
North Platte	0%
Rio Grande	50%
South Platte / Metro	22%
Southwest	0%
Yampa / White	0%



9.2 ECONOMICS AND FUNDING

FIGURE 9.2-1 2015 COLORADO STATE BUDGET

GOAL

Colorado's Water Plan coordinates existing funding sources and explores additional funding opportunities.

Introduction

Investing in the long-term sustainable supply and delivery of water is critical to Colorado's future. Even in robust economic times, the difficulties inherent in financing large, long-term, sustainable water projects can create community apprehension and political controversy.

At the same time, the State of Colorado does not invest significant funds in water resources compared to other state priorities.[7] Figure 9.2-1 shows the State's overall natural resources budget compared to other state priorities.

Financing long-term, sustainable water supplies and infrastructure projects requires a collaborative effort involving water users and providers, as well as federal, state, and local entities. Over the years, the CWCB has partnered with various water providers throughout Colorado to conserve, develop, and protect Colorado's water for future generations. The CWCB has provided funding through grants and loans for critical multipurpose and multipartner projects, which have included the Chatfield Reallocation Project, the Animas-La Plata Project, the Rio Grande Cooperative Project, and the Elkhead Reservoir Enlargement Project. For these projects alone, the CWCB contributed over $200 million. These projects supplied over 100,000 acre-feet of water to help water providers meet their water supply and storage needs, while also improving stream health, promoting shared uses, sustaining agriculture, and providing long-term recreational benefits.[8]

To meet long-term water demands, Colorado will need to secure funding through a combination of legislation, partnerships, and state and federal grant and loan programs. It is the CWCB's intent to promote, and potentially financially and politically support, projects that evaluate water supply, storage, and conservation efforts on a regional, multipurpose, multi-partner, multi-benefit basis, and projects that evaluate the consolidation of services where practical, feasible, and acceptable. This section provides: 1) A description of existing financial need; 2) an overview of financial assistance programs; and 3) recommendations and suggested approaches for developing an integrated water infrastructure financing model that could assist in addressing Colorado's short- and long-term water needs.

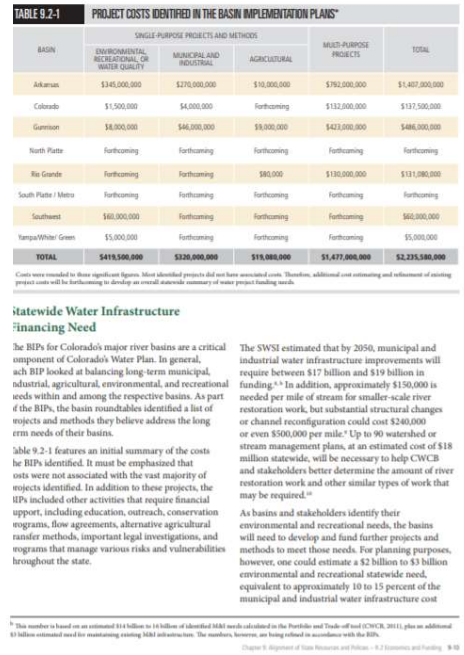


TABLE 9.2-1 PROJECT COSTS IDENTIFIED IN THE BASIN IMPLEMENTATION PLANS*

BASIN	SINGLE-PURPOSE PROJECTS AND METHODS			MULTI-PURPOSE PROJECTS	TOTAL
	ENVIRONMENTAL, RECREATIONAL, OR WATER QUALITY	MUNICIPAL AND INDUSTRIAL	AGRICULTURAL		
Arkansas	$345,000,000	$270,000,000	$10,000,000	$782,000,000	$1,407,000,000
Colorado	$1,500,000	$4,000,000	Forthcoming	$132,000,000	$137,500,000
Gunnison	$8,000,000	$46,000,000	$9,000,000	$423,000,000	$486,000,000
North Platte	Forthcoming	Forthcoming	Forthcoming	Forthcoming	Forthcoming
Rio Grande	Forthcoming	Forthcoming	$80,000	$130,000,000	$131,080,000
South Platte / Metro	Forthcoming	Forthcoming	Forthcoming	Forthcoming	Forthcoming
Southwest	$60,000,000	Forthcoming	Forthcoming	Forthcoming	$60,000,000
Yampa/White/ Green	$5,000,000	Forthcoming	Forthcoming	Forthcoming	$5,000,000
TOTAL	$419,500,000	$320,000,000	$19,080,000	$1,477,000,000	$2,235,580,000

Costs were rounded to three significant figures. Most identified projects did not have associated costs. Therefore, additional cost estimating and refinement of existing project costs will be forthcoming to develop an overall statewide summary of water project funding needs.

Statewide Water Infrastructure Financing Need

The BIPs for Colorado's major river basins are a critical component of Colorado's Water Plan. In general, each BIP looked at balancing long-term municipal, industrial, agricultural, environmental, and recreational needs within and among the respective basins. As part of the BIPs, the basin roundtables identified a list of projects and methods they believe address the long term needs of their basins.

Table 9.2-1 features an initial summary of the costs the BIPs identified. It must be emphasized that costs were not associated with the vast majority of projects identified. In addition to these projects, the BIPs included other activities that require financial support, including education, outreach, conservation programs, flow agreements, alternative agricultural transfer methods, important legal investigations, and programs that manage various risks and vulnerabilities throughout the state.

The SWSI estimated that by 2050, municipal and industrial water infrastructure improvements will require between $17 billion and $19 billion in funding.[9,10] In addition, approximately $150,000 is needed per mile of stream for smaller-scale river restoration work, but substantial structural changes or channel reconfiguration could cost $240,000 or even $500,000 per mile.[9] Up to 90 watershed or stream management plans, at an estimated cost of $18 million statewide, will be necessary to help CWCB and stakeholders better determine the amount of river restoration work and other similar types of work that may be required.[10]

As basins and stakeholders identify their environmental and recreational needs, the basins will need to develop and fund further projects and methods to meet those needs. For planning purposes, however, one could estimate a $2 billion to $3 billion environmental and recreational statewide need, equivalent to approximately 10 to 15 percent of the municipal and industrial water infrastructure cost

"It must be emphasized that costs were not associated with the vast majority of projects identified."

-COLORADO'S WATER PLAN / CHAPTER 9-10

UPDATE SCOPE

Projects

A lookback to step forward

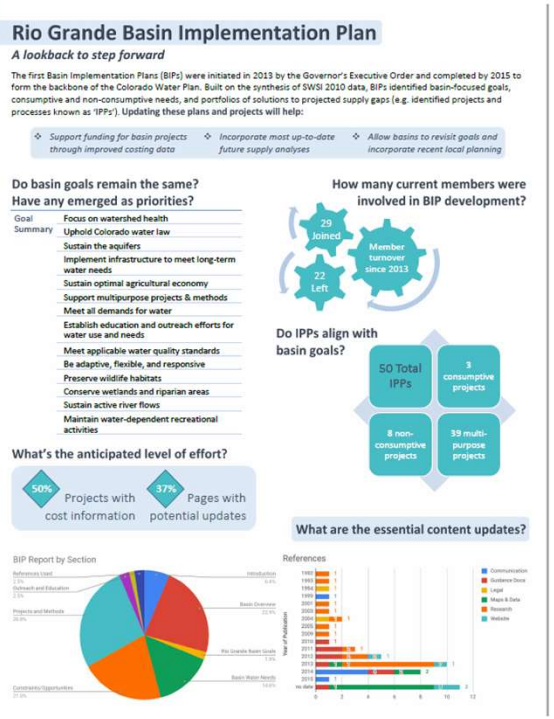
In 2015, each Basin Roundtable developed data sets of Identified Projects and Processes (IPPs) in accordance with CWCB guidance. Due to the complexity of studies, variation by basin, and number of entities involved, IPP data across and within basins remain inconsistent in content and format. The Technical Update to the Water Plan is reviewing the handling and formatting of IPP data to ensure useful data products can be created and future analyses can be performed consistently. The following table shows a summary of statewide IPP data, organized by a *draft recommendation* of minimum supplied data attributes.

Data Attribute	Arkansas	Colorado	Gunnison	North Platte	Rio Grande	S. Platte / Metro	Southwest	Yampa / White
IPP ID Number	X		X	X	X	X	X	X
IPP Name	X	X	X	X	X	X	X	X
IPP Description	X	X	X	X			X	X
Basin						X		
Municipal & Industrial Need	X	X	X		X		X	
Agricultural Need	X	X	X		X		X	
Environmental & Rec Need	X	X	X	X	X		X	X
Admin Need					X			
Multiple Needs	X	X	X		X		X	
Water Source GNIS Name								
Water Source GNIS ID								
Water Destination								
Latitude & Longitude	X		X	X			X	X
Phase	X	X	X				X	
Yield	X	X	X			X		
Yield Units	X	X	X			X		
Estimated Cost	X	X	X		X	X		
Contact	X		X			X	X	
Proponents	X	X	X		X	X	X	X

3

CWCB
General Contractor

BASIN
Local Experts



TIER
EVAL

4

DRAFT Project Tier Matrix

Use the Drop Down Menus Below to Assign Tiers

Select the Project Phase from the drop down menu in the box below (Implementation, Feasibility or Concept)

PROJECT PHASE	Tier 1	Tier 2	Tier 3	Tier 4	Assigned Tier
Implementation	Shovel Ready (immediately implementable); does not apply for a "Concept" project.	Can start within the year.	Needs at least a year to start.	Not Shown.	Tier 3

Rank all of the following using the drop down menu (right)

PLAN ALIGNMENT	Tier 1	Tier 2	Tier 3	Tier 4	Assigned Tier
Basin Plans	Strongly aligns with Bain Implementation Plans	Somewhat aligned with Basin Implementation Plan.	Not as well aligned with Basin Implementation Plan.	Not Shown.	Tier 3
Local Plans	Extensive Local Planning, Organizational support and water rights support the project.	Some local planning or organizational support for the project; water rights may or may not be explicitly identified.	Not clearly identified in any local plan, organizational effort; water rights concerns are noted; may be under consideration or going through a permitting	Not Shown.	Tier 3
Water Plan	Meets at least 3 actions in the Colorado Water Plan.	Meets at least 2 actions in the Colorado Water Plan.	Meets only 1 action in the Water Plan.	Not Shown.	Tier 3

MINIMUM CRITERIA	Tier 1	Tier 2	Tier 3	Tier 4	Assigned Tier
Meets Core Data Needs (list of 20)	Includes all 20 Criteria	Meets critical subset (TBD)	Provides only a few details; critical subset is not complete.	Not Shown.	Tier 3

NEED	Tier 1	Tier 2	Tier 3	Tier 4	Assigned Tier
Criticality	Critical to basin (would cause severe impact to the basin if the project didn't move forward; (Basin Priority and/or Emergency Need); Has clear metrics for tracking and completion date.	Significant basin effort (fully aligns with basin goals); implementation or plan would advance basin goals; has clear metrics for tracking and completion date.	Project could be of basin interest but may not as directly advance basin goals; may not have clear metrics and/or may not have a clear end date or objectives.	Not Shown.	Tier 1

Priority categorization is calculated from the tier cumulative ranking above.			PRIORITY CATEGORIZATION		Tier 3

	TIER 1	TIER 2	TIER 3	TIER 4	
SUPPORT BY TIER	Priority Basin Support	Full Basin Support	Support of Concept	No Current Support	

BRANDING UPDATE

5

A ANALYSIS + TECHNICAL UPDATE PHASE

B BASIN PLAN UPDATE PHASE

C COMPREHENSIVE UPDATE PHASE

THE COLORADO WATER PLAN

A B C

TABLE 11-1 CYCLICAL PLANNING PROCESS PROPOSED BY THE CWCB

Product	Year Initiated
Basin Implementation Plans	2013
Colorado's Water Plan	2013
Statewide Water Supply Initiative	2016
Basin Implementation Plans	2018
Colorado's Water Plan	2020
Statewide Water Supply Initiative	2022

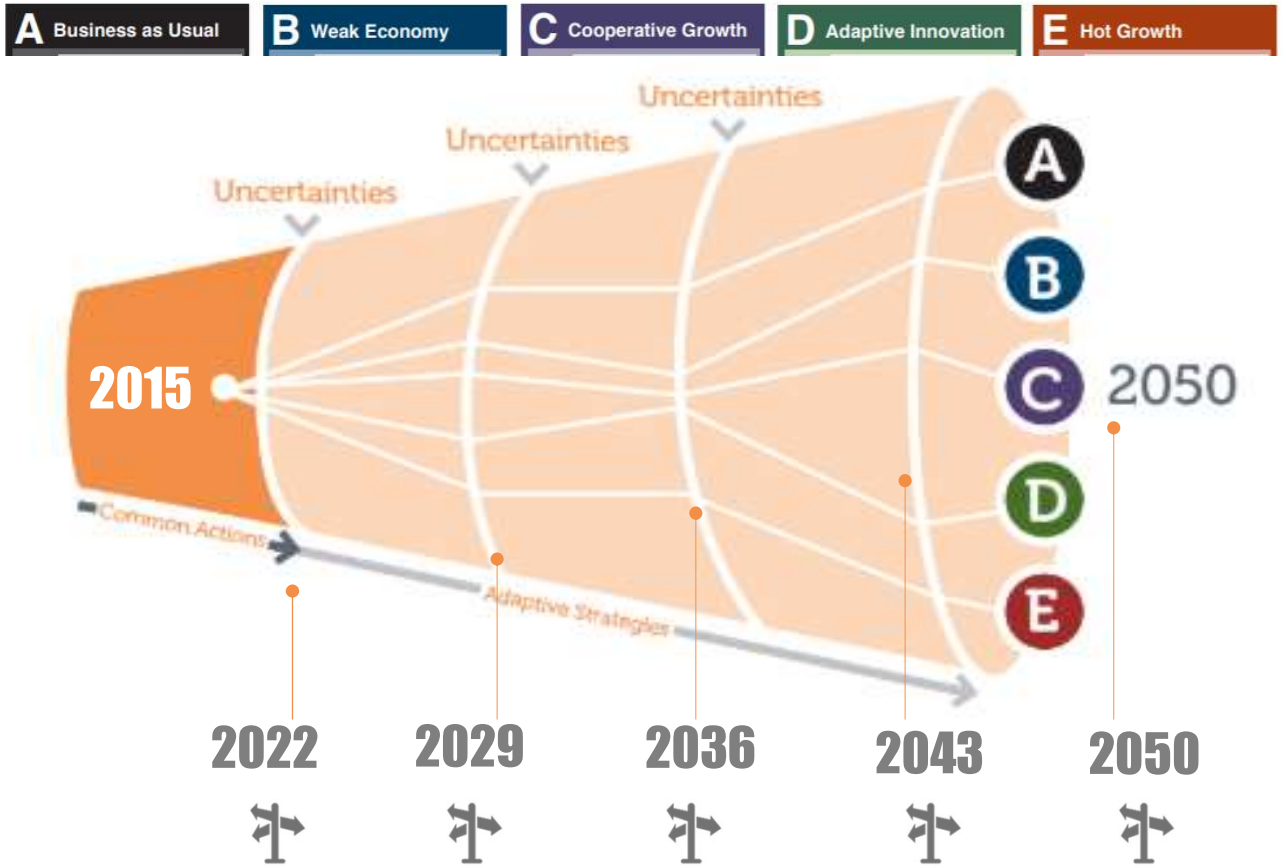
ACTIONS

1. The CWCB will work with other state agencies, the basin roundtables, and the people of Colorado to update Colorado's Water Plan, beginning no later than 2020.
2. The CWCB will develop guidelines for Basin Roundtable WSRA grants to help facilitate the implementation of the BIPs.

ADAPTIVE PLANNING

6

Review and adjust plans based on observed trends.

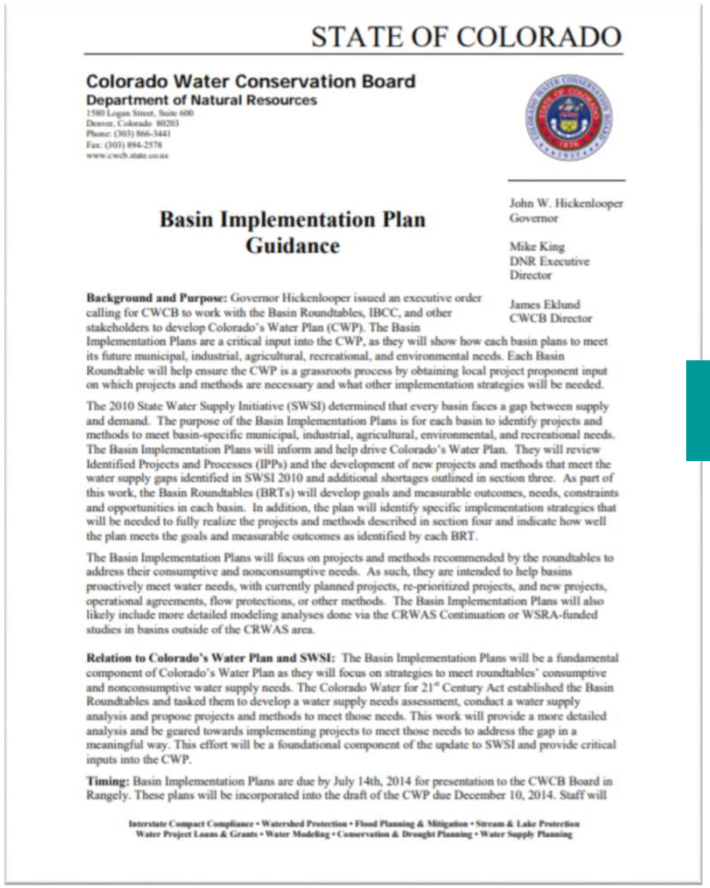


REVISIT CORE STRATEGIES

- No & Low Regrets are Core Strategies in the Water Plan that aim to “Invest in actions that have few or no disadvantages in terms of costs and benefits, regardless of the future”
- How do basin projects relate?
- Do these strategies need revisiting?
- How can basin be adaptive?

ROADMAP
GUIDANCE

8



STATE OF COLORADO

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John W. Hickenlooper
Governor

Mike King
DNR Executive Director

James Eklund
CWCB Director

Basin Implementation Plan Guidance

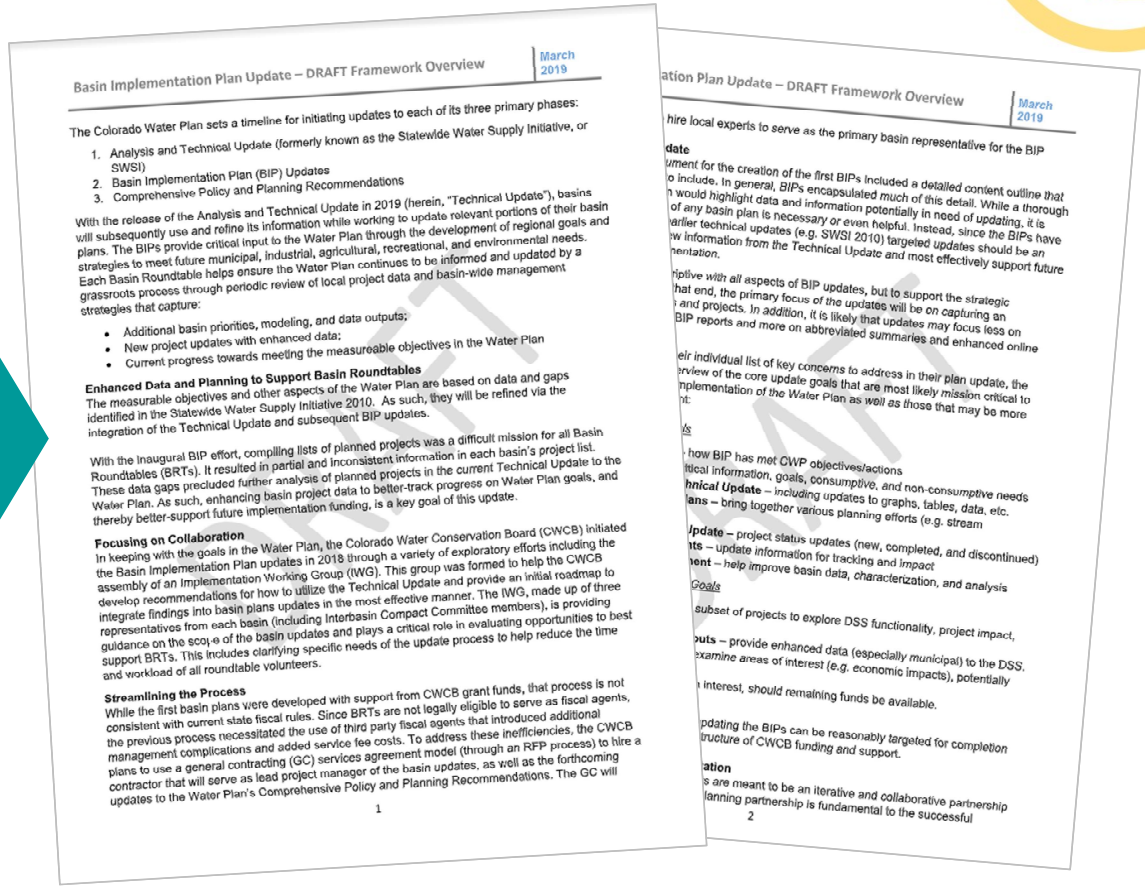
Background and Purpose: Governor Hickenlooper issued an executive order calling for CWCB to work with the Basin Roundtables, IBCC, and other stakeholders to develop Colorado's Water Plan (CWP). The Basin Implementation Plans are a critical input into the CWP, as they will show how each basin plans to meet its future municipal, industrial, agricultural, recreational, and environmental needs. Each Basin Roundtable will help ensure the CWP is a grassroots process by obtaining local project proponent input on which projects and methods are necessary and what other implementation strategies will be needed.

The 2010 State Water Supply Initiative (SWSI) determined that every basin faces a gap between supply and demand. The purpose of the Basin Implementation Plans is for each basin to identify projects and methods to meet basin-specific municipal, industrial, agricultural, environmental, and recreational needs. The Basin Implementation Plans will inform and help drive Colorado's Water Plan. They will review Identified Projects and Processes (IPPs) and the development of new projects and methods that meet the water supply gaps identified in SWSI 2010 and additional shortages outlined in section three. As part of this work, the Basin Roundtables (BRTs) will develop goals and measurable outcomes, needs, constraints and opportunities in each basin. In addition, the plan will identify specific implementation strategies that will be needed to fully realize the projects and methods described in section four and indicate how well the plan meets the goals and measurable outcomes as identified by each BRT.

The Basin Implementation Plans will focus on projects and methods recommended by the roundtables to address their consumptive and nonconsumptive needs. As such, they are intended to help basins proactively meet water needs, with currently planned projects, re-prioritized projects, and new projects, operational agreements, flow protections, or other methods. The Basin Implementation Plans will also likely include more detailed modeling analyses done via the CRWAS Continuation or WSRA-funded studies in basins outside of the CRWAS area.

Relation to Colorado's Water Plan and SWSI: The Basin Implementation Plans will be a fundamental component of Colorado's Water Plan as they will focus on strategies to meet roundtables' consumptive and nonconsumptive water supply needs. The Colorado Water for 21st Century Act established the Basin Roundtables and tasked them to develop a water supply needs assessment, conduct a water supply analysis and propose projects and methods to meet those needs. This work will provide a more detailed analysis and be geared towards implementing projects to meet those needs to address the gap in a meaningful way. This effort will be a foundational component of the update to SWSI and provide critical inputs into the CWP.

Timing: Basin Implementation Plans are due by July 14th, 2014 for presentation to the CWCB Board in Rangely. These plans will be incorporated into the draft of the CWP due December 10, 2014. Staff will



The Colorado Water Plan sets a timeline for initiating updates to each of its three primary phases:

1. Analysis and Technical Update (formerly known as the Statewide Water Supply Initiative, or SWSI)
2. Basin Implementation Plan (BIP) Updates
3. Comprehensive Policy and Planning Recommendations

With the release of the Analysis and Technical Update in 2019 (herein, "Technical Update"), basins will subsequently use and refine its information while working to update relevant portions of their basin plans. The BIPs provide critical input to the Water Plan through the development of regional goals and strategies to meet future municipal, industrial, agricultural, recreational, and environmental needs. Each Basin Roundtable helps ensure the Water Plan continues to be informed and updated by a grassroots process through periodic review of local project data and basin-wide management strategies that capture:

- Additional basin priorities, modeling, and data outputs;
- New project updates with enhanced data;
- Current progress towards meeting the measureable objectives in the Water Plan

Enhanced Data and Planning to Support Basin Roundtables
The measurable objectives and other aspects of the Water Plan are based on data and gaps identified in the Statewide Water Supply Initiative 2010. As such, they will be refined via the integration of the Technical Update and subsequent BIP updates.

With the inaugural BIP effort, compiling lists of planned projects was a difficult mission for all Basin Roundtables (BRTs). It resulted in partial and inconsistent information in each basin's project list. These data gaps precluded further analysis of planned projects in the current Technical Update to the Water Plan. As such, enhancing basin project data to better-track progress on Water Plan goals, and thereby better-support future implementation funding, is a key goal of this update.

Focusing on Collaboration
In keeping with the goals in the Water Plan, the Colorado Water Conservation Board (CWCB) initiated the Basin Implementation Plan updates in 2018 through a variety of exploratory efforts including the assembly of an Implementation Working Group (IWG). This group was formed to help the CWCB develop recommendations for how to utilize the Technical Update and provide an initial roadmap to integrate findings into basin plans updates in the most effective manner. The IWG, made up of three representatives from each basin (including Interbasin Compact Committee members), is providing guidance on the scope of the basin updates and plays a critical role in evaluating opportunities to best support BRTs. This includes clarifying specific needs of the update process to help reduce the time and workload of all roundtable volunteers.

Streamlining the Process
While the first basin plans were developed with support from CWCB grant funds, that process is not consistent with current state fiscal rules. Since BRTs are not legally eligible to serve as fiscal agents, the previous process necessitated the use of third party fiscal agents that introduced additional management complications and added service fee costs. To address these inefficiencies, the CWCB plans to use a general contracting (GC) services agreement model (through an RFP process) to hire a contractor that will serve as lead project manager of the basin updates, as well as the forthcoming updates to the Water Plan's Comprehensive Policy and Planning Recommendations. The GC will

hire local experts to serve as the primary basin representative for the BIP

date
ument for the creation of the first BIPs included a detailed content outline that o include. In general, BIPs encapsulated much of this detail. While a thorough would highlight data and information potentially in need of updating, it is of any basin plan is necessary or even helpful. Instead, since the BIPs have arlier technical updates (e.g. SWSI 2010) targeted updates should be an w information from the Technical Update and most effectively support future entation.

ipitive with all aspects of BIP updates, but to support the strategic hat end, the primary focus of the updates will be on capturing an and projects. In addition, it is likely that updates may focus less on BIP reports and more on abbreviated summaries and enhanced online

eir individual list of key concerns to address in their plan update, the rview of the core update goals that are most likely mission critical to nplementation of the Water Plan as well as those that may be more nt:

Js

how BIP has met CWP objectives/actions
itical information, goals, consumptive, and non-consumptive needs
hnical Update – including updates to graphs, tables, data, etc.
ans – bring together various planning efforts (e.g. stream

Update – project status updates (new, completed, and discontinued)
nts – update information for tracking and impact
ent – help improve basin data, characterization, and analysis

Goals

subset of projects to explore DSS functionality, project impact,

outs – provide enhanced data (especially municipal) to the DSS.
examine areas of interest (e.g. economic impacts), potentially

interest, should remaining funds be available.

pdating the BIPs can be reasonably targeted for completion tructure of CWCB funding and support.

ation
s are meant to be an iterative and collaborative partnership lanning partnership is fundamental to the successful

SUMMIT
AGENDA

9

SEPTEMBER 25 + 26 2019

MODELING COMPLEXITY

- ✗ **IPPs** (NOT INCLUDED)
- ✗ **SUB-BASINS** (NOT REPORTED)
- ✓ **TAG DIRECTION**
- ✓ **OTHER ASSUMPTIONS**
- ✓ **5 SCENARIOS**
- ✗ **SIGN POSTS** (NOT INCLUDED)

11

REVIEW OF THE TECHNICAL UPDATE'S

RECOMMENDATIONS

CHAPTER

1

BIP UPDATES

A. DETERMINE BIP UPDATE SCOPE
B. INTEGRATE PLANS
C. GET BETTER DATA IF YOU HAVE IT
D. EVALUATE AREAS FOR IMPROVEMENT

2

PROJECT UPDATES

A. UPDATE IPPs
B. GET PROJECT COSTS
C. HELP EVALUATE TIERS

3

TECHNICAL UPDATES

A. DO YOU NEED TO DO ADDITIONAL MODELING?
B. DO YOU WANT TO MODEL PROJECTS?
C. DO YOU NEED SUB-BASIN RESULTS?

4

STRATEGIC UPDATES

A. MAKE SURE PLANS ARE ADAPTIVE
B. HELP WITH SIGN POSTS
C. HOW HELPFUL ARE SCENARIOS?

5

OUTREACH UPDATES

A. ENGAGE EXISTING AND NEW STAKEHOLDERS
B. BRAND AROUND THE WATER PLAN

NEXT STEPS FOR
FINAL MEETING

- Gather input on recommendations by May 31, 2019.
- Share final draft of recommendations.
- End working group.


THOUGHTS, COMMENTS OR
QUESTIONS ?