

# DRAFT Supplemental Basin Implementation Plan Guidance for – Section 1: Goals and Measurable Outcomes



## Introduction

This document provides supplemental guidance to the Basin Roundtables (BRTs) regarding the completion of *Section 1: Basin Goals and Measurable Outcomes* as outlined in the Basin Implementation Plan (BIP) DRAFT Guidance. The material and references contained here are based on the work of previous statewide efforts, which included a significant amount of input from Colorado's water community and stakeholders.

The example goals and measurable outcomes included within this document are meant to serve as examples and are not prescriptive. These examples are intended to represent the water values listed in Governor Hickenlooper's Executive Order D 2013-005, which indicates that "*Colorado's water policy must reflect its water values...and the Colorado Water Plan must incorporate the following:*

- *A productive economy that supports vibrant and sustainable cities, viable and productive agriculture, and a robust skiing, recreation, and tourism industry;*
- *Efficient and effective water infrastructure promoting smart land use; and*
- *A strong environment that includes healthy watersheds, rivers and streams, and wildlife."*

The Colorado Water Conservation Board (CWCB) has established a template of example draft goals, measurable outcomes, and potential BIP actions for each BRT to review, revise, add, and subtract from in developing that portion of their BIP. The *goals* presented here are broad statements that reflect Colorado's water values as developed through the BRT and Interbasin Compact Committee (IBCC) processes, as well as the Statewide Water Supply Initiative (SWSI). The suggested *measurable outcomes* answer the question: how will a BIP, if fully implemented, meet the overall *goal* in a quantifiable way?

There are two tables detailing goals and measurable outcomes presented in this memo. **Table 1** is based on the No/Low Regrets Action Plan (IBCC 2013), which represents the portfolio of strategies that are necessary to meet the water supply gap regardless of which future climatic or economic scenario Colorado experiences. **Table 2** presents additional goals and measurable outcomes that when combined with Table 1 provides a comprehensive list for BRTs to consider.

In order to maintain schedule, initial drafts of BIP goals and measurable outcomes should be provided for inclusion and discussion at the Statewide Roundtable Summit on March 6<sup>th</sup> and for presentation at the March 2013 CWCB board meeting.

## No/Low Regrets Goals

No/Low Regrets goals include those specific actions that were identified by the IBCC during its November 2012 and March 2013 meetings. They are based on commonalities amongst various portfolios that were developed by each BRT during 2011 and 2012. These actions are needed no matter what future Colorado will face, and therefore can be considered as near term implementation strategies. The No/Low Regrets goals are as follows:

1. *Minimize Statewide Acres Transferred (per Basin Goals) and Implement Agricultural Sharing Projects.*
2. *Plan and Preserve Options for Existing and New Supply.*
3. *Establish Low/Medium Conservation Strategies.*
4. *Implement Nonconsumptive Projects.*
5. *Have a High Success Rate for Identified Projects and Processes [IPPs].*
6. *Implement Storage and Other Infrastructure.*
7. *Implement Reuse Strategies.*

Table 1 summarizes these goals and suggests measurable outcomes that were included in the [No/Low Regrets Action Plan](#) and includes page references so that BRTs can get additional detail. Additionally, Table 1 provides example actions BRTs may want to include in their BIPs in order to address these goals and satisfy measurable outcomes.

**Figure 1** compares the statewide measurable outcomes of the No/Low Regrets goals to IBCC's "status quo" portfolio. Implementation of the No/Low Regrets actions is projected to fulfill 620,000 acre-feet (AF) of the statewide municipal and industrial (M&I) water needs in 2050, equivalent to the needs associated with projected "low" 2050 demands (SWSI 2010). Similarly quantified No/Low Regrets measurable outcomes are provided by basin for consideration in **Appendix A**. The goals presented in Table 1 and the basin-specific measurable outcomes presented in Appendix A should be considered as suggestions for the BRTs when developing their initial draft goals and measurable outcomes.

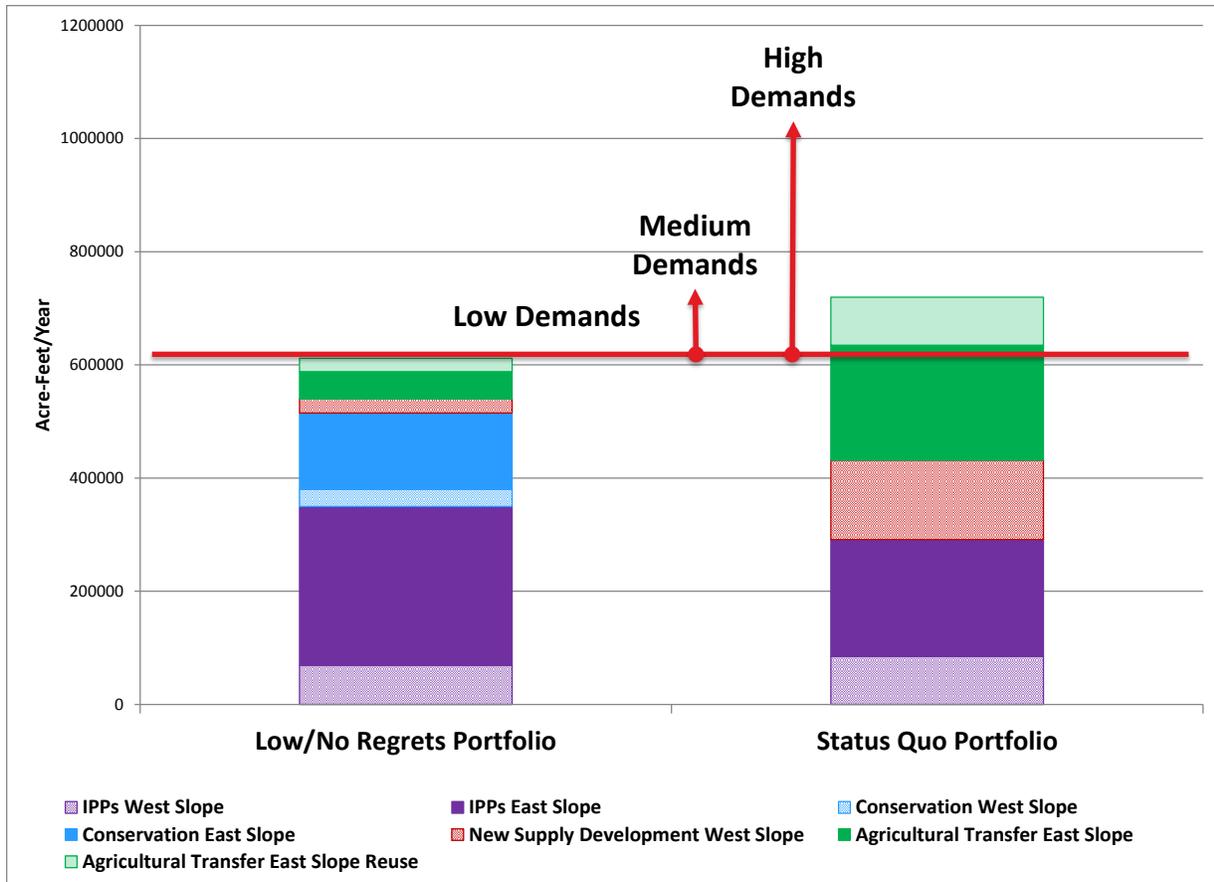


Figure 1. Statewide No/Low Regrets Portfolio vs. Status Quo Portfolio

## Long-Term Goals and Measurable Outcomes

The BIPs, SWSI, and Colorado’s Water Plan will use a long-term planning horizon of 2050. The draft long-term goals and measurable outcomes are shaped by the water values identified in the executive order in addition to encompassing the No/Low Regrets goals and measurable outcomes.

A wide range of uncertainties may present themselves between now and 2050; therefore, scenario planning was deemed as the best choice for addressing Colorado's water supply future. The BRTs previously worked with the Portfolio and Trade-off Tool to develop different statewide portfolios for meeting Colorado's long-term M&I water supply needs considering many future scenarios. The IBCC summarized the BRT portfolios by developing five representative portfolios and future scenarios. These five scenarios include varying statewide M&I and self-supplied industrial water supply needs that range from a "low" of 620,000 AF to a "high" of over 1,230,000 AF.

While implementation of No/Low Regrets goals and actions meet the "low" scenario, it may be necessary for BIPs to develop additional goals and measurable outcomes that, when combined with the No/Low Regrets goals, meet Colorado's water supply needs for all scenarios. These additional BIP goals should support the directives listed in the executive order, which are incorporated into the following Long-Term goals:

1. Meet Community Water Needs throughout Colorado
2. Meet Colorado's Agricultural Needs
3. Meet Colorado's Environmental and Recreational Needs
4. Meet Colorado's Water Quality Management Needs

**Table 2** further refines the Long-Term goals and suggests measurable outcomes and BIP actions that BRTs may consider. To assist with the development of the associated measurable outcomes, basin-specific water supply needs are provided in **Appendix B** for all five IBCC future scenarios. More information on these future scenarios can be found in the [draft SWSI 2016 Chapter: Scenario Planning and Adaptive Management](#).

Additionally, **Table 3** illustrates how the No/Low Regrets goals from Table 1 and suggested goals from Table 2 relate to the four long-term goals. This table can be used by BRTs as a template for their BIPs to show how basin-specific goals and measurable outcomes support the objectives of Colorado's Water Plan.

**Table 1. No/Low Regrets Goals and DRAFT Measurable Outcomes**

No/Low Regrets Goals	Example Measurable Outcomes	Potential BIP Actions
<p><b>Minimize Statewide Acres Transferred (per Basin Goals) and Implement Agricultural Sharing Projects</b></p> <p><i>Section 1 of the No/Low Regrets Action Plan (pg. 7-15)</i></p>	<p><i>Limit traditional permanent dry-up of irrigated agricultural lands to the IPPs, urbanization, and compliance factors, equivalent to 340,000 acres or 12 percent statewide.</i></p>	<ul style="list-style-type: none"> <li>• Develop an Incentives Program                             <ul style="list-style-type: none"> <li>– Financial incentives</li> <li>– Selective and systematic considerations</li> </ul> </li> </ul>
	<p>(Ark: 20K acres, 5%; Co: 63K acres, 23%; Gu: 24K acres, 9%; NP: 0 acres, 0%; RG: 82K, 13%; SP:148K acres, 18%; SW: 6K acres, 2%; YW: 1.6K acres 1%)<sup>1</sup></p> <p><i>Additional East Slope Example:</i> Initiate alternative agricultural transfer project or projects on the East Slope to yield 50,000 acre-feet per year (AFY) plus an additional 25,000 AFY from reuse of that water.</p>	<ul style="list-style-type: none"> <li>• Establish ATM Demonstration Projects                             <ul style="list-style-type: none"> <li>– Overlay district or authority</li> <li>– Storage and other infrastructure</li> <li>– Multi-purpose objectives</li> <li>– Adequate measurement and monitoring</li> <li>– Determine the location, timing, and cost of ATM Demonstration Projects</li> </ul> </li> </ul>
	<p><i>Additional Example:</i> Reduce agricultural shortages by 10-15% through multi-purpose projects and additional storage and other infrastructure.</p>	<ul style="list-style-type: none"> <li>• Implement ATM Program</li> </ul>
	<p><i>Additional Example:</i> Reduce urbanization by 10% by working with growing communities to increase the density of new developments.</p>	<ul style="list-style-type: none"> <li>• Analyze Infrastructure Needs for Storage of ATM Water</li> </ul>

<sup>1</sup> Each of the percentages are derived from the portfolio and trade-off tool and reflect the total number of irrigated acres and the total basin percent of irrigated acres expected to be permanently lost due to urbanization, IPPs, and other factors such as compact related issues in the Rio Grande and Republican.

**Table 1. No/Low Regrets Goals and Measurable Outcomes (continued)**

No/Low Regrets Goals	Example Measurable Outcomes	Potential BIP Actions
<p><b>Establish Low/Medium Conservation Strategies</b>  <a href="#">Section 3 of the No/Low Regrets Action Plan (pg. 19)</a></p> <p><a href="#">Appendix B: Summary of Statewide Water Supply Initiative 2010 Findings on Water Conservation (pg. 65)</a></p>	<p><i>Implement strategies at the basin level to meet medium levels of conservation, and apply half of that to meet the M&amp;I Gap, equivalent statewide to 67,000 AFY by 2030 and 167,000 AF by 2050. (2050 Conservation Savings by Basin: Ark: 36K AF, Co: 15K AF, Gu: 4.3K AF, NP: 85 AF, RG: 3.2K AF, SP: 97K AF, SW: 7.5K AF, YW: 3.7K AF)<sup>2</sup></i></p> <p><i>Additional Examples Based off Provider Controlled Best Practices Needed to Meet Medium Conservation:</i></p> <ul style="list-style-type: none"> <li>• 100% of covered entities have conservation public information and education programs, integrated resource planning, and conservation oriented water rates</li> <li>• 30% or more of covered entities have water budget-based water rates</li> <li>• 5-10% of covered entities have conservation oriented tap fees</li> <li>• 50% or more of the population has smart metering with leak detection</li> <li>• 50% of multi-family housing has submetering</li> <li>• 10-15% of covered entities have specialized nonresidential surveys, audits, and equipment efficiency improvements</li> <li>• 30-50% of covered entities have targeted audits for high demand landscape customers</li> <li>• 20-40% of landscapes transform some of their high water requirement turf to low water requirement plantings</li> <li>• 50% or more of landscapes have irrigation efficiency improvements</li> <li>• Real water losses are at 6% on average across the basin</li> </ul> <p><i>Additional Example: Increase overall urban density in 2035 by 10%</i></p>	<ul style="list-style-type: none"> <li>• Establish a Basin-wide Conservation Goal with Intermittent Benchmarks                         <ul style="list-style-type: none"> <li>– Support local entities in their efforts to outline and report their own approaches to help achieve the basin and statewide goals</li> <li>– Explore best approach to implementation of standards to achieve goal</li> <li>– Develop and implement conservation standards</li> </ul> </li> <li>• Continue to Support Local Implementation of Best Practices for low/medium conservation                         <ul style="list-style-type: none"> <li>– Encourage use of levels framework and best practices guidebook</li> </ul> </li> <li>• Promote Enabling Conditions for Use of Conserved Water                         <ul style="list-style-type: none"> <li>– Maintain and develop storage and infrastructure for the use of conserved water</li> <li>– Promote incentives for the use of conserved water</li> <li>– Identify and explore barriers to sharing conserved water</li> </ul> </li> <li>• Develop New Incentives for Conservation                         <ul style="list-style-type: none"> <li>– Explore funding options in support of the Water Efficiency Grant Program</li> <li>– Develop professional education and certification programs</li> <li>– Support and encourage land use practices that help reduce water consumption, focusing as much as possible on incentives</li> </ul> </li> <li>• Explore Legislative Concepts and Develop Support                         <ul style="list-style-type: none"> <li>– Engage in outreach and education efforts to explain the need for legislation; develop political support</li> </ul> </li> <li>• Implement Education and Outreach Efforts                         <ul style="list-style-type: none"> <li>– Track public attitudes through baseline and ongoing surveys</li> <li>– Develop decision-maker outreach strategies</li> <li>– Pursue a coordinated media campaign to establish a water conservation ethic</li> </ul> </li> </ul>

<sup>2</sup> Each of the percentages are derived from the portfolio and trade-off tool and reflect 50% of watery savings from the active medium conservation strategies applied to meet new demands in the basin.

**Table 1. No/Low Regrets Goals and Measurable Outcomes (continued)**

No/Low Regrets Goals	Example Measurable Outcomes	Potential BIP Actions
<p><b>Implement Nonconsumptive Projects and Methods</b>  <a href="#">Section 4 of the No/Low Regrets Action Plan (pg. 31)</a>   <a href="#">Nonconsumptive Toolbox (CWCB 2013)</a></p>	<p><b>Refer to Table 2 for specific examples of nonconsumptive goals and measurable outcomes. These are based on the discussion captured in the No/Low Regrets Action Plan below:</b>                      The following guiding principles were developed as part of the "Letter to the Governors" and can be used as a basis for developing nonconsumptive goals and measurable outcomes that have statewide significance. These principles can then be considered by the Basin Roundtables when they are developing their own goals and measurable outcomes. Nonconsumptive goals and measurable outcomes should:</p> <ul style="list-style-type: none"> <li>• Promote recovery and sustainability of endangered, threatened, and imperiled species</li> <li>• Protect and enhance economic values to local and statewide economies derived from environmental and recreational water uses</li> <li>• Pursue nonconsumptive projects and methods that also benefit consumptive water users</li> </ul> <p><i>Based upon the above principles, statewide goals and measurable outcomes may be developed for:</i></p> <ul style="list-style-type: none"> <li>• Federally-listed endangered and threatened species</li> <li>• Imperiled species</li> <li>• Economically important nonconsumptive uses</li> <li>• Multi-purpose projects and methods</li> </ul> <p><i>Existing nonconsumptive goals and measurable outcomes should be used when they are available, such as those included in fish recovery programs.</i></p>	<ul style="list-style-type: none"> <li>• Develop Basin-wide Goals and Measurable Outcomes to Incorporate into BIPs                             <ul style="list-style-type: none"> <li>– Develop goals and measurable outcomes for federally listed endangered and threatened species</li> <li>– Develop goals and measurable outcomes for imperiled species</li> <li>– Develop goals and measurable outcomes for economically important nonconsumptive uses</li> <li>– Develop goals and measurable outcomes for multi-purpose projects and methods</li> </ul> </li> <li>• Pursue Projects and Methods to Meet Nonconsumptive Needs as Part of the BIPs                             <ul style="list-style-type: none"> <li>– Develop basinwide goals</li> <li>– Develop measurable outcomes</li> <li>– Identify needs and opportunities</li> <li>– Utilize the decision process to prioritize projects and methods</li> </ul> </li> <li>• Track Nonconsumptive Projects and Methods                             <ul style="list-style-type: none"> <li>– Conduct nonconsumptive surveys and analysis</li> <li>– Use existing database</li> <li>– Use Basin Needs Decision Support System (BNDSS)</li> </ul> </li> <li>• Develop Targeted Incentives, including Funding for Projects and Methods in the Nonconsumptive Focus Areas                             <ul style="list-style-type: none"> <li>– Assess funding needs</li> <li>– Target existing funding sources and programs to provide enhanced levels of support for implementation of nonconsumptive needs</li> <li>– Explore additional incentives, including funding options</li> </ul> </li> <li>• Manage and Improve Storage, Infrastructure, and Reservoir Operations to Benefit Environmental and Recreational Values</li> </ul>

**Table 1. No/Low Regrets Goals and Measurable Outcomes (continued)**

No/Low Regrets Goals	Example Measurable Outcomes	Potential BIP Actions
<p><b>Have a High Success Rate for IPPs</b>  <a href="#">Section 5 of the No/Low Regrets Action Plan (pg. 41)</a></p>	<p><i>Implement IPPs to yield 80 percent statewide, equivalent to 70,000 AFY for the West Slope and 280,000 AFY for the East Slope</i></p> <p><i>(2050 No/Low Regret IPP success by Basin: Ark: 76 KAF, Co: 45 KAF, Gu: 12 KAF, Metro: 119, NP: 100 AF, RG: 6 KAF, SP: 80 KAF, SW: 13 KAF, YW: 7 KAF)<sup>3</sup></i></p>	<ul style="list-style-type: none"> <li>• Support Local Implementation of IPPs                             <ul style="list-style-type: none"> <li>– Support the conversion of single-purpose IPPs into multi-purpose IPPs when requested by a project proponent</li> <li>– Encourage cooperative projects through BIPs</li> <li>– Support local permitting authorities to identify, as requested, multi-purpose components up front in a project planning to incorporate county and local concerns</li> </ul> </li> <li>• Update Tracking and Data Collection via the Basin Needs Decision Support System (BNDSS)                             <ul style="list-style-type: none"> <li>– Provide updated IPP data as part of their BIPs</li> <li>– Track and analyze impacts of IPPs on the projected water supply gap</li> </ul> </li> <li>• Optimize Funding Sources for IPPs                             <ul style="list-style-type: none"> <li>– Assess funding needs</li> <li>– Target existing funding sources for implementing IPPs</li> </ul> </li> <li>• Generate Political Support for IPPs                             <ul style="list-style-type: none"> <li>– Engage in regular, active communication about IPPs between CWCB, IBCC, and Basin Roundtables</li> <li>– Upon request of a project proponent, convene a facilitated dialogue among stakeholders, project proponents, and state agency representatives if there is disagreement about a proposed project or process</li> <li>– Conduct outreach and education about IPPs and the state water planning process</li> <li>– Develop an approach for determining whether a project meets the values of Colorado’s Water Plan and has broad stakeholder support</li> <li>– Upon request of a project proponent encourage legislative resolutions in support of IPPs that meet the values of Colorado’s Water Plan</li> <li>– Publicly advocate for IPPs that meet the values of Colorado’s Water Plan and have stakeholder support</li> </ul> </li> </ul>

<sup>3</sup> Each of the percentages are derived from the portfolio and trade-off tool and reflect the basin selected success rates for the IPPs by category.

**Table 1. No/Low Regrets Goals and Measurable Outcomes (continued)**

No/Low Regrets Goals	Example Measurable Outcomes	Potential BIP Actions
<p><b>Implement and Assess Storage and Other Infrastructure</b>  <a href="#">Section 6 of the No/Low Regrets Action Plan (pg. 49)</a></p>	<p><i>Xxx AFY of yield resulting from additional strategic and multi-purpose storage and other infrastructure. Include associated infrastructure such as basin storage (surface and aquifer storage and recovery [ASR]), pipelines, etc.</i></p>	<ul style="list-style-type: none"> <li>• Manage and Develop Strategic Storage and Infrastructure                             <ul style="list-style-type: none"> <li>– Identify storage and other infrastructure opportunities through BIPs</li> <li>– Manage and improve storage and infrastructure to effectively use conserved water</li> <li>– Prepare for uncertainty in hydrology and climate change</li> <li>– Explore and implement aquifer storage and recovery</li> </ul> </li> <li>• Identify and Prioritize Multi-purpose Storage and Infrastructure Opportunities                             <ul style="list-style-type: none"> <li>– Manage and improve storage, infrastructure, and reservoir operations to benefit consumptive and nonconsumptive needs and values</li> <li>– Prioritize implementation of multi-purpose projects that meet the values of Colorado’s Water Plan</li> <li>– Identify partners for permitting, funding, and constructing multi-purpose projects</li> </ul> </li> </ul>

**Table 1. No/Low Regrets Goals and Measurable Outcomes (continued)**

No/Low Regrets Goals	Example Measurable Outcomes	Potential BIP Actions
<p><b>Implement Reuse Strategies</b>  <i>Section 7 of the No/Low Regrets Action Plan (pg. 55)</i></p>	<p><i>25,000 AFY of yield resulting from reuse projects above and beyond the IPPs.</i></p>	<ul style="list-style-type: none"> <li>• Improve Tracking, Quantification, and Planning                             <ul style="list-style-type: none"> <li>– Utilize SWSI efforts to improve reporting of reuse IPPs</li> <li>– Develop BIPs that incorporate reuse</li> </ul> </li> <li>• Establish a Basinwide Reuse Goal with Intermittent Benchmarks                             <ul style="list-style-type: none"> <li>– Encourage relevant local entities to outline and report their own approaches to help achieve the basinwide goal</li> </ul> </li> <li>• Develop New Incentives for Reuse                             <ul style="list-style-type: none"> <li>– Explore funding options in support of WSRA grant program</li> <li>– Pursue breakthroughs in research by utilizing the WSRA grant program</li> </ul> </li> <li>• Implement Education and Outreach Efforts                             <ul style="list-style-type: none"> <li>– Track public attitudes through baseline and ongoing surveys</li> </ul> </li> </ul>
<p><b>Plan and Preserve Options for Existing and New Supply</b>  <i>Section 2 of the No/Low Regrets Action Plan (pg. 17)</i></p>	<p><i>Develop 35,000 AFY of new supplies in the Colorado River system for the West Slope.</i></p> <p><i>A conceptual agreement is developed between roundtables regarding how to preserve/not foreclose a potential future transbasin diversion from the West Slope to the East.</i></p>	<p><i>This work is not yet complete, as noted by the IBCC in the No/Low Regrets Action Plan. BRTs can continue to engage in interbasin dialogue to plan for and preserve Colorado River supply options for the future. Once it is complete, the BRT can come up with appropriate BIP elements and actions for the use of additional Colorado River system supplies on the East and West Slopes.</i></p>

**Table 2. DRAFT Long-Term Goals and Measurable Outcomes**

Statewide Goals	Example BIP Measurable Outcomes	Potential BIP Actions
<b>Meet Community Water Needs Throughout Colorado</b>		
Use Water Efficiently to Reduce Overall Future Water Needs	<ul style="list-style-type: none"> <li>• 80-100 percent of covered entities participate in conservation survey required by HB 1051</li> <li>• 80-100 percent of covered entities achieve medium conservation levels (see Table 7-2, SWSI 2010)</li> </ul>	<ul style="list-style-type: none"> <li>• All covered entities in the basin participate in the water conservation survey required by HB 1051 to enable future benchmarking and tracking of conservation efforts. Where data is available, BRTs should establish benchmarking prior to implementation of HB 1051.</li> <li>• All covered entities in the basin have active conservation plans filed with the CWCB.</li> <li>• All non-covered entities evaluate conservation strategies.</li> </ul>
Identify Additional Projects and Processes to Meet the Water Supply Gap for Communities While Balancing the Needs of Agriculture, the Environment, and Recreation Across the State	<ul style="list-style-type: none"> <li>• 105,000 AFY of additional yield from additional projects and methods; include associated infrastructure such as basin storage (surface and ASR), pipelines, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Identify at least one new regional and/or multi-purpose project that meets in-basin M&amp;I needs above and beyond conservation and IPPs, as estimated in SWSI 2010.</li> <li>• Document strategy to preserve and plan for opportunities to develop additional water projects and methods, dependent upon which future scenario and related water needs Colorado may face.</li> </ul>
Meet Community Water Needs During Periods of Drought	<ul style="list-style-type: none"> <li>• 50-80 percent of covered entities has/participates in a drought plan</li> <li>• Xxx AF of drought reserve water (e.g., storage, interruptible supply agreements/water bank, savings from restrictions, and nontributary groundwater targeted for drought protection)</li> </ul>	<ul style="list-style-type: none"> <li>• Commitments for most covered entities to have or participate in a drought plan.</li> <li>• Benchmarking of existing volume of drought reserve water.</li> <li>• Determine volume of future drought reserve water needed for the basin and projects and methods that could provide new drought reserve sources.</li> </ul>

**Table 2.DRAFT Long-Term Goals and Measurable Outcomes (continued)**

Statewide Goals	Example BIP Measurable Outcomes	Potential BIP Actions
<b>Meet Colorado's Agricultural Needs</b>		
<p>Ensure Agriculture Remains a Viable Economic Driver in Colorado, Supporting Food Security, Jobs, and Rural Communities While Maintaining and Protecting Private Property Rights</p>	<ul style="list-style-type: none"> <li>• 70-90 percent of current irrigated acres remain in production (<i>see Table 4-11 from SWSI 2010</i>)</li> </ul> <p><i>Additional example of economically-based measurable outcomes</i></p> <ul style="list-style-type: none"> <li>• Average farm size (Xxx acres)</li> <li>• \$Xxx of total economic output from agriculture</li> <li>• Xxx number of jobs supported by agriculture</li> <li>• \$Xxx county assessed value of agriculture lands</li> <li>• Xxx acres of conservation easements for agriculture</li> <li>• \$Xxx of value from open space, wildlife habitat, and ecosystem services</li> </ul>	<ul style="list-style-type: none"> <li>• Benchmarking acres with existing agricultural production (irrigated and dry land, separately).</li> <li>• Document future amount of acres remaining in agricultural production.</li> <li>• Document amount of acres kept in production by ATM programs.</li> <li>• Develop incentives for farmers to offer land for conservation easements.</li> <li>• Develop additional options and incentives for farmers and ranchers other than to sell out or continue as is (e.g., ATMs, partnerships with environmental community, etc.).</li> </ul>
<p>Meet Colorado's Agricultural Demands</p>	<ul style="list-style-type: none"> <li>• 60,000 AFY of yield from identified projects that provide water to an additional 15,000 acres</li> <li>• 5-15% and Xxx AFY reduction in shortage due to additional yield from identified projects (xxx irrigated acres)</li> </ul>	<ul style="list-style-type: none"> <li>• Determine agricultural water supply gap.</li> <li>• Identify projects to meet agricultural gap.</li> </ul>
<p>Implement Efficiency and Conservation Measures to Maximize Beneficial Use and Production</p>	<ul style="list-style-type: none"> <li>• 5-15% and total Xxx AF reduction in shortage due to efficiency improvements and agricultural conservation (xxx irrigated acres)</li> <li>• Xxx AFY generated from agricultural conservation, which can be utilized for other uses</li> </ul>	<ul style="list-style-type: none"> <li>• Benchmark existing agricultural efficiency improvements and identify limitations.</li> <li>• Document future reduction in irrigation water shortages due to efficiency improvements.</li> <li>• Support and identify agricultural producers interested in agricultural conservation that reduces consumptive use, such as mulching, drip irrigation, phreatophyte removal, change of crop type to cool weather crops, etc.</li> <li>• Support and identify agricultural producers interested in agricultural efficiency improvements such as ditch lining, sprinkler irrigation, etc.</li> </ul>

**Table 2.DRAFT Long-Term Goals and Measurable Outcomes (continued)**

Statewide Goals	Example BIP Measurable Outcomes	Potential BIP Actions
<b>Meet Colorado's Environmental and Recreational Needs</b>		
<p>Promote Restoration, Recovery, and Sustainability of Endangered, Threatened, and Imperiled Aquatic and Riparian Dependent Species and Plant Communities</p>	<ul style="list-style-type: none"> <li>• 80-100% (or xxx stream miles) of the nonconsumptive focus areas with federally listed threatened and endangered aquatic species have existing or planned projects and methods that secure the species in these reaches as much as they can be secured within the existing legal and water management context</li> <li>• 50-80% (or xxx stream miles) of the nonconsumptive focus areas with imperiled species or plant communities identified by the BRTs have existing or planned projects and methods that secure the species in these reaches as much as they can be secured within the existing legal and water management context</li> </ul>	<ul style="list-style-type: none"> <li>• Fully maintain existing programs that provide benefits to and protect endangered, threatened, and imperiled aquatic and riparian dependent species and plant communities.</li> <li>• Design any new consumptive projects to co-exist and not diminish the existing endangered species recovery programs and obligations.</li> <li>• Prevent species that are not federally listed from becoming listed by developing projects and methods that meet the measurable outcomes.</li> </ul>
<p>Protect and Enhance Economic Values to Local and Statewide Economies Derived from Environmental and Recreational Water Uses, Such as Fishing, Boating, Waterfowl Hunting, Wildlife Watching, Camping, and Hiking</p>	<ul style="list-style-type: none"> <li>• 80-100% (or xxx stream miles) of the nonconsumptive focus areas with recreational opportunities that are of high economic value have existing or planned projects and methods that secure these areas as much as they can be secured within the existing legal and water management context</li> <li>• 50-80% (or xxx stream miles) of the nonconsumptive focus areas with recreational opportunities that are of moderate economic value or have the potential for high economic value have existing or planned projects and methods that provide direct protection to these areas</li> </ul>	<ul style="list-style-type: none"> <li>• Increase the number of reservoir operation agreements to protect and enhance flatwater and whitewater recreation opportunities.</li> <li>• Support and increase fish production through the state hatchery system (the state hatcheries provide 70-80% of fish for fishing recreation throughout the state; for building genetic pools for endangered and imperiled fish species and for stocking new projects).</li> <li>• Develop projects to improve access to recreational opportunities.</li> <li>• Develop projects to increase and improve wetland habitat for waterfowl hunting and wildlife wat</li> </ul>
<p>Support the Development of Multi-Purpose Projects and Methods that Benefit Environmental and Recreational Water Needs as well as Water Needs for Communities or Agriculture</p>	<ul style="list-style-type: none"> <li>• 80-100% of new projects and methods developed in the BIPs consider how to mitigate environmental/recreational impacts as part of the initial planning stages</li> <li>• 50-80% of new projects and methods developed in the BIPs are designed from the initial planning stages to enhance nonconsumptive values and meet nonconsumptive needs as well as water supply needs</li> <li>• 30-50% of nonconsumptive projects and methods also have benefits to consumptive users</li> </ul>	<ul style="list-style-type: none"> <li>• Identify nonconsumptive considerations for the consumptive projects and methods included in the BIPs.</li> <li>• Identify consumptive considerations or the nonconsumptive projects and methods included in the BIPs.</li> </ul>

**Table 2.DRAFT Long-Term Goals and Measurable Outcomes (continued)**

Statewide Goals	Example BIP Measurable Outcomes	Potential BIP Actions
<p>Protect, Maintain, and Improve Conditions of Streams, Lakes, Wetlands, and Riparian Areas to Promote Self-Sustaining Fisheries and Functional Riparian and Wetland Habitat to Promote Long-Term Sustainability</p>	<ul style="list-style-type: none"> <li>• 50-80% (or xxx stream miles) of the nonconsumptive focus areas with outstanding examples of wetlands, riparian habitat, or aquatic species habitat/populations have existing or planned projects and methods that protect these areas as much as they can be secured within the existing legal and water management context</li> <li>• 30-50% (or xxx stream miles) of nonconsumptive focus areas that could be self-sustaining have existing or planned projects and methods that maintain or improve these areas as much as they can be within the existing legal and water management context</li> </ul> <p>NOTE: These measurable outcomes are for more ubiquitous species or plant communities not included above</p>	<ul style="list-style-type: none"> <li>• Xxx number of habitat related improvement projects and methods, such as fish passage structures, "fish friendly" diversion structures installed or modified, structural or nonstructural projects implemented to increase connectivity of habitat on streams.</li> <li>• Xxx number of flow related projects and methods, such as conservation pool agreements in reservoirs, instream flow water rights evaluated by biologists for potential increases, and voluntary flow management agreements that need to be put in place.</li> </ul>
<p>Maintain Watershed Health – Protect or Restore Watershed that Could Affect Critical Infrastructure and/or Environmental and Recreational Areas</p>	<ul style="list-style-type: none"> <li>• 50-80% (xxx square miles) of critical watersheds have existing or planned projects and methods that are protective</li> </ul>	<ul style="list-style-type: none"> <li>• Utilize forest assessments to identify and prioritize watershed areas.</li> <li>• Develop watershed wildfire assessments that focus on critical infrastructure.</li> <li>• Protect, create, and maintain identified wetlands to ensure water quality, provide flood protection and wildlife habitat benefits.</li> <li>• Identify critical infrastructure protections from wildfire assessments and watershed health projects and methods that are protective.</li> <li>• Identify critical erosion issues due to roads and other developments and projects and methods that are protective.</li> </ul>

**Table 2.DRAFT Long-Term Goals and Measurable Outcomes (continued)**

Statewide Goals	Example BIP Measurable Outcomes	Potential BIP Actions
<b>Meet Colorado's Water Quality Management Needs</b>		
Provide Safe Drinking Water to Colorado's Citizens and Visitors	<ul style="list-style-type: none"> <li>• Zero waterborne disease outbreaks at public drinking water systems</li> <li>• Zero persons receive drinking water that exceeds the health based standards for uranium, radium, and other radionuclides</li> <li>• 98% of the population served by community drinking water systems receives drinking water that meets all health-based standards</li> <li>• 95% of community public drinking water systems provide water that meets all health-based standards</li> </ul>	<ul style="list-style-type: none"> <li>• Identify community drinking water systems that need improvements so that health-based standards are met.</li> <li>• Identify projects and methods focused on reducing the number of persons receiving water that exceed health based standards for uranium, radium, and other radionuclides.</li> </ul>
Monitor, Protect and Improve Water Quality for All Classified Uses	<ul style="list-style-type: none"> <li>• 70% of stream/river miles and lake/reservoir acres for which water quality is reported</li> <li>• 15% of impaired stream/river miles and lake/reservoir acres restored to meet all applicable water quality standards</li> <li>• 52% of river/stream miles and 30% of lake/reservoir acres attain water quality standards even with the continued growth of Colorado's population</li> <li>• 100% of existing direct use and conveyance use reservoirs attain the applicable standards that protect the water supply use classification</li> </ul>	<ul style="list-style-type: none"> <li>• Identify water bodies or geographic areas for focused monitoring.</li> <li>• Identify impaired water bodies for focused restoration actions.</li> <li>• Benchmark population growth and water quality standards attainment.</li> <li>• Identify direct use and conveyance use reservoirs.</li> <li>• Identify where water quality may be limiting focus areas identified by BRTs through their nonconsumptive mapping efforts.</li> </ul>

**Table 3. BIP Goals Relationship to Long-Term Goals**

		Long-Term Goals			
		Meet Community Water Needs Throughout Colorado	Meet Colorado's Agricultural Needs	Meet Colorado's Environmental and Recreational Needs	Meet Colorado's Water Quality Management Needs
No/Low Regrets Goals	Minimize Statewide Acres Transferred (per Basin Goals) and Implement Agricultural Sharing Projects	X	X		
	Plan and Preserve Options for Existing and New Supply	X	X	X	X
	Establish Low/Medium Conservation Strategies	X	X	X	
	Implement Nonconsumptive Projects		X	X	X
	Have a High Success Rate for Identified Projects and Processes	X	X		
	Implement Storage and Other Infrastructure	X	X	X	
	Implement Reuse Strategies	X	X	X	
Meet Community Water Needs	Use water efficiently to reduce overall future water needs	X	X	X	
	Identify additional projects and processes to meet the water supply gap for communities while balancing the needs of agriculture, the environment, and recreation across the state	X	X	X	X
	Meet community water needs during periods of drought	X			
Meet Agricultural Needs	Ensure agriculture remains a viable economic driver in Colorado, supporting food security, jobs, and rural communities while maintaining and protecting private property rights		X		
	Meet Colorado's Agricultural Demands		X		
	Implement efficiency measures to maximize beneficial use and production	X	X	X	
Meet Environmental & Recreational Needs	Promote restoration, recovery and sustainability of endangered, threatened, and imperiled aquatic and riparian dependent species and plant communities	X	X	X	X
	Protect and enhance economic values to local and statewide economies derived from environmental and recreational water uses, such as fishing, boating, waterfowl hunting, wildlife watching, camping, and hiking			X	X
	Support the development of multi-purpose projects and methods that benefit environmental and recreational water needs as well as water needs for communities or agriculture.	X	X	X	X
	Protect, maintain and improve conditions of streams, lakes, wetlands, and riparian areas to promote self-sustaining fisheries and functional riparian and wetland habitat to promote long-term sustainability			X	X
	Maintain watershed health – protect or restore watershed that could affect critical infrastructure and/or environmental and recreational areas	X	X	X	X
Meet WQ Needs	Provide Safe Drinking Water to Colorado's Citizens and Visitors	X	X		X
	Monitor, Protect and Improve Water Quality for All Classified Uses	X	X	X	X