Southwest Basin Roundtable
Public Education, Outreach, and Participation
Implementation and Action Plan

Presented to the:

Southwest Basin Roundtable Education and Outreach Committee
Southwest Basin Roundtable Members
Colorado Foundation for Water Education
Colorado Water Conservation Board

Prepared and Presented by:

Denise Rue-Pastin
Southwest Basin Roundtable (SBR) Public Education, Participation, and Outreach Liaison,
SBR Education and Outreach Committee Chair,
and
Water Information Program (WIP) Coordinator

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Introduction

This report presents the Southwest Basin Roundtable's (SBR) updated Public Education, Participation, and Outreach (PEPO) Implementation and Action Plan. The original plan was approved by the SBR in 2011 and updated in 2012. This version focuses on current priorities of the SBR as they relate to the Colorado Water Plan implementation. Specifically, this education plan seeks to address the following taken from the Colorado Water Conservation Board (CWCB) *Basin Implementation Plan Draft Guidance* (CWCB, 2013) document:

> It [the plan] will let the decision makers in the basin understand how they are represented, 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. Where appropriate, this effort can also help roundtables' outreach to potential project proponents for the new projects and methods needed to meet future water needs to determine if they are interested in being partners or the lead entity (p. 7).

Additional reporting requirements for this education plan includes: roundtable involvement in development of this plan; educational priorities; strategies to achieve educational priority goals (including budget and schedule); partnerships; and periodic reporting. To set the context for this education plan, however, it was determined that background information may be helpful, especially for those who may be unfamiliar with the history of the roundtable process. Therefore, background is provided first, followed by sections specifically established to address each of the points referenced above. Conclusions are provided at the end.

Background[1]

The 2005 *Colorado Water for the 21st Century Act* (House Bill 05-1177), is based upon the premise that Coloradans must work together to address the water needs within the state. The legislation created a framework to encourage dialogue on water, broadened the range of stakeholders actively participating in water decisions, and created a locally driven process where the decision-making power rests with those living within the state's nine river basins. The statewide structure, the Interbasin Compact Committee (IBCC), the local structures, and the nine basin roundtables, bring over 300 diverse citizens into water supply planning discussions across the state.

As each basin roundtable carries out its charge to develop basin-wide water needs assessments, they are also required to advance the understanding of future water needs through educational programs and processes. In the statutes of HB 05-1177, each basin roundtable has powers and responsibilities that include the following:

> "(c) ... Basin roundtables shall actively seek the input and advice of affected local governments, water providers, and other interested stakeholders and persons in

[1] This section draws heavily from the Colorado Foundation for Water Education Basin Roundtables Final Education Survey Report (2010).

establishing its needs assessment, and shall propose projects or methods for meeting those needs.
(d) Serve as a forum for education and debate regarding methods for meeting water supply needs; and
(e) As needed, establish roundtable subcommittees or other mechanisms to facilitate dialogue and resolution of issues and conflicts within the basin."

Moreover, the Public Education, Participation, and Outreach (PEPO) Workgroup is a legislatively created committee of the IBCC. This group is tasked with: creating a process to inform, involve, and educate the public on the IBCC's activities and the progress of the interbasin compact negotiations; creating a mechanism by which public input and feedback can be relayed to the IBCC and compact negotiators; and educating IBCC and roundtable members on water issues. The PEPO Workgroup's membership consists of the Education Liaisons, a volunteer position on each basin roundtable, members of the IBCC, statewide water education experts, staff of the Water Supply Planning section of the CWCB, and a consultant firm that facilitates the PEPO Workgroup. The members of this committee work to identify the best approaches for education and outreach at the statewide and basin-specific levels. The PEPO Workgroup and roundtable members are collectively defining the most helpful and meaningful ways in which the public can participate in the work of their basin roundtable.

In May 2013 Governor Hickenlooper issued an Executive Order directing the CWCB to develop a Colorado Water Plan. Creation of this plan is a grassroots effort drawing upon eight years of unprecedented work, dialogue, and consensus-building that water leaders from across the state have engaged in through the IBCC and basin roundtable process discussed above. Colorado's Water Plan will be aligned with the state's water values: vibrant and sustainable cities; viable and productive agriculture; a robust skiing, recreation and tourism industry; and a thriving environment that includes healthy watersheds, rivers, streams, and wildlife.

In December 2014 the Draft Colorado Water Plan was delivered to Governor Hickenlooper. The Colorado Water Plan, written by the CWCB, reflects efforts to confront challenges including a 163 billion-gallon projected water supply shortfall, as well as sustain a growing economy and population expected to double to 10 million by 2050. The Plan draws on river basin discussions held around the state, as well as each Basin's Draft Implementation Plans. The Draft Colorado Water Plan will be finalized in December 2015 (Finley, 2014).

How Will the SBR Inform Decision Makers in the Basin

As presented in the introduction, this section seeks to answer the following questions related to how the SBR plans to inform decision makers in the basin so that they understand: 1) how they are represented, 2) the status of the basin's consumptive and non-consumptive needs, 3) planned projects, 4) current river operations and opportunities, and 5) constraints associated with different hydrologic cycles. In addition, this section will address the SBR's plan to promote partnerships for new projects and methods.

How will decision makers in the SBR area understand: How they are represented

The CWCB produced a very informative Frequently Asked Questions (FAQs) and fact sheet related to the IBCC and roundtable process that does a good job of answering this question. Both pieces are regularly distributed to each of the roundtable members. They were asked to widely share this information with their constituents. In addition, this information is available at the Water Information Program (WIP) office in Durango and is already being used and disseminated at various public events. Moreover, the CFWE will be releasing a Headwaters issue specifically focusing on the Colorado Water Plan. The WIP has already purchased 350 copies to be disseminated to the SBR members and public at various events. The WIP plans to apply for CWCB PEPO funds to help cover the purchase of these publications. In addition, the WIP website (www.waterinfo.org) homepage provides information on the IBCC/roundtable process, including links to provide public input to the Colorado Water Plan. Finally, information about the IBCC/roundtable process and the State Water Plan is presented at local events (e.g., Kiwanis, Rotary, etc.), most local water board meetings (e.g., Animas-La Plata Water Conservancy District, Dolores Water Conservancy District, San Juan Water Conservancy District, Southwestern Water Conservation District, etc.), the annual Water 101 Seminar, and various local newspapers are periodically running information pieces related to this. The SBR plans to continue with all of these activities.

How will decision makers in the SBR area understand: The status of the basin's consumptive and non-consumptive needs

Version I of this action plan indicated that "the gap for the Dolores/San Juan River Basin ranges from a low of 5,120 acre-feet (AF) to a high of more than 15,000 AF. Relaying this information, to include an action plan, conservation, and public participation process, is viewed as a high priority education and outreach component" (Water Information Program, 2012, p. 2). In addition, the same referenced report stated that "keeping the public and roundtable members informed on non-consumptive projects, including an action plan is a high priority education and outreach component. Also, it will be important to incorporate non-consumptive needs into future projects and/or changes to existing projects" (p. 3). Related to this, the SBR hired a consulting team to work on their Basin Implementation Plan (BIP). Carrie Lile, an engineer with Harris Water Engineering, and Ann Oliver, a local river facilitator, were selected for this work. They worked throughout 2014 to update the SBR consumptive and non-consumptive needs assessment as part of the BIP. When this information is finalized in the BIP the WIP will summarize it into an easy to read and understand information sheet to be shared in similar manners to those listed in the previous section (e.g., roundtable members, WIP office and events, etc.).

How will decision makers in the SBR area understand: Planned projects

See previous section related to consumptive and on-consumptive needs.

How will decision makers in the SBR area understand: Current river operations and opportunities

Due to the natural variability of river flows it will be important that decision makers in the SBR area understand the potential for dry as well as wet years. For these reasons, too it will be important for the Colorado Water Plan to include some degree of flexibility related to implementation. The WIP has information related river operations and opportunities—specifically, CFWE Citizen's Guides and Headwaters issues that cover these topics such as the: Citizen's Guide to Colorado Climate Change; Citizen's Guide to Where Your Water Comes From; Headwaters Summer 2014 issue on Floods; Headwaters Winter 2011 Ecosystem Services issue; and the Fall 2003 issue on the 2002 drought. These documents are available at the WIP office and are regularly disseminated at local events.

How will decision makers in the SBR area understand: Constraints associated with different hydrologic cycles

As mentioned above, due to the natural variability in the hydrologic cycle in general, and the American West in particular, it will be important that decision makers in the SBR area understand the potential for dry as well as wet years. The CWCB developed a drought fact-sheet that will continue to be distributed at each of the roundtable meetings. In addition, the WIP has this information, as well as a wealth of additional informational pieces (some of which were listed in the previous section) available on the topic of variations in the hydrologic cycles. These are also available on the WIP website and disseminated at various functions throughout the year.

How will the SBR promote partnerships for new projects and methods

The SBR already promotes partnerships for new projects and methods. Each application to the SBR must provide information related to collaborative efforts, including cost-sharing. The SBR also makes recommendations to applicants about potential future partners. The SBR will continue these efforts indefinitely.

Additional Reporting Requirements

Roundtable involvement in development of this plan

Although the SBR membership has left the development of this EAP primarily to the PEPO representative, numerous members were involved in the planning efforts to varying degrees. As an example, the SBR Chair, BIP consultants, members of the Education and Outreach Committee were involved by providing direction, input, recommendations, and review. Moreover, when the EAP was in draft form various members of the SBR were invited to provide review and comments. All input has been incorporated and the updated EAP will be presented to the SBR membership at their April 2015 meeting.

Educational priorities

The SBR's overall goals and priorities for education, participation, and outreach including target audiences are basically laid out in Section 1 of the BIP—Basin Goals and Measurable Outcomes, which for reference is provided in Appendix A. Appendix B provides a summary of the

education, participation, and outreach goals for this EAP, a synopsis of which is provided as follows:

Short-Term Goals:

- Encourage education and conservation to reduce demand.
- Implement informational events about [water conservation and land-use planning] and water reuse efforts, tools and strategies.
- Promote wise and efficient water use through implementation of municipal conservation strategies to reduce overall future water needs.

Ongoing Activities:

- Implement IPPs to benefit recreational values and the economic value they provide.
- Implement IPPs to directly restore, recover or sustain endangered, threatened, and sensitive aquatic and riparian dependent species and plant communities.
- Implement IPPs to monitor, protect or improve water quality.
- Participate in Compact Water Bank efforts.
- Support agricultural water efficiency projects identified as IPPs.
- Support and participate in IPPs that promote dialogue, foster cooperation and resolve conflict.

Mid- and Long-Term Targets:

- Mid-Term: Promote 60% in-house use and 40% outside use (60/40 ratio) for Southwest Colorado and the entire State by 2020
- Long-Term: Promote 70% in-house use and 30% outside use (70/30 ratio) for Southwest Colorado and the entire State by 2030.

Strategies to achieve educational priority goals

One strategy to achieve the short-term goals of conservation, land-use planning (which will include coverage and discussion of the 60/40 and 70/30 ratios referenced above), and water reuse is to implement a pilot conservation and land-use planning session in 2015—likely in the Durango area. Initially it is anticipated that this would be a 2-4 hour workshop for local decision-makers and water utility personnel. Between local water professionals, including a land-use planner and the WIP Coordinator it is believed the session can be effectively conducted and facilitated at a reasonable cost. Depending upon input from the SBR, PEPO funds—estimated to be about $1.2k could be used for this effort. If the first year pilot is successful, the session could be annually rotated throughout the basin (e.g., Cortez, Telluride, Pagosa Springs, etc.) similar to the Water 101 Seminar. The SBR would also like to pursue a similar water conservation workshop approach, to include water-wise landscaping for the general public, however these details have yet to be determined. Strategies to achieve ongoing activities are discussed in the following partnerships section. Mid-and long-term goals will be incorporated in with the short-

term water conservation, land-use planning, and reuse workshop already discussed. A breakdown of the budget and schedule to achieve the SBR educational goals is provided in Attachment C.

Partnerships

Predominately in relation to the SBR's ongoing activities, partnerships or individuals/entities will assist with the implementation of our EAP strategies include:

- Agricultural Efficiency Projects: The SBR members and organizations have been working with local Conservation District's to promote agricultural efficiency improvements for a number of years and will continue these partnerships into the future.
- Aquatic Species: SBR members and organizations have been working with a variety of local, state, and federal agencies for decades to help protect aquatic species in the Basin. Examples include the Dolores River Dialogue Group, Colorado Parks and Wildlife, and the U.S. Forest Service. The SBR plans to continue these partnerships well into the future.
- Compact Water Bank: Various SBR members and organizations have been working with a number of entities on the West Slope water bank concept. Predominately this has involved the Colorado River and Southwestern Water Conservation Districts, though a host of additional partners are involved. The SBR will continue these partnerships into the future.
- Recreational: The SBR members and organizations have been working with local recreational groups and interests for years and will continue these partnerships into the future.
- Riparian Ecosystems: SBR members and organizations have been working with a variety of local, state, and federal agencies for a number of years to help protect riparian ecosystems in the Basin. Examples include the Animas Watershed Partnership and the Dolores River Dialogue Group. The SBR plans to continue these partnerships well into the future.
- Water Quality: Similar to the examples listed above, various SBR members and organizations have been working water quality issues in the Basin for quite some time. A prime example includes the Animas River Stakeholders Group (http://www.animasriverstakeholdersgroup.org/). The SBR plans to continue water quality partnerships into the future.

All of these projects and partnerships promote dialogue, foster cooperation, and help to resolve conflicts.

Periodic reporting

Period PEPO reporting on this EAP will be submitted to the CWCB and the CFWE by their required deadlines. This will be done in an effort to share challenges, progress, and resources.

Conclusion

In addition to all of the components already discussed as part of this SBR Education and Outreach Action Plan, the original version of this action plan stated that key components will include:

- Consumptive Projects: Relay 'gap' information, to include an action plan and public participation process, to the public; communicate statewide implications of the identified projects and processes; engage diverse stakeholders; SBR members and public education related to prioritizing projects.
- Non-Consumptive Projects: Keep the public and roundtable members informed on non-consumptive projects; bridge the consumptive and non-consumptive communities while highlighting progressive, multi-purpose solutions.
- Roundtable Member Education: SBR members education related to changing demographics, drought planning, the Colorado River Compact, and water supply availability; Provide more SBR member education/information programs and presentations.
- Support and utilize existing water education efforts (WIP, 2012, p. 6).

These components will also continue and be included as part of this SBR implementation plan. The SBR and their education committee believe that a well-informed basin roundtable increases its capacity to effectively contribute to water resource decisions. In addition, well-educated members enhance their ability to better inform and involve their public stakeholders in the water supply planning process. As a result, the SBR and Dolores/San Juan River Basin water community can have an improved awareness of its key water resource issues, leading to demonstrated support for the basin roundtables' strategies to meet their future water supply needs. Implementation of this Education and Outreach Action Plan will help to meet Article VII of the IBCC by-laws by creating a process to inform, involve, and educate the public not only of the SBR processes, but of the IBCC's activities and progress.

References

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Appendix A:

SBR BIP Basin Goals & Measurable Outcomes

Section 1: Southwest Basin Roundtable Basin Goals & Measurable Outcomes

The Southwest Basin Roundtable is unique for the complexity of hydrography, political entities, water compacts and treaties, and distinct communities that it encompasses. Although the name suggests only one basin, the Roundtable actually provides a forum for water discussions pertaining to nine distinct sub-basins, including the San Juan River, the Piedra, the Pine, the Animas (including the Florida River), the La Plata, the Mancos, McElmo Creek, the Dolores and the San Miguel, eight of which flow out of Colorado. Together these sub-basins make up the interdependent landscape of Southwest Colorado.

Many communities, both natural and human, depend on the water produced by these sub-basins. The Southwest Basin is home to the Southern Ute Indian Tribe and the Ute Mountain Ute Indian Tribe, the only two Indian Reservations in Colorado. Neighboring these tribal lands are 10 counties including Archuleta, La Plata, San Juan, Montezuma, Dolores, San Miguel and portions of Mineral, Hinsdale, Montrose and Mesa. Each of these tribal areas and counties represent distinct communities and landscapes, with their own specific and unique social, economic and environmental values, challenges and opportunities.

Multiple layers of legal agreements govern water use in the Roundtable's area, adding additional complexity, opportunity and challenge. While all of the sub-basins are tributary to the Colorado River and therefore fall under the Colorado River Compact and the Upper Colorado River Basin Compact, seven are part of the San Juan River sub-basin and two, the Dolores and San Miguel basins, are part of the Colorado River sub-basin. All of the water to which the State of New Mexico is entitled under the Upper Colorado River Compact has its origins in the basins that are part of the San Juan River sub-basin.

A Treaty and settlement with both Ute Indian tribes pertain to waters of each sub-basin. The La Plata River Compact apportions water between Colorado and New Mexico with a daily delivery requirement to New Mexico. The San Juan/Chama Project delivers water trans-mountain from the San Juan River sub-basin in Colorado to the Rio Grande River in New Mexico to provide a portion of New Mexico's Colorado River entitlement (annual average of 85,000 to 100,000 AF). These New Mexico obligations are met by the waters of the Southwest Basin, and affect the water available to meet the needs of the area's communities. The Animas La Plata Compact provides for diversion and storage of flows for use in both Colorado and New Mexico.

The area supports many water-dependent species of wildlife, including warm and cold water fish species addressed by three different multi-state conservation agreements, and four terrestrial species that are currently listed under the Federal Endangered Species Act.

Finally, the Southwest Basin is a region of diverse natural systems, agricultural heritage, outstanding beauty, and extensive recreational opportunities. Many communities within the area rely heavily on tourism and the recreational industry as a primary economic driver. Agriculture and the open spaces it maintains contribute to the culture, economy and quality of life of the

Southwest Basin. Municipal and industrial activities round out the economic and social values and help support the diverse and vibrant communities of the region.

This geographic, political, economic and legal complexity leads to unique challenges and opportunities. Appreciation of this context is basic to the development of the Roundtable's goals and to its BIP. Therefore, the Roundtable prefaces its BIP Goals with the following underlying principles. Many of these are also stated in the Colorado Water Plan Southwest Colorado Statement of Importance January 2014, which was adopted by the Roundtable on January 8, 2014. The Roundtable:

- Intends to develop, use, and maintain the Basin Implementation Plan as a living document.
- Agrees that all water uses are important to the future of this region.
- Identifies specific and unique projects that are important to maintaining the quality of life in this region and should accommodate the development and maintenance of flows, including domestic supplies, environmental needs, agriculture, recreation, and commercial/industrial needs to provide for further economic development.
- Supports multi-purpose projects when possible and when they can be accomplished in a manner that is protective of the values present.
- Recognizes and upholds the unique settlement of tribal reserved water rights claims in the Colorado Ute Indian Water Rights Final Settlement Agreement of December 10, 1986, as authorized by Congress in the Colorado Ute Indian Water Rights Settlement Act of 1988, Pub. L. No. 100-585, and as amended by the Colorado Ute Settlement Act Amendments of 2000, Pub. L. No. 106-554 and Pub. L. No, 110-161 (2007); and the 1991 Consent Decrees.
- Recognizes and addresses the downstream challenges faced by water users in southwest Colorado due to continued development and pressures from users in the State of New Mexico; protect interests in southwest Colorado, while complying with existing Compact obligations. The entitlement to Colorado River flows for New Mexico will be based on deliveries from southwest Colorado.
- Intends to preserve the Southwest Basin's ability to develop Colorado River Compact entitlements and to meet our water supply gaps.
- Recognizes and addresses the challenges to all water uses that future drought and/or climate variability may bring.
- Recognizes that the flows necessary to support the full complement of values are not currently well understood.
- Limit Conflicts and Promote Collaboration Within the Framework of State, Tribal and Federal Plans, Policies, Authorities and Rights.

The Roundtable has established 21 goals (Table 1) to address the following seven themes (in no particular order):

A. Balance All Needs and Reduce Conflict
B. Maintain Agriculture Water Needs
C. Meet Municipal and Industrial Water Needs
D. Meet Recreational Water Needs

E. Meet Environmental Water Needs
F. Preserve Water Quality
G. Comply with CO River Compact and Manage Risk

In order to clarify the desired results of these goals and to help the Roundtable gauge progress toward meeting the goals over the planning horizon of this BIP (thru 2050), the Roundtable has agreed upon 31 Measureable Outcomes (Table 1). While recognizing the value of identifying measureable outcomes, the Roundtable is also cognizant of its limitations.

One limitation is that the development of ambitious but realistic measurable outcomes requires an understanding of the extent to which the Roundtable's stated goals are already being met. Measurable outcomes in this BIP were developed without a thorough understanding of the current status of those measures and of water supply needs, particularly for environmental and recreational values.

An additional limitation is that there are factors which may complicate the attainment of these outcomes. These factors include uncertainty around the ability of sponsors to implement Identified Projects and Processes due to issues with funding, permitting, partner support, etc.; lack of sufficient support/interest in implementing a Measureable Outcome, concern for unintended consequences, as well as difficulty in obtaining the necessary data to assess some of the identified outcomes.

Given these limitations and consistent with its principle that this BIP be a "living document," the Roundtable intends periodic reviews and updates of its Measurable Outcomes as more reliable information is developed and attainment is better understood.

NOTE: Yellow highlights indicate EAP priorities

Table 1. Goals and Measureable Outcomes for the Southwest Basin Implementation Plan

A. Balance All Needs and Reduce Conflict		
ID	Goals	Measurable Outcomes (by 2050)
A 1	Pursue a high success rate for identified specific and unique IPPs to meet identified gaps and to address all water needs and values.	1. 100% of IPPs shall consider from the initial planning staging maintaining and enhancing environmental and recreational needs. 2. Complete 19 multipurpose IPPs to meet identified gaps. 3. Support and participate in 10 IPPs (such as processes) that promote dialogue, foster cooperation and resolve conflict. 4. At least 50% of identified watersheds have existing or planned IPPs that are protective of critical infrastructure and/or environmental and recreational areas. 5. All towns and major water supply systems with water supply infrastructure have watershed/wildfire assessments that identify strategies/treatments necessary to mitigate the impacts that occur to hydrology in a post-fire environment. 6. All major reservoirs have watershed/wildfire assessments that identify strategies/treatments necessary to mitigate the impacts that occur to hydrology in a post-fire environment.
A 2	Support specific and unique new IPPs important to maintaining the quality of life in this region, and to address multiple purposes including municipal, industrial, environmental, recreational, agricultural, risk management, and compact compliance needs.	
A 3	Implement multi-purpose IPPs (including the creative management of existing facilities and the development of new storage as needed).	
A 4	Promote dialogue, foster cooperation and resolve conflict among water interests in every basin and between basins for the purpose of implementing solutions to Southwest Colorado's and Colorado's water supply challenges *(SWSI 2010)*.	
A 5	Maintain watershed health by protecting and/or restoring watersheds that could affect critical infrastructure and/or environmental and recreational areas.	

Note that several of these outcomes, indicated by an asterisk, pertain directly to supporting implementation of the projects and processes, either planned or in progress, that are currently on the Southwest Basin's IPP list. They will be reviewed and updated in the future.

B. Meet Agricultural Needs		
ID	Goals	Measurable Outcomes (by 2050)
B1	Minimize statewide and basin-wide acres transferred.	1. Implement projects (e.g. ATMs, efficiency, etc.) in order to help preserve agriculture and open space values, and to help address municipal, environmental, recreational, and industrial needs; while respecting private property rights. 2. Implement strategies that encourage continued agricultural use and discourage permanent dry-up of agricultural lands. 3. The water providers in the state that are using dry- up of agricultural land (defined as requiring a water court change case) and/or pursuing a new TMD (as defined by IBCC to be a new west slope to east slope diversion project) shall have a higher standard of conservation. The goal for these water providers is a ratio of 70% use occurs in-house while 30% use occurs outside (70/30 ratio). 4. Implement at least 10* agricultural water efficiency projects identified as IPPs (by sub-basin).
B2	Implement efficiency measures to maximize beneficial use and production.	
B3	Implement IPPs that work towards meeting agricultural water supply shortages.	

C. Meet Municipal and Industrial Water Needs		
ID	Goals	Measurable Outcomes (by 2050)
C1	Pursue a high success rate for identified IPPs to meet the municipal gap.	1. Complete 41* IPPs aimed at meeting municipal water needs. 2. Consistently meet 100% of residential, commercial and industrial water system demands identified in SWSI 2010 in each sub-basin, while also encouraging education and conservation to reduce demand. 3. Implement at least 1* IPP that protect or enhance the ability of public water supply systems to access and deliver safe drinking water that meets all health-based standards. 4. Change the ratio of in-house to outside treated water use for municipal and domestic water systems (referred to as water providers herein) from the current ratio of 50% in-house use and 50% outside use, to 60% in-house use and 40% outside use (60/40 ratio) for Southwest Colorado and the entire State by 2030. 5. Implement 3 informational events about water reuse efforts, tools and strategies. 6. The water providers in the state that are using dry up of agricultural land (defined as requiring a water court change case) and/or pursuing a new Trans Mountain Diversion (TMD) (as defined by IBCC to be a new west slope to east slope diversion project) shall have a higher standard of conservation. The goal for these water providers is a 70/30 ratio by 2030. This is a prerequisite for the Roundtable to consider support of a new TMD.
C2	Provide safe drinking water to Southwest Colorado's citizens and visitors.	
C3	Promote wise and efficient water use through implementation of municipal conservation strategies to reduce overall future water needs.	
C4	Support and implement water reuse strategies.	

D. Meet Recreational Water Needs		
D1	Maintain, protect and enhance recreational values and economic values to local and statewide economies derived from recreational water uses, such as fishing, boating, hunting, wildlife watching, camping, and hiking.	1. Implement 10* IPPs to benefit recreational values and the economic value they provide. 2. At least 80% of the areas with recreational opportunities have existing or planned IPPs that secure these opportunities and supporting flows/lake levels within the contemporary legal and water management context. Based on the map of recreational attributes generated for SWSI 2010 (Figure 1) 80% of each specific value equates to approximately 428 miles of whitewater boating, 185 miles of flat-water boating, 4 miles of Gold medal Trout Streams, 545 miles of other fishing streams and lakes, 3 miles of Audubon Important Bird Area, 143 miles of waterfowl hunting/viewing parcels, and 6 miles of Ducks Unlimited projects. 3. Address recreational data needs.

E. Meet Environmental Water Needs		
E1	Encourage and support restoration, recovery, and sustainability of endangered, threatened, and imperiled aquatic and riparian dependent species and plant communities. *(See list of such species in the Southwest Basin)***	1. Implement 15* IPPs to directly restore, recover or sustain endangered, threatened, and sensitive aquatic and riparian dependent species and plant communities. 2. At least 95% of the areas with federally listed water dependent species have existing or planned IPPs that secure the species in these reaches as much as they can be secured within the existing legal and water management context.
E2	Protect, maintain, monitor and improve the condition and natural function of streams, lakes, wetlands, and riparian areas to promote self-sustaining fisheries, and to support native species and functional habitat in the long term, and adapt to changing conditions.	3. At least 90% of areas with identified sensitive species (other than ESA species) have existing or planned IPPs that provide direct protection to these values. Based on the map of environmental attributes generated for SWSI 2010 (Figure 1) 90% for individual species equates to approximately 169 miles for Colorado River cutthroat trout, 483 miles for roundtail chub, 794 miles for bluehead sucker, 700 miles for flannelmouth sucker, 724 miles for river otter, 122 milrd for northern leopard frog, 921 miles for active bald eagle nesting areas and 229 miles for rare plants. 4. Implement 26* IPPs to benefit the condition of fisheries and riparian/wetland habitat. 5. At least 80% of areas with environmental values have existing or planned IPPs that provide direct protection to these values.

**Federally Listed:

- Southwest Willow Flycatcher (Endangered)

Sensitive Species:

- Colorado River Cutthroat Trout
- Roundtail Chub
- Bluehead Sucker
- Flannelmouth Sucker
- River Otter
- Northern Leopard Frog
- Active Bald Eagle Nests

Federally Listed Species not included in SWSI 2010 Needs Assessment:

- New Mexico Meadow Jumping Mouse (Proposed Endangered)
- Yellow-billed Cuckoo (Proposed Threatened)
- Gunnison Sage Grouse (Proposed Threatened)

F. Preserve Water Quality		
ID	Goals	Measurable Outcomes (by 2050)
F1	Monitor, protect and improve water quality for all classified uses.	1. By 2016, replace the following statewide outcomes with outcomes based on the current status of these measures in the Roundtable area, followed by a periodic status review every five years. a. 60% of stream miles and 40% of reservoir acres attain water quality standards and support all designated uses. b. 15% of impaired stream miles and reservoir acres are restored to meet all applicable water quality standards. c. 50% of stream miles and 30% of reservoir acres are attaining water quality standards. d. 100% of existing direct use and conveyance use reservoirs attain the applicable standards that protect the water supply use classification. 2. Implement 6* IPPs to monitor, protect or improve water quality.

G. Comply with CO River Compact and Manage Risk		
G1	Plan and preserve water supply options for all existing and new uses and values.	1. Water providers proposing a new TMD shall achieve a 60/40 ratio by 2020 and 70/30 ratio by 2030 as a prerequisite for the Roundtable to consider support of a new TMD. 2. A conceptual agreement is developed between roundtables regarding how to approach a potential future trans-mountain diversion from the West Slope to the East. 3. Protect 100% of pre-compact water rights in the SW Basins Area. 4. Implement 4* IPPs aimed at utilizing Tribal Water Rights Settlement water. 5. Implement 2* IPPs aimed at meeting La Plata River compact. 6. Participate in Compact Water Bank efforts.
G2	Recognize and address the challenges faced by water users in southwest Colorado due to continued development and pressures from users in the State of New Mexico; protect interests in southwest Colorado, while complying with existing Compact obligations. New Mexico's entitlement to Colorado River flows are based on deliveries from southwest Colorado (*SW CO Statement of Importance).*	
G3	Preserve Southwest Basin's ability to develop CO River compact entitlement to meet our water supply gaps. *(SW CO Statement of Importance).*	
G4	Recognize and uphold the unique settlement of tribal reserved water rights claims in the 1988 Tribal Water Rights Settlement and the 1991 Consent Decree. *(SW CO Statement of Importance).*	
G5	Support strategies to reduce demand in the Colorado River Basin to ensure levels in Lake Powell are adequate to produce power.	
G6	Support strategies to mitigate the impact of a Colorado River Compact curtailment should it occur.	

Appendix B:

Summary of the Education, Participation, and Outreach Goals for SBR EAP

Goals and Measureable Outcomes for the Southwest Basin Implementation Plan

Key: All underlined are priorities. **Bold** indicates short-term goals, *italic* provides ongoing activities, while no bold or italic reflects long-term targets.

A. Balance All Needs and Reduce Conflict

Goal A1: Promote dialogue, foster cooperation and resolve conflict among water interests in every basin and between basins for the purpose of implementing solutions to Southwest Colorado's and Colorado's water supply challenges.

Goal A5: Maintain watershed health by protecting and/or restoring watersheds that could affect critical infrastructure and/or environmental and recreational areas.

Measurable Outcome 3: Support and participate in 10 IPPs (such as processes) that promote dialogue, foster cooperation and resolve conflict.

B. Meet Agricultural Needs

Goal B2: Implement efficiency measures to maximize beneficial use and production.

Measurable Outcome 3: The water providers in the state that are using dry- up of agricultural land and/or pursuing a new TMD shall have a higher standard of conservation. The goal for these water providers is a ratio of 70% use occurs in-house while 30% use occurs outside (70/30 ratio).

Measurable Outcome 4: Implement at least 10* *agricultural water efficiency projects* identified as IPPs (by sub-basin).

C. Meet Municipal and Industrial Water Needs

Goal C3: Promote wise and efficient water use through implementation of **municipal conservation strategies to reduce overall future water needs**.

Goal C4: Support and implement water reuse strategies.

Measurable Outcome 2: Consistently meet 100% of residential, commercial and industrial water system demands identified in SWSI 2010 in each sub-basin, while also encouraging **education and conservation to reduce demand**.

Measurable Outcome 4: Change the ratio of in-house to outside treated water use for municipal and domestic water systems from the current ratio of 50% in-house use and 50% outside use, to 60% in-house use and 40% outside use (60/40 ratio) for Southwest Colorado and the entire State by 2030.

Measurable Outcome 5: **Implement 3 informational events about water reuse efforts, tools and strategies.**

Measurable Outcome 6: The water providers in the state that are using dry up of agricultural land and/or pursuing a new TMD shall have a higher standard of conservation. The goal for these water providers is a 70/30 ratio by 2030.

D. Meet Recreational Water Needs

Goal D1: Maintain, protect and enhance recreational values and economic values to local and statewide economies derived from recreational water uses, such as fishing, boating, hunting, wildlife watching, camping, and hiking.

Measurable Outcome 1: Implement 10 IPPs to benefit recreational values and the economic value they provide.*

E. Meet Environmental Water Needs

Goal E1. Encourage and support restoration, recovery, and sustainability of endangered, threatened, and imperiled aquatic and riparian dependent species and plant communities.

Measurable Outcome 1: Implement 15 IPPs to directly restore, recover or sustain endangered, threatened, and sensitive aquatic and riparian dependent species and plant communities.*

Measurable Outcome 4: Implement 26* IPPs to benefit the condition of fisheries and riparian/wetland habitat.

F. Preserve Water Quality

Goal F1. Monitor, protect and improve water quality for all classified uses.

Measurable Outcome 2: Implement 6 IPPs to monitor, protect or improve water quality.*

G. Comply with CO River Compact and Manage Risk

Goal G5. Support strategies to reduce demand in the Colorado River Basin to ensure levels in Lake Powell are adequate to produce power.

Measurable Outcome 1: Water providers proposing a new TMD shall achieve a 60/40 ratio by 2020 and 70/30 ratio by 2030 as a prerequisite for the Roundtable to consider support of a new TMD.

Measurable Outcome 6: Participate in Compact Water Bank efforts.

Attachment C:

Budgets

SBR 2015 EAP and Budget

GOAL	OBJECTIVE/TASK	LEAD	TIMELINE	EXPENSE	ONGOING PROCESS/PROJECT?	COMMENTS & NOTES
Educate decision makers in the SBR area about how they are represented	a) Regularly distribute FAQs and fact sheet related to the IBCC and roundtable process. b) Purchase and distribute Headwaters Colorado Water Plan issue. c) Purchase and distribute information about the IBCC/roundtable process and the State Water Plan at local events, local water board meetings, and the annual Water 101 Seminar.	Denise Rue-Pastin	Throughout 2015	$800	Yes	
Educational priority	Pilot conservation and land-use planning session	Denise Rue-Pastin	Late Fall 2015	$1,200	Pilot	
Roundtable members and general public information and education related to consumptive and non-consumptive projects and CWP	a) Notify all area papers of Roundtable meeting dates, time, and location; including 'open to the public' invitation	Denise Rue-Pastin	Quarterly meetings 2015	$ 108.20	Yes	WIP Coordinator time est.
	b) Post all consumptive and non-consumptive related activities and meetings on WIP website	Denise Rue-Pastin	Throughout 2015	$ 108.20	Yes	
	c) Presentations to various local organizations	Varies	Throughout 2015	$ 125.00	Yes	Copies and materials
	d) Roundtable information is provided at each Annual Water 101 Workshop	Denise Rue-Pastin	Throughout 2015	$ 225.00	Yes	Copies & 75 issues of the CFWE Water Law
	e) Other/Misc:			$ 100.00		
Roundtable Members Education	a) Drought planning information at Roundtable meeting	Handouts; Speaker TBD	TBD	$ 125.00	No, but info needs will be cont. assessed	Copies and materials
	b) Climate change information at Roundtable meeting	Handouts; Speaker TBD	TBD	$ 125.00	No, but info needs will be cont. assessed	Copies and materials
	c) Water quality regulation or groundwater hydrology information at Roundtable meeting	Handouts; Speaker TBD	TBD	$ 125.00	No, but info needs will be cont. assessed	Copies and materials
	d) Interstate compacts information at Roundtable meeting	Handouts; Speaker TBD	TBD	$ 125.00	No, but info needs will be cont. assessed	Copies and materials

	e) Other/Misc: Current river operations and opportunities, constraints associated with different hydrologic cycles			$ 100.00		
TOTAL				$3,266.40		

Roundtable 2016 to 2020 EAP and Budget

GOAL	OBJECTIVE/TASK	LEAD	TIMELINE	EXPENSE	ONGOING PROCESS/PROJECT?	COMMENTS & NOTES
Educate decision makers in the SBR area about how they are represented	a) Regularly distribute FAQs and fact sheet related to the IBCC and roundtable process. b) Purchase and distribute Headwaters Colorado Water Plan issue. c) Purchase and distribute information about the IBCC/roundtable process and the State Water Plan at local events, local water board meetings, and the annual Water 101 Seminar.	Denise Rue-Pastin	2016-2020	$2	Yes	
Educational priority	Water conservation workshop, to include water-wise landscaping for the general public	Denise Rue-Pastin	Starting in 2016	$1,200	Pilot	
Roundtable members and general public information and education related to consumptive and non-consumptive projects AND CWP	a) Notify all area papers of Roundtable meeting dates, time, and location; including 'open to the public' invitation	Denise Rue-Pastin	Quarterly meetings 2016-2020	$541	Yes	WIP Coordinator time est.
	b) Post all consumptive and non-consumptive related activities and meetings on WIP website	Denise Rue-Pastin	2016-2020	$541	Yes	
	c) Presentations to various local organizations	Varies	2016-2020	$625	Yes	Copies and materials
	d) Roundtable information is provided at each Annual Water 101 Workshop	Denise Rue-Pastin	2016-2020	$1,125	Yes	Copies, plus 75 issues of the CFWE Water Law
	e) Other/Misc			$500		
Roundtable members education	a) Information on a variety of topics at Roundtable meetings	Handouts; Speaker TBD	TBD	$625	No, but info needs will be cont. assessed	Copies and materials
	b) Other/Misc:			$500		

Support and utilize existing water education partners and efforts	a) All Roundtable meetings are posted on WIP website and in quarterly newsletters	Denise Rue-Pastin	2016-2020	$541	Yes	WIP Coordinator time est.
	b) There is a Roundtable update section in each of the WIP quarterly newsletters	Denise Rue-Pastin	2016-2020	$947	Yes	WIP Coordinator time est.
	c) There is a Roundtable tab/section on the WIP website	Denise Rue-Pastin	2016-2020	$947	Yes	WIP Coordinator time est.
	d) Water information provided at each of the Roundtable meetings on an information table	Denise Rue-Pastin	2016-2020	$625	Yes	Copies
	e) Other organizations that could help with efforts (e.g., CDWR, CWCB, SJCA, SWCD, etc.)	Varies	2016-2020	N/A	Yes	
	f) Other/Misc.			$500		
TOTAL				**$11,617**		

4/17/2015

Basin Implementation Plan

Southwest Basin Roundtable

Ann Oliver and Carrie Lile
HARRIS WATER ENGINEERING, INC.

EXECUTIVE SUMMARY

The Southwest Basin Roundtable (Roundtable) is unique for the complexity of hydrography, political entities, water compacts and treaties, and distinct communities that it encompasses. The Roundtable provides a forum for water discussions pertaining to nine distinct sub-basins, including the San Juan, the Piedra, the Pine, the Animas (including the Florida River), the La Plata, the Mancos, McElmo Creek, the Dolores rivers and the San Miguel River, eight of which flow out of Colorado.

Many communities, agricultural producers, and natural systems depend on the water produced by these sub-basins. The Southwest Basin is home to the Southern Ute Indian Tribe and the Ute Mountain Ute Indian Tribe, the only two Indian Reservations in Colorado. Neighboring these tribal lands are 10 counties including Archuleta, La Plata, San Juan, Montezuma, Dolores, San Miguel and portions of Mineral, Hinsdale, Montrose, and Mesa. These tribal areas and counties represent distinct communities and landscapes, with their own specific and unique social, economic and environmental values, challenges and opportunities.

The Southwest Basin is a region of diverse natural systems, agricultural heritage, outstanding beauty, and extensive recreational opportunities. The area supports many water-dependent species of wildlife, including warm and cold water fish species addressed by three different multi-state conservation agreements, and four terrestrial species that are currently listed under the Endangered Species Act. Many towns within the area rely heavily on tourism and the recreational industry as a primary economic driver. Agriculture and the open spaces it maintains contribute to the culture, economy and quality of life of the Southwest Basin. Municipal and industrial activities round out the economic and social values and help support the diverse and vibrant communities of the region.

The Roundtable has developed this Basin Implementation Plan (BIP) based on the best available information and current conditions. The Roundtable plans to employ and maintain the BIP as a living document to be reviewed and updated periodically as conditions evolve and new information becomes available. The Roundtable takes a balanced and cooperative approach to include and address all water supply needs. While acknowledging that they sometimes represent competing demands and conflicting interests, the Roundtable treats agricultural, municipal, industrial, environmental and recreational needs equally, and is open to new projects and processes that can help address the Southwest Basin's goals.

Through its consensus-based discussions, the Roundtable has developed agreement around several salient aspects of both Southwest Basin-wide and state-wide water supply. Highlights of these agreements include conditions under which the Roundtable can consider a new trans-mountain diversion project, goals for statewide municipal water conservation measures, and the Basin's outstanding data needs.

The Roundtable is concerned about any new trans-mountain diversion (TMD). A new TMD would increase the risk of a Colorado River Compact call, as well as the risk of contingency measures to address serious conditions such as the inability to generate power from Lake Powell or levels of Lake Mead dropping below Las Vegas's municipal water supply intake. An increase in such risks jeopardizes the Southwest Basin's ability to develop water supplies to meet needs in the Southwest Basin and puts additional pressure on the Basin's agriculture to meet downstream water needs for compact compliance and/or obligations. Therefore, the Roundtable agrees on eight factors to be addressed prior to considering a new TMD.

The Roundtable supports the idea that on a statewide basis we all need to be more efficient with our water use and achieve high conservation. Recognizing that municipal demand is one of the driving forces behind agricultural dry-up and that outdoor urban irrigation is one of the highest consumptive uses of municipal water. The Roundtable agrees that before it will consider a new TMD, outdoor irrigation by water providers using agricultural buy–up and dry-up and/or pursuing a TMD should meet the higher goal of 70/30 ratio of inside to outside use of municipal water by the year 2030.

In development of Colorado's Water Plan and the Southwest BIP, the Roundtable has discussed water supply "gaps" that exist for various uses throughout the State. In evaluating those needs for southwestern Colorado, it is important that future uses and needs for the Western Slope be recognized and preserved. The Roundtable also acknowledges that uses in other parts of the state, especially demands on the Front Range, may develop sooner than those in southwestern Colorado, and that, prior to consideration of any TMD, an allocation for future uses shall be recognized for development in the San Juan and Dolores River basins.

In Colorado, the authority to establish water policies of the state, determine the beneficial uses of the water resources, and administer water rights pursuant to the Doctrine of Prior Appropriation fall under the jurisdiction of state government. It is recognized that there is a significant amount of land administered by the federal government in Colorado, which creates the potential for conflicts between state and federal laws and policies. Congress and Federal agencies have a long standing deference to state water allocation systems, and Colorado continues to promote state-federal cooperation to avoid contentious water rights issues. Federal policies and actions could affect existing and future water supplies and planning efforts in southwestern Colorado.

Therefore, the Roundtable supports Colorado's system of water rights administration and allocation and the full recognition of tribal rights under the Colorado Ute Indian Water Rights Settlement. The Roundtable also encourages and supports creative solutions sought through collaborative efforts, negotiated settlements, and strengthening the use of State-Federal MOUs, to limit conflicts between state, tribal and federal polices, laws and land management plans. Maintaining opportunities that allow for management solutions that provide for multiple beneficial

uses and are protective of environmental and recreational values are critical for the planning and strategic development of the water resources in the State of Colorado.

With respect to the Southwest Basin's Environmental and Recreational values and water needs, the Roundtable recognizes that there are significant gaps in the data and understanding regarding the flows and other conditions necessary to sustain these values. The Roundtable also recognizes that the tools currently available to help maintain those conditions are limited. The Roundtable has identified two methods that it hopes can help address and bridge this need for additional information and tools. These are:

1. Evaluation of environmental and or recreation gaps is planned to be conducted for improvement of non-consumptive resources and/or in collaborative efforts with development of consumptive IPPs. The evaluations may be conducted by a subgroup of the Roundtable or by individuals, groups, or organizations with input from the Roundtable. The evaluation may utilize methodologies such as the southwest attribute map, flow evaluation tool, R2 Cross, and any other tools that may be available.

2. Where environmental and/or recreational gaps are identified, a collaborative effort will be initiated to develop innovative tools to protect water identified as necessary to address these gaps.

The Roundtable has adopted 21 goals and 30 measureable outcomes to meet identified gaps and water supply needs. Since SWSI 2010, the Roundtable success rate for completing IPPs is 44%. A total of 55 projects were completed since the drafting of the SWSI 2010 list. Through the BIP outreach process over 80 new projects were added to the list. The list totals about 160 IPPs for all sub-basins. Of these 160, about 50% of the IPPs are for needs such as agricultural, municipal and industrial while the remaining 50% of the IPPs are for environmental and recreational needs.

At the end of 2014, the Roundtable had granted $1,906,626 from the Southwest Basin account and $5,162,859 from the statewide account; for a total of $7,069,485 granted to projects and processes aimed at meeting water needs within the Southwest Basin (See Appendix A – Final WRSA Annual Report).

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ABBREVIATIONS

AF – Acre-feet

BIP – Basin Implementation Plan

BOR – Bureau of Reclamation

CDPHE – Colorado Department of Public Health and Environment

CDSS – Colorado Decision Support Systems

CFWE – Colorado Foundation for Water Education

CPW – Colorado Parks and Wildlife

CWCB – Colorado Water Conservation Board

CWP – Colorado Water Plan

CU – Consumptive Use

EAP – Education Action Plan

ESA – Endangered Species Act

gpcd – gallons per capita day

IBCC – Interbasin Compact Committee

IPP – Identified Projects and Processes

ISF – Instream Flow

IWR – Irrigation Water Requirement

Roundtable – Southwest Basin Roundtable

SJRIP – San Juan River Basin Recovery Implementation Program

SWCD – Southwestern Water Conservation District

SWSI 2010 - SWSI 2010 Southwest Basin Report Basinwide Consumptive and Nonconsumptive Water Supply Needs Assessments

TMD – Trans-mountain Diversions

Upper Program – Upper Colorado River Endangered Fisheries Recovery Program

USFWS – Untied States Fish and Wildlife Services

USFS – Untied States Forest Service

WIP – Water Information Program

WQCD – Water Quality Control Division

WSL-CU – Water Supply Limited Consumptive Use

SECTION 1: BASIN GOALS & MEASURABLE OUTCOMES

The Southwest Basin Roundtable is unique for the complexity of hydrography, political entities, water compacts and treaties, and distinct communities that it encompasses. Although the name suggests only one basin, the Roundtable actually provides a forum for water discussions pertaining to nine distinct sub-basins, including the San Juan, the Piedra, the Pine, the Animas (including the Florida River), the La Plata, the Mancos, McElmo Creek, the Dolores and the San Miguel rivers, eight of which flow out of Colorado. Together these nine sub-basins make up the interdependent landscape of Southwest Colorado.

Many communities, both natural and human, depend on the water produced by these sub-basins. The Southwest Basin is home to the Southern Ute Indian Tribe and the Ute Mountain Ute Indian Tribe, the only two Indian Reservations in Colorado. Neighboring these tribal lands are 10 counties including Archuleta, La Plata, San Juan, Montezuma, Dolores, San Miguel and portions of Mineral, Hinsdale, Montrose and Mesa. Each of these tribal areas and counties represent distinct communities and landscapes, with their own specific and unique social, economic and environmental values, challenges and opportunities.



Vallecito Reservoir (Pine River basin)

Multiple layers of legal agreements govern water use in the Southwest Basin's area, adding additional complexity, opportunity and challenge. All of the nine sub-basins are tributary to the Colorado River and therefore fall under the Colorado River Compact and the Upper Colorado River Basin Compact: seven are part of the San Juan River sub-basin and two, the Dolores and San Miguel rivers, are part of the Colorado River sub-basin. All of the water to which the State of New Mexico is entitled under the Upper Colorado River Compact has its origins in those basins that are part of the San Juan River sub-basin (e.g. the San Juan, Piedra, Pine, Animas, La Plata, Mancos and McElmo rivers).

A treaty and settlement with both Ute Indian tribes pertain to waters within specific sub-basins. The La Plata River Compact apportions La Plata River water between Colorado and New Mexico with a daily delivery requirement to New Mexico. The San Juan/Chama Project delivers water trans-mountain from the San Juan River sub-basin in Colorado to the Rio Grande River in New Mexico to provide a portion of New Mexico's Colorado River entitlement (annual average of 85,000 to 100,000 AF). These New Mexico obligations are met by the waters of the Southwest Basin, and affect the water available to meet the needs of the area's communities. The Animas La Plata Compact provides for diversion and storage of flows for use in both Colorado and New Mexico.

The area supports many water-dependent species of wildlife, including warm and cold water fish species addressed by three different multi-state conservation agreements, and four terrestrial species that are currently listed under the Federal Endangered Species Act.

Finally, the Southwest Basin is a region of diverse natural systems, agricultural heritage, outstanding beauty, and extensive recreational opportunities. Many communities within the area rely heavily on tourism and the recreational industry as a primary economic driver. Agriculture and the open spaces it maintains contribute to the culture, economy and quality of life of the Southwest Basin. Municipal and industrial activities round out the economic and social values and help support the diverse and vibrant communities of the region.

These geographic, political, economic and legal complexities lead to unique challenges and opportunities. Appreciation of this context is basic to the development of the Roundtable's goals and to its BIP. Therefore, the Roundtable prefaces its BIP Goals with the following underlying principles. Many of these are also stated in the Southwestern Water Conservation District's Statement of Importance January 2014 (Appendix D), which was adopted by the Roundtable on January 8, 2014.

The Roundtable:

- *Intends to develop, use, and maintain the Basin Implementation Plan as a living document.*
- *Agrees that all water uses are important to the future of this region.*
- *Identifies specific and unique projects that are important to maintaining the quality of life in this region and should accommodate the development and maintenance of flows, including domestic supplies, environmental needs, agriculture, recreation, and commercial/industrial needs to provide for further economic development.*
- *Supports multi-purpose projects when possible and when they can be accomplished in a manner that is protective of the values present.*
- *Recognizes and upholds the unique settlement of tribal reserved water rights claims in the Colorado Ute Indian Water Rights Final Settlement Agreement of December 10, 1986, as authorized by Congress in the Colorado Ute Indian Water Rights Settlement Act of 1988, Pub. L. No. 100-585, and as amended by the Colorado Ute Settlement Act Amendments of 2000, Pub. L. No. 106-554 and Pub. L. No, 110-161 (2007); and the 1991 Consent Decrees.*
- *Recognizes and addresses the downstream challenges faced by water users in southwest Colorado due to continued development and pressures from users in the State of New Mexico; protect interests in southwest Colorado, while complying with existing Compact obligations. The entitlement to Colorado River flows for New Mexico will be based on deliveries from southwest Colorado.*
- *Intends to preserve the Southwest Basin's ability to develop Colorado River Compact entitlements and to meet our water supply gaps.*
- *Recognizes and addresses the challenges to all water uses that future drought and/or climate variability may bring.*

- *Recognizes that the flows necessary to support the full complement of values are not currently well understood.*
- *Limit Conflicts and Promote Collaboration within the Framework of State, Tribal and Federal Plans, Policies, Authorities and Rights.*

The Roundtable has established 21 goals (Table 1) to address the following seven themes (in no particular order):

A. Balance All Needs and Reduce Conflict
B. Maintain Agriculture Water Needs
C. Meet Municipal and Industrial Water Needs
D. Meet Recreational Water Needs
E. Meet Environmental Water Needs
F. Preserve Water Quality
G. Comply with CO River Compact and Manage Risk

In order to clarify the desired results of these goals and to help the Roundtable gauge progress toward meeting the goals over the planning horizon of this BIP (thru 2050), the Roundtable has agreed upon 31 Measureable Outcomes (Table 1). While recognizing the value of identifying measureable outcomes, the Roundtable is also cognizant of its limitations.

One limitation is that the development of ambitious but realistic measurable outcomes requires an understanding of the extent to which the Roundtable's stated goals are already being met. Measurable outcomes in this BIP were developed without a thorough understanding of the current status of those measures and of water supply needs, particularly for environmental and recreational values.

An additional limitation is that there are factors which may complicate the attainment of these outcomes. These factors include uncertainty around the ability of sponsors to implement Identified Projects and Processes (IPPs) due to issues with funding, permitting, partner support, etc.; lack of sufficient support/interest in implementing a Measureable Outcome, concern for unintended consequences, as well as difficulty in obtaining the necessary data to assess some of the identified outcomes.

Given these limitations and consistent with its principle that this BIP be a "living document," the Roundtable intends periodic reviews and updates of its Measurable Outcomes as more reliable information is developed and attainment is better understood.

TABLE 1. GOALS AND MEASUREABLE OUTCOMES FOR THE SOUTHWEST BASIN IMPLEMENTATION PLAN

A. BALANCE ALL NEEDS AND REDUCE CONFLICT

ID	Goals	Measurable Outcomes (by 2050)
A1	Pursue a high success rate for identified specific and unique IPPs to meet identified gaps and to address all water needs and values.	1. 100% of IPPs shall consider from the initial planning stage maintaining and enhancing environmental and recreational needs. 2. Complete 27 multipurpose IPPs to meet identified gaps. 3. Support and participate in 10 IPPs (such as processes) that promote dialogue, foster cooperation and resolve conflict. 4. At least 50% of identified watersheds have existing or planned IPPs that are protective of critical infrastructure and/or environmental and recreational areas. 5. All towns and major water supply systems with water supply infrastructure have watershed/wildfire assessments that identify strategies/treatments necessary to mitigate the impacts that occur to hydrology in a post-fire environment. 6. All major reservoirs have watershed/wildfire assessments that identify strategies/treatments necessary to mitigate the impacts that occur to hydrology in a post-fire environment.
A2	Support specific and unique new IPPs important to maintaining the quality of life in this region, and to address multiple purposes including municipal, industrial, environmental, recreational, agricultural, risk management, and compact compliance needs.	
A3	Implement multi-purpose IPPs (including the creative management of existing facilities and the development of new storage as needed).	
A4	Promote dialogue, foster cooperation and resolve conflict among water interests in every basin and between basins for the purpose of implementing solutions to Southwest Colorado's and Colorado's water supply challenges *(SWSI 2010).*	
A5	Maintain watershed health by protecting and/or restoring watersheds that could affect critical infrastructure and/or environmental and recreational areas.	

*Note that several of these outcomes, indicated by an asterisk, pertain directly to supporting implementation of the projects and processes, either planned or in progress, that are currently on the Southwest Basin's IPP list. They will be periodically reviewed and updated in the future.

TABLE 1. CONTINUED…

B. MEET AGRICULTURAL NEEDS		
ID	Goals	Measurable Outcomes (by 2050)
B1	Minimize statewide and basin-wide acres transferred.	1. Implement projects (e.g. ATMs, efficiency, etc.) in order to help preserve agriculture and open space values, and to help address municipal, environmental, recreational, and industrial needs; while respecting private property rights. 2. Implement strategies that encourage continued agricultural use and discourage permanent dry-up of agricultural lands. 3. The water providers in the state that are using dry- up of agricultural land (defined as requiring a water court change case) and/or pursuing a new TMD (as defined by IBCC to be a new west slope to east slope diversion project) shall have a higher standard of conservation. The goal for these water providers is a ratio of 70% in-house use to 30% outdoor use (70/30 ratio). 4. Implement at least 10* agricultural water efficiency projects identified as IPPs (by sub-basin).
B2	Implement efficiency measures to maximize beneficial use and production.	
B3	Implement IPPs that work towards meeting agricultural water supply shortages.	

*Note that several of these outcomes, indicated by an asterisk, pertain directly to supporting implementation of the projects and processes, either planned or in progress, that are currently on the Southwest Basin's IPP list. They will be periodically reviewed and updated in the future.

TABLE 1. CONTINUED…

C. MEET MUNICIPAL AND INDUSTRIAL WATER NEEDS

ID	Goals	Measurable Outcomes (by 2050)
C1	Pursue a high success rate for identified specific and unique IPPs to meet the municipal gap.	1. Complete 40* IPPs aimed at meeting municipal water needs. 2. Consistently meet 100% of residential, commercial and industrial water system demands identified in SWSI 2010 in each sub-basin, while also encouraging education and conservation to reduce demand. 3. Implement at least 1* IPP that protects or enhances the ability of public water supply systems to access and deliver safe drinking water that meets all health-based standards. 4. Change the ratio of in-house to outside treated water use for municipal and domestic water systems (referred to as water providers herein) from the current ratio of 50% in-house use and 50% outside use, to 60% in-house use and 40% outside use (60/40 ratio) for Southwest Colorado and the entire State by 2030. 5. Implement 3 informational events about water reuse efforts, tools and strategies. 6. The water providers in the state that are using dry-up of agricultural land (defined as requiring a water court change case) and/or pursuing a new TMD (as defined by IBCC to be a new west slope to east slope diversion project) shall have a higher standard of conservation. The goal for these water providers is a 70/30 ratio by 2030. This is a prerequisite for the Roundtable to consider support of a new TMD.
C2	Provide safe drinking water to Southwest Colorado's citizens and visitors.	
C3	Promote wise and efficient water use through implementation of municipal conservation strategies to reduce overall future water needs.	
C4	Support and implement water reuse strategies.	

*Note that several of these outcomes, indicated by an asterisk, pertain directly to supporting implementation of the projects and processes, either planned or in progress, that are currently on the Southwest Basin's IPP list. They will be periodically reviewed and updated in the future.

TABLE 1. CONTINUED…

D. MEET RECREATIONAL WATER NEEDS		
ID	Goals	Measurable Outcomes (by 2050)
D1	Maintain, protect and enhance recreational values and economic values to local and statewide economies derived from recreational water uses, such as fishing, boating, hunting, wildlife watching, camping, and hiking.	1. Implement 10* IPPs to benefit recreational values and the economic value they provide. 2. At least 80% of the areas with recreational opportunities have existing or planned IPPs that secure these opportunities and supporting flows/lake levels within the contemporary legal and water management context. Based on the map of recreational attributes generated for SWSI 2010 (Figure 1) 80% of each specific value equates to approximately 428 miles of whitewater boating, 185 miles of flat-water boating, 4 miles of Gold medal Trout Streams, 545 miles of other fishing streams and lakes, 3 miles of Audubon Important Bird Area, 143 miles of waterfowl hunting/viewing parcels, and 6 miles of Ducks Unlimited projects. 3. Address recreational data needs.

*Note that several of these outcomes, indicated by an asterisk, pertain directly to supporting implementation of the projects and processes, either planned or in progress, that are currently on the Southwest Basin's IPP list. They will be periodically reviewed and updated in the future.

TABLE 1. CONTINUED…

E. MEET ENVIRONMENTAL WATER NEEDS		
ID	Goals	Measurable Outcomes (by 2050)
E1	Encourage and support restoration, recovery, and sustainability of endangered, threatened, and imperiled aquatic and riparian dependent species and plant communities. *(See list of such species in the Southwest Basin)***	1. Implement 15* IPPs to directly restore, recover or sustain endangered, threatened, and sensitive aquatic and riparian dependent species and plant communities. 2. At least 95% of the areas with federally listed water dependent species have existing or planned IPPs that secure the species in these reaches as much as they can be secured within the existing legal and water management context. 3. At least 90% of areas with identified sensitive species (other than ESA species) have existing or planned IPPs that provide direct protection to these values. Based on the map of environmental attributes generated for SWSI 2010 (Figure 1) 90% for individual species equates to approximately 169 miles for Colorado River cutthroat trout, 483 miles for roundtail chub, 794 miles for bluehead sucker, 700 miles for flannelmouth sucker, 724 miles for river otter, 122 miles for northern leopard frog, 921 miles for active bald eagle nesting areas and 229 miles for rare plants. 4. Implement 26* IPPs to benefit the condition of fisheries and riparian/wetland habitat. 5. At least 80% of areas with environmental values have existing or planned IPPs that provide direct protection to these values.
E2	Protect, maintain, monitor and improve the condition and natural function of streams, lakes, wetlands, and riparian areas to promote self-sustaining fisheries, and to support native species and functional habitat in the long term, and adapt to changing conditions.	

*Note that several of these outcomes, indicated by an asterisk, pertain directly to supporting implementation of the projects and processes, either planned or in progress, that are currently on the Southwest Basin's IPP list. They will be periodically reviewed and updated in the future.

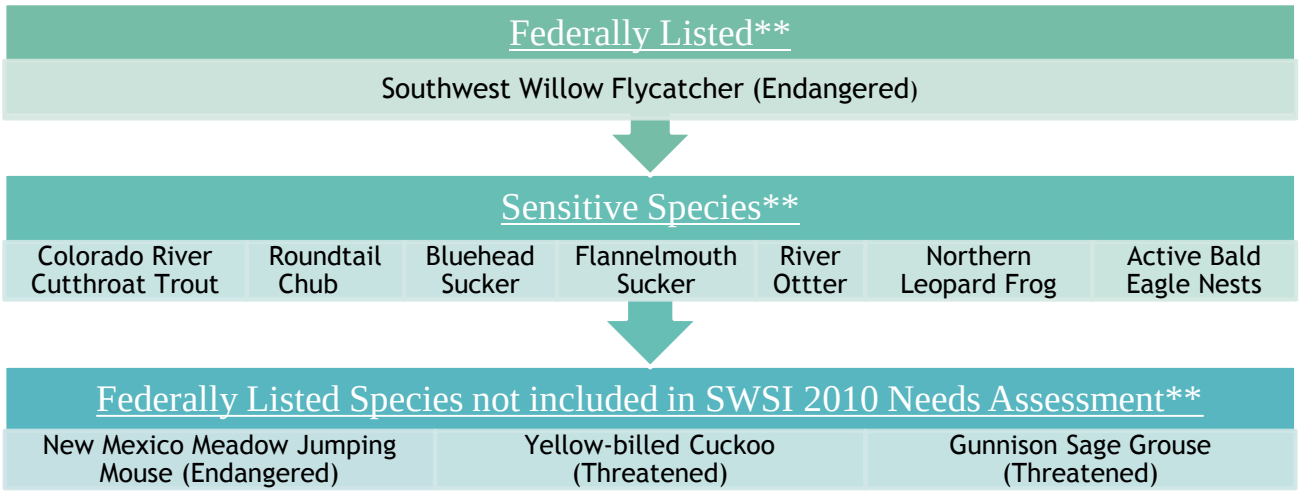


TABLE 1. CONTINUED…

F. PRESERVE WATER QUALITY		
ID	Goals	Measurable Outcomes (by 2050)
F1	Monitor, protect and improve water quality for all classified uses.	1. By 2016, replace the following statewide outcomes with outcomes based on the current status of these measures in the Roundtable area, followed by a periodic status review every five years. a. 60% of stream miles and 40% of reservoir acres attain water quality standards and support all designated uses. b. 15% of impaired stream miles and reservoir acres are restored to meet all applicable water quality standards. c. 50% of stream miles and 30% of reservoir acres are attaining water quality standards. d. 100% of existing direct use and conveyance use reservoirs attain the applicable standards that protect the water supply use classification. 2. Implement 6* IPPs to monitor, protect or improve water quality.

*Note that several of these outcomes, indicated by an asterisk, pertain directly to supporting implementation of the projects and processes, either planned or in progress, that are currently on the Southwest Basin's IPP list. They will be periodically reviewed and updated in the future.

TABLE 1. CONTINUED…

G. COMPLY WITH CO RIVER COMPACT AND MANAGE RISK		
ID	Goals	Measurable Outcomes (by 2050)
G1	Plan and preserve water supply options for all existing and new uses and values.	1. Water providers proposing a new TMD shall achieve a 60/40 ratio by 2020 and 70/30 ratio by 2030 as a prerequisite for the Roundtable to consider support of a new TMD. 2. A conceptual agreement is developed between roundtables regarding how to approach a potential future TMD from the West Slope to the East. 3. Protect 100% of pre-compact water rights in the Southwest Basin Area. 4. Implement 2* IPPs aimed at utilizing Tribal Water Rights Settlement water. 5. Implement 2* IPPs aimed at meeting La Plata River compact. 6. Participate in Compact Water Bank efforts.
G2	Recognize and address the challenges faced by water users in southwest Colorado due to continued development and pressures from users in the State of New Mexico; protect interests in southwest Colorado, while complying with existing Compact obligations. New Mexico's entitlement to Colorado River flows are based on deliveries from southwest Colorado (*SWCD Statement of Importance).*	
G3	Preserve Southwest Basin's ability to develop CO River compact entitlement to meet our water supply gaps. *(SWCD Statement of Importance).*	
G4	Recognize and uphold the unique settlement of tribal reserved water rights claims in the 1988 Tribal Water Rights Settlement and the 1991 Consent Decree. *(SWCD Statement of Importance).*	
G5	Support strategies to reduce demand in the Colorado River Basin to ensure levels in Lake Powell are adequate to produce power.	
G6	Support strategies to mitigate the impact of a Colorado River Compact curtailment should it occur.	

*Note that several of these outcomes, indicated by an asterisk, pertain directly to supporting implementation of the projects and processes, either planned or in progress, that are currently on the Southwest Basin's IPP list. They will be periodically reviewed and updated in the future.

SECTION 2: EVALUATE NEEDS

2.1 ENVIRONMENTAL & RECREATIONAL NEEDS

Identifying environmental and recreational water needs within the Southwest Basin poses a significant challenge. In SWSI 2010 the Roundtable was able to identify and map the location of environmental and recreational values defined by the Roundtable and by public input received at Roundtable hosted outreach meetings in Durango, Telluride, Cortez and Pagosa Springs. (Appendix C, SWSI 2010). However, the water, habitat or infrastructure needed to support the identified values has not been quantified or identified so the Southwest Basin's environmental and recreational supply needs cannot be fully defined.



Hesperus Mountain (Mancos River basin)

Given the constraints of time to develop this BIP, the Roundtable has chosen to address the issue by supporting an IPP that contemplates the development of this information:

> "Evaluation of environmental and or recreation gaps is planned to be conducted for improvement of non-consumptive resources and/or in collaborative efforts with development of consumptive IPPs. The evaluations may be conducted by a subgroup of the Roundtable or by individuals, groups, or organizations with input from the Roundtable. The evaluation may utilize methodologies such as the southwest attribute map, flow evaluation tool, R2 Cross, and any other tools that may be available."

Any changes resulting from the information gathered through the IPP will be considered in the future, consistent with the Roundtable's principle that the BIP is a "living document."

In developing this BIP, the Roundtable conducted numerous interviews to update the Basin's list of IPPs (Appendix A). Guided by the goals and measureable outcomes identified in Section 1, the Roundtable then used mapping to assess the stream miles of environmental and

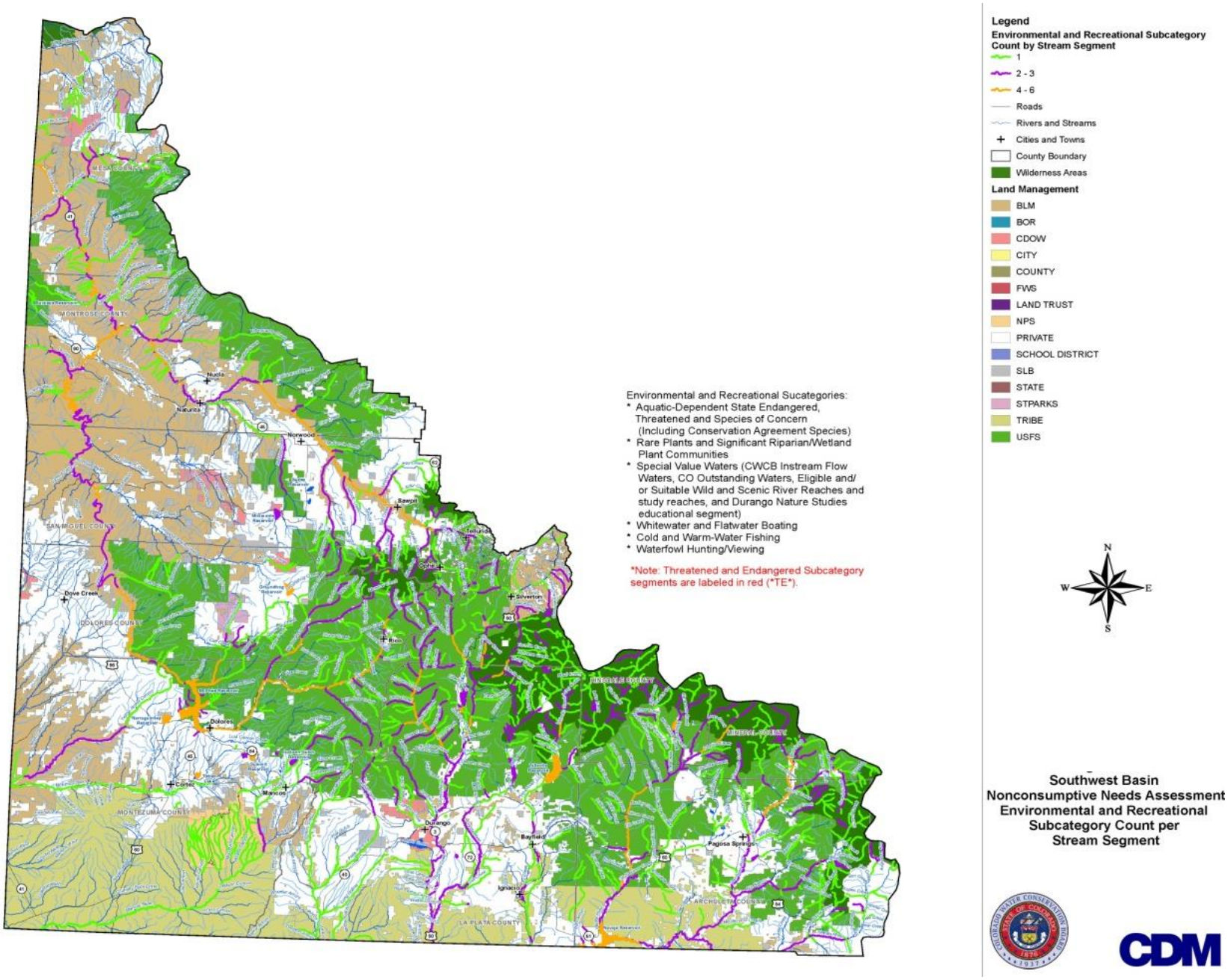
recreational values on reaches and water bodies in the Southwest Basin that are benefiting, to some unknown extent, from existing protections or IPPs, and the stream miles of these values that currently do not appear to be benefitting from protections or IPPs.

Appendix C of SWSI 2010 presented the results of the Roundtable's extensive inventory of its environmental and recreational attributes, or values. This inventory identified the following 22 environmental (15) and recreational (7) attributes or values, which were then grouped into six subcategories (Table 2) and mapped (Figure 1) (CWCB 2011).

TABLE 2. SOUTHWEST BASIN ENVIRONMENTAL AND RECREATIONAL ATTRIBUTES AND CATEGORIES IDENTIFIED IN SWSI 2010 (CWCB 2011)

SUB-CATEGORY	CATEGORY	ATTRIBUTE
Aquatic-Dependent State Endangered, Threatened and Species of Concern.	1	Colorado River Cutthroat Trout
	2	Roundtail Chub
	3	Bluehead Sucker
	4	Flannelmouth Sucker
	5	River Otter
	6	Northern Leopard Frog
	7	Active Bald Eagle Nests
	8	Southwestern Willow Flycatcher
Special Value Waters	9	Outstanding Waters
	10	Wild and Scenic Eligibility/Suitability
	11	CWCB ISF Water Rights
	12	CWCB Natural Lake Level Water Rights
	13	Durango Nature Studies
Rare Plants and Significant Riparian/Wetland Plant Communities	14	Rare Plants
	15	Significant Plant Communities
Whitewater and Flat-water Boating	16	Whitewater Boating
	17	Flat-water Boating
Cold and Warm water Fishing	18	Gold Medal Trout Streams
	19	Other Fishing Streams and Lakes
Waterfowl Hunting/Viewing	20	Audubon Important Bird Areas
	21	Waterfowl Hunting/Viewing Parcels
	22	Ducks Unlimited Projects

FIGURE 1. SOUTHWEST BASIN NONCONSUMPTIVE NEEDS ASSESSMENT ENVIRONMENTAL & RECREATIONAL SUBCATEGORY COUNT PER STREAM SEGMENT (CWCB 2011, FIGURE 2-4, PG 2-6)



Three species that are currently listed under the Federal Endangered Species Act, but that were not included in SWSI 2010 are the New Mexico Meadow Jumping Mouse (Endangered), the Yellow-billed Cuckoo (Threatened) and the Gunnison Sage Grouse (Threatened).

Complete or partial protections for environmental or recreational flows that exist in the Southwest Basin include the following:

- CWCB ISF reaches (decreed, pending, and recommended)
- Reaches found Suitable for Wild & Scenic designation
- Recreational in-channel diversion
- Wilderness Areas
- National Parks

In addition to these protections which are easily mapped to specific reaches or areas, water management, water administration (e.g. senior water rights), and compact administration in the Basin, as well as two Programmatic Biological Opinions issued under Section 7 of the Endangered Species Act function to maintain some level of flow in some rivers under certain circumstances. These protections are not specific to reaches or flows, and therefore do not lend themselves to mapping. They cover several rivers within and outside of the Basin and provide some level of long term maintenance of flows out of the state. However, the level of flow maintained in a given reach of river in a given year is dependent on conditions elsewhere in the Colorado River basin, and therefore difficult to know or plan on for the maintenance of a given environmental or recreational value. Programmatic Biological Opinions, water management, and water administration will be discussed in detail in Section 3.

Map layers reflecting the stream reaches where the bulleted protections exist were overlaid onto the map of Southwest Basin environmental and recreational attributes. The resulting maps (Figures 2 and 3) allow an assessment of the stream reaches where environmental and recreational values currently exist with some level of protection that may benefit the values at some unknown level, as well as the stream reaches where no such protections appear to exist.

FIGURE 2. MAP OF REACHES WITH ENVIRONMENTAL VALUES WITH NO IDENTIFIED FLOW PROTECTIONS

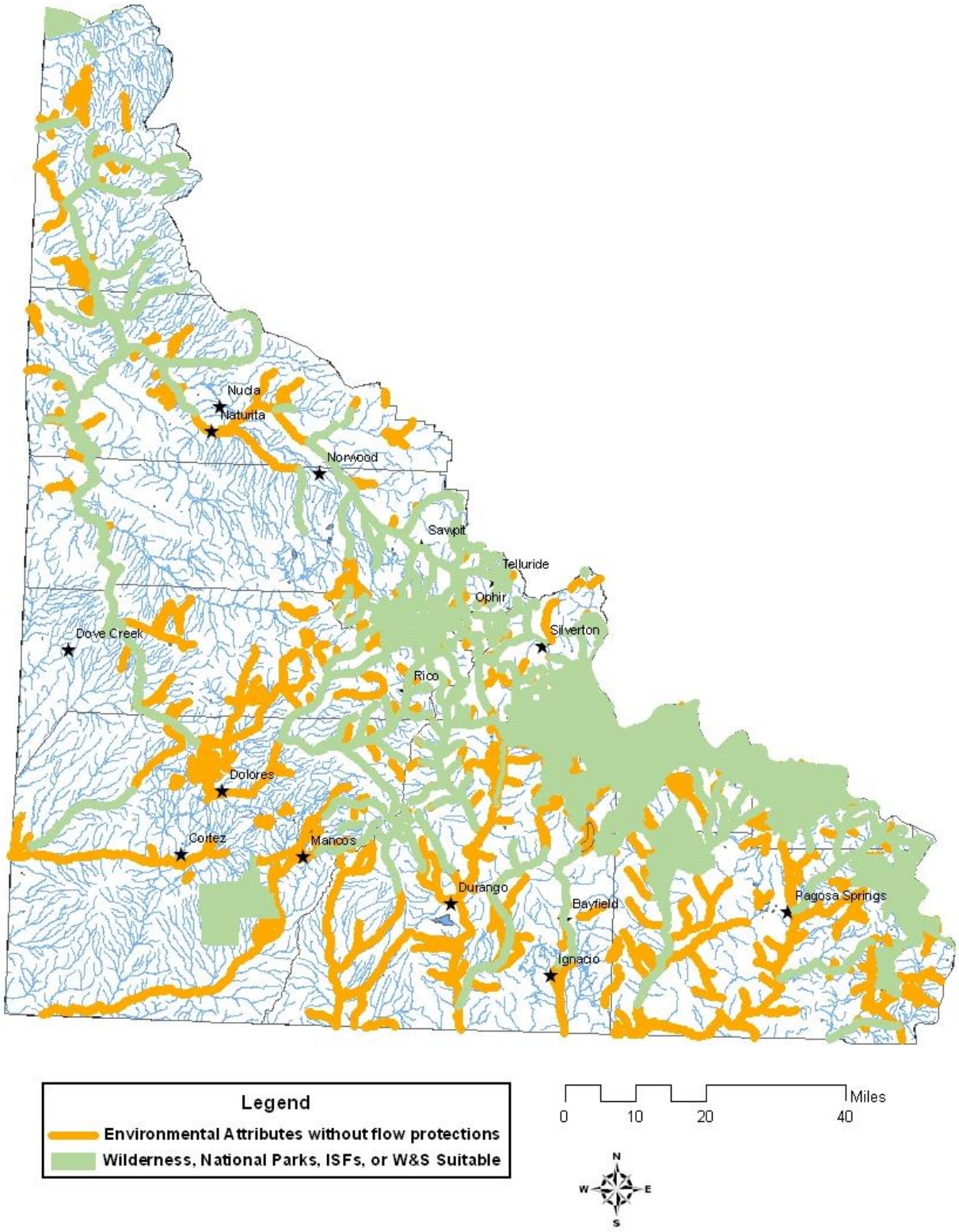
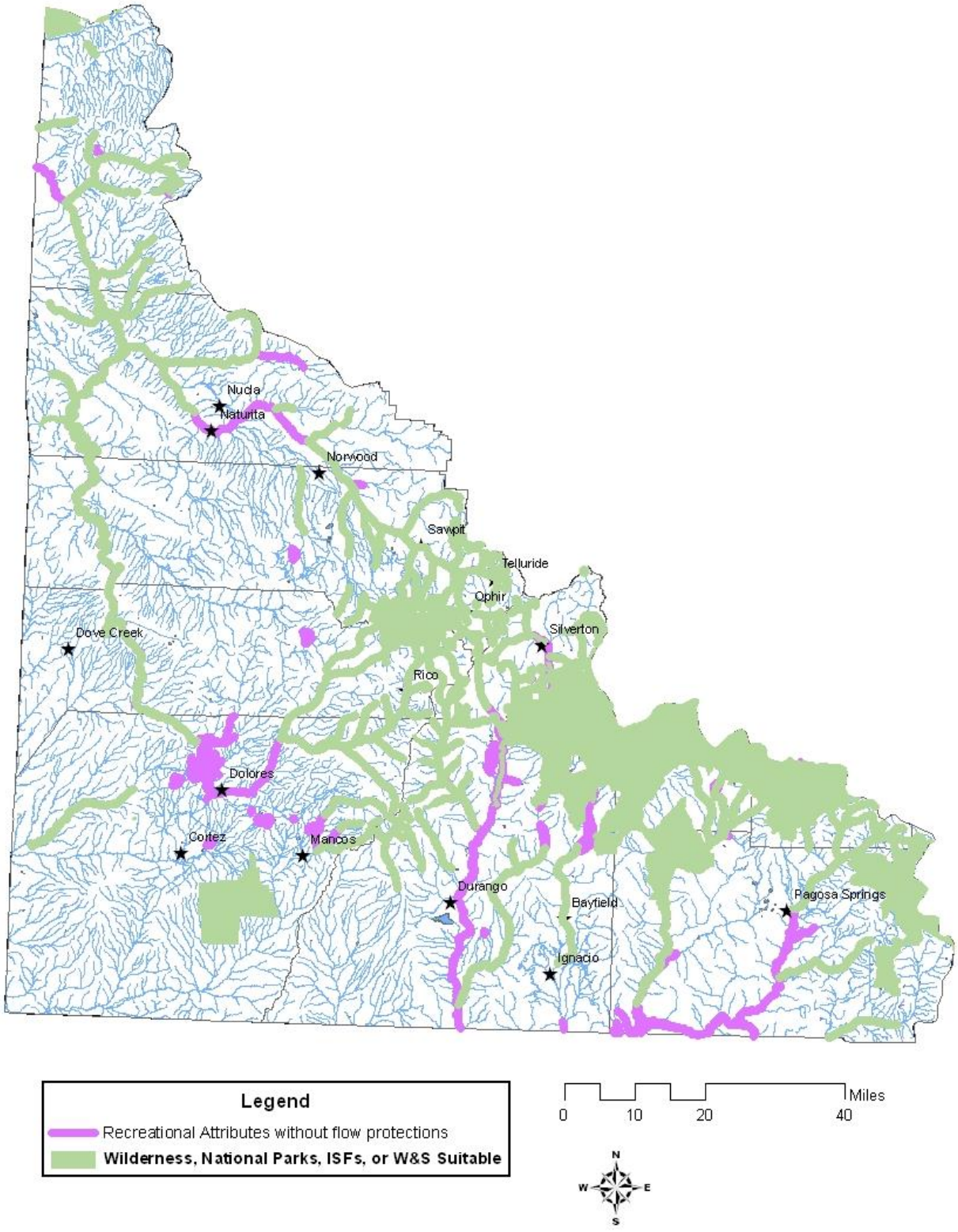


FIGURE 3. MAP OF REACHES WITH RECREATIONAL VALUES WITH NO IDENTIFIED FLOW PROTECTIONS



The Roundtable recognizes that there are significant gaps in the data and understanding regarding the flow regimes (stream flow frequency, magnitude, duration and timing) and other conditions necessary to sustain many of the environmental and recreational values identified in the Southwest Basin. The Roundtable also recognizes that the tools currently available to help maintain those conditions are limited. Therefore the Roundtable cautions against any assumption that the presence of an existing protection (e.g. ISF) is sufficient to maintain or sustain the attribute(s) identified in that reach. Assessment of the sufficiency of such measures depends on the particular attributes, the condition of the stream reach and the measures in place. The Roundtable has identified two IPPs that it hopes can help address and bridge these needs for more information and additional tools (Sections 4 and 5).

2.2 AGRICULTURAL, MUNICIPAL AND INDUSTRIAL NEEDS

2.2.1 AGRICULTURAL

SWSI 2010 provided information about the methodologies used to develop estimates of current irrigated acres, estimates of 2050 irrigated acres, and estimates of the average annual agricultural demand by basin for the year 2050.

Current irrigated acres were estimated using the CDSS program's spatial databases which include crop types, irrigation practices, and water source (e.g. locations of wells or diversion structures). The most recent year of data collected that is provided as a spatial database is 2005. According to SWSI 2010, the Southwest Basin has the third highest percentage of irrigated acres of Colorado's west slope basins (seventh overall in the state).

To develop estimates of 2050 irrigated acres the baseline of current irrigated acres was used. Multiple factors (a total of 8) were qualitatively addressed, while three factors (urbanization of existing irrigated lands, agricultural to municipal water transfers, and water management decisions) were quantified. For detailed explanation of the quantification of factors reference SWSI 2010 Section 4.3.1.2 Irrigation Acres Methodology. Table 3 provides a comparison of current irrigated acres to estimated future irrigated acres.



Lemon Reservoir (Animas River basin)

Lemon Reservoir is a main feature of the Florida Project on the Florida River northeast of Durango. The reservoir was completed in 1963, and the canal rehabilitation was completed in 1965. The reservoir can store about 40,000 AF, and provides supplemental irrigation for approximately 20,000 acres. Through recent agreements, efficiency improvements, and court changes, the storage can also provide domestic and augmentation requirements while continuing to meet the irrigation demand. The Florida Water Conservancy District manages the project, which is identified as a multipurpose IPP.

TABLE 3. CURRENT AND ESTIMATED FUTURE IRRIGATED ACRES BY SUB-BASIN (CWCB 2011)

	CURRENT IRRIGATED ACRES (ACRES)	ESTIMATED DECREASE IN IRRIGATED ACRES DUE TO URBANIZATION (ACRES)*		ESTIMATED DECREASE IN IRRIGATED ACRES DUE TO AGRICULTURAL TO MUNICIPAL TRANSFERS TO ADDRESS M&I GAP (ACRES)*		ESTIMATED 2050 IRRIGATED ACRES*		ESTIMATED DECREASE IN IRRIGATED ACRES BY 2050*	
		Low	High	Low	High	Low	High	Low	High
San Juan	15,840	626	799	200	413	15,014	14,628	826	1,213
Piedra	7,074	129	165	89	185	6,856	6,725	219	350
Pine	46,755	934	1,347	590	1,220	45,231	44,188	1,524	2,567
Animas	32,193	578	854	406	840	31,209	30,499	984	1,694
La Plata	21,305	382	565	269	556	20,654	20,184	651	1,121
Mancos	11,617	54	72	147	303	11,417	11,242	200	375
McElmo	11,394	43	57	131	270	11,220	11,067	173	327
Dolores	80,368	479	634	943	1,949	78,946	77,784	1,422	2,584
San Miguel	32,879	921	1,314	415	858	31,543	30,708	1,336	2,171
Total	**259,400**	**4,100**	**5,800**	**3,200**	**6,600**	**252,100**	**247,000**	**7,300**	**12,400**

*Estimates based on projected level of population growth.

The Southwest Basin has numerous reservoirs (e.g. Animas La Plata Project, Electra Lake, Lemon Reservoir, Vallecito Reservoir, Pagosa Area Water and Sanitation District reservoirs, Jackson Lake, McPhee Reservoir, Norwood Water Commission reservoirs, Gurley Reservoir, etc.) that provide or plan to provide municipal and industrial water. While some extent of urbanization is inevitable, the Southwest Basin does not assume that current irrigation water supply will be transferred to meet the municipal and industrial gap. A minor exception is augmentation planning. Augmentation plans are developed on a case by case basis where a water rights holder is drying-up (taking out of production) their own land in order to provide additional water supply for a different use (such as domestic water).

The estimated average annual agricultural demand is based on the estimated 2050 irrigated acres and the average amount of water consumptively used by crops on irrigated lands. The consumptive use (CU) for a crop is the amount of water provided to the crop during the growing season. The irrigation water requirement (IWR) is the amount of water the crop would use if it were available. To quantify a crop's CU, the IWR is compared to the average water supply, the minimum of these two values over a period of time (typically months) is the water supply limited consumptive use (WSL CU). The WSL CU is assumed to represent the water necessary to sustain existing levels of agricultural acreage.

In addition to agricultural consumptive demands, SWSI 2010 estimated non-irrigation agricultural consumptive demands, such as stock ponds. For detailed explanation of the agricultural demand methodology see Section 4.3.1.4 2050 Agricultural Demand Methodology in SWSI 2010.

Two types of agricultural need were identified during the outreach efforts for the BIP. One of these we will term as an "annual shortage". This shortage can be quantified by comparing the WSL-CU to the IWR for a specific basin to indicate how often throughout the season a crops potential water use (IWR) is met. As an example, Table 4 provides estimates of current and 2050 annual agricultural demands. The Annual Shortage is calculated by subtracting the WSL-CU from the IWR.

TABLE 4. ESTIMATED CURRENT & FUTURE AGRICULTURAL DEMANDS IN THE SOUTHWEST SUB-BASINS

	IRRIGATED ACRES		IRRIGATION WATER REQUIREMENT (AF/YR)		WATER SUPPLY LIMITED-CU (AF/YR)		ANNUAL SHORTAGE (AF/YR)		NON-IRRIGATION DEMAND* (AF/YR)	
	SWSI 2010	2050 Estimate	SWSI 2010	2050 Estimate	SWSI 2010	2050 Estimate	SWSI 2010	2050 Estimate	SWSI 2010	2050 Estimate
San Juan	15,840	14,821	34,693	32,460	22,597	21,139	12,096	11,321	2,941	2,752
Piedra	7,074	6,790	14,839	14,243	8,595	8,250	6,244	5,993	946	908
Pine	46,755	44,710	103,096	98,586	90,515	86,555	12,581	12,031	9,311	8,904
Animas	32,193	30,854	74,431	71,336	53,817	51,579	20,614	19,757	5,843	5,600
La Plata	21,305	20,419	44,493	42,643	14,286	13,692	30,207	28,951	1,757	1,684
Mancos	11,617	11,329	31,560	30,779	16,060	15,663	15,499	15,116	2,716	2,649
McElmo	72,463	11,144	157,219	26,732	110,571	23,016	46,648	3,717	6,547	6,403
Dolores	19,298	78,365	48,728	174,195	28,050	112,190	20,678	62,005	11,925	11,623
San Miguel	32,879	31,125	71,167	67,371	37,396	35,402	33,770	31,969	3,937	3,727
Total	**259,400**	**249,557**	**580,200**	**558,345**	**381,900**	**367,486**	**198,300**	**190,859**	**45,900**	**44,250**

* includes stock ponds, ditch losses, etc.

Table 5 shows the shortage in water supply on an annual basis that is needed to meet the IWR for the existing irrigated acreage identified in SWSI 2010. Percentages shown represent the SWSI 2010 Annual Shortage value as a percent of the SWSI 2010 IWR provided in Table 4. It can be seen from Table 5 that the La Plata River basin shows the largest discrepancy between the amounts of water that the existing irrigated crops could use if it were available and the amount of water they are supplied with annually.

TABLE 5. ANNUAL SHORTAGE IN WATER SUPPLY NEEDED TO MEET CROPS IWR

SUB-BASIN	SHORTAGE
San Juan	35%
Piedra	42%
Pine	12%
Animas	28%
La Plata	68%
Mancos	49%
McElmo	30%
Dolores	42%
San Miguel	47%

The La Plata River basin has about 21,305 acres of existing irrigated lands (CWCB 2011). The average annual water supply is 23,153 AF. Based on this acreage and average annual water supply, about 0.71 AF per acre is supplied to the crops, assuming a high efficiency of delivery (e.g. conveyance losses of 10% and on-farm losses of 25%), as used by Bureau of Reclamation (BOR). The IWR is 2.09 AF per acre, so this annual water supply on average is meeting the IWR about 32% of the time for a single irrigation season.

The La Plata River is also unique in that it is administrated according to the La River Compact, as well as Colorado water law. See Section 3.2 for details of the compact. The compact requires half of the measured flow, not to exceed 100 cubic feet per second, at the Hesperus gaging station be delivered to the state line.

The second type of agricultural need identified in the Southwest Basin is the amount of irrigable land that is either not currently irrigated or not currently under production. We term this an “irrigation gap”. As part of the Animas La-Plata Project the BOR conducted land classifications of the Animas and La Plata river drainage areas and found many acres that are dry-land farmed that are potentially irrigable (DPR Appendix B, 1979). Of the present dry-land farming acreage, approximately 30,000 acres could be irrigated, in addition, 13,000 acres are presently not in crop production that could be irrigated as well. Assuming an IWR of 1.9 AF per acre (conveyance losses of 10% and on-farm losses of 25%, as assumed by BOR) the water supply needed to irrigate these new lands would be about 110,295 AF. This is well out of range for the average annual water supply in the La Plata Basin to provide for these new lands in addition to the existing lands’ needs. However, extensive studies identify trans-basin water as a source of potential water supply. The



McPhee Reservoir (Dolores River basin)

trans-basin water would be used to meet the demands of the existing lands in addition to the development of these new lands. Examples of trans-basin agricultural water development exist in the Southwest Basin today.

In some regions the needs of one basin have been met through a trans-basin diversion. An example is the McElmo River basin which receives irrigation water diverted out of the Dolores River through the Dolores Project. The Dolores Project irrigates about 28,500 acres of land from Yellow Jacket to Dove Creek, to the north, and about 7,600 acres around the toe of Ute Mountain (operated by Ute Mountain Ute Farm and Ranch). The Dolores Project also provides supplemental irrigation water to 26,300 acres in the Montezuma Valley Irrigation Company's service area that are classified as irrigable by the BOR. The Ute Mountain Ute Farm and Ranch has identified additional needs for irrigation water (see Appendix A) in the amount of 4,000 AF. This is a known, quantifiable irrigation gap. Please see Section 5 for proposed strategies and tools that could potentially meet a portion or all of this need.

2.2.2 MUNICIPAL

SWSI 2010 provided information about the methodologies used to develop population projections and future municipal demands by 2050. For a detailed explanation of municipal demands, reference Section 4.2 M&I and SSI Consumptive Needs in SWSI 2010 (CWCB 2011). Population projections were estimated using standard methods and forecasting processes utilized by the Colorado State Demographer's Office. Due to uncertainties in projections, low, medium, and high scenarios for population projections were developed. The State of Colorado is estimated to grow from approximately 5.1 million people to between 8.6 (low) and 10 (high) million people by 2050.

TABLE 6. POPULATION PROJECTIONS (CWCB 2011)

	2008	2035	2050 LOW	2050 MEDIUM	2050 HIGH	% AVERAGE ANNUAL GROWTH RATE
Archuleta County	12,870	28,295	32,180	34,602	37,517	2.23-2.58
Dolores County	1,993	3,127	3,455	3,692	3,977	1.37-1.69
La Plata County	51,454	87,929	95,803	105,276	116,996	1.49-1.95
Montezuma County	26,127	41,306	45,560	48,529	52,062	1.32-1.62
Montrose County*	4,177	7,787	8,577	9,037	9,661	1.80-2.07
San Juan County	588	683	830	1,098	1,395	0.78-1.95
San Miguel County	7,966	15,509	17,602	22,028	27,368	1.93-2.93
Total	**105,180**	**184,640**	**20,4010**	**224,260**	**248,980**	**1.6-2.1**

*Southwest portion of Montrose County

To estimate current and future municipal demands, water demands were based on the per capita water use rates (provided by water providers throughout the state) multiplied by the projected population for each county. Numerous factors contribute and affect the estimated per capita water use. For a detailed explanation on how these values were determined please reference SWSI 2010 Section 4.2.2.1 2050 M&I Water Demands Methodology. In summary, local water providers provided per capita water use based on their existing customers, which was in turn used

to estimate county-wide water use. Passive water conservation was also taken into consideration and assumed to range from 19 to 33 gallons per capita through the year 2050. The municipal and industrial demands of the Southwest Basin are expected to be between 40,000 and 50,000 AF per year by 2050 (CWCB 2011).

TABLE 7. 2050 MUNICIPAL WATER DEMAND ESTIMATES (CWCB 2011)

	WATER DEMAND (AF/YR)	2050 BASELINE WATER DEMAND (AF/YR)		
	2008	Low	Medium	High
Archuleta County	2,600	6,600	7,100	7,700
Dolores County	540	940	1,000	1,100
La Plata County	9,800	18,000	20,000	22,000
Montezuma County	5,000	8,800	9,400	10,000
Montrose County*	870	1,800	1,900	2,000
San Juan County	120	170	220	280
San Miguel County	2,600	5,700	7,100	8,900
Total	**21,530**	**42,010**	**46,720**	**51,980**

*Southwest portion of Montrose County

An M&I gap within Montrose County (Southwest Basin portion) was identified during the outreach efforts for the development of the BIP. Montrose County representatives provided two IPPs to meet the municipal and industrial needs over the next 50 years; please see Section 4.4 for a summary of the IPPs and Appendix A for the full IPP list. The two Montrose County projects will address the potential 3,200 AF gap between existing water supplies and demands projected to occur by the year 2050 in the west portion of Montrose County.

Another M&I gap that exists throughout the Southwest Basin is the need for water delivery infrastructure. This is not a quantifiable water supply gap but rather related to delivery of safe, reliable potable drinking water. Approximately 35% of the population within the basins are served by covered entities (public water systems serving at least 2,000 AF of water annually), approximately 40% are served by community public water systems (e.g. 15 connections or 25 residents; served year around), with the reminder of the population served by wells, non-community water systems, water hauling, surface water diversions or some combination of these (S. Harris, pers. comm.). Many residents are in need of safe, reliable drinking water that are not living within the service area of an existing water system. The formation of water districts, water authorities, or other entities to serve and construct rural water delivery systems is necessary to serve current residents of the Southwest Basin and to provide for future growth projections. A rural water system can provide reliability and safe drinking water to residents whose needs might otherwise not be met. The Southwest Basin has multiple existing or planned reservoirs to serve

M&I water demands. These reservoirs can provide long term water supply for public water systems.

2.2.3 INDUSTRIAL

SWSI 2010 estimated future self-supplied industrial water needs (SSI) which includes water used by self-supplied industries and municipal water provided to large industries. Subsectors that are included are:

- Large industries such as mining, manufacturing, brewing, and food processing
- Water needed for snowmaking
- Thermoelectric power generated at coal and natural gas fired facilities
- Energy development; such as natural gas, coal, uranium, and oil shale



Snowmaking in Telluride, CO (San Miguel River basin)

For the Southwest Basin, the industries specifically noted were snowmaking (within La Plata and San Miguel counties) and thermoelectric power generation (within Montrose County). SWSI 2010 reported snowmaking water demands are expected to remain constant through 2050 because no resort expansions were planned at time of data collection. For thermoelectric power generation baseline estimates generated through the SWSI I efforts were assumed until 2035, while 2050 estimates were made based on predetermined percent increase for low (5 percent), medium (25 percent) and high (50 percent) range. SWSI 2010 did not include projections of water demands for energy development within the Southwest Basin. Such demands might be worth estimating if drilling of shale beds moves from exploration to production.

SWSI 2010 included these SSI projections within the M&I water demand projections. These projections also include reductions for passive conservation (a range of 19 to 33 gpcd by 2050 was used). Please see the below Table 8 for a quantification of these values.

TABLE 8. 2050 M&I DEMAND PROJECTIONS FOR COUNTIES IN THE SOUTHWEST BASIN (CWCB 2011)

	2008 WATER DEMAND (AF/YR)	2035 WATER DEMAND* (AF/YR)	2050 INCREASE IN M&I AND SSI DEMAND* (AF/YR)		
			Low	Medium	High
Archuleta County	2,600	5,400	3,500	4,000	4,600
Dolores County	540	790	300	400	500
La Plata County	9,800	15,000	6,800	8,600	10,800
Montezuma County	5,000	7,300	3,000	3,500	4,200
Montrose County**	870	1,500	3,000	3,900	5,000
San Juan County	120	120	30	90	100
San Miguel County	2,600	4,800	2,900	4,300	6,000
Southwest Total	**21,530**	**34,910**	**19,500**	**24,800**	**31,200**

*Water demand including passive conservation

**Southwest portion of Montrose County

SWSI 2010 describes the M&I and SSI water supply gap as the difference between the 2050 net new water needs minus the 2050 IPPs (based on the IPP's yield and success rate). SWSI 2010 describes meeting the future M&I demand through growth into existing supplies, as well as through achieving regional in-basin IPPs having a success rate of 100%. A number of IPPs exist to meet the M&I demand projections. For the complete list of IPPs see Appendix A. Within each sub-basin, current municipal IPPs have the potential to meet identified needs if completed as currently described.

Archuleta County has a projected demand increase of 3,500 to 4,600 AF per year. This potential gap could be met by the IPP described as regional in-basin IPPs which is the Dry Gulch Water Storage Facility Project. Infrastructure gaps could be met by the proposed IPPs for the Aspen Springs Distribution System and the Snowball Booster Station with Snowball to Dutton Diversion Pipeline Project.

Dolores County has a projected demand increase of 300 to 500 AF per year. This potential gap could be met by growth into existing supplies and regional in-basin IPPs. The Rico Alluvial Pipeline Water Supply Project was recently completed; the Town of Rico constructed a new groundwater source to meet demands while keeping the existing surface water diversion in place to provide redundancy. The Dolores Project has existing M&I water that is not permanently allocated. The Dolores Project already provides M&I water to the City of Cortez, Montezuma Water Company, Dove Creek, and Towaoc. In addition, a new reservoir is proposed, the Upper Plateau Reservoir decreed for M&I and fisheries purposes, which could also supply M&I demands.

La Plata County has a projected demand increase of 6,800 to 10,800 AF per year. This potential gap could be met by growth into existing facilities and regional in-basin IPPs. The Animas-La Plata Project currently has water allocated for M&I use for the City of Durango, La Plata Archuleta Water District, La Plata West Water Authority, Ute Mountain Ute Tribe, and Southern Ute Tribe. The Florida Water Conservancy District has a multi-purpose IPP providing augmentation water and M&I water for the Florida River basin. New regional in-basin infrastructure IPPs include the Animas Airpark Water Distribution System, La Plata Archuleta Water District Distribution System and the La Posta Road Water Distribution System.



Rico Alluvial Municipal Pipeline Project (Dolores River basin)

Montezuma County has a projected demand increase of 3,000 to 4,200 AF per year. This potential gap could be met by growth into existing facilities. Again, the Dolores Project provides M&I water to water providers within Montezuma County. In the future, Totten Reservoir could be a potential water source to provide M&I water. Within the Mancos watershed, reservoirs currently providing M&I water have enlargements planned to increase capacity and provide additional water supply.

Montrose County has a projected demand increase of 3,000 to 5,000 AF per year. This potential gap could be met by growth into existing supplies and by regional in-basin IPPs. Existing providers are investigating means of providing additional water, firming of existing supplies, and enlargement of distribution systems. The regional in-basin IPP consists of a two-phased IPP; the first phase is to conduct a feasibly study to determine reservoir sites and expected yield, and the second phase is to construct one or more reservoirs.

San Juan County has a projected demand increase of 30 to 100 AF per year. This potential gap can be met by growth into existing supplies. Currently, there are no IPPs listed that provide additional water supply. The existing IPPs relate to infrastructure not supply.

San Miguel County has a projected demand increase of 2,900 to 6,000 AF per year. This potential gap can be met by growth into existing supplies. Existing providers are investigating means of providing additional water, firming of existing supplies, and enlargement of distribution systems.

SECTION 3: CONSTRAINTS & OPPORTUNITIES

3.1 ANALYSIS OF CONSTRAINTS & OPPORTUNITIES BASED ON EXISTING DATA

The purpose of this section is to understand where there appear to be opportunities for new IPPs to meet remaining needs (e.g. gaps) and what some of the constraints may be, based on existing data.

Examples of physical and administrative conditions that may act as constraints and/or present opportunities include:

- Water management and water rights administration (see Section 3.2),
- Current and future hydrology (see Section 3.5),
- Sensitive species and habitat location and quality (see Section 3.3)
- Flows and river gradient (e.g. for whitewater and flat-water boating)
- Reservoir capacity and operation agreements
- Regulations/ Permitting
- Water Quality
- Public Land Management laws or policies (e.g. W&S suitability, Wilderness)

Table 9 provides a summary of general opportunities and constraints that the Roundtable has identified to-date for accomplishing the Goals and Measureable Outcomes in Section 1.

The Roundtable has not yet, but could in the future, consider reviewing existing spatial data to study locations around the Southwest Basin that might present opportunities for attaining all or some of the measureable outcomes. Moreover, as more information about environmental and recreational water needs is gathered, additional IPPs may be identified to meet any updated measurable outcomes. The following sections provide more detail on some of these conditions.



Dusk in the San Juan Mountains (Animas River basin)

TABLE 9. SUMMARY OF OPPORTUNITIES AND CONSTRAINTS ASSOCIATED WITH SOUTHWEST BASIN MEASUREABLE OUTCOMES

THEME	MEASUREABLE OUTCOME	OPPORTUNITIES	CONSTRAINTS
A	1. 100% of new IPPs shall consider from the initial planning stage maintaining and enhancing environmental and recreational needs.	• Incorporate into Southwest Basin funding criteria and expectations. • Partnerships could assist in funding opportunities, and achieving the desired outcomes.	• Jurisdictions. • Timing. • Difficult to assess. • Some of projects have already passed through their initial planning and have reached a stage where difficult; options may be limited for achieving all needs within a given project, requires prioritizing. • Permitting requirements.
A	2. Complete 19 multipurpose IPPs to meet identified gaps.	• Look for project specific opportunities. • Support implementation, to help meet water supply gaps.	• Project specific. • Water availability. • Funding. • Water management and administration. • Permitting. • Legal obligations.
A	3. Initiate and participate in 10 IPPs that promote dialogue, foster cooperation and resolve conflict.	• Areas with high demand for multiple uses and values but which are over appropriated. • Areas with lower demand and more opportunity for common ground among uses, values and jurisdictions.	• Hydrology past present and predicted • Physical realities (topographic, habitat, hydrology). • Habitat. • Water administration (Critical areas map). • Reservoir capacity and contracts. • Compact requirements.

TABLE 9. CONTINUED…

THEME	MEASUREABLE OUTCOME	OPPORTUNITIES	CONSTRAINTS
A	4. At least 50% of sub-basins have existing or planned IPPs that are protective of critical infrastructure and/or environmental and recreational areas and watershed health.	• Although the goal has been met for portions of each sub-basin, additional opportunities exist for forest health, community wildfire protection, water quality, and source water protection planning in portions of each sub-basin.	• Action depends on collaboration between various private, tribal, federal, state and local jurisdictions.
A	5. All towns and major water supply systems with water supply infrastructure have watershed/ wildfire assessments that identify strategies/ treatments necessary to mitigate the impacts that occur to hydrology in a post-fire environment.	• Smaller entities can also benefit. • While each county has a Community Wildfire Protection Plan in place, not every town or major supply system has a CWPP or Source Water Protection Plan specific to its operations.	• Action depends on various private, tribal, federal, state and/or local jurisdictions outside of town or water suppliers' control. • Cost of such assessments.
A	6. All major reservoirs have watershed/ wildfire assessments that identify strategies/treatments necessary to mitigate the impacts that occur to hydrology in a post-fire environment.	• While every county has a CWPP in place, there is opportunity for reservoir specific fire and disaster planning and management efforts.	• Action depends on various private, tribal, federal, state and/or local jurisdictions outside reservoir operators' control.

TABLE 9. CONTINUED…

THEME	MEASUREABLE OUTCOME	OPPORTUNITIES	CONSTRAINTS
B	1. Implement projects (e.g. ATMs, efficiency, etc.) in order to help preserve agriculture and open space values, and to help address municipal, environmental, recreational, and industrial needs; while respecting private property rights.	• These tools could be explored and be useful at some point. • Southwest Basin will take the opportunity to learn from such projects elsewhere in the state.	• Water rights administration. • Tools are still in development. • Not currently active within Southwest Basin.
B	2. Implement strategies that encourage continued agricultural use and discourage permanent dry-up of agricultural lands.	• These tools could be explored and be useful at some point. • Southwest Basin will take the opportunity to learn from such projects elsewhere in the state.	• Water rights administration. • Tools are still in development. • Not currently a high priority need within our basin.
B	3. The water providers in the state that are using dry-up of agricultural land (defined as requiring a water court change case) and/or pursuing a new TMD (as defined by IBCC to be a new west slope to east slope diversion project) shall have a higher standard of conservation. The goal for these water providers is a ratio of 70/30.	• Opportunity for Southwest Basin to achieve outcome and help build support; • Join with Colorado Basin Roundtable in supporting this measure. • Participate in conservation discussions and pursue future legislation.	• Political support/opposition at State level.

TABLE 9. CONTINUED…

THEME	MEASUREABLE OUTCOME	OPPORTUNITIES	CONSTRAINTS
B	4. Implement at least 10 agricultural water efficiency projects identified as IPPs (by sub-basin).	• Many more ditches and districts may also have interest or plans.	• Resources (e.g. funding and match, manpower, expertise). • State water policy. • Lack of financial incentive for efficiency. • Need to adapt state water policy.
C	1. Complete 41 IPPs identified in 2015 IPP list (includes all basins) aimed at meeting municipal water needs.	• Many more public or non-community suppliers may also have need/interest or plans. • Roughly 25% of the population (Harris and Lile, pers. comm.) are not covered by a public water system (e.g. wells, hauling, non-community systems).	• Non-community water systems have not been identified. • Funding.
C	2. Consistently meet 100% of residential, commercial and industrial water system demands identified in SWSI 2010 in each sub-basin.	• Complete the currently listed IPPs, and newly identified needs. • Connect available M&I water supplies with areas of need. • Opportunity for increased outreach to suppliers.	• Funding. • Source water quality. • No central place for data • Depends on hydrology, water rights and administration. • Capital cost versus return ratio.
C	3. Implement projects that protect or enhance the ability of public water supply systems to access and deliver safe drinking water that meets all health-based standards.	• Engage more public water suppliers in Source Water Protection Planning. • Support implementation of identified BMPs from existing plans.	• Funding for implementation. • Interest. • Lack of urgency. • Jurisdictions.

TABLE 9. CONTINUED…

THEME	MEASUREABLE OUTCOME	OPPORTUNITIES	CONSTRAINTS
C	4. Change the ratio of in-house to outside treated water use for municipal and domestic water systems (referred to as water providers herein) from the current ratio of 50/50 to 60/40 for southwest Colorado and the entire State by 2030.	• More useful measure of conservation than per capita use, because per capita use does not fit the same for all communities, and because consumptive use is highest with outside use. • Legislation	• Concerns that one size does not fit all.
C	5. Implement 3 informational events about water reuse efforts and strategies.	• Highlight current reuse efforts in and out of the basin. • Educate about grey water use law and opportunities.	• Legal. • Return flow demand and quality. • State water policy. Historical use.
C	6. The water providers in the state that are using dry-up of agricultural land (defined as requiring a water court change case) and/or pursuing a new TMD (as defined by IBCC to be a new west slope to east slope diversion project) shall have a higher standard of conservation. The goal for these water providers is a ratio of 70/30. Water providers proposing a new TMD shall achieve a 60/40 ratio by 2020 and 70/30 by 2030 (high conservation) as a prerequisite for the Roundtable to consider support of a new TMD.	• Legislation.	

TABLE 9. CONTINUED…

THEME	MEASUREABLE OUTCOME	OPPORTUNITIES	CONSTRAINTS
D	1. Implement 10 projects to benefit recreational values and the economic value they provide.	• Education. • Funding. • Providing safe and appropriate access and address data gaps on flow needs. • Partnerships.	• Hydrology and water administration, private property concerns. • Funding. • Poor recreational etiquette. • Lack of data on flow needs.
D	2. At least 80% of the areas with recreational opportunities have existing or planned IPPs that secure these opportunities and supporting flows/lake levels within the contemporary legal and water management context.	• Incorporating benefits from water administration and management. • Developing data on range of flows to support values.	• Difficult to quantify. • Assessing sufficient protection. Private property rights. • Water availability. • Water quality. • Lack of data.
E	1. Implement 15 IPPs to directly restore, recover or sustain endangered, threatened, and imperiled aquatic and riparian dependent species and plant communities.	• Participation in SJRIP. • Partnerships. • Dialogue. • Developing data on range of flows to support values.	• Water rights. • Private property. • Lack of data on flow needs.
E	2. At least 95% of the areas with federally listed water dependent species have existing or planned IPPs that secure the species in these reaches as much as they can be secured within the existing legal and water management context.	• Partnerships. • Dialogue. • Developing data on range of flows to support values. • Update attribute map. • Jointly identify reaches where opportunities exist.	• Water Rights. • Private Property. • Lack of data on flow needs. • Not currently mapped as attributes (or incorrect). • Difficult to assess sufficiency of IPPs.

TABLE 9. CONTINUED…

THEME	MEASUREABLE OUTCOME	OPPORTUNITIES	CONSTRAINTS
E	3. At least 90% of areas with identified imperiled species (other than ESA species) have existing or planned projects and methods that provide direct protection to these values.	• Partnerships and dialogue. • Update attribute list, mapping. • Developing data on range of flows to support species. • Jointly identify reaches where opportunities exist.	• Water rights. • Private property. • Lack of data on flow needs. • Not currently mapped as attributes (or incorrect). • Difficult to assess sufficiency of IPPs.
E	4. Implement 26 IPPs to benefit condition for fisheries and riparian/wetland habitat.	• Partnerships • Dialogue • Update attribute list and mapping. • Developing data on range of flows to support species. • Jointly identify reaches where opportunities exist.	• Water rights • Private property • Lack of data on flow needs. • Not currently mapped as attributes (or incorrect) • Difficult to assess sufficiency of IPPs.
E	5. At least 80% of areas with environmental values have existing or planned projects and methods that provide direct protection to these values.	• Partnerships. • Dialogue. • Update attribute list/ mapping. • Developing data on range of flows to support species. • Jointly identify reaches where opportunities exist.	• Water rights. • Private property. • Lack of data on flow needs. • Not currently mapped as attributes (or incorrect). • Difficult to assess sufficiency of IPPs.

TABLE 9. CONTINUED…

THEME	MEASUREABLE OUTCOME	OPPORTUNITIES	CONSTRAINTS
F	1. By 2016, replace the following statewide outcomes with outcomes based on the current status of these measures in the Roundtable area.	• Partnerships. • Funding. • More consistent and comprehensive periodic monitoring.	• Funding. • Legislation. • Regulatory policy.
F	2. Implement 6 IPPs to monitor, protect or improve water quality.	• Funding. • Consistent periodic monitoring. • Identifying sources.	• Funding. • Consistency. • Jurisdictions. • Access. • Identifying sources is challenging.
G	1. Water providers proposing a new TMD shall achieve a 60/40 ratio by 2020 and 70/30 by 2030 (high conservation) as a prerequisite for the Roundtable to consider support of a new TMD.	• Opportunity for Southwest Basin to achieve outcome and help build support. • Join with Colorado Basin Roundtable in supporting this measure. Participate in conservation discussions and pursue future legislation.	• Political support/opposition at State level.
G	2. A conceptual agreement is developed between roundtables regarding how approach a potential future TMD from the West Slope to the East.	• IBCC working on it. • Future Use Allocation (FUA). • Develop alternative sources to a TMD to meet future water needs.	• Water supply. • Compact curtailment. • Risk management. • Future west slope development. • Funding.

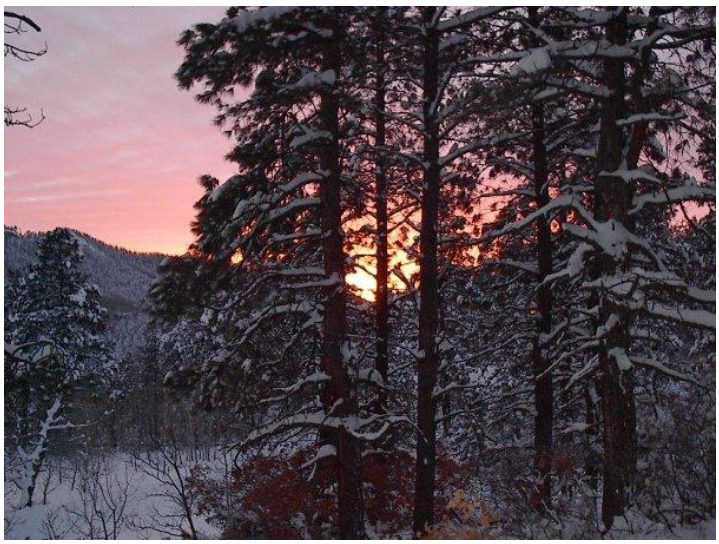
TABLE 9. CONTINUED…

THEME	MEASUREABLE OUTCOME	OPPORTUNITIES	CONSTRAINTS
G	3. Protect 100% of pre-compact water rights in the Southwest Basin.	• Put to beneficial use. Protect historic consumptive use.	• Listing on abandonment list is a risk. Ability to put to beneficial use in some cases.
G	4. Implement 2 IPPs aimed at utilizing Tribal Water Rights Settlement water.	• Support implementation.	
G	5. Implement 2 IPPs aimed at meeting La Plata River compact.	• Support implementation.	
G	6. Participate in Compact water bank efforts.	• Demand management. • Includes most entities in state interested in water development in CO River.	• Data needs. • Water rights, administration and policy. • Voluntary participation. • Funding.

3.2 WATER MANAGEMENT & WATER ADMINISTRATION

The Southwest Basin encompasses approximately 216,075 irrigated aces (in 2005). These acres are served by rivers, ditches, springs, wells and other bodies of water. Approximately 6,797 decreed points of diversion exist within the Southwest Basin. Another 1,850 decreed wells exist and require administration (CDSS 2014). The Southwest Basin has a variety of water uses that all require proper water management and water administration.

The Southwest Basin's major water export is the San Juan Chama Project. This project is a component of the Upper Colorado River Compact and allows an average annual diversion ranging from 85,000 to 100,000 AF to be provided to New Mexico. In addition there are a number of relatively small, high elevation TMDs from the Southwest Basin to the Rio Grande and Gunnison basins. However, within the Southwest Basin there are many trans-basin diversions from one sub-basin to another.



Winter sunset in the San Juan Mountains (Animas River basin)

In Colorado, the authority to establish water policies of the state, determine the beneficial uses of the water resources, and the administration of water rights pursuant to the Doctrine of Prior Appropriation fall under the jurisdiction of state government. It is recognized that there is a significant amount of land administered by the federal government in Colorado, which creates the potential for conflicts between state and federal laws and policies. Congress and Federal agencies have a long standing deference to state water allocation systems, and Colorado continues to promote state-federal cooperation to avoid contentious water rights issues. Federal policies and actions could affect existing and future water supplies and planning efforts in southwestern Colorado.

Therefore, the Roundtable supports Colorado's system of water rights administration and allocation and the full recognition of tribal rights under the Colorado Ute Indian Water Rights Settlement. The Roundtable also encourages and supports creative solutions sought through collaborative efforts, negotiated settlements, and strengthening the use of State-Federal MOUs, to limit conflicts between state, tribal and federal polices, laws and land management plans. Maintaining opportunities that allow for management solutions that provide for multiple beneficial uses and are protective of environmental and recreational values are critical for the planning and strategic development of the water resources in the State of Colorado.

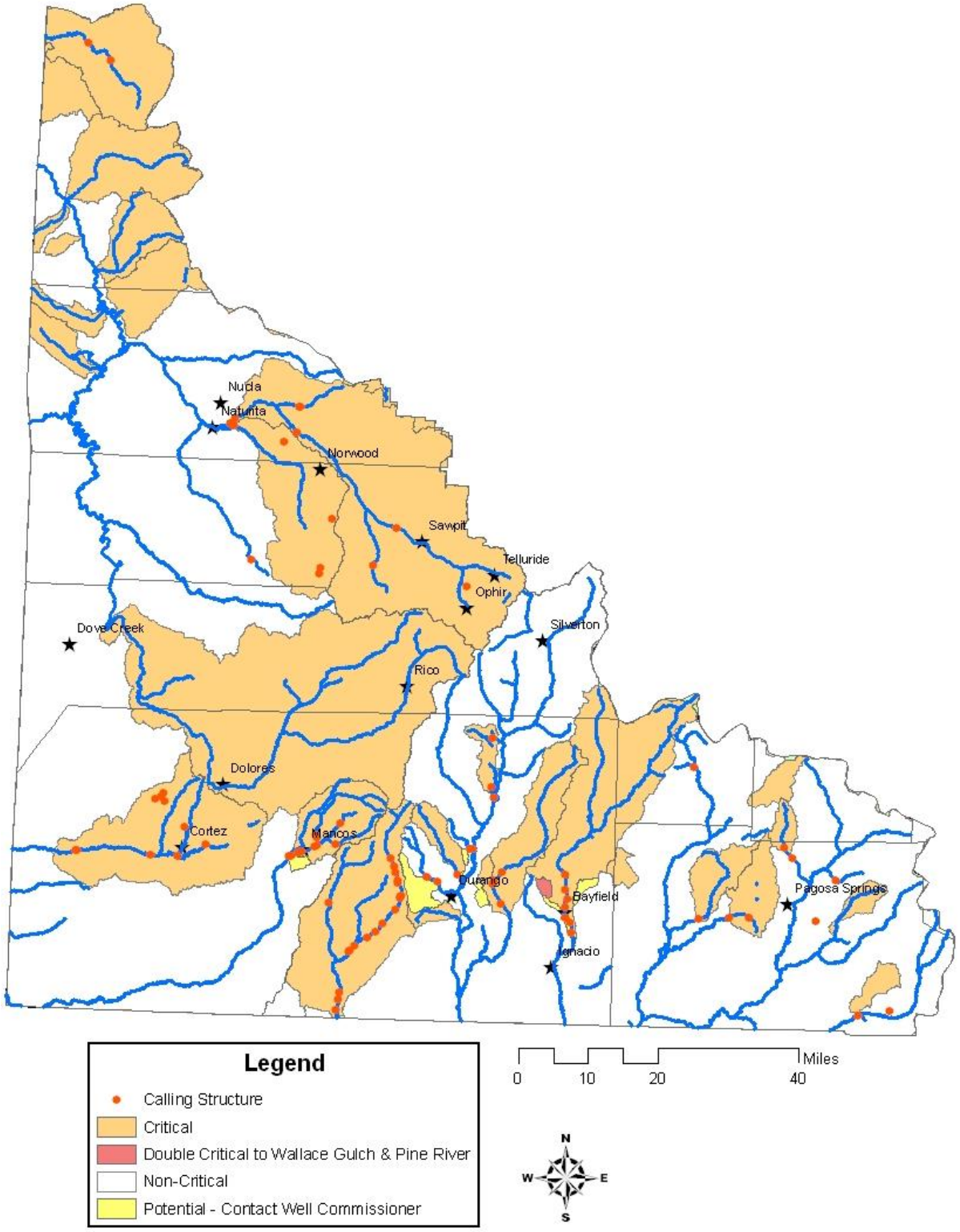
COLORADO DIVISION OF WATER RESOURCES ADMINISTRATION

Two Divisions of Water Resources (DWR) have jurisdiction within the Southwest Basin. The majority of sub-basins are within Division 7, while the San Miguel River and portions of the Dolores River are administered by Division 4.

Water critical areas exist throughout the Southwest Basin and its sub-basins (Figure 4). When an area is designated as critical (e.g. over-appropriated) the State Engineer cannot issue a well permit without water being made available for appropriation by means of an approved augmentation plan (Policy 2004-3: Use of evapotranspiration credit within substitute water supply plans involving the exposure of ground water in ponds or reservoirs not located within the stream bed).

DWR tracks calling structures along with the time period of administration, the water source, structure location, appropriation date, and water amount called. Figure 4 also shows the location of structures that placed calls between November 1, 2000 and October 31, 2013.

FIGURE 4. WATER CRITICAL BASINS AND STRUCTURES PLACING CALLS BETWEEN NOVEMBER 1, 2000 AND OCTOBER 31, 2013 (SOURCE: DIVISION OF WATER RESOURCES)



TRIBAL WATER RIGHTS

In a period from the 1970s through 2006, the Ute Mountain Ute Tribe and the Southern Ute Indian Tribe resolved federal Indian water rights litigation claims through negotiated settlement with the State of Colorado, the United States, water districts, and local water users. The negotiated settlement was viewed as an approach preferable to litigating large, senior priority federal reserved water rights that could potentially disrupt existing, non-Tribal water users upstream of the reservations.

The Settlement established quantities of water rights, priorities of tribal rights, permitting requirements, conditions for changing water rights, conditions for leasing, and other terms including cooperative and coordinated administration of water rights arising under State and federal law. Also as part of the negotiated settlement, each Ute Tribe took new water allocations in federal water storage projects (the Dolores Project and the Animas-La Plata Project) and confirmed their allocations in existing facilities such as Vallecito and Lemon Reservoirs. These facilities and the municipal and agricultural uses developed from them are important parts of southwest Colorado's water management scenario.

The tribal water rights established in the settlement have the potential to play an important role in not only addressing water management issues for the Tribes themselves, but also serving the greater interests of the community of southwest Colorado. Furthermore, the special nature of Tribal water rights may provide opportunities in the future that other water rights do not allow.

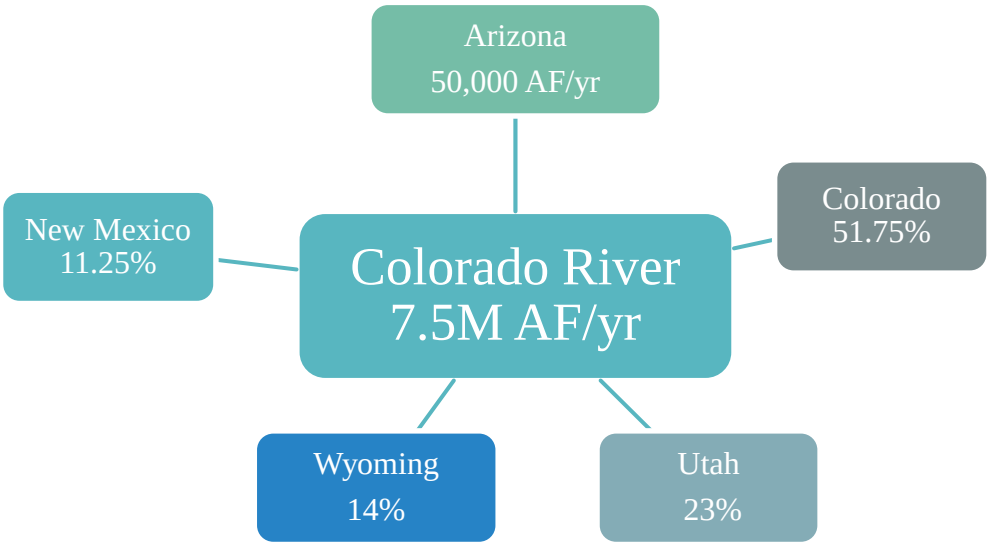
COMPACT COMPLIANCE

The Colorado River Compact of 1922 allocates 7.5M AF of CU annually to: Upper Basin states (parts of AZ, CO, NM, UT, WY above Lee Ferry, AZ) and Lower Basin states (parts of AZ, CA, NV below Lee Ferry, AZ). The compact requires the Upper Basin states to provide on average 7.5M AF during any period of ten consecutive years. The major purposes of this compact are:

- *"Provide for the equitable division and apportionment of the use of the waters of the Colorado River System;*
- *To establish the relative importance of different beneficial uses of water, to promote interstate comity;*
- *To remove cause of present and future controversies;*
- *And to secure the expeditious agricultural and industrial development of the Colorado River Basin, the storage of its waters, and the protection of life and property from floods."*

The Colorado River Basin is thus divided into two basins, with an apportionment of use of portions of the Colorado River System waters is allocated to each of them with provision that future equitable apportionments may be made.

The Upper Colorado River Compact of 1984 allocates 7.5M AF apportionment of consumptive use available to the Upper Basin states as follows:



The La Plata River Compact was signed in 1922 and approved by Congress in 1925. It requires dividing the waters of the La Plata River between Colorado and New Mexico. The river is administered daily except from December 1 through February 15. The Colorado DWR maintains two stream gages, one near Hesperus, CO and one at the Stateline, for administration purposes. The flow of the river between February 15 and December 1 of each year is apportioned between the two states as follows:

- *"Each state shall have the unrestricted right to use all the waters within its boundaries on each day when the mean daily flow at the Interstate station is one hundred cubic feet per second, or more;*
- *On all other days the State of Colorado shall deliver at the Interstate station a quantity of water equivalent to one-half of the mean flow at the Hesperus station for the preceding day, but not to exceed one hundred cubic feet per second;"*

The Animas-La Plata Compact implements the operation of the Animas-La Plata Federal Reclamation Project. This project is a part of the Colorado River Storage Project Act. The Compact allows:

- *"the right to store and divert water in Colorado and New Mexico from the La Plata an Animas River systems, including return flow to the La Plata River from Animas River diversions, for uses in New Mexico under the Animas-La Plata Federal Reclamation Project shall be valid and of equal priority with those rights granted by decree of the Colorado state courts for uses of water in Colorado for that project providing such uses in New Mexico are within the allocation of water made to state by articles III and XIV of the Upper Colorado River Basin Compact." (37-64-101. Animas-La Plata Project Compact)."*

BIOLOGICAL OPINIONS



Razorback sucker (USFWS)

Under Section 7 of the Endangered Species Act (ESA) of 1973, federal agencies must consult with the US Fish and Wildlife Service (USFWS) to avoid jeopardizing listed species or harming critical habitat. When possible, the USFWS does a programmatic consultation that addresses multiple projects. These consultations require that applicants take specific steps to protect endangered species, while also allowing multiple projects to go forward. Two such Biological Opinions touch upon water management in the Southwest Basin: Final Biological Opinion for Navajo Reservoir Operations (USFWS 2005) and the Gunnison River Basin PBO (USFWS 2009).

The actions of two recovery programs provide compliance with the ESA for water development and water management activities. The Upper Colorado River Endangered Fish Recovery Program (Upper Program) and the San Juan River Basin Recovery Implementation Program (SJRIP) are charged with using adaptive management and measures to recover four species of endangered Colorado River fishes while allowing water development activities to continue to meet the needs of the people. Program partners include: State and federal agencies, water and environmental organizations, power customers, and American Indian tribes.

The Dolores River is a tributary to the Colorado River and thus a part of the Gunnison River Basin PBO (USFWS 2009). Releases from the Aspinall Unit reservoirs provide reasonable and prudent alternatives for the Dolores Project as described in the Aspinal Unit operations EIS of 2012.



Colorado pikeminnow (USFWS)

The two recovery programs combined have provided ESA compliance for 2,354 federal, tribal, and non-federal water projects. The Upper Program has provided 1,176 projects ESA compliance for Colorado since 1988 through 2012. These projects total annual depletions are about 2,122,140 AF. The SJRIP has conducted 293 consultations since 1992 through 2012 within Colorado. These projects total annual depletions are about 217,797 AF. ESA consultation is required within the San Juan basin if a proposed project's estimated annual depletions are greater than 100 AF.

3.3 SENSITIVE SPECIES

COLORADO RIVER CUTTHROAT TROUT CONSERVATION STRATEGY

CHECK IT OUT!

http://ndismaps.nrel.colostate.edu/stockingrestrictions/

Maps located at the above website show numerous populations of CRCT that are being managed in accordance with CRCT Conservation Strategy

Colorado River Cutthroat Trout (CRCT) is a state-listed Species of Special Concern in Colorado, Wyoming, and Utah, and also is characterized as a Sensitive Species by federal land management agencies (BLM and USFWS). Colorado Parks and Wildlife (CPW) works closely with UT, WY, and federal land managers to manage for the recovery and persistence of CRCT throughout their historic range, guided by "Conservation strategy for Colorado River cutthroat trout in the states of Colorado, Utah, and Wyoming (CRCT Coordination Team, 2006)".

Implementation of the CRCT Conservation Strategy and showing progress on measurable benchmarks has allowed the USFWS to maintain its opinion that CRCT is 'not warranted' for listing under the ESA. Such a finding has been beneficial to state wildlife management agencies, but is also of critical importance to water managers so that consultation with the USFWS under Section 7 of the ESA is not required for projects in CRCT occupied waters.



Colorado River Cutthroat Trout

THREE SPECIES AGREEMENT

Three native fish species, roundtail chub, bluehead sucker, and flannelmouth sucker, occupy some lower portions of most of the sub-basins represented within the Southwest Basin. Concerns about declines in the three species within the entire Upper Colorado River Basin (including the San Juan River drainage) prompted resource agencies to draft and adopt a multi-state, multi-agency, range-wide conservation, and strategy agreement. Known as "The Three Species Agreement", the agreement provides the framework for conservation actions designed to preserve these species across their historic Colorado and five other Colorado River Basin states. Signatories to the agreement include the Colorado River Basin states, the United States Forest Service (USFS), BLM, BOR, and sovereign tribes.

The range-wide declines described in the Three Species Agreement speak to the species' potential for listing by the USFWS. The Three Species Agreement articulates that within their jurisdictional authority, signatories are responsible for taking action to conserve native fish. The agreement is predicated on the concept that collectively, local, state, federal agencies, and other willing partners can work together with the communities most affected by a potential listing to develop and implement voluntary actions that pre-empt the need for federal listing of any of these species under the ESA.



Roundtail chub (USFWS)

Within the Southwest Basin, these species are present in many low-elevation tributaries to the San Juan River. The Ute Mountain Ute and Southern Ute tribes have been active participants in habitat and flow restoration projects on behalf of these native fish, and a fairly intensive effort was launched in 2010 to preserve these species below McPhee Dam in the Dolores River drainage.

CPW is currently developing a state-specific strategy that describes how Colorado is implementing management actions that will help conserve these species. Monitoring of populations remains critical to determine the status of the fishery and the persistence of threats to these populations.

While these fish tend to be located lower in watersheds that have already undergone upstream water development, it is imperative that fishery managers work cooperatively with water managers to continue to implement the voluntary actions articulated in the Three Species Agreement. In the Southwest Basin, flow protection provided by downstream compact deliveries, ISF appropriations, or voluntary flow agreements may be an important means of maintaining the native fishery.

3.4 HISTORICAL STREAMFLOW

The historical streamflow in the sub-basins of the Southwest Basin has laid the foundation for the values and levels of water use that exist in the Southwest Basin today. The CWCB Historical Streamflow Analysis Tool was used to provide a summary of historical streamflow at key gages (selected by CWCB) within the Southwest Basin for the study period of 1950 through 2012. Hydrologic classifications of "drought", "dry", "average", "wet", and "flood" were given for water years based on the criteria shown in Table 10. Figure 5 shows the Key Stream Flow Gages in Southwest Basin. This tool allows for a snapshot of the last 50 years hydrology.

TABLE 10. HYDROLOGIC CLASSIFICATION CRITERIA

PERCENTILE RANGE	HYDROLOGIC CLASSIFICATION
0.00 – 0.05	Drought
0.06 – 0.24	Dry
0.25 – 0.75	Average
0.76 – 0.94	Wet
0.95 – 1.00	Flood

AVERAGE MONTHLY HYDROLOGIC CLASSIFICATION

The average monthly flows by hydrologic classification are graphed for each stream gage. While this does not tell the whole story, it does show the variability between drought and wet years and the different volumes between average and wet years. The following series of graphs for each stream gage were generated by the Historical Streamflow Analysis Tool.

FIGURE 5. KEY STREAM FLOW GAGES IN SOUTHWEST BASIN

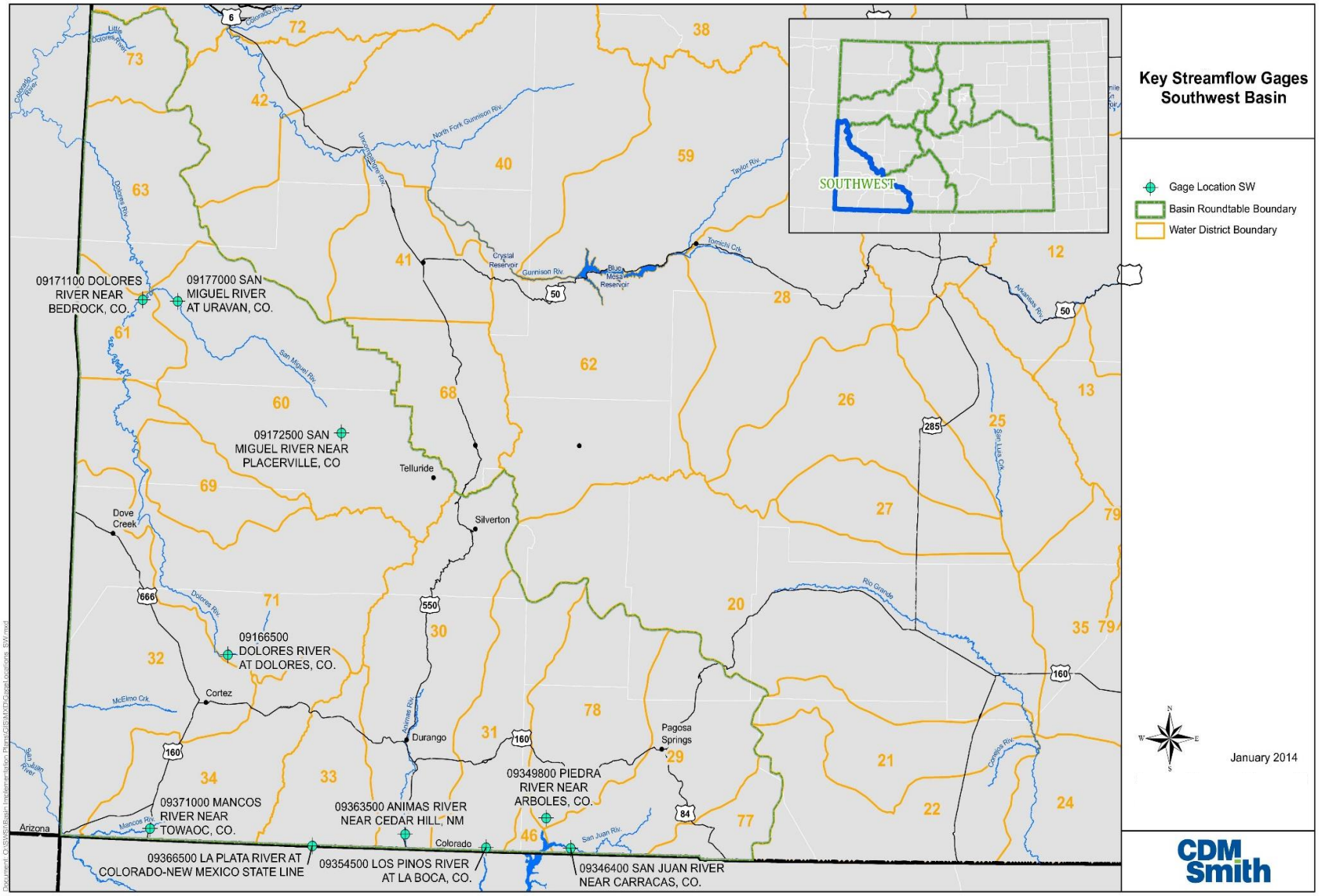
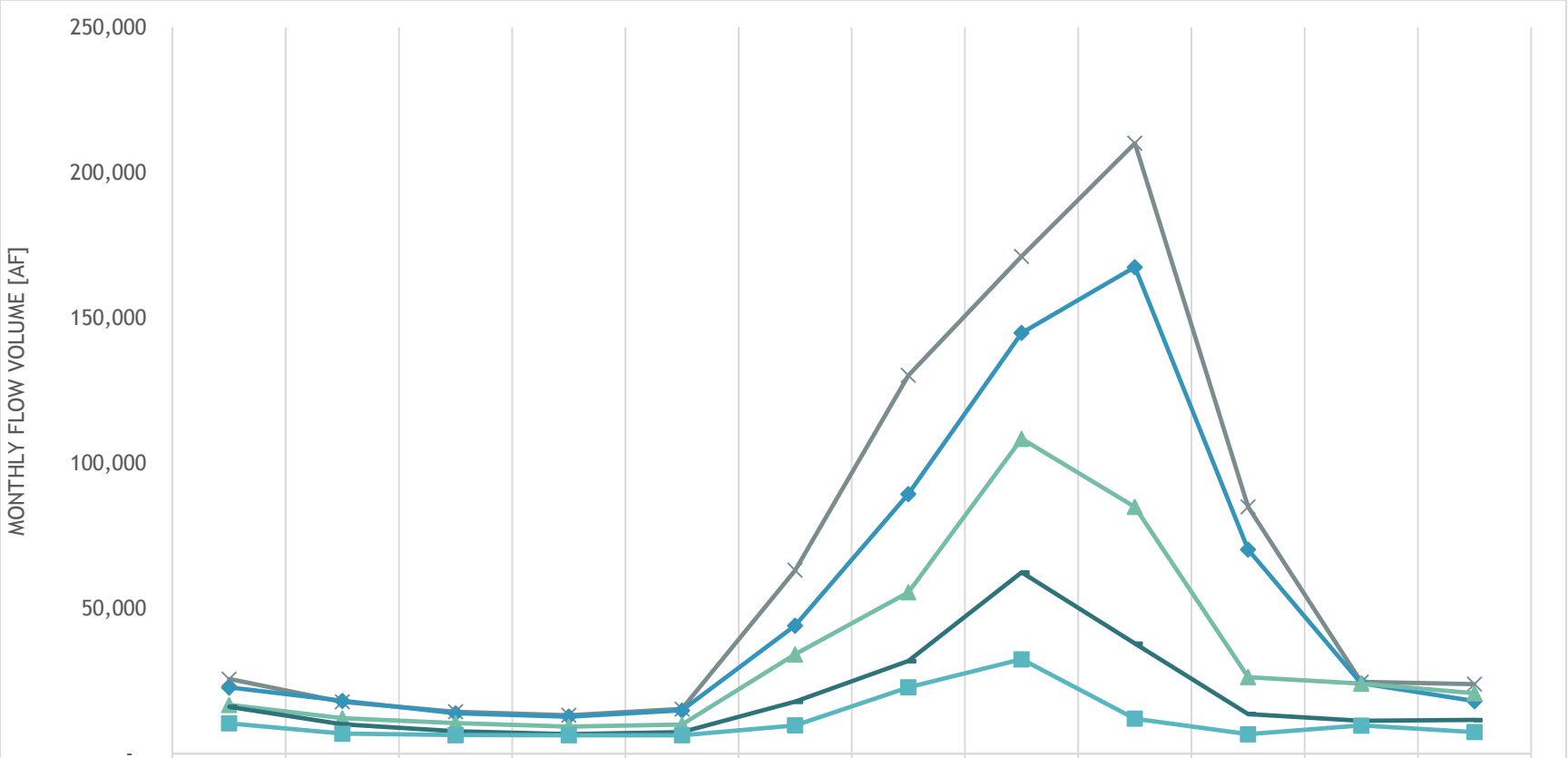


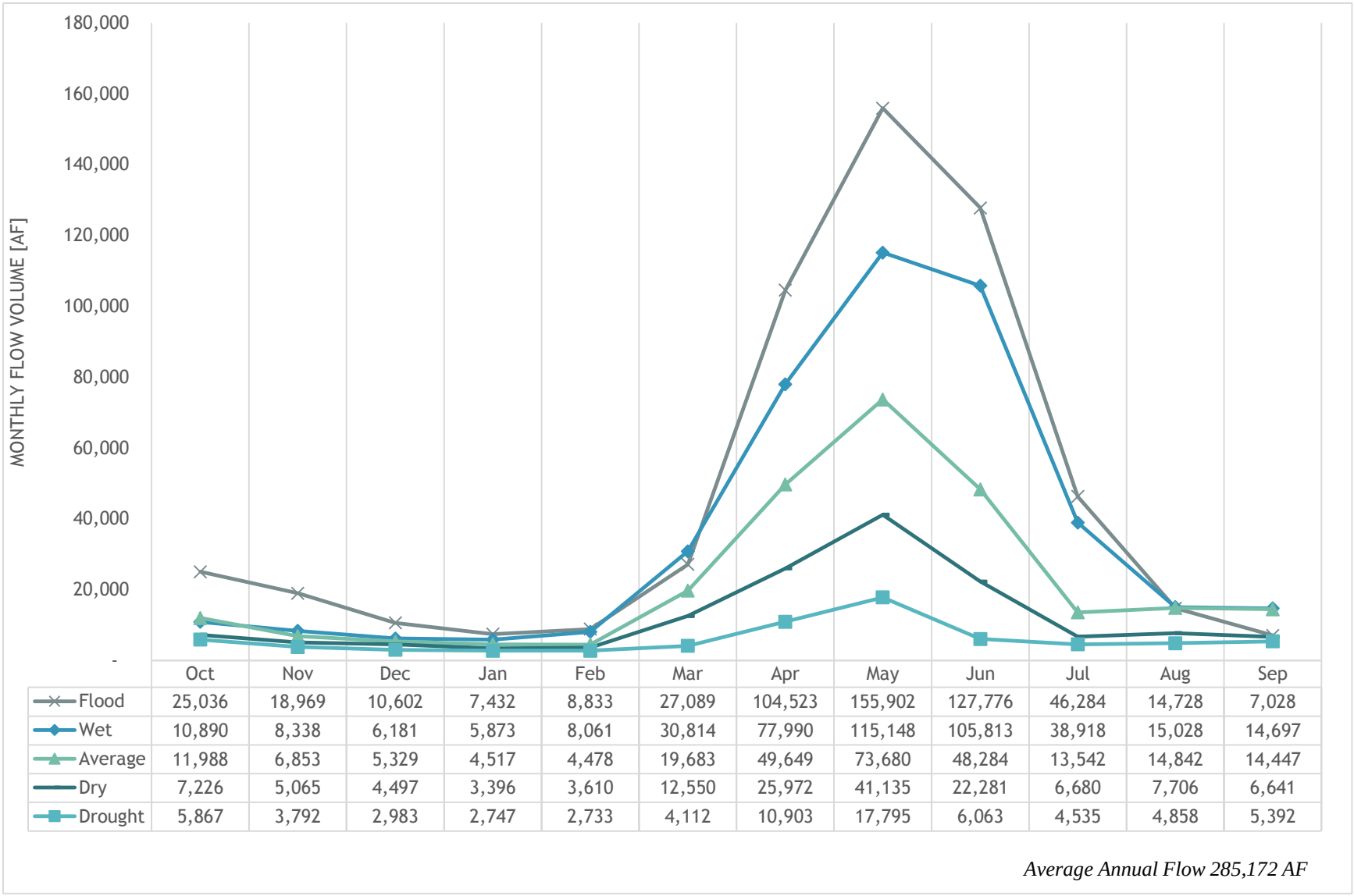
FIGURE 6. SAN JUAN RIVER AT NAVAJO – AVERAGE MONTHLY FLOWS BY HYDROLOGIC YEAR CLASSIFICTAITON (WY 1963-2012)



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Flood	25,733	17,902	14,519	13,301	15,470	63,186	130,272	171,196	210,132	84,992	24,775	24,015
Wet	22,850	18,252	13,974	12,832	14,963	44,152	89,403	144,857	167,483	70,281	24,258	18,165
Average	16,882	12,245	10,595	9,409	10,084	34,237	55,568	108,402	85,000	26,383	24,149	20,857
Dry	16,236	10,172	7,830	6,743	7,496	17,957	31,956	62,441	37,944	13,734	11,365	11,654
Drought	10,523	6,963	6,454	6,440	6,407	9,836	22,910	32,541	12,100	6,748	9,740	7,538

Average Annual Flow 433,617 AF

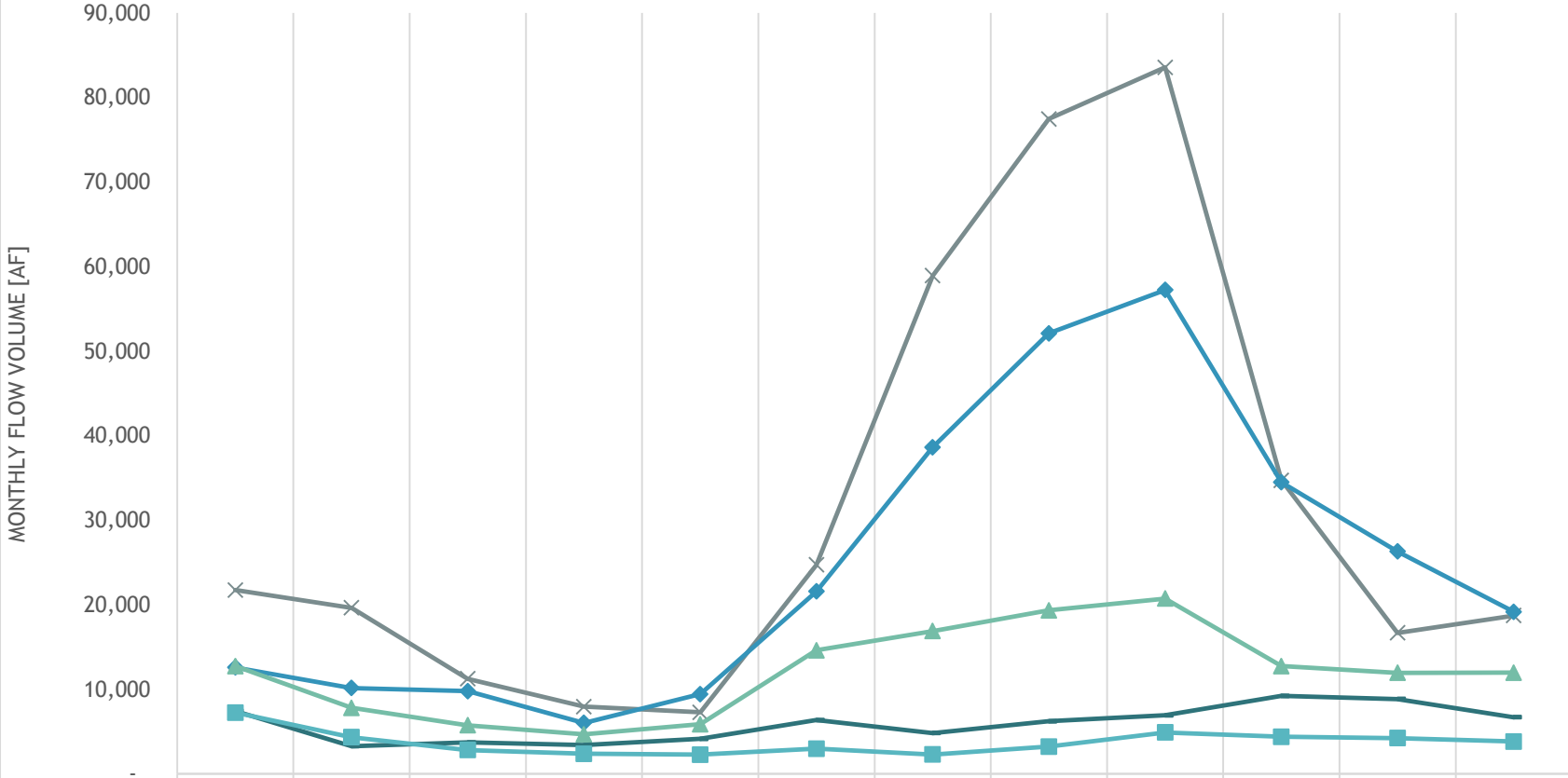
FIGURE 7. PIEDRA RIVER AT ARBOLES – AVERAGE MONTHLY FLOWS BY HYDROLOGIC YEAR CLASSIFICATION (WY 1963 TO 2012)



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Flood	25,036	18,969	10,602	7,432	8,833	27,089	104,523	155,902	127,776	46,284	14,728	7,028
Wet	10,890	8,338	6,181	5,873	8,061	30,814	77,990	115,148	105,813	38,918	15,028	14,697
Average	11,988	6,853	5,329	4,517	4,478	19,683	49,649	73,680	48,284	13,542	14,842	14,447
Dry	7,226	5,065	4,497	3,396	3,610	12,550	25,972	41,135	22,281	6,680	7,706	6,641
Drought	5,867	3,792	2,983	2,747	2,733	4,112	10,903	17,795	6,063	4,535	4,858	5,392

Average Annual Flow 285,172 AF

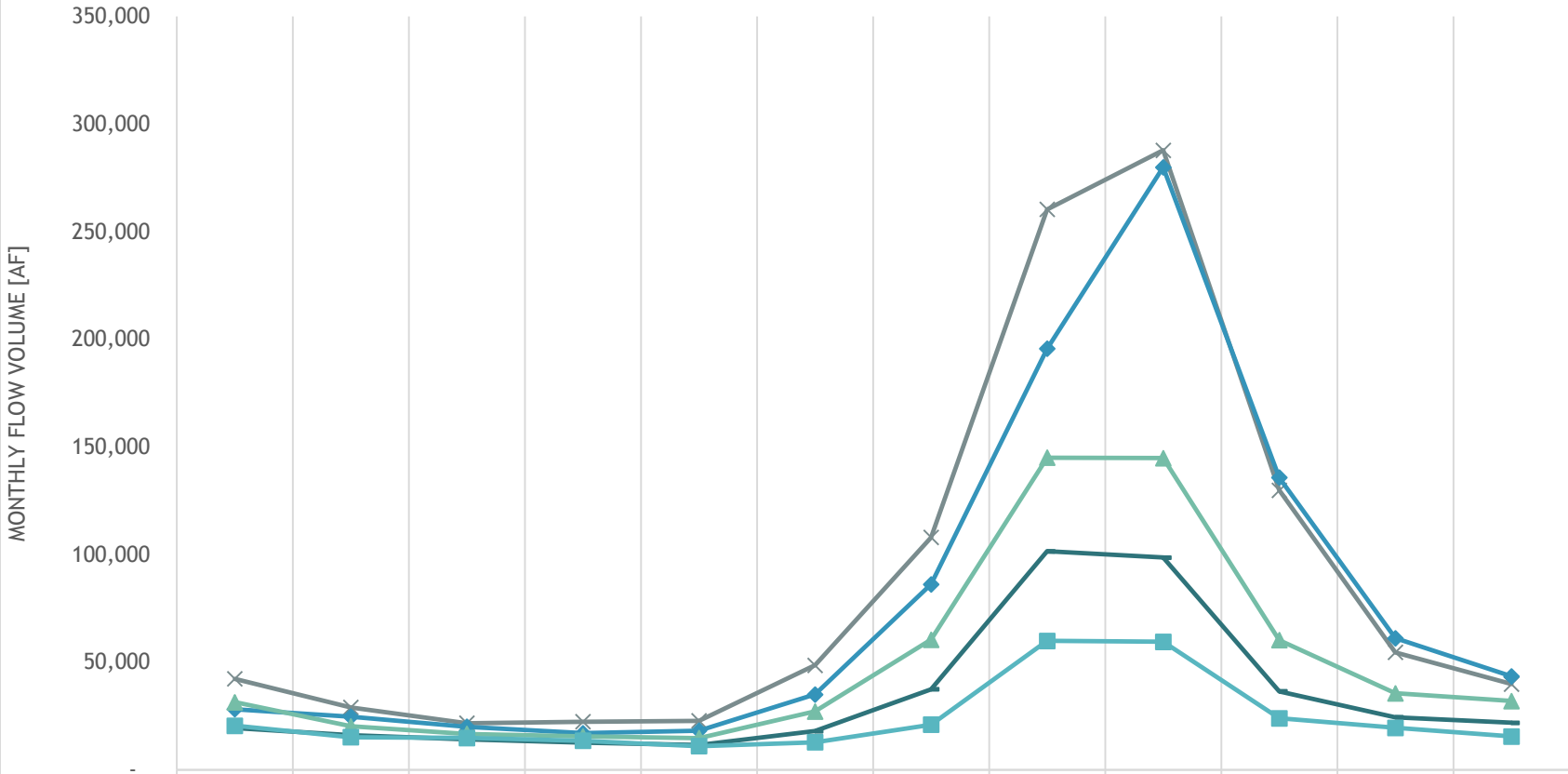
FIGURE 8. PINE RIVER AT BOCA - AVERAGE MONTHLY FLOWS BY HYDROLOGIC YEAR CLASSIFICATION (WY 1952 TO 2012)



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Flood	21,752	19,640	11,248	7,959	7,280	24,722	58,940	77,467	83,575	34,731	16,678	18,740
Wet	12,586	10,154	9,792	6,044	9,445	21,588	38,638	52,111	57,240	34,491	26,308	19,173
Average	12,752	7,817	5,758	4,681	5,876	14,629	16,890	19,340	20,744	12,746	11,965	11,975
Dry	7,438	3,293	3,721	3,402	4,152	6,368	4,841	6,222	6,937	9,223	8,863	6,700
Drought	7,256	4,337	2,827	2,386	2,286	2,993	2,295	3,230	4,912	4,400	4,234	3,839

Average Annual Flow 168,316 AF

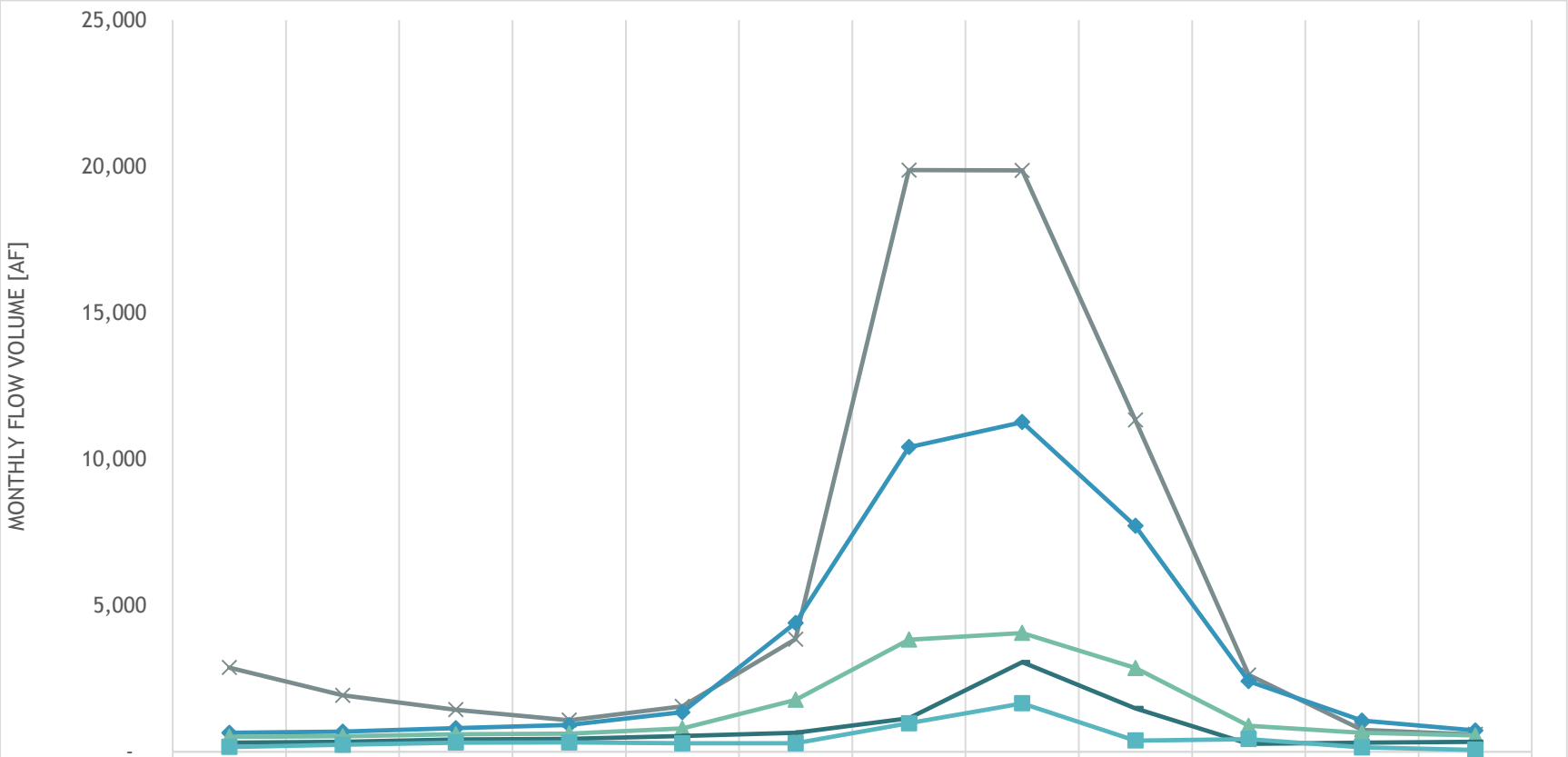
FIGURE 9. ANIMAS RIVER AT THE STATE LINE - AVERAGE MONTHLY FLOWS BY HYDROLOGIC YEAR CLASSIFICATION (WY 1950 TO 2012)



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Flood	42,264	28,973	21,601	22,323	22,726	48,540	107,890	260,344	287,766	129,853	54,519	39,848
Wet	28,125	24,668	20,002	17,033	18,208	34,954	86,135	195,587	279,900	135,705	61,122	43,443
Average	31,372	20,206	16,671	15,511	14,728	27,098	60,388	144,984	144,748	60,213	35,538	31,928
Dry	19,451	16,028	14,099	12,676	11,486	17,997	37,387	101,520	98,604	36,415	24,407	21,839
Drought	20,442	15,165	14,794	13,502	10,995	12,781	20,931	59,859	59,456	23,900	19,496	15,489

Average Annual Flow 641,273 AF

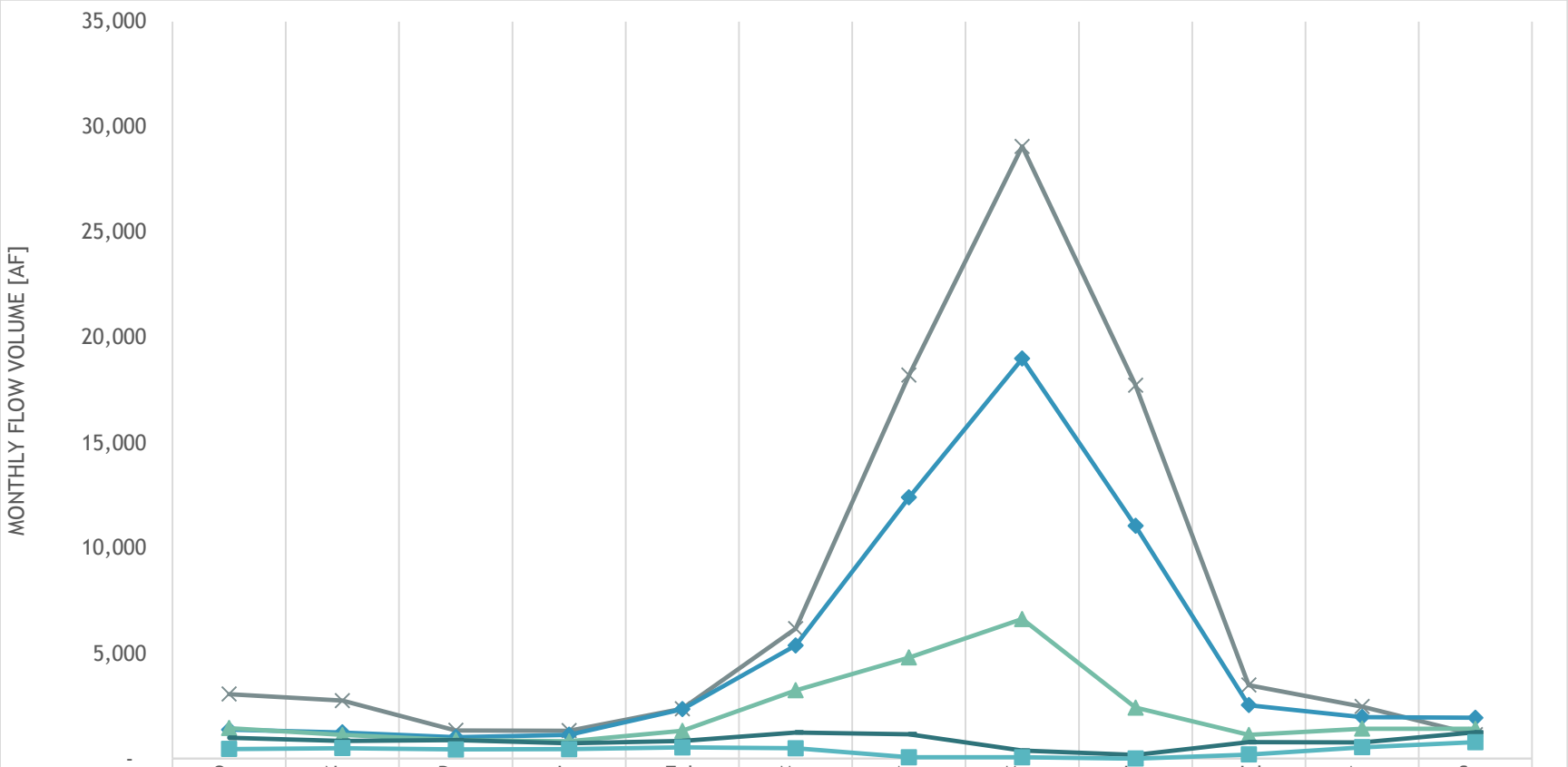
FIGURE 10. LA PLATA RIVER AT THE STATE LINE - AVERAGE MONTHLY FLOWS BY HYDROLOGIC YEAR CLASSIFICATION (WY 1950 TO 2012)



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Flood	2,878	1,925	1,434	1,077	1,548	3,843	19,875	19,866	11,332	2,623	750	589
Wet	643	683	802	912	1,349	4,400	10,411	11,263	7,717	2,410	1,061	724
Average	508	527	597	620	791	1,773	3,827	4,056	2,862	882	643	553
Dry	307	335	422	435	538	651	1,139	3,060	1,484	267	305	335
Drought	164	238	311	317	289	287	975	1,654	379	432	150	64

Average Annual Flow 23,153 AF

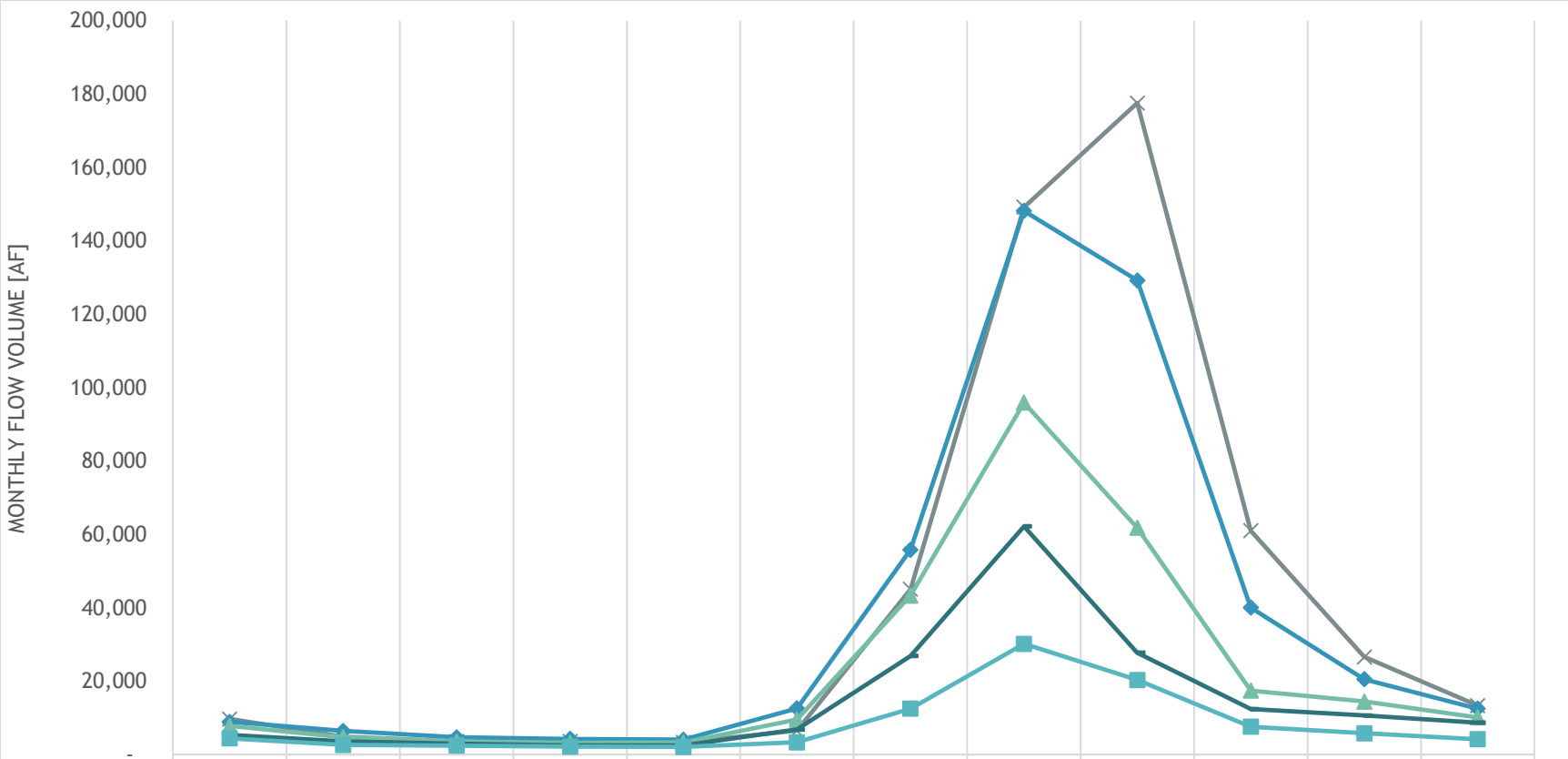
FIGURE 11. MANCOS RIVER AT TOWAOC - AVERAGE MONTHLY FLOWS BY HYDROLOGIC YEAR CLASSIFICATION (WY 1952 TO 2011)



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Flood	3,065	2,757	1,342	1,322	2,369	6,176	18,210	29,072	17,733	3,494	2,469	1,135
Wet	1,377	1,244	1,020	1,134	2,344	5,375	12,400	18,997	11,049	2,539	1,977	1,942
Average	1,451	1,123	878	819	1,322	3,240	4,805	6,629	2,423	1,127	1,424	1,413
Dry	989	842	875	733	835	1,245	1,157	384	178	781	775	1,248
Drought	459	495	439	447	532	493	62	66	-	195	538	779

Average Annual Flow 32,688 AF

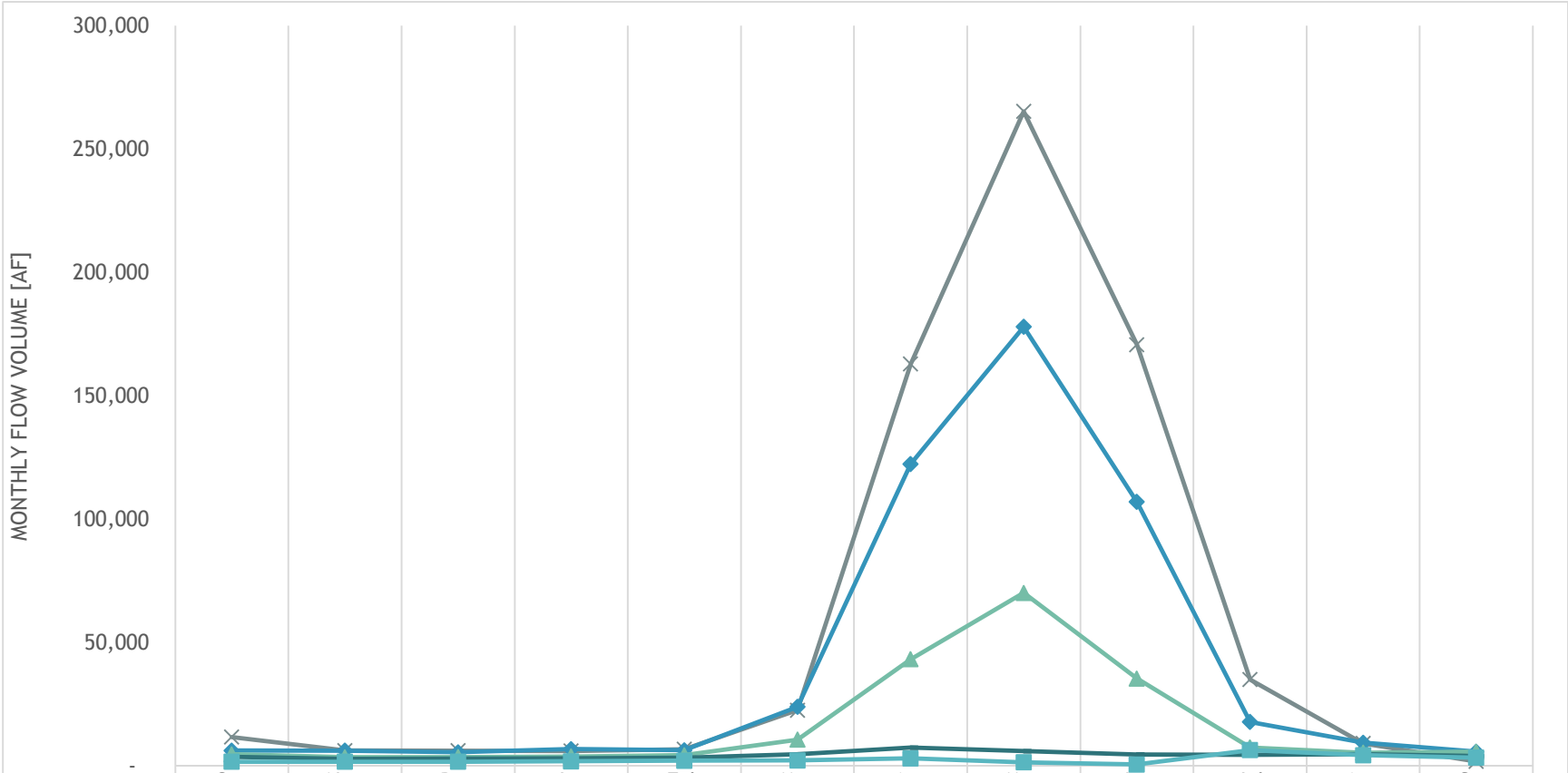
FIGURE 12. DOLORES RIVER NEAR DOLORES - AVERAGE MONTHLY FLOWS BY HYDROLOGIC YEAR CLASSIFICATION (WY 1950 TO 2012)



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Flood	9,679	4,872	3,550	3,564	3,308	6,497	45,047	149,167	177,543	60,996	26,586	13,317
Wet	8,898	6,409	4,672	4,223	4,026	12,591	55,816	148,135	129,226	40,054	20,519	12,514
Average	7,777	4,726	3,559	3,187	3,235	9,518	43,317	95,929	61,800	17,435	14,458	10,111
Dry	5,334	3,563	2,989	2,484	2,471	6,826	26,848	62,168	27,724	12,385	10,650	8,694
Drought	4,419	2,630	2,416	2,134	2,048	3,317	12,515	30,166	20,335	7,568	5,804	4,156

Average Annual Flow 291,488 AF

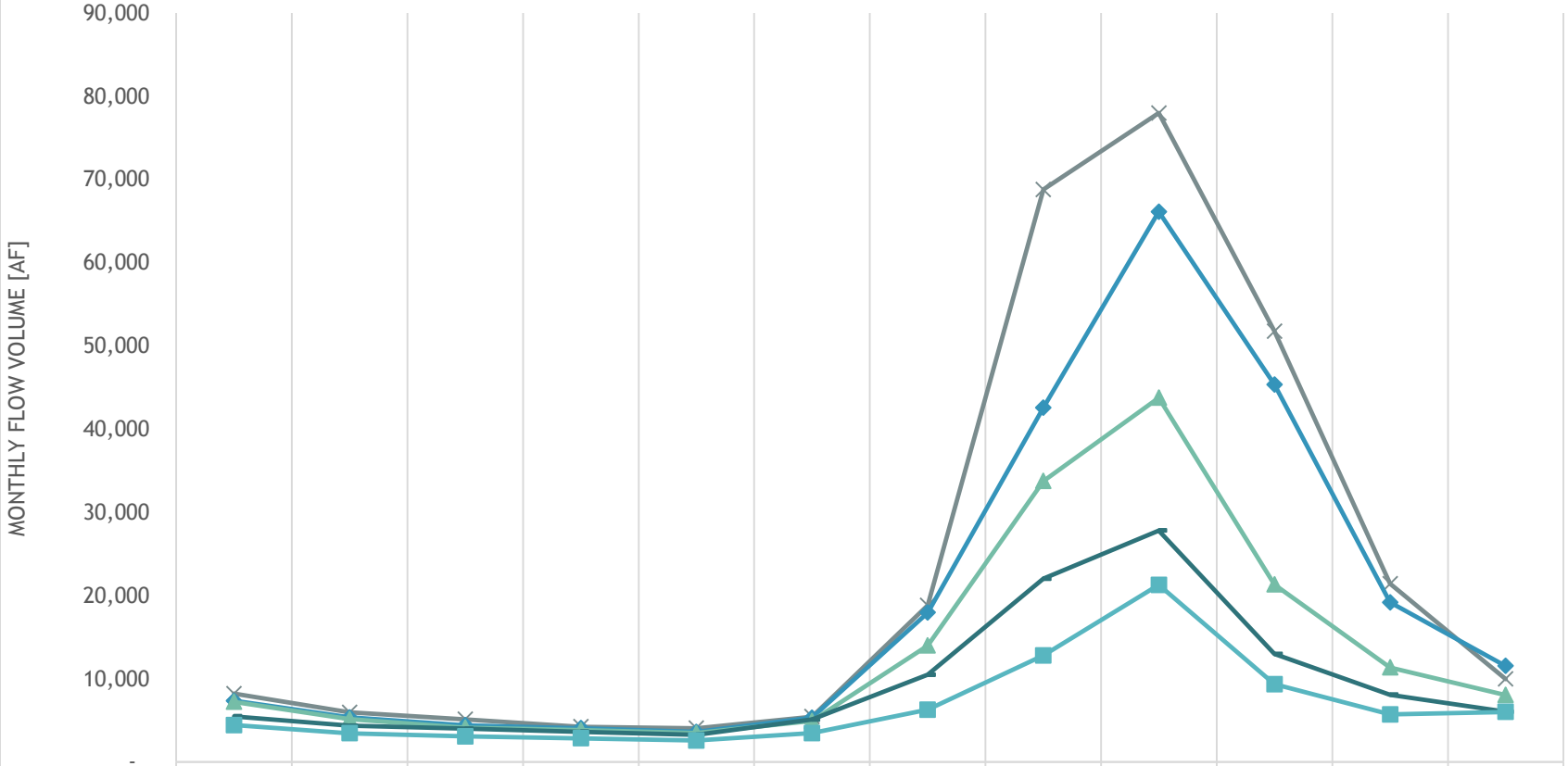
FIGURE 13. DOLORES RIVER NEAR BEDROCK - AVERAGE MONTHLY FLOWS BY HYDROLOGIC YEAR CLASSIFICATION (WY 1972 TO 2012)



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Flood	11,610	6,127	6,054	5,907	6,613	22,496	162,805	265,220	170,654	34,879	9,003	1,704
Wet	6,086	6,039	5,391	6,675	6,238	23,837	122,293	177,912	106,916	17,692	9,285	5,658
Average	4,590	3,411	3,462	3,684	4,259	10,550	43,144	70,010	35,311	7,360	5,216	5,623
Dry	3,498	2,742	2,832	2,982	3,146	4,572	7,260	5,895	4,502	4,330	4,647	3,904
Drought	1,599	1,585	1,556	1,736	1,970	2,110	2,938	1,356	452	6,303	4,200	3,257

Average Annual Flow 247,213 AF

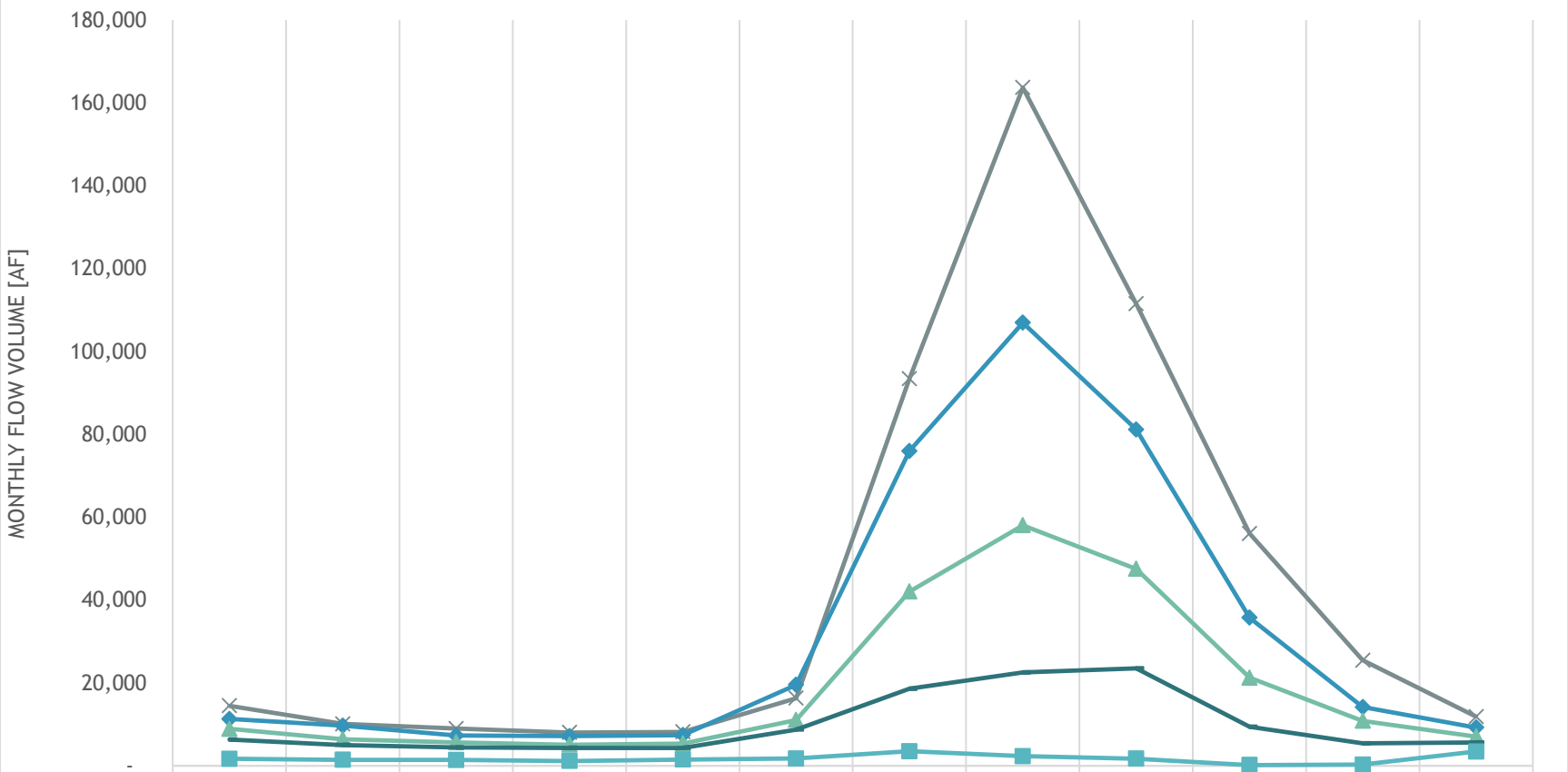
FIGURE 14. SAN MIGUEL RIVER NEAR PLACERVILLE - AVERAGE MONTHLY FLOWS BY HYDROLOGIC YEAR CLASSIFICATION (WY 1950 TO 2012)



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Flood	8,203	5,975	5,133	4,243	4,066	5,452	18,819	68,796	77,993	51,777	21,427	9,965
Wet	7,359	5,360	4,426	4,069	3,613	5,324	17,948	42,584	66,126	45,367	19,175	11,533
Average	7,230	5,146	4,134	3,821	3,479	4,935	14,001	33,769	43,780	21,336	11,358	8,051
Dry	5,486	4,359	4,001	3,625	3,270	5,118	10,485	22,034	27,824	12,992	8,090	6,037
Drought	4,443	3,452	3,081	2,844	2,582	3,482	6,280	12,810	21,278	9,342	5,710	6,017

Average Annual Flow 244,390 AF

FIGURE 15. SAN MIGUEL RIVER NEAR URAVAN - AVERAGE MONTHLY FLOWS BY HYDROLOGIC YEAR CLASSIFICATION (WY 1952 TO 2012)



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Flood	14,494	10,111	8,987	8,033	8,182	16,316	93,432	163,692	111,516	56,071	25,470	11,879
Wet	11,286	9,703	7,303	7,154	7,424	19,554	75,975	106,942	81,171	35,746	14,177	9,241
Average	8,919	6,426	5,646	5,108	5,390	11,069	42,065	58,072	47,541	21,260	10,829	7,069
Dry	6,325	5,015	4,410	4,314	4,333	8,735	18,581	22,543	23,514	9,394	5,397	5,608
Drought	1,682	1,432	1,410	1,175	1,507	1,745	3,517	2,316	1,730	188	281	3,439

Average Annual Flow 168,244 AF

3.5 PREDICTED FUTURE HYDROLOGY

Phase I of the Colorado Water Availability Study (CRWAS) considered five climate change scenarios, all treated as if they were equally probable. Preliminary findings of the CRWAS show that compared to current conditions, projected future climate conditions may lead to a number of changes in the Colorado River basin within western Colorado (the "Study Area"). According to the Colorado Drought Mitigation and Response Plan, Annex C. Climate Change Implications (CWCB 2013), some of the projected conditions directly pertinent to the Southwest Basin include changes in temperature, precipitation, crop irrigation requirement, and hydrology as summarized below.

TEMPERATURE

- Each of the five climate projections shows an increase in average annual and monthly temperature within the Study Area, with average annual increases ranging from 1.8°F to 5.2°F.

PRECIPITATION

- Generally increases in the winter months and decreases in the summer months.
- Average winter increases are smaller in the southwestern portion of the Study Area.
- Increase in temperatures causes a shift from snow to rain in the early and late winter months.
- Study Area winter average changes by 102% to 116% of historical.
- Study Area April through October average changes by 82% to 105% of historical.

CROP IRRIGATION REQUIREMENT (BASED ON ACREAGE AND CROP TYPES IDENTIFIED IN A 1993 ACREAGE INVENTORY)

- Increases throughout the Study Area for all climate projections (average annual increase by 1.9 to 7.4 inches depending on projection).
- Increases are primarily due to higher temperature and lower irrigation-season precipitation, which increase the number of growing season days for perennial crops, and crop demand for irrigation water.
- Peak CIR continues to occur in the same month as it has historically.
- Study Area average annual growing season increases by 8 to 32 days.

CLIMATE-ADJUSTED HYDROLOGY

- At over 80% of the sites, the majority of climate cases suggest a decrease in annual flow.
- Annual flow is more likely to increase in parts of the Yampa basin and at some higher elevations.
- Annual flow is more likely to decrease in southwestern watersheds and at lower elevations.

- At 75% of locations, all climate cases showed a shift toward earlier runoff, and at all locations, some climate cases showed a shift toward earlier runoff. Runoff shifts earlier by an average of 8 days.

MODELED STREAMFLOW

- Flows are generally higher than historical in May and June and lower in July through March.
- The historical annual low flow values generally fall within the range of projected low-flow values.

WATER AVAILABLE TO MEET FUTURE DEMANDS

- Upstream locations on main rivers and smaller tributaries generally have less flow available to meet future demands as a percent of modeled streamflow than gages farther downstream that include more tributary inflow.
- Most locations show less water availability for three of the five climate projections, although one projection shows more water available at the locations selected to display CRWAS results.
- Generally more water availability in April and May, corresponding to the shift in natural flow hydrographs.
- The historical annual minimum water availability values generally fall within the range of projected minimum water availability values for 2040 throughout the Study Area.

MODELED RESERVOIR STORAGE

- Earlier peak runoff, reduced flows during the peak irrigation season, and increased crop demands result in more use of water in reservoirs, resulting in more reservoir fluctuation.
- Reservoirs are generally drawn down to lower levels, and generally fill to historical levels.

MODELED CONSUMPTIVE USE

- Average annual consumptive use in the San Juan basin is less for every climate projection.
- Projected consumptive use in the San Juan generally increases in spring months only.

- Total consumptive use for the Study Area is greater than for historical climate conditions for most climate projections.
- Although modeled consumptive use generally increases, not all crop demands are met in any basin. Similar to historical conditions, there continue to be water shortages on tributaries and in the late irrigation season for the projected conditions.

In order to allow a better understanding of how projected, climate-impacted stream flows differ from historic and prehistoric conditions, the 2013 update to the Colorado Drought Mitigation

and Response Plan (CWCB) developed graphs to compare the prehistoric, historical, and projected flows. These graphs provide the long-term context within which to consider the 56-year period experienced from 1950 through 2005. They also suggest the need for adaptations to meet future needs.

The projections of future streamflow were obtained for a number of locations in the Colorado, South Platte and Arkansas rivers' basins. Reconstructions of prehistoric flows have been made for a large number of stream gauges in Colorado (NOAA, 2013). Sixteen locations were selected where both climate change projections and prehistoric reconstructions exist, including the Dolores and Animas rivers in the Southwest Basin.

Figure 16 shows the comparison for the Animas River at Durango and Figure 17shows the comparison for the Dolores River. The 56 year running average of the prehistoric reconstruction (paleo data) is the solid blue line. The end of the solid blue line represents average conditions over the most recent 56 years. The dashed lines show the averages for each climate-impacted flow scenario. Both graphs show that all projected scenarios fall outside of the highest and lowest 56-year average flows in the prehistoric reconstruction, and seven of the eight projected scenarios are below the historical average flow, indicating that the projections of future flows are drier.

The Colorado Drought Mitigation and Response Plan points out that "because there is greater scientific confidence in the quantification of prehistoric flows than in the quantification of projected flows, there is a better scientific basis to support adaptation measures based on the variability of prehistoric flows. On both the Animas and the Dolores rivers, all of the projections fall outside the range of the prehistoric flows, and suggesting that decisions regarding adaptation should primarily consider the projections of future flow in order to develop management strategies that will meet future needs.

The Plan also notes that "it is important to keep in mind that these comparisons use 56 year average flows. Annual droughts, and multi-year spells will be superimposed on the average flows, so the curves and projections do not represent the most severe conditions that may face a system."

FIGURE 16. COMPARISON OF HISTORIC AND PREHISTORIC FLOW RECONSTRUCTION TO AVERAGE FUTURE FLOW PROJECTIONS FOR THE ANIMAS RIVER AT DURANGO, FROM THE COLORADO DROUGHT MITIGATION AND RESPONSE PLAN (CWCB 2013)

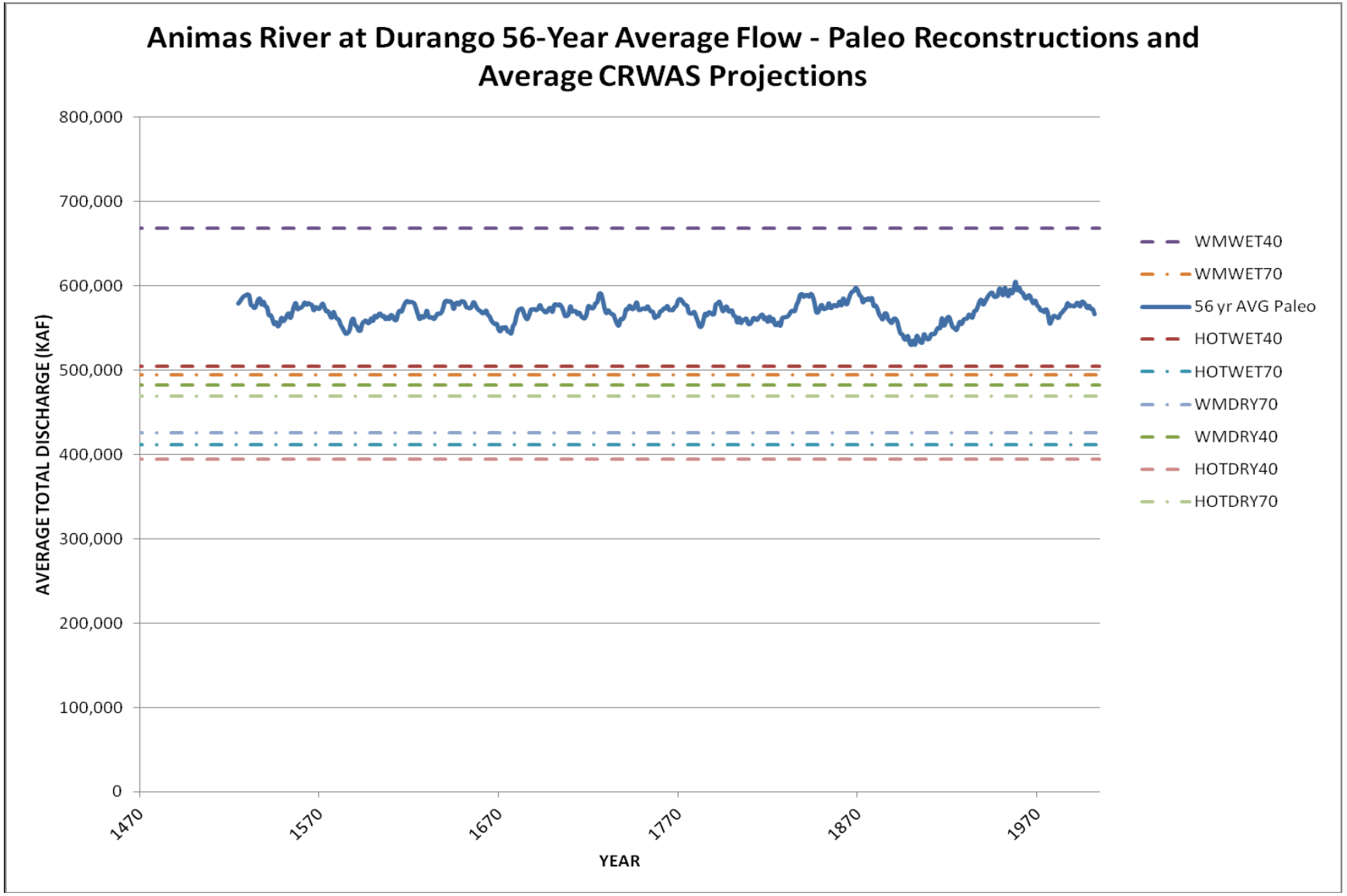
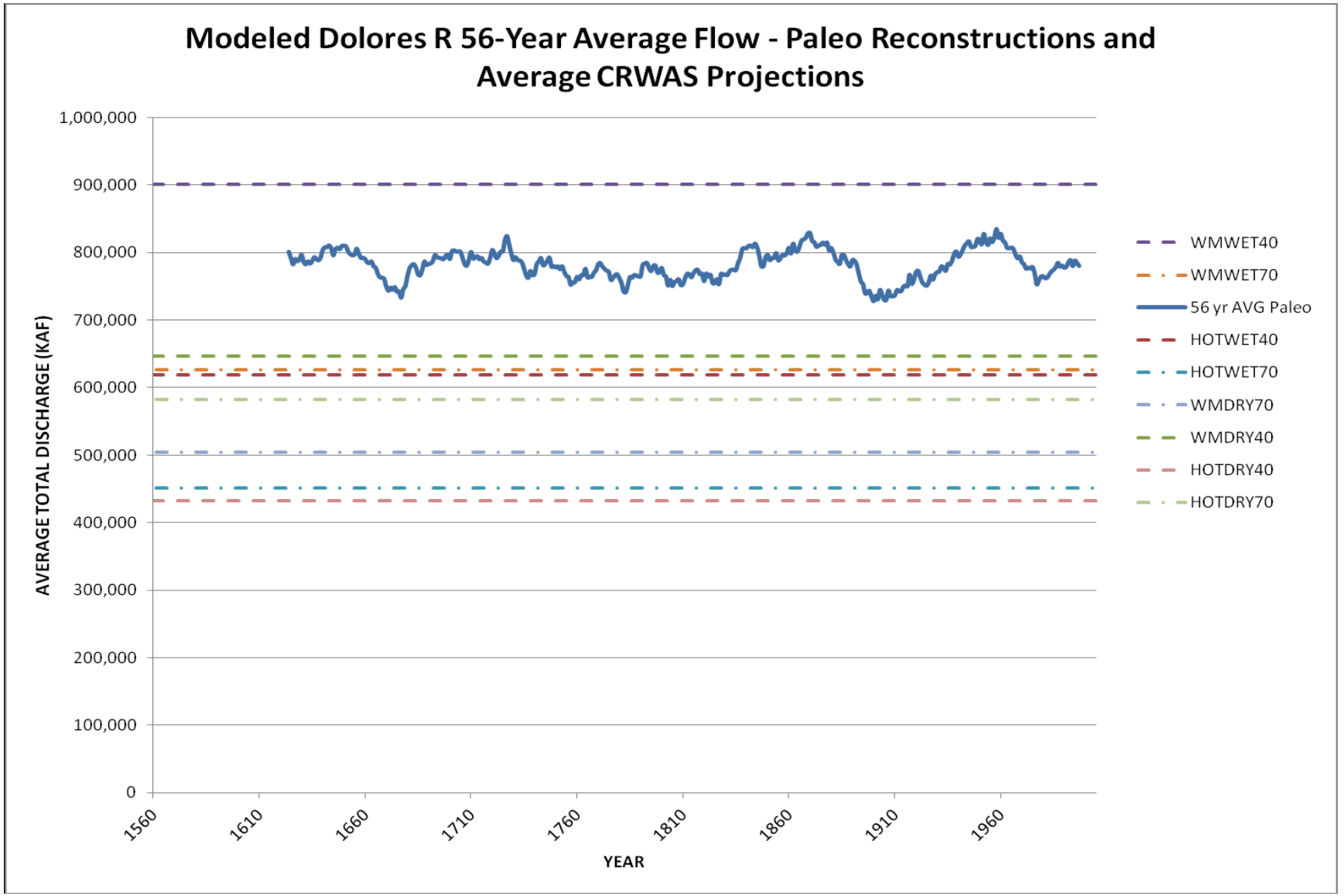


FIGURE 17. COMPARISON OF HISTORIC AND PREHISTORIC FLOW RECONSTRUCTION TO AVERAGE FUTURE FLOW PROJECTIONS FOR THE DOLORES RIVER, FROM THE COLORADO DROUGHT MITIGATION AND RESPONSE PLAN (CWCB 2013)



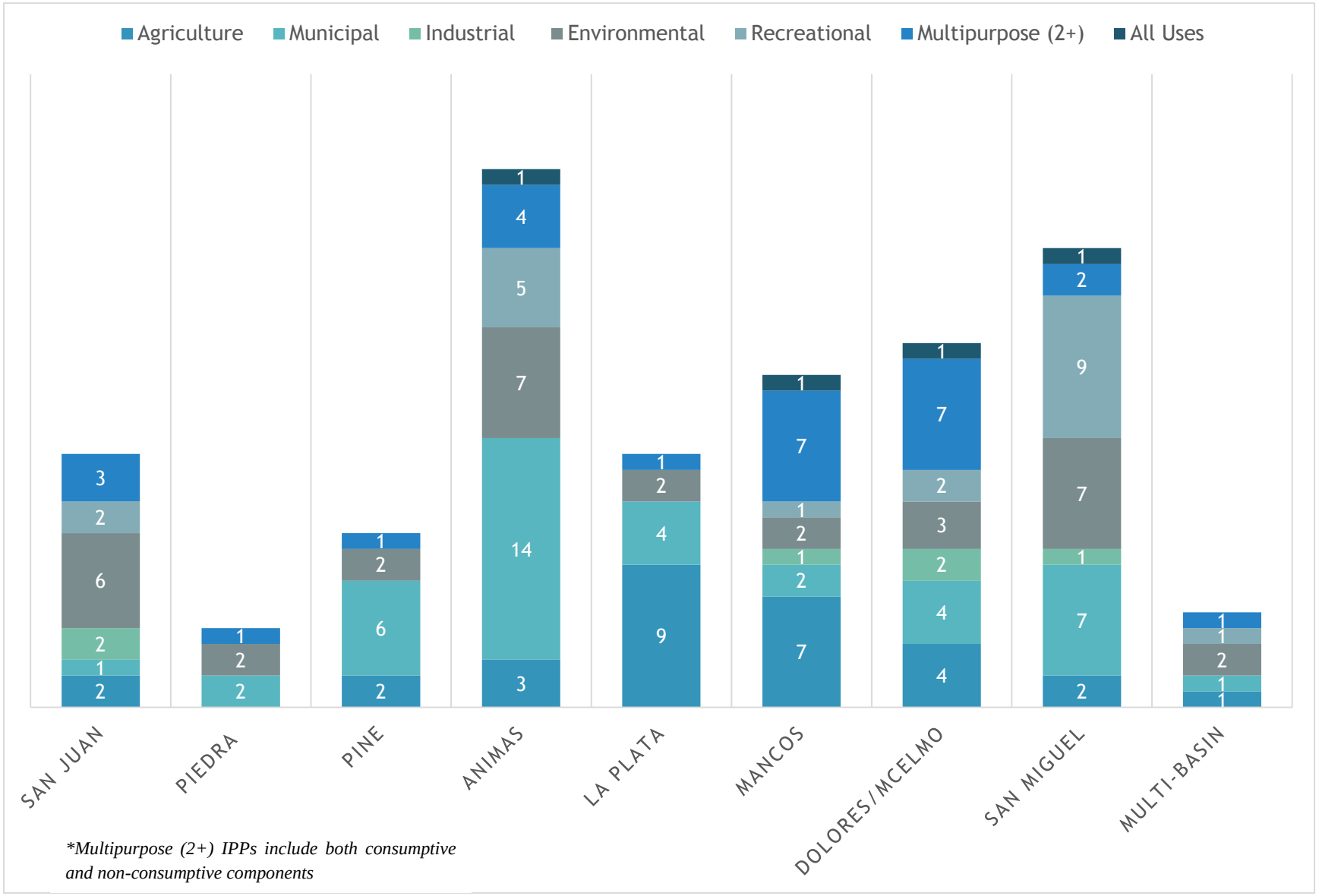
SECTION 4: PROJECTS & METHODS

The SWSI 2010 Identified Projects and Processes (IPP) list went through an in depth updating process for inclusion into the BIP. The BIP consultants outreached to over 200 people across the nine sub-basins requesting updates and identification of new IPPs. The following sections describe outreach efforts, and provide a summary of current IPPs, as well as conceptual IPPs. Conceptual IPPs are ideas for projects or processes that people or entities within the sub-basin have, but which do not yet have a sponsor who is actively pursuing implementation of the concept.

For a complete list of the IPPs for all sub-basins please reference Appendix A. The Roundtable takes a collaborative approach to treat all types of IPP equally and to evaluate them equally for all environmental, agricultural, recreational, municipal, industrial, and multi-purpose needs. Figure 18 presents the IPPs as sorted by sub-basin and type of need. The IPPs are sorted by the following types of need: agricultural, municipal, industrial, environmental, recreational, multipurpose (addressing at least one consumptive and one non-consumptive need), all uses, and multi-basin (e.g. agricultural efficiency projects or hydropower development).

Agricultural IPPs make up about 19% of the total IPPs on the list to date. Municipal and industrial IPPs make up about 29% of the total IPPs on the list to date. Environmental IPPs make up about 21% of the total IPPs while recreational IPPs make up about 12% of the IPPs on the list today. There are about 17% that are considered multipurpose with a consumptive and non-consumptive component. The IPPs are almost equally split between consumptive and non-consumptive projects and/or processes.

FIGURE 18. IPPS SORTED BY SUB-BASINS AND TYPE OF NEEDS



4.1 EDUCATION, PARTICIPATION & OUTREACH

This section provides a summary of the Roundtable Education Action Plan (EAP) activities both completed and planned. Specifically, this section provides information on how the Roundtable informed local decision makers and the public about the CWP. This section includes: number and locations of public meetings (or sessions at regular Roundtable meetings), as well as number of attendees and recorded demographics/professional affiliations; additional engagement mechanisms and related outreach; other notable features of the Roundtable outreach activities; and a 2015 and long-term (2016-2020) EAP, including budget.

NUMBER AND LOCATIONS OF PUBLIC MEETINGS

There is a half hour social networking opportunity before each of the Roundtable meetings that the public is invited to and they are also invited to attend the Roundtable meetings themselves. The demographic/professional affiliations of the general public attendees are recorded in each of the Roundtable meeting minutes. Starting when the BIP planning process began in the fall of 2013. The number of public in attendance at the Roundtable meetings breaks down as follows:

- November 2013: 31 public in attendance; 25 members in attendance
- January 2014: 15 public in attendance; 25 members in attendance
- March 2014: 22 public in attendance; 22 members in attendance
- May 2014: 21 public in attendance; 20 members in attendance
- July 2014: 20 public in attendance; 24 members in attendance
- September 2014: 16 public in attendance; 21 members in attendance
- November 2014: 20 public in attendance; 26 members in attendance
- January 2015: 22 public in attendance; 23 members in attendance

Roundtable members also help conducted four public outreach meetings specific to the BIP and CWP. These meetings were held across the Southwest Basin in the winter of 2014. The meetings provided the public with presentations on the CWP and BIP along with discussion topics to spur public participation and input. The meetings were a great success in understanding the public's concerns and interests as they relate to water development and uses within the Southwest Basin. Appendix B contains meeting presentations, sign in sheets, and meeting notes.

- November 17, 2014 meeting was held in Pagosa Springs; 16 plus people in attendance
- November 19, 2014 meeting was held in Bayfield; 14 plus people in attendance
- December 1, 2014 meeting was held in Mancos; 30 plus people in attendance
- December 9, 2014 meeting was held in Placerville; 15 plus people in attendance

In addition, information about the Interbasin Compact Committee (IBCC)/Roundtable process and the CWP, including updates, has been presented at many local events (e.g. Kiwanis, Rotary, etc.), most local water board meetings (e.g. Animas-La Plata Water Conservancy District, Dolores Water Conservancy District, San Juan Water Conservancy District, Southwestern Water Conservation District, etc.), the annual Water 101 Seminar, and the annual *Water in the West Art Show*. Local presentations included:

- Kate McIntire (CWCB), Kristin Maharg (CFWE), and Denise Rue-Pastin (WIP) conducted a one hour public education and outreach workshop session prior to the November 2013 Roundtable meeting. The majority of roundtable members and some public were in attendance and it was well received. In addition, the importance of public education and outreach was discussed as an agenda item during this meeting.
- Denise Rue-Pastin made a presentation to the Durango Kiwanis Club (approximately 30 in attendance) on November 12, 2013 that provided an extensive discussion of the CWP, including a wide variety of handouts.
- Denise Rue-Pastin provided a presentation at the Durango High Noon Rotary meeting on March 27, 2014 (approximately 50 in attendance) that provided an extensive discussion of the CWP, including a wide variety of handouts.
- Mike Preston, General Manager of the Dolores Water Conservancy District, made presentations (including handout materials) to the Montezuma Valley Irrigation Company Board of Directors and staff (approximately 40 in attendance) on April 8, 2014 and the Dolores Water Conservancy District Board of Directors and staff (approximately 35 in attendance) on April 10, 2014.
- Bruce Whitehead, Executive Director of Southwestern Water Conservation District, provided CWP information at a 4CORE meeting on May 1, 2014 (approximately 15 in attendance).
- Rod Profitt, Board President for San Juan Water Conservancy District, made a CWP presentation on May 7, 2014 to the Pagosa Springs Town Council (approximately 25 in attendance).
- Rod Profit and Val Valentine provided a CWP information session at the Archuleta County Board of Commissioners meeting on May 14, 2014 (approximately 15 in attendance).
- Rod Profitt attended the regularly scheduled June 2014 meeting of the Pagosa Area Water and Sanitation District to provide information on the CWP (approximately 30 in attendance).
- Rod Profitt attended the regularly scheduled June 2014 meeting of the Park Ditch Company to provide CWP information (approximately 20 in attendance).
- Mike Preston presented CWP information at the Club 20 Meeting at La Plata Electric Association on July 31, 2014 (approximately 30 in attendance).
- Mike Preston presented Southwest Basin Roundtable perspectives at the SB115 Legislative Hearing in Durango on August 27, 2014 (approximately 100 in attendance).
- CWP and Roundtable information were presented at the Annual Water 101 Seminar on September 22, 2014 in Telluride (approximately 70 in attendance).
- April Montgomery and Mike Preston provided the Dolores Conservation District with a CWP and Roundtable update at their December 5, 2014 meeting (approximately 25 in attendance).
- Mike Preston provided the Mancos Conservation District with a CWP and Roundtable update at their December 6, 2014 meeting (approximately 20 in attendance).

- Various roundtable members participated in and provided CWP input at the December 18, 2014 West Slope Caucus in Grand Junction (approximately 150 in attendance).
- Bruce Whitehead presented CWP information to the Kiwanis on February 12, 2015 in Durango (approximately 50 in attendance).
- Rod Proffitt presentation to the Archuleta Board of County Commissioners, which updated them on Dry Gulch, noting that Dry Gulch is an IPP and part of BIP in the CWP (approximately 25 in attendance).
- Bruce Whitehead presented CWP information to the Pagosa Springs Rotary on February 19, 2015 (approximately 50 in attendance).

ADDITIONAL ENGAGEMENT MECHANISMS AND RELATED OUTREACH

Area newspapers are invited to each of the Roundtable meetings and various local papers periodically ran information pieces related to the CWP and the importance of public input. Examples include the Cortez Journal (Circulation: 7,500; Geographic area: Predominantly the Cortez/Dolores/Mancos areas), the Durango Herald (Circulation: 9,400; Geographic area: Nine-county Dolores/San Juan River Basin), and the Pine River Times (Circulation: 1,600; Geographic area: Predominantly the Bayfield area). The WIP website has over 100 newspaper articles posted that specifically reference the CWP. A sampling of those articles includes:

- February 12, 2015: Colorado water plan can't create more H20 (Aspen Daily News)
- December 14, 2014: Colorado needs this water plan (Times Call)
- December 10, 2014: Colorado water plan draft goes to Hickenlooper to address shortfall (Denver Post)
- December 9, 2014: Southwest Basin Water Roundtable holds meetings to discuss plan (Cortez Journal)
- November 26, 2014: Statewide water plan taking shape (Pine River Times)
- November 6, 2014: State water planning is 'evolutionary' (Grand Junction Sentinel)
- October 14, 2014: 18,000 Coloradans call on water board for strong conservation and efficiency in state water plan (Groundfloor Media)
- October 11, 2014: How will Colorado's water plan address West-East water transfers? (Post Independent)
- September 11, 2014: State water plan must include recreation economy (Post Independent)
- September 4, 2014: State Water Plan draws crowd (Pine River Times)
- August 13, 2014: Colorado's Water Plan (KRCC)
- July 29, 2014: The importance of the Colorado Water Plan (ColoradoPols.com)
- July 17, 2014: Colorado's river basin users discuss statewide water plan (KUNC)
- July 9, 2014: Water plan would weigh new diversion projects (Post Independent)
- June 15, 2014: Take the opportunity to make your voice heard in state's water planning (Grand Junction Sentinel)
- June 1, 2014: Conservation, efficiency key to water plan (Soapbox)

- May 29, 2014: Can the state water plan bridge the gap? (Summit Voice)
- May 24, 2014: Draft plan for state's water future released (Aspen Daily Times)
- May 5, 2014: Water planning: What Colorado could learn from Texas (Durango Herald)
- April 11, 2014: Water supply concerns dominate regional seminar (Pine River Times)
- April 8, 2014: Haven't heard of the Colorado Water Plan? (Durango Herald)
- March 7, 2014: Governor pushes state water plan (Durango Herald)
- January 23, 2014: Colorado continues to wrangle over last drop (Durango Telegraph)
- January 30, 2014: Anxiety builds over state water plan (Durango Herald)
- October 30, 2013: Protecting Colorado's water future by Bruce Whitehead (Durango Herald and Southwestern Water Conservation District)



In addition, a local radio station, K-WUF, provided coverage and information on the CWP in May 2014. K-WUF serves all of Archuleta County and parts of La Plata, Hinsdale, and Mineral Counties in Colorado, as well as portions of northwest New Mexico. Moreover, the WIP website provides information on the IBCC/roundtable process, as well as links to provide public input to the CWP.

OTHER NOTABLE FEATURES OF THE ROUNDTABLE OUTREACH ACTIVITIES

The Roundtable wanted local decision makers and the public to understand the status of the Southwest Basin's consumptive and non-consumptive needs as well as planned projects. Related to this, the Roundtable hired a consulting team to work on their BIP. The consultants met with numerous individuals and organizations to obtain input to update the Southwest Basin's consumptive and non-consumptive needs assessment, as well as planned projects related to the BIP. To-date, the BIP consultants have met with and talked to over 200 individuals and organizations throughout the Southwest Basin. The consultants reviewed and have incorporated all public input comments into this BIP.

It should be noted, too, that the Roundtable wanted to promote partnerships for new projects and methods. Therefore, each funding application to the Roundtable is required to provide information related to collaborative efforts, including cost-sharing. Over the years, too, the Roundtable has made numerous recommendations to applicants about potential future partners. Moreover, the BIP consultants continually worked to obtain input and promote partnerships.

In addition, the Roundtable felt it was important that the public understand how they are represented on the Roundtable. Related to this, the CWCB produced a very informative Frequently Asked Questions (FAQs) and fact sheet related to the IBCC and Roundtable process that explained how they are represented. Both pieces were regularly distributed at each of the Roundtable bi-monthly meetings throughout 2013 and 2014. Also, in early January 2014 the CWCB produced a Roundtable fact sheet and that has been disseminated at each of the Roundtable meetings. It was

also sent to the entire Roundtable email list which is distributed to more than 100 individuals and organizations. Roundtable members and the public were asked to widely share the FAQs and fact sheets with their constituents. This information is also available at the WIP office in Durango and has been used extensively and disseminated at various public events.

Due to the natural variability of river flows and the hydrologic cycle, the Roundtable thought it was important that local decision makers and the public understand the potential for dry as well as wet years. Information pieces related to this were disseminated at each of the Roundtable meetings, as well as various events and presentations. Some of those pieces came from or included:

- Cech, T. V. (2010). *Principles of water resources* (3rd ed.). Hoboken, NJ: John Wiley & Sons. [Note: Chapter 3 surface water hydrology, to include river components and morphology]
- Colorado Foundation for Water Education. (2009). *Headwaters: Administering Colorado's water resources scarcity rules.* Denver, CO: Author.
- Grigg, N. S. (2008). *Total water management: Practices for a sustainable future*. Denver, CO: American Water Works Association. [NOTE: Chapter 9—laws and regulations]
- Maxwell, S. (Ed.). (2008). *The business of water: A concise overview of challenges and opportunities in the water market*. Denver, CO: American Water Works Association.

In addition, the CWCB developed a drought factsheet that was continually disseminated at each of the Roundtable meetings. This factsheet, as well as additional informational pieces related to variations in the hydrologic cycle, is available on the WIP website and at the WIP office. They have been disseminated at various functions throughout the roundtable process.

OUTREACH PLAN

It will be important to continue to provide information to local decision makers and the public about the BIP so that people understand the BIP's context and are better able to connect to their role in implementing the BIP. In addition, the Roundtable believes it is important to plan for educational programs that allow for deeper exploration of the important water issues within the Southwest Basin. To those ends, the following provides an outreach/education action plan and budget for 2015, as well as a broader, long-term (five year) plan for outreach:

- Continue with Roundtable meetings currently scheduled for: January 14, 2015, April 8, 2015, July 8, 2015, and October 14, 2015.
- Continue with the public education and participation outreach activities identified in Section 4.1 of this BIP (e.g. local presentations, Annual Water 101 Seminar, newspapers, radio, website, etc.).
- Continue with all of the other notable features of Roundtable outreach activities to include keeping local decision makers and the public informed about consumptive and non-

consumptive needs and planned projects, promoting partnerships, providing information about how they are represented on the Roundtable, and disseminating information on natural variability of river flows and the hydrologic cycle.

The Roundtable's overall goals and priorities for education, participation, and outreach including target audiences are presented in Section 1 of this Plan, a synopsis of which is provided as follows:

Short-Term Goals

- Encourage education and conservation to reduce demand.
- Implement informational events about [water conservation and land-use planning] and water reuse efforts, tools and strategies.
- Promote wise and efficient water use through implementation of municipal conservation strategies to reduce overall future water needs.

Ongoing Activities

- Implement IPPs to benefit recreational values and the economic value they provide.
- Implement IPPs to directly restore, recover or sustain endangered, threatened, and sensitive aquatic and riparian dependent species and plant communities.
- Implement IPPs to monitor, protect or improve water quality.
- Participate in Compact Water Bank efforts.
- Support agricultural water efficiency projects identified as IPPs.
- Support and participate in IPPs that promote dialogue, foster cooperation and resolve conflict.

Mid-and Long-Term Targets

- Mid-Term: Promote 60% in-house use and 40% outside use (60/40 ratio) for Southwest Colorado and the entire State by 2020.
- Long-Term: Promote 70% in-house use and 30% outside use (70/30 ratio) for Southwest Colorado and the entire State by 2030.

One strategy to achieve the short-term goals of conservation, land-use planning (which will include coverage and discussion of the 60/40 and 70/30 ratios referenced above), and water reuse is to implement a pilot conservation and land-use planning session in 2015. Initially it is anticipated that this would be a two to four hour workshop for local decision makers and water utility personnel. Between local water professionals, including a land-use planner and the WIP Coordinator, it is believed the session can be effectively conducted and facilitated at a reasonable cost. Depending upon input from the Roundtable, PEPO funds (estimated to be about $1,200) could be used for this effort. If the first year pilot is successful, the session could be annually

rotated throughout the basin (e.g. Cortez, Telluride, Pagosa Springs, etc.) similar to the Water 101 Seminar. The Roundtable would also like to pursue a similar water conservation workshop approach, to include water-wise landscaping for the general public, however these details have yet to be determined. Strategies to achieve ongoing activities are discussed in the following partnerships section. Mid-and long-term goals will be incorporated in with the short-term water conservation, land-use planning, and reuse workshop already discussed. A breakdown of the budget and schedule to achieve the Roundtable educational goals is provided in Attachment C.

Moreover, the Roundtable will continue with key components identified in their original EAP to include:

- Consumptive Projects: Relay gap information, to include an action plan and public participation process, communicate statewide implications of IPPs, engage diverse stakeholders, and provide assistance and information to the Roundtable members and public related to prioritizing projects.
- Non-Consumptive Projects: Keep the public and Roundtable members informed about non-consumptive projects and help to bridge the consumptive and non-consumptive communities while highlighting progressive, multi-purpose solutions.
- Roundtable Member Education: Provide Roundtable members information and education related to a wide variety of water-related issues and interests (e.g. climate change, drought planning, groundwater hydrology, interstate compacts, water quality regulation, etc.).
- Support and utilize existing water education efforts.

It should be noted, that in addition to all of the Roundtable members and their associated organizations, future partners that could be involved in assisting with educational programming may include the Colorado DWR, CWCB, Animas Watershed Partnership, Mountain Studies Institute, San Juan Citizen's Alliance, Trout Unlimited, and Southwestern Water Conservation District.

This section provided a summary of the Roundtable EAP activities that were conducted in the 2013 to 2014 timeframe. The goal of Roundtable EAP outreach activities to date has been to inform decision makers and the public about the Roundtable process and how they can effectively participate in the CWP. Thus far, it is conservatively estimated that nearly 3,000 members of the public, plus Roundtable members in the Southwest Basin have been informed and/or involved in the CWP and public input process. Constituent support for the BIP will be important to meet future water supply needs. The Roundtable believes that well informed members and the public will help to execute this BIP. The Roundtable plans to continue their public education, participation, and outreach activities well into the future.

TABLE 11. SOUTHWEST BASIN ROUNDTABLE 2015 EAP AND BUDGET

GOAL	OBJECTIVE/TASK	LEAD	TIMELINE	EXPENSE	ONGOING?	COMMENTS
Educate decision makers in the SBR area about how they are represented	a) Regularly distribute FAQs and fact sheet related to the IBCC and roundtable process. b) Purchase and distribute Headwaters Colorado Water Plan issue. c) Purchase and distribute information about the IBCC/roundtable process and the State Water Plan at local events, local water board meetings, and the annual Water 101 Seminar.	Denise Rue-Pastin	Throughout 2015	$800	Yes	
Educational priority	Pilot conservation and land-use planning session	Denise Rue-Pastin	Late Fall 2015	$1,200	Pilot	
Roundtable members and general public information and education related to consumptive and non-consumptive projects and CWP	a) Notify all area papers of Roundtable meeting dates, time, and location; including 'open to the public' invitation	Denise Rue-Pastin	Quarterly meetings 2015	$108	Yes	WIP Coordinator time est.
	b) Post all consumptive and non-consumptive related activities and meetings on WIP website	Denise Rue-Pastin	Throughout 2015	$108	Yes	
	c) Presentations to various local organizations	Varies	Throughout 2015	$125	Yes	Copies and materials
	d) Roundtable information is provided at each Annual Water 101 Workshop	Denise Rue-Pastin	Throughout 2015	$225	Yes	Copies & 75 issues of the CFWE Water Law
	e) Other/Misc			$100		
Roundtable Members Education	a) Drought planning information at Roundtable meeting	Handouts; Speaker TBD	TBD	$125	No, but info needs will be continually assessed	Copies and materials
	b) Climate change information at Roundtable meeting	Handouts; Speaker TBD	TBD	$125	No, but info needs will be continually assessed	Copies and materials
	c) Water quality regulation or groundwater hydrology information at Roundtable meeting	Handouts; Speaker TBD	TBD	$125	No, but info needs will be continually assessed	Copies and materials
	d) Interstate compacts information at Roundtable meeting	Handouts; Speaker TBD	TBD	$125	No, but info needs will be continually assessed	Copies and materials
	e) Other/Misc: Current river operations and opportunities, constraints associated with different hydrologic cycles			$100		
TOTAL				$3,266		

TABLE 12. SOUTHWEST BASIN ROUNDTABLE 2016 TO 2020 EAP AND BUDGET

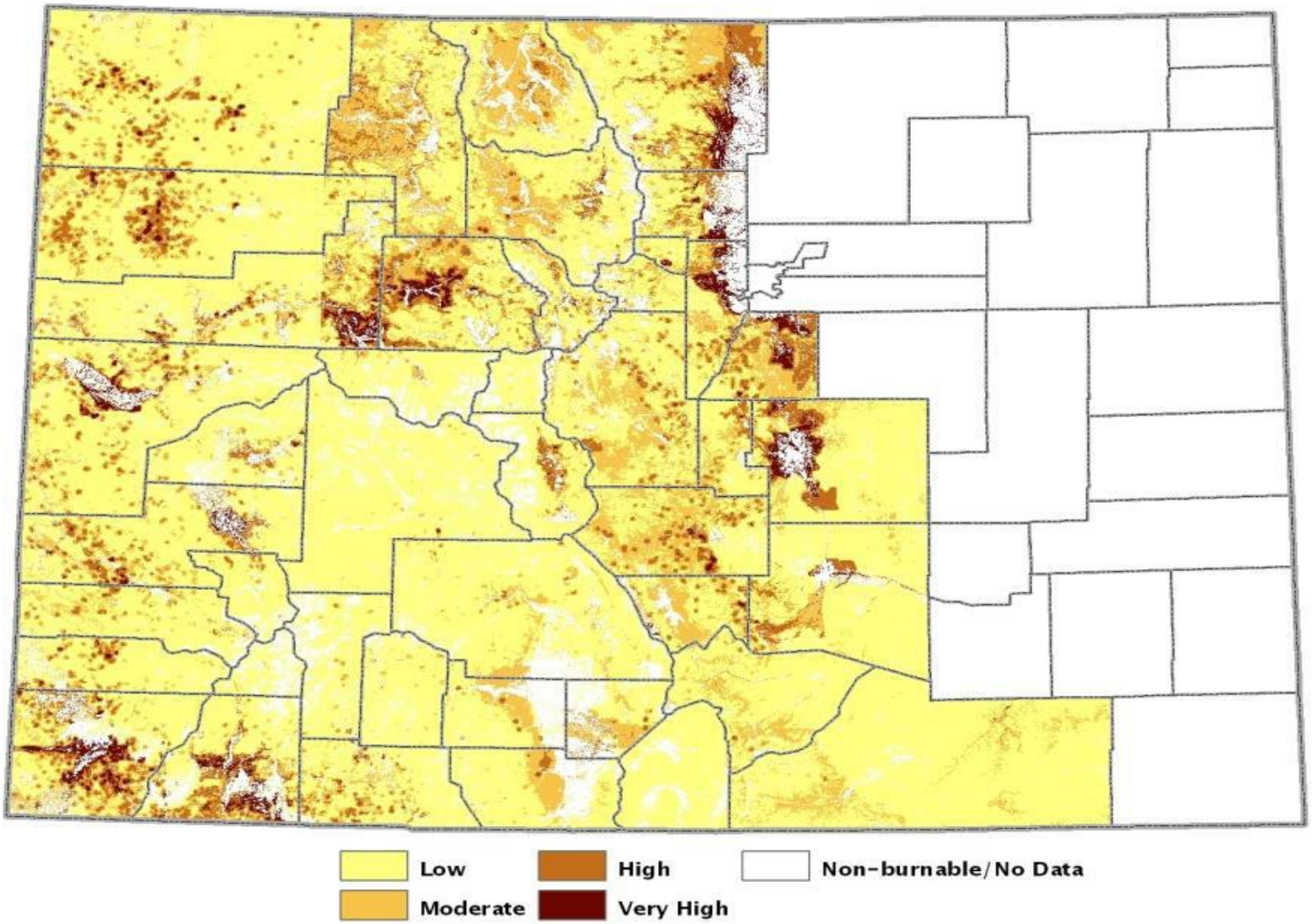
GOAL	OBJECTIVE/TASK	LEAD	TIMELINE	EXPENSE	ONGOING?	COMMENTS
Educate decision makers in the SBR area about how they are represented	a) Regularly distribute FAQs and fact sheet related to the IBCC and roundtable process. b) Purchase and distribute Headwaters Colorado Water Plan issue. c) Purchase and distribute information about the IBCC/roundtable process and the State Water Plan at local events, local water board meetings, and the annual Water 101 Seminar.	Denise Rue-Pastin	2016-2020	$2,400	Yes	
Educational priority	Water conservation workshop, to include water-wise landscaping for the general public	Denise Rue-Pastin	Starting in 2016	$1,200	Pilot	
Roundtable members and general public information and education related to consumptive and non-consumptive projects AND CWP	a) Notify all area papers of Roundtable meeting dates, time, and location; including 'open to the public' invitation	Denise Rue-Pastin	Quarterly meetings 2016-2020	$541	Yes	WIP Coordinator time est.
	b) Post all consumptive and non-consumptive related activities and meetings on WIP website	Denise Rue-Pastin	2016-2020	$541	Yes	
	c) Presentations to various local organizations	Varies	2016-2020	$625	Yes	Copies and materials
	d) Roundtable information is provided at each Annual Water 101 Workshop	Denise Rue-Pastin	2016-2020	$1,125	Yes	Copies, plus 75 issues of the CFWE Water Law
	e) Other/Misc			$500		
Roundtable members education	a) Information on a variety of topics at Roundtable meetings	Handouts; Speaker TBD	TBD	$625	No, but info needs will be continually assessed	Copies and materials
	b) Other/Misc:			$500		
Support and utilize existing water education partners and efforts	a) All Roundtable meetings are posted on WIP website and in quarterly newsletters	Denise Rue-Pastin	2016-2020	$541	Yes	WIP Coordinator time est.
	b) There is a Roundtable update section in each of the WIP quarterly newsletters	Denise Rue-Pastin	2016-2020	$947	Yes	WIP Coordinator time est.
	c) There is a Roundtable tab/section on the WIP website	Denise Rue-Pastin	2016-2020	$947	Yes	WIP Coordinator time est.
	d) Water information provided at each of the Roundtable meetings on an information table	Denise Rue-Pastin	2016-2020	$625	Yes	Copies
	e) Other organizations that could help with efforts (e.g. CDWR, CWCB, SJCA, SWCD, etc.)	Varies	2016-2020	N/A	Yes	
	f) Other/Misc.			$500		
TOTAL				$11,617		

4.2 WATERSHED HEALTH & WATER QUALITY

CHECK IT OUT!
http://www.coloradowildfirerisk.com/

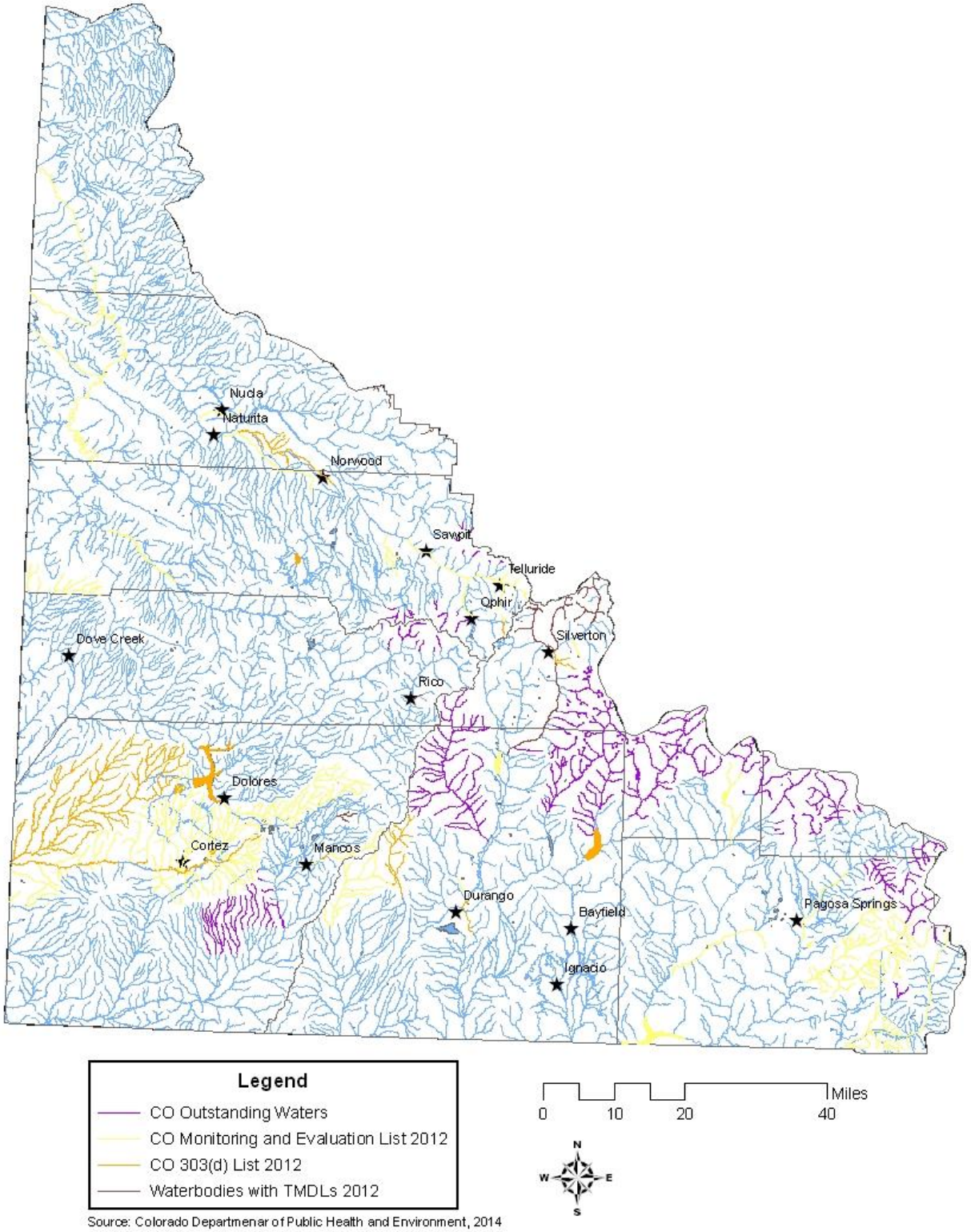
Wildfire, water quality degradation and other issues related to watershed health can impact and endanger critical water supplies through impacts to water supply infrastructure, environmental or recreational values, and/or water quality. The Colorado Wildland Fire Susceptibility Index (Figure 18), developed by the Colorado State Forest Service, provides one tool for gaging levels of fire risk within the Southwest Basin. Go to the website to obtain fire risk information for specific locations.

FIGURE 19. COLORADO WILDLAND FIRE SUSCEPTIBILITY INDEX (COLORADO STATE FOREST SERVICE 2008)



The protection, maintenance, and restoration of Colorado's water resources are managed by the Clean Water Program within the Colorado Water Quality Control Division (WQCD). Colorado's water quality is assessed periodically in conjunction with the WQCD's triennial review of water quality standards, the development of discharge permits, the 303(d) List and Total Maximum Daily Loads, and the completion of special studies. Water bodies are listed as "impaired" under Section 303(d) of the Clean Water Act when monitoring data demonstrates that the water quality standard for a pollutant or pollutants is being exceeded. Figure 20 shows the waterbodies listed as impaired in the Southwest Basin, as well as those with Outstanding Waters designation and those on the Monitoring and Evaluation List for impairment.

FIGURE 20. COLORADO WATER QUALITY CONTROL DIVISION WATER QUALITY LISTINGS AND DESIGNATIONS FOR WATERBODIES IN THE SOUTHWEST BASIN



Source: Colorado Departmenar of Public Health and Environment, 2014

CURRENT IPPS

Watershed health protection projects and methods are occurring or have been completed within each of the Southwest Basin's nine sub-basins. These efforts range from broad collaborative watershed groups, to collaborative groups focused on forest health or water quality, to more focused community wildfire mitigation plans aimed at protecting property and source water protection plans to protect drinking water supplies. The dialogue and action fostered by these efforts can help protect critical water supplies from harm by fire, contaminants or other hazards.

In the San Juan River basin, there are two groups working on forest and watershed health focused on public and private lands. The San Juan Headwaters Forest Health Partnership includes people and organizations representing multiple interests working to strengthen understanding of methods for improving forest health and long-term resilience of the watersheds of the Upper San Juan River Basin, to broaden knowledge of current conditions and opportunities, to develop and implement a set of management approaches and projects, as well as monitoring and adaptive management.

CHECK IT OUT!
http://www.sanjuanchama.org/

The Chama Peak Land Alliance formed the San Juan–Chama Watershed Partnership to engage public and private stakeholders in collaborative planning and decision making in the Navajo River and Rio Blanco River watersheds of Colorado (as well as the Chama River watershed in New Mexico). These watersheds are at very high risk for wildfire and insect and disease mortality; yet they sustain agricultural operations, tourism based economies, wildlife populations and public recreation, as well as supply over 50% of the water supply for Santa Fe and Bernalillo counties in New Mexico, via the San Juan Chama Diversion.

In the Animas River basin two collaborative groups are working on water quality issues. In the upper watershed, the Animas River Stakeholders Group (ARSG) is focused on water quality challenges related to historic mining and natural mineralization in the upper Animas River watershed. The ARSG's mission is to improve water quality and aquatic habitats in the Animas River watershed through a collaborative process designed to encourage participation from all interested parties. Focusing lower in the basin, the Animas Watershed Partnership (AWP) works to protect and improve the quality of water resources in the Animas River. AWP's efforts to date have focused on nutrient, sediment, and bacterial levels based on recent and current sampling efforts, including the Animas Watershed Based Plan (2011). The Microbial Source Tracking and Nutrient Sampling Project aims to identify the animal sources of bacterial contamination in the Animas River close to the Southern Ute/New Mexico Boundary, as well as to measure and compare the concentrations of E. coli, total nitrogen, and total phosphorus in the Animas River and the Florida River close to their confluence.

THE ASSESSMENT IS AVAILABLE AT:

http://www.utemountainuteenvironmental.org/index.cfm/water-quality/surface-water/monitoring-assessment/

In the Mancos River basin, four efforts focus on water quality and watershed health. The Ute Mountain Ute Tribe and the Mancos Valley Watershed Group have completed watershed and water quality assessments and implement projects aimed at improving watershed health. The Ute Mountain Ute Tribe Environmental Programs Department recently completed its Mancos River Water Quality Assessment: 2011-2012 (Ute Mountain Ute Tribe 2013).

The Mancos Valley Watershed Group completed the Mancos Watershed Plan in 2011. The group was formed in 2006 and brings together private landowners, environmentalists, recreationalists, government agencies, and concerned community members to address goals including improvement of fishing, reduction of copper loading in the East Mancos, working with irrigators to improve diversions, improvement of the ecological function of the river, and improvement of summer flows through the town of Mancos and downstream. In addition as part of the BOR's Colorado River Salinity Control Program, the U.S. Department of Agriculture Natural Resource Conservation Service's Environmental Quality Incentives Program (EQIP) provides cost share assistance to landowners in the Colorado River basin, including all sub-basins of the Southwest Basin, who install salinity control measures. Finally, the Mancos Water Conservation District plans to conduct Natural Disaster Planning.

In the Dolores River watershed several groups are focusing on different aspects of watershed health. The Dolores River Dialogue is a coalition of diverse interests, whose purpose is to explore management opportunities, build support for and take action to improve the ecological conditions downstream of McPhee Reservoir while honoring water rights, protecting agricultural and municipal water supplies, and the continued enjoyment of rafting and fishing. The Dialogue has completed several assessments, including A Way Forward and the Dolores River 319 Plan. A Legislative Subcommittee has also been formed from this effort, which lead to an Implementation Team developing an Implementation, Monitoring, and Evaluation Plan (IM&E Plan). This IM&E Plan is part of the foundation for draft National Conservation Area legislation to protect native fish, downstream values, water rights, and Dolores Project allocations.

The Dolores River Restoration Partnership is a public-private collaboration "working to remove invasive plants whose extensive growth has displaced native plant communities, impaired wildlife habitat and forage, hindered recreational opportunities, and increased risks associated with wildfire." Their goals include to "increase the number of acres of sustainable, healthy riparian and floodplain plant communities in the watershed while reducing those dominated by tamarisk and other invasive, non-native plant species," and to "increase opportunities for the next generation of stewards; increase public safety both by reducing wildfire-related risks and improving highway safety; and improve aesthetics." They have completed the Dolores River Restoration Action Plan

(Dolores River Restoration Partnership 2010) which identified the riparian and floodplain locations where restoration activities should focus.

Trout Unlimited is currently developing the Upper Dolores River Assessment. This is an assessment of fisheries and riparian conditions of the Upper Dolores Watershed aimed at applying the best science to support restoration activities, including identification of possible restoration and irrigation infrastructure improvement partnerships in the Dolores River watershed, reaches of the Dolores River main stem for possible restoration work, monitoring, reconnection, and/or reintroduction projects on important tributary streams for native and wild trout.

In the San Miguel River basin, the San Miguel Watershed Coalition works to "advance the ecological health and promote the economic vitality of the watershed through the collaborative efforts of the entire community. Our ultimate goal is to realize a watershed that is healthy in every respect while offering a sustainable and quality lifestyle for all who live in it." The coalition periodically compiles and issues a watershed health assessment entitled the San Miguel Watershed Report Card.

Also pertinent to water quality in a tributary of the San Miguel River are the Carbenaro Mine Adit Reclamation and the Carribou Mine Tailings and Adit Reclamation Projects, both aimed at mitigating heavy metal loading to Howard's Fork.

CHECK IT OUT!
http://uplandscape.org/

The Uncompahgre Plateau Collaborative Restoration Project (UP CFLRP) is a collaborative effort engaging public and private partners in efforts "to enhance the resiliency, diversity and productivity of the native ecosystem of priority National Forest System lands on the Uncompahgre Plateau, Colorado using best science available and collaboration." The group is active in forest health issues across the Uncompahgre Plateau, including portions of the San Miguel and Dolores river watersheds. The UP CFLRP is completing projects including "active restoration on 160,000 acres that involves prescribed burns, mechanical treatments, timber harvests, invasive species treatments, native plant establishment, trail and road relocations (sediment control), riparian restoration and improvements for Colorado cut throat trout."

In La Plata, Archuleta, and Montezuma counties, FireWise of Southwest Colorado has Chapter Coordinators working with home and property owners to help them understand their fire risk and recommend actions they can take to mitigate that risk. The organization does education/outreach, planning, and some implementation activities (such as creation of demonstration sites, grant writing, incentives for homeowners, etc.).

The main "planning" effort that FireWise of Southwest Colorado is currently supporting is the development of Community Wildfire Protection Plans (CWPPs). There is a CWPP in place for each of the five counties in Southwest Colorado, as well as 17 subdivision-level plans in place and another 12 such plans underway.

While the CWPP plans focus primarily on what the subdivision can do, many of them also make recommendations for actions to be taken on public lands that adjoin the subdivision. Although the primary emphasis of these CWPPs is on creating defensible space for homes, the wildfire mitigation they promote also helps support healthy forests and healthy watersheds.

FireWise of Southwest Colorado works closely with the Colorado State Forest Service, BLM/USFS, fire departments, Offices of Emergency Management, NRCS, Conservation Districts, and other non-profits like the Southwest Conservation Corps and San Juan Headwaters Partnership (P. Wilson, Pers. Comm.).

Finally, Source Water Protection Plans promote protection of public water systems from fire and other potential hazards/sources of contamination. These are voluntary planning efforts that public water suppliers can pursue with funding support available through CDPHE and technical/planning support provided by the Colorado Rural Water Association. In developing these plans, participating public water suppliers identify their water sources and planning areas, inventory and prioritize potential hazards /sources of contamination, and identify Best Management Practices that they or partners can implement to protect their sources of drinking water.

In the Southwest Basin, 23 public water suppliers have completed or are in the process of developing Source Water Protection Plans for their surface and/or groundwater intakes. These plans cover the following planning areas:

- In the Animas River basin, the Florida River watershed upstream of the Durango-La Plata Airport's water intake, the Animas River watershed upstream of the City of Durango's water intake, and the Falls Creek and Dyke Creek drainages.
- In the Mancos River basin, the source areas for the Mancos Rural Water Company, Mesa Verde National Park, and the Town of Mancos.
- In the Dolores River basin the source areas for The town of Rico, Town of Dolores, City of Cortez, Montezuma Water Company, and the Town of Dove Creek.



Missionary Ridge Fire North of Durango 2002 (Animas River basin)

4.3 CONSERVATION PROJECTS & PROCESSES

CURRENT IPPS

Currently the Southwest Basin does not identify any municipal water conservation projects on the IPP list. This lack of identified IPPs should not be interpreted to mean that there are no efforts in place or planned to enhance levels of conservation in the Southwest Basin, as not every municipality or public water supplier responded to requests for updates and additions to the IPP list.

IPP CONCEPTS

In the course of the interviews gathered around the Southwest Basin to identify existing IPPs, project concepts also were discussed and compiled. These are ideas for projects or processes that people or entities within the Southwest Basin have, but which do not yet have a sponsor who is actively pursuing implementing the idea. One IPP concept identified during the planning process is to work with public water suppliers, including municipalities, to assess their current indoor to outdoor water use ratio and to incentivize attainment of the 60/40 ratio included in the Southwest Basin Measureable Outcome B3. Another IPP concept is the development of irrigation efficiency programs.

4.4 NEW MULTI-PURPOSE, COOPERATIVE, & REGIONAL PROJECTS & PROCESSES

The BIP will be used to foster multi-purpose, cooperative, and regional IPPs. Throughout the efforts of updating the IPP list, new partnerships have formed and new IPPs were identified. While all sub-basins strive towards multi-purpose, cooperative, and regional IPPs not all sub-basins identified new projects during these outreach efforts. Some sub-basins may have existing IPPs, developed during the SWSI 2010 efforts, which already encompass the essence of Section 4.4. Below are specific IPPs that are highlighted for IPPs that demonstrate new multi-purpose and cooperative efforts towards implementation of projects and processes.

SAN JUAN RIVER BASIN

A Geothermal Greenhouse Partnership (GGP) has formed within the San Juan River basin. The GGP mission is as stated: *"Harnessing intrinsic renewable solar and geothermal energy to grow safe, sustainable, reliable and affordable food for local people, and provide an attraction for visitors, year around. In doing so, create educational opportunities, nurture local businesses, create jobs and cultivate pride and economic vitality*."

The project consists of three phases: 1) Development of partnership and building capacity within the organization; 2) Construction of the project will commence and utilization of the facilities; and 3) Expanding the influence of the GGP and further education and outreach efforts. The GGP has relationships with local, state, national, public, and private entities such as: Pagosa

Springs Town Council, Archuleta County Board of County Commissioners, Archuleta School District 50-Jt, U.S. Senator Mark Udall, Southwest Organization for sustainability, Growing Spaces, Pagosa Verde, 4Core – Four Corners Office for Resource Efficiency, Davis Engineering Service, and Reynolds & Associates Architecture Engineering.

Also with in the San Juan River basin multiple processes have formed. Each having a diverse group of stakeholders working together to address multiple known needs. The Chama Peak Land Alliance seeks conservation minded landowners to work collaboratively together to practice and promote ecological and economical sound land management. The San Juan Headwaters Forest Health Partnership is committed to collaborative approaches to improve the health and long-term resilience of mixed-conifer forests and the communities associated with these forests.

MANCOS RIVER BASIN

The Ute Mountain Ute Tribe has received a grant to develop a Water Conservation and Management Plan. The plan is a process to discuss development of the Ute Mountain Ute Tribe allocations in the La Plata, Mancos, San Juan, and McElmo river basins. This includes development with non-tribal partners within the Mancos River valley, development into western La Plata County and eastern Montezuma County, as well as additional needs from the Dolores Project in the amount of 4,000 AF.

Mancos Water Conservancy District has an IPP describing the need to conduct planning for natural disasters such as fire, floods, etc. This project is in the initial planning stages and will try to address protection of water supply and water quality for all values if a natural disaster were to occur.

DOLORES AND MCELMO RIVER BASINS

The Dolores Water Conservancy District and the Ute Mountain Ute Tribe are jointly pursuing the development of an energy dissipating structure (EDS) hydropower project. This is a collaborative process between users of the Dolores Project. The EDS site is located on the Towaoc Highline Canal at the transition between Reaches 2 and 3. The EDS would be a source of renewable energy and annual revenue for the two parties. This IPP combines renewable energy with existing agricultural delivery practices.

Another IPP the Dolores Water Conservancy District is a proponent of is an optimization study for the Dolores and McElmo river basins. The study plans to review the available water supplies to evaluate whether the water is being used as effectively as possible while using existing facilities. The study will recommend additional management methods and/or facilities that may improve effectiveness. This study will collaborate with users of the Dolores Project, upper and lower Dolores River, and McElmo Creek users.

SAN MIGUEL RIVER BASIN

Montrose County provided a new multi-purpose IPP for the portion of the county within the Southwest Basin. The Montrose County Firming Project will consist of two phases. The purpose of the project is to provide a reliable source of water for municipal and industrial demands over the next 50 years. The first phase is to be completed by 2018, which is a feasibility level engineering study of proposed storage sites and diversion points pursuant to recent water right filings. The second phase of the project will be to construct one or two reservoirs, in addition to the Nucla Town Reservoir Enlargement, and the direct flow points of diversion as determined by Phase 1. The project will address the 3,200 AF gap between existing water supplies and demands projected to occur by 2060 in the western portion of Montrose County. The reservoirs release will also provide non-consumptive piscatorial use and water quality improvements.

4.5 M&I PROJECTS & PROCESSES

Throughout the efforts of updating the IPP list, existing M&I IPP's were updated when applicable and new M&I IPPs were identified. While all sub-basins have M&I needs, not all sub-basins identified new IPPs during these outreach efforts. Below are specific IPPs that demonstrate the types of M&I IPPs existing or planned within the Southwest Basin.

The IPP list consists of about 25% municipal projects and/or processes. Every sub-basin has a need for safe, reliable water supplies and adequate infrastructure. Types of M&I IPPs are water diversion structures construction, improvements to infrastructure, construction of new infrastructure, and storage facilities (new and existing), to name a few.

The Dry Gulch Water Storage Facility Project is a noteworthy project for providing municipal water supply. It will incorporate both consumptive and non-consumptive uses for state and local purpose. The primary proponent of the project is presently San Juan Water Conservancy District. The off stream facility will have storage capacity of up to 11,000 AF. The project will utilize gravity flow and syphoning to fill and maintain water levels; this is a cost effective and environmental friendly approach. The project is the preliminary stages and is currently resolving land ownership issues and securing funding.

Across all sub-basins, the potential for micro-hydropower is being explored. As the technologies for hydropower progress so does the potential for production. These potential hydropower projects could be associated with irrigation infrastructure and/or other multi-purpose projects. Multiple sub-basins have specific IPPs addressing the development of hydropower. Within the San Juan River basin, a small hydropower project associated with the Dry Gulch Water Storage Facility Project (utilizing Park Ditch delivery infrastructure) would be developed in conjunction with



Dolores Project (Dolores River basin)

the dam project. The Florida Water Conservancy District within the Animas River basin listed hydropower as need to be meet during utilization of a new water right (other needs addressed as well). Within the Mancos River basin, there is potential for hydropower facilities within the canals and ditches within the Mancos River valley.

The Dolores and McElmo river basins already have existing hydropower facilities with two new additions to the IPP list. As described previously in Section 4.4, the EDS Hydropower Development is jointly pursued by the Dolores Water Conservancy District and Ute Mountain Ute Tribe. The Dolores Water Conservancy District is also pursuing a development of a Plateau Pumpback Project. This project would utilize water released from an upper reservoir through a penstock to generate hydropower and be pumped back to the upper reservoir during off-peak demand.

4.6 AGRICULTURAL PROJECTS & PROCESSES

Throughout the efforts of updating the IPP list, existing agricultural IPP's were updated when applicable and new agricultural IPPs were identified. While all sub-basins have some agricultural IPPs, not all sub-basins identified new IPPs during these outreach efforts. Below are specific IPPs that are highlighted to demonstrate the types of agricultural IPPs existing or planned within the Southwest Basin.

One overarching concept for all sub-basins is the need for ditch company improvements and efficiency projects. A plethora of irrigation systems exist in the Southwest Basin; this leads to not all systems being represented on the IPP list. To account for these systems, a multi-basin IPP exists as a place holder for irrigation systems utilizing open ditches to deliver water. There is potential to upgrade these ditches (by lining or piping) to conserve water. Other efficiency projects may exist and should be developed as needed. Along with this overarching concept, specific IPPs exist for ditch companies that have identified planned improvements and efficiencies. These projects include ditch linings and headgate improvements.

Multiple reservoirs exist within the Southwest Basin. The majority of these reservoirs provide some quantity of agricultural water supply. Agricultural water delivered from a reservoir may require pumping stations, canals, ditches, piping, and delivery boxes for connection with irrigators. All these components require routine maintenance and upgrades. Efficiency improvements are made to conserve water and potentially provide additional water supplies.

Vallecito Reservoir provides agricultural, municipal, tribal, and environmental flows year around. Two IPPs are listed regarding the reservoir and infrastructure repairs. Along with these repairs, continued improvements are being made to the delivery systems and on-farm irrigation practices that utilize Pine River Irrigation District shares.

Florida Water Conservancy District has multiple needs within the Florida River drainage (a tributary of the Animas River). One of the many components of their IPP is irrigation system improvements by the Florida Mesa Ditch Companies that would firm up agricultural delivery and

provide additional water supply for those other uses in Lemon Reservoir through the reduction of losses in the delivery system. Currently, nearly all of the irrigation system delivering water from Lemon Reservoir consists of old, open ditches. To date 3 miles of ditches have been lined, with future plans to continue these upgrades.

Long Hollow Reservoir is a 5,400 AF storage project in Long Hollow (a sub-basin of the La Plata River) with construction scheduled to be completed in the fall of 2014. This reservoir will be used for La Plata River Compact compliance and as a source of exchange water for irrigation water supply. Potential uses for augmentation and exchange for domestic wells exist too. Along with the reservoir construction, a water delivery study will be conducted to better meet La Plata River Compact requirements to the State of New Mexico.

Southwester Water Conservation District holds water rights in the Animas River that are decreed and available to meet irrigation demands within the La Plata River basin. This water supply could potentially provide supplemental water for existing irrigated lands and water supply for full service lands that are currently not in production and/or dry-land farmed.

The Mancos Water Conservancy District provided multiple new IPPs. These range from reservoir enlargements, inlet rehabilitation for reservoirs, river measuring stations to improve water management, and ditch piping to improve conservations.

Irrigators in McElmo Canyon have expressed the need for agricultural water in the early part of the irrigation season. A pilot project was conducted for a single year utilizing Totten Reservoir to provided releases for agricultural uses during the early months of the irrigation season. For this to become permanent release, improvements to Totten Reservoir must be made.



San Miguel River

Multiple reservoirs exist within the San Miguel River basin that have IPPs ranging from reservoir improvements to enlargements. These reservoirs provide agricultural water to their surrounding areas as well as water for other uses. It is important to maintain these reservoirs so supplemental irrigators needs are meet.

4.7 ENVIRONMENTAL PROJECTS & PROCESSES

This section provides an overview of the environmental IPPs currently identified in the Southwest Basin. In the San Juan and Piedra river basins, IPPs aim to restore and improve stream, wetland and CRCT habitat. Six IPPs focus on restoration of aquatic and riparian habitat, and

channel stability. These include the Cat Creek Watershed Project, San Juan River Bank Stability Project, the Navajo River Restoration, Spring Creek Restoration, San Juan River Village MD River Restoration, and the Lower Piedra from Hwy 160 to Navajo Lake Projects. Two projects aim to enhance or create wetlands: Crowley Ranch Reserve Wetland Enhancement and the Sambrito Project. Two projects focus on working with private landowners to improve habitat for CRCT Conservation Populations. These are on Himes Creek and Headache Creek.

In the Pine River basin, the River Ranch Pine River Habitat Improvement Project plans to restore aquatic and riparian habitat and channel stability. The Vallecito Reservoir Instream Flow Project aims to allow donation of an instream flow to the CWCB to enhance fish habitat.

In the Animas River basin IPPs aim to improve stream habitat, CRCT habitat and water quality. Four projects focus on improving riparian habitat, aquatic habitat, and/or water quality, including the Salmonid Habitat Improvement Animas above Howardsville, Animas River Vegetation Management, Florida River Water Quality Initiative, El Rancho Florida Florida River Riparian and Aquatic Habitat Improvement, and the Florida River Habitat and Water Quality Improvement Projects. Two projects focus on native fish. The Hermosa Creek CRCT Metapopulation Project works to create and sustain habitat for CRCT, while the Florida River Habitat Assessment hopes to work with private landowners to assess habitat for native warm water fish.

In the La Plata River basin two projects aim to control invasive species: the Southern Ute Indian Tribe Management of Invasive Riparian Species and Long Hollow Reservoir Non-Native Fish Control.

In the Mancos River basin, three projects aim to improve aquatic habitat for native warm water and non-native trout, and/or riparian habitat. These include the Mancos Fishing Habitat Improvements, Mancos River Habitat and Diversion Project - Phase II, the Ute Mountain Ute Tribe's Mancos River Restoration (riparian and aquatic natives). The Habitat Assessment of the Mancos River is focused on assessing the quality of the lower Mancos for native warm water fish.

In the Dolores and McElmo river basins three IPPs have the potential to help address flow needs for native warm water fish while meeting other needs. These include the Dolores Water Conservancy District Optimization Study, the Upper Plateau Storage Reservoir, and the Proposed ISF on the Dolores River. The Dolores River Restoration Partnership and the Dolores Project McPhee Reservoir Aquatic Nuisance Species Protection aim to maintain and improve riparian and aquatic habitat respectively by controlling non-native species. The Upper Dolores River Assessment will evaluate riparian and aquatic habitat quality. The Redburn Ranch will improve aquatic habitat connectivity for the non-native trout fishery. The Future River Stewards project will engage in water quality sampling and river stewardship education to benefit all uses.

In the San Miguel river basin four IPPs address maintenance of flows for environmental values. These include the Naturita Creek Proposed ISF, Flow Protection for Area of Critical Environmental Concern, San Miguel ISF, and Suitability - Wild and Scenic Rivers Act. Three

projects focus on improving habitat for native fish species: one for CRCT (Woods Lake CRCT Refuge), and two for native warm water fish (Tabeguache Creek Native Fish Barrier Removal Project, CCC-Ditch Fish Ladder Repair). The Valley Floor River Channel Restoration project will improve both aquatic and riparian habitat. Three IPPs focus on developing new reservoirs which in addition to meeting municipal and agricultural needs, could include benefits to environmental values. These are the Montrose County Firming Project Phase 1 and 2, and the San Miguel Project.

In addition several projects are multi-purpose processes focused on watershed and forest health, and/or water quality. These have the potential to benefit multiple values, including environmental values. These IPPs are covered in depth in Section 4.2.

4.8 RECREATIONAL PROJECTS & PROCESSES



Rafting on the Dolores River

IPPs that have recreational benefits have been identified throughout the Southwest Basin. Three IPPs help maintain or improve whitewater boating recreation. These include the Four Corners Paddle Trail (Animas River basin) Upper Dolores River Recreation Access, San Miguel Potential Recreational In-Channel Diversion, San Miguel Suitability - Wild and Scenic Rivers Act, and the CCC-Ditch Fish Ladder Repair. An IPP concept is to update the identification of boatable reaches and boatable days and flows for the rivers in each sub-basin.

The following three IPPs will benefit flat-water boating recreation as well as fishing and waterfowl viewing opportunities: the Dry Gulch Storage Facility Project, Lake Nighthorse Recreation, and Dolores Project McPhee Reservoir Aquatic Nuisance Species Protection. In addition, eight IPPs plan specifically to improve fishing, waterfowl viewing, and/or hunting opportunities around the Southwest Basin. These include the San Juan River Village MD River Restoration, the Spring Creek Restoration, the Crowley Ranch Reserve Wetland Enhancement, River Ranch Pine River Habitat Improvement, Salmonid Habitat Improvement Animas above Howardsville, Mancos Fishing Habitat Improvements, Upper Dolores River Assessment, and Rehabilitation of Priest Lake.

Finally, several water quality IPPs described in Section 4.2 have the potential to benefit all uses, including Recreation.

SECTION 5. STRATEGIES & TOOLS

In order to implement this BIP, address the identified challenges and opportunities within the Southwest Basin and ensure reliable water supplies into the future the Roundtable has identified a suite of strategies and tools. Included are the overarching strategies considered by the Roundtable in development of the IPPs discussed in the following sections. Also included are big picture tools for implementation of the IPPs. The Roundtable recommends and supports these strategies and tools for implementation of IPPs and cross-basin cooperation.

5.1 STRATEGIES

The water supply in the Southwest Basin, as in the entire Colorado River Basin, is highly variable from year to year. Tree ring data for nearly 1,200 years indicates that the water supply has historically had decades long wet and dry cycles. These overarching strategies attempt to set a framework for how the Southwest Basin will "live" through these fluctuating water supplies while implementing our IPPs.

- The Roundtable treats and evaluates all IPPs equally, whether they are consumptive, non-consumptive, projects, or processes. This approach strengthens the foundation of collaboration and dialogue that already exists within the Southwest Basin, as well as the opportunities for partnerships to address existing and future water supply challenges. The potential to build partnerships across a range of interests and needs is identified as a key opportunity and strategy for achieving all of the goals and many of the measureable outcomes identified in this BIP.
- The Roundtable encourages sponsors to pursue a broad set of potentially complementary funding sources and to consider funding their projects from more than one source.
- The Roundtable intends to continue to cooperate with other Basin Roundtables to implement components of this BIP, as well as to address new challenges and pursue new opportunities that may arise in the future.
- Education and outreach about water values, water supplies, available funding options, and new information and tools will be a critical component for the implementation of this BIP. Education and outreach are specifically identified as strategies in measureable outcomes, IPPs or opportunities relating to M&I water conservation and reuse, agricultural water projects, recreational uses, water quality and watershed health.
- Continually improving water management and conservation by all water users is critical to meeting water demands of any type. At times there is simply not enough water to meet even one demand without considering all of the possible demands. Specific IPPs have not been developed for all possible management and conservation opportunities but overall strategies include:
    - Maintain and improve irrigation delivery facilities in order to reduce shortages, keep in production irrigated lands especially lands using pre-Compact water rights, and where possible leave additional flows in streams.

- Continue to reduce the amount of water needed for municipal, domestic, and industrial purposes through conservation efforts to meet the Roundtable's goal and measureable outcome herein.
- Investigate ways to maintain the desired values with available water supplies.

5.2 STRATEGIES RELATED TO NEW TRANSMOUNTAIN DIVERSIONS

The Roundtable is concerned about any new TMD. A new TMD would increase the risk of a Colorado River Compact curtailment, as well as the risk of contingency measures to address serious conditions such as the inability to generate power from Lake Powell or levels of Lake Mead dropping below Las Vegas's municipal water supply intake. An increase in such risks jeopardizes the Southwest Basin's ability to develop water supplies to meet needs in the Southwest Basin and puts additional pressure on the Southwest Basin's agriculture to meet downstream water needs for compact compliance and/or obligations.

The Roundtable recognizes that these increased risks are not limited to conveyance of west slope water through construction of new infrastructure. These risks can also be increased right now by new purchases of existing west slope water rights, including buy and dry of pre-1922 west slope agricultural water rights. Such purchases could conceivably occur in any basin along the west slope and be delivered across the divide by means of exchange, through existing infrastructure. This risk of buy and dry of west slope water to meet east slope demands is one of the concerns behind the Southwestern Water Conservation District's participation as a member of the Water Bank Working Group to develop a Compact Water Bank.

As a result of the concerns and risks described above, the Roundtable agrees on eight factors that must be addressed prior to considering a new TMD.

1. Municipalities receiving water from a new TMD must meet a high water conservation goal. The Roundtable has proposed specific conservation goals in the measurable outcomes of Section 1 of this BIP.
2. As part of any proposed TMD project package, funding to design and construct compensatory projects on the West Slope shall be included.
3. Additional development of the Colorado River basin involves more risk to all users, including pre and post Compact water rights. Implementation of risk management strategies is necessary to understand and provide some level of protection for existing water rights holders and users.
4. Discussions should occur to determine whether allocations for each sub-basin of the Colorado River basin, similar to sub-alllocation of the Colorado River Compact, are appropriate.
5. Municipalities receiving water from a new TMD will fully develop their existing water supplies within their basin (such as reuse strategies, storage, etc.).
6. A new TMD will not negatively impact the quality of life on the West Slope.
7. A new TMD will not be a headwaters diversion and may require development of a pumped back type of delivery system.
8. The state of Colorado shall present their position on administration of a compact curtailment on a basin level.

In addition to the factors the Roundtable has developed the following statement:

> *A new TMD must be considered in conjunction with alternative water sources that do not rely on the Colorado River basin water supplies.*

The Roundtable expresses serious concerns over a new TMD because of the potential impacts of the over-development of Colorado River Basin supplies could have on the economy, agriculture, and quality of life of west slope communities. Due to the lingering drought, the Colorado River Basin is looking less and less like a reliable source of water to support Colorado's urban development. Recently there has been significant concern about the water levels in Lakes Powell and Mead and there are on-going efforts through "system conservation" and "demand

management" to attempt to put more water into Lake Powell through curtailment of existing users. This drought is not an unusual situation based on the tree ring study from 760 to 2010 that shows droughts commonly occur for decades.

The IBCC has developed 7 points as a framework (IBCC Draft Conceptual Agreement; July 2014) for further discussion of a new TMD, one of them is "The East Slope is not looking for a firm yield from a new TMD project and would accept hydrologic risk for that project." The conceptual thinking has been that the East Slope would only divert when conditions at Lake Powell or the Colorado River Basin were above a yet to be determined trigger amount. Based on the current conditions, Lake Powell hasn't been much above 50% since 2002. Even without knowing what the trigger content might be, it is unlikely that water would have been available for most of the last 15 years under any trigger amount or scenario. In other words, billions of dollars could be spent on a new TMD without achieving the goal of supplying water to the Front Range while minimizing agricultural dry-up and removing the threat to west slope communities.

The Roundtable continues to firmly believe that conservation and reuse must be a major means to reduce demand and address future gaps and that no TMD should proceed unless high level conservation goals are achieved. However, assuming a new east slope municipal water source is required to minimize agricultural dry-up, there needs to be a thorough analysis of alternative water sources with criteria that include: annual cost per acre-foot of firm yield; benefits to entire state or just a portion of the state (since broader benefits allow costs be spread to more sectors); net environmental benefits; etc. For this to be a meaningful comparative analysis it needs to be led by the state and "Alternative Water Sources" must be more broadly defined to include not just the Colorado River basin and alternatives involving storage on the Front Range, but other reliable alternative water sources with strong emphasis on in-state alternatives. BOR's "Colorado River Basin Water Supply and Demand Study" provides a list of potential water sources north and east of the Colorado River basin such as the Missouri River and Mississippi River for comparison to the Colorado River basin.

Assuming an alternative water source can be developed and is needed, it will be sometime in the 2040's before any project can be constructed and operational. The other three "legs of the stool", especially conservation (e.g. municipal and agricultural) will be essential to meeting the interim water demand. The Roundtable maintains that meeting high level conservation goals and reuse is essential and no alternative water sources project should proceed without high levels of municipal conservation. Repayment of construction costs needs to be commensurate with benefits received.

Roundtable asserts that these evaluations are a statewide issue and need to be conducted by the state (probably CWCB) because some of the alternative water sources will involve state to state discussions and in some cases compact obligations. For this reason, the Colorado Water Plan should include the evaluation of alternative water sources. Individual or collective water providers are not appropriate entities to represent Colorado in these types of discussions. By having multiple alternatives to consider, the state can play a neutral role in critical comparative evaluation, without

being "pre-decisional" concerning potential outcomes. Leadership on the part of the state in a rigorous comparative evaluation process will provide a foundation for the Basin Roundtables, IBCC, CWCB, along with water providers, recreational and environmental advocates to work toward a statewide consensus.

In summary, the Roundtable does not make this proposal to delay a new TMD but to make sure the billions of dollars that will be spent on a new municipal water source actually provides a firm water supply that will minimize agricultural dry-up. The current drought in the Colorado River Basin indicates that a new TMD may also require significant agricultural dry-up to provide a firm supply. Therefore, a new TMD must be considered in comparison with alternative water sources that do not rely on Colorado River Basin water supplies. Any such new supply must be designed to minimize impacts on users throughout Colorado. The Colorado Water Plan needs to include planning for evaluation of such alternatives.

5.3 TOOLS FOR IMPLEMENTATION OF IPPS

EDUCATION

Key audiences for outreach about resources and tools to meet water needs include municipalities, drinking water suppliers, mutual ditch companies and irrigation districts, water conservation districts, water conservancy districts, recreational companies, resource agencies, non-governmental organizations, and the people of the Southwest Basin and the State of Colorado. Such education efforts can occur on many levels throughout the Southwest Basin, from individual water users and suppliers around the basin, to collaborative watershed groups, to the basin-wide level of the Southwestern Water Conservation District and the Water Information Program. Continued funding for the Water Information Program will help ensure that consistent information is shared and disseminated around the basin to all users and interests.

FUNDING MECHANISMS

It is clear that additional funding strategies and mechanisms will be needed to fully implement this BIP. One novel strategy with potential to develop and fund more multipurpose projects and potentially support multiple IPPs in one funding effort is the idea of "bundling" a package of proposals (e.g. bundling IPPs). Such a bundle might seek funding for a number of different projects within the Southwest Basin, within a sub-basin, or at a specific site. As an example, a municipal supply project could be "bundled" with an effort to benefit flows or aquatic habitat for a sensitive species elsewhere in the same sub-basin. Such a strategy might take a watershed health approach to meeting a broader set of watershed needs. The advantage of such a strategy is that it might be more easily funded due to the multipurpose nature of the packaged projects.

Using two or more complimentary funds from different levels of private, local, state and/or federal funding will often be helpful in obtaining the funding match required by any one source. Examples of some sources that may be complementary and could work well together depending on the IPP include:

Local	State	Federal
•Private Funds •Southwestern Water Conservation District •Southwest Basin Roundtable WSRA •Local governments	•Water Supply Reserve Account Grants from CWCB through the Roundtable •Loans from CWCB •Colorado Non-Point Source Program Grants •Southwest Wetland Focus Area Funding from CPW •Source Water Protection Planning Grants from CDPHE •Colorado Parks and Wildlife Grants (HPP, Fishing is Fun, etc) •Loans from the Colorado Water Resources and Power Development Authority for municipal water systems	•Working Lands for Wildlife Funds from the NRCS and USFWS •RCPP, EQIP, WIP, or CREP cost-share funds from NRCS •Water SMART grants (BOR). •Partners for Fish and Wildlife

This is NOT an exhaustive list. Grant funding programs come and go over time. Their availability changes with budgetary constraints and other factors. It is important to check early and often with individual agencies to see what funding options they may have available and when the deadlines are for application.

RECOMMENDATIONS

In addition to these strategies, the Roundtable submits three recommendations to the State of Colorado:

WSRA funds are a secure and important source of funds for implementation of the Southwest BIP. CWCB should not manage these funds on a "use it or lose it" basis. The Roundtable is concerned that doing so would discourage the development of more thoughtful and high quality IPPs by forcing the Roundtable to disperse these funds in a more quick and potentially indiscriminant fashion. The Roundtable recognizes that there are gaps in the data and understanding regarding the flows and other conditions necessary to sustain the environmental and recreational values identified in the Southwest Basin. The Roundtable also recognizes that the tools currently available to help maintain those conditions are limited. The Roundtable has identified

two IPPs, described below under "Partnerships", to help address and bridge this need for additional information and tools. These IPPs should be considered on even priority with other IPPs when considered for basin and state WSRA funding. Though the WSRA Supplemental Scoring Matrix describes a scoring matrix for ranking funding, this should only be used as one of many criteria and should NEVER be used as the sole criteria for funding.

PARTNERSHIPS

Developing partnerships and collaborative efforts can be an effective tool for accomplishing multi-purpose IPPs. Partnerships are particularly well suited to combine with two or more funding sources mentioned above. Partnering with different interests has the potential to expand the funding opportunities such as partnering with the Southern Ute Tribe and/or Ute Mountain Ute Tribe to support implementation of the Tribal Settlement and other mutually beneficial IPPs.



Hermosa Creek (Animas River basin)

The Roundtable specifically plans to use partnerships and collaboration to implement the following two IPPs developed by the Roundtable to help evaluate environmental and recreational gaps:

1. Evaluation of environmental and or recreation gaps is planned to be conducted for improvement of non-consumptive resources and/or in collaborative efforts with development of consumptive IPPs. The evaluations may be conducted by a subgroup of the Roundtable or by individuals, groups, or organizations with input from the Roundtable. The evaluation may utilize methodologies such as the southwest attribute map, flow evaluation tool, R2 Cross, and any other tools that may be available.
2. Where environmental and/or recreational gaps are identified, a collaborative effort will be initiated to develop innovative tools to protect water identified as necessary to address these gaps.

ADDITIONAL INFORMATION AND ANALYSIS

In developing this BIP, the Roundtable identified three key data gaps that need to be addressed in order to significantly improve the Southwest Basin's ability to plan for and ensure reliable water supplies for all uses into the future. The questions behind these data gaps are:

1. What are the current demands and future needs for water to serve all major industrial uses in the Southwest Basin (e.g. snowmaking, mining, oil and gas development, etc.)?
2. What are the water supply related needs of the non-community nonpublic water systems in the Southwest Basin? How can the Roundtable identify and improve communication and outreach to these systems?

3. What are the flows and other conditions necessary to sustain environmental or recreational values associated with specific reaches around the Southwest Basin? What are boatable flows for segments that support recreational whitewater boating values?
4. What new or existing tools can be developed and employed at the reach, local, basin and/or state level to maintain the conditions that sustain environmental or recreational values on segments around the Southwest Basin?
5. What specific stream and lake segments currently support environmental and recreational values within the Southwest Basin? What are those values? The segments and values mapped for SWSI 2010 need to be brought up to date.

By addressing these questions, the Roundtable plans to develop tools to fill data or analysis gaps that challenge the Southwest Basin's ability to adequately plan for and maintain water supplies for all values and uses within the Southwest Basin.

CROSS-BASIN COOPERATION

The Southwest Basin intends to continue its involvement in two current cross-basin cooperative efforts. One is the IBCC's effort to develop a conceptual agreement between roundtables regarding how to approach a potential future TMD from the west slope to the east, including the discussion of a possible future use allocation. The Southwest Basin is actively engaged in the West Slope Caucus discussions and supports further refinement of the seven points of framework (IBCC Draft Conceptual Agreement; July 2014). The Roundtable would like the opportunity to review and comment on any future refinements to said Framework.

The Southwest Basin's cooperative effort is through the Southwestern Water Conservation District's participation as a member of the Water Bank Working Group to develop a Compact Water Bank.

SECTION 6. HOW THE BIP MEETS THE ROUNDTABLE'S GOALS & MEASUREABLE OUTCOMES

The Roundtable has crafted the BIP to represent the values and goals of the Southwest Basin. The BIP's implementation will meet identified gaps and water supply needs as related to these goals and measurable outcomes. Where water supply needs and gaps are not known, the BIP provides for a process to develop the information and a loop back to revise the BIP as needed, consistent with the Roundtable's principle that the BIP is a "living document."

Since SWSI 2010, the Roundtable success rate for completing IPPs is 44%. A total of 55 projects were completed since the drafting of the SWSI 2010 list. While many projects are now complete, through the BIP outreach process over 80 projects were added to the list. Table 13 shows the breakdown of completed IPPs to date by sub-basin. At the end of 2014, the Roundtable had granted $1,906,626 from the Southwest Basin account and $5,162,859 from the statewide account.

TABLE 13. IPPS COMPLETED TO DATE

SUB-BASIN	IPPS OUTSTANDING FROM SWSI 2010	NEW IPPS	COMPLETED SINCE 2010	SUCCESS RATE FOR 2015 LIST
San Juan	4	12	3	43%
Piedra	3	2	7	70%
Pine	4	7	16	80%
Animas	16	18	13	45%
La Plata	6	10	0	0%
Mancos	6	15	4	40%
Dolores/McElmo	11	12	4	27%
San Miguel	21	8	8	28%
Total	**71**	**84**	**55**	**44%**

To date the list totals about 160 IPPs for all sub-basins. Of these 160, about 50% of the IPPs are for needs such as agricultural, municipal, and industrial while the remaining 50% of the IPPs are for environmental and recreational needs.

MEETING THEME A, B, C, AND F GOALS AND MEASUREABLE OUTCOMES

Table 14 shows how IPPs listed in Appendix A will address the following goals identified by the Roundtable in Section 1, assuming they are completed by 2050.

A. Balance All Needs and Reduce Conflict
B. Maintain Agriculture Water Needs
C. Meet Municipal and Industrial Water Needs

TABLE 14. HOW THE SOUTHWEST BASIN IMPLEMENTATION PLAN IPPS ADDRESS THEME A, B, C, F, AND G GOALS AND MEASUREABLE OUTCOMES

THEME	MEASUREABLE OUTCOME	SOUTHWEST BASIN IMPLEMENTATION PLAN
A	1. 100% of new IPPs shall consider from the initial planning stage maintaining and enhancing environmental and recreational needs.	Not known.
A	2. Complete 19 multipurpose IPPs to meet identified gaps.	19 IPPs on list to date.
A	3. Initiate and participate in 10 processes that promote dialogue, foster cooperation and resolve conflict.	10 IPPs on list to date.
A	4. At least 50% of sub-basins have existing or planned IPPs that are protective of critical infrastructure and/or environmental and recreational areas and watershed health.	100% of sub-basins have existing or planned IPPs.
A	5. All towns and major water supply systems with water supply infrastructure have watershed/ wildfire assessments that identify strategies/ treatments necessary to mitigate the impacts that occur to hydrology in a post-fire environment.	100%
A	6. All major reservoirs have watershed/ wildfire assessments that identify strategies/treatments necessary to mitigate the impacts that occur to hydrology in a post-fire environment.	100%
B	1. Implement agricultural sharing projects in order to help preserve agriculture and open space values, and to seek other means to address municipal, environmental, recreational, and industrial needs; while respecting private property rights.	No IPP.
B	2. Implement strategies that avoid permanent agriculture transfers.	No IPP.

TABLE 14. CONTINUED…

THEME	MEASUREABLE OUTCOME	SOUTHWEST BASIN IMPLEMENTATION PLAN
B	3. The water providers in the state that are using dry-up of agricultural land (defined as requiring a water court change case) and/or pursuing a new TMD (as defined by IBCC to be a new west slope to east slope diversion project) shall have a higher standard of conservation. The goal for these water providers is a ratio of 70/30.	For 2013: Pagosa (75/25) Durango (57/43) Cortez (60/40).
B	4. Implement at least 10 agricultural water efficiency projects identified as IPPs (by sub-basin).	10 IPPs.
C	1. Complete 41 IPPs identified in 2015 IPP list (includes all basins) aimed at meeting municipal water needs.	41 IPPs (about 30% of total IPP list).
C	2. Consistently meet 100% of residential, commercial and industrial water system demands in each sub-basin.	Unknown.
C	3. Implement projects that protect or enhance the ability of public water supply systems to access and deliver safe drinking water that meets all health-based standards.	1 SWPP IPP.
C	4. Change the ratio of in-house to outside treated water use for municipal and domestic water systems (referred to as water providers herein) from the current ratio of 50/50 to 60/40 for southwest Colorado and the entire State by 2030.	
C	5. Implement 3 informational events about water reuse efforts and strategies.	No IPP.

TABLE 14. CONTINUED…

THEME	MEASUREABLE OUTCOME	SOUTHWEST BASIN IMPLEMENTATION PLAN
C	6. The water providers in the state that are using dry-up of agricultural land (defined as requiring a water court change case) and/or pursuing a new TMD (as defined by IBCC to be a new west slope to east slope diversion project) shall have a higher standard of conservation. The goal for these water providers is a ratio of 70/30. Water providers proposing a new TMD shall achieve a 60/40 ratio by 2020 and 70/30 by 2030 (high conservation) as a prerequisite for the Roundtable to consider support of a new TMD.	Included in TMD criteria.
F	1. By 2016, replace the following statewide outcomes with outcomes based on the current status of these measures in the Roundtable area.	.
F	2. 60% of stream miles and 40% of reservoir acres attain water quality standards and support all designated uses.	TBD.
F	3. 15% of impaired stream miles and reservoir acres are restored to meet all applicable water quality standards.	TBD.
F	4. 50% of stream miles and 30% of reservoir acres are attaining water quality standards.	TBD.
F	5. 100% of existing direct use and conveyance use reservoirs attain the applicable standards that protect the water supply use classification.	TBD.
F	6. Implement 6 IPPs to monitor, protect or improve water quality.	6 IPPs.

TABLE 14. CONTINUED…

THEME	MEASUREABLE OUTCOME	SOUTHWEST BASIN IMPLEMENTATION PLAN
G	1. Water providers proposing a new TMD shall achieve a 60/40 ratio by 2020 and 70/30 by 2030 (high conservation) as a prerequisite for the Roundtable to consider support of a new TMD.	See above.
G	2. A conceptual agreement is developed between roundtables regarding how approach a potential future TMD from the West Slope to the East.	In progress.
G	3. Protect 100% of pre-compact water rights in the Southwest Basin.	Protected by current DWR policy on pre-22 rights.
G	4. Implement 2 IPPs aimed at utilizing Tribal Water Rights Settlement water.	2 IPPs.
G	5. Implement 2 IPPs aimed at meeting La Plata River compact.	2 IPPs.
G	6. Participate in Compact water bank efforts.	SWCD is participant in Water Bank Working Group.

MEETING THEME D AND E GOALS AND MEASUREABLE OUTCOMES

In order to begin to gage how well this BIP may address the goals and measureable outcomes identified to meet environmental and recreational water needs, the map of 2015 environmental and recreational IPPs (including multipurpose IPPs) (Figure 20 & 21) was overlaid onto Figures 2 and 3, the maps of Southwest Basin environmental and recreational attributes with no identified flow protections. This mapping allows an assessment of the stream reaches where environmental and recreational values exist with some level of protection, project, or process that could benefit the values to some extent, and of the stream reaches where no such protections, projects, or processes appear to exist.

FIGURE 21. MAP OF ALL 2015 ENVIRONMENTAL, RECREATIONAL OR MULTIPURPOSE IPPS; IDENTIFIED FLOW PROTECTIONS; AND RECREATIONAL ATTRIBUTES WITHOUT IDENTIFIED FLOW PROTECTIONS

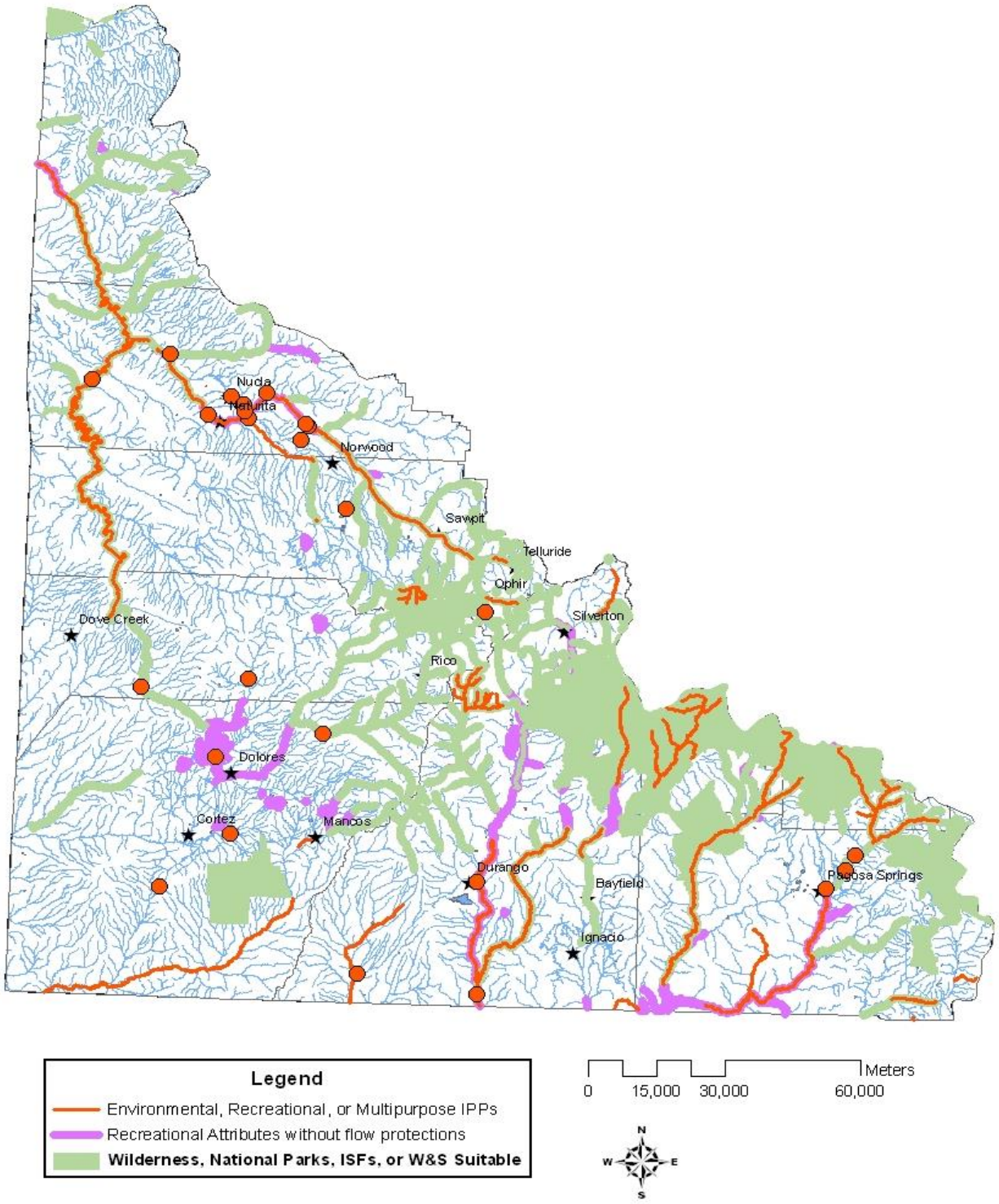
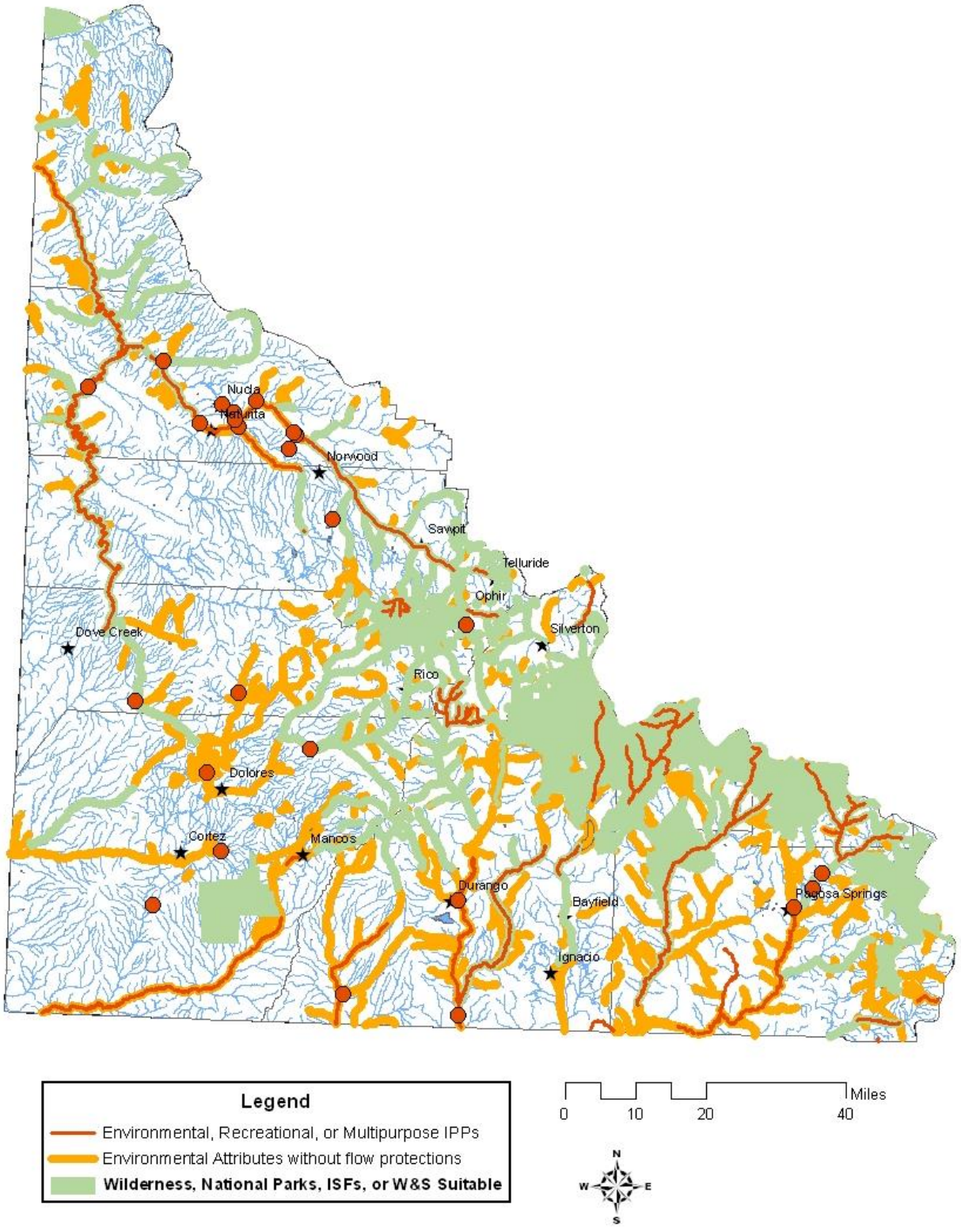


FIGURE 22. MAP OF ALL 2015 ENVIRONMENTAL, RECREATIONAL OR MULTIPURPOSE IPPS; IDENTIFIED FLOW PROTECTIONS; AND ENVIRONMENTAL ATTRIBUTES WITHOUT IDENTIFIED FLOW PROTECTIONS



The Roundtable recognizes that there are significant gaps in the data and understanding regarding the flow regimes (stream flow frequency, magnitude, duration, and timing) and other conditions necessary to sustain many of the environmental and recreational values identified in the Southwest Basin. The Roundtable also recognizes that the tools currently available to help maintain those conditions are limited. Therefore the Roundtable cautions against any assumption that the presence of an existing protection (e.g. ISF) or of an IPP is sufficient to maintain or sustain the attribute(s) identified in that reach. Assessment of the sufficiency of such measures depends on the particular attributes, the condition of the stream reach and the measures in place, and is better conducted on a reach by reach basis. The Roundtable has identified two IPPs that it hopes can help address and bridge these needs for more information and additional tools (Sections 4 and 5).

Table 15 summarizes available information about how well this BIP may address the suite of Theme D and Theme E goals and measureable outcomes identified in Section 1 upon completion of the environmental and recreational IPPs in Appendix A. The analyses of stream miles in this table makes use of the information on values developed in SWSI 2010, maps of the existing flow protections in the Southwest Basin (e.g. ISFs, Minimum Lake Levels, RICDs, Wilderness and National Park Service lands, and Wild and Scenic Suitability), and the Southwest Basin 2015 updated IPP list.

It is important to note that the stream mile percentages in Table 15 do not necessarily measure anticipated progress toward the corresponding measureable outcome upon implementation of the 2015 IPPs. Rather, these percentages represent only the miles out of all the stream miles occupied by a specific value, where some level of protection, benefit or attention from existing protections, or from current IPPs may exist upon completion of those IPPs. The Roundtable cannot measure the sufficiency of these protections or the anticipated projects and processes at this time.

TABLE 15. HOW THE SOUTHWEST BASIN IMPLEMENTATION PLAN IPPS MAY ADDRESS RECREATIONAL (THEME D) AND ENVIRONMENTAL (THEME E) MEASUREABLE OUTCOMES

THEME	MEASUREABLE OUTCOME	BASIN IMPLEMENTATION PLAN
D	1. Implement 10 IPPs to benefit recreational values and the economic value they provide.	There are 10 IPPs currently listed that involve education about, enhancement of, protection of, or access to recreational uses.
D	2. At least 80% of the areas with recreational opportunities have existing or planned IPPs that secure these opportunities and supporting flows/lake levels within the contemporary legal and water management context.	While the level to which they may be secure is unknown, the percent of total stream miles for each recreational attribute that have some level of protection, benefit or attention from existing protections or from existing or planned IPPs is: Whitewater Boating: 83% Flatwater Boating: 4% Gold Medal Trout Streams: 1% Other fishing Streams and Lakes: 60% Audubon Important Bird Areas: 8% Waterfowl Hunting /Viewing Parcels: 52% Ducks Unlimited Projects: 22% (Note: these cannot be added together for a total percentage because some attributes are found within the same reach.)
E	1. Implement 15 IPPs to directly restore, recover or sustain endangered, threatened, and imperiled aquatic and riparian dependent species and plant communities.	There are 10 IPPs listed that aim to restore, recover or sustain endangered, threatened, or imperiled aquatic or riparian dependent species or plant communities.
E	2. At least 95% of the areas with federally listed water-dependent species have existing or planned IPPs that secure the species in these reaches as much as they can be secured within the existing legal and water management context.	TBD. Not currently known because we do not currently possess maps of the habitat for these species.

TABLE 15. CONTINUED….

THEME	MEASUREABLE OUTCOME	BASIN IMPLEMENTATION PLAN
E	3. At least 90% of areas with identified sensitive species (other than ESA species) have existing or planned projects and methods that provide direct protection to these values.	While the level to which they may be protected is unknown, the percent of total stream miles for each sensitive species that have some level of protection, benefit or attention from existing protections or from existing or planned IPPs is: Colorado River Cutthroat Trout: 72% Roundtail Chub: 43% Bluehead Sucker: 49% Flannelmouth Sucker: 54% River Otter: 66% Northern Leopard Frog: 32% Active Bald Eagle Nests: 40% Rare Plants: 42% (Note: these cannot be added together for a total percentage because some attributes are found within the same reach.)
E	4. Implement 26 IPPs to benefit the condition of fisheries and riparian/wetland habitat.	There are 26 IPPs that aim to benefit the condition of fisheries, riparian or wetland habitat.
E	5. At least 80% of areas with environmental values have existing or planned projects and methods that provide direct protection to these values.	Not known.

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APPENDIX A

- **DRAFT IPP LIST MACH 2015**
- **COMPLETED IPP LIST MARCH 2015**

Updated: 7/31/2014

Multi-Basin IPPs

ID	Date	Sub Basin	NC/C/B	Description	County	Status	Remaining Steps	Need Addressed	IPP Contact Information: Sponsors	IPP Contact Information: Lead contact & Source of Info.	Project vs. Process	Project ready for implementation NOW?	Does the need exist today?	Already received some WSRA funding?
1-MB	Mar-14	All Basins	NC	Environmental and Recreational Needs. Evaluation of environmental and/or recreational gaps is planned to be conducted for improvement of non-consumptive resources and/or in collaborative efforts with development of consumptive IPPs. The evaluations may be conducted by a subgroup of the Roundtable or by individuals, groups, or organizations with input from the Roundtable. The evaluation may utilize methodologies such as the southwest attributes map, flow evaluation tool, R2Cross, and any other tools that may be available.	All	Not Complete		Environmental needs, Recreational needs		Source: BRT feedback Lead: Ann Oliver	Process & Project	Maybe	Yes	No
2-MB	Apr-14	All Basins	NC	Environmental and Recreational Needs. Where environmental and/or recreational gaps are identified, a collaborative effort will be initiated to develop innovative tools to protect water identified as necessary to address these gaps.	All	Not Complete		Environmental needs, Recreational needs		Source: BRT feedback Lead: Ann Oliver	Process & Project	Maybe	Yes	No
3-MB	SWSI 2010	All Basins	C	Rural Water Supply. Assumed 5 to 10 percent of future demand in Southwest Basin will be in rural areas not covered by public water systems and groundwater or hauling water may be the only options and alternatives will not be developed.	All	Not Complete	Investigate possible areas of demand	Municipal water supply (infrastructure and water quantity)	Unincorporated areas of Southwest Basin not covered by a water provider	Source: BRT feedback Lead: Carrie Lile	Project	N/A	Maybe	No
4-MB	SWSI 2009	All Basins	C	Ditch Company Improvement and Efficiency Projects. Currently multiple irrigation systems deliver water in old open ditches. There is the potential to upgrade these ditches (lining and piping) to conserve water.	All	Not Complete		Agriculture (infrastructure)		Source: BRT Feedback Lead: Carrie Lile	Project	N/A	Yes	No
5-MB	SWSI 2010	All Basins	NC	Implementation of the Range-Wide Conservation Agreement and strategy for Roundtail Chub, Flannelmouth Sucker, and Bluehead Sucker.This Conservation Agreement signed in 2004 initiated formal inter-state consultation and cooperation to conserve these species. CO still drafting strategy document to coordinate implementation of conservation measures for these native fish, which are present in the lower reaches of the SW sub-basins.	Western Slope	Ongoing		Roundtail Chub, Flannelmouth Sucker, Bluehead Sucker	CO, AZ, NM, UT, NV, WY; BOR, BLM, USFS	Source: David Graf (CPW)	Project	Yes	Yes	No
6-MB	Jul-14	All Basins	C	Water Bank Working Group. Southwestern Water Conservation District participates in the water bank working group.	All	Not Complete		Agriculture water supply, Compact compliance	SWCD	Source: Carrie Lile	Process & Project	Yes	Maybe	No

Concept Ideas

ID	Date	Sub Basin	NC/C/B	Description	County	Status	Remaining Steps	Need Addressed	IPP Contact Information: Sponsors	IPP Contact Information: Lead contact & Source of Info.	Project vs. Process	Project ready for implementation NOW?	Does the need exist today?	Already received some WSRA funding?
1	13-Nov	All Basins	NC	Micro Hydropower. Potential hydropower projects associated with irrigation infrastructure and/or other multipurpose projects.	All	Not Complete	Investigate possible projects	Renewable Energy		Source & Lead: Ann Oliver	Project	N/A	Maybe	No
2	Nov-13	La Plata	NC	Long Hollow Reservoir Non-Native Fish Control. Work with partners to develop plan for control of non-native fish in Long Hollow Reservoir and the lower La Plata river. The La Plata River, together with the Mancos River, hosts the most genetically intact native fish community on the West slope of Colorado, due largely to the lack of invasion by non-native fish species.	La Plata	Not Complete	Identify key partners; Agree to effort	Native fishery	CPW	Source: Jim White	Project	No	Yes	No

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1					**Updated: 7/31/2014**										
2					**San Juan River Basin Draft IPP List**										
3		**PROPOSED IPPs**								**IPP Contact Information**					
4	**ID**	**Date**	**Sub Basin**	**NC/C/B**	**Description**	**County**	**Status**	**Remaining Steps**	**Need Addressed**	**Sponsors**	**Lead contact & Source of Info.**	**Project vs. Process**	**Project ready for implementation NOW?**	**Does the need exist today?**	**Already received some WSRA funding?**
5	1-SJ	updated from SWSI 1, updated from Rod 9/17/13	San Juan	B	Dry Gulch Water Storage Facility Project. This Project is an off-stream water storage facility planned for a capacity of 11,000 AF of water. It will incorporate both consumptive and non-consumptive uses for State and local purposes. The primary proponent of the project is presently San Juan Water Conservancy District. Preliminary cost estimates for construction of this project approximate $60 Million.	Archuleta	Not Complete	Resolve ownership and financing issues, Complete NEPA reports, Resolve land issues with FS, Resolve beneficial uses	Municipal water supply (need for storage), Recreation	San Juan Water Conservancy District	Source: SJWCD Lead: Rodney Proffitt	Project	No	No	Yes
6	2-SJ	Updated from Renee 9/17/13	San Juan	C	Snowball Booster Station with Snowball to Dutton Diversion Pipeline Project. This project will eliminate the need to upgrade the Snowball Water Treatment Plant in the next 15 years and allow us to feed the Snowball Diversion water into our lake system. This project provides water security to the Town of Pagosa Springs area, total system redundancy, and greater access to the water in our lake system. The project will provide year round senior water rights to the system of lakes. The gap this project meets is water security for Town of Pagosa Springs area, which we are currently realizing as a need due to wildfire and allows us to treat lake water that we currently cannot use thus adding to the amount of accessible water in the basin.	Archuleta	Not Complete	Evaluate the integrity of the water treatment	Municipal water supply (infrastructure)	Pagosa Area Water and Sanitation District	Source & Lead: Renee Lewis	Project	No (Within the next 7 to 10 years with proper planning)	Yes	No
7	3-SJ	Sep-13	San Juan	C	Crowley Irrigation System Dam. Correct deficient outlet conduct and gate control on the outlet works to meet New Mexico Office of the State Engineer dam safety regulations.	Archuleta	Not Complete	Resolve interstate funding challenges	Agricultural (water supply and infrastructure)	Shahan Family, Crowley Reserve	Lead: Don Shahan Source: Ann Oliver	Project	Yes	Yes	No
8	4-SJ	SWSI 2010 Nov-13	San Juan	NC	Cat Creek Watershed. This watershed has some serious soil erosion and grazing management issues. Cat Creek itself is very unstable in many places with down cutting of the channel bottom and erosion of stream banks taking place. Efforts to restore the creek would have to include addressing resource problems on the uplands as well as the creek. We have done very little in this watershed but plan to explore the possibility of developing a watershed management project if there is enough landowner interest.	Archuleta	Not Complete	Secure support from landowners, Implement project	Habitat quality	Private landowners, NRCS	Lead & Source: Jerry Archuleta	Project	Yes	Yes	No
9	5-SJ	SWSI 2010	San Juan	NC	San Juan River Bank Stability. There are bank stability issues all along the San Juan River from Pagosa Springs to Navajo Lake. The problem seems to worsen the further you go downstream towards Navajo Lake, but an assessment would need to be done to determine if this is actually the case. We have completed work on some properties but this would be a very large project and would probably have to be broken down into smaller section.	Archuleta	Not Complete	Assessment of issues, Secure support from landowners, Implement project	Habitat quality, Water quality	District Conservationist, Pagosa Springs Office	Source: Jerry R. Archuleta	Process	Yes	Yes	No
10	6-SJ	Jun-11	San Juan	C	Pagosa Lakes Property Owners Association. The purpose of this project is to rehabilitate a failing outlet pipe on Village Dam.	Archuleta	Not Complete		Agricultural water supply (infrastructure)	Pagosa Lakes Property Owners Association	Lead & Source: Larry Lynch	Project	Yes	Yes	Yes
11	7-SJ	Nov-13	San Juan	B	Geothermal Greenhouse Partnership. The project will serve as a center for K-12 Science Education and for advance study in agriculture and renewable technology; will provide a test site for the commercialization of organic crops at high altitude using a geothermal resource; provide year-round community gardens and local food.	Archuleta	Not Complete	Secure funding, Construct	Education, Renewable Energy	Geothermal Greenhouse Partnership, Inc.	Source & Lead: Pauline Benetti and Sally High	Project	Yes (concept)	Yes	No

San Juan River Basin Draft IPP List Continued…

PROPOSED IPPs

ID	Date	Sub Basin	NC/C/B	Description	County	Status	Remaining Steps	Need Addressed	IPP Contact Information: Sponsors	IPP Contact Information: Lead contact & Source of Info.	Project vs. Process	Project ready for implementation NOW?	Does the need exist today?	Already received some WSRA funding?
8-SJ	Nov-13	San Juan	NC	Park Ditch Hydropower Project. Small hydropower project associated with Park Ditch and Dry Gulch. The project could be developed prior to construction of the dam or pump station, or in conjunction with the dam project.	Archuleta	Not Complete	Secure partners, Feasibility study	Renewable Energy		Source: Val Valentine	Project	No (concept)	No	No
9-SJ	Jan-14	San Juan	NC	Spring Creek Restoration. Restore riparian habitat and water quality in a highly incised ephemeral stream, passing through Crowley Ranch Reserve green space.	Archuleta	Not Complete	Funding, Implementation	Recreation, Riparian habitat, Water quality	Crowley Ranch Reserve, NRCS, RMBO, USFWS	Lead: Jerry Archuleta Source: Martin Moses	Project	Yes	Yes	No
10-SJ	Jan-14	San Juan	NC	Crowley Ranch Reserve Wetland Enhancement. Enhance existing ponds and associate riparian areas on Reserve's green space.	Archuleta	Not Complete	Design, Funding, Implementation	Recreation, Wetland habitat	Crowley Ranch Reserve, NRCS, RMBO, USFWS	Lead: Jerry Archuleta Source: Martin Moses	Project			
11-SJ	SWSI 2010 Jan-14	San Juan	NC	Navajo River Restoration. Stream channel restoration on 9 miles of in-stream and stream-side riparian restoration on the Navajo River below the Oso Diversion am with private landowners.	Archuleta	Not Complete	Develop landowner interest	Habitat quality, Water quality, Agriculture	San Juan Conservation District, NRCS, RMBO, CPW, Landowners, USFWS, Chama Peak Land Alliance	Lead: Jerry Archuleta Source: Jerry Archuleta &Martin Moses	Project	Yes	Yes	No
12-SJ	Jan-14	San Juan	B	San Juan River Village MD River Restoration. Improve 1000 feet of San Juan River. Bank stability, instream habitat and recreational values in common use area (green space). Upstream of a diversion for MD and irrigation use by increasing channel stability .	Archuleta	Not Complete	Final engineering, Funding for implementation	Aquatic habitat quality, Water quality riparian, Recreation	NRCS, MD	Lead: Martin Moses, Cynthia Purcell Source: Martin Moses	Project			
13-SJ	Jan-14	San Juan	C	Water Conservation and Management Plan. The plan is a process to discuss development of water rights on the San Juan River (near Four Corners).	Montezuma	Not Complete	Complete planning process	Agricultural water supply, Potentially other water supply needs	Ute Mountain Ute Tribe	Lead & Source: Celene Hawkins	Process	Yes	Yes	Yes
14-SJ	Jan-14	San Juan	B	Chama Peak Land Alliance. Conservation minded landowners working collaboratively to practice and promote ecologically and economically sound land management in the southern San Juan Mountains of Colorado and northern New Mexico.	Archuleta	Ongoing			Chama Peak Land Alliance	Lead & Source: Monique DiGiorgio	Process	Yes	Yes	No
15-SJ	Apr-14	San Juan	B	San Juan Headwaters Forest Health Partnership. The Partnership is committed to collaborative approaches to improving the health and long-term resilience of mixed-conifer forests and the communities located near them in southwest Colorado. The Workgroup will focus on strengthening, understanding, sharing knowledge and lessons learned, developing management approaches, imitating high priority projects, and monitoring results using an adaptive framework.	Archuleta	Ongoing		Forest Health	Ecologists, Forest-related businesses, Fire personnel & EMS, Home Owners' Associations, Representatives from Federal, State, & County governments & entities, Consultants, Conservationists, Pagosa Range District Office, and Citizens	Lead & Source: Aaron Kimple	Process	Yes	Yes	No
16-SJ	Jul-14	San Juan	B	River Protection Workgroup Regional Process. The workgroups of 5 rivers from the San Juan to Animas and Hermosa lead a local process involving the public in protecting natural values while allowing water development to continue. Watershed values were defined and a final report was generated. The process continues today in the form of regional discussions with potential project outcomes. The process may convene the subbasin workgroups in the future.	Archuleta, Hinsdale, Mineral, La Plata, San Juan	Ongoing			SWCD, SJCA, TU, TWS, SUIT, DWR, CWCB, USFS, SJPL, 4 Corners Backcountry Horseman, Private landowners and Citizens	Lead: River Protection Workgroup Source: Ann Oliver	Both	N/A	N/A	No

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1								Updated: 7/31/2014							
2					**Piedra River Basin Draft IPP List**										
3		**PROPOSED IPPs**								**IPP Contact Information**					
4	**ID**	**Date**	**Sub Basin**	**NC/C/B**	**Description**	**County**	**Status**	**Remaining Steps**	**Need Addressed**	**Sponsors**	**Lead contact & Source of Info.**	**Project vs. Process**	**Project ready for implementation NOW?**	**Does the need exist today?**	**Already received some WSRA funding?**
5	1-P	SWSI 2010	Piedra	C	Aspen Springs Water System The Metro District includes over 2,000 lots most of which are currently undeveloped. Eventually a pipe distribution system will be necessary to supply water.	Archuleta	Not Complete	Design of distribution system	Municipal water supply (infrastructure and water quantity)	Aspen Springs Metro District	Lead: Pat Ulrich Source: Steve Harris	Project	No	Yes	Yes
6	2-P	SWSI 2010	Piedra	NC	Lower Piedra from Hwy 160 to Navajo Lake. Some landowners have started to look at working together to treat a complete section of the river and hopefully this will progress to the stage that a comprehensive project could be developed (stabilization work). The project's focus is on stream bank stability, improved irrigation water diversions and improved riparian area conditions.	Archuleta	Not Complete		Habitat quality, Water quality	Southern Ute Tribe, NRCS & Private landowners	Source: Jerry Archuleta	Project	Yes	Yes	Yes
7	3-P	Fall 2013	Piedra	NC	Sambrito Project. Restore infrastructure to improve, deliver, and manage water to sustain wetlands at Navajo State Park.	Archuleta, La Plata	Not Complete	Restore infrastructure	Habitat quality and quantity	CPOW, BOR, SW-WFAC, Friends of the Navajo	Lead & Source: Catherine Ortega	Project	Yes	Yes	No
8	4-P	Nov-13	Piedra	C	La Plata Archuleta Water District. LAPLAWD's distribution system will consist of over 200 miles of pipeline, multiple storage tanks, water loading stations and other necessary infrastructure.	La Plata	Not Complete	Construction has begun	Municipal water supply (infrastructure and water quantity)	La Plata Archuleta Water District	Lead & Source: Ed Tolen, GM	Project	Yes	Yes	Yes
9	5-P	Jul-14	Piedra	B	River Protection Workgroup Regional Process. The workgroups of 5 rivers from the San Juan to Animas and Hermosa lead a local process involving the public in protecting natural values while allowing water development to continue. Watershed values were defined and a final report was generated. The process continues today in the form of regional discussions with potential project outcomes. The process may convene the subbasin workgroups in the future.	Archuleta, Hinsdale, Mineral, La Plata, San Juan	Ongoing			SWCD, SJCA, TU, TWS, SUIT, DWR, CWCB, USFS, SJPL, 4 Corners Backcountry Horseman, Private landowners and citizens	Lead: River Protection Workgroup Source: Ann Oliver	Process & Project	N/A	N/A	No

Updated: 7/31/2014

Pine River Basin Draft IPP List

PROPOSED IPPs

ID	Date	Sub Basin	NC/C/B	Description	County	Status	Remaining Steps	Need Addressed	IPP Contact Information: Sponsors	IPP Contact Information: Lead contact & Source of Info.	Project vs. Process	Project ready for implementation NOW?	Does the need exist today?	Already received some WSRA funding?
1-LP	SWSI 2010	Pine	C	La Plata Archuleta Water District Water Source. LAPLAWD master plan recommends two raw water sources, with one in the Pine River basin. LAPLAWD would utilize water from Vallecito Reservoir through PRID with joint treatment plant with the Town of Bayfield.	La Plata	Not Complete	Joint treatment plant between Bayfield & LAPLAWD will be constructed in 2014	Municipal water supply (infrastructure and water quantity)	La Plata Archuleta Water District	Lead & Source: Ed Tolen, GM	Project	Yes	Yes	Yes
2-LP	Nov-13	Pine	C	La Plata Archuleta Water District. LAPLAWD's distribution system will consist of over 200 miles of pipeline, multiple storage tanks, water loading stations and other necessary infrastructure.	La Plata	Not Complete	Construction has begun	Municipal water supply (infrastructure and water quantity)	La Plata Archuleta Water District	Lead & Source: Ed Tolen, GM	Project	Yes	Yes	Yes
3-LP	SWSI 1	Pine	NC	Vallecito Reservoir Flow Donation Agreement. The three entities have filed for a new water right in Vallecito Reservoir to allow a donation to the instream flow program in the Pine River and for other purposes. The new water right would also allow "exchange" water to provided to users outside of the PRID service area, such as upstream of Vallecito Reservoir.	La Plata	Not Complete	Water right needs to be finalized in court; Agree and approval by SUIT council	Fish habitat	Pine River Irrigation District, Southern Ute Indian Tribe, CWCB	Lead & Source: Steve Harris	Project	Yes	Yes	No
4-LP	SWSI 2010	Pine	C	Forest Lakes Metro District. Future issue is cost of contract water from Vallecito Reservoir.	La Plata	Not Complete		Municipal water supply	Forest Lakes Metro District	Source: Steve Harris, Janice Sheftel, John Porter	Project			No
5-LP	SWSI 2010	Pine	C	Southern Ute Indian Tribe. Source of water and treatment is Southern Ute Indian Tribe water rights. Tribe treats water, but each has own distribution systems.	La Plata	Not Complete		Municipal water supply	Southern Ute Indian Tribe, Town of Ignacio	Source: Steve Harris, Janice Sheftel, John Porter	Project			No
6-LP	Nov-13	Pine	C	Town of Bayfield. Future demands on the system will require infrastructure improvements and expansions/enlargements to the distribution system, treatment facilities and storage facilities.	La Plata	Not Complete	Design and Construct improvements	Municipal water supply (infrastructure)	Town of Bayfield	Source: Carrie Lile	Project	No	No	No
7-LP	Nov-13	Pine	C	Town of Ignacio. Future demands on the system will require infrastructure improvements and expansions/enlargements to the distribution system, treatment facilities and storage facilities.	La Plata	Not Complete	Design and Construct improvements	Municipal water supply (infrastructure)	Town of Ignacio	Source: Carrie Lile	Project	No	No	No
8-LP	Jan-14	Pine	NC	River Ranch Pine River Habitat Improvement. Improve instream and riparian habitat along 0.75 mile reach through POA green space.	La Plata	Not Complete	Design, Fund and Construct	Aquatic habitat, Riparian habitat	River Ranch POA, NRCS, USFWS, RMBO	Lead: NRCS				
9-LP	Nov-14	Pine	C	Vallecito Reservoir Spillway Floor Repair. The spillway floor is in need of repair sometime in the near future. Could be in 5 to 10 years. No estimates yet on cost but it's expected to be quite expensive.	La Plata	Not Complete	Design, Fund and Construct	Water supply (all uses), Safety	Pine River Irrigation District	Source & Lead: Mike Canterbury	Project	No	No	No
10-LP	Dec-14	Pine	C	Vallecito Reservoir East Spillway Repair. The east spillway wall next to the #3 radial gate needs repair. Erosion is taking place behind the two sections closest to the east radial gate which is pushing the concrete against the gate. This is affecting the gate operation dramatically. The radial gates open to about 15 feet. Because of the binding issue with gate #3 they can only open that gate up to about 4 feet before their is a risk the gate is getting stuck.	La Plata	Not Complete	Design, Fund and Construct	Water supply (all uses)	Pine River Irrigation District	Source & Lead: Mike Canterbury	Project	No	YEs	No
11-LP	Jul-14	Pine	B	River Protection Workgroup Regional Process. The workgroups of 5 rivers from the San Juan to Animas and Hermosa lead a local process involving the public in protecting natural values while allowing water development to continue. Watershed values were defined and a final report was generated. The process continues today in the form of regional discussions with potential project outcomes. The process may convene the subbasin workgroups in the future.	Archuleta, Hinsdale, Mineral, La Plata, San Juan	Ongoing			SWCD, SJCA, TU, TWS, SUIT, DWR, CWCB, USFS, SJPL, 4 Corners Backcountry Horseman, Private landowners and Citizens	Lead: River Protection Workgroup Source: Ann Oliver	Both	N/A	N/A	No

Animas River Basin Draft IPP List

Updated: 7/31/2014

PROPOSED IPPs

ID	Date	Sub Basin	NC/C/B	Description	County	Status	Remaining Steps	Need Addressed	IPP Contact Information: Sponsors	IPP Contact Information: Lead contact & Source of Info.	Project vs. Process	Project ready for implementation NOW?	Does the need exist today?	Already received some WSRA funding?
1-A	Jul-13	Animas	C	Animas-LA Plata Project. Utilization of Animas-LA Plata Project water supplies for multiple purposes by Southern Ute Indian Tribe, Ute Mountain Ute Indian Tribe, Animas-LA Plata Water Conservancy District, City of Durango, LA Plata West Water Authority, Lake Durango Water Authority, Colorado Water Conservation Board, LA Plata Archuleta Water District, and others that may be entitled to ALP water. The utilization could include treatment and conveyance (pumps and pipelines) of raw or treated water.	La Plata, Archuleta, Montezuma	Not Complete		Municipal water supply	Southern Ute Indian Tribe, Ute Mountain Ute Indian Tribe, Animas-LA Plata Water Conservancy District, City of Durango, LA Plata West Water Authority, Lake Durango Water Authority, Colorado Water Conservation Board, LA Plata Archuleta Water District, and others that may be entitled to ALP water		Both	Yes	Yes	Yes
2-A	Jul-13	Animas	NC	Lake Nighthorse Recreation. Provide boating, fishing, and swimming opportunities.	La Plata	Not Complete		Recreation	Animas La Plata Water Conservancy District, Bureau of Reclamation, La Plata county, City of Durango		Project	Yes	Yes	Yes
3-A	Oct-13	Animas	C	La Plata Archuleta Water District. Design and construction of a treatment plant for ALP water possibly in coordination with City of Durango. Transmission and distribution pipelines to convey treated water from the treatment plant to customers.	La Plata	Not Complete	Investigate potential partnerships, acquire land, design and construct	Municipal water supply	La Plata Archuleta Water District	Lead and Source: Ed Tolen	Project	No	Yes	Yes
4-A	SWSI 2010	Animas (Florida)	C	Florida Water Conservancy District. Need for industrial, municipal, domestic, commercial, wildlife, wetlands, exchange, augmentation, hydropower, irrigation, and fire protection water within the Florida River basin. The District has initiated institutional changes by entering into a water service contract with the BOR to use decreed 114 AF water right for augmentation purposes and has obtained a 2,500 AF water right to address the aforementioned uses. Utilization of the 2,500 AF will require another water service contract with the BOR, voluntary water turn in by users, and irrigation system efficiency improvements by the Florida Mesa Ditch Companies that would firm up agricultural delivery and provide additional water supply for those other uses in Lemon Reservoir through the reduction of losses in the delivery system.	La Plata	Not Complete	Finalize water service contract with BOR and Complete additional irrigation system improvements	Municipal, Industrial & Agricultural water supplies	Florida Water Conservancy District	Lead & Source: Florida Water Conservancy District	Project	Yes	Yes	Yes
5-A	SWSI 2010	Animas (La Plata too)	C	Rural Domestic Water Supply. Potential joint project to construct raw water pump and pipeline among Durango West Metro Districts, Lake Durango Water Company, and/or La Plata West Authority. Other options include the future Animas La-Plata/ Western La Plata rural domestic system or to purchase treated water from Lake Durango.	La Plata	Not Complete	Lake Durango Water Company was purchased by Lake Durango Water Authority; Negotiations for ALP water ongoing		Durango West Metro District #1, Durango West Metro District #2, Lake Durango, La Plata West Water Authority	Source: Steve, Janice, John	Both		Yes	Yes
6-A	SWSI 2010	Animas (Florida)	C	Edgemont Ranch Metro District. May need storage for firming.	La Plata	Not Complete			Edgemont Ranch Metro District	Source: Steve Harris	Project			
7-A	SWSI 2010	Animas (Florida)	C	El Rancho Florida Metropolitan District. System is built out but upgrading water source and treatment to meet increasing treatment standards.	La Plata	Not Complete			El Rancho Florida Metropolitan	Source: Steve Harris	Project			
8-A	SWSI 2010	Animas	NC	Recreational In-Channel Diversion. Provide a boating park that allows for rafting, kayaking, tubing and other water sports to occur. Water needs depend on the time of year. Water rights were secured in 2009. Construction of the anchored rock facility commenced in the Fall of 2013.	La Plata	Not Complete	Complete construction	Recreation	City of Durango	Source: City of Durango	Project	Yes	Yes	No
9-A	SWSI 2010	Animas	C	Purgatory Metropolitan District. District has sufficient water now, but is anticipating huge growth, especially at Durango Mountain Resort. The District is looking for more water. Water rights must be deeded to District with inclusion of property within the District. District is looking.	La Plata	Not Complete			Purgatory Metropolitan District					
10-A	SWSI 2010	Animas	C	San Juan County. San Juan County with assistance from SWCD has applied for a water right to provide for the future water needs in the Animas River basin in the County. The application is pending with negotiations with opposers. Implementation of the eventual decree will result in recommended IPPs.	San Juan	Not Complete	Water right nearly decreed; Maintain diligence		SWCD, San Juan County					

Animas River Basin Draft IPP List Continued…

PROPOSED IPPs

ID	Date	Sub Basin	NC/C/B	Description	County	Status	Remaining Steps	Need Addressed	IPP Contact Information: Sponsors	IPP Contact Information: Lead contact & Source of Info.	Project vs. Process	Project ready for implementation NOW?	Does the need exist today?	Already received some WSRA funding?
11-A	SWSI 2010 (Updated from SWSI 1)	Animas	C	Town of Silverton. Physical water supply is presently adequate, but the Town is applying for an augmentation plan to firm up supply from a potential senior call on the Animas River. The augmentation plan would utilize existing and enlarged capacity of Molas Lake as storage for augmentation water. If necessary, alternative storage sites may be reviewed to replace and/or supplement Molas Lake.	San Juan	Not Complete	Water is decreed; Maintain diligence; Develop IPPs to make use of water		Town of Silverton					
12-A	SWSI 2010	Animas	C	Cascade Village. North of Purgatory and supplies water to condominium development. Option is to develop wells. Durango proposed RICD could impact future water development.	San Juan	Not Complete		Municipal water supply	Cascade Village	Source: Steve Harris				
13-A	SWSI 2010	Animas (Florida)	C	Lemon Reservoir Ditch Companies Improvements. Currently nearly all of the irrigation system to deliver Lemon Reservoir water is old open ditch. There is the potential to upgrade these ditches (lining and piping) to conserve water in Lemon for decreed purposes. To date 3 miles of ditches has been lined.	La Plata	Ongoing	Design and construct additional improvements	Agricultural water supply	Florida Water Conservancy District, Florida Consolidated Ditch Company	Lead & Source: FWCD & FCDC	Project	Yes	Yes	Yes
14-A	Nov-13	Animas	C	La Plata Archuleta Water District. LAPLAWD's distribution system will consist of over 200 miles of pipeline, multiple storage tanks, water loading stations and other necessary infrastructure.	La Plata	Not Complete	Construction has begun	Municipal water supply (infrastructure and water quantity)	La Plata Archuleta Water District	Lead & Source: Ed Tolen, GM	Project	Yes	Yes	Yes
15-A	SWSI 2010	Animas	B	Children's Water Festival. Sponsored by the Southwestern Water Conservation District and Water Information Program.	Southwest	Ongoing		Education	Coordinated by The Water Information Program the annual program includes a varying and diverse array of stakeholders/presenters	Lead & Source: Denise Rue-Pastin	Process	Yes	Yes	No
16-A	SWSI 2010	Animas	NC	Animas River Vegetation Management. On-going annual project by SUIT to improve the riparian corridor by managing non-native vegetation. Annual program from 2002- present.	La Plata	Ongoing		Riparian health, Non-native vegetation control	SUIT	Source: SUIT Wildlife	Project			
17-A	SWSI 2010, Updated Nov 2013	Animas (Hermosa)	NC	Hermosa Creek CRCT Metapopulation Project. Collaborative effort to create an isolated meta-population of CO River cutthroat trout in the Hermosa Creek watershed. Some barriers installed; some need installation; next steps include non-native trout removal and relinkage of mainstem and tributary. CWCB minimum ISFs occur on Hermosa mainstem and tributaries; project is structural to create upstream migration barriers, cleanse existing mixed salmonic population, and subsequently link upper watershed and tributaries into genetically clean meta-population. UPDATE: Upper Hermosa Creek above the confluence, removed non-natives from 9 miles, down until Hotel Draw. Phases by segments, 1) small segment on East Fork, NNR; 2) One common barrier between steams and removed.	La Plata	Not Complete		Colorado River Cutthroat Trout	CPW, USFS, TU 5 Rivers Chapter	Lead & Source: Jim White	Project	Yes	Yes	No
19-A	Fall 2013	Animas (Florida)	B	Florida River Habitat and Water Quality Improvement Project. Install fencing along ~1mile of the Florida River to allow for management of livestock away from a riparian buffer zone and the river channel itself. Improve irrigation practices on about 25 acres of flood irrigated pastures.	La Plata	Not Complete	Complete construction	Trout, Native fish, Riparian habitat, Aquatic habitat improvements and reduction in nutrient, Sediment and bacterial loading	Animas Watershed Partnership, San Juan RC&D, Durango-La Plata Regional Airport, CO NPS, San Juan Watershed Group, Private Landowner	Lead & Source: Ann Oliver	Project	Yes	Yes	No
20-A	Jan-14	Animas	B	Microbial Source Tracking Study. A two year (2013, 2014) sampling effort to identify the genetic sources (i.e. ruminant, horse, human, dog, waterfowl, other) of E. coli and Bacteroides in the Animas Mainstem in New Mexico. One site sampled in Colorado 2 miles north of the state line. Colorado partners discussing possibility of adding sample sites in Colorado. Led by the San Juan Watershed Group in partnership with the Animas Watershed Partnership.	La Plata	Not Complete	Complete second year of sampling. Decide whether to seek funding for additional sampling locations in Colorado.	Water quality	Animas Watershed Partnership, San Juan Watershed Group, San Juan RC&D, San Juan Soil and Water Conservation District, CO NPS, Private Landowners, Citizens.	Lead & Source: Ann Oliver	Project	Yes	Yes	No
21-A	Jan-14	Animas	C	Animas Consolidated Ditch Company. The project objectives are to install control points along a specific river stream section, delineate river cross sections, collect and analyze data. The ditch's headgate has experienced head cutting impacts due to the excessively large gravel operations during the late 1900s.	La Plata	Ongoing	Evaluate data collected, Final report	Agricultural water supply	Animas Consolidated Ditch	Lead and Source: Ed Zink	Project	Yes	Yes	Yes

Animas River Basin Draft IPP List Continued…

PROPOSED IPPs

ID	Date	Sub Basin	NC/C/B	Description	County	Status	Remaining Steps	Need Addressed	IPP Contact Information: Sponsors	IPP Contact Information: Lead contact & Source of Info.	Project vs. Process	Project ready for implementation NOW?	Does the need exist today?	Already received some WSRA funding?
22-A	Jan-14	Animas	B	Animas Watershed Partnership. The Partnership members are stewards in protecting and improving the quality of water resources in the Animas Watershed. The Partnership fosters a community based collaborative process involving all stakeholders by using available data sources and sound science.	San Juan, La Plata	Ongoing		Water quality, Recreation, Habitat quality, Drinking water	City of Durango, City of Farmington, Southern Ute Indian Tribe, Southwestern Water Conservation District, Trout Unlimited, San Juan Watershed Group, San Juan Soil and Water Conservation District, La Plata Conservation District, Bureau of Reclamation	Lead & Source: Ann Oliver	Process	Yes	Yes	No
23-A	SWSI 2010	Animas	B	Animas River Stakeholders Group. Animas River Stakeholders Group working to meet Water Quality Standards to protect aquatic species and improve aquatic habitat, Maggie Gulch to Silverton and Silverton through Durango. Remediation of 33 mine waste sites and 36 draining mines. Most of the mine waste sites have been completed. About 5 draining mines have been addressed.	San Juan, La Plata	Ongoing	Continue to address remaining draining mines	Water quality, Recreation, Habitat quality, Drinking water	SWWCD, SJCA, TU, TWS, SUIT, CDWR, CWCB, USFS, SJRC&D, Private landowners and citizens	Lead: Bill Simon and Peter Butler; Source: Ann Oliver	Process	Yes	Yes	
24-A	Dec-13	Animas	NC	Four Corners Paddle Trail Project. A study to determine if a Four Corners Paddle Trail idea is feasible under a partnership approach to management. The working group will focus on the development of a river recreation plan that addresses river access, safety hazards, conservation, education and public information. San Juan River Quality Waters will not be compromised and private property will not be affected. There will be opportunities for civic engagement throughout the planning process to listen to your concerns, ideas and opportunities.	La Plata	Not Complete	Outreach and Education around river etiquette, Trespass issues, Installation of signage	Recreation (Boating)	San Juan County, NM; City of Farmington; City of Aztec; City of Durango; City of Bloomfield; River Reach Foundation; San Juan College; Durango Trails 2000; Aztec Trails & Open Space Inc.; San Juan Watershed Group; Four Corners Economic Development; National Park Service; Bureau of Land Management; Jacks Plastic Welding; 4 Corners River Sports	Lead: Source: Kent Ford	Process	No	Yes	No
25-A	Nov-13	Animas	NC	Florida River Habitat Assessment. Florida River Habitat Assessment for Native Warmwater Fish.	La Plata	Not Complete	Conduct field assessment	Habitat quality, Native fish species	CPW, private landowners	Lead: Jim White	Project	No	Yes	No
26-A	Jan-13	Animas	NC	Salmonid Habitat Improvements. Salmonid Habitat Improvement above Howardsville.	San Juan	Not Complete		Aquatic habitat quality, Trout fishery	BLM, CPW	Source: Jim White	Project	No	Yes	No
27-A	Sep-12	Animas	C	Animas Airpark Water Distribution System. The POA applied for WSRA funds to design the pipe distribution system to utilize water available from the City of Durango pipeline.	La Plata	Not Complete	Obtain City approval of design, Construction and Connection to water source	Municipal water supply	Animas Airpark POA	Lead & Source: Bob Wolf	Project	Yes	Yes	Yes
28-A	Jan-14	Animas	C	Hess Ditch Lateral Replacement. Sunnyside school location…Incorporated ditch. Put 1.5 miles in a pipe. Irrigates 600acres.	La Plata	Not Complete	Engineering design, funding and implementation	Agricultural water supply	CDOT, NRCS, Florida Canal Enlargement Company	Lead: Florida Canal Enlargement Company Source: Sterling Moss	Project			
29-A	Jan-14	Animas (Florida)	B	Florida River Water Quality Initiative. Targeted EQIP funds for work on agricultural lands in the watershed, including salt creek.	La Plata	Not Complete	Continue to develop landowner partners, Design fund implement	Water quality, Riparian habitat, Aquatic habitat quality, Agriculture infrastructure for irrigation	NRCS, LPCD, landowners	Lead & Source: Sterling Moss	Project			
30-A	Jan-14	Animas (Florida)	NC	El Rancho Florida, Florida River Riparian and Aquatic Habitat Improvement. Improve riparian buffer vegetation and instream habitat.	La Plata	Not Complete	Final design, Fund implement	Water quality, Riparian, Aquatic habitat	NRCS, RMBO, La Plata Open Space, El Rancho Florida MD, private landowner	Lead & Source: Sterling Moss	Project	No	Yes	No
31-A	Dec-13	Animas	C	La Posta Road Water Distribution System. The La Posta Road Property Owners Association is interested pursuing the formation of a special district. The special district will conduct a mill levy election which is needed to finance a water distribution system for La Posta Road and surrounding parcels. The POA will receive treated water from the City of Durango.	La Plata	Not Complete	Formation of District, Mill levy election, Secure funding, Construct distribution system	Municipal water supply, Infrastructure	La Posta Road property owners	Lead & Source: Bob Wolf	Process & Project	No	Yes	No
32-A	Jan-13	Animas	C	Reinforcement of the Boulder Head Gate. The headgate is the source of water for the Town of Silverton. The Town has been working on the headgate upgrades since 2005. They shotcreted the headgate area in 2005 and again in 2011. The area still needs one more application of shotcrete. If the third application is not applied, there is a chance for an avalanche to destroy the	San Juan	Not Complete	Secure funding, Complete application of shotcrete	Municipal water supply, Infrastructure	Town of Silverton	Lead: Gilbert Archuleta, Source: Anthony Edwards	Project	Yes	Yes	No

Animas River Basin Draft IPP List Continued…

PROPOSED IPPs

ID	Date	Sub Basin	NC/C/B	Description	County	Status	Remaining Steps	Need Addressed	IPP Contact Information: Sponsors	IPP Contact Information: Lead contact & Source of Info.	Project vs. Process	Project ready for implementation NOW?	Does the need exist today?	Already received some WSRA funding?
33-A	Jul-14	Animas, Hermosa	B	River Protection Workgroup Regional Process. The workgroups of 5 rivers from the San Juan to Animas and Hermosa lead a local process involving the public in protecting natural values while allowing water development to continue. Watershed values were defined and a final report was generated. The process continues today in the form of regional discussions with potential project outcomes. The process may convene the subbasin workgroups in the future.	Archuleta, Hinsdale, Mineral, La Plata, San Juan	Ongoing			SWCD, SJCA, TU, TWS, SUIT, DWR, CWCB, USFS, SJPL, 4 Corners Backcountry Horseman, Private landowners and citizens	Lead: River Protection Workgroup Source: Ann Oliver	Both	N/A	N/A	No
34-A	SWSI 2010	Animas (Elbert)	C	Elbert Creek Augmentation Plans. The Elbert Creek tributary of the Animas River North of Durango is over developed. Electra Lake is available as a source of augmentation. Other augmentation sources are not developed.		Not Complete		Water supply		Source: Steve Harris	Project			
35-A	SWSI 2010	Animas	C	Animas River Water Supply Upstream of RICD. Once the RICD at Smelter Rapids is constructed Animas River Basin north of Durango will become water critical. SWCD and LA Plata County obtained a decree to provide water senior to the RICD to meet this need. Portions of this decree are being distributed to water users.		Ongoing		Water supply	Unincorporated Northern La Plata County not covered by a water system	Source: Steve, Janice, John	Project			

Updated: 3/20/2015

La Plata River Basin Draft IPP List

PROPOSED IPPs

ID	Date	Sub Basin	NC/C/B	Description	County	Status	Remaining Steps	Need Addressed	IPP Contact Information: Sponsors	IPP Contact Information: Lead contact & Source of Info.	Project vs. Process	Project ready for implementation NOW?	Does the need exist today?	Already received some WSRA funding?
1-LaP	SWSI 2010	La Plata	C	La Plata West Water Authority. Provide Western La Plata County with a rural domestic water system to provide a safe, dependable source of domestic water in an area with minimal groundwater availability and diminishing amounts of water from La Plata River.	La Plata	Not Complete		Municipal water supply	La Plata West Water Authority, UMUT, SUIT, Lake Durango	Lead & Source: Roy Horvath		N/A	Yes	Yes
2-LaP	SWSI 2010	La Plata	C	Long Hollow Dam Project (aka Bobby K Taylor Reservoir). LPWCD developed a reservoir site with 5,309 AF storage in Long Hollow. Water will be used for Compact compliance and irrigation supply by exchange. There is also potential use for augmentation and exchange for domestic wells.	La Plata	Construction Completed	Annual Reservoir Operations	Agricultural water supply, Compact compliance	La Plata Water Conservancy District	Lead & Source: Eric Bikis	Project	Yes	Yes	Yes
3-LaP	Mar-14	La Plata	C	Long Hollow Reservoir Compact Water Delivery Study. La Plata Water Conservancy District is performing a study to understand stream characteristics of the La Plata River along the 4.5 mile reach between Low Hollow and the New Mexico stateline stream gage. This work will help administer Compact compliance and develop a plan for reservoir releases and stream administration.	La Plata	Not Complete	Secure funding, Conduct study	Compact compliance	La Plata Water Conservancy District	Source: Brice Lee; Lead: Eric Bikis	Project	Yes	Yes	Yes
4-LaP	SWSI 2010	La Plata	C	Red Mesa Ward Reservoir. Existing storage and rights for 1,176 AF storage owned by Red Mesa Reservoir Company, primary use irrigation with other uses including industrial and existing domestic augmentation plans. Needs include spillway and/or outlet updates to maintain existing capacity and compile with Division of Water Reservoirs regulations. Enlargement-refill water rights of 4,074 AF held by LPWCD to meet existing and future demands including domestic, augmentation, irrigation, etc. Studies of enlargement potential in place and feasibility ongoing.	La Plata	Not Complete	Secure funding. Construct project.	Agricultural, Industrial, Municipal water supplies	La Plata Water Conservancy District	Source: Trent Taylor	Project	Yes	Yes	Yes
5-LaP	SWSI 2010	La Plata	NC	In-channel Habitat Enhancement. La Plata River (Doughty), 450 feet of channel and riparian habitat improvements.	La Plata	Not Complete			SUIT, NRCS, BOR		Project	Yes	Yes	No
6-LaP	SWSI 2010	La Plata	C	Augmentation Plans in La Plata River Basin. The La Plata River basin is water critical and new uses require augmentation plans to change existing water rights to new uses.	La Plata	Not Complete					Project			
7-LaP	SWSI 2010	La Plata	NC	Management of Invasive Riparian Species. Management of weeds, tamarisk, and Russian olive control. Ecosystem enhancement/non-native vegetation control. Work has been ongoing since 2002.	La Plata	Not Complete		Riparian habitat	SUIT, DWR		Project	Yes	Yes	No
8-LaP	Jan-14	La Plata	C	Rehabilitation of the "Old Fort Lewis" Water System. The current water system was built over 50 years ago to serve the student and employee populations. Once the college moved to Durango, the property became a resource for community activities including research and education. The water system is need of major upgrades and rehabilitation. The water source is the Lory Spring and is considered Groundwater Under the Direct Influence of Surface Water which requires direct filtration and disinfection. The project proposes to rehabilitate the old system by upgrading electrical system, replacing the current pressure tank, installing up to date chlorination system, cartridge filtration equipment and upgrading safety issues in the building.	La Plata	Not Complete	Secure funding and construct	Municipal water supply	Fort Lewis	Lead & Source: Beth LaShell	Project	Yes	Yes	No
9-LaP	Jan-14	La Plata, Mancos, McElmo	C	Water Conservation and Management Plan. The plan is a process to discuss development of the UMUT allocation in A-LP (including but not limited to: development into western La Plata County and eastern Montezuma County (dry side development)).	La Plata, Montezuma	Not Complete	Complete planning process	Future municipal, Industrial water supply	Ute Mountain Ute Tribe	Lead & Source: Celene Hawkins	Process	Yes	Yes	Yes
10-LaP	Jan-14	La Plata	C	Lake Durango Water Authority. Development of infrastructure and water sources to deliver water within the Lake Durango service area.	La Plata	Not Complete	Design and Construction	Municipal water supply	Lake Durango Water Authority	Source: Tom Brossia & Charlie Smith	Project	Yes	Yes	Yes
11-LaP	Jul-14	La Plata & Animas	C	Agricultural Water Supply. Southwestern Water Conservation District holds water rights in the Animas River that are decreed and available to meet irrigation demands within the La Plata basin. This water supply could potentially provide water for supplemental supplies on existing irrigate lands and to provide a supply for full service lands.	La Plata	Not Complete		Agricultural water supply	Southwestern Water Conservation District	Lead & Source: Bruce Whitehead	Project	No	Yes	No

La Plata River Basin Draft IPP List Continued…

PROPOSED IPPs

ID	Date	Sub Basin	NC/C/B	Description	County	Status	Remaining Steps	Need Addressed	IPP Contact Information: Sponsors	IPP Contact Information: Lead contact & Source of Info.	Project vs. Process	Project ready for implementation NOW?	Does the need exist today?	Already received some WSRA funding?
12-LaP	Jul-14	La Plata	C	Big Stick Ditch. Improvements to be made to existing diversion structure and ditch. Mancos shale slide areas exist around the ditch, the project proposes to pipe the ditch within these areas. Complete improvements to the diversion structure.	La Plata	Not Complete	Secure funding, Construct	Agricultural water supply		Lead & Source: Guy Stees	Project	Yes	Yes	No
13-LaP	Nov-14	La Plata	C	Soldiers Draw. A feasibility study was conducted in the La Plata River basin to define additional water storage in the area. La Plata water Conservancy District received a decree for water storage rights in Soldiers Draw for construction of a reservoir allowing 1,000 acre-feet of storage. Water would be used for Compact compliance purpose as well as domestic and agricultural use by downstream users.	La Plata	Not Complete	Secure funding, Construct project	Compact compliance, Agricultural water supply	La Plata Water Conservancy District	Source: Eric Bikis	Project	Yes	Yes	Yes
14-LaP	Mar-15	La Plata	C	La Plata River Ditch Capacity Enlargement. Numerous La Plata River ditches are feeder ditches decreed to divert and convey water to the Long Hollow Project and associated recharge pits. These ditches do not have sufficient capacity to convey this volume of water during some portions of the year. Funding is needed to increase the size of one or more of these ditches.	La Plata	Not Complete	Secure funding, Construct project	Compact compliance, Agricultural water supply	La Plata Water Conservancy District	Source: Eric Bikis	Project	Yes	Yes	Yes
15-LaP	Mar-15	La Plata	C	La Plata River Ditch Lining and/or Sealing. Several of the La Plata River Ditches that may be used as an alternative conveyance of water to meet Colorado's obligation to New Mexico under that La Plata River Compact would benefit from lining or sealing. This would increase efficiency of Compact deliveries and would thereby benefit both Colorado and water users within the La Plata River Basin. Ditch losses would be assessed and a proposed ling/sealing plan would be developed prior to implementation of the plan.	La Plata	Not Complete	Secure funding, Construct project	Compact compliance, Agricultural water supply	La Plata Water Conservancy District	Source: Eric Bikis	Project	Yes	Yes	Yes
16-LaP	Mar-15	La Plata	C	BKT Diversion Ditch Study. A study is needed to determine if a ditch dedicated to convey water from the La Plata River to the Long Hollow Project is feasible. Such a ditch would benefit storage in the BKT Reservoir and improve Compact deliveries to New Mexico.	La Plata	Not Complete	Secure funding, Conduct study	Compact compliance, Agricultural water supply.	La Plata Water Conservancy District	Source: Eric Bikis	Project	Yes	Yes	Yes

Updated: 7/31/2014

Mancos River Basin Draft IPP List

PROPOSED IPPs

ID	Date	Sub Basin	NC/C/B	Description	County	Status	Remaining Steps	Need Addressed	IPP Contact Information: Sponsors	IPP Contact Information: Lead contact & Source of Info.	Project vs. Process	Project ready for implementation NOW?	Does the need exist today?	Already received some WSRA funding?
1-M	SWSI 2010	Mancos	B	Salinity Control Project. Mancos Valley Salinity Control Project Plan and Environmental Assessment.	Montezuma	Ongoing	Continue to work with private landowners to install irrigation pipelines	Agriculture, Water quantity, Water quality, Aquatic habitat	NRCS, MCD, Ute Mtn Ute Tribe, private landowners	Lead: NRCS; Source: Ann Oliver	Project	Yes	Yes	No
2-M	Dec-13	Mancos	B	Mancos River Watershed Stakeholders Group. Mancos River Watershed Stakeholders implementing recommendations of completed Watershed Based Plan. Plan identifies goals, sources and practices to implement to protect and improve water resources in the Mancos River watershed.	Montezuma	Ongoing	Continue to foster awareness and dialogue; Develop funding for implementing recommendations and other projects	Water quality, Aquatic habitat, Channel function, Riparian function, Fisheries, Agriculture, Municipal	MCD, CWCB, CO NPS, UMUT, Mesa Verde National Park, private landowners and interested citizens	Lead: Mancos Conservation District Source: Ann Oliver	Process	No	Yes	Yes
3-M	Dec-13	Mancos	B	Mancos River Habitat and Diversion Project - Phase II. To restore aquatic habitat and efficiency of 4 irrigation diversions along a 2.4 mile reach downstream of Mancos (ditches: Veits, Bolen, Sheek, and Exon). To allow fish and sediment passage and promote channel stability.	Montezuma	Not Complete	Construct 4 diversion structures; Complete RSRA surveys; Final Report	Agriculture; Trout and native fish, Aquatic habitat, Healthy channel, Riparian habitat	Landowners, ditch companies, MCD, TU, CWCB, Peter Stacey	Lead: MCD; Source: Ann Oliver	Project	Yes	Yes	Yes
4-M	Dec-13	Mancos	NC	Mancos Fishing Habitat Improvements. Potential project to improve aquatic habitat and fishing opportunity through Mancos. Potential to design and install habitat improvement measures in channel.	Montezuma	Not Complete	ID partners and funding source(s)	Trout fisheries, Native fish, Aquatic habitat	CPW, MCD, TU	Source: Ann Oliver and Jim White	Project	No	Yes	No
5-M	Nov-13	Mancos	NC	Habitat Assessment of the Mancos River. Identify opportunities to enhance or protect habitat in water limited streams. The Mancos River, together with the La Plata River, hosts the most genetically intact native fish community on the West slope of Colorado, due largely to the lack of invasion by non-native fish species.	Montezuma	Not Complete	Conduct study; Report results and recommendations	Native fish, Aquatic habitat	CPW, Ute Mountain Ute Tribe	Lead: Paul Jones Source: Paul Jones	Project	Yes	Yes	No
6-M	Jan-14	Mancos	C	Jackson Gulch Reservoir Enlargement. Reservoir enlargement of 5 feet added to the dam height which equates to 1,000 AF of new storage.	Montezuma	Not Complete	Feasibility, Design, and Construction; Secure funding	Agricultural water supply, Municipal water supply	Mancos Water Conservancy District	Lead & Source: Gary Kennedy	Project	No, Planning stage	No	Yes
7-M	Jan-14	Mancos	C	Lake Mancos Reservoir. New reservoir with a dam height of 10 feet and 80 AF of new storage.	Montezuma	Not Complete	Phase 1 Completed; Feasibility, Design, and Construction; NEPA compliance	Agricultural water supply, Municipal water supply	Mancos Water Conservancy District	Lead & Source: Gary Kennedy	Project	No, Planning stage	Yes	Yes
8-M	Jan-14	Mancos	C	Weber Reservoir Diversion. Inlet rehabilitation is needed. Improvements to the structure and line or pipe the inlet canal.	Montezuma	Not Complete	Secure funding; Design and Construction	Agricultural water supply	Mancos Water Conservancy District	Lead & Source: Gary Kennedy	Project	No	No	No
9-M	Jan-14	Mancos	C	Bauer Lake Diversion. Inlet rehabilitation is needed. Improvements to the structure and line or pipe the inlet canal.	Montezuma	Not Complete	Secure funding; Feasibility, Design, and Construction	Agricultural water supply	Mancos Water Conservancy District	Lead & Source: Gary Kennedy	Project	No	No	No
10-M	Jan-14	Mancos	C	Joe More Reservoir Diversion. Inlet rehabilitation is needed. Improvements to the structure and line or pipe the inlet canal.	Montezuma	Not Complete	Secure funding; Feasibility, Design, and Construction	Agricultural water supply	Mancos Water Conservancy District	Lead & Source: Gary Kennedy	Project	No	No	No
11-M	Jan-14	Mancos	C	River Measuring Stations. Mancos River contributories need measurement. Needed for water management with an addition of 3 to 4 measuring flumes.	Montezuma	Not Complete	Secure funding; Currently undergoing Placement Study; Next steps design and construction	Agricultural water supply management, Environmental	Mancos Water Conservancy District	Lead & Source: Gary Kennedy	Project	No, Planning stage	Yes	No
12-M	Jan-14	Mancos	C	Weber Ditch Piping. Piping of the ditch in areas that are compromised by the Weber fire and areas that have issues of safety and seepage.	Montezuma	Not Complete	Secure funding; Feasibility completed; Design and Construction	Agricultural water supply; Fire mitigation	Mancos Water Conservancy District	Lead & Source: Gary Kennedy	Project	No, Planning stage	Yes	No
13-M	Jan-14	Mancos	C	Root & Ratliff Ditch Piping. Ditch piping needed for better water conservation and control.	Montezuma	Not Complete	Secure funding; Feasibility completed; Design and Construction	Agricultural water supply management	Mancos Water Conservancy District	Lead & Source: Gary Kennedy	Project	No, Planning stage	Yes	No

Mancos River Basin Draft IPP List Continued…

PROPOSED IPPs

ID	Date	Sub Basin	NC/C/B	Description	County	Status	Remaining Steps	Need Addressed	IPP Contact Information: Sponsors	IPP Contact Information: Lead contact & Source of Info.	Project vs. Process	Project ready for implementation NOW?	Does the need exist today?	Already received some WSRA funding?
14-M	Jan-14	Mancos	C	Town of Mancos. Increase portable water storage; larger storage facilities for portable water, public health and fire suppression.	Montezuma	Not Complete	Secure funding; Feasibility completed; Design and Construction	Municipal water supply, Water quality	Mancos Water Conservancy District	Lead & Source: Gary Kennedy	Project	No, Planning stage	Yes	No
15-M	Jan-14	Mancos	C	Mancos Rural Water Company. Increase portable water storage; larger storage facilities for portable water and public health.	Montezuma	Not Complete	secure funding; Feasibility completed; Design and Construction	Municipal water supply, Water quality	Mancos Water Conservancy District	Lead & Source: Gary Kennedy	Project	No, Planning stage	Yes	No
16-M	Jan-14	Mancos	NC	Hydropower Potential. Potential for hydropower facilities within the canals and ditches within the Mancos Valley. As technologies progress potential hydropower production progresses.	Montezuma	Not Complete	Conduct study; Report Results and recommendations	Renewable energy	Mancos Water Conservancy District	Lead & Source: Gary Kennedy	Project	No	No	No
17-M	Feb-14	Mancos	C	Jackson Gulch Drop Chute Pipe. Need piping to secure water source for the reservoir; provide protection of private property and safety.	Montezuma	Not Complete	Secure funding; Currently in planning sages; Design and Construction	Agricultural water supply	Mancos Water Conservancy District	Lead & Source: Gary Kennedy	Project	No, Planning stage	Yes	No
18-M	Jan-14	Mancos	B	Natural Disaster Planning. Conduct planning for natural disaster such as fire, flood, etc...	Montezuma	Not Complete	Planning stages	Protection of water supply, Water quality for all values	Mancos Water Conservancy District	Lead & Source: Gary Kennedy	Process	No, Planning stage	Yes	No
19-M	Jan-14	Mancos	C	Water Conservation and Management Plan. The plan is a process to discuss development of the UMUT allocations in the Mancos River drainage (including, but not limited to: development with non-tribal partners in the Mancos River Valley).	Montezuma	Not Complete	Complete planning process	Agricultural/irrigation and livestock needs	Ute Mountain Ute Tribe, non-tribal partners within Mancos River Valley	Lead & Source: Celene Hawkins	Process	Yes	Yes	Yes
20-M	Jan-14	Mancos	NC	Mancos Watershed Enhancement Projects. An environmental project describing the UMUT's work in the Mancos River watershed to remove invasive species (tamarisk, Russian olive) and to regenerate and farm native species (cottonwood and willow).	Montezuma	Ongoing	Design, Fund, and Implement projects	Habitat quality and quantity	Ute Mountain Ute Tribe	Lead & Source: Celene Hawkins	Project	Yes	Yes	No
21-M	Jan-14	Mancos	B	Additional Storage. Development of additional storage within the Mancos River drainage (expansion of Jackson Reservoir, off-reservation and/or on-reservation sites possible).	Montezuma	Not Complete	Investigate, Develop, Design and Construct reservoirs	Agricultural water supply, Habitat quality and quantity	Ute Mountain Ute Tribe	Lead & Source: Celene Hawkins	Project	No	Yes	No

Updated: 3/19/2015

Dolores and McElmo River Basins Draft IPP List

PROPOSED IPPs

ID	Date	Sub Basin	NC/C/B	Description	County	Status	Remaining Steps	Need Addressed	IPP Contact Information: Sponsors	IPP Contact Information: Lead contact & Source of Info.	Project vs. Process	Project ready for implementation NOW?	Does the need exist today?	Already received some WSRA funding?
1-DM	Jul-13	Dolores	C	Summit Reservoir & Irrigation Company. Summit and Lost Canyon for irrigation system improvements.	Dolores, Montezuma	Not Complete		Agricultural	Summit Reservoir & Irrigation Company		Project		Yes	Yes
2-DM	SWSI 2010	Dolores	C	Montezuma Water Company. Supplies potable water to rural Dolores and Montezuma Counties. Continually expanding to serve new areas presently on wells or hauling.	Montezuma, Dolores	Not Complete		Municipal water supply	Montezuma Water Company					
3-DM	Jan-14	Dolores, McElmo	C	Water Conservation and Management Plan. The plan is a process to discuss the UMUT's additional needs from the Dolores Project (including the 4,000 AF acquisition request and ongoing projects in water conservation and additional storage).	Montezuma	Not Complete	Complete planning process	Agricultural, Municipal, Industrial water supply	Ute Mountain Ute Tribe	Lead & Source: Celene Hawkins	Process	Yes	Yes	Yes
4-DM	Jan-14	Dolores, McElmo	NC	Energy Dissipating Structure Hydropower Development. The EDS site is located on the Towaoc Highline Canal at the transition from Reach 2 into Reach 3. A preliminary hydropower feasibility study was completed in December of 2010. DWCD and UMUT are jointly pursuing this development.	Montezuma	Not Complete	Joint development of entity to operate power plant, RFQ for design and construction	Renewable Energy	Ute Mountain Ute Tribe, DWCD	Lead & Source: Celene Hawkins		Yes	Yes	No
5-DM	SWSI 1, SWSI 2010	Dolores	C	Augmentation upstream of McPhee Reservoir. CWCB ISF may limit the ability to provide augmentation above McPhee Reservoir in the future. Alternatives include small storage (10 to 20 AF) or alluvial storage.	Dolores	Not Complete		Municipal water supply, Agricultural water supply	DWCD	Source & Lead: DWCD	Project	No	Yes	No
6-DM	SWSI 2010	Dolores	B	Upper Plateau Storage Reservoir. This is a new, up to 20,000 AF reservoir proposed by DWCD as a method to increase the water supply from the Dolores River. The water could be used for fishery flows below McPhee and/or M&I.	Dolores	Ongoing		Municipal, Environmental water supplies	DWCD	Lead: DWCD Source: Steve Harris	Project	No	Yes	No
7-DM	Jul-14	Dolores	C	Plateau Pumpback Project. Water is released from an upper reservoir through a penstock to generate hydropower and pumped back up to the upper reservoir during off-peak demand. This project would operate as a giant battery to fill green power gaps when the sun is not shining and the wind is not blowing.	Dolores	Investigating	DWCD exercising FERC feasibility license; Investment Information Memo response will determine if the need exists today	Hydropower production	DWCD	Lead: DWCD Source: Ken Curtis	Project	No	No, unknown	No
8-DM	SWSI 2010	Dolores	C	Groundhog Reservoir Expansion. The reservoir could potentially be expanded by decreasing the freeboard in the spillway, thus, raising the water level by about 1,000 AF. Studies have not been completed to fully evaluate this option.	Dolores	Not Complete	DWCD and MVIC are investigating options to maximize the use of Groundhog	Municipal water supply (well augmentation)	DWCD	Lead and Source: DWCD	Process then project	No, need further evaluation	No	No
9-DM	SWSI 2011	Dolores	B	Dolores River Dialogue. Formed in 2004 to explore management opportunities to improve the ecological conditions downstream of McPhee Reservoir while honoring water rights, protecting agricultural and municipal water supplies, and the continued enjoyment of rafting and fishing. Meets twice a year, guided by a Steering Committee, which oversaw the development of a watershed plan in 2013. A Legislative Subcommittee has also been formed from this effort, which lead to an Implementation Team developing an Implementation Monitoring and Evaluation Plan. The IM&E Plan is part of the foundation for NCA Legislation to protect native fish, downstream values, water rights and Dolores Project allocations.	Dolores, Montezuma, San Miguel, Montrose	Ongoing	Continue to provide a forum for initiatives related to DRD Purpose Statement, Adopt Implementation Plan and introduce NCA Legislation	Native fish, Agricultural water supply, Municipal water supply, Boating, Fishing	USBR *; CDWR; CDNR; CPW*; CWCB; Dolores County; Dolores Public Lands Office (USFS/BLM); Dolores River Action Group (local private boaters); Dolores River Coalition* (represents 20 groups) ; DWCD*; Army Corps of Engineers; Montezuma County; MVI*; public at large; SJCA*; SJPLC; San Miguel County; TNC*; USFWS; and the Ute Mountain Ute Tribe*; Dolores River Boating Advocates (* = Steering Committee Representation)	Source: Mike Preston	Process & Project	Yes	Yes	No

Dolores and McElmo River Basins Draft IPP List Continued…

PROPOSED IPPs

ID	Date	Sub Basin	NC/C/B	Description	County	Status	Remaining Steps	Need Addressed	IPP Contact Information: Sponsors	IPP Contact Information: Lead contact & Source of Info.	Project vs. Process	Project ready for implementation NOW?	Does the need exist today?	Already received some WSRA funding?
10-DM	Jul-13	Dolores	NC	Proposed Instream Flow on the Dolores River . BLM is beginning to collect preliminary data for an instream flow water right downstream of the San Miguel River, within the Uncompahgre Field Office to protect habitat for 3 sensitive fish species. Section discussed during Wild and Scenic Process and stakeholders identified it as eligible.	Montrose, Mesa	Ongoing		Habitat for 3 sensitive fish species	BLM, CWCB, CPW	Source: Roy Smith; Linda Bassi	Process	Yes	Yes	No
11-DM	SWSI 2010	Dolores	B	Paradox Valley Salinity Control. BOR Desalination Plant intercepts and collects saline water flowing toward Dolores River within the Paradox Valley and stores that water in deep wells. Losses to the Dolores surface flows are mitigated with 700 AF/year out of McPhee Reservoir. Managed as part of the downstream fishery water, and does not share shortages.	Dolores	Ongoing		Water quality	BOR, DWCD, CPW		Project	Yes	Yes	No
12-DM	SWSI 2010	McElmo	C	Totten Reservoir. The existing 3,300 AF reservoir was acquired by DWCD. With no new facilities the reservoir can be used for direct service and augmentation in the McElmo Creek basin. With a pump and pipeline to Towaoc-Highline Canal can provide additional water for use within Dolores Project area. There are several potential water sources. The yield is variable based on type of use (M&I or irrigation) and sources.	Montezuma	Not Complete		Municipal water supply, Agricultural water supply	DWCD	Lead and Source: DWCD	Project	Yes	Yes	Yes?
13-DM	Jul-13	McElmo	C	McElmo Irrigators. Completed pilot phase of project. Pilot phase was to initiate a 1 time lease of water from Totten to McElmo irrigators during the early irrigations season. Improvements will need to be made to Totten before this can become a permanent lease.	Montezuma	Not Complete	Improvements to Totten	Agricultural water supply	DWCD	Lead and Source: DWCD	Project	Ongoing	Yes	No
14-DM	Jan-14	Dolores	B	Optimization Study. A study to review the available water supplies to evaluate whether the water is being used as effectively as possible using the existing facilities. Then determined if there are additional management methods and/or facilities that may improve the effectiveness.	Montezuma, Dolores	Not Complete	Develop a RFP; hire a consultant; conduct work	All needs within the basin could be possible addressed	DWCD	Lead and Source: DWCD	Process	Yes	Yes	No
15-DM	Jan-14	Dolores	C	DWCD Water Management and Conservation Plan. The 2002 Plan will be updated through 2013 with new data and candidate programs and measures. The programs and measures range from water management, water supply, budget, infrastructure, and conservation. The Plan describes actions for each program and measure with priorities of implementation of measures by the Board.	Montezuma, Dolores	Not Complete	Drafting a WMCP	Agricultural water supply, Municipal water supply	DWCD, MVIC, UMUT, CPW, CSU Extensions, USBR, Full Service Farmers, DCD, other stakeholders	Lead and Source: DWCD	Process & Project	Yes	Yes	No
16-DM	Jan-14	McElmo	B	Rehabilitation of the McElmo Creek Flume. The McElmo Flume was designated one of Colorado's Most Endangered Places in 2011. Its is a most fitting recognition for reasons beyond just being endangered. The Flume represents the heritage of the culture that developed with the advent of water being trans-basin diversion from the Dolores during the mid-1880s. This is a water education project that will provide a new opportunity for the public to learn about the water history of the Montezuma Valley.	Montezuma	Not Complete	Construct highway access point, rehabilitate flume	Public Education	Montezuma County	Lead: James Dietrich	Project	Yes	Yes	No
17-DM	Mar-14	Dolores	NC	Upper Dolores River Recreation Access. The Upper Dolores lacks safe, adequate and appropriate access for recreational opportunities including boating and fishing. The San Juan Skyway runs along the Dolores River and offers highway accessibility, but an official access site has not been established, resulting in user created access and riparian damage. An established site with day use accessibility would be ideal for enabling recreation in a manner that is safe and appropriate.	Dolores	Not Complete		Public Education, Recreation access	Dolores River Boating Advocates, Forest Service	Lead & Source: Lee-Ann Hill	Project	Yes	Yes	No
18-DM	Mar-14	Dolores	B	Future River Stewards. Program to involve local youth in water quality sampling at Bradford Bridge, river stewardship and mindful use.	Dolores	Not Complete		Public Education, Water quality	Dolores River Boating Advocates, local schools, Riverwatch Program	Lead & Source: Lee-Ann Hill	Project	Yes	Yes	No
19-DM	Mar-14	Dolores, McElmo	B	Dolores Project McPhee Reservoir Aquatic Nuisance Species (ANS) Protection. With the recent infestation of Lake Powell by invasive mussels, McPhee remains vulnerable to traveling ANS from other waters open to boating. The impacts of an infestation would destroy biological, recreational, ecological and consumptive uses provided by the Dolores Project. An infestation would damage the fishery and hurt boating and fishing opportunities. Infrastructure impacts would increase costs and hinder operations at McPhee with unknown impacts extending beyond the reservoir. Prevention remains the only successful strategy to prevent these negative impacts. DWCD is working with CPW and USFS to bolster the current efforts led by CPW to prevent an infestation of Zebra and Quagga mussels to the Dolores Project.	Montezuma	Ongoing		Municipal supply, Agricultural supply, Boating, Aquatic habitat	DWCD, CPW, USFS	Lead & Sources: Ken Curtis & Jim White	Project	Yes	Yes	No

Dolores and McElmo River Basins Draft IPP List Continued…

PROPOSED IPPs

ID	Date	Sub Basin	NC/C/B	Description	County	Status	Remaining Steps	Need Addressed	IPP Contact Information: Sponsors	IPP Contact Information: Lead contact & Source of Info.	Project vs. Process	Project ready for implementation NOW?	Does the need exist today?	Already received some WSRA funding?
20-DM	Apr-14	Dolores	NC	Dolores River Restoration Partnership, 170 miles of riparian restoration on the Dolores River between Dove Creek Pump Station and the Dolores's confluence with the Colorado River.	Dolores, Mesa	Ongoing		Habitat	TNC, Tamarisk Coalition, Conservation Corps groups and three offices of BLM: Uncompahgre, Tres Rios & Grand Junction		Project	Yes	Yes	No
21-DM	2014	Dolores	B	Trout Unlimited and Montezuma Land Conservancy. Upper Dolores River Assessment. This is an assessment of fisheries and riparian conditions of the Upper Dolores Watershed aimed at applying the best science to help strategic planning for targeted restoration activities. Identify possible restoration and irrigation infrastructure improvement partnerships in the Dolores Watershed. Identify reaches of the Dolores main stem for restoration work. Identify and implement monitoring and restoration projects on critical and important streams containing conservation populations of native trout. Identify and prepare critical and important streams for reconnection / isolation and reintroduction of native trout.	Montezuma and Dolores	Ongoing		Water quality, Aquatic habitat, Channel function, Riparian function, Fisheries, Recreation, Agriculture	Trout Unlimited and Montezuma Land Conservancy	Matt Clark, TU	Project	Yes	Yes	No
22-DM	May-14	San Miguel	B	Wines Diversion Structure Renovation. Dolores River, near the State line, renovate the Wines diversion structure and adjacent riparian area 8 miles northwest of Gateway. This passage currently impedes safe recreational boaters and provides a barrier to fish passage into the upper Dolores River.	Mesa	Not Complete		Recreational, fish passage, Agricultural water supply (delivery)	TNC, John Hendricks, Grand Junction BLM, CPW	Lead: Pete Foster & Source: Peter Mueller	Project	Yes	Yes	No
23-DM	Mar-15	Dolores	C	Gateway Community Water System. The Gateway Community would greatly benefit from the development of a potable water system, to increase the quantity as well as construction of a drinking water distribution system within the town of Gateway Colorado.	Mesa	Not Complete		Municipal water supply, Municipal infrastructure	Gateway Canyons Resort, Mesa County	Source: Carrie Gudorf	Project	No	Yes	No

Updated: 1/20/2015

San Miguel River Basin Draft IPP List

PROPOSED IPPs

ID	Date	Sub Basin	NC/C/B	Description	County	Status	Remaining Steps	Need Addressed	IPP Contact Information: Sponsors	IPP Contact Information: Lead contact & Source of Info.	Project vs. Process	Project ready for implementation NOW?	Does the need exist today?	Already received some WSRA funding?
1-SM	SWSI 2010	San Miguel	C	Enlargement of Gurley Reservoir. Designs have been prepared to enlarge the existing Gurley Reservoir.	San Miguel	Not Complete		Agricultural water supply	Farmers Reservoir and Ditch Company	Source: Steve Harris	Project			
2-SM	SWSI 2010	San Miguel	C	Lone Cone Reservoir. Enlargement of Lone Cone Reservoir.	San Miguel	Not Complete		Agricultural water supply	Lone Cone Reservoir and Ditch Company	Source: April Montgomery	Project			
3-SM	Dec-13	San Miguel	B	Montrose County Firming Project Phase 1. The purpose of the Project is to provide a reliable source of water for municipal and industrial demands in Montrose County over the next 50 years, including future growth in the Towns of Nucla and Naturita. The first phase of the Project, to be completed by 2018, is to complete feasibility-level engineering studies of the Upper Maverick Draw, Lower Maverick Draw, Big Bucktail, Tuttle Draw, and Nucla Town Reservoir Enlargement storage sites and the Nucla Pump Site and Pipeline, Highline Canal, Paradox Valley Pipeline diversion points pursuant to the 2012 Water Court decree in Case #10CW164 et seq.	Montrose	Not Complete	Secure funding, Conduct feasibility study	Municipal water supply, Industrial water supply, Environmental water supply, Recreation	Montrose County	Source: Jon Waschbusch; Lead: M. Catlin	Process	Yes	Yes	No
4-SM	Dec-13	San Miguel	B	Montrose County Firming Project Phase 2. The second phase of the Project will be to construct one or two reservoirs, in addition to the Nucla Town Reservoir Enlargement, and the direct flow points of the diversion. The Project will address the 3,200 acre-feet gap between existing water supplies and demands projected to occur by the year 2060 in the west on of Montrose County, and will also allow for reservoir releases to provide non-consumptive piscatorial use and water quality improvements.	Montrose	Not Complete	complete Phase 1, Start Phase 2	Municipal water supply, Industrial water supply, Environmental water supply, Recreation	Montrose County	Source: Jon Waschbusch; Lead: M. Catlin	Project	Yes	Yes	No
5-SM	SWSI 2010	San Miguel	B	San Miguel Project. The project was authorized as a participating project in the Colorado River Storage Project (CRSP) and includes a large storage and diversion water right on the San Miguel River. Though the project as authorized is not likely to be constructed, the water right could be changed to meet future water needs in the San Miguel Basin. As a participant in CRSP, power revenues are being accumulated in the name of the project and legislation might allow funds to construct a locally approved alternative to the authorized project.	San Miguel	Not Complete		Potentially all needs possible	SMWCD	Source: Steve Harris	Process & Project			
6-SM		San Miguel	NC	Suitability - Wild and Scenic Rivers Act. Protect outstandingly remarkable values through consideration of suitability under Wild and Scenic Rivers Act and the Uncompahrge BLM Resource Management Plan Revision. Determine what segments of the 21 found eligible should be identified as suitable.	San Miguel	Not Complete		Native Fish, Recreation	BLM, Counties, citizens and other organizations	BLM, Counties, citizens and other organizations	Process			
7-SM	SWSI 2010	San Miguel	B	Rehabilitation of Priest Lake. The Priest Lake dam owned by USFS was breeched under order of DWR. The lake is an important facility for fishing and augmentation of USFS facilities.	San Miguel	Not Complete		Augmentation, Fishing recreation	EXCEL Energy	Source: April Montgomery	Project			
8-SM	SWSI 2010	San Miguel	NC	CCC Ditch Fish Passage. Provide fish passage at CCC-Ditch diversion. A fish ladder was constructed that abuts CCC-Ditch, add electronic gauges to assist in diversion. No additional water associated with this project.	Montrose	Not Complete		Fish passage	CCC-Ditch, CWT, BLM, CPW, TNC, SWCD, CWCB, Telluride Foundation	Source: Peter Mueller	Project		Yes	
30-SM	Sep-14	San Miguel	NC	Reed Chatfield Diversion Structure Renovation. This passage currently impedes safe recreational boaters and creates a barrier to fish passage into the upper San Miguel River.	Dolores	Not completed		Fish passage, Recreation	TNC, San Miguel Watershed Council	Source & Lead: Peter Mueller	Project	Yes, begin planning stage	Yes	No
31-SM	Sep-14	San Miguel	NC	Parkway Diversion Structure Renovation. This passage currently impedes safe recreational boaters and creates a barrier to fish passage into the upper San Miguel River.	Dolores	Not completed		Fish passage, Recreation	TNC, San Miguel Watershed Council	Source & Lead: Peter Mueller	Project	Yes, begin planning stage	Yes	No
9-SM	Fall 2013	San Miguel	NC	Woods Lake Colorado River Cutthroat Trout Refuge. CPW with partners is continuing implementation of a cutthroat refuge concept at Woods Lake, and has completed 2 (of 3) infrastructure improvement projects designed to isolate this fishery from exposure to non-native trout (mainly brook trout). CPW has obtained internal funding and is working in partnership with the Hughes Ditch Co to modify the diversion structure to facilitate cutthroat isolation and allow diversion of existing water rights.	San Miguel	Not Complete		Native Fish, Cutthroat Trout	CPW, USFS, Hughes Ditch Company, San Miguel County	Source: David Garf	Project			
10-SM	Fall 2013	San Miguel (Howard's Fork)	B	Carbenaro Mine Adit Reclamation. Reduce or treat the contaminated water - heavy metals, principal contributor to Howard's Fork. Investigating what options exist to mitigate heavy metal loading.	San Miguel	Not Complete		Water Quality	EPA, Division of Water Safety, CDPHE, DRMS, private landowner	Source: Peter Mueller, Pat Willits	Project			
11-SM	Fall 2013	San Miguel (Naturita Creek)	NC	Naturita Creek Proposed ISF. Spawning habitat for flannelmouth sucker, bluehead sucker, and roundtail chub. BLM has collected preliminary data for an instream flow right. Could also protect agricultural lands and water rights to preserve existing flows. Current conservation easements and supportive landowners. ISF data collected and CWCB Appropriation; possible purchase/lease of ISF.	San Miguel	Not Complete		Native Warmwater Fish, Aquatic Habitat	BLM, CWCB, CPW, private landowners, San Miguel Co Open Space	Source: Roy Smith, BLM, Dave Foley, private landowners	Process			
12-SM	SWSI 2010	San Miguel (Howard's Fork)	B	Carribou Mine Tailings and Adit. Investigate how best to reclaim. Improvement of water quality.	San Miguel	Not Complete		Water quality	USFS, private landowner, DRMS, EPA, CDHPE	Source: Peter Mueller	Project			
13-SM	SWSI 2010	San Miguel	NC	Flow Protection for Area of Critical Environmental Concern. Flows to protect already designated ACEC values. Portion of section determined as wild suitability under Wild and Scenic.	San Miguel, Montrose	Not Complete			BLM, Wild and Scenic stakeholders, TNC, San Miguel County	Source: BLM, Jenny Russell				
14-SM	SWSI 2010	San Miguel	NC	Valley Floor River Channel Restoration. Valley floor restoration of historic river channel. Riparian habitat restoration. Flows to protect wetlands. Existing flows may be sufficient.	San Miguel	Not Complete		Riparian habitat, Aquatic habitat	Town of Telluride	Source: Telluride, Lance McDonald	Project			

San Miguel River Basin Draft IPP List Continued…

ID	Date	Sub Basin	NC/C/B	Description	County	Status	Remaining Steps	Need Addressed	IPP Contact Information: Sponsors	IPP Contact Information: Lead contact & Source of Info.	Project vs. Process	Project ready for implementation NOW?	Does the need exist today?	Already received some WSRA funding?
PROPOSED IPPs														
15-SM	SWSI 2010		NC	San Miguel Instream Flow. Identify non-consumptive need to support fisheries from CCC-ditch downstream to Calamity Creek in times when CCC-Ditch diverts most or all of the water. Identify willing lessor for 3 to 10 year paid lease of water.		Not Complete		Native Warmwater Fish, Aquatic Habitat	CPW, TNC, CWT, and others ass needed	Source: Peter Mueller				
16-SM	SWSI 2010	San Miguel	C	Tri-State Power Facility. Have adequate water rights for future demands but would need storage to firm the yield if plant is expanded. Need storage options.	Montrose	Not Complete		Industrial water supply	Tri-State Power Facility					
17-SM	SWSI 2010	San Miguel	C	Straw Dam. The dam is located immediately downstream of the existing Gurley Reservoir and could provide additional storage for M&I uses on Wrights Mesa. Designs have been prepared.	San Miguel	Not Complete			San Miguel Water Conservancy District (SMWCD)	Source: Steve Harris	Project			
18-SM	SWSI 2010	San Miguel	C	Town of Ophir. The Town of Ophir is investigating methods to provide for the long term water supply possibly including diversion and storage facilities.	San Miguel	Not Complete		Municipal water supply	Town of Ophir	Source: April Montgomery	Project			
19-SM	SWSI 2010	San Miguel	C	Town of Norwood. The Town of Norwood holds water rights on the San Miguel River to provide for future municipal water needs. Use of the water rights would involve a diversion from the river and a small storage facility.	San Miguel	Not Complete		Municipal water supply	Town of Norwood	Lead & Source: Patti Grafmyer	Project			
20-SM	SWSI 2010	San Miguel	C	Aldarosa Ranch & Homeowners Company. Have water rights and groundwater.	San Miguel	Not Complete		Municipal water supply	Aldarosa Ranch & Homeowners Co	Source: Helton & Williamsen				
21-SM	SWSI 2010	San Miguel	C	Norwood Water Commission. This project would be for municipal needs when growth takes place and infrastructure would be updated and the water system expanded to enable Norwood Water Commission to serve unincorporated Montrose County (Phase III, as called out by the NWC Master Plan). This would provide additional back-up to the existing 10 inch mainline from the water treatment plant to Norwood.	San Miguel, Montrose	Not Complete		Municipal water supply	Norwood Water Commission	Source: Patti Grafmyer Lead: Tim Lippert	Project			
22-SM	SWSI 2010	San Miguel	NC	Potential RICD. Important rafting/boating area. No protection of recreation flows currently exists. Area identified by BLM as suitable for recreation under Wild and Scenic process. Potential recreation in channel diversion, kayak park or protection of rafting flows.	San Miguel, Montrose	Not Complete		Recreational boating	San Miguel Whitewater Alliance, Telluride Outside, Jagged Edge, San Miguel County, BLM	Source: San Miguel Whitewater Alliance	Project			
23-SM	Apr-14	San Miguel	C	Norwood Lawn and Garden. The installation of a raw water irrigation system within Norwood for residents to use for outside watering. Norwood Water Commission would be able to utilize their 119 shares of water for this project and residents would use less treated water for outside use.	San Miguel	Not Complete		Municipal water supply (infrastructure)	Norwood Water Commission	Lead: Tim Lippert Source: Patti Grafmyer	Project			
24-SM	Apr-14	San Miguel	C	Town of Mountain Village. This project includes two components: 1) Installation of a connection waterline between two tanks to better supply water for fire protection; 2) Installation of 2 micro hydro generators in the systems.	San Miguel	Not Complete	Permitting has started, Construction	Municipal water supply	Mountain Village	Source & Lead: Finn Kjome	Project	Yes	Yes	No
25-SM	Apr-14	San Miguel	B	San Miguel Watershed Coalition. The Coalition works to "advance the ecological health and promote the economic vitality of the watershed through the collaborative efforts of the entire community. Our ultimate goal is to realize a watershed that is healthy in every respect while offering a sustainable and quality lifestyle for all who live in it. "The coalition periodically compiles and issues a watershed health assessment entitled the San Miguel Watershed Report Card.	San Miguel, Montrose	Ongoing		Water Quality, Riparian habitat, Aquatic habitat		Source & Lead: Linda Luther-Broderick	Process			
26-SM	May-14	San Miguel	NC	Tabeguache Creek Native Fish Barrier Removal Project. The project will remove existing barrier on the Tabeguache Creek in order to create passage for the native fish to move upstream, which will help protect and enhance habitat and restore populations of these native fish. The need for action is outlined in the Range-Wide Conservation Agreement and Strategy for three warmwater fish.	Montrose	Not Complete		Native warmwater fish	BLM, TNC, San Miguel Watershed Coalition	Source & Lead: Linda Luther-Broderick	Project	Yes	Yes	No
27-SM	Jun-14	San Miguel	NC	CCC-Ditch Fish Ladder Repair. This project will repair the scour hole below the CCC Ditch diversion dam and place boulders in a reverse shingled manner in order to improve and repair the fish ladder and to improve the passage over the dam for whitewater boaters.	San Miguel	Not Complete		Native fish, Recreation	BLM, Colorado Water Trust, San Miguel Watershed Coalition	Source & Lead: Linda Luther-Broderick	Project	Yes	Yes	No
28-SM	Jun-14	San Miguel	C	Alternate Main Line to Norwood. Additional 14 inch main line from the Water Treatment Plant to the 200,000 gallon tank south of Norwood (Phase I, as called out by the NWC Master Plan).	San Miguel	Not Complete		Municipal water supply	Norwood Water Commission	Source: Patti Grafmyer Lead: Tim Lippert	Project			
29-SM	Jun-14	San Miguel	C	Up-grade and Loop Water Lines. Up-grade the undersized water lines, add a 100,000 gallon portable water tank and loop the water line on the north east of Norwood (Phase II, as called out by the NWC Master Plan).	San Miguel	Not Complete		Municipal water supply	Norwood Water Commission	Source: Patti Grafmyer Lead: Tim Lippert	Project			

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1	**COMPLETED IPPs**							**Remaining Steps**	**Need Addressed**	**IPP Contact Information**		**Project vs. Process**
2	**ID**	**Date**	**Sub Basin**	**NC/C/B**	**Description**	**County**	**Status**			**Sponsors**	**Lead contact & Source of Info.**	
3	1	SWSI 2010	San Juan	NC	Upper Colorado and San Juan Endangered Fish Recovery Programs. Federal program affecting water management throughout Upper Colorado and San Juan River Basins; both basins operated under Programmatic Biological Opinion (PBO) allowing depletions under a cumulative cap without individual consultation on each project. San Juan program extended through 2023. A process to provide certainty for meeting consumptive needs.	Western Slope	Completed				Source: DG (CPW)	
4	2	SWSI 2010	San Juan	NC	Rio Blanco River Project. The Project is an environmental enhancement. The project is completed; the entire planned reaches have been restored, reports submitted to all grant agencies and ended when the LBPOA and SJWCD published "A River Once More" by Val Valentine in 2010.	Archuleta	Completed		water quality, habitat restoration	LBPOA, SJWCD		Project
5	3	SWSI 2010	San Juan	NC	San Juan River. River Protection Workgroup leading local process to involve the public in protecting natural values while allowing water development to continue. It is a stakeholders process to address Wild & Scenic suitability and determine appropriate protection tools. Consensus that the following tools could be acceptable as alternatives to Wild and Scenic Suitability/Eligibility: Planning and Zoning Districts, Deed Restrictions in Exchange for Release of WSR, Local Community Council, Mineral Withdrawal, and County Planning.	Archuleta, Hinsdale, Mineral	Completed		Habitat quality, water quality, recreation	SWCD, SJCA, TU, TWS, SUIT, DWR, CWCB, CPW, 4 Corners Backcountry Horseman, Private landowners and citizens	Source: Ann Oliver	Process
6	4	SWSI 2010	Piedra	NC	Stolsteimer Creek #1. 3 miles of channel and riparian habitat improvements	La Plata	Completed 2005			SUIT, USEPA		Project
7	5	SWSI 2010	Piedra	NC	Stolsteimer Creek #2. 0.3 miles of channel and riparian habitat improvements	La Plata	Completed 2008			SUIT, USFWS		Project
8	6	SWSI 2010	Piedra	NC	ME&M Ditch. 400 ft. of bank stabilization and habitat enhancement including 5 J-hooks	La Plata	Completed 2004-2006			SUIT, BOR		Project
9	7	SWSI 2010	Piedra	NC	Piedra River Restoration. Piedra River Phase I and Phase II, 2.25 miles of channel and riparian habitat improvements	La Plata	Completed 2000			SUIT, BOR		Project
10	8	SWSI 2010	Piedra	NC	Piedra River Restoration. Piedra River Phase III, 0.5 miles of channel and riparian habitat improvements	La Plata	Completed 2007			SWWCD, SJCA, TU, TWS, SUIT, CDWR, CWCB, USFS, Private landowners and citizens		Project
11	9	SWSI 2010	Piedra	C	Aspen Springs Water Depot. The Metro District needs a water hauling station to reduce the travel time for existing residents.	Archuleta	Completed Fall 2013		Municipal water supply (infrastructure and water quantity)	Aspen Springs Metro District	Lead & Source: Carrie Lile	Project
12	10	SWSI 2010	Piedra	NC	Stolsteimer Creek #3.Channel and riparian habitat improvements between Aspen Springs and confluence with the Piedra River.	La Plata	Completed		Habitat quality (riparian and channel)	SUIT, NRCS, San Juan Conservation District	Lead & Source: Jerry R. Archuleta	Project
13	11	SWSI 2010	Piedra	B	River Protection Workgroup. The Workgroup is leading local process to involve the pubic in protecting natural values while allowing water development to continue. Watershed values are defined by the collaborative workgroup and include outstandingly remarkable values: scenery, fish, geology, archeology, and recreation.	Archuleta & Hinsdale & Mineral	Completed			SWCD, SJCA, TU, TWS, SUIT, DWR, CWCB, USFS, SJPL, 4 Corners Backcountry Horseman, Private landowners and citizens	Lead: River Protection Work group Source: Ann Oliver	Process
14	12		Pine	C	Town of Bayfield. Need storage to firm existing water rights. Only other option is to lease water from Vallecito Reservoir.	La Plata	Completed		Municipal water supply (water quantity)	Town of Bayfield	Source: Steve Harris, Janice Sheftel, John Porter	Both
15												

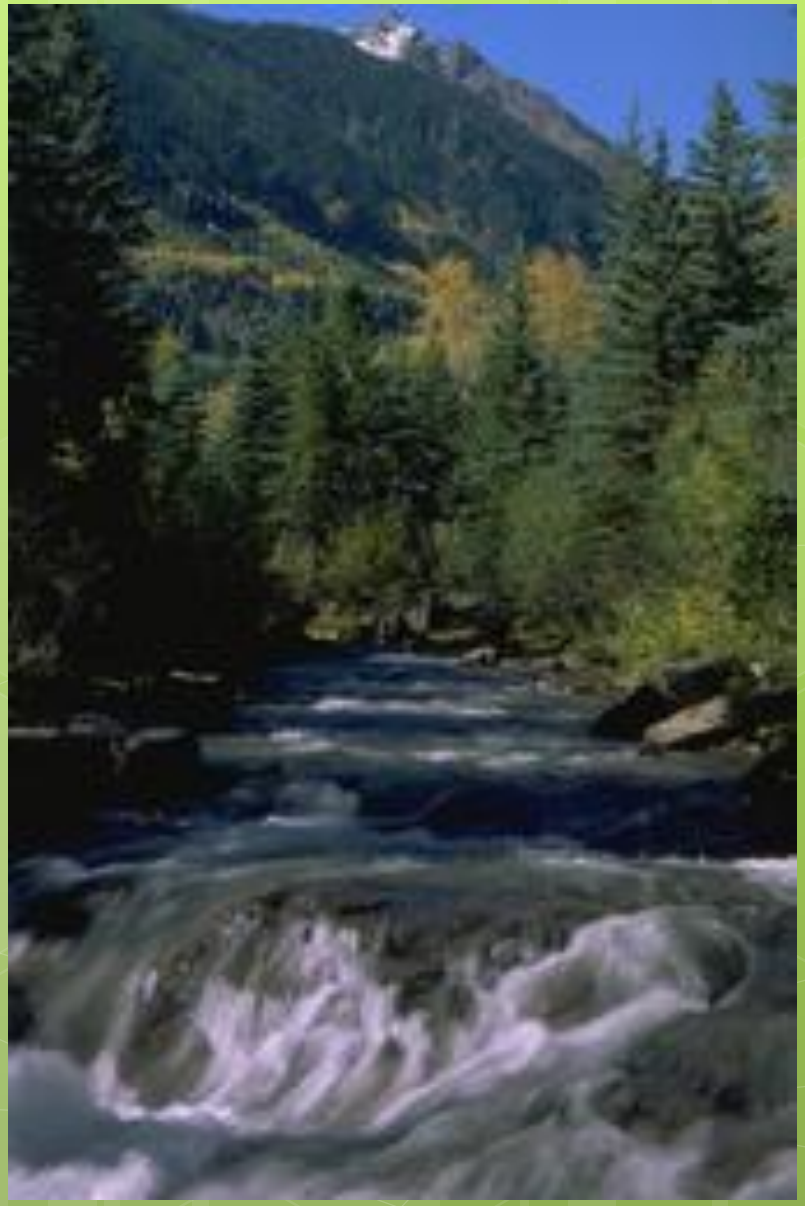
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16		**COMPLETED IPPs Continued…**										
17	**ID**	**Date**	**Sub Basin**	**NC/C/B**	**Description**	**County**	**Status**	**Remaining Steps**	**Need Addressed**	**IPP Contact Information** **Sponsors**	**Lead contact & Source of Info.**	**Project vs. Process**
18	13	SWSI 2010	Pine	C	Municipal Users upstream of Vallecito Reservoir. There is a large number of homes upstream of Vallecito Reservoir that are currently served by wells. LAPLAWD will not serve this area. Augmentation water, primarily from Vallecito is necessary for these wells to utilize water in priority.	La Plata	Completed			Unincorporated La Plata County upstream of Vallecito Dam; Happy Scenes Water System	Source: Steve Harris	Project
19	14	SWSI 2010	Pine, Florida, Animas, Piedra	C	La Plata Archuleta Water District was formed in August of 2008. A Board of Directors is currently seated and making plans for a mill levy election needed to finance a water distribution system for southeast La Plata County. A Master Plan has been prepared to describe the facilitates and water sources.	La Plata	Completed. Mill levy to fund facilities has been approved by voters. Pipelines to serve customers are under construction.			La Plata Archuleta Water District	Lead & Source: Ed Tolen, GM	
20	15	SWSI 2010	Pine	NC	Beaver Creek Bank Stabilization and Habitat Enhancement. 200 ft. of bank stabilization and habitat enhancement including 2 arm vane weirs, 3 J'hooks, and construction of a backwater.	La Plata	Completed 2010			SUIT, BOR		
21	16	SWSI 2010	Pine	NC	Beaver Creek, 2000 feet of channel work and riparian restoration	La Plata	Completed Spring 2010			SUIT, USEPA		
22	17	SWSI 2010	Pine	NC	Dry Creek, 3000 feet of channel work and riparian restoration	La Plata	Completed Fall 1999			SUIT, USEPA		
23	18	SWSI 2010	Pine	NC	Ignacio Creek, 2500 feet of channel work and riparian restoration	La Plata	Completed Spring 2008			SUIT, USEPA		
24	19	SWSI 2010	Pine	NC	Rock Creek I, 4000 feet of channel work and riparian restoration	La Plata	Completed Spring 2001			SWWCD, SJCA, TU, TWS, SUIT, CDWR, CWCB, USFS, Private landowners and citizens		
25	20	SWSI 2010	Pine	NC	Rock Creek II, 2500 feet of channel work and riparian restoration	La Plata	Completed Spring 2003			SWWCD, SJCA, TU, TWS, SUIT, CDWR, CWCB, USFS, Private landowners and citizens		
26	21	SWSI 2010	Pine	NC	Rock Creek IV, 3500 feet of channel work and riparian restoration	La Plata	Completed Spring 2006			SWWCD, SJCA, TU, TWS, SUIT, CDWR, CWCB, USFS, Private landowners and citizens		
27	22	SWSI 2010	Pine	NC	Naranjo, 1100 ft. of bank stabilization and habitat enhancement including 6 J-hooks, construction of an earthen berm and backwater	La Plata	Completed 2008			SWWCD, SJCA, TU, TWS, SUIT, CDWR, CWCB, USFS, Private landowners and citizens		
28	23	SWSI 2010	Pine	NC	Pine River #1, 1 mile of channel and riparian habitat improvements	La Plata	Completed 2005			SUIT, BOR		
29	24	SWSI 2010	Pine	NC	Pine River #2, 0.5 miles of channel and riparian habitat improvements	La Plata	Completed 2006			SUIT, BOR		
30	25	SWSI 2010	Pine	NC	Pine River #3, 0.5 miles of channel and riparian habitat improvements	La Plata	Completed 2009			SWWCD, SJCA, TU, TWS, SUIT, CDWR, CWCB, USFS, Private landowners and citizens		
31	26	SWSI 2010	Pine	NC	Watts, 850 ft. of bank stabilization and habitat enhancement including 8 bendway weirs, 1 J-hook, and 1400 ft. of livestock exclusion fence	La Plata	Completed 2010			SUIT, BOR		
32	27	SWSI 2010	Pine	NC	Pine River Protection Workgroup. River Protection Workgroup leading local process to involve the public in protecting natural values while allowing water development to continue. Watershed values are defined by the collaborative workgroup and include the outstandingly remarkable values of scenery and recreation.	Hinsdale & La Plata	Completed			SWWCD, SJCA, TU, TWS, SUIT, CDWR, CWCB Private landowners and citizens	Source: Ann Oliver	Process
33	28		Animas	C	Purchase of ALP Available Water Supply. CWCB had an option to obtain approximately 10,400 AF of water from the Animas La Plata Project. SWCD sent a letter to CWCB recommending the water be purchased and maintained for use in Colorado. CWCB is currently studying the potential needs for the water. CWCB studied the potential needs for the water and completed the purchase.	La Plata	Completed	None			Colorado Water Conservation Board, supported by Southwestern Water Conservation District (SWCD)	Lead contact & Source: SWCD

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34	**COMPLETED IPPs Continued…**							**Remaining Steps**	**Need Addressed**	**IPP Contact Information**		**Project vs. Process**
35	**ID**	**Date**	**Sub Basin**	**NC/C/B**	**Description**	**County**	**Status**			**Sponsors**	**Lead contact & Source of Info.**	
36	29		Animas (Hermosa)	NC	Hermosa Creek River Protection Workgroup. The Workgroup is leading local process to involve the public in protecting natural values while allowing water development to continue. Watershed values are defined by the collaborative workgroup and outstandingly remarkable values include recreation and Cutthroat Trout.		Completed	**Completed process, and identified additional IPPs**		SWWCD, SJCA, TU, TWS, SUIT, CDWR, CWCB Private landowners and citizens	Source: Ann Oliver	Process
37	30	SWSI 2010	Animas	NC	Animas Watershed Partnership. Animas Watershed Partnership contracting preparation of Animas Watershed Based Plan for entire river - CO and NM, with focus on identifying sources of and reducing non-point source pollutants. Water quality protection and/or improvement for all uses, including aquatic habitat and recreation.	La Plata	Plan completed and priorities identified			City of Durango, SJCA, SUIT, SWCD, TU 5 Rivers Chapter, Citizens	**Lead & Source: Ann update!**	Process
38	31	SWSI 2010	Animas	NC	Animas River Basin Creek In-Channel Habitat Restoration. Right name? Animas River Basin Creek, 0.5 miles of channel and riparian habitat improvements		Completed 2004			SWWCD, SJCA, TU, TWS, SUIT, CDWR, CWCB, USFS, Private landowners and citizens	Source: SUIT Wildlife	
39	32	SWSI 2010	Animas	NC	Animas In-Channel Habitat Enhancement. Animas River High Flume, 1.4 miles of channel and riparian habitat improvements		Completed 2004,2006			SWWCD, SJCA, TU, TWS, SUIT, CDWR, CWCB, USFS, Private landowners and citizens	Source: SUIT Wildlife	
40	33	SWSI 2010	Animas	NC	Silverton to Baker's Bridge Animas River Protection Work Group. River Protection Workgroup leading local process to involve the public in protecting natural values while allowing water development to continue. Watershed values are defined by the collaborative workgroup and include outstandingly remarkable values scenery, geology, recreation, cultural/historical, wildlife, and ecological.	San Juan, La Plata	Completed (June 2013)		Scenery, recreation, ecology, and cultural/historical values	SWCD, SJCA, TU, TWS, SUIT, CDWR, CWCB, DWR, San Juan County, Four Corners River Sports, Animas River Stakeholders, Private landowners and citizens	Source: Ann Oliver	Process
41	34	SWSI 2010	Animas	C	City of Durango. Have adequate water rights and negotiating for Animas-La Plata Project Water to increase overall storage.		**Completed. ALP water purchase completed**			City of Durango	Durango	Process
42	35	SWSI 2010	Animas	C	La Plata Archuleta Water District. LAPLAWD has sent a letter to CWCB requesting a portion of the ALP water. Obtaining a portion of this water is critical to serving LAPLAWD.	La Plata	Completed		Municipal water supply (water quantity)	La Plata Archuleta Water District	Lead & Source: Ed Tolen, GM	Process?
43	36	SWSI 2010	Animas (Lightner Creek)	NC	Animas Watershed Partnership (Lightner Creek Workgroup). Heavy sediment loading degrading channel health and causing impacts to private property owners and aesthetic water quality. Priority sediment loading sites have been identified - funding was sought in FY 2011.	La Plata	Completed			Animas Watershed Partnership, San Juan RC&D, CO NPS, San Juan Watershed Group, SUIT, CWCB	Lead & Source: Ann Oliver	Project
44	37	SWSI 2010	Animas (Florida)	NC	Florida Source Water Protection Plan.	La Plata	Completed			City of Durango, Edgemont Ranch Metro District, Forest Groves Home Owners, El Rancho Florida Homeowners, Durango-La Plata Regional Airport, La Plata County, SJPL, CRWA, COWQCC	Source: Edd Balch, CRWA	Process?
45	38	SWSI 2010	Animas (Cascade Creek)	NC	Cascade Creek Mitigation. Mitigate impacts to flows incurred on Cascade Creek by Tacoma Power Plant. FERC relicensing process is completed and mitigation measures are being implemented.	La Plata	Completed			Xcel, SWCD, SJPL, SJCA, TU, DWCD, MVIC	Source: Bruce Whitehead	
46	39	SWSI 2010	Animas	C	Town of Silverton. The Town of Silverton with assistance from SWCD has applied for a water right to provide for the future water needs of the Town. The application is pending with negotiations with opposers. Implementation of the eventual decree will result in recommended IPPs.	San Juan	Completed, water right has been decreed.	Water is decreed; maintain diligence; develop IPPs to make use of water		SWCD and Town of Silverton	Source: SWCD	
47	40	Jul-13	Animas	NC	Animas River Stakeholders Group. Currently, no water needed, although water rights have been purchased in the past. MAYBE MAKE THE DESCRIPTION MORE ABOUT THE GROUP?	San Juan	**Complete!**			SWWCD, SJCA, TU, TWS, SUIT, CDWR, CWCB, USFS, Private landowners and citizens		Process?
48	41	Dec-13	Dolores	C	DWCD and UMUT Joint Study. DWCD and the UMUT are conducting a reconnaissance water study, with partial CWCB funding, to evaluate potential water supplies and alternative facilities to serve the water needs of DWCD and UMUT now and into the future. The study is approximately half completed and will recommend IPPs to be implemented.	Montezuma	Completed	Pursue Study's recommendations	Water Supply	DWCD, UMUT	Lead & Source: Carrie Lile	Process

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49	**COMPLETED IPPs Continued…**							**Remaining Steps**	**Need Addressed**	**IPP Contact Information**		**Project vs. Process**
50	**ID**	**Date**	**Sub Basin**	**NC/C/B**	**Description**	**County**	**Status**			**Sponsors**	**Lead contact & Source of Info.**	
51	42	SWSI 1, SWSI 2010	Dolores	C	Rico Alluvial Pipeline Water Supply Project. The project would provide a new more reliable water source for Rico. A Preliminary Engineering Report has been prepared describing the new well and 2 mile pipeline. An agreement with CWCB to address Instream flow right is imminent. Rico is now within the DWCD. The Project may provide adequate water through 2050 depending on growth in Rico.	Dolores	Completed			Rico	Source: Steve Harris	
52	43	SWSI 2010	Dolores	C	Dove Creek Lawn and Garden. Dove Creek purchases water from Dolores Water Conservancy District. A lawn and garden raw water system has been completed in Dove Creek.	Dolores	Completed		Municipal water supply	Town of Dove Creek, DWCD	Source & Lead: DWCD	Project
53	44	SWSI 2010	McElmo	C	Lawn and Garden Water. There is a demand for lawn and garden water within DWCD for small tracts of land that do not currently have a water source. Raw water distribution facilities have been constructed in some locations but additional facilities are needed.	Montezuma, Dolores	Completed	Ongoing	Municipal water supply	DWCD	Lead and Source: DWCD	Project
54	45	Jul-13	Dolores	NC	Taylor Creek Project and Tenderfoot Ranch Project. Erosion control, breeding habitat, channel stabilization, and habitat enhancement for trout. Tenderfoot Ranch is the small restoration completed in 2012. Taylor Creek was an erosion control project completed in 2013.	Dolores, Montezuma	Completed		River health, fisheries	TU, USFS, private landowners	Source: Ann Oliver (check with Matt Clark)	
55	46	2014	Dolores	B	Trout Unlimited and Redburn Ranch Diversion. Replace a cobble push-up diversion dam and associated irrigation infrastructure to improve operation and to allow fish and sediment passage and promote channel stability.	Montezuma	Completed		agriculture, aquatic habitat, channel function, riparian function, fisheries	Trout Unlimited and Redburn Ranch	Matt Clark, TU	Project
56	47		San Miguel	NC	CWCB declared intent to appropriate 1/2011. Montrose County has provided additional information on flow/ habitat relationships that is being reviewed by CWCB staff.		Completed, ISF in place			CWCB, BLM, CPW, Montrose County		
57	48	SWSI 2010	San Miguel	C	UMETCO Water Rights Transfer. Joint study in 2008 by SWCD and CWCB to determine best use of UMETCO (Uravan) water rights. Uravan water trust 1987, MOU CWCB local governments 1991, historic use (Armbuster Report) 2005.	Montrose	Completed		Water supply	SWCD, CWCB, Montrose County, Naturita, Nucla	Source: BRT feedback	Process
58	49	SWSI 2010	San Miguel	B	Future San Miguel County Demands. San Miguel County, with assistance from SWCD is evaluating the future water needs in the San Miguel basin in the County and the IPP's to meet the needs. A report and water rights application are planned. IPP's will be identified and recommended as part of a future water right.	San Miguel	Completed		Potentially all needs possible	SWCD, San Miguel County	Source: SWCD	Process
59	50		San Miguel (Howard's Fork)	NC	Mine Tailings Reclamation. USFS imitating tailings removal from riparian area east of Ophir.	San Miguel	Completed			USFS, SMWC, Town of Ophir, TLR, San Miguel Conservation Foundation, GOCO	Source: Peter Mueller, Pat Willits	
60	51	SWSI 2010	San Miguel	C	Mustang Water Authority. Mustang Water Authority formed to provide water to Nucla and Naturita.	Montrose, San Miguel	Completed		Municipal water supply	Nucla, Naturita	Source: Buckhorn Geotech Report on Mustang Water Authority	Process

APPENDIX B

- **PUBLIC OUTREACH MEETINGS BIP POWERPOINT PRESENTATION**
- **PUBLIC OUTREACH MEETINGS CWP POWERPOINT PRESENTATION**
- **PAGOSA SPRINGS PUBLIC MEETING NOTES**
- **BAYFIELD PUBLIC MEETING NOTES**
- **MANCOS PUBLIC MEETING NOTES**
- **PLACERVILLE PUBLIC MEETING NOTES**
- **SUB-BASIN MAP FOR OUTREACH AND ASSOCIATED SAMPLE OF BASIN IPPS BULLET LIST**
- **SUMMATION OF PUBLIC COMMENTS**



DRAFT Southwest Basin Implementation Plan

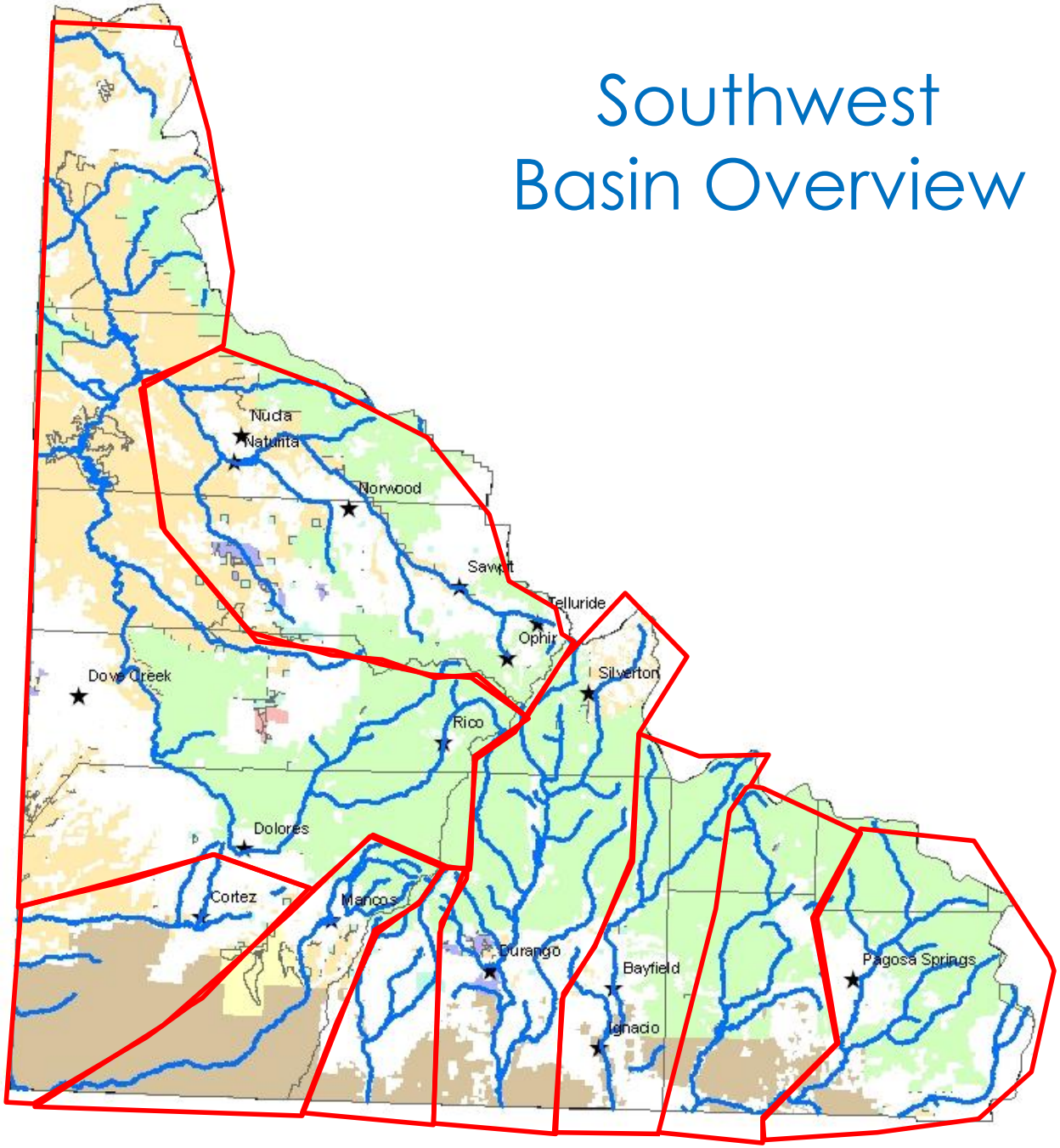
SOUTHWEST BASIN ROUNDTABLE

December 9, 2014

Southwest Basin Implementation Plan

- Basin Overview
- Plan Development and Approach
- Highlights
  - Goals and Measureable Outcomes
  - Opportunities and Constraints
  - Identified Projects and Processes
  - Strategies

Southwest Basin Overview



Plan Development



Approach

















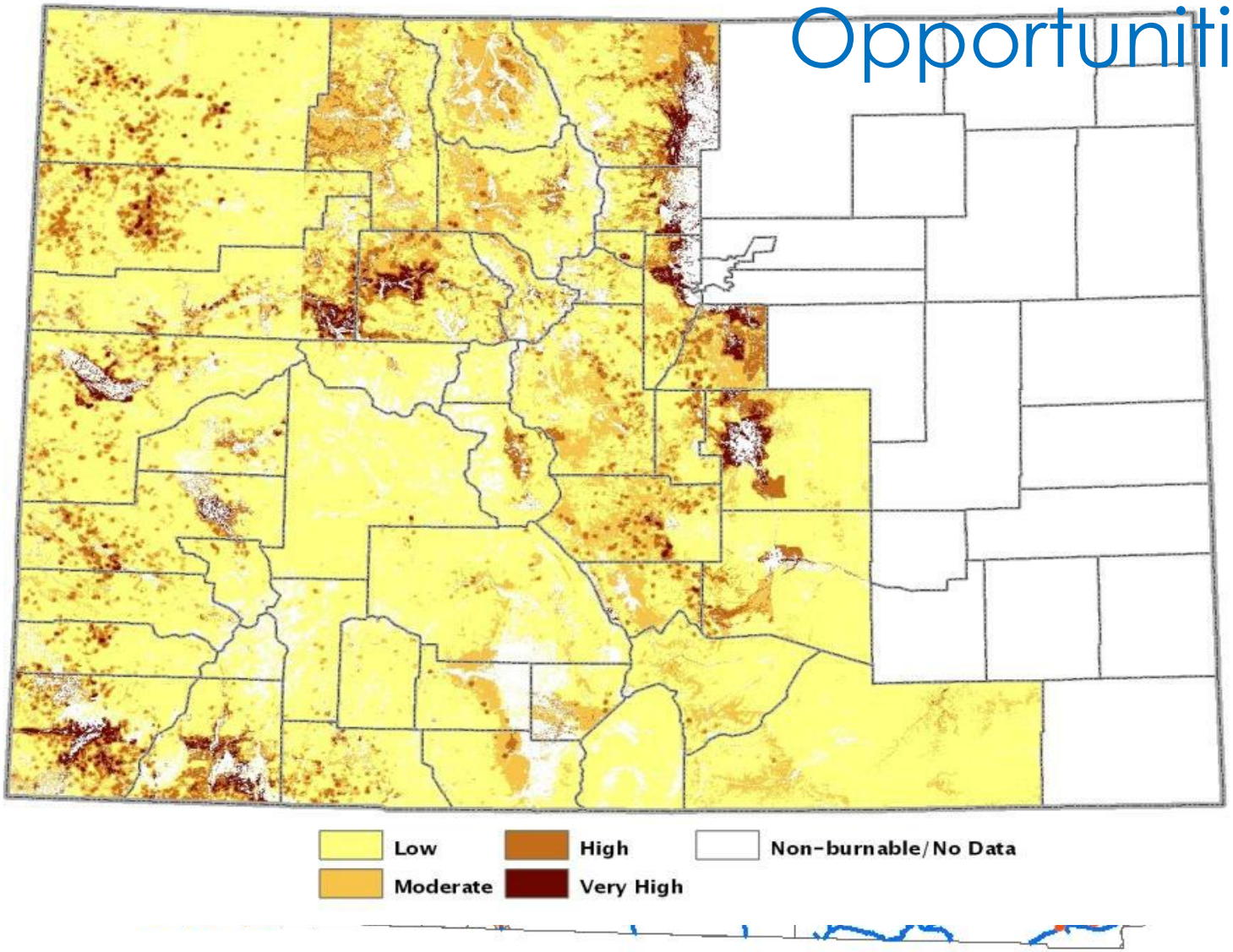
Goal Themes

A. Balance All Needs and Reduce Conflict
B. Maintain Agricultural Water Needs
C. Meet Municipal and Industrial Water Needs
D. Meet Recreational Water Needs
E. Meet Environmental Water Needs
F. Preserve Water Quality
G. Comply with CO River Compact & Manage Risk

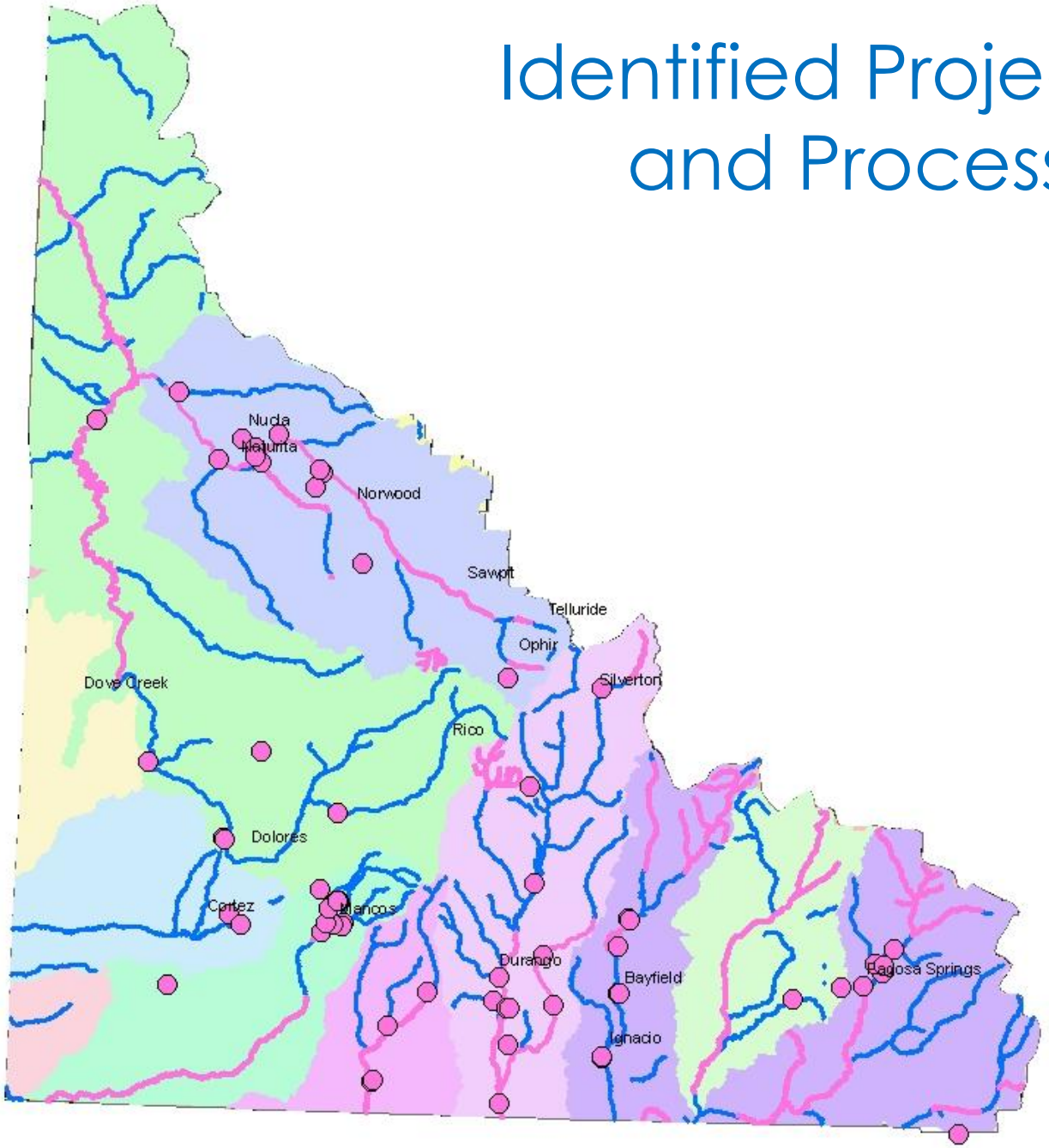
Measureable Outcomes



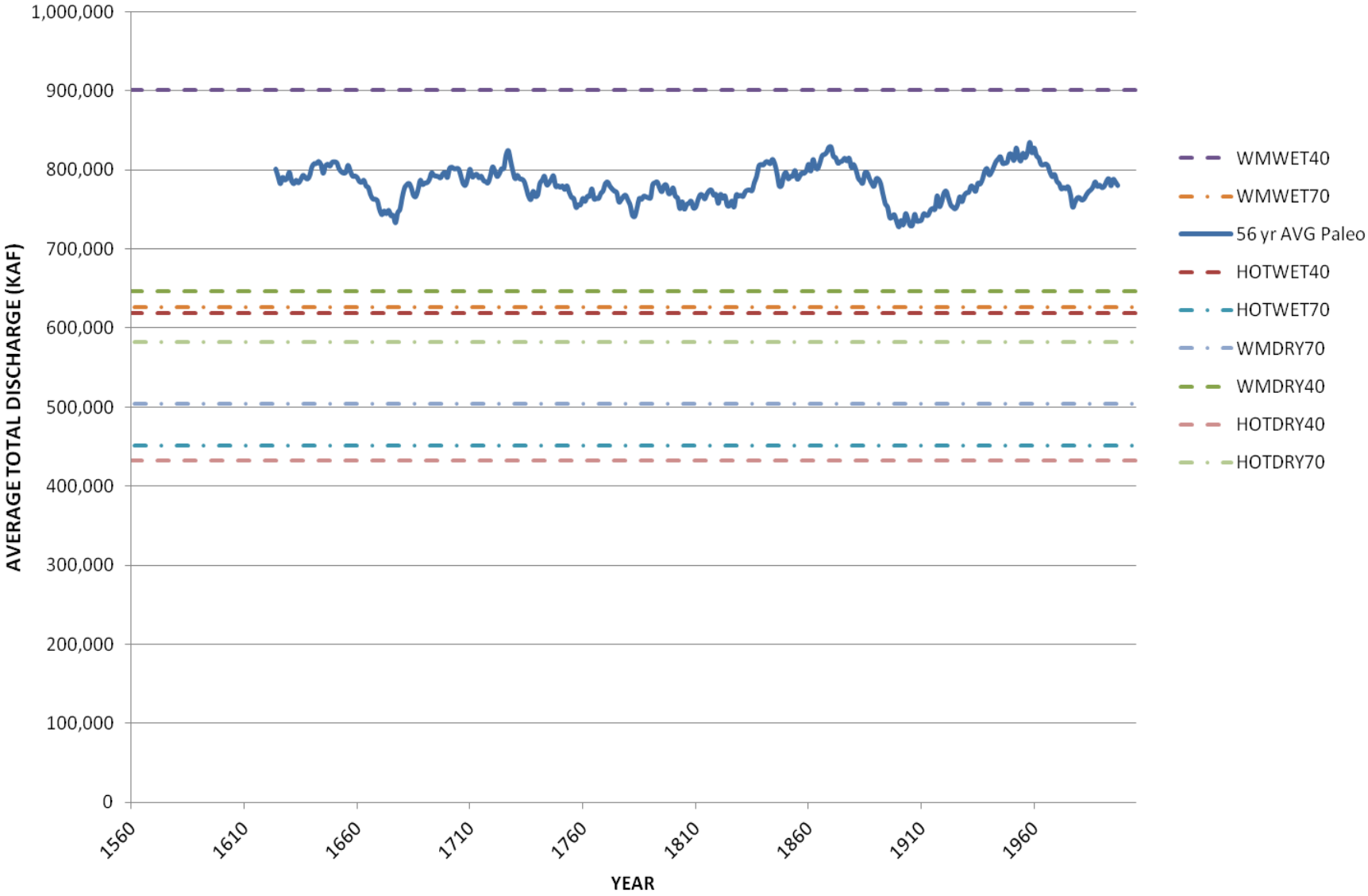
Constraints and Opportunities



Identified Projects and Processes



Modeled Dolores R 56-Year Average Flow - Paleo Reconstructions and Average CRWAS Projections



Some Local IPPs

San Miguel River Basin (29)

- San Miguel Watershed Coalition
- Town of Norwood Municipal Supply
- Montrose County Firming Project
- Instream Flows
- Enlargement of Gurley Reservoir
- Lone Cone Reservoir Enlargement
- CCC Ditch Fish Passage
- Woods Lake Colorado River Cutthroat Trout Refuge
- Carbenaro Mine Adit Reclamation
- Tri-State Power Facility Industrial Supply
- Aldarosa Ranch & Homeowners Company
- Potential RICD
- Town of Mountain Village Supply







Some Local IPPs

Dolores River Basin (22)

- Dolores River Dialogue
- Dolores River Restoration Partnership
- McPhee Reservoir Aquatic Nuisance Species Protection
- Augmentation upstream of McPhee Reservoir
- Upper Plateau Storage Reservoir
- Proposed Instream Flow on the Dolores River
- Paradox Valley Salinity Control
- TU& MLC Upper Dolores River Assessment
- Upper Dolores River Recreation Access
- Diversion Structure Renovation near Gateway







Strategies: Meeting Statewide Water Needs

- SWBRT identified 8 Factors to be met in order to consider a TMD

- SWBRT recommends that the State develop and evaluate at least one alternative to a TMD



Strategies: Partnerships

- Use cooperation and negotiation to limit conflicts between state, tribal and federal policies, laws and management.



- Continue collaboration on multi-purpose projects.
- Coordinate with Tribal partners to support implementation of the Tribal Settlement

Strategies: Education

- More information and dialogue:
  - water conservation and reuse
  - agricultural water sharing
  - recreational uses
  - water quality
  - watershed health



Strategies: Funding

- Great potential to leverage Water Supply Reserve Account funds with other sources (private, NRCS, etc)



- "Bundling" projects
- Recommendations:
  - WSRA should not be use it or lose it
  - Dedicated funding sources
    - grass buy back
    - agricultural efficiencies
    - local water quality monitoring efforts
    - recreational/ environmental data needs

Strategies: Address Data Needs

- Evaluate environmental and recreational gaps
- Evaluate needs of non-public water supply systems
- Evaluate Industrial water uses and needs
- Collaborate to develop innovative tools to address gaps
- Update SWSI 2010 data



Meeting our Goals

Goal Themes	Supporting IPPs
A. Balance all needs	29
B. Agricultural	10
C. M & I	42
D. Recreation	10
E. Environmental	41
F. Water Quality	6
G. Compact/Risks	7





Long Hollow Reservoir Construction
(La Plata River)



Recreational In-Channel Diversion Construction
(Animas River)

Federal-State-Tribal Language

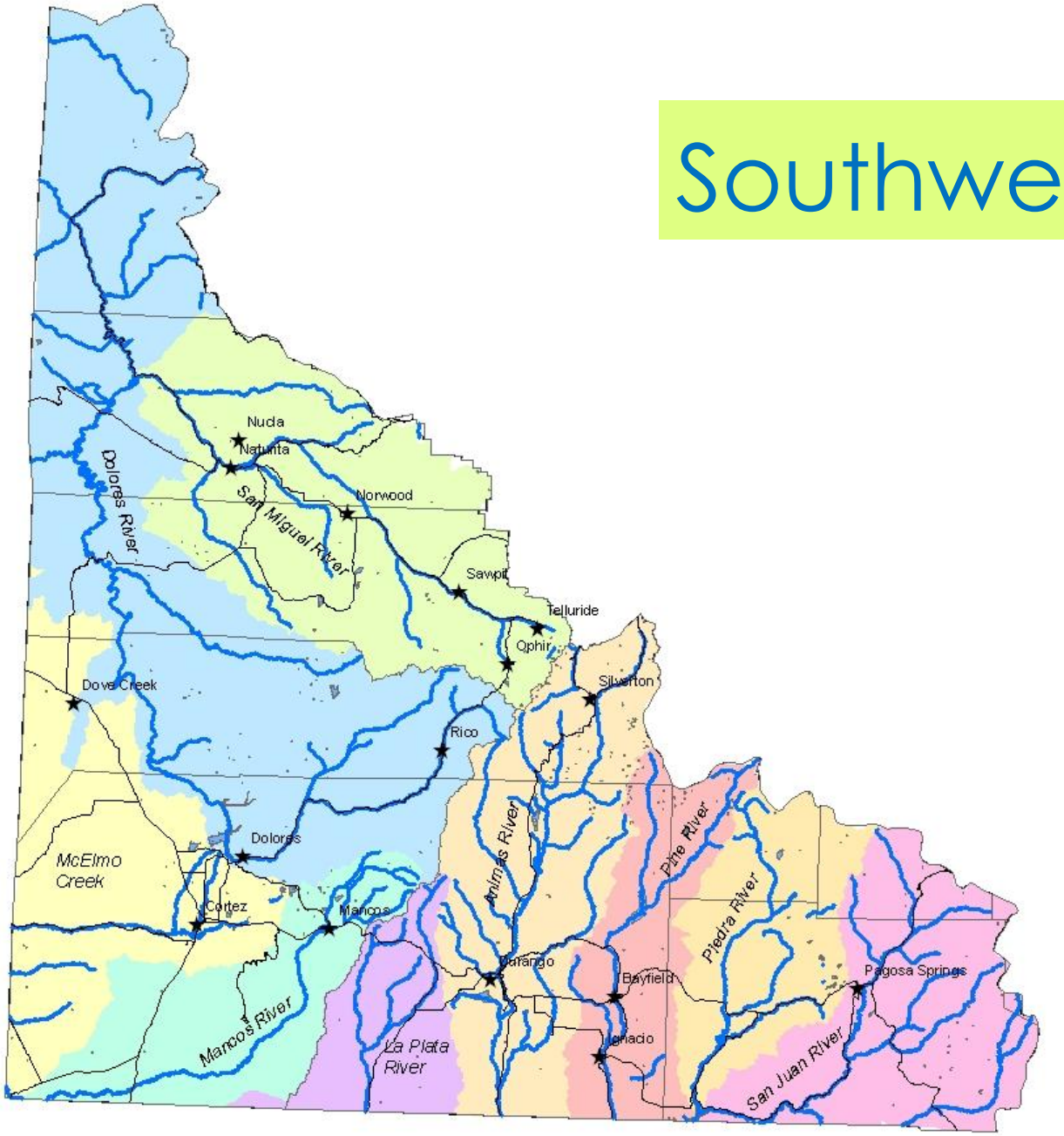
In Colorado, the authority to establish water policies of the state, determine the beneficial uses of the water resources, and the administration of water rights pursuant to the Doctrine of Prior Appropriation fall under the jurisdiction of state government. It is recognized that there is a significant amount of land administered by the federal government in Colorado, which creates the potential for conflicts between state and federal laws and policies. Congress and federal agencies have a long standing deference to state water allocation systems, and Colorado continues to promote state-federal cooperation to avoid contentious water rights issues. Federal policies and actions could affect existing and future water supplies and planning efforts in Southwestern Colorado.

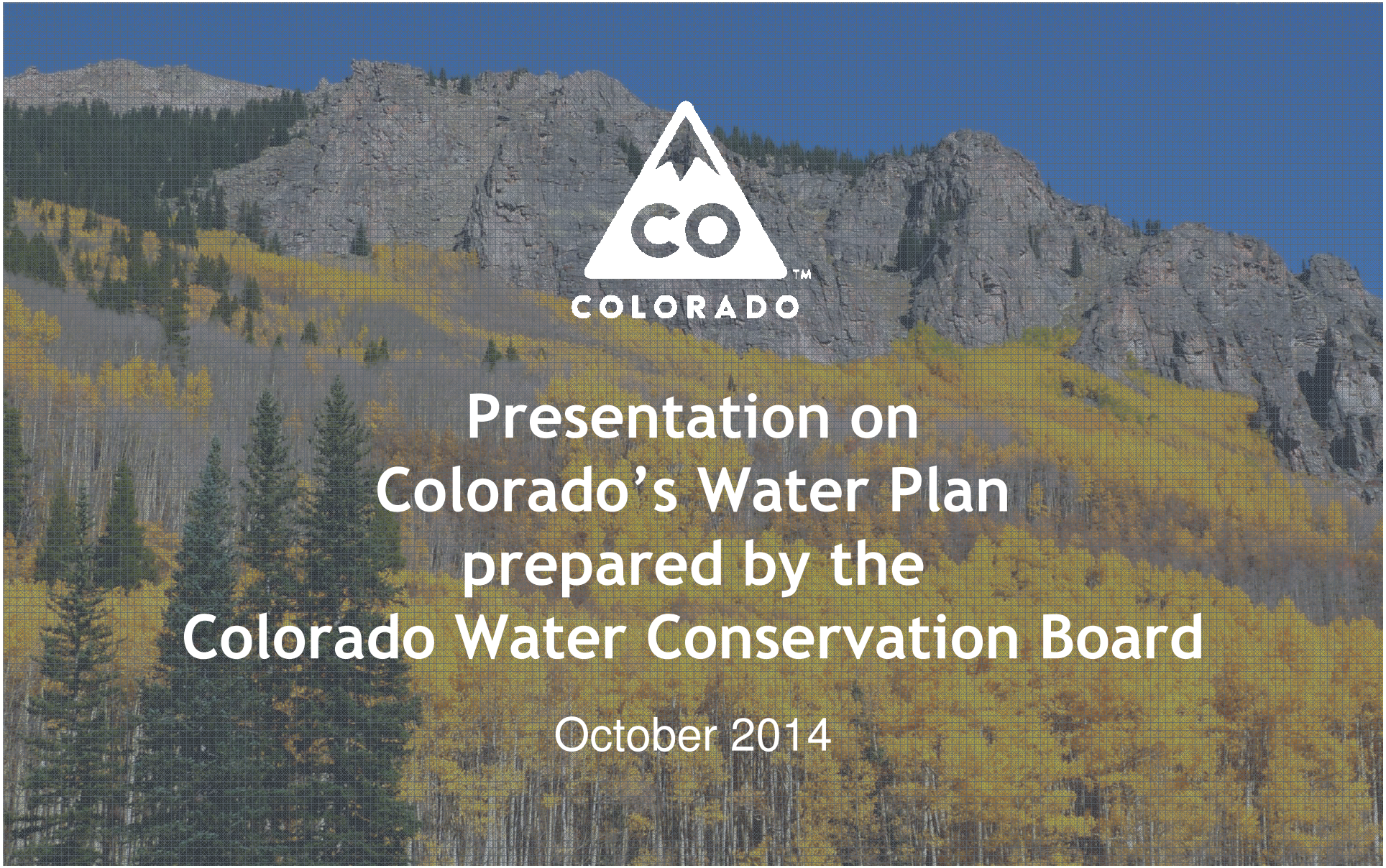
Therefore, the Roundtable supports Colorado's system of water rights administration and allocation and the full recognition and use of tribal rights under the Colorado Ute Indian Water Rights Settlement. The Roundtable also encourages and supports creative solutions sought through collaborative efforts, negotiated settlements, and strengthening the use of State-Federal MOUs, to limit conflicts between state, tribal and federal policies, laws and land management plans. Maintaining opportunities that allow for management solutions that provide for multiple beneficial uses and are protective of environmental and recreational values are critical for the planning and strategic development of the water resources in the State of Colorado.

Identified Projects and Processes

- Water sources
- Hydropower on existing canals
- Geothermal use
- Habitat restoration
- In Stream Flow proposals
- Education
- Recreational Education and/or Access
- Storage
- Ag Diversions and Fish Passage
- Efficiencies for delivery systems

Southwest Basin





Presentation on Colorado's Water Plan prepared by the Colorado Water Conservation Board

October 2014

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

COLORADO'S WATER PLAN

Water Supply Planning for the Future

1. Colorado's Water Plan
2. Basin Roundtables
3. Statewide Water Supply Initiative (SWSI)
4. How the public can get involved

COLORADO

May 2013 Governor's Executive Order Directed CWCB to Develop a Plan That



Reflects Colorado's values



Utilizes the work of the IBCC and Basin Roundtables

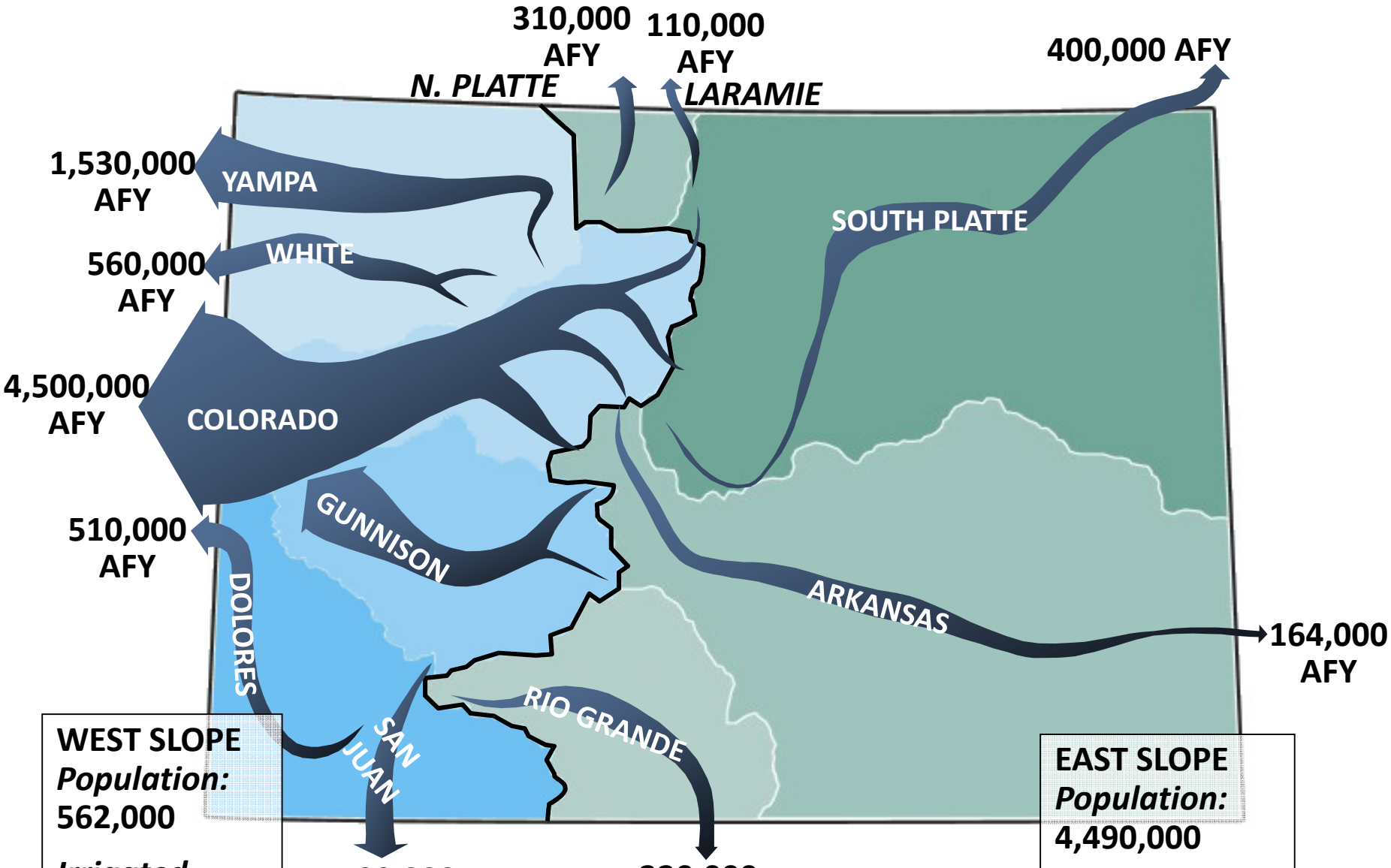


Aligns projects, studies, funding



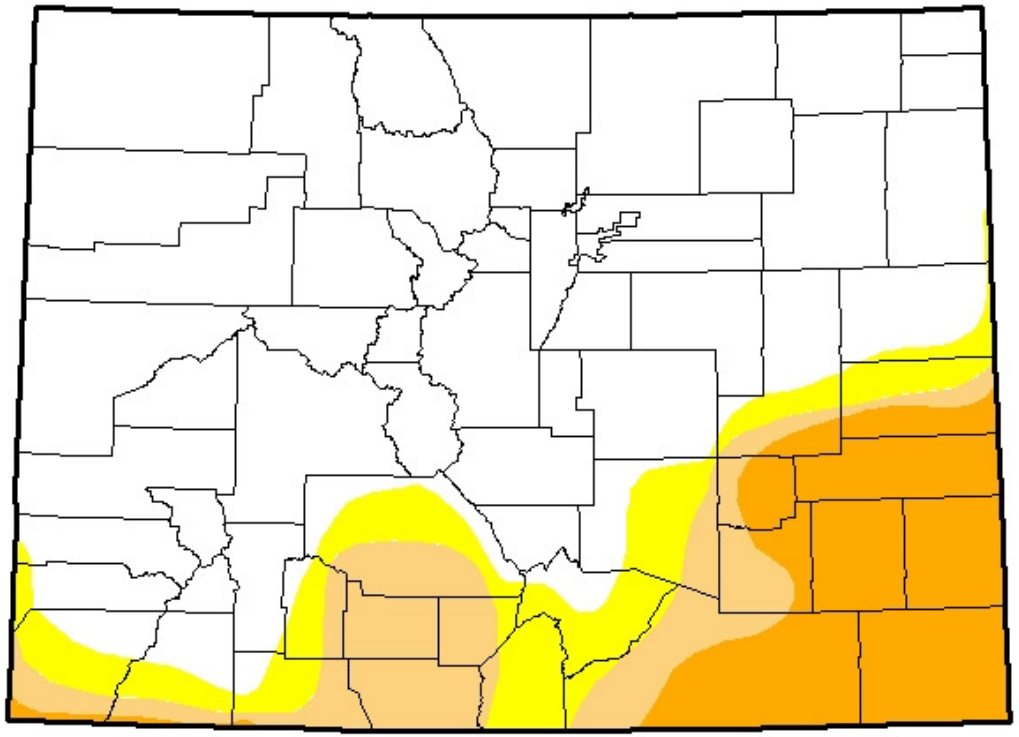
More efficient project permitting

Colorado Population, Irrigated Acres and River Flows



U.S. Drought Monitor

Colorado



November 11, 2014

(Released Thursday, Nov. 13, 2014)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	70.00	30.00	21.26	12.26	0.00	0.00
Last Week *11/4/2014*	69.92	30.08	21.28	12.26	0.00	0.00
3 Months Ago *8/12/2014*	59.90	40.10	26.95	15.58	2.67	0.00
Start of Calendar Year *12/31/2013*	32.04	67.96	22.33	13.56	4.01	1.47
Start of Water Year *9/30/2014*	68.96	31.04	22.94	13.82	2.31	0.00
One Year Ago *11/12/2013*	26.04	73.96	21.01	12.01	4.01	1.47

Intensity:

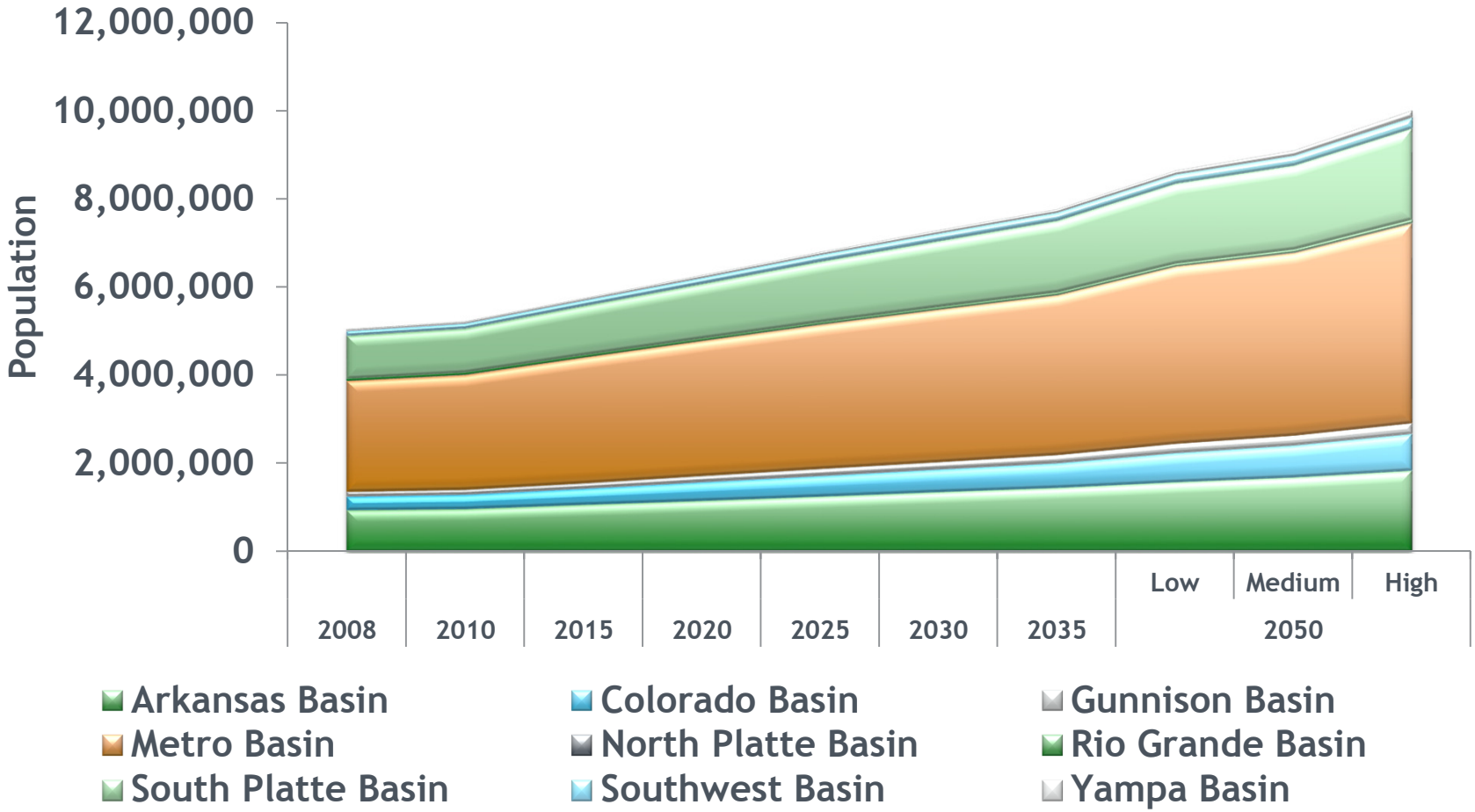
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

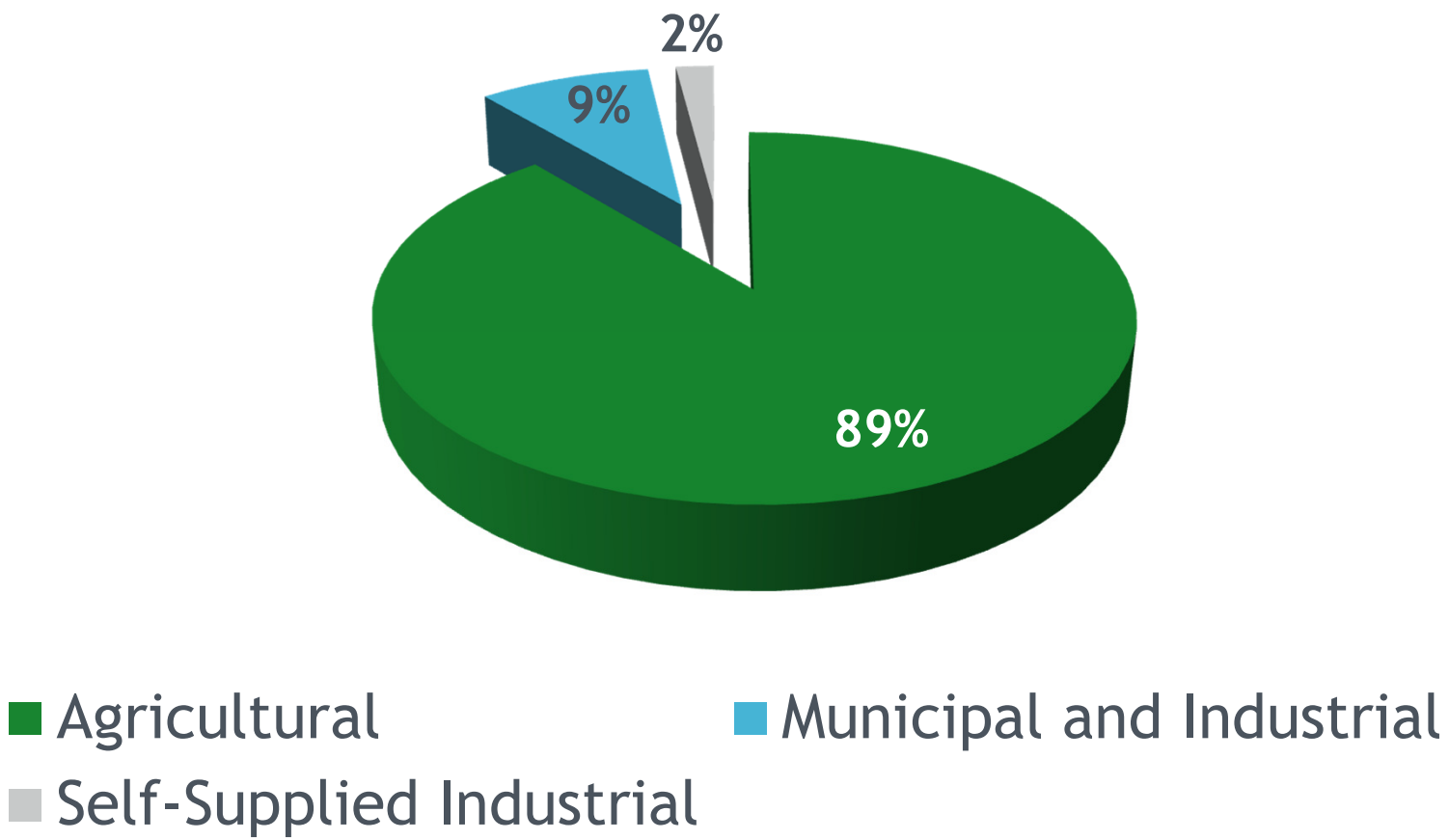
Author:
Matthew Rosencrans
CPC/NCEP/NWS/NOAA

http://droughtmonitor.unl.edu/

By 2050, Colorado's Population is Expected to Nearly Double



Colorado's Current Water Use by Sector



Colorado's Water Plan: The path to a secure water future.

- Vibrant & sustainable cities
- Healthy watersheds & environment
- Robust recreation & tourism
- Viable & productive agriculture

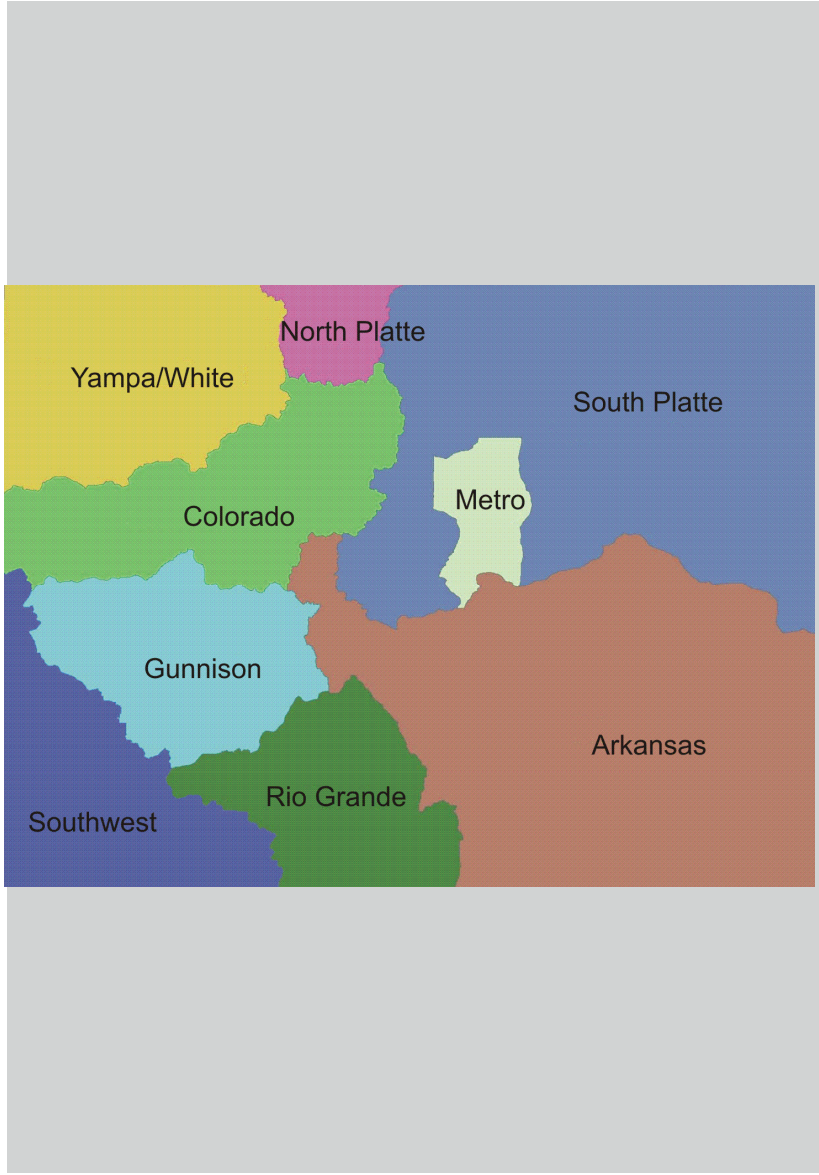


COLORADO'S WATER PLAN

COLORADO

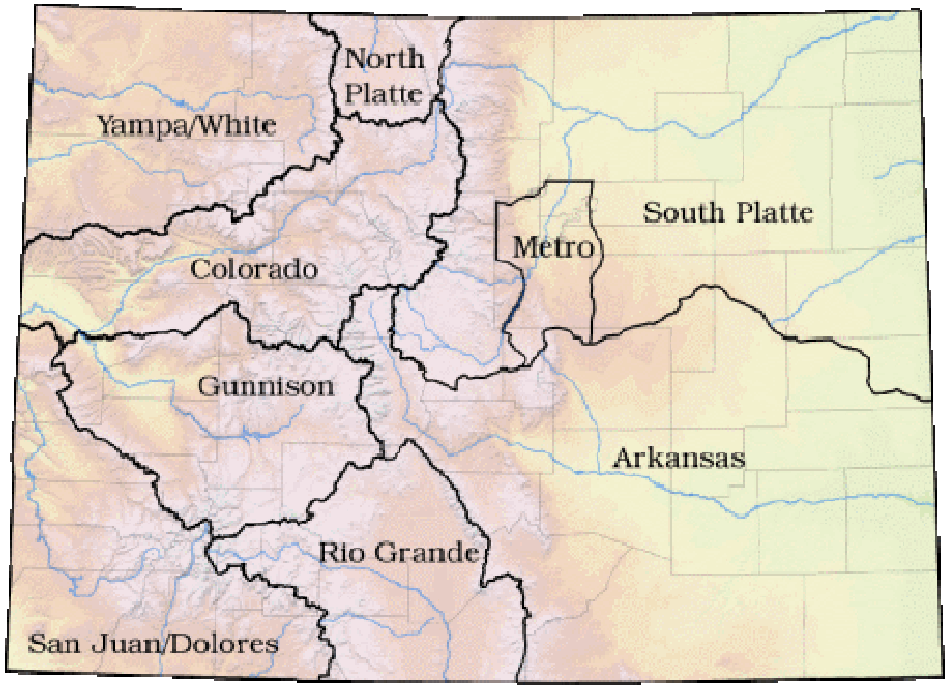
HB05-1177 Water for the 21st Century Act created nine Basin Roundtables

- The BRTs provide forums for locally driven, collaborative solutions
- Broad range of stakeholders—municipal providers, counties, industry and interest groups have a seat at each table



The Basin Roundtables and Colorado's Water Plan

- Each Basin Roundtable is currently drafting a Basin Implementation Plan to address the water supply gaps identified in SWSI 2010 on a local level.
- Development of the BIPs is occurring in coordination with the SWSI Update.
- The draft BIPs were delivered to the CWCB in July, 2014.
- Elements of the BIPs will comprise a significant portion of Colorado's Water Plan.



Overview of SWSI Update

SWSI Update – 2010

- Demand
- Supply
- Gaps
- Solutions

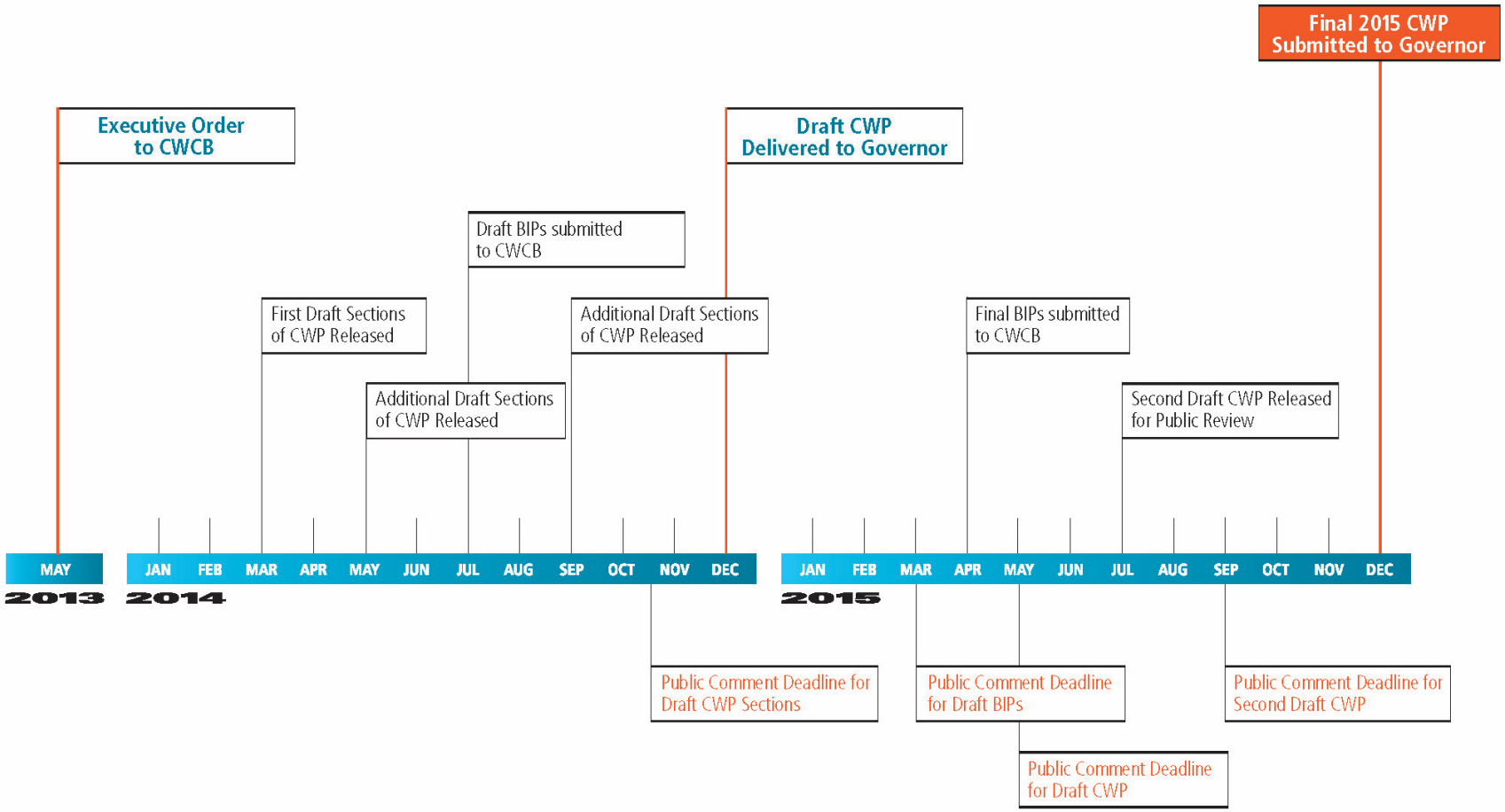
SWSI 2016 Update Additions

- Scenario Planning
- Climate Change
- Hydrologic Variability
- Agricultural Gap
- Nonconsumptive Gap
- Basin Implementation Plans
- Economics

DRAFT 05/20/14

COLORADO'S WATER PLAN TIMELINE

CWP = Colorado's Water Plan **CWCB** = Colorado Water Conservation Board **BIP** = Basin Implemention Plan **2015** = All 2015 events are recommendations



How can the public engage in this process?

- Public input on Colorado's Water Plan continues to increase, and input has been received from every basin across the state.
- Review public input and CWCB responses online.
- The public input process will continue through 2015 – through the Basin Roundtables and CWCB.
- Visit www.coloradowaterplan.com to learn more.



COLORADO

Colorado Water Conservation Board

Department of Natural Resources

COLORADO'S WATER PLAN

Southwest Basin Roundtable
Basin Implemenation Plan Outreach Meeting

Pagosa Springs, Colorado
November 17, 2014

	Name	Contact Information	Where did you travel from?
1	Carrie Weiss	CSWPagosa2@yahoo.com	P.Spgs.
2	Renita Sheiman		
3	PRESTON BOETTCHE	CTOHER@FRONTIER.NET	P.SPGS.
4	Ben Wanberg	benbearburton@gmail.com	PS
5	John J. Taylor		PS
6	DAVE STERNER	davesterner@yahoo.com	PS
7	Moby Whiting	mwhiting@tu.org	PS.
8	Charles Formwalt		PS
9	Donna Formwalt		PS
10	Joe Lamb	Chester.Lamb@us.army.mil	PS
11	VAL VALENTINE	pagosahva7@gmail.com	MINERAL CO.
12	Jim VAN LIERE	JRVL_PE@MSN.COM	P.S.
13	RAY FINNEY	Rayfinney63@gmail.com	P.S.
14	DENISE RUCH-PASTOR	WIP	P.S.
15	Bill Hudson	editor@pagosadailypost.com	PS
16	AARON KIMPLE	akimple@mountainstudies.org	DGO
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11/17/14

Pagosa Springs BIP Outreach Meeting

RT members
11/11

Pete – Local Planning Commissioner
Denise
Preston
John Taylor + Gene
Ray Feeny – SJWCD
Carrie Wiess
Bill Hudson – Pagosa Paper
Charles + Donna Farnwall – rancher (CFS takeover)
Dave – Archuleta waste
Jan Quinn
Rod!
Jim Valere – engr (worried about fish
Joe Crab
Renee – Pagosa Sun
Debra? – local
Mely + Michael Whiting
Val Valentine
Jack + Lee Costa
~~Buff~~ JR
Aaron Kimpple

1. FS take over of headwaters
2. worried about fishing
3. John T → EPA's water of US
4. talk about keeping our water local (Dry Gulch Reservoir captures it)
5. Mely doesn't like the pie chart
   Sacrifice our uses for theirs
6. Tamarisk! invasive species; just as bad as grass

(Ray)
Quote: Flush twice; Brighton needs the water (bar in Denver)

7. MW → economics: whats the highest and best use of that? 1 almond = 1.5 gal wate
   ~~Send~~ Spend tax payer funds on water for storage; than tax payers have a say in how it is used
   public money = public business
8. ~~What~~ Once the water is gone; what's it worth?
9. Local concerns: Dry Gulch + USFS (trade for land?)
   Shouldn't have to go through so many hoops others think you should!
10. SJ Chama mentioned several times

* Bruce's IPPs
* Local funds spent from WSRA

new slides
F/S/T statement
TMD criteria

Reporter:

11. Geothermal Greenhouse Project → $50K

~~Steven~~ concerned about funding a project that has no business plan

Mely: we don't get into local politics and coalition doesn't

How do we find out about local needs/wants?

Idea: if grants relate to certain area we move KT meeting to their area

12. JR: TNC Study — 20 to 26% more moisture will go into the ground after deforesting

* communities look at how to get more water access into their watersheds?

13. Aaron → SJ Headwaters being proactive

14. Add a list of completed (DPs)!

BAYFIELD
~~Pagosa Springs~~, Colorado
November 19, 2014

Southwest Basin Roundtable
Basin Implemenation Plan Outreach Meeting

	Name	Contact Information	Where did you travel from?
41	Jerry Hronich	563 4454	Ignacio
42	Ralph Klusman	563-4406	Ignacio
43	Mike Canterbury	884-2558	Vallecito
44	Carole McWilliams	884-2331	Bayfield
45	Phil Lane	883 2454	Ignacio
46	BUCK SKILLEN	759-2726	DGO
47	Ed Toler	563-0320	Ignacio
48	Christy Duran	884-2558	Vallecito
49	Bruce Whitehead	247-1302	Durango
50	CHARLES MACKOWN	426-1692	IGNACIO
51	Chuck Wanner	259-0075	Dur. Rd Trl.
52	Monte Miller	884-4327	Bayfield
53	Ed Zeink	749-4621	Durango
54	Judy Clarke	884-0568	Pine River Ranch
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Bayfield Public Meeting 11/19/14

1. Conservation
   Incentive vs penalties/regulations

2. Colorado water entitlements; meet needs yet need to send some quantity downstream

* 3. Make Sure Thompson Expansion on IPPList

4. Conservation on the East Slope critical!
   (Buck) seems like west slope naturally does it

*change non-public to non-covered

5. CWCB trys to make one shoe fit everyone it doesn't. broad brush !!

6. PR improve efficiencies, want water to still stay here! (Pine River)
   bring in new production

$ email west Slope peeps for comparisions

7. Reuse factor, people rely on return flows, put more water on lands less down river, better to store & release

8. Federal regulation: reclassify current waters not currently under regulation (Public guy) to Chuck answers
   where do wetlands fit?
   Chuck described WCCC & quality of water
   Bruce & Chuck disagree, here wetlands only cause of irrigation
   Ed T explained why/how wetlands are delineated
   Homestead subdivision; big wetlands that have disappeared cause of improved irrigation factors

9. (guy next to Ed T) conflict, sorta of interests
   ag vs rec/enviro; TU did work and now they have to go back & fix it
   streambed improvement project by bridge and affected how they diverte

Ed Z
Bruce
Chuck
- Pine paper lady
-
Mike @ PRID
- PRID
Buck
-
Ed T
-
-
-
- Public

Town Project? (reporter sorta knows)
Opportunity! for us to work together
future: RT try to ask questions about how this affects users below/above project

10. WSRA → what do we fund?
keep using funds to keep water local

11. Conservation of household use water (know late lady)
alternatives to WWTP
disgusted w/ $51M TP
doesn't like toilets, WWTPs
composting toilets! use of greywater ☺

12. (Pine Reporter) Rain Water? Have we discussed this?
Bruce: rural + urban rain water law

13.

* call Craig *
* Thompson
Epperson *

759-1390
call w/ Answer

where is the PO?
may need an extension too?

PLEASE SIGN IN!

	NAME	CONTACT INFO	WHERE DID YOU TRAVEL FROM
1	BRIAN KIMMEL	swlsinc@frontier.net	Mancos
2	Bob Becker	becr@frontier.net	MANCOS
3	Lorraine Becker	" " "	"
4	Jim Mimiaga	jmimiaga@cortezjournal.com	
5	ERIC & BETH JANES	ejanes@frontier.net	Mancos
6	Wally Patchett	WallacePatchett@state.co.us	Montrose
7	Gabe Deall	gdeall@gmail.com	Mancos
8	Brandon Bell	mancosrwc@hotmail.com	Mancos
9	Phyllis Snyder	pksws@hotmail.com	Cortez
10	Marty Robbins	Marty.Robbins@State.co.us	Cortez
11	Allen Maez	21693 Cty Rd 21 Lewis, CO	Lewis
12	Patricia Burk	p_a_burk@msn.com	Mancos
13	Jack Burk	38359 Rd H Mancos	Mancos
14	Ben Wolcott	bitsncams@yahoo.com	Mancos
15	Raymond Keith		Mancos
16	J. Paul Brown	brownjpaul@yahoo.com	Ignacio
17	Steve Davis	stephenadavis1@msn.com	Mancos
18	Doug Pickering	doug.pickering@state.co.us	Cortez
19	Mark Lambert	mblambert@fs.fed.us	Dura yo
20	Dustin Stein	stubbinfarm@gmail.com	Mancos!
21	Josh Munson	joshuasmunson@gmail.com	Dolores
22	Sam Carter	sam@doloresriverboating.org	Dolores
23	MIKE PRESTON		Cortez
24	John Porter	Southwestern WCD	Cortez

see next page

26 Kate Greenberg Kate@youngfarmers.org 612.669.6829 National Young Farmers Coalition Durango

27 Kellie Pettyjohn kelliepj@yahoo.com mancos

28 Tom Schillaci tom@videoresource.net Silverton

29 Tom Hunter

SOUTHWEST BASIN ROUNDTABLE
Basin Implementation Plan Outreach Meeting

Mancos Community Center

December 1, 2014

Meeting Agenda

1. Introductions (15 minutes, depending on attendance)
    a. Name
    b. Group survey: How many people have heard of the Roundtable? Colorado Water Plan? Basin Implementation Plan? Which river basin do you live in?
2. Colorado Water Plan: overview, update of status, and timeline (10 minutes)
3. Basin Implementation Plan: overview, update of status, and timeline (10 minutes)
4. Group Discussions and/or Breakout session (85 minutes)

Location: Mancos Community Center

130 W. Grand Avenue
Mancos Colorado

Time: 6 p.m. to 8 p.m.

Drafted 11/12/2014

#email Mike P CWP PPT

MANCOS OUTREACH MEETING 12/1/14

1. Ask how the CO River compact is addressed in the Plan?
3. ANN wrote down!
2. How are they incorporating BIPs?
4. talk about conservation
how would it be emplimented?
5. TMD factors (8)
example of a TMD out of the basin? SW
explain how we are a part of a TMD
6. What is an IPP?
types, examples
7. BK → are we able/possible to make room for double population?
8. Ratio % vs total use
use more inside to use more outside
9. 5 M more ppl, 4M on front range
meeting
key decisits of water supply
this is inevitable!
address/action for potential long term risk
10. Consumers are also food consumers
We prored what they need!
We use our water and they use our end product
East
11. Watertm Canyon → need education! in Denver, entitlement
experience → not allowed to use a way, they
them change

#Make Brian Kimmel a copy

Ask IPP list in state Plan

#email Letter opts!

30 people

RT { Mike P, John P, Tim Hunter

Mancos Rural Water -?
Mancos WCD
Gabe -local!
Dustin -local, farm beer
Ben -local
Wally - DWR Marty, Doug
JPaul
Josh - Dolores
Lee Ann
Sam
Mark - FS
Ray Keith
Tom - video!
Bob Becker MCD
Eric Jane + wife
Jim
Brian Kimmel
Al Maze - Lewis
Kelly - local
Trisha & Jack MCD
River Boats

12. Well written from FS guy
concerned: CWP (chapter 9) sets up an adversarial relationship

13. Oil + gas impacts ↑ using water + don't know what they are doing w/it

14. CWP so far, nothing to address putting more into agriculture

JPaul 15. S. Platte water going downstream that can be legally supported; need to develop this
Narrow's Project, NISP too

EricJ 16. WW treatment work's manage of treated water for reuse
8 or 9th criteria add: recovering basin for a TMD demonstrate a strategy for waste reuse; 70/30 isn't enough
Stronger language in the area of water reuse

→ need data needs: reuse

2 alternatives to permanently protect plants water

17. Scenario planning: how much future climate change? projections
bring any project to the table even if they aren't long term reliable/climate change sustainable
John Pansmured up "Risk Management" triggers
planning for unknown; projects that are only short term; terms of a paradigme
* something to add to grant criteria (projects + planning process)

Lee Ann 18. Farmer's conservation IPPs?

19. Education! more education on snowpack ACROSS the state; not just "my" area; they consume cause there is an awful lot of snow in Vail

Education themed night

John Porter

20. Miss Becker pipestreams: bringing water from the Mississippi

21. Eduction! TMD's are FULLY consumed transcontinental

22. Plan is lacking conservation! hugely lacking
strick uncomfortable language isn't in here
mandates! yes! we need to do some work too, not just one sided

BL

23. relate land use codes to water use

24. Keep Tahoe Blue → land use code management strict!

25. Water Festival → water storage = water bank
store our water + then use it
live so close to the state line, our water levels so fast
FIRST eaten it then use

Tina

26. Great comments tonight!
get on the website! come to meetings!

PLACERVILLE, CO

PLEASE SIGN IN!

	NAME	CONTACT INFO	WHERE DID YOU TRAVEL FROM?
1	Kenny Heldman	KHeldman@NMTC wireless.com	Nucla
2	Mary Slosson	mary@telluridedailyplanet.com	Telluride
3	Earl + Ruth Reeves		Naturita
4	Leigh Robertson	LeighRobertson3@gmail.com	Ridgway
5	Hilary Cooper	hilary@sheepmountainalliance.org	Telluride
6	Erik Dalton	erikmdalton@gmail.com	Telluride
7	Laura Kudo	laura@telluride institute.org	(Fall Creek) Telluride
8	Sarah Bubbe	sarah@sanmiguelwatershed.org	Telluride
9	JOAN MAY	joanm@sanmiguelcounty.org	San Miguel Cty
10	Ashley Babcock	ashley@ecoactionpartners.org	Telluride
11	Steven Zweck	steve2@sanmiguelcounty.org	Delta
12	Lexi Tuddenham		Tride.
13	Terri Lamers	Lamers_T@yahoo.com	Nor
14	Linda Luther-Borodenca		Pville
15	JoAnne Snyder	Snyder56Jo@Yahoo.com	Montrose

Placerville Public Outreach 12/9/14

April presented CWCB State Plan info

BIP is an appendix to CWP
as well as incorporated thru that

1. Regulatory power of the plan?
recommendations to
law makers? power?

April → more road map on where
we should focus

2. 61% leave the state; how ~~is~~
are net years calculated?
If we don't use our water + it
goes down stream; well
we keep just send more + more?

3. Have we meet compact obligations?
Yes to date

4. Nervous about water law & Feds; possible change something
compacts on east slope too

5. Watershed Master Plan → what is this? funding for it?

6. Lake Mead @ historically low levels, does this concern us?

* Update IPPs that have been completed

7. IPP List → wild + scenic of Natrita creek is no longer
a part of the list (Kenny I think)

8. Tab... Dam removal → needs to be updated; completed
(Hillary I think)

lots of ladies
Laura K → watershed pro.
Sara → SM watershed
Kenny → Nevada CCC, Gurl
→ Natrita
→ Dairy Plant
Linda → open space
Ashley → Eco action
Joan → SM CC
→ SM CC attorney
Hillary → sharepoint all
Eric Dalton
Lee → SM gunnison
Ann
Carrie
April - chair CWCB

9. Basin over allocated; would you reduce uses by a %?

* IPP list online

10. Storage issue; one way to deal w/ over appropriated streams

11. Main solution: more water storage
especially on East Slope
funding + EA big hurdles

12. Evaporation; doesn't dissappear but lands some place

13. water law worked for 100 yrs, shouldn't change

14. Data gaps → who does this?

15. (SM report) no info on ISF; only 2 monitoring spots
out of allot ISF in SM + Dolores
no real data/stream gages
1. gages to monitor
economic studies for rec needs, one of true last free flowing rivers
more forms of natural storage
ag efficiences
@ traditional forms aren't very acceptable

curley guy 16. ISF could have filed on more what than is available
Uravan data; 50s data stunt; misleading w thinks

(disagreement on ISFs....)

17. Concern: over keeping SM free flowing river!
river rafter/kayak buisness; shortest period
huge economic driver! special place

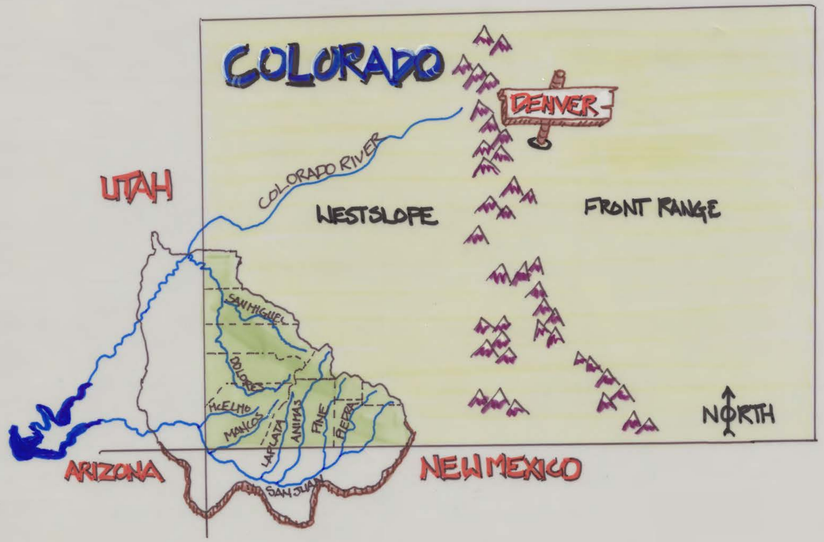
18. Ag efficiencies → no water lost; run off is re used

19. Surface water + grand water → how are they related?
water isn't lost when it returns to the grand

20. Explore snow making as a new storage solution
could store water w/o dams
recreate on it
actual river water to snow to run off

21.

COLORADO'S SOUTHWEST BASIN



MESA
GATEWAY
COLORADO RIVER
MOAB
MONTROSE
NUCLA
SAN MIGUEL RIVER
SLICKROCK
NORWOOD
SAN MIGUEL
DISSAPOINTMENT CREEK
TELLURIDE
TELLURIDE
RED MOUNTAIN
SILVERTON
SAN JUAN
HINSDALE
MINERAL
MONTICELLO UT.
BLANDING UT.
DOVE CREEK
DOLORES
GROUNDHOG RES.
WEST FORK
DURANGO MTN. RESORT
WOLF CREEK
MCPHEE RES.
DOLORES RIVER
MONTEZUMA
JACKSON RES.
LA PLATA
LEMON RES.
WILLIAMS FORK RES.
PIEDRA RIVER
CORTEZ
DOLORES
MANCOS
DURANGO
VALLECITOS
ARCHULETA
PAGOSA SPRINGS
DRY GULCH
MCELMO CREEK
SLEEPING UTE MOUNTAIN
TOWAOC
MESA VERDE
LITE MOUNTAIN UTE RESERVATION
LAKE NIGHTHORSE
FLORIDA RIVER
PINE RIVER
BAYFIELD
ECHO CANYON RES.
RIO BLANCO
LA PLATA RIVER
LONG HOLLOW RES.
IGNACIO
SOUTHERN UTE RESERVATION
SAN JUAN RIVER
NAVAJO RIVER
RIOCHAMA DIVERSION
UTAH
ARIZONA
NEW MEXICO
FOUR CORNERS
MANCOS RIVER
ANIMAS RIVER
SHIPROCK
SHIPROCK N.M.
FARMINGTON N.M.
AZTEC N.M.
BLOOMFIELD N.M.
SAN JUAN RIVER
RIOCHAMA
ELVADO RES.

MAP KEY
- RIVERS
- HIGHWAYS
- COUNTY LINES
- RESERVOIRS

Southwest Basin Roundtable: Basin Implementation Plan
Map Key for IPPs (Identified Projects and Processes)
Highlights by Sub-Basin from East to West

San Juan River Sub-Basin

1. San Juan Chama Diversion – 89,832AF (Acre Feet) per year provided to New Mexico under Colorado River Compact. Extensive restoration – Blanco River
2. Dry Gulch Water Storage Project – 11,000AF of Off-stream storage for future M&I (Municipal & Industrial) needs and other recreational and environmental purposes
3. Geothermal Greenhouse Partnership – K-12 science education, test site for commercial organic crops: high altitude, geothermal, year round food production
4. San Juan Headwaters Forest Health Partnership – Collaborative approach to improving long term resilience of mixed conifer forests and nearby communities

Piedra River Sub-Basin

5. River Protection Workgroup(s) (RPWs) – Workgroups formed in 5 Sub-basins tributary to the San Juan River and 4 tributaries (San Juan, Piedra, Pine, Animas and Hermosa Creek) to involve public in protecting values while allowing future water development. Piedra values included: ranching, fishing hunting, hiking, boating.

Pine River Sub-Basin

6. La Plata Archuleta Water District – To meet residential and commercial water needs that have outstripped groundwater capacity and quality. Will build out to 200 miles of pipeline, multiple storage tanks, water loading stations and other infrastructure.
7. Vallecito Reservoir – Spillway repairs. Flow donation agreement for instream flow and other purposes. New water right would allow "exchange water" for users outside of PRID service area such as upstream of Vallecito Reservoir.

Animas River Basin

8. In-Channel Recreational Diversion – "Kayak Park" south of Durango opened for use in summer of 2014.
9. Animas River Stakeholders Group – Working to meet water quality standards to protect aquatic species and improve habitat from Maggie Gulch to Silverton and Silverton to Durango. Remediation of 33 mine waste sites (mostly complete) and 36 draining mines (5 have been addressed).
10. Lake Nighthorse Recreation – Open Lake Nighthorse for boating, fishing and swimming
11. Hermosa Watershed Protection Act of 2013 – Introduced in Senate by Senator Bennet, Co-Sponsor Senator Udall. Companion Legislation (H.R. 1319) introduced by Congressman Tipton. Bill a result of the Animas River Protection Workgroup process involving water users, ranchers, business leaders, mountain bicyclists, dirt bikers and community officials.
12. Hermosa Creek Cutthroat Trout Meta-population Project – Some native trout barriers installed. Next comes non-native removal and re-linkage with tributary mainstem.
13. Lemon Reservoir and Florida Mesa Ditch Companies – FWCD has acquired a 2,500AF water right for multiple purposes within the Florida Basin (M&I, wildlife, wetlands, exchange, augmentation, hydropower, and irrigation). Voluntary program for ditch companies to conserve water and firm up irrigation deliveries to provide for above uses through reduction in delivery system losses (3 miles of ditch lining to date).

La Plata River Sub-Basin

14. Long Hollow Reservoir – 5,400 AF reservoir near state line to meet New Mexico compact compliance, irrigation supply by exchange and potential exchange/ augmentation of domestic wells. Reservoir complete. Operational practices being evaluated.
15. La Plata West Water Authority – Provide western La Plata County with safe dependable water in the face of declining groundwater. Source: Lake Nighthorse.

Mancos River Sub-Basin

16. Ute Mountain Tribe Water Conservation and Management Plan – Process to discuss UMUT water rights in the Mancos sub-basin including possible development with non-Tribal partners.
17. Jackson Gulch Reservoir Enlargement – 5 feet added to dam height would equate to 1,000AF of new storage to meet M&I growth without diminishing irrigation.
18. Mancos River Habitat Diversion Project, Phase II – Restore aquatic habitat and efficiency of 4 diversions downstream of the Town of Mancos to improve irrigation diversions while allowing fish and sediment passage and promoting channel stability
19. Weber Ditch Piping – Piping of ditch in areas compromised by the Weber fire regarding safety and seepage

Dolores River and McElmo Creek Sub-Basins

20. Dolores River Dialogue (DRD) – A collaborative process, ongoing since 2004 to protect water rights, Dolores Project allocations, community water supplies and the continued enjoyment of boating and fishing. The DRD appointed the Lower Dolores Working Group to find alternatives to Wild and Scenic Suitability. The Work Group appointed a Legislative Subcommittee which is developing NCA legislation to protect water rights and downstream values. The Legislative Subcommittee commissioned "A Way Forward" scientific evaluation of opportunities to improve the status of 3 sensitive native fish species (roundtail chub, flannelmouth sucker and bluehead sucker) guided by a Native Fish Implementation, Monitoring and Evaluation Plan, overseen by a broad based Implementation Team. All of these features are part of the proposed "Dolores River Canyon National Conservation Area" legislation, intended for Congressional introduction in 2015. The DRD Steering Committee completed a Watershed Plan with significant historic appendices in 2013.
21. Optimization Study – Given the multiplicity of stakeholders with water stored or passing through McPhee Reservoir, fully appropriated water rights, and extremely tight water supplies in the dry end of the hydrologic cycle, the Optimization Study is intended to evaluate the most effective use of existing facilities and potential delivery system improvements to optimize benefits and improve drought resilience within the framework of Colorado water rights and Dolores Project contracts.

San Miguel River Sub-Basin

22. San Miguel Watershed Coalition – Formed to involve the whole community to advance the ecological health and promote the economic vitality of the watershed by collaborative efforts. The coalition periodically compiles the San Miguel Watershed Report Card.
23. Town of Norwood – Holds water rights for future municipal needs by diverting San Miguel water rights into a small storage reservoir.
24. Montrose County Firming Project Phase 1 – To provide a water source for M&I demand 50 years into the future, including the growth of the Towns of Nucla and Naturita. Engineering feasibility studies are being undertaken on a variety of potential reservoir sites and a number of infrastructure expansion opportunities
25. Instream Flows – Have been decreed on the San Miguel River and are being evaluated on Naturita Creek which is considered spawning habitat for flannelmouth sucker, bluehead sucker and roundtail chub.

SUMMATION OF PUBLIC COMMENTS

COLORADO'S WATER PLAN

coloradowaterplan.com

cowaterplan@state.co.us

Direct 303-866-3441

Cover Sheet for Input Document, Item #16

The document listed below was submitted as formal input for Colorado's Water Plan. A summary of the document, including a staff response and/or recommendation is included in the master spreadsheet included within this packet.

Date: March 19, 2014

Input provided by: Lee-Ann Hill, Dolores River Boat Advocates

Method of submission: Email to cowaterplan@state.co.us

Summary of Input: Comments from Dolores River Boating Advocates for the Colorado's Water Plan, most of which were also discussed in person with CWCB staff.

Documents Submitted for Review: Comments in attached letter

Staff Response: The CWCB appreciates the encouragement to continue to engage on solving the difficult issues on the Dolores River. CWCB and the Southwest Basin Roundtable have helped fund efforts, such as "A Way Forward," and will continue to support the Dolores River Dialogue process as appropriate. Staff will pass these comments onto the Southwest Basin Roundtable. CWCB has helped fund the operation of the Slick Rock Gage on an annual basis, and if there is considerable local support for funding the Slick Rock gage on a more permanent basis, will discuss with the CWCB Board how CWCB may be able to help fund it on a more permanent basis. Staff encourages Dolores River Boating Advocates to partner with other groups and ask the Basin Roundtable or the Watershed Protection Fund for assistance to develop a Watershed Plan for the Upper Dolores River. This could incorporate the optimization study, youth involvement, and watershed assessments. Because staff has supported many watershed efforts across the state, please contact Chris Sturm for some example grants and watershed plans that have been fruitful.

Dolores River Boating Advocates
Colorado Water Plan Recommendations
March 19, 2014

The following recommendations are submitted on behalf of Dolores River Boating Advocates (DRBA). DRBA is a grassroots non-profit organization in Southwest Colorado with over 250 supporters, and growing. DRBA seeks to optimize flows, restore the natural environment, and permanently protect the Dolores River for whitewater boating.

We appreciate the opportunity to offer input on the Governor's State Water Plan for Colorado on behalf of the Water for the 21st Century Act. We have categorized our input into gaps, processes, projects, and concepts per the framework of the Colorado Water Plan. Following are priorities for our organization that we would like to see included in the Southwest Basin Implementation Plan for the State Water Plan.

Gaps

- **Recreation Access on the Upper Dolores River**: The Upper Dolores River is a remarkable stretch of free-flowing river with wild and scenic suitability for recreation, yet it lacks safe and adequate access for recreational opportunities including boating and fishing. The San Juan Skyway runs along the Dolores River and offers highway accessibility, but an official access site has not been established which has resulted in user created access and riparian damage. An established site with day use accessibility would be ideal for enabling recreation in a manner that is safe for human use and the riparian environment. A makeshift boat put-in at the confluence of the West Fork of the Dolores River could be improved, or an access site could be established on public land upstream from the West Fork confluence. Alternatively, the purchase of property for a day use site by the state or county would enable day trips to Dolores for all levels of boaters, and would allow fishing access and day use enjoyment. A recreation plan would help identify a suitable location and help move an access project forward.
- **Habitat and boating flows on the Lower Dolores River**: Boating and habitat flows on the Lower Dolores River are currently secondary to irrigation needs in the Montezuma Valley, yet the ecological health of the Dolores River has been compromised to a point of significant concern, while boating on the Lower Dolores River has been reduced by about 35%. Flows annually that mimic the natural hydrograph would improve the natural environment and provide whitewater boating opportunities on the Lower Dolores River, as identified in the "A Way Forward Native Fish Study," and through the efforts of the Dolores River Dialogue and the Implementation Team. While the Implementation Team is looking at ways to implement flows, attaining those flows is where the gap lies. Filling this gap is a critical piece in enabling the *Implementation, Monitoring, and Evaluation Plan* to move forward to restore the ecological and recreational values of the Lower Dolores River.
- **Reliability of funding for the Slick Rock stream gage**: Each year, partners involved in the work of the Dolores River Dialogue struggle with funding for maintenance and operations of the Slick Rock stream gage. Certainty in funding is needed. The Slick Rock gage that plays a significant role in assessing adequate flows for native fish, sediment loads from upstream tributaries, and lends to a

comprehensive watershed flow assessment for the Dolores River. While the continuation of the Slick Rock stream gage is valuable for the *Implementation, Monitoring, and Evaluation Plan*, the funding is not secure or sustainable. Annual seed money would help ensure the continuation of this important stream gage, and would minimize budget uncertainty for the participating entities that could then assign a fixed amount in their annual budgets.

Processes

- **The Dolores River Dialogue**: Processes associated with the Dolores River Dialogue including the *Implementation, Monitoring, and Evaluation Plan* and the Legislative Subcommittee, are important efforts that need to continue moving forward where results can be achieved and measured, and the diligence and participation of stakeholders from throughout the Southwest and the State can come to fruition after many, many years of deliberation.
- **Upper Dolores River Recreation Plan**: As mentioned above in "Gaps," an Upper Dolores Recreation Plan would be valuable for assessing access and user needs and potential land use issues on the Upper Dolores River.

Projects

- **Dolores River Basin Optimization Study:** To help determine efficiencies and water availability, an Optimization Study is needed. This study would lend to the processes and projects already in play in the Dolores Basin, and the implementation of efficiencies could yield additional water for habitat and recreation flows on the Dolores River, per the *Implementation, Monitoring, and Evaluation Plan*.
- **Youth stewardship and outdoor education programs**: River stewardship programs and projects that focus on youth involvement, such as Colorado River Watch, are great opportunities to get the next generation of Coloradoans invested in our water and encourage wise water practices. Developing a deep understanding of water quality and quantity will help inform our future decision makers and citizens.

Concepts

- With the degree of historic mining activity in the upper Dolores watershed, a **319 Watershed Plan for the Upper Dolores River** would be valuable for assessing water quality in regards to the agricultural, fishery, riparian, recreational, and municipal needs and uses of the Upper Dolores River.
- **Watershed Assessments**: Basin-by-basin watershed assessments to determine water availability are critical before significant new projects are considered. These assessments must include non-consumptive needs for habitat and recreation.

The State Water Plan is our opportunity to be visionary about our State's needs with additional consideration of current and past water challenges. We ask that non-consumptive needs that sustain the ecological and recreational benefits of rivers be valued alongside consumptive needs and uses in the State Water Plan. Non-consumptive water is a tremendous economic driver in Colorado, and supports the quality of life that Colorado

residents enjoy. Growth beyond our state's water means is not part of a sustainable future for Colorado. Transbasin and transmountain diversions to accommodate out of basin growth are precarious and temporary "fixes" at best that would do immeasurable harm rather than good in the long run. Living within our water means and within the carrying capacity of our watersheds is essential as we move through the 21st Century. Further, "big straw" concepts do not adequately incorporate non-consumptive needs and values of a watershed, which are essential to our own survival. We are opposed to this type of reckless water misappropriation, and we trust that a more viable and sustainable solution will be pursued.

Thank you for your consideration of our comments and recommendations. We look forward to future participation as the State Water Plan develops.

Sincerely,

Lee-Ann Hill
Program Coordinator

And

Dolores River Boating Advocates Board of Directors: Julia Anderson, Sam Carter, Kevin Cook, Jane Dally, Wade Hanson, Tracie Hughes, Andy Hutchinson, Josh Munson

Zimbra **carrie@durangowater.com**

Re: Basin Implementation Plan Public Feedback in Durango

From : Ed Millard <ed.millard@gmail.com> Mon, Sep 29, 2014 12:31 PM

Subject : Re: Basin Implementation Plan Public Feedback in Durango

To : Carrie Lile <carrie@durangowater.com>

Cc : annsoliver@gmail.com, Michael Preston <mpreston@frontier.net>

Below are a few areas of concern based on one pass skimming the BIP and IPP's. Not sure at this point if I will develop more formal comments or not. It would take a lot of time to research and fully understand such a large document, especially with all the related material.

NCA

The proposed Lower Dolores National Conservation Area isn't mentioned anywhere in the BIP. The proposed CWCB Instream Flow on the Dolores is, as is Wild and Scenic Suitability. Since the NCA will have a wide ranging impact on the Dolores, and may remove WSR suitability, why isn't it mentioned?

MVI

Montezuma Valley Irrigation isn't mentioned anywhere in the BIP, other than on the list of organizations to which it was presented. Every other water user in the Dolores Project is discussed in the body of the document. MVI seems have been replaced with the code word McElmo Basin. Perhaps the MVI board preferred it this way?

Environmental and Recreational Gaps

A key area of concern I have is with the language in these two "multi basin" IPP's, which also appears in the Southwest Basin IPP executive summary, and in two other places in the BIP verbatim:

1. Evaluation of environmental and or recreation gaps is planned to be conducted for improvement of non-consumptive resources and/or in collaborative efforts with development of consumptive IPPs. The evaluations may be conducted by a subgroup of the Roundtable or by individuals, groups, or organizations with input from the Roundtable. The evaluation may utilize methodologies such as the southwest attribute map, flow evaluation tool, R2 Cross, and any other tools that may be available.

2. Where environmental and/or recreational gaps are identified, a collaborative effort will be initiated to develop innovative tools to protect water identified as necessary to address these gaps.

Its implied this this language and IPP's were developed by the Southwest Roundtable, but they are listed under "Multibasin IPP". Are these IPP's specific to the Southwest Basin but are striving to fulfill a statewide goal which is why they are listed as "Multibasin"? **Who exactly authored this language and inserted it in 4 different places including the Executive Summary?**

I find the wording very awkward and the meaning opaque. I think I know what its saying but for language and IPP's that seems to have seized control of and dominate the Southwest BIP, I'm wondering if somewhat greater effort should be spent to craft wording that is clearer and less subject to interpretation. Some rhetorical questions, exactly what kind of "innovative tools" are we talking about and how are they going to "protect" this mystery "water" they are planning to "identify".

Is there a document some place that describes these two IPP's in detail?

Is there a link between these two IPP's and the "Optimization study" proposed by DWCD for the Dolores and McElmo basins? Is there a document describing this proposed optimization study in more detail?

On Sep 29, 2014, at 10:49 AM, Carrie Lile <carrie@durangowater.com> wrote:

> I would assume that date is for comments made to the draft BIP for that area. Ann and I have not set an official deadline for comments on the Southwest BIP yet. We would appreciate comments sooner than later, as we would like to present them to our sub-committee for discussion and then the to Roundtable for recommendations for inclusions. So comments made before November 10 would helpful, but not necessary. We are hashing out the deadline details this week. From what I know, the draft CWP will go to the Govern on December 10th and then the final BIPs are due in April of 2015. The latest we could receive comments in March 1st to allow us time to incorporate them (if applicable). Then a final of the CWP would go to the Govern in December of 2015.
>
> Carrie
>
> ---
>
> **From:** "Ed Millard" <ed.millard@gmail.com>
> **To:** "Carrie Lile" <carrie@durangowater.com>
> **Cc:** annsoliver@gmail.com, "Michael Preston" <mpreston@frontier.net>
> **Sent:** Monday, September 29, 2014 10:38:33 AM
> **Subject:** Re: Basin Implementation Plan Public Feedback in Durango

Zimbra **carrie@durangowater.com**

state water plan

From : South West Land Services <swlsinc@frontier.net> Mon, Mar 16, 2015 01:44 PM
Subject : state water plan
To : carrie@durangowater.com

Please add to the comments:

I keep hearing that we must be ready to spread already ”thin” water resources to include potentially 500,000 more state residents.
And yet I see nothing in the plan that requires us to develop “carrying capacity” plans for drainages to determine just how much we have that is usable and how more we can practically develop.
This includes agriculture, residential, light industrial, etc.
The plan should contain language that required every county to account for the actual usable water in their drainages and figure out how that is developed with their current populations.
After which we might be able to see more/allow more immigration.
Real planning and development and zoning based on water capacities should be required.

Brian Kimmel

Colorado's Water Plan - Public Input Received
October 11, 2014 through January 4, 2015

Item Number	Date	Input Provided By	Method of Input Submission	Related Chapters/ Sections of CWP	Summary of Input	Documents Submitted for Review	Staff Responses and Recommendations
19	10/24/2014	Scott Kadera	Webform	2, 7.3, Southwest BIP	I live in La Plata County, not far from the airport. While we have been in a drought for a number of years, you would not know that by driving around that part of the county. During the summer, water flows freely and constantly through irrigation ditches and over fields. While many of these fields have a legitimate agricultural use, a number of land owners are just watering pasture land for a horse or two, or in some cases no animals at all. But, if they don't use the water they will lose their right to it. It isn't logical or fair to punish people that may want to conserve water or do not have a need for it at this time. The use it or lose it policy has to change. Also, I have some concerns about fracking and its effect on our ground water. I understand that the water and chemicals are being injected deep into to the earth but I don't think anyone knows what the long term effects are going to be. As we have seen with some of the capped mines in Silverton, CO, water finds a way to escape. When they cap one part of a mine the water will find its way out somewhere else. The same thing could happen to our ground water. Wells and springs could get contaminated and once that happens the water will be good for nothing. Another concern of mine is the first priority of the Southwest Basin Roundtable. It states, "Ensure endangered species' needs do not negatively impact future in-basin uses." I might be able to see why this would be a priority if we were being responsible with the water we have but we are not. As stated above, the use it or lose it policy results in a waste of thousands, if not, millions of gallons of water each year. To say that we would rather waste water rather than save endangered species is morally wrong. Finally, there seems to be a disconnect on the Front Range about their water usage and the compacts that we have with lower basin states. It is only logical that the biggest opportunity for water conservation would come from the biggest user, the Front Range. Why should the Western Slope have to pay the price for Denver residents to have green lawns? If we all practice responsible water management and conservation then there will be enough water for future building, agriculture, the environment and recreation.	N/A	Nine out of every ten years some portion of the state experiences some level of drought. Moreover drought can carry serious economic and environmental consequences. Therefore it is a natural hazard that the state takes seriously. Colorado is a national leader in drought mitigation and planning efforts, much of which is outlined in the State of Colorado Drought Mitigation and Response Plan. Pieces of that plan have been incorporated into Colorado's Water Plan where appropriate. Colorado's Water Plan seeks to uphold Colorado's current water law system. Colorado water allocation and governance has always been guided by local users meeting local needs and Colorado's Water Plan will not change that. Rather than diminishing local control or authority over water, Colorado's Water Plan seeks to strengthen local decision-makers' ability to achieve regional and statewide water solutions. These principles are fundamental to Colorado water administration and law and Colorado's Water Plan requires them to succeed. Please review Chapter 2 of the 2014 draft Colorado's Water Plan, specifically section 2.1 (Colorado water law & administration) which addresses the usufructory nature of water rights within Colorado and the prior appropriation system. Fracking currently uses approximately 18,000 acre feet per year, which is a very small proportion of Colorado's overall water use. However, there may be some areas where there are greater regional effects. In addition, power plants that burn natural gas to make energy use less water than traditional power plants. Therefore, from an overall resource management perspective, fracking and the resulting energy production do not consume a significant amount of water compared to current levels. Colorado's Water Plan seeks to work collaboratively to uphold Colorado's water values and does not put a value judgment on any one beneficial use. The Water Quality Division of the Colorado Department of Public Health and Environment (CDPHE) regulates water quality issues of this nature in the state. Water Quality has been recognized as critical for Colorado's water future. The CWCB is working closely with the Water Quality Control Division and the Basin Roundtables in order to address Colorado's Water Quality needs. This is further explored in Section 7.3. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. CWCB will pass these comments on to the Southwest Basin Roundtable.
20	10/28/2014	Joseph Grantham	Webform	Arkansas BIP	In reviewing Arkansas Draft BIP of July 31, 2014, mistake on bottom of page 29 re: small capacity wells. Says limit is 15 gpm and this is incorrect. See 37-90-105, C.R.S. Up to 50 gallons per minute. Local ground water management districts may adopt rules to reduce this amount or increase up to no more than 80 a.f. per year per 37-90-105(7)(a).	N/A	CWCB will pass these comments on to the Arkansas Basin Roundtable.
21	11/12/2014	Justin West, Hearing Officer, Colorado Ground Water Commission & DWR	Webform	6.3, 6.6	Our watershed is our life. Its our Heath and well being on all levels. It is Our heaven to escape to. Fly fishing and fish with many endangered native cutthroat, hunting, hiking biking a more all depend on our rivers. They depend on them because the seasonal flows supports the ecological web of our woods. As a Colorado native for three generationsI have noticed thru my elders how when one thing changes in nature, everything is impacted. It may take time to see but everything changes. Aside from the emotional and spiritual and physical well being our waters provides the residence of our watersheds, it is also our economic engine. I know all my friends depend on seasonal water for fishing guides, raft guides, and more. Then other friends of mine rely on those same tourist that came for the water to eat in their restaurants and buy their clothes in the store. Our seasonal flows bring in tourist and Durango is a tourist town, without them we would be in extreme economic despair. Last I want to say that to rob a watershed of its life, it's blood, is to irreversibly affect it forever and is morally wrong. Solutions to our water shortages should not be to rob and rape our Mother Earth for more than she can give, but to use our minds as human beings, stewards of our mothers lands, and find ways to reduce, reuse, and recycle out water usage. We as humans can live in union with nature and to put in more pipelines and reallocate water is to commit a serious crime against our children and grandchildren for they will not know the natural world for what it is.	N/A	Thank you for your comment. The four values driving Colorado's Water Plan are 1) vibrant and sustainable cities, 2) viable and productive agriculture, 3) a robust recreation and tourism industry, and 4) a thriving environment that includes healthy watersheds, rivers, streams, and wildlife. The CWCB and the Basin Roundtables are working to support conservation, environment, and recreation in the Basin Implementation Plans and Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan.
22	11/13/2014	Peter Grosshuesch, Town of Breckenridge	Webform	6.3	Local governments should establish their own water conservation goals such as GPCD or overall production/consumption, and identify and implement measures to reach them.	N/A	Local water providers currently establish conservation goals through water conservation plans. Any goals within Colorado's Water Plan will allow for local flexibility in water conservation plans.
23	11/17/2014	Frank (Buck) Skillen, Trout Unlimited	Webform	6.6	In developing the State water plan, it is vital that the economic impact of fishing and hunting be considered. From a fishing standpoint many millions of dollars come into all of our communities from both residents and visitors. Further, Colorado fisheries are known for pristine cold, clear running water which is vital to a healthy tourism and recreation industry. Thank you for your careful consideration of these points. Respectfully submitted, Frank (Buck) Skillen.	N/A	Thank you for your comment. The four values driving Colorado's Water Plan are 1) vibrant and sustainable cities, 2) viable and productive agriculture, 3) a robust recreation and tourism industry, and 4) a thriving environment that includes healthy watersheds, rivers, streams, and wildlife. The CWCB and the Basin Roundtables are working to support conservation, environment, and recreation in the Basin Implementation Plans and Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan.

GAIL SCHWARTZ
Senate District 5

200 E. Colfax Avenue
Denver, Colorado 80203
Capitol: 303-866-4871
FAX: 303-866-4543
Home: 970-925-3013

Email: gail.schwartz.senate@gmail.com

SENATE
STATE OF COLORADO
DENVER

COMMITTEES
Agriculture, Natural Resources, and Energy
Chair
Local Government
Member
Capital Development Committee
Vice Chair

Senate Majority Caucus Whip

October 9, 2014

Re: Comments on the draft Colorado Water Plan

Dear Director Eklund:

This letter provides my comments on Colorado Water Plan (CWP). The comments reflect my insights on the SB14-115 process undertaken by the Water Resources Review Committee and should not be read as an opinion of the committee.

I gleaned from the citizens' input that Colorado needs a statewide Water Plan that addresses and balances the broad range of perspectives across the state. To simply roll-up the individual basin implementation plans (BIPs) into a document will not "add up" to a unified recommendation for the future of Colorado's water. The CWCB should prioritize developing a plan with a statewide perspective.

At virtually every hearing I attended (I attended all scheduled hearings except the Arkansas Basin hearing), Colorado citizens expressed their support for a strong commitment by municipal water utilities to indoor and outdoor water conservation. My recommendations on conservation goals are as follows:

- The Plan should guide all BIPs toward meeting, at a minimum, the No/Low Regrets goals on conservation as spelled out by the IBCC.
- Current Front Range BIPs' commitment to conservation is not sufficiently rigorous to achieve the level of conservation necessary to avoid future diversions from the West Slope.
- We need to blaze a new trail. The Plan should generate recommendations for legislation to increase conservation for residential and commercial performance and reduce outdoor lawn irrigation in cities across the state.

Repeatedly, Colorado citizens that attended our meetings placed a high priority on protecting riparian areas and habitat with healthy rivers. It is to be specified within the Water Plan to meet Environment and Recreation (E&R) needs. My thoughts on addressing this priority are as follows:

- It's incumbent upon the state's water leaders to embrace solid goals for identifying and protecting stream values. This is especially critical for future water projects that seek to develop additional water. For example, the Yampa basin will evaluate how M&I and ag projects could impact necessary E&R protections, with consideration of how climate change will impact these future needs.

- Specific goals should include ecosystem resiliency and protecting recreation economies, regardless of what new M&I or agriculture projects get built.
- Most identified IPPs have specified costs, while E&R needs rarely do. They both must receive equal consideration and similarly E&R projects should have estimates of expenditures and timelines for completion.
- It is often difficult to fund E&R projects in various basins. Therefore, the Plan should commit a meaningful share of all future funding to meet E&R needs.
- An important step is to develop stream management plans statewide as defined by a West Slope expert as "An evaluation of flow and water quality needs to support environmental and recreational uses within a specific basin together coupled with identification of challenges and opportunities to restore or improve conditions for those uses."

For developing the $18 Billion new projects (we know Colorado may never have available) the Plan should both require prioritization and establish criteria to determine whether projects deserve state support and funding. Group discussions regarding streamlining of permits felt new projects should not come at the expense of Clean Water Act protections and water quality. I tend to agree that this is an important balance that must be maintained.

As I have repeatedly stated, the only thing new in "new supply" is that it is new to the new user. I support the IBCC conceptual agreement that "preserves the option" for a new supply without the plan committing to state support for such a project. It is prudent for the plan to adopt this position in light of the great uncertainty about long-term water availability in the Colorado River Basin. We repeatedly heard from citizens that basins must live within their means and not rely upon future diversions to support growth.

Citizens consistently expressed that they supported legislation for more tools and flexibility for addressing efficiency in agriculture and the preservation of a sustainable agricultural economy. Alternative transfer mechanisms (ATMs) are key for meeting future needs, and should be fleshed-out in the Plan.

We certainly learned that citizens care about water and want to weigh in on the plan for the future of water in Colorado. I observed that the SB 14-115 hearings brought together a lot of folks who might have found the CWCB/BIP processes intimidating or were not previously engaged in water conversations. Going forward, it's important to listen to all perspectives and continue forums such as these to seek input.

Sincerely,



Senator Gail Schwartz
Senate Agriculture, Natural Resources and Energy, Chair
Water Resources Review Committee, Vice Chair

Senate Bill 115 Comments - Summary and CWCB Response

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Public Comments Provided Outside of Committee Meetings and Not Using Questionnaire			
Senator Larry Crowder E-mail to committee staff (excerpts provided in the following column).	• The Colorado W ater Plan (CW P) should include reports from all municipal water providers concerning water losses related to leaking pipes and aging infrastructure. • It should also include a goal of limiting such losses to one percent of the water delive red by a water provider.	6.5	Thank you for your comment. CWCB's information indicates that 6-7% of water loss is sufficient for meeting high conservation strategies. This would also be a helpful process to propose at the roundtable level. Infrastructural and maintenance costs are also emphasized in Section 6.5.5.
Kay L. Linder E-mail to committee (excerpts provided in the following column).	• Expressed concerned about the possible future issues with the Poudre River and felt very strongly that (the committee) could make irreparable damage to it if (the committee) was not careful in (its) decisions. • Objected to a reservoir that would impede the flow of water through the city of Fort Collins or harm the Poudre River.	6.5	Thank you for your comment. Colorado's Water Plan and the South Platte BIP emphasize the importance of environmental resiliency in development.
Public Comments from June 18, 2014 Gunnison Basin Hearing			
Steve Glazer	• The Joint Review Process (Article 10 of Title 34, repealed in 2003) s hould be reinstated so that all permits from all state offices may be dealt with at one time. The state should initiate a Colorado Env ironmental Quality Act to help avoid future litigation.	9.4, 10	Your legislative suggestions will be considered in the drafting of Chapter 10. Permitting issues are explored in Section 9.4 and the section will be further developed in 2015.
Marlene Zanetell	• Public education materials for the basin roundtables should not identify the purchase of water rights that are senior to the Colorado River Compact as a possible solution to enable c ontinued Front Range diversions during droughts. • The state should encourage greater water conservation and reuse to reduce the pressure on W est Slope water resources. • The CWP should also explain that Blue Mesa Reservoir and other elements of the Colorado River Storage Project do not directly benefit Gunnison and Montrose Counties but provide benefits to the state as a whole.	6.2, 6.5	Thank you for your comment. Compact concerns are addressed in west slope BIPs as well as within Colorado's Water Plan. The Gunnison BIP does a great job of articulating the role of the CRSP reservoirs within the Gunnison Basin and within the greater Colorado River basin. The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues.
Marc Catlin	• There is not more water in the Gunnison basin than what is needed by the basin. • All tributaries should be treated equally in the CW P. • Water efficiency does not necessarily mean lower consumption. • Water use and reuse is important. • Tamarisk and Russian-Olive trees are using huge amounts of water. Grant programs to remove phreatophytes quickly are crucial to prevent land fallowing. • Water banking is not the whole solution and needs to be examined closely. • The law should be amended to prohibit the us e of water obtained from new transmountain diversions (TMDs) for outdoor water consumption, such as lawn watering.	6, 8,10	The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. Your legislative suggestions will be considered in the drafting of Chapter 10. In Section 6.3.4, Colorado's Water Plan addressed the need for reducing nonnative phreatophytes in order to gain salvagled water.
Jennifer Bock, environmental representative on the Gunnison Basin Roundtable, and W ater Program Director for High Country Conservation Advocates Also submitted a letter to the c ommittee	• The CWP should promote funding for environmental needs assessments and increased instream flows, such as funding to increase efficiency and purchasing or leasing of water rights for instream flows. • The plan should also include criteria for new diversions including a requirement that conservation and reuse be maximized prior to allowing new diversions.	10, 6.3	Thank you for your comment. The role of funding for environmental and recreational projects and methods, and the historical disparity between those projects and M&I or agricultural needs is discussed in 9.1 - Economics and Funding. Chapter 8 also discusses the issues at hand when proposing new conservation strategies or new supply. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3.
Cassidy Tawse-Garcia, High Country Conservation Advocates	• Protect the Gunnison watershed.	8	With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Garin Vorthman, Colorado Farm Bureau	• The word "viable" should not be attached to "agriculture" in the CW P. Instead it should be "robust" and "strong." "Viable" implies there is a value judgement. • The CWP should respect the doctrine of prior appropriation.	6.4	6.4 - The word viable has been replaced in several locations as suggested.
Donna Brosemer, Greeley Water Utilities	• The CWP should not prioritize water projects proposed by municipalities and other water users. The state should treat water users equally and not withhold state funding or permits for projects based on their priority in the CWP. • The CWP should respect property rights and local control. • Local land use planners and water providers should also work more closely together.	2.3 ,6.3.3	Thank you for your comments. Staff has addressed your land use and local comments in the latest version of the chapter 6.3.3 draft. Colorado water allocation and governance has always been guided by local users meeting local needs and Colorado's Water Plan will not change that. Rather than diminishing local control or authority over water, Colorado's Water Plan seeks to strengthen local decision-makers' ability to achieve regional and statewide water solutions. To that effect, Colorado's Water Plan will work to encourage, rather than mandate, several of the points presented in the comments.
J. Paul Brown, Colorado W ool Growers Association	• The CWP should respect property rights and encourage additional s torage on the Front Range to ens ure that Colorado is able to use its full entitlements under the South Platte River and Arkansas River compacts. • The state should also coordinate federal perm its for water projects.	9.1, 9.4	Thank you for your comments. The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues. See compacts information in 2.2 and 9.1. Look to section 9.4 for permitting efficiency goals.
Chris Treese, Colorado River Water Conservation District Submitted written comments using the original questionnaire	• The CWP statewide goals and objectives should also include "minimize impacts; adequate compensation and mitigation for inherent/inev itable conflicts/tradeoffs; affirmation of prior appropriation; do not ov erdevelop the Colorado River Basin." • Priorities for addressing possible Gunnison-basin-specific issues should include "basin directed actions; first, do no harm, protect existing uses; broaden education/participation in water matters." • Basin-specific priorities that should also be included: "coordinated management and development of Gunnison basin with other 3 basins of the Colorado River."	1, 3, BIP	Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. Additionally, the updated Chapter 3 will have a more detailed look at the themes, goals, and policy statements identified by the basin roundtables in their respective BIPs. CWCB Staff will work with the BRTs and pass these comments along to the Gunnison Basin.
Roger Espinoza Submitted written comments using the original questionnaire	• Does this plan help to mediate some of the tensions between recreactionalists and private land owners? • Seeing the differences in absoluteness between water and land rights would make this task difficult. • Lastly, would this be a money issue or a value issue?"	5	Colorado's Water Plan does not currently address policies related to recreational activity on waterways.
Table 1 Small Group Discussion Report	• The CWP's goals should explicitly acknowledge the need to protec t and preserve existing water rights and the environment, and to encourage conservation. • Measures to address the gap between supply and demand should not hurt agriculture. • Water storage should be listed as a goal or as a strategy of the CW P. • The plan should acknowledge the effect of the Endangered Spec ies Act on Colorado's ability to complete projects as they were originally intended. • A goal of CW P should be to protect watershed health. • Additional storage in the upper Gunnis on basin should be emphasized. • The plan should also explain how conservation is beneficial to the environment.	1, 6.3	Thank you for your comments. The four values driving Colorado's Water Plan are 1) vibrant and sustainable cities, 2) viable and productive agriculture, 3) a robust recreation and tourism industry, and 4) a thriving environment that includes healthy watersheds, rivers, streams, and wildlife. Colorado's Water Plan will not include any specific water projects. The CWCB would like to encourage multipurpose projects and full mitigation. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. Staff has addressed your "how conservation benefits to environment" comments in the latest version of the chapter 6.3.1 draft. The response is taken from the CWCB's Water Efficiency Minicipal Planning Guidance Document.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Table 2 Small Group Discussion Report	• The goals identified in chapter 1 of the draft CW P are inherently in conflict. • The doctrine of prior appropriation is important. • Current uses of water both statewide and in the Gunnis on basin should be retained. • Do not over-develop statewide nor in the Gunnison Basin. • The values identified in chapter 1 of the draft CW P concerning a productive economy that supports "viable and productive agriculture" should instead be "robust and productive agriculture." • Front Range water usage must be conserved to limit the need for additional trans basin diversions. • Compact compliance is also a concern	1, 6.3, 8, 9.1	The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work.
Table 3 Small Group Discussion Report	• The CWP is brilliant idea that needs to be done and organized well. • Concerned about outcomes and how to meet supply and demand issues, including transbasin diversions, watershed protection, the importance of water quality. • Public education about water is critical. The public is uninformed about water. They have little to no understanding of our relations hip to other states including CO's fixed amount of water. • Agriculture must not be harmed. • Enlarging existing storage facilities should be considered, rather than building new storage facilities. • Recreational and economic impacts of water and evaporation from storage projects are real impacts. • Water is key to the quality of life on the W estern Slope. • Forests are our largest reservoir. Forest health is key to healthy water.	9.5,6.5,7, 8	Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. Refer to Chapter 8 for more discussion about TMDs, and Chapter 9 for looking at public education and outreach. Chapter 4 also looks at the potential in existing storage facilities. The Water Quality Division of the Colorado Department of Public Health and Environment (CDPHE) regulates water quality issues of this nature in the state. Water Quality has been recognized as critical for Colorado's water future. The CWCB is working closely with the Water Quality Control Division and the Basin Roundtables in order to address Colorado's Water Quality needs. This is further explored in Section 7.3. Forest health addressed in Chapter 7. Colorado's Water Plan will not include any specific water projects. The CWCB would like to encourage multipurpose projects and full mitigation.
Table 4 Small Group Discussion Report	• There may not be enough water for both agriculture needs and municipal needs. • Agriculture is key because it sustains the environment, recreation, and groundwater recharge. Incentives should be provided to encourage agricultural water efficiency. • The Front Range should conserve their water better. The ration of indoor to outdoor w ater use by Front Range residences should not be 50/50 as it is currently, and instead be closer to 70/30. • The goals of the CW P must be more specific, especially related to conservation measures. • The pre-1922 W estern Slope diversions should be prioritized.	6.3, 1	Thank you for your comments. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. Staff has taken a best practice approach to setting goals in the latest version of the chapter 6.3.1 draft. Additionally, staff has included the IBCC's no and low regrets conservation stategies which are the minimum level of water conservation that should be undertaken and equates to around 170,000 acre feet of active savings by 2050.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Table 5 Small Group Discussion Report	• The values identified in chapter 1 of the draft CW P are too broad and do not all apply to the Gunnison Basin. • The value of "sustainable cities" should be further defined. • Water quality should be preserved even during "boom" and "bust" cycles. • The plan should protect existing uses. • The meaning of "forest health" is different to people living in different areas of the state. • There are concerns about funding for water projects to promote conservation. It is unclear where the money for such projects will come from. • There are concerns about the effect of compacts on the basin. • The plan should support an equitable dis tribution of water, rather than distributed according to population or the demographics of the legislature. • The CWP drafting process should be nonpartisan and encompassing of people from all areas of the state--not urban vs. rural.	1, 6.5, 7, 9.2, 9.5	6.5 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and draft of Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan. Each Basin Roundtable is made up of a diverse set of stakeholders and the inclusion of both an environmental and recreational representative is required by the Colorado Water for the 21st Century Act. In addition, representatives from each county, municipalities within each county, industry, agriculture, and domestic water suppliers are required. Lastly, a representative from each water conservation and conservancy district are also mandated. There are also several other at large seats, and many of these are held by environmental interests, and many of the local government representatives are also focused on environmental and recreational issues since their citizens care about these topics and the area may be dependent on tourism. Watershed Health is discussed chapter 7.1. Thank you for your comment, no further incorporation is needed because your comment has already been considered or addressed.
Table 6 Small Group Discussion Report	• The Western Slope is concerned about being "bullied" into trans mountain diversions. • Conflicts exist and will continue to exist and there must be continuous cooperation to work through these conflicts. • It is unclear how much water is actually available. Efforts should be made to clarify water availability through improved data collection. • There must be an acceptance of a certain amount of uncertainty. • Conservation is important. The connection between land use and water connection should be examined.	6.3, 4, 8	Thank you for your comments. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. The CWCB does take water conservation seriously and considers it an integral part of managing water statewide.6.3.3 addresses you comments on land use and water connection. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. Refer to Chapter 8 for more on transmountain diversions and cross-basin concepts. CH 4 comments have been taken under consideration. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP.
Table 7 Small Group Discussion Report	• There are concerns about the state government playing too large of a role in s tatewide water planning that loc al communities are better suited to planning for their needs . • Different basins in Colorado have very different needs and a "one size fits all" CW P may not fit all basins. • There are concerns that the doctrine of prior appropriation is not mentioned in the CW P goals. • One property right should not be prioritized over another. • The CWP should not prioritize water supply projects and should not be used prevent individual water projects from moving forward. • Education about water in Colorado schools should be a priority of the CW P.	9.5, 2.3	Colorado water allocation and governance has always been guided by local users meeting local needs and Colorado's Water Plan will not change that. Rather than diminishing local control or authority over water, Colorado's Water Plan seeks to strengthen local decision-makers' ability to achieve regional and statewide water solutions. To that effect, Colorado's Water Plan will work to encourage, rather than mandate, several of the points presented in the comments. The development of Colorado's Water Plan has helped to raise the level of importance placed on education and outreach statewide related to water supply planning. The CWCB is working together with the Basin Roundtables (BRTS) to expand education and outreach activities related to raising awareness regarding the issues presented in the webform comments submitted and Section 9.5 Outreach, Education, and Public Engagement will include recommendations on continuing education on these topics long-term.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Table 8 Small Group Discussion Report	• Conservation in the CW P and in the water process must be made a priority. • Transmountain diversions from the W estern slope are a large concern. New diversions should also address the economic loss in the basin of origin. • Lake Powell should not be used as a water bank to enable the East Slope to make diversions from the Colorado River Basin. Once the water reaches Lake Powell it is no longer Colorado's water because there is no way to return it to the state.	6, 2.2, 8	Thank you for your comments. The CWCB does take water conservation seriously and considers it an integral part of managing water statewide. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues.
Public Comments from August 21, 2014 Colorado Basin Hearing			
Robert Ittner, Jr. Chair, Pitkin County Board of County Commissioners Letter to Committee (excerpts provided in the following column).	• Transbasin diversions (TBDs) and other projects of statewide interest which are implicated or propounded by the CWP must be subject to robust 1041 review by local governments. • CWP should recognize and account for the disproportionate impact that TBDs have on the state's ability to meet its compact delivery obligations compared to in-basin diversions. • Recreational in-channel diversion (RICDs) and W ild and Scenic designations support western slope recreation and economies, and are tools for compact compliance.	6.5, 9.1, 8	Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. Transmountain diversions are addressed in Chapter 8. Colorado water allocation and governance has always been guided by local users meeting local needs and Colorado's Water Plan will not change that. Rather than diminishing local control or authority over water, Colorado's Water Plan seeks to strengthen local decision-makers' ability to achieve regional and statewide water solutions. To that effect, Colorado's Water Plan will work to encourage, rather than mandate, several of the points presented in the comments. Local control issues are explored in Chapter 2, as well as 9.1. The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Rachel Richards, Pitkin County Commissioner Also submitted comments in a questionnaire (included in Table 1).	• TBDs and other projects of statewide interest which are implicated or propounded by the CWP must be subject to robust 1041 review by local governments. • RICDs and W ild and Scenic designations support western slope recreation and economies. CWP should recognize the benefits of healthy rivers and recreation to the economy. • It should also consider how to protect agriculture without new TBDs. • Municipal outdoor water consumption should be limited to reduce the pressure on agriculture and the waters of the Colorado Basin. • New residential growth should pay for new water projects, transportation, and related infras tructure needs.	6.3, 6.5	6.3-Thank you for your comments. The CWP does have actions related to reducing outdoor water consumption. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. 6.5 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. Refer to Chapter 8 for more discussion of transmountain diversions. Colorado water allocation and governance has always been guided by local users meeting local needs and Colorado's Water Plan will not change that. Rather than diminishing local control or authority over water, Colorado's Water Plan seeks to strengthen local decision-makers' ability to achieve regional and statewide water solutions. To that effect, Colorado's Water Plan will work to encourage, rather than mandate, several of the points presented in the comments.Chapters 2 and 9 more discussion of local control and it's role in Colorado water.
Steve Child, Pitkin County Commissioner, representing himself	• CWP should take a longer range view beyond 2050 to avoid upcoming problems. • A reservoir on the lower South Platte should be considered to provide water for upstream municipal and industrial users, help meet interstate water delivery obligations in the South Platte and Republic an River Basins, and to recharge the Ogalala aquifer. • Triggers should be developed based on levels in Lake Mead and Lake Powell that determine when TMDs are allowed. • Alternatives should be developed to replace bluegrass lawns with landscapes that use less water. • A pump back project on the Gunnison River would help provide water for endangered fis h on the Colorado River. • Land use policies should be adopted that enc ourage conservation.	6.5, 6.3, 6.6, BIP	6.3-Thank you for your comments. The CPW does have actions related to reducing outdoor water consumption.Land use policies are featured in the the actions section of 6.3.3 These comments and others with similar sentiment have been taken into consideration and will be reflected in Ch 6.5 of the November draft of CWP. The triggers conversation is addressed within the conceptual agreement, discussed in Chapter 8. Nos. 1 and 9 of 6.6.7 identify actions to address the needs of threatened and endangered fish species. The proposed pumpback project on the Gunnison River is an appropriate subject for basin roundtable discussion. CWCB Staff will work with the BRTs and pass these comments along to the Gunnison Basin.
Laura Makar, Pitkin County, Pitkin County Healthy Rivers and Streams Advisory Board	• County 1041 review powers should be maintained for new transbasin diversions and for statewide projects. • The CWP should recognize and account for the disproportionate impact that transbasin diversions have on the state's ability to meet its compact delivery obligations compared to in-basin diversions. Unlike in-basin diversions, transbasin diversions (TBDs) provide no return flows to the basin of origin. • The CWP should support stream health and recognize the benefits of RICDs and instream flows in helping Colorado meet its compact obligations.	8, 6.6, 9.1	Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. Local control issues and their importance to Colorado's water landscape are found in chapters 2 and 9. The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and draft of Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. Transmountain diversions are discussed in Chapter 8. Thank you for your comment, no further incorporation is needed Ch 6.6 addresses streams health and instream flow.

Senate Bill 115 Comments - Summary and CWCB Response

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Andre W illie, Chairman, Pitkin County Healthy Rivers and Streams Board Letter to committee (excerpts provided in the following column).	• County 1041 review powers should be maintained for new TBDs and for statewide projects. • The CWP should recognize and account for the disproportionate impact that TBDs have on the state's ability to meet its compact delivery obligations compared to in-basin diversions. • CWP should also support stream health and recognize the benefits of RICDs and W ild and Scenic designations, and instream flows in helping Colorado m eet its compact obligations.	6.5, 7, 9.1	6.5 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. Colorado water allocation and governance has always been guided by local users meeting local needs and Colorado's Water Plan will not change that. Rather than diminishing local control or authority over water, Colorado's Water Plan seeks to strengthen local decision-makers' ability to achieve regional and statewide water solutions. To that effect, Colorado's Water Plan will work to encourage, rather than mandate, several of the points presented in the comments. Chapters 2 and 9 discuss the role of local control issues to Colorado's water landscape. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. Chapter 8 discusses the interbasin concepts related to transmountain diversions. The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and draft of Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan. Thank you for your comment, no further incorporation is needed because Chapter 7.1 addresses stream health and instream flow.
Torie Jarvis, Northwest Council of Governments Water Quality and Quantity Committee Public testimony and written comments.	• New TMDs should only be allowed if they are able to address local concerns and if approved by affected local governments and water providers. • TMDs must provide multiple benefits and make streams and rivers healthier to the maximum extent possible. • Legislation should be approved to reestablish the Colorado Joint Review Process that was repealed in 2003. • The state should not sponsor a water project until the state regulatory process has been completed and the project has been agreed to by the impacted counties, conservancy districts, and conservation districts in the area from which the water would be diverted.	2.3, 6.5, 8, 10	Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. Refer to Chapter 8 for a more thorough discussion on the statewide viewpoints on TMDs. Colorado water allocation and governance has always been guided by local users meeting local needs and Colorado's Water Plan will not change that. Rather than diminishing local control or authority over water, Colorado's Water Plan seeks to strengthen local decision-makers' ability to achieve regional and statewide water solutions. To that effect, Colorado's Water Plan will work to encourage, rather than mandate, several of the points presented in the comments. Colorado's Water Plan will not include any specific water projects. The CWCB would like to encourage multipurpose projects and full mitigation. You legislative suggestions will be considered in the drafting of Chapter 10.
Ken Nuebecker, American Rivers (Also completed a questionnaire)	• The CWP should recognize the challenge and importance of quantifying water needs for the environment and recreation. • The Colorado Basin Roundtable developed the W atershed Flow Evaluation Tool to identify the basin's nonconsumptive water needs. This tool may also help other basins identify environmental and recreational water needs as well as provide a standard and widely agreed upon method for assessing these needs.	6.6	Thank you for your comments. These comments and others with similar content have been considered and will be reflected in section 6.6 of the November draft of CWP.
Mark Fuller, Executive Director, Ruedi Water and Power Authority	• The CWP should identify realistic and broadly applicable metrics to measure adequate streamflows and include implementation measures to guarantee those flows. • It should identify short-term leases of agricultural water rights for instream flows as a reasonable means for meeting instream flow needs while complying with Colorado water law. • Unappropriated water in the Colorado River Basin should not be used to satisfy water needs in other parts of the state. Instead, this water should be used to ensure that Colorado meets its compact delivery obligations. • The value of the CW P lies in the boldness and innovations that it brings in helping to solve water issues. A plan that is a catalog of unresolved issues, undeveloped projects, and unchallenged policies will not make progress.	6.3.4, 9.1	9.1- The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues. Agricultural water sharing and modernizing agricultural efficiencies are aspects of Colorado's Water Plan and included in Section 6.4 and Subsection 6.3.4

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Steve Acquafresca, Mesa County Board of County Commissioners Also submitted comments in a questionnaire (included in Table 1).	• The value of the CW P depends on it being developed by the grassroots and it should be flexible enough to be adjusted over the years. • The legislature should not recommend changes to the CWP that overturn grassroots recommendations.	10	Your legislative suggestions will be considered in the drafting of Chapter 10.
Ken Ransford, Recreational Representative of Colorado Basin Roundtable Also submitted comments in a questionnaire (included in Table 1).	• All basins should adopt the high c onservation target in the BIPs. • Colorado water law should be amended to remove disincentives to efficient irrigation practices, such as use it or lose it. • The law should allow certain changes of water rights outside of water court to reduce the cost of water transfers and to encourage more flexible water use.	6.3, 10	Thank you for your comments. As this is a grass roots effort, staff is incorporating the draft BIPs as they are with a view that final BIPs are not due until Spring 2015. There are actions in both the water conservation and reuse sections that address sharing and marketing of conserved water. Agricultural water sharing and modernizing agricultural efficiencies are aspects of Colorado's Water Plan and included in Section 6.4 and Subsection 6.3.4. Your legislative suggestions will be considered in the drafting of Chapter 10.
Kristin Green, Conservation Colorado	• The CWP should prioritize conservation and reuse and such measures should be maximized prior to authorizing new water diversions. • The CWP should also include a high-level water conservation goal and should promote funding for environmental needs assessments.	6	Thank you for your coments. CWCB staff does treat water conservation seriously but also sees it as one strategy among others that will help with our future water management decisions. In the current drafts, a goal of 170,000 acre feet of active savings was adopted as the no/low regret action or minimum that should be carried out. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. Section 6.6.7 addresses the need for additional environmental needs assessments and funding.
Annie Henderson, Upper Colorado River Private Boaters Association Also submitted comments in a questionnaire (included in Table 1).	• Water based recreation economy benefits the environment. • Conservation is the only way to avoid the impending water crisis. • New water diversions should be opposed. • Water conservation should be maximized prior to considering new TMDs. • Water for the environment and other nonconsumptive uses should be recognized as beneficial uses. • The law should be re-evaluated to ensure that it can address climate change and population growth.	6.3, 6.6, 8, 10	With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and draft of Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan. 6.6.4 describes how Colorado law recognizes instream flow and recreational in-channel diversion water rights as beneficial uses. Your legislative suggestions will be considered in the drafting of Chapter 10.
Marc Catlin, Montrose County Also testified at June 18 Gunnison Basin meeting	• The CWP should encourage permanent phreatophyte removal to make additional water available at the state line and to reduce the need for agricultural water transfers. • Water banks that store agricultural water for other purposes will impact agricultural communities. • Communities that receive water from fallowed agricultural lands should be required to offs et the economic impacts to the affected agricultural communities.	6.4	ATM programs are estabished to curb permanent buy and dry so that farmers and agriculturally based communities can maintain viable economic patterns. We recognize the importance of local and regional ag economies, which are discussed in the background portion of this section.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Roger Wilson	• CWP should identify water needs for endangered species and to ensure that sufficient water is provided to allow the removal of these species from the Endangered Species List. • The legislature should adopt legislation or a resolution that identifies guiding principles for the IBCC that are derived from regional sensitivities and statewide economic interests (tourism, recreation, agriculture, and municipal needs) with a focus on preserving the current balance of water use. • The price of population growth must be borne by those seeking that growth and not by current water users.	6.6,10	6.6 - Thank you for your comments. 6.6.2 and 6.6.7 address how Colorado is working and will continue to work on endangered species issues. Your legislative suggestions will be considered in the drafting of Chapter 10.
Richard Van Gytenbeek, Trout Unlimited	• Explained that agricultural water efficiency can benefit stream flows. • Greater cooperation between the agricultural community and the recreation, tourism, and sportsmen's communities should be encouraged. • New TMDs should be opposed because other water supply options are available.	6.3.4, 8	Agricultural water sharing and modernizing agricultural efficiencies are aspects of Colorado's Water Plan and included in Section 6.4 and Subsection 6.3.4 With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work.
Bill Hoblitzell, Eagle Watershed Council	• Expressed concern about provisions of the State Water Supply Initiative (SWSI) that identify the Colorado Basin as a possible solution to the water supply needs of other basins. • SWSI should be updated to include information about the impacts of climate change, provide a greater emphasis on conservation, and to identify new water conservation technologies. • Colorado instream flow law should also be updated to reflect new scientific information, such as the benefits of flushing flows, and the CWP should consider the benefits of stream management planning such as developed by Grand County. • The legislature should consider new policies to allow water-sharing agreements and flexible water use, and to provide sufficient time for local communities to identify solutions to their water supply needs.	6.2, 4, 6.3, 10	6.3-Thank you for your comments. SWSI will identify the latest water conservation initiatives and technologies and their impacts on future demands. Ch 4- SWSI will include climate change analysis. Your legislative suggestions will be considered in the drafting of Chapter 10.
Rick Lofaro, Executive Director, Roaring Fork Conservancy Letter to the committee (excerpts provided in the following column).	• Nonconsumptive use of water on the western slope is essential to the ecological health and economic vitality of the state. • New TMDs could cause significant declines in river health. • The legislature should promote agricultural efficiencies. • Water conservation should be increased statewide.	6.6, 10, 6.3, 8	6.3-Thank you for your comments. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. The water conservation chapter does lay out specific actions that will assist in increasing water conservation statewide. 6.6 - Thank you for your comments. 6.6.1 recognizes the ecological and economic benefits of healthy stream flows. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. Agricultural water sharing and modernizing agricultural efficiencies are aspects of Colorado's Water Plan and included in Section 6.4 and Subsection 6.3.4. Your legislative suggestions will be considered in the drafting of Chapter 10.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Kendall Bakich, Wildlife Biologist, Colorado Parks and W ildlife Letter to the committee (excerpts provided in the following column).	• The CWP should identify priority stream reaches and characteristics to protect in the Colorado River. • It should specify support and funding to addres s data gaps for nonconsumptive needs within critical reaches of the Upper Colorado watershed to support aquatic ecosystem health and recovery of endangered fish species. • It should provide project funding to address non-consumptive needs identified in the Upper Colorado Riv er Basin. • It should encourage innovative partnerships and legal mechanisms that help augment stream flows in cooperation with in-basin water users. • It should emphasize water conservation, reuse, and efficiency before seeking to increase water diversion, particularly out-of-basin diversions, and promote mitigation and monitoring against such impacts.	6.6, 6.3, 9.2, BIP	6.3- Thank you for your comments. The latest draft of the CWP does emphasize water conservation, reuse and land use as very important and effective strategies for managing our water resources statewide. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. 6.6 - Thank you for your comments, which have been considered and will be reflected in section 6.6 of the November draft of CWP. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan, and is explored in Section 6.6. CWCB Staff will work with the BRTs and pass these comments along to the Colorado Basin. Funding opportunities are discussed in Chapter 9.2.
Table 1 Small Group Discussion Report	• Concerned about how basin implementation plans (BIPs) will be incorporated into the Colorado W ater Plan (CWP) and whether the basins will have an equal voice in the development of the CW P. • Concerned that the draft CW P is too project focused instead of policy focused. • The legislature should also listen to a broad range of opinions when it reviews the CWP, instead of just special interests and to help ensure that land use is more closely connected to water and that there will be sufficient water available for recreation. • The CWP should also encourage the state to live within its water means such as some of neighboring states.	9.5, 6.3.3, 6.6	Additional BIP content was included in the November draft of Colorado's Water Plan. CWCB will continue to work with the BRTs throughout 2015 as they finalize their BIPs. Chapter 6.3.3- There is a section dedicated to water use and urban land use planning where actions are described that will get at this connection. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan, and is explored in Section 6.6.
Table 2 Small Group Discussion Report	• Shoshone Hydropower plant water right should be owned by the Colorado Basin because it is critical to the basin. • No new transmountain diversions should be allowed for municipal outdoor purposes. Approving authorities, such as zoning boards, should not approve open space planted with non-native vegetation in new subdivisions. • The term "new supply" is a fictitious term because its only a new supply for the persons that receive the water and that such water is being taken from someone. • The state should control how water is used instead of the federal government.	6.5/BIP, 8, 10	6.5 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. Shoshone concerns have been addressed by the Colorado roundtable in their BIP. "New Supply" use is no longer used in IBCC planning work, refer to Chapter 8 and the conceptual agreement. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. Colorado water allocation and governance has always been guided by local users meeting local needs and Colorado's Water Plan will not change that. Rather than diminishing local control or authority over water, Colorado's Water Plan seeks to strengthen local decision-makers' ability to achieve regional and statewide water solutions. To that effect, Colorado's Water Plan will work to encourage, rather than mandate, several of the points presented in the comments. CWCB Staff will work with the BRTs and pass these comments along to the Colorado Basin.
Table 3 Small Group Discussion Report	• Colorado needs to quantify the amount of water that the state is entitled to that is currently going downstream, to quantify how much water is adjudicated, and to identify how any shortfall will be covered. • Delta and Mesa counties need more storage on the Grand Mesa and the State of Colorado s hould advocate for this storage in the federal perm it review process. • Colorado should also sustain agriculture and ensure local control, and the priority system must stay in place. • Water use should not predicate land use.	9.1, 6.5, 2.3	6.5 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues. Compact concerns are reflected in current CWP drafts, and information about permitting and potential efficiencies will be addressed in Chapter 9. The importance of the priority system and local control are addressed in Chapter 2.3. Colorado's Water Plan will not include any specific water projects. The CWCB would like to encourage multipurpose projects and full mitigation.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Table 4 Small Group Discussion Report	• It is unclear whether new TMDs are needed when existing TMDs have unused capacity. • Users of any TMDs must bear the risk during droughts and compact calls. • The burden of proof should be on those seeking new diversions to demonstrate the need for the water and prove that existing users and streams will not be impacted. • The CWP should be the basis for unified state action and not a collection of competing interests. • The plan should also address the needs of Lake Powell and Lake Mead, and the downstream states. • A reservoir in the lower South Platte Reservoir should be considered because it would enable flexible water transfers and help meet compact delivery obligations. • There should be a permanent and reliable s ource of funding to implement the plan. • There should be a stronger connection between land use and water use in the plan. • CWP should encourage additional res earch on low-water consuming crops.	6.5, 9.1, 10, 6.3.4	6.5 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of Colorado's Water Plan. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. Refer to Chapter 8 for comments on TMDs, and Chapter 2 for the importance of compacts in state water planning. The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues. Funding addressed in Chapter 9. Chapter 6.3.3- There is a section dedicated to water use and urban land use planning where actions are described that will get at this connection. Colorado's Water Plan will not include any specific water projects. The CWCB would like to encourage multipurpose projects and full mitigation. Modernizing agricultural efficiencies are aspects of Colorado's Water Plan and included in Section 6.4 and Subsection 6.3.4
Table 5 Small Group Discussion Report	• Water for agriculture and water-based recreation are important but may be in conflict at times. • Residents should reduce outdoor water consumption by limiting the size of lawns to help ensure that other important needs are met and to delay the need for new projects. • Local communities should resolve conflicts between competing recreational water needs, such as water for golf courses, ski areas, and fishing, through voluntary agreements. • CWP should also address legal barriers to conservation, such as "use it or lose it" and should enable the tracking, protecting, and directing of saved water. • The Shoshone hydro power call should be protected.	6.3, 10	6.3-Thank you for your comments. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. The CWP highlights actions that will recude outdoor consumption such as adoption of WaterSense technologies statewide, incentives for outdoor efficiencies, and support for local ordinances that address outdoor consumption. Your legislative suggestions will be considered in the drafting of Chapter 10.
Table 6 Small Group Discussion Report	• The CWP should recognized that no water is available for new TMDs. • Disagree with the Interbasin Compact Committee's (IBCC) principles for new TMDs; i.e., that new TMDs only divert during surplus or wet periods when the additional div ersions would not increase the risk to existing uses and that the diverter take hydrologic responsibility for risk associated with new TMDs. • High water flows are needed for in-basin for recreational and environmental purposes, and to help meet compact delivery obligations. • Front Range growth should be considered. Front Range water users should know where they get their water. • It is unclear whether new storage to capture water in unusually wet years is practical. • Water on the W est Slope for recreation and environment benefit all residents of Colorado. The Front Range and West Slope need each other. • The legislature should also consider making adjustments to the doctrine of prior appropriation to addres s evolving water needs and to avoid crises.	ch 8, 10, 6.5	6.5 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. Refer to Chapter 8 for an updated discussion on statewide viewpoints regarding TMDs. Your legislative suggestions will be considered in the drafting of Chapter 10.
Table 7 Small Group Discussion Report	• No change should be made to the doctrine of prior appropriation and the CW P should consider adjusting compact delivery obligations to lower basin states to account for evaporative losses in Lake Mead and delivery obligations to Mexico. • CWP should promote block water rates, ensure that water users know how much water they are using, and provide financial incentives to use less water. • Payments for land fallowing should be based on loss of total income, not just net income to protect agricultural communities. • There are concerns about a water bank that uses West Slope agricultural water rights to help meet a compact call. • Water banks should not harm the West Slope, should be voluntary, and should not be used for new supplies. • Fairways and parks in Denver should deficit irrigate and the Front Range m unicipal and industrial users should not be expected to bear a disproportionate burden of m eeting Colorado's compact delivery obligations. • The water budget of the Sterling Ranc h residential development in Douglas County should be used as a model for new subdivisions.	9.1, 6.3.1, 6.4, 6.3.3	6.3.1- thank you for your comments. 6.3.1 promotes block water rates, ensuring that water users know how much water they are using, and providing financial incentives to use less water in the current draft. Sterling Ranch is highlighted as a model development. 6.4 Lease-fallowing negotiations occur between the farmers and interested municipalities. Recommend that CWP not dictate how those transactions take place, and what costs should be included in the agreements. For 6.4 - specific payments for total loss of income were not discussed in this version of the document, but could be more thoroughly vetted and added during 2015 as appropriate. 9.1- The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Table 8 Small Group Discussion Report	• Splitting comments on the draft CW P into constituent groups is not useful because persons may be multiple types of water users. • Land use and water use should be linked and water conservation should be maximized. • County 1041 powers should be maintained to enable bas ins of origin to protect themselves. • The burden of a compact call should not fall disproportionately on the W est Slope. • TMDs limit the ability of Colorado to meet a compact call. • The CWP should go beyond 2050 especially when considering the needs of agriculture and the impacts of climate change. • State law should also be amended to encourage conservation. • The public must be educated about the cost of their water use. • Baselines for instream flow needs should be quantified and funding s hould be made available to help quantify these needs, especially for head water streams.	9.1, 6.3, 6.6, 6.3.3, 2.3, 10	Chapter 6.3.3- Thank you for your comments. 6.3- The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. Land use and water use are linked and are tied to water conservation with actions that are designed to assist the integration of these disciplines. 6.6 - Thank you for your comments. Section 6.6 recognizes the need for more quantification of environmental needs and recommends strengthening funding for environmental projects. 9.1 - The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues. 2.3- Colorado water allocation and governance has always been guided by local users meeting local needs and Colorado's Water Plan will not change that. Rather than diminishing local control or authority over water, Colorado's Water Plan seeks to strengthen local decision-makers' ability to achieve regional and statewide water solutions. To that effect, Colorado's Water Plan will work to encourage, rather than mandate, several of the points presented in the comments. Your legislative suggestions will be considered in the drafting of Chapter 10.
Table 9 Small Group Discussion Report	• Additional residential outdoor water conservation should be supported. • Water should not be taken from agriculture to supply residential growth. • New residential developments should be required to have an adequate water supply.	6.3.3, 6.3	Thank you for your comments. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. Outdoor water consumption is supported through various actions outlined in chapters 6.3.1 and 6.3.3.
Public Comments from August 27, 2014 Southwest Basin Hearing			
Brad Blake, a member of the Florida Cooperative Ditch Board, representing himself	• The CWP should preserve and protect water rights and there should be more discussion about the plan. • The plan should identify who is responsible for implementing, managing, and enforcing the law. • Expressed concern that the voices of people from the Florida River area are not being heard and that the federal government wants to control every drop of water.	2	The Prior Appropriation Doctrine and the status of water as a private property right is fundamental to Colorado water administration and law and Colorado's Water Plan requires these principles to succeed.
Patti Buck	• Urged the public to submit comments on the U.S. Environmental Protection Agency's (EPA) draft regulations (defining the scope of waters protected under the Clean W ater Act). • Explained her family chose to buy a ranch with water rights to protect its value and ensure that water would be available for cattle.	5	Thank you for your comments. The Prior Appropriation Doctrine and the status of water as a private property right is fundamental to Colorado water administration and law and Colorado's Water Plan requires these principles to succeed.
Wayne Buck	• Expressed concern about the EPA's draft regulations (defining the scope of waters protected under the Clean Water Act) and how they may extend to all water in the state including rain captured in buckets. • Spoke in support of additional s torage to retain Colorado's compact entitlement.	9.1, 6.5	6.5 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues. Refer to Chapter 2 for a discussion of compacts.
Don Schwindt	• Expressed support for legislative involvement with the CW P but cautioned the committee about unintended consequences. • Stressed the importance of meshing the CW P with the prior appropriation doc trine.	2	Thank you for your comments. The Prior Appropriation Doctrine and the status of water as a private property right is fundamental to Colorado water administration and law and Colorado's Water Plan requires these principles to succeed.
J. Paul Brown (also testified at the June 18 meeting)	• Explained that the purpos e and content of the CW P is unclear. • Recommended that it protect the doctrine of prior appropriation and c onsider the need for additional w ater storage. • The CWP should address the problem of obtaining federal perm its for water project. • It should also recognize the importance of return flows to downstream water users.	2, 9.4	Thank you for your comments. The Prior Appropriation Doctrine and the status of water as a private property right is fundamental to Colorado water administration and law and Colorado's Water Plan requires these principles to succeed. Permitting issues are discussed in Section 9.4.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Mark Catlin, Montrose County Also testified at the June 18 and August 21 meetings.	• Expressed concern about requiring agric ulture to change consumptive uses to address municipal water needs. • Recommended that phreatophytes be eradicated prior to requiring agric ulture to reduce its consumption through land fallowing or other means.	6.3.4, 6.3	Agriculture uses the majority of water in Colorado and is an important economic driver in the state. The Basin Roundtables and the Colorado Water Conservation Board have engaged a number of agricultural representatives, pursuant to the Colorado Water for the 21st Century Act. For further information, please read Chapter 6. In Section 6.3.4, Colorado's Water Plan addressed the need for reducing nonnative phreatophytes in order to gain salvagled water.
Rod Proffit, President of the San Juan Water Conservancy District, and a member of the Southwest Basin Roundtable	• Said that the CW P should be considered a necessary first step for legislation to implement processes and projects for the state to move forward.	10	Legislative recommendations will be included in Chapter 10.
Margaret Cozine, retired librarian Also submitted comments in a questionnaire (included in Table 1).	• Expressed concern about water used in the basin for lawn watering and recommended that the laws be amended to allow greater use of rainwater harvesting and the reuse of grey water.	10, 6.3	6.3-Thank you for your comments.The actions outlined in the chapter are meant to increase conservation statewide. Both outdoor water consumption and rainwater harvesting are discussed in the chapter. Rainwater harvesting does have some limitations within current Colorado water law. The Prior Appropriation Doctrine, which is in Colorado's Constitution, typically dictates that rainwater is used by a downstream user. However, the CWCB maintains a rainwater harvesting pilot program to explore how rainwater harvesting can be used. This is further discussed in Subsection 5.6.1. Your legislative suggestions will be considered in the drafting of Chapter 10.
Table 1 Small Group Discussion Report	• The group did not reac h a consensus on all issues. • Number one component of the CW P should be conservation and how to support agriculture. • Need a higher standard for conservation if an entity is buying and drying. • Disappointed with the Governor's veto of the water efficiency bill and questioned the need to tak e care of the Front Range without "buy and dry" of agriculture. • Expressed concern about the disproportionate impact of a compact call on certain basins. • Although the San Juan-Chama Project takes 90,000 acre feet per year from the San Juan basin over to the Rio Grande basin, the San Juan basin was never compensated with any West Slope storage. The Dry Gulch storage project could help address that oversight. • Consider eliminating the "use it or lose it" from Colorado W ater Law to eliminate the concern about abandonment. The Southwest Basin Roundtable recognizes that all uses are valid and consumptive versus non-consumptive use is not the issue. • Consider a sunset on conditional water rights but noted that some projects take decades to move forward, so there is a need for a long period of tim e. • The plan should acknowledge that agricultural conservation may affect return flows that also benefit the environment. • It would be helpful to have water judges who are very familiar with water law.	6.3, 6.5, 10, 9.1	Staff is working with the CWCB Board on a potential solution to the Dry Gulch project by restructuring PAWSD debt and allowing the project time to evolve. 6.3-Thank you for your comments. The current draft does have a no/low regrets goal of 170,000 acre feet of savings by 2050 which is the minimum that should be accomplished. The actions outlined in the chapter are meant to increase conservation statewide. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. 6.5 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues. The prior appropriation doctrine is discussed in Chapters 2 and 9, and agricultural conservation is discussed in section 6.3.4. Your legislative suggestions will be considered in the drafting of Chapter 10.
Table 2 Small Group Discussion Report	• A compact call threatens all water users and water for municipalities should not receive greater priority over types of water use. • Expressed support of greater water conservation. However, agriculture has no incentive to save water due to "use it or lose it" Partnering with people who are conserving will help protect stream flows. • Land planners seem disconnected from water planners but should be coordinating their efforts . • Expressed concern about the disproportionate impact of transmountain diversions on the basin of origin because of the loss of return flows. • The East Slope needs to increase conservation. • Ski areas should not have to give up their water rights to renew their federal leases. • The potential impact of climate change should be studied and adequate funding s hould be provided for such studies.	9.1, 6.3, 6.1	6.3-Thank you for your comments. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. The actions outlined in the chapter are meant to increase conservation statewide. 6.3.3 addresses the connection between land use and water use with actions designed to integrate the disciplines. The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues. Climate change could have a serious effect on Colorado's water supplies, which is why Colorado's Water Plan is engaged in scenario planning. Climate change issues are addressed in various sections throughout Colorado's Water Plan. However, while temperature's impact on demands are understood, hydrolocial impacts are not. Since Colorado's water planners cannot necessarily impact the global climate change situation, Colorado's Water Plan is not directly focused on mitigating climate change. Other agencies within Colorado's state government consider climate mitigation strategies.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Table 3 Small Group Discussion Report	• Every drop of water in Colorado starts on federal land but does n't belong to the federal gov ernment. Instead, water belongs to water users in the state of Colorado. • Goals in the water plan need should be given equal weight. • The state needs to learn to live within its means in our current time. • Conservation is very important for the CW P but if we conserve water in the Southwest Basin, the down-basin states will want to use the water saved in Colorado. • Important to protect agriculture which is being lost at a record rate. • Watersheds and forest management should be very important because of fires. • Need to keep the water in the mountains longer. • Need to protect the quantity of water in order to keep pollutants in check. • Loss of livestock allotments is a problem that is reflected in the health of the s tate forests and range.	9.1, 7.3, 6.3,	The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues. The Water Quality Division of the Colorado Department of Public Health and Environment (CDPHE) regulates water quality issues of this nature in the state. Water Quality has been recognized as critical for Colorado's water future. The CWCB is working closely with the Water Quality Control Division and the Basin Roundtables in order to address Colorado's Water Quality needs. This is further explored in Section 7.3.
Table 4 Small Group Discussion Report	• The lawn bill sponsored by Senator Roberts (SB 14-17) was a good idea and a good s tart but not a solution for everything. • Water harvesting should be expanded but this is difficult under the prior appropriation s ystem. • People want to harvest precipitation because they care about conservation and local food. • Municipal waste of water needs to be addressed at the local level. • More storage should be considered. • Water quality and citizens being able to access water even for indoor use, and for a call on Colorado's water, are concerning. • Federal actions that have impact on local entities, such as the definition of waters that are subject to the Clean Water Act, is concerning. • West Slope water should be kept on the W est Slope.	10, 6.3, 8	6.3.1- Thank you for your comments. The CWCB water harvesting pilot program is highlighted through the example of Sterling Ranch and there are actions related to supporting local water provider's manage their water better through more advanced water conservation. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. Your legislative suggestions will be considered in the drafting of Chapter 10.
Table 5 Small Group Discussion Report	• Western slope should have support of the rest of the state in terms of water distribution. • Deficit irrigation should be used more in urban situations rather than for agriculture. • Priority of water rights should not be changed. • The Eastern Slope needs storage. • Needs to be better representation of agricultural users throughout the process. • Need to consider the economic impact of water use and stop federal double dipping. • Make better use of landscape plants and getting rid of Tamarisk and Russian Olive. • Water should be used many times before it goes back into the stream, such as applying grey water to golf courses.	6.3	6.3.1-Thank you for your comments. Outdoor water consumption is addressed through incnetives and support of local ordinances as well as in the reuse section discussion of gray water and general reuse. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. In Section 6.3.4, Colorado's Water Plan addressed the need for reducing nonnative phreatophytes in order to gain salvagled water.
Table 6 Small Group Discussion Report	• The EPA is trying to change the Clean W ater Act to put all Colorado water under federal juris diction to take control of state's water and land. • A lot of water leaves the state because of lack of storage but the Endangered Spec ies Act and other federal regulations hinder the building of s torage. • Important to eliminate the "buy and dry" of agricultural water in order to keep agriculture going. • First in time, first in right, priority system must be adhered to in the CW P. • Forests need to be better managed to have more water. • Agricultural lands should not be fallowed to meet a compact call. • Hydropower should be considered an eligible renewable energy resource. • Water conservation bill related to lawn water might have unintended consequences related to property rights.	7, 9.1	6.5 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. Refer to chapters 2 and 9 for discussion of prior appropriation, chapter 7 for forest health, and chapter 6 for conservation measures. The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues. Energy is discussed in Section 6.3.5.
Table 7 Small Group Discussion Report	• Skeptical of the statewide water plan and its effect on their water rights. • Prior appropriation doc trine must be protected. • Because only five percent of the state directly own water rights, it will be difficult to persuade them that their rights will be protected under the CW P. • The CWP is being rushed. More time needs to be allocated to for public comment. It has also been too top down and the public has not had a sufficient opportunity to develop the CW P. • CWP must be based on opposition to federal government actions that will harm private water rights obtained on federal land. • Storage should be central to any water plan.	2, 9.5, 6.5	6.5 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. Look to Chapter 1 for s discussion of what the water plan will do, and won't do with regards to prior appropriation. Chapter 9 discusses the foundation of stakeholder input that has led to the Plan, including the near-decade of the Water for the 21st Century Act, in addition to over 13,000 comments incorporated into the first draft of the water plan. Public engagement will continue throughout 2015.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Table 8 Small Group Discussion Report	• Support the protection of agriculture, prior appropriations in state water law, and private property rights. • Support the full multiple use of public lands and using water multiple times before it leaves the state. • Would like to see less state regulation and les s expensive permitting for water storage and conservation projects. • Southwest Basin has lots of smaller municipalities that need more common sense regulations for water treatment so they can plan for the future without building plants that become obsolete in five years.	9.1, 2.3, 6	Colorado's Water Plan will not include any specific water projects. The CWCB would like to encourage multipurpose projects and full mitigation. Colorado water allocation and governance has always been guided by local users meeting local needs and Colorado's Water Plan will not change that. Rather than diminishing local control or authority over water, Colorado's Water Plan seeks to strengthen local decision-makers' ability to achieve regional and statewide water solutions. To that effect, Colorado's Water Plan will work to encourage, rather than mandate, several of the points presented in the comments. Permitting issues are explored in Section 9.4 and the section will be further developed in 2015.
Table 9 Small Group Discussion Report	• Having a plan for storage is critical and that sufficient water flow is important for the health of env ironment. • Forest health also needs to be considered. • Needs and concerns of the southwestern part of the state should be given the same value as the rest of the state. • The southwest should not bear a dis proportionate burden of helping the s tate comply with compact requirements. • Quality and quantity should be balanced in the CW P. • Property rights should be protected.	2.3, 7, 9.1	Colorado water allocation and governance has always been guided by local users meeting local needs and Colorado's Water Plan will not change that. Rather than diminishing local control or authority over water, Colorado's Water Plan seeks to strengthen local decision-makers' ability to achieve regional and statewide water solutions. To that effect, Colorado's Water Plan will work to encourage, rather than mandate, several of the points presented in the comments. The Water Quality Division of the Colorado Department of Public Health and Environment (CDPHE) regulates water quality issues of this nature in the state. Water Quality has been recognized as critical for Colorado's water future. The CWCB is working closely with the Water Quality Control Division and the Basin Roundtables in order to address Colorado's Water Quality needs. This is further explored in Section 7.3. The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and draft of Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan. The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues. 7 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. An additional section on forest health has been added to chapter 7.
Public Comments from August 28, 2014 Rio Grande Basin Hearing			
Ron Brink, member of the Rio Grande Basin Roundtable Also submitted comments in a questionnaire (included in Table 1).	• The CWP should maintain the doctrine of prior appropriation and reflec t each basin's unique water needs and characteristics.	2.3	Colorado water allocation and governance has always been guided by local users meeting local needs and Colorado's Water Plan will not change that. Rather than diminishing local control or authority over water, Colorado's Water Plan seeks to strengthen local decision-makers' ability to achieve regional and statewide water solutions. To that effect, Colorado's Water Plan will work to encourage, rather than mandate, several of the points presented in the comments.
Rio de la Vista, member of the Rio Grande Basin Roundtable	• The CWP should recognize the importance of forest, rangeland, and soil health in ensuring an adequate water supply and a healthy watershed. • It should recognize that measures to improve soil health can also help store carbon and help offset impact from climate change. • The state should also provide adequate funding for the bas in roundtable process and for water projects identified by the basin roundtables.	7, 10	The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and draft of Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan. Section 7.1 -of the plan addresses carbon sequestration and we are incorporating your comments into the relevant sections/chapters (7.1.1). Your legislative suggestions will be considered in the drafting of Chapter 10.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Chuck Reel Also submitted comments in a questionnaire	• Opposed restrictions on in-house-only well permits that prevent him from using his well water to grow a small garden for personal consumption without an augmentation plans. • Opposed the law that prevents him from using rainwater that he collects from his property to irrigate his garden. • Opposed the use of water for "fracking" in energy development.	6.3, 5.6	Rainwater harvesting does have some limitations within current Colorado water law. The Prior Appropriation Doctrine, which is in Colorado's Constitution, typically dictates that rainwater is used by a downstream user. However, the CWCB maintains a rainwater harvesting pilot program to explore how rainwater harvesting can be used. This is further discussed in Subsection 5.6.1. Fracking currently uses approximately 18,000 acre feet per year, which is a very small proportion of Colorado's overall water use. However, there may be some areas where there are greater regional effects. In addition, power plants that burn natural gas to make energy use less water than traditional power plants. Therefore, from an overall resource management perspective, fracking and the resulting energy production do not consume a significant amount of water compared to current levels. Colorado's Water Plan seeks to work collaboratively to uphold Colorado's water values and does not put a value judgement on any one beneficial use.
Dale Pizel, Colorado Parks and W ildlife Commissioner	• The CWP should be based on collaboration of water users. • It should be of sufficient value that water planners and providers will want to use it. • The CWP should be periodically updated to reflect new information about what works in water planning.	11	Thank you for your comments. Chapter 9 discusses the foundation of stakeholder input that has led to the Plan, including the near-decade of the Water for the 21st Century Act, in addition to over 13,000 comments incorporated into the first draft of the water plan. Public engagement will continue throughout 2015. Updating Colorado's Water Plan will be explored in Chapter 11.
Mike Gibson, Manager, San Luis Valley Water Conservancy District, Rio Grande Basin Roundtable Chair	• The legislature should recognize significant assistance provided by volunteers for the Rio Grande Basin Roundtable activities and in the development of the Rio Grande Basin Roundtable Basin Implementation Plan. • It should also provide sufficient time for the basin roundtables and the Colorado W ater Conservation Board to develop the CW P. • State and federal regulations should be reviewed to identify measures to streamline the permitting process for water projects.	9.4	Thank you for your comments regarding the legislature. Permitting issues are explored in Section 9.4 and the section will be further developed in 2015.
Susan Wolfrey	• Spoke in support of being conscious of the needs of the Earth and urged people to w ork cooperatively for the benefit of humanity.	7	The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and draft of Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan.
Steve Navratil	• The CWP should reflect the connection between energy use and water availability and consider climate impacts caused by the burning and produc tion of fossil fuels. • It should also encourage greater use of renewable energy, including solar energy. • The state should provide incentives to use land from farms that are participating in a land fallowing program in the Rio Grande Basin for renewable energy generation.	6.5, 6.3.5	Thank you for your comments. Climate change could have a serious effect on Colorado's water supplies, consequently, Colorado's Water Plan factors in an altered climate in 3 of the 5 scenarios examined in the planning process. Additionally, Climate change is addressed throughout Colorado's Water Plan, as it is likely to effect a multitude of sectors. In addition, agricultural water sharing and modernizing agricultural efficiencies are aspects of Colorado's Water Plan and included in Section 6.4 and Subsection 6.3.4. Energy is discussed in Section 6.3.5.
Table 1 Small Group Discussion Report	• The 3rd goal of the Rio Grande Bas in BIP should be to "restore" the aquifers in the Rio Grande Basin rather than to "sustain the confined and unconfined aquifers. . ." as it currently reads • Goal 5 of the BIP is to "manage water use to sustain optimal agricultural economy throughout the basin's communities." "Optimal" should be changed to "diversified" to reflect the broad range of agric ultural activities in the basin including ranching and farming. • Goal 6 is to "support the development of projects and methods that have multiple benefits for agricultural, municipal and industrial, and environmental and recreational water needs." After "water needs" recommend adding "according to the doctrine of prior appropriation" and that s uch projects be collaborative. • Concerned about additional trans basin diversions that export water from the basin.	BIP	6.5 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. Refer to Chapter 8 for more discussion on interbasin discussion on transmountain diversions. CWCB Staff will work with the BRTs and pass these comments along to the Rio Grande Basin.
Table 2 Small Group Discussion Report	• Recommended collaboration between water users in the valley to help the basin address its water supply challenges. • CWP and CW CB should assist small communities in addressing their water infrastructure needs. • Supports the Rio Grande Basin BIP and agreed that bas in roundtables should evaluate water projects based on their consistency with BIP goals. • The legislature should allow sufficient time for basin roundtables to develop the CW P and not interfere with its development.	6.5, BIP	6.5 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. Funding for water needs is discussed in Chapter 9. CWCB Staff will work with the BRTs and pass these comments along to the Rio Grande Basin. Chapter 9 discusses the foundation of stakeholder input that has led to the Plan, including the near-decade of the Water for the 21st Century Act, in addition to over 13,000 comments incorporated into the first draft of the water plan. Public engagement will continue throughout 2015.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Table 3 Small Group Discussion Report	• Rio Grande Decision Support System identifies depletions caused by phreatophytes in the basin. The BIP should also identify the need to replace these depletions and encourage the restoration of native vegetation in the basin • The legislature should consider measures to streamline the permitting process for water projects that meet BIP goals and have broad support from the basin. • Unlike other basins in the state, the RGB is under regular compact calls. Adequate funding should be provided for SNOTEL and other water monitoring systems in the basin to help ensure that it is able to comply with the compact. • Rules and regulations concerning ground water pumping in the basin should be provided sufficient time to work. • Exports from the basin will be strongly opposed by the basin. • The Rio Grande Compact protects the basin and should not be amended.	10, 9.1, 8, BIP	CWCB Staff will work with the BRTs and pass these comments along to the Rio Grande Basin. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water projects, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues.Funding for water needs is discussed in Chapter 9. Your legislative suggestions will be considered in the drafting of Chapter 10. Permitting issues are explored in Section 9.4 and the section will be further developed in 2015.
Table 4 Small Group Discussion Report	• The process to develop the CW P has helped unify the basin. • Supports multi-use and collaborative projects to address the basin's and the state's water supply needs. • Need to keep senior water rights use near the river to protect return flows to the river and the need to use water efficiently. • Concerned about population grow th and the possibility that other basins would look to obtain water from the Rio Grande Basin to help meet that growth. • Urban areas must use water efficiently prior to looking for new supplies and urban users should be made aware of the source of their water supply. • Maintain the prior appropriation doc trine while allowing flexible water use.	6.5, 6.2, 8, 6.3	6.5 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. Colorado's Water Plan will not include any specific water projects. The CWCB would like to encourage multipurpose projects and full mitigation. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. Projects and methods identified by the BIPs are addressed in 6.5, including the multipurpose approach and the benefits of that approach. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. Transmountain diversions and the interbasin discussion on this matter are covered in Chapter 8, including the Rio Grande basin's position on these matters.
Table 5 Small Group Discussion Report	• Sustainable water use should be encouraged and that ways to decrease water use be considered. • Innovative solutions should be used to satisfy new water demands including the use of water cleaning technologies, and that greater biodiversity in agricultural lands be encouraged. • Supports provisions of the RGB BIP concerning soil health. • The status quo should be maintained in terms of transbasin diversions into and out of the bas in. • Water users should collaborate to identify win-win solutions. • Land use planning for outdoor water consumption should be included in CW P.	6.2, 6.3, 8	6.3-Thank you for your comments. The CWP highlights actions that will recude outdoor consumption such as adoption of WaterSense technologies statewide, incentives for outdoor efficiencies, and support for local ordinances that address outdoor consumption. 6.3.3 addresses the connection between land use and water use with actions designed to integrate the disciplines. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Table 6 Small Group Discussion Report	• CWP should support both large-scale commercial agriculture and small-scale residential agriculture and it should encourage the development of hydrologic modeling to improve water management decisions and guide project funding decisions by the CWCB. • It is important to comply with the Rio Grande Compact and the need for new water storage in the basin to create more consistent stream flows in the basin and in downstream states. • CWP should recognize that climate change is occurring and should identify measures to offset its effects including cloud seeding. • Public should also be educated about the the W ater Supply Reserve Account and other sources of funding that are available for water projects. • The CWP should have broad public "buy in." • Forest health is important to watershed protection.	6.5, 9.1, 6.2, 9.5	Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. Agricultural water sharing and modernizing agricultural efficiencies are aspects of Colorado's Water Plan and included in Section 6.4 and Subsection 6.3.4. The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues. Compact concerns are addressed in 2 and 9.1, climate change concerns are addressed throughout the entire Plan. A forest health section has been added to 7.1, and more funding is addressed in Chapter 9. Climate change could have a serious effect on Colorado's water supplies, consequently, Colorado's Water Plan factors in a altered climate in 3 of the 5 scenarios examined in the planning process. Additionally, Climate change is addressed throughout Colorado's Water Plan, as it is likely to effect a multitude of sectors. However, the exact impacts of climate change remain uncertain; and while it is clear temperature's are, and will continue, rising, there is less consensus surrounding precipitation. Scenario planning enables the state to prepare for a wide range of possible futures to capture, and prepare for, such uncertainty. Specific climate change adaptation and mitigation recommendations are not addressed in Colorado's Water Plan but are being addressed through other statewide efforts.
Table 7 Small Group Discussion Report	• Rio Grande Basin is unique from other basin. The CWP needs to recognize the unique aspects of each basin. CWP should recognize property rights of water rights owners and provide alternatives to buy and dry of agricultural water rights. • CWP should address impacts from land fallowing in the basin to sustain the aquifers. • Success of the CW P will depend on the development of new storage. • State should streamline its regulations for new reservoirs and improvements to existing reservoirs. • Process to develop the CW P has been positive because it encouraged the basin to focus on its water needs.	6.3.4, 9.4	CWCB Staff will work with the BRTs and pass these comments along to the Rio Grande Basin Roundtable. Agricultural water sharing and modernizing agricultural efficiencies are aspects of Colorado's Water Plan and included in Section 6.4 and Subsection 6.3.4. Permitting issues are explored in Section 9.4 and the section will be further developed in 2015. Colorado's Water Plan will not include any specific water projects. The CWCB would like to encourage multipurpose projects and full mitigation.
Public Comments from August 21, 2014 Arkansas Basin Hearing			
Gary Bostrom, Chief W ater Services Officer for Colorado Springs Utilities (CSU)	• The CWP should recognize that each community is unique in terms of its customers, hydrology, climate, and water rights portfolio and that will determine how these communities will meet future water supply needs in the most cost-effective manner. • High level water conservation savings will not solve the water supply gaps. Low to medium conservation measures are more reasonable and achievable. SW SI overestimates the potential for water conservation and does not adequately recognize conservation measures already undertaken by some communities. Proposals that mandate indoor to outdoor water use ratios have unforseen consequences and only comprise 3.5 percent of water usage in the state. • Water providers are implementing a number of measures to stretch their supplies through conservation and reuse. • Adequate amounts of storage must be located in the right loc ation and built within reasonable time. • 60 to 70 percent of CSU water comes from the Colorado River, so CSU is concerned about a compact call on that river. • There needs to be a balance between the need to develop the state's compact entitlement with the risk of over-development. • Colorado will need to develop additional supplies in the Colorado River Basin if the state is to meet its future water supply needs. • The CWCB should encourage the development of in-basin and TBDs projects that are developed in a responsible manner and provide joint benefits, such as the Eagle River MOU Project. • CSU supports leasing, fallowing, deficit irrigation, and interruptible s upply agreements. Alternative transfer methods (ATMs) are important to closing gaps in water needs, and the CW P needs to discuss barriers to ATMs. • CSU understands the need to mitigate problems in water supply projects that hinder the success of the projects. • The CWP should include specific recommendations about the regulations that should be streamlined to facilitate water development.	6.3, 8 ,6.3.4 9.4	Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. Colorado water allocation and governance has always been guided by local users meeting local needs and Colorado's Water Plan will not change that. Rather than diminishing local control or authority over water, Colorado's Water Plan seeks to strengthen local decision-makers' ability to achieve regional and statewide water solutions. The CWP focuses on support and incentives for local water providers to attain the appropriate level of conservation. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. SWSI estimates were based in industry best practices and estimates of passive savings and range from low to high. These will be updated in SWSI 2016. In the current draft, a now/low regrets approach to water conservation addresses the minimum amount of savings at 170,000 acre feet by 2050. 6.4 barriers to ATM success are already added in the recent update.Staff agrees that ATMs are an important part of helping to close the gap. Barriers to ATMs have been added as a new sub-section as suggested. More permitting information will be in chapter 9, and more about intrabasin projects in Chapter 8. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Sean Chambers, President Pikes Peak Regional W ater Authority, Cherokee Metro District GM Also submitted a letter to the c ommittee (excerpts provided in the following column).	• Some communities in El Paso County need to reduce their reliance on nonrenewable ground water supplies and develop renewable water supplies. • The permitting process should be streamlined to encourage water development. • State and local entities should rely on a single set of reports and analysis to avoid duplication of time and expense. • Overlapping state regulatory requirements should be eliminated. • The state fish and wildlife mitigation plan and the water court's terms and conditions to prevent injury to water rights should guide other state and local regulatory agencies. • A permanent state clearinghouse should be established to assume oversight for all state permitting requirements and to interact with federal permitting agencies. • Large-scale ground water storage projects should be considered and obstacles to such projects should be removed.	9.3, 10	Thank you for your comments. CWCB Staff will work with the BRTs and pass these comments along to the Basin Roundtable. Colorado's Water Plan will not include any specific water projects. The CWCB would like to encourage multipurpose projects and full mitigation. Your legislative suggestions will be considered in the drafting of Chapter 10. Permitting issues are explored in Section 9.4 and the section will be further developed in 2015.
Bob Leach, developer	• There should not be one-size-fits all state legislation for landscaping. Instead, such land use decisions should be made at the local level.	6.3.3, 2.3	Thank you for you comments. Land use and water use are addressed and there are clear statements indicating that these are local decisions. The actions aim to support integrating land use and water use planning. Colorado water allocation and governance has always been guided by local users meeting local needs and Colorado's Water Plan will not change that. Rather than diminishing local control or authority over water, Colorado's Water Plan seeks to strengthen local decision-makers' ability to achieve regional and statewide water solutions. To that effect, Colorado's Water Plan will work to encourage, rather than mandate, several of the points presented in the comments.
Marge Vorndam, Trout Unlimited Also submitted comments in a questionnaire (included in Table 1).	• Protecting water for agricultural use also supports upstream recreational users. • The CWP needs to address limiting growth and there needs to be an analysis of how much population can be sustained with the state's water supply. • Non-consumptive goals need to address wildlife needs. • Channelization related to moving water rights can harm the enviornment. • There is a need to support tributaries and to preserve creeks for wildlife.	6.6	6.6 - Thank you for your comments. Section 6.6 recognizes the importance of Colorado's wildlife and identifies actions to meet environmental needs on streams. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan, and is explored in Section 6.6. Colorado's Water Plan and the technical work that supports it includes three growth scenarios: low-growth, mid-growth, high-growth. As water planners, Colorado must prepare for any of these future possibilities as we do not have control over the state's economy and how many people are born or choose to move here. While some communities choose to limit growth, doing so on a broad statewide scale is untenable and unconstitutional. The CWCB is working with each basin on their Basin Implementation Plan and will continue to encourage all interested parties to do the same.
Benjamin Wurster, President Chapter 509 Trout Unlimited and outfitter	• A formal emergency action plan should be included in the CW P and the BIP to address times when the water is shut off to a stream. He would like to have a phone number and action plan when an emergency is identified by a recreational or agricultural user such as high temperature water, to increase the water temporarily to reduce the water temperature and protect fisheries.	7	7.1- Thank you for your comments. CWCB Staff will work with the BRTs and pass these comments along to the Basin Roundtables. CWCB will consider these comments in the 2015 draft of Colorado's Water Plan.
Kiera Hatton, Pueblo Planning Commissioner, representing herself	• Empty gravel pits should be used store water. • There needs to be an interconnection between land use and water use. • She wants a grey water system in her home but the city doesn't know how to authorize it. Local planning departments should be educated about the benefits of grey water use. • Residents should be able to collect and use rainwater. Such collection would also address storm runoff problems.	6.3	6.3.3-Thank you for your comments. Chapter 6.3.3 addresses the conncetion between land use and water use. Gray water is discussed in 6.3.2 and it will be up to local jurisdictions on how they allow and manage for it. Rainwater harvesting is discussed in 6.3.1 through the first pilot program at Sterling Ranch. The pilot program is being conducted to invetigate the impacts of harvesting. Rainwater harvesting does have some limitations within current Colorado water law. The Prior Appropriation Doctrine, which is in Colorado's Constitution, typically dictates that rainwater is used by a downstream user. However, the CWCB maintains a rainwater harvesting pilot program to explore how rainwater harvesting can be used. This is further discussed in Subsection 5.6.1.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Table 1 Small Group Discussion Report	• Important to protect current water rights and prevent injury to junior water rights in the CW P. • Finalize the Arkansas River Decision Support System to better manage ground water. • Need additional storage basin wide and an information center where someone could get information on available state and federal funding. • Concern over how the water plan will be implemented and reconciled with local control. • Need for public outreach, watershed health coordination, and rainwater harvesting in the CW P.	6.1, 9.5, 2.3	6.3.1-Thank you for your comments. Rainwater harvesting does have some limitations within current Colorado water law. The Prior Appropriation Doctrine, which is in Colorado's Constitution, typically dictates that rainwater is used by a downstream user. However, the CWCB maintains a rainwater harvesting pilot program to explore how rainwater harvesting can be used. This is further discussed in Subsection 5.6.1. The CWCB and Colorado's Water Plan support water supply management strategies that will allow the state to better conjunctively utilize groundwater within currently existing legal constraints. SWSI 2010 found that unappropriated water in the South Platte, Arkansas, and Rio Grande Basins is extremely limited, and reliance on nonrenewable, nontributary groundwater as a permanent water supply creates reliability and sustainability concerns, particularly along the Front Range. In anticipation of HB 1278 recommendations related to groundwater monitoring and modeling, the CWCB is requesting $500,000 under the 2014 Projects Bill that would allow the CWCB to further evaluate the causes of high groundwater levels within the South Platte River Basin. The CWCB and DWR also maintain Decision Support Systems (DSS) tools that could serve as useful resources to be used in groundwater modeling in the future. Colorado water allocation and governance has always been guided by local users meeting local needs and Colorado's Water Plan will not change that. Rather than diminishing local control or authority over water, Colorado's Water Plan seeks to strengthen local decision-makers' ability to achieve regional and statewide water solutions. To that effect, Colorado's Water Plan will work to encourage, rather than mandate, several of the points presented in the comments.
Table 2 Small Group Discussion Report	• CWP should not be a one s ize fits all plan or create economic burdens. • Too much regulation makes it harder to get projec ts online and storage is very important. • Concerned about legislation to limit lawn size in residential developments. • Needs to be an incentive to increase conservation instead of "use it or lose it." • Need to be incentives to control invasive species. • Future diversions should be kept away from the federal government. • Water sharing should be encouraged.	10	Colorado water allocation and governance has always been guided by local users meeting local needs and Colorado's Water Plan will not change that. Rather than diminishing local control or authority over water, Colorado's Water Plan seeks to strengthen local decision-makers' ability to achieve regional and statewide water solutions. To that effect, Colorado's Water Plan will work to encourage, rather than mandate, several of the points presented in the comments.The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and draft of Colorado's Water Plan. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan. These topics are explored in Section 6.3. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. In Section 6.3.4, Colorado's Water Plan addressed the need for reducing nonnative phreatophytes in order to gain salvagled water.
Table 3 Small Group Discussion Report	• Don't rush the plan's development or legislation to implement the plan. • Flexibility in water use should be extended to all user types. • Concern over how BIPs are going to be integrated es pecially for organizations located in multiple basins. • CWP should address keeping water in agriculture rather than taking it out of agriculture.	3, 6.4	Chapter 9 discusses the foundation of stakeholder input that has led to the Plan, including the near-decade of the Water for the 21st Century Act, in addition to over 13,000 comments incorporated into the first draft of the water plan. Public engagement will continue throughout 2015. Colorado water allocation and governance has always been guided by local users meeting local needs and Colorado's Water Plan will not change that. Rather than diminishing local control or authority over water, Colorado's Water Plan seeks to strengthen local decision-makers' ability to achieve regional and statewide water solutions. CWCB Staff will work with the BRTs and pass these comments along to the Basin Roundtables. Agricultural water and modernizing agricultural efficiencies are aspects of Colorado's Water Plan and included in Section 6.4 and Subsection 6.3.4.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Table 4 Small Group Discussion Report	• Concern with aquifer depletion in the low er Arkansas Basin. • All storage is good. • Need more flexibility in the CW P and continuous improvement. • Invasive species are water wasters and a major problem. • Concern that there is no incentive to conserve water. • Precipitation harvesting and grey water use should be encouraged. • Stream health is very important. There needs to be a water emergency plan during droughts to provide emergency flows to protect stream biota. • The CWP should avoid unintended consequences. • Water planning needs to be integrated among all responsible agencies.	4, 6.6 ,6.3	6.3.3-Thank you for your comments. CWCB Staff will work with the BRTs and pass these comments along to the Basin Roundtable. Chapter 6.3.1 discusses incentives for conservation and rainwater harvesting is discussed through the first pilot program at Sterling Ranch. The pilot program is being conducted to invetigate the impacts of harvesting. Gray water is discussed in 6.3.2 and it will be up to local jurisdictions on how they allow and manage for it. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and draft of Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan. In Section 6.3.4, Colorado's Water Plan addressed the need for reducing nonnative phreatophytes in order to gain salvagled water.
Table 5 Small Group Discussion Report	• More storage is needed. • Need streamlined permits in water court, and for the EPA and other federal perm itting agencies to get out of the way. • The CWP should address phreatophytes and public education.	6.5, 9.4	Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. Information about watershed health (and phreatophytes) will be in chapter 7, with more about permitting in chapter 9. The development of Colorado's Water Plan has helped to raise the level of importance placed on education and outreach statewide related to water supply planning. The CWCB is working together with the Basin Roundtables (BRTS) to expand education and outreach activities related to raising awareness regarding the issues presented in the webform comments submitted and Section 9.5 Outreach, Education, and Public Engagement will include recommendations on continuing education on these topics long-term. Permitting issues are explored in Section 9.4 and the section will be further developed in 2015. In Section 6.3.4, Colorado's Water Plan addressed the need for reducing nonnative phreatophytes in order to gain salvagled water.
Public Comments from September 16, 2014 Yampa-White Basin Hearing			
Jackie Brown, Routt County Conservation District and Yampa-White Basin Roundtable (BRT) member	• Everyone should understand that the basin roundtable and BIP repres ents years of roundtable members learning and developing trust in one another. • She believes that the BRT did a good job and hopes that its efforts can be translated into the CW P in a way that interprets how their community values water.	3	Thank you for your comments. Staff is looking forward to working closely with the BRTs on future drafts of CWP.
Carolina Manriquez, Forester, Colorado State Forest Service	• Explained that there is a continued need for fores t management in the district.	7	7 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. Look to chapter 7 for more on forest health and cooperation between federal and state agencies
Ken Brenner, Upper Yampa Water Conservancy District, Friends of the Yampa, Yampa River Legacy Project, Colorado Mountain College trustee, representing himself Also submitted comments in a questionnaire (included in Table 1).	• Expressed concern about the possible role of the state in funding new water supply projects and requested assurance that project sponsors will be responsible for funding such projects. • The Front Range has the ability to continue to improve conservation efforts, reuse water, refine water sharing between agriculture and municipalities. This could be simplified with legislation. • Front Range local governments must not approve water consumptive land uses prior to proving that there is a sustainable water supply for such development. • The highest and best use of the Yampa River is as a consistent and reliable source of water to meet the Colorado River Compact obligation. • Objects to federal intervention or extensive fallowing like what is occurring in California. • A negotiated equitable apportionm ent strategy needs to be identified before any projects move forward. • The Yampa River is the cornerstone of the basin's economy, and transmountain diversion (TMDs) would damage that economy. • Several portions of the Yampa River are suitable for wild and scenic designations from the BLM and several endangered species depend on these waters.	6.5, 6.3.3, 9.1, 6.2, 6.5, 6.6, 8	6.3-Thank you for your comments. 6.3.1- The actions outlined in the chapter are meant to increase conservation statewide. 6.3.3 addresses the connection between land use and water use with actions designed to integrate the disciplines and highlights the legislation that required the proof of adequate water supply for new developments. 6.6 - Thank you for your comments. Section 6.6.7 identifies actions to address endangered species issues. 6.5 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. Compact issues are identified and addressed in chapters 2 and 9. The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues. 8- With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Anthony D'Aquila Also submitted comments in a questionnaire (included in Table 1).	• Supports the BIP but thinks its too supply centered and needs to look more at demand management. • Colorado needs to lead in water conservation to protect our quality of life. He would like to see reuse, reduction, reclaimation, and efficiency in all sectors, not just the municipal sector. • Planners who developed the Yampa-White BIP should reconsider the water use numbers that are the basis for projecting shortages in the basin. He explained that these numbers are too high and recommended that these assumptions be reduced to reflect higher conservation levels. • Concern for water quality should be incorporated in the process.	6.3, 3, BIP	6.3-Thank you for your comments. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. As this is a grass roots effort, staff is incorporating the draft BIPs as they are with a view that final BIPs are not due until Spring 2015. CWCB Staff will work with the BRTs and pass these comments along to the Yampa White Basin.
Jon Hill, Rio Blanco County Commissioner and Yampa-White Basin Roundtable member	• Considers agriculture to be most important aspect of his county and discussed the contribution to stream flows from agricultural return flows. • The Front Range needs to think about storage projects there in addition to inc reased conservation. • The western slope has a high percentage of public land, and it's necessary to bring those agencies on board with the CW P.	6.5, 9	6.5 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. Look to chapter 8 for more on intrabasin collaboration, and efforts to engage the federal agencies are ongoing, as documented in chapters 2 and 9.
Kelly Heaney, Water Resources Manager for the City of Steamboat Springs, Yampa-White Basin Roundtable member, Colorado Watershed Assembly, and Community Agriculture Alliance	• Testified that the City of Steamboat Springs will continue to engage and m onitor the process for the development of CW P.	9.4	Thank you for your comments and your engagement in the CWP process.
Kevin McBride, Upper Yampa Water Conservancy District	• Explained that there is not enough water to supply all demands for water in the Colorado River Basin and that the various demands for water need to be balanc ed. • Noted that society deals with things after they occur and that its important to look at climate variability to better prepare for the future. There will be wet and dry times in the future so we must make smart decisions and the CWP needs to work for all the possible conditions.	6.1	The current course Colorado is heading down leads to several of the results that the commenter mentions. For instance, without action, up to 35% of Colorado's farms in the South Platte could be dried up. This is one impetus for why Colorado is pursuing the development of a water plan. Colorado's Water Plan will yield better results through support of conservation, reuse, sharing agreements between farmers and municipalities, incentive-based of water-smart land use, and the development of multi-purpose projects and methods. Climate change could have a serious effect on Colorado's water supplies, which is why Colorado's Water Plan is engaged in scenario planning. Climate change issues are addressed in various sections throughout Colorado's Water Plan. However, while temperature's impact on demands are understood, hydrolocial impacts are not. Since Colorado's water planners cannot necessarily impact the global climate change situation, Colorado's Water Plan is not directly focused on mitigating climate change. Other agencies within Colorado's state government consider climate mitigation strategies.
Cody Perry, college outdoor educ ation teacher, Friends of the Yampa, Also submitted comments in a questionnaire (included in Table 1).	• Explained that a diverse range of biomes depend on the Yampa River and that it is important to educate students about the value of the river. • Spoke in support of a sustainable future and expressed concern about water development that reduce flows in the river and can cause irreparable impacts downstream. • He explained that water is the key to everything in the west and said that the CW P should be considered on moral grounds and it should address the kind of world we want to leave for others.	7	7.1- Thank you for your comment, no further incorporation is needed because your comment has already been considered or addressed. The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and draft of Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Soren Jespersen, President, Friends of the Yampa	• Noted that the tools, assessments, and models have value but they hide the value of the Yampa River. The Yampa River is one of the longest free flowing river in Colorado. There have been attempts to put dams in the river but those were rejected. The people in the valley protect the river. • Noted that it's important to live with resources we have and explained the river is important for hunters, anglers, wildlife, and the bas in's economy. He also expressed concern about water projects that may impact the basin.	7, 6.6, BIP	6.6 - Thank you for your comments. 6.6.7 contemplates CWCB and basin roundtables working in partnership on assessing where protection is needed to enable moving forward on environmental and recreational projects. 7.1- Thank you for your comment, no further incorporation is needed because your comment has already been considered or addressed. The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and draft of Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan. CWCB Staff will work with the BRTs and pass these comments along to the Yamp/White Basin.
Charlie Preston-Townsend Vice President, Friends of the Yampa Steamboat Springs, Colorado E-mail to the committee (excerpts provided in the following column).	• The state of Colorado must view the Yampa River as a significant and reliable source of water to meet Colorado River Compact obligations. • Colorado must hold non-consumptive needs as a priority and consider the significant conservation work that has been accomplished in the Yampa River Valley as an example for future water planning. • The Yampa Valley and Western Slope water users must be assured that, in the event of a compact call, negotiated equitable apportionment principles will be utilized to protect our many important junior water rights. • Maximum efficiencies through reduction and reuse programs shall be fully implemented before any further trans-basin projects are undertaken in the Yampa River basin and across Colorado.	9.1, 6.6, 8, 6.3	The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and draft of Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues.
Table 1 Small Group Discussion Report	• The Yampa-White Basin's projects and methods study examines potential scenarios with emphasis on high demand and low hydrology, specifically looking at IPPs and how they affect the hydrology. Projects that allow flexibility and the ability to turn the projects on and off depending on the hy drology should be preferred and no IPP scenarios should be excluded. • Growth and development should adapt to what storage a basin already has. • Basins should develop their own source of supply rather than taking water from agriculture. Buy and dry should not occur. • Additional storage is needed for the W hite River for energy development and other purposes. The lack of water supply will not stop energy development. If the water isn't available energy companies will go after water from agriculture. • The United States Geological Survey and the CW CB need to add measuring devices in all the basins to understand how water use is impacting flows in the rivers and to help identify ways to better use water. • The Colorado River compact is a concern for the entire W est Slope. Over development elsewhere will put Yampa-White Basin's use at risk. Additional TMDs could create conflicts with Colorado River compact. Climate change creates additional challenges. • Watershed management is not well addressed in the BIP, but environmental and recreational needs are well addressed. Fires in the Rio Grande, Arkansas, Cache-La Poudre watersheds demonstrate the importance of forest health.	6.1, 6.3.5, 6.1, 9.1, 8, BIP	8 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. Climate change could have a serious effect on Colorado's water supplies, which is why Colorado's Water Plan is engaged in scenario planning. Climate change issues are addressed in various sections throughout Colorado's Water Plan. However, while temperature's impact on demands are understood, hydrolocial impacts are not. Since Colorado's water planners cannot necessarily impact the global climate change situation, Colorado's Water Plan is not directly focused on mitigating climate change. Other agencies within Colorado's state government consider climate mitigation strategies. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. Chapter 8 addresses many of these concerns, and Chapter 3 will reflect the position of basins on TMD development. The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues. CWCB Staff will work with the BRTs and pass these comments along to the Yampa/white Basin.
Table 2 Small Group Discussion Report	• Explained that the Yampa-White Basin has junior water rights relative to other basins and expressed concern about unfair administration under the compact call scenario. There needs to be a better understanding of basin's role in helping Colorado c omply with the Colorado River Compact. • Need additional storage and the tools to enable the basin to meet the goals of its BIP. • Questioned whether large conditional water rights need to be extended. • Need flexibility in water administration. • The basin needs to come up with its own solutions to its own problems, rather than one-size-fits-all solution.	9.1	The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Table 3 Small Group Discussion Report	• Disruption of river flow disrupts the quality of life. • Basin's current method of agricultural irrigation is working but is inefficient and reduces flow to the river. Switching to sprinkler systems would not benefit wetlands to the same extent as flood irrigation. • Change the term "agricultural water use" to "agricultural water priority." • Want the release of water from storage timed so as not to diminish quality of life downstream. • Support sharing water through the fallowing process to provide water for instream flows. • Concerned about how the Colorado River Compact and endangered species affect downstream water rights. • There needs to be better land use on the Front Range before there is more development (TMDs, for example). The state need to learn to liv e within its means.	6.3.4, 6.3.3, 9.1	6.3.3-Thank you for your comments. The current draft highlights ongoing projects that deal with water use and land use while the actions in the chapter aim to integrate water and land use planning and support land use that takes water use into consideration. The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues.
Table 4 Small Group Discussion Report	• The Yampa-White Basin does not have extra water when accounting for future growth in the basin and the state's need to comply with the Colorado River Compact. • Growth in the state should only occur where water is available. • Feeding the state and country will be hard with the loss of agricultural water. Alternatives should be developed to help farmers pay for their retirement with having to sell their water rights. • Difficult to maintain the values that bring people to Colorado w hile doubling the population. • Water quality and ecological systems need to be considered when planning for future growth. • Technology and science should be developed to better understand this interaction between surface and groundwater in the basin. • Recreation is very important to the economy and livelihood of the basin.	9.1, 6.4, 6.1	6.4 Philosophical on-going debate that is imbedded in the ATM concept. Recommend no specific changes as a result of this comment. Colorado's Water Plan and the technical work that supports it includes three growth scenarios: low-growth, mid-growth, high-growth. As water planners, Colorado must prepare for any of these future possibilities as we do not have control over the state's economy and how many people are born or choose to move here. While some communities choose to limit growth, doing so on a broad statewide scale is untenable and unconstitutional. The CWCB is working with each basin on their Basin Implementation Plan and will continue to encourage all interested parties to do the same. The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and draft of Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan.
Table 5 Small Group Discussion Report	• Want better public access to the data and assumptions underlying the tables in the Yamp-White BIP. • Generally supportive of the BIP and tenet of equitable apportionm ent. • The plan should focus less on the supply side and more attention should be given to the demand side. • The BIP's goal of preserving historic use should be reconsidered because some current uses maybe inefficient and could be improved upon. • Concerned that the BIP focuses too much on nonconsumptive needs for endangered species and not enough on nonconsumptive needs for watershed health. • Concerned about maintaining the culture of the basin and preserving the manner in which the basin has operated.	BIP	CWCB Staff will work with the BRTs and pass these comments along to the Yampa/White Basin.
Public Comments from September 17, 2014 South Platte Basin Hearing			
Glen Colton	• It is impossible to double the population of the s tate between now and 2050, and there is not enough water to support such a large number of people.	6.1	Colorado's Water Plan and the technical work that supports it includes three growth scenarios: low-growth, mid-growth, high-growth. As water planners, Colorado must prepare for any of these future possibilities as we do not have control over the state's economy and how many people are born or choose to move here. While some communities choose to limit growth, doing so on a broad statewide scale is untenable and unconstitutional. The CWCB is working with each basin on their Basin Implementation Plan and will continue to encourage all interested parties to do the same.
Diane Marschke, Also completed questionnaire	• Residential conservation efforts will not proceed until water is more expensive. • The Northern Integrated Supply Project (NISP) threatens the Poudre River.	6.3	6.3.1-Thank you for your comments. The current draft chapter highlights support for conservation oriented rate structures such as water budgets that send an appropriate price signal to residential water users.
Kevin McCarty, Little Thompson Watershed Restoration Coalition Also submitted comments in a questionnaire (included in Table 1).	• Explained that municipal conversions have not happened because available water supply is insufficient. He reported that, in Pinewood Springs, there are places where the river is running dry. The gap is not in 2050, but right now. • Noted that the Little Thompson is not currently mentioned in the South Platte BIP.	4, BIP	noted. The current course Colorado is heading down leads to several of the results that the commenter mentions. For instance, without action, up to 35% of Colorado's farms in the South Platte could be dried up. This is one impetus for why Colorado is pursuing the development of a water plan. Colorado's Water Plan will yield better results through support of conservation, reuse, sharing agreements between farmers and municipalities, incentive-based of water-smart land use, and the development of multi-purpose projects and methods. CWCB Staff will work with the BRTs and pass these comments along to the South Platte Basin.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Richard Kommrusch, Fort Collins Community Action Network	• The baseline projections used to prepare the CW P overestimate the amount of water that will be available in the future due to climate change.	6.1	Climate change could have a serious effect on Colorado's water supplies, which is why Colorado's Water Plan is engaged in scenario planning. Climate change issues are addressed in various sections throughout Colorado's Water Plan. However, while temperature's impact on demands are understood, hydrolocial impacts are not. Since Colorado's water planners cannot necessarily impact the global climate change situation, Colorado's Water Plan is not directly focused on mitigating climate change. Other agencies within Colorado's state government consider climate mitigation strategies.
Carole Hossan, artist	• While there is emphasis placed on efficiency and production in the CW P, less emphasis has been placed on the beauty and tranquility of the river. More consideration should be given to nature rather than to ec onomic growth.	6.6	6.6 - Thank you for your comment. Section 6.6 recognizes the importance of the environment and outlines a path to meeting environmental needs. Section 7.1 addresses watershed health. The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and draft of Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan.
Theresa Conley, Conservation Colorado Also testified at the October 1, 2014 Metro Basin hearing and submitted a letter with comments on the CW P (excerpts provided under the October 1 summary).	• There is room for innovation in the CW P, and it should focus on demand management. • There needs to be a closer connection between land use and water use. • There should more flexibility for water sharing. • There is a need for additional data on nonc onsumptive needs, and funding to collect this data.	6.2, 6.3, 6.6	6.3-Thank you for your comments. 6.3.1 contains a wide variety of demand management best practices and actions that will increase conservation statewide. 6.3.3 focuses on the closer connection between land use and water use that must occur in the future. 6.6 - Thank you for your comment. Section 6.6.3 recognizes the need for more data and information on environmental and recreational needs, and 6.6.7 lists CWCB and the roundtables working in partnership to develop that information as a necessary action.
Dick Jefferies, Rocky Mountain Flycasters	• The CWP needs to protect and restore healthy streams, improve streamflows, include environmental and recreational needs in the structure of water planning, and identify ways to address the disconnect that exists between the development community and local government, and overuse of water for development purposes. • SB 14-023 and HB 14-1026 repres ent progress. • There should be no new large trans-basin diversions from the Colorado Basin.	6.6, 8	Thank you for your comment. Section 6.6 recognizes the importance of the environment and recreation, and outlines a path to meeting environmental and recreational needs. The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and draft of Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work.
Dale Karlin, Larimer County Farmers' Union	• Agricultural producers should work with Colorado State University to develop farming techniques that conserve water. They should also consider use of drip irrigation. • Municipalities should focus on conservation, grey water usage, and new technologies that allow for wastewater reclamation. • The industrial sector, including oil and gas producers, should mitigate the effects of their industry on the water supply.	6.3	6.3-Thank you for your comments. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. 6.3.2 highlight current and future techniques and technologies that could be implemented in Colorado to increase reuse of water. Agricultural water sharing and modernizing agricultural efficiencies are aspects of Colorado's Water Plan and included in Section 6.4 and Subsection 6.3.4
Kevin Jones, Fort Collins Area Chamber of Commerce	• Current shortfalls are due to past failures to plan for drought and water shortages, and the water supply in Northern Colorado should be increased by the expansion of Halligan Reservoir and NISP. • Reasonable demand management through conservation, water reuse, and prevention of waste should also be pursued. • The public should be educated about demand management.	6.5, 6.3	6.3-Thank you for your comments. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. 6.3.1 and 6.3.2 highlight actions and best practices to increase water conservation and resue of water statewide 6.5 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. The development of Colorado's Water Plan has helped to raise the level of importance placed on education and outreach statewide related to water supply planning. The CWCB is working together with the Basin Roundtables (BRTS) to expand education and outreach activities related to raising awareness regarding the issues presented in the webform comments submitted and Section 9.5 Outreach, Education, and Public Engagement will include recommendations on continuing education on these topics long-term.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
David Smeltzer	• Population limits should be discussed in the CW P, because growth in population will eventually outstrip available supply. • Healthy rivers and streams are important. The Upper Colorado River is an example of an over-appropriated river that has lost insects and aquatic habitats as a result. • Data about minimum stream flows necessary for stream health should used for water supply planning.	6.6, 6.1	6.6 - Thank you for your comment. Colorado's Water Plan and the technical work that supports it includes three growth scenarios: low-growth, mid-growth, high-growth. As water planners, Colorado must prepare for any of these future possibilities as we do not have control over the state's economy and how many people are born or choose to move here. While some communities choose to limit growth, doing so on a broad statewide scale is untenable and unconstitutional. The CWCB is working with each basin on their Basin Implementation Plan and will continue to encourage all interested parties to do the same. Section 6.6.3 recognizes the need for more data and information on environmental and recreational needs. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan, and is explored in Section 6.6.
Gary Wockner, Save the Poudre	• A coalition of environmental organizations believe the information presented in the South Platte BIP is controversial. • The CWP should not endorse any water supply projects. • Dams and reservoirs destroy rivers. • Restoring rivers should take precedence. • The state should not fund water projects or streamline the permitting process for projects. • No additional water should diverted from the Poudre River.	6.6, BIP	7.1- Thank you for your comment, no further incorporation is needed because your comment has already been considered or addressed. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan, and is explored in Section 6.6. CWCB Staff will work with the BRTs and pass these comments along to the South Platte Basin.
Robert Longenbaugh Also testified at the October 1, 2014, Metro Basin hearing and submitted a letter with comments on the CW P (excerpts provided under the October 1 summary).	• The South Platte BIP should not claim that there is no unappropriated water in the South Platte. Too much water is being sent to Nebraska. The loss of this water is a waste and could be used to help address the supply gap. • Phreatophytes should be controlled to make additional water available to address the supply gap. • The beneficial use of surface water and groundwater should be maximized and these waters should conjunctively used.	9.1, 6.2, BIP	Thank you for your comment. In Section 6.3.4, Colorado's Water Plan addressed the need for reducing nonnative phreatophytes in order to gain salvagled water. CWCB Staff will work with the BRTs and pass these comments along to the South Platte Basin.
Joseph Piesman	• The goal of the CW P should be to balance the needs of agricultural, municipal, and recreational users. • Minimum stream flows should be maintained for the benefit of anglers , birders, and anyone who walks along the river and enjoys it.	6.6	6.6 - Thank you for your comment. Section 6.6 recognizes the importance of the environment and recreation and the challenges of attempting to meet all of our state's water needs. This section outlines a path to meeting environmental and recreational needs, with one suggested approach being multi-purpose projects that leverage resources to enable multiple types of water uses. CWCB maintains and operates In Stream Flow and Natural Lake Level programs, both of which are highly regarded as some of the most successful programs of their kind in the Western US. Nonconsumptive needs are critically important aspects of the Basin Implementation Plans and Colorado's Water Plan. Although not fully tested, instream flows can be designed to directly benefit riparian areas, and the CWCB Stream and Lake Protection Section has been working with the BLM to design an approach to in-stream flows by providing a flood flow component in the spring.
Jim Eartman	• Population growth is exponential, and that the lim its on the environment's carrying capacity are significant. • The human spirit needs natural places unaffected by humans. • Some homeowners are over-watering their lawns and cutting them too short.	6.3, ,6.1	7.1 Thank you for your comment, no further incorporation is needed because your comment has already been considered or addressed. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. Colorado's Water Plan and the technical work that supports it includes three growth scenarios: low-growth, mid-growth, high-growth. As water planners, Colorado must prepare for any of these future possibilities as we do not have control over the state's economy and how many people are born or choose to move here. While some communities choose to limit growth, doing so on a broad statewide scale is untenable and unconstitutional. The CWCB is working with each basin on their Basin Implementation Plan and will continue to encourage all interested parties to do the same.
Sue Reed	• Conservation alone is unable to address water shortages. Technology and storage should also be considered.	6.5, 6.3	6.5 - Thank you for your comments. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. Look to the BIP project and method summaries in 6.5 and 6.6.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Gina Janett	• The South Platte Roundtable did not inc lude enough environmental participants, and it was dominated by water user constituencies. • NISP should be removed from the CWP because it would severely damage the Poudre River. • Demand management should be maximized prior to developing new water sources.	6.5	6.5 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. More info about demand management is included in the chapter 8 discussion. Colorado's Water Plan will not include any specific water projects. The CWCB would like to encourage multipurpose projects and full mitigation. Each Basin Roundtable is made up of a diverse set of stakeholders and the inclusion of both an environmental and recreational representative is required by the Colorado Water for the 21st Century Act. In addition, representatives from each county, municipalities within each county, industry, agriculture, and domestic water suppliers are required. Lastly, a representative from each water conservation and conservancy district are also mandated. There are also several other at large seats, and many of these are held by environmental interests, and many of the local government representatives are also focused on environmental and recreational issues since their citizens care about these topics and the area may be dependent on tourism.
Joe Duda, Colorado State Fores t Service	• The management of healthy forests is important to ensure a healthy river system.	7	7.1- Thank you for your comment, no further incorporation is needed because your comment has already been considered or addressed. The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and draft of Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan.
Chris Kraft Also submitted comments in a questionnaire (included in Table 1).	• NISP has no intention of hurting the Poudre Riv er. Instead, it will enhance the river rather than damage it. The Fort Morgan community would also benefit from this project. • Agricultural use is also a city use, in that farmers produce food consumed in cities along the Front Range.	6.5	6.5 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. Colorado's Water Plan will not include any specific water projects. The CWCB would like to encourage multipurpose projects and full mitigation. Discussion of the interwoven relationship of various uses is addressed throughout the document.
Peter Bridgman	• More water storage and more conservation is imperative. • The oil and gas industry should be required to rec ycle the water it uses to the quality at which they bought it.	6.3	6.3-Thank you for your comments. 6.3.1 discusses actions and best practices to increase water conservation statewide. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. The Water Quality Division of the Colorado Department of Public Health and Environment (CDPHE) regulates water quality issues of this nature in the state. Water Quality has been recognized as critical for Colorado's water future. The CWCB is working closely with the Water Quality Control Division and the Basin Roundtables in order to address Colorado's Water Quality needs. This is further explored in Section 7.3.
Terry Farrill, Fort Collins-Loveland Water District	• The state needs to be a strong advocate for permits for water projects at the federal level. • NISP will enhance the flow of the river during months when it is currently low. • Conservation can only go so far.	9.4, 6.3	6.3-Thank you for your comments. 6.3.1 highlights actions and best practices to increase water conservation statewide. This is presented as one among several strategies to manage our future water supplies. Colorado's Water Plan will not include any specific water projects. The CWCB would like to encourage multipurpose projects and full mitigation.
Nancy York	• NISP will not benefit the Poudre Riv er. • The challenge posed by a growing population must be met through conservation. • Rainwater harvesting, as practiced in Arizona, could be a useful approach. • The state should not build massive storage, but conserve water and electricity.	6.3	6.3-Thank you for your comments. 6.3.1 highlights actions and best practices to increase water conservation statewide. This is presented as one among several strategies to manage our future water supplies. Colorado's Water Plan will not include any specific water projects. The CWCB would like to encourage multipurpose projects and full mitigation. Rainwater harvesting does have some limitations within current Colorado water law. The Prior Appropriation Doctrine, which is in Colorado's Constitution, typically dictates that rainwater is used by a downstream user. However, the CWCB maintains a rainwater harvesting pilot program to explore how rainwater harvesting can be used. This is further discussed in Subsection 5.6.1. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3.

Senate Bill 115 Comments - Summary and CWCB Response

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Roni Sylvester	• The CWP's first priority should be to fortify existing water rights according to prior appropriation. W ater in the South Platte Basin is someone's property, and it has been bought and sold.	9.1	Thank you for your comments. The Prior Appropriation Doctrine and the status of water as a private property right is fundamental to Colorado water administration and law and Colorado's Water Plan requires these principles to succeed.
Roger Hoffman Letter to the committee (excerpts provided in the following column).	• There has not been enough repres entation of the broad public interests particularly with respect to maintenance of adequate river flows. • While the need for conservation is acknowledged, too little is being done in this regard and too much emphasis is given to additional water storage. • Much greater emphasis should be placed on water conservation, and better statewide support for water sharing. • Due to Colorado's water law and use it or lose it, agricultural users have little incentive to implement conservation technologies, and to this day continue to rely on dated, inefficient technologies simply because there remain disincentives – along with lack of any contrary incentives, for conserving water. • The state can do much more in terms of enabling water sharing that benefits both urban and rural us ers. • The state has already taken some modest steps in terms of enabling "reuse" of water; more should be done. • It's also quite clear, from the disparity in per-capita consumption between various communities that far more can be done to directly encourage conservation among the urban users. Providers should, for example, be required to offer tiered water rates that reward those who use water frugally and which disincentivize wasteful practices. • Annexation and development practices should be updated to reflec t the reality of limited supplies. • The changing climate is a game-changer. The state must be much smarter in adapting to the em erging realities.	6.3,10, 6.3.3, 6.1	6.3-Thank you for your comments. 6.3.1 and 6.3.2 highlight actions and best practices to increase water conservation and resue of water statewide.The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. Conservation oriented rate structures are discussed as a foundational practice that every water provider should be doing. With regard to indoor water conservation and tiered rate structures, the vast majority of water providers currently operate with tiered water rates. 6.3.3 includes discussion of integrating land use and water use more closely and the actions to accomplish this. Climate change could have a serious effect on Colorado's water supplies, which is why Colorado's Water Plan is engaged in scenario planning. Climate change issues are addressed in various sections throughout Colorado's Water Plan. However, while temperature's impact on demands are understood, hydrolocial impacts are not. Since Colorado's water planners cannot necessarily impact the global climate change situation, Colorado's Water Plan is not directly focused on mitigating climate change. Other agencies within Colorado's state government consider climate mitigation strategies. Your legislative suggestions will be considered in the drafting of Chapter 10.
Andy Jones, Steve Malers, and George Wallace, Poudre Basin Water Sharing Working Group Letter to the committee (excerpts provided in the following column). Mr. Malers also submitted comments in a questionnaire	• The CWP should not try to be a "one size fits all" plan. The Water Resources Review Committee should encourage the kind of flexibility that will be required in order m eet watershed and area-specific needs and produce the innovation necessary for meeting competing interests in water - especially between agriculture, urban water providers, open space programs, and others. • Though a number of water projects are being planned and dis cussed, the group requested multiple-purpose storage that will serve agriculture (which has a water gap too), urban utilities , and the environment. • There is also opportunity for new projects but also shared storage in existing reservoirs, gravel pits, and aquifers that is not being realized. • The legislature should continue to provide incentives, funding, and legislative support for ATM development, pilot projects, and evaluation. • The CWP should encourage new partnerships that provide an ATM element, such as the "buy and supply" concept of purchasing farms or ranches with water, conserving those farms and then leasing or selling those farms to producers with ATM conditions included for drought firming, emergencies, or base supply.	6.2, 10, 6.4	6.4 Staff appreciates the constructive comments. We have added language to discuss flexibility and furthering the goals of ATM development. Regarding the "buy and supply" concept - we recommend that this could be vetted and then added between draft and final versions. Colorado's Water Plan will not include any specific water projects. The CWCB would like to encourage multipurpose projects and full mitigation. Legislative recommendations will be handled in Chapter 10.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Table 1 Small Group Discussion Report	• An information campaign is needed to educate the public about the value of water. • Must continue to allow historical flexibility in the use of water at the local level. • The CWP ought to promote and finance innovative and efficient uses of water, particularly by ending agricultural "buy and dry." Viable alternatives include increased efficiency of agricultural water use, and financing alternative transfer mechanisms (ATMs). • The permitting process is being impacted by issues that are outside of the process and has become a catch all for other issues. • The CWCB should continue to include a discussion of water quality concerns with respect to environmental and recreational water uses.	6.3, 6.6, 7.3	6.3-Thank you for your comments. 6.3.1 highlights actions and best practices to increase water conservation statewide. Agricultural water sharing and modernizing agricultural efficiencies are aspects of Colorado's Water Plan and included in Section 6.4 and Subsection 6.3.4 The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. The development of Colorado's Water Plan has helped to raise the level of importance placed on education and outreach statewide related to water supply planning. The CWCB is working together with the Basin Roundtables (BRTS) to expand education and outreach activities related to raising awareness regarding the issues presented in the webform comments submitted and Section 9.5 Outreach, Education, and Public Engagement will include recommendations on continuing education on these topics long-term. The Water Quality Division of the Colorado Department of Public Health and Environment (CDPHE) regulates water quality issues of this nature in the state. Water Quality has been recognized as critical for Colorado's water future. The CWCB is working closely with the Water Quality Control Division and the Basin Roundtables in order to address Colorado's Water Quality needs. This is further explored in Section 7.3.
Table 2 Small Group Discussion Report	• Opposed to transmountain diversions. • Focus should be placed on demand management, water sharing, and water reuse strategies. • Environmental interests are under represented on the South Platte Bas in Roundtable and ought to rec eive additional attention. • Agricultural water users risk losing a portion of their water right if they implement certain water savings measures. • Opposed to the Northern Integrated Supply Project (NISP) because of its effects on the Poudre River.	6.2, 6.3, 8, 9.5	6.3-Thank you for your comments. 6.3.1 highlights actions and best practices to increase water conservation statewide. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. Each Basin Roundtable is made up of a diverse set of stakeholders and the inclusion of both an environmental and recreational representative is required by the Colorado Water for the 21st Century Act. In addition, representatives from each county, municipalities within each county, industry, agriculture, and domestic water suppliers are required. Lastly, a representative from each water conservation and conservancy district are also mandated. There are also several other at large seats, and many of these are held by environmental interests, and many of the local government representatives are also focused on environmental and recreational issues since their citizens care about these topics and the area may be dependent on tourism. Colorado's Water Plan will not include any specific water projects. The CWCB would like to encourage multipurpose projects and full mitigation.

Senate Bill 115 Comments - Summary and CWCB Response

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Table 3 Small Group Discussion Report	• Support the creation of additional s torage capacity in multipurpose reservoirs in the South Platte Basin. • Municipal and industrial conservation should be prioritized and should include graywater and rainwater harvesting. • Water and land use planning ought to tak e place in conjunction with one another. • Agricultural users are also expected to conserve water, including by implementing improved irrigation systems. • Communities should be educated about the relations hip between agricultural and municipal water use. • Total water management should address both surface and groundwater supplies.	6.3, 6.3.4, 6.4	6.3-Thank you for your comments. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. 6.3.1 highlights actions and best practices to increase water conservation statewide.Rainwater harvesting does have some limitations within current Colorado water law. The Prior Appropriation Doctrine, which is in Colorado's Constitution, typically dictates that rainwater is used by a downstream user. However, the CWCB maintains a rainwater harvesting pilot program to explore how rainwater harvesting can be used. This is further discussed in Subsection 5.6.1. Graywater use and rainwater harvesting are both discussed in the chapter. 6.3.3 discusses the connection between land use and water use and advocates for better integration of the disciplines. Agricultural water sharing and modernizing agricultural efficiencies are aspects of Colorado's Water Plan and included in Section 6.4 and Subsection 6.3.4
Table 4 Small Group Discussion Report	• The state should take a more active role in the federal proc ess for water projects. • The South Platte Basin's aquifer requires better management. The state should allow pumping from the aquifer to maximize beneficial use of the water we already have. • Regulators must consider the impacts of large engineering projec ts on the environment.	6.3, 9.1	6.5 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. Refer to chapter 9 for more about potential for improvements to permitting. The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and draft of Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan.
Table 5 Small Group Discussion Report	• Communities and individuals should play a larger role in the planning proc ess. • Healthy forests are important for a clean water supply.	7	7 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. An additional section on forest health has been added to chapter 7. Each Basin Roundtable is made up of a diverse set of stakeholders and the inclusion of both an environmental and recreational representative is required by the Colorado Water for the 21st Century Act. In addition, representatives from each county, municipalities within each county, industry, agriculture, and domestic water suppliers are required. Lastly, a representative from each water conservation and conservancy district are also mandated. There are also several other at large seats, and many of these are held by environmental interests, and many of the local government representatives are also focused on environmental and recreational issues since their citizens care about these topics and the area may be dependent on tourism.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Table 6 Small Group Discussion Report	• Identified Projects and Processes (IPPs), conservation, new supplies, and ATMs all merit inclusion in the CW P. • Education and transparency should also be prioritized. • The CWP needs to account for the impacts of climate change, including effects on water supplies and forest health. • There ought to be a dis cussion of water use by energy providers, including oil and natural gas extractors.	7, 6.3.5	6.5 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. Look to chapters 6.5 and 6.6 for discussion of basin projects and methods, including IPPs. Agricultural water sharing and modernizing agricultural efficiencies are aspects of Colorado's Water Plan and included in Section 6.4 and Subsection 6.3.4 Energy needs are also discussed in chapter 5. 7 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. An additional section on forest health has been added to chapter 7. Climate change could have a serious effect on Colorado's water supplies, which is why Colorado's Water Plan is engaged in scenario planning. Climate change issues are addressed in various sections throughout Colorado's Water Plan. However, while temperature's impact on demands are understood, hydrolocial impacts are not. Since Colorado's water planners cannot necessarily impact the global climate change situation, Colorado's Water Plan is not directly focused on mitigating climate change. Other agencies within Colorado's state government consider climate mitigation strategies. Fracking currently uses approximately 18,000 acre feet per year, which is a very small proportion of Colorado's overall water use. However, there may be some areas where there are greater regional effects. In addition, power plants that burn natural gas to make energy use less water than traditional power plants. Therefore, from an overall resource management perspective, fracking and the resulting energy production do not consume a significant amount of water compared to current levels. Colorado's Water Plan seeks to work collaboratively to uphold Colorado's water values and does not put a value judgement on any one beneficial use. The development of Colorado's Water Plan has helped to raise the level of importance placed on education and outreach statewide related to water supply planning. The CWCB is working together with the Basin Roundtables (BRTS) to expand education and outreach activities related to raising awareness regarding the issues presented in the webform comments submitted and Section 9.5 Outreach, Education, and Public Engagement will include recommendations on continuing education on these topics long-term.
Table 7 Small Group Discussion Report	• Minimum stream flows must be determined and guaranteed as a part of the CW P and the South Platte BIP. • Uncertain as to how compact obligations affect planning for the South Platte Bas in BIP. • Conservation should be incentivized. This requires a revision of the current "use-it-or-lose-it" provision in Colorado water law.	6.3, 6.6, 10	6.3-Thank you for your comments. The actions of 6.3.1 highlight a number of incentive based efforts for increased conservation. 6.6 - Thank you for your comments. 6.6.7 contemplates CWCB and basin roundtables working in partnership on assessing environmental needs. Colorado's Instream Flow Program is a tool available to the basin roundtables. CWCB maintains and operates In Stream Flow and Natural Lake Level programs, both of which are highly regarded as some of the most successful programs of their kind in the Western US. Nonconsumptive needs are critically important aspects of the Basin Implementation Plans and Colorado's Water Plan. Although not fully tested, instream flows can be designed to directly benefit riparian areas, and the CWCB Stream and Lake Protection Section has been working with the BLM to design an approach to in-stream flows by providing a flood flow component in the spring. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. Legislative recommendations will be handled in Chapter 10.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Table 8 Small Group Discussion Report	• Colorado water users should fully utilize all water available under inters tate compact requirements. • Reuse and conservation is important and ought to inc lude graywater use. • Modifications to water law must be careful to account for effects on other water laws. • Land use and zoning requirements should be considered to limit urban and suburban lawn sizes. • Instream flow language should be included, with recognition that instream flows benefit from multipurpose infrastructure.	9.1, 10, 6.6. 6.3	6.3- Thank you for your comments. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. 6.3.1 and 6.3.2 fully discuss water conservation best practices and reuse including gray water use. 6.3.3 discusses land use and water use integration through incentives and education. Outdoor water use is addressed in both 6.3.1 and 6.3.3. 6.6 - Thank you for your comments. Section 6.6.1 discusses the relationship between instream flows and other water uses and infrastructure. The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues.
Table 9 Small Group Discussion Report	• Senate Bill 14-115 meetings are difficult for the public to attend, as they require physical attendance during normal business hours. In the future, public meetings should accommodate testimony via videoconferencing and take place during the evening. • Demand should be studied at the level of individual homes and businesses. • Minimizing outdoor municipal water use is more important than minimizing indoor use. • The inefficiency of flood irrigation is often outweighed by the benefits provided by autumn recharge flows. • Industrial water contamination deserves attention.	6.3, 7.3	6.3- Thank you for your comments. As part of SWSI 2016, customer category demand projections (homes, businesses, etc) will be generated to develop statewide demand projections.The current conservation chapter in the CWP does focus on outdoor water in a number of defined actions. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3.
Table 10 Small Group Discussion Report	• Table was unable to reach a consensus on several issues, including the utility of additional storage. • Fragmentation among local decision making bodies requires the intervention of the state, even though local control is generally preferable. • Innovative water storage could utilize subsurface aquifers to minimize water loss. • Lawn sizes are indicative of a need for outdoor m unicipal water conservation. • Population growth should be slowed, as should issuances of building permits. • Local food production and farming is important.	6.5, 6.3	6.3- Thank you for your comments. The current conservation chapter in the CWP does focus on outdoor water use in a number of defined actions. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. 6.5 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. Colorado water allocation and governance has always been guided by local users meeting local needs and Colorado's Water Plan will not change that. Rather than diminishing local control or authority over water, Colorado's Water Plan seeks to strengthen local decision-makers' ability to achieve regional and statewide water solutions. To that effect, Colorado's Water Plan will work to encourage, rather than mandate, several of the points presented in the comments. Local control and land use are discussed in Chapter 2, and projects and methods identified by basin roundtables (including storage concepts) are explored in 6.5 and 6.6. Colorado's Water Plan and the technical work that supports it includes three growth scenarios: low-growth, mid-growth, high-growth. As water planners, Colorado must prepare for any of these future possibilities as we do not have control over the state's economy and how many people are born or choose to move here. While some communities choose to limit growth, doing so on a broad statewide scale is untenable and unconstitutional. The CWCB is working with each basin on their Basin Implementation Plan and will continue to encourage all interested parties to do the same.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Table 11 Small Group Discussion Report	• The value of a tiered water system ought to be studied. • Development of CW P requires leadership from the state government. • Land use planning should emphasize water security for both the Eastern and W estern Slopes. • Agricultural users should adopt pivot irrigation to support conservation endeavors. • Support a more robust and accessible instream flow program.	6.3	6.3-Thank you for your comments. 6.3.1 highlights actions and best practices to increase water conservation statewide. Conservation oriented rate structures are discussed as a foundational practice that every water provider should be doing. With regard to indoor water conservation and tiered rate structures, the vast majority of water providers currently operate with tiered water rates. 6.3.3 includes discussion of integrating land use and water use more closely and the actions to accomplish this. Agricultural water sharing and modernizing agricultural efficiencies are aspects of Colorado's Water Plan and included in Section 6.4 and Subsection 6.3.4. CWCB maintains and operates In Stream Flow and Natural Lake Level programs, both of which are highly regarded as some of the most successful programs of their kind in the Western US. Nonconsumptive needs are critically important aspects of the Basin Implementation Plans and Colorado's Water Plan. Although not fully tested, instream flows can be designed to directly benefit riparian areas, and the CWCB Stream and Lake Protection Section has been working with the BLM to design an approach to in-stream flows by providing a flood flow component in the spring.
Table 12 Small Group Discussion Report	• Agricultural and municipal users must cooperate to address water quality concerns. • ATMs should be evaluated with attention to their s ustainability. • Agricultural uses must be protected in order to avoid economic losses to rural community. • Storage will help address the coming water gap, but strategies must be multipurpose. • Water and land use planning must be integrated.	6.3, 6.5	6.3- Thank you for your comments. 6.3.3 includes discussion of integrating land use and water use more closely and the actions to accomplish this. Agricultural water sharing and modernizing agricultural efficiencies are aspects of Colorado's Water Plan and included in Section 6.4 and Subsection 6.3.4 6.5 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. The importance of multipurpose projects and methods is discussed in the BIPs and reflected in sections 6.5. and 6.6.
Public Comments from October 1, 2014 Metro Basin Hearing			
Jennifer Barrow, Also submitten a questionnaire	• The BIP should include a high conservation strategy. • New supplies will not be able to addres s new demands alone. Climate change may further reduce the available supply. • New development should include water-wise landscaping.	4, 6.3	6.3-Thank you for your comments. As the BIP process is a grass roots effort, staff is incorporating the draft BIPs as they are with a view that final BIPs are not due until Spring 2015. Your comments will help shape how the final BIPs turn out. 6.3.1 highlights actions and best practices to increase water conservation statewide. 6.3.3 includes discussion of integrating land use and water use more closely and the actions to accomplish this. Climate change could have a serious effect on Colorado's water supplies, which is why Colorado's Water Plan is engaged in scenario planning. Climate change issues are addressed in various sections throughout Colorado's Water Plan. However, while temperature's impact on demands are understood, hydrolocial impacts are not. Since Colorado's water planners cannot necessarily impact the global climate change situation, Colorado's Water Plan is not directly focused on mitigating climate change. Other agencies within Colorado's state government consider climate mitigation strategies. Ch 4 - additional climate change information has been incorporated

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Robert Stocker Also submitted written testimony	• The BIP should recognize our generation's moral responsibility to future citizens and to the future of life its elf. The CWP should be sustainable and environmentally responsible. • Strategies to protect the environment should include: 1) establishing science-based standards for flow characteristics required to maintain plants, fish, and wildlife dependent on our s treams and rivers for propagation and survival; 2) modifying water policies to assure that environmental standards are met before water is extracted for other uses; 3) appreciating the prairie as an ecosystem worthy of protection; 4) requiring minimal standards for returning industrial water to the environment, including water use for fracking; 5) and recognizing stream health as a beneficial use and allowing non-governmental water rights to be established for maintaining stream health. • Conservation is by far the most cost-effective way to deal with water shortages. • Recommended legislation to: 1) encourage water-responsible landscaping and outlaw covenants that require maintaining water-hungry bluegrass lawns; 2) track losses in municipal water systems and eliminate leaks; 3) allow homeowners to collect rainwater for later use in their yards; and 4) modify water law to discourage waste. Our current "use it or lose it" water policy does just the opposite. Agriculture is the largest water user in Colorado. "Buy and dry" is not all bad. If farmers can grow the same crops with less water, they should be able to sell or lease the excess to someone else. • Consider subsidizing reductions in consumption by purchasing additional ins tream flow rights.	6.6, 10, 6.4, 6.3	6.3-Thank you for your comments. Conservation is a very cost effective tool and your ideas have already been incorporated into the current draft chapter. 6.6 Thank you for your comments. Section 6.6.3 addresses quantification methodologies for environmental water needs. 6.4 - Thank you for the comments. 6.4 - Thank you for the ATM related comments. The plan recognizes and supports free market activities, along with water law and private property rights. Added flexibility is discussed to further the goals of alternative transfer methods within the basic framework. The concept of increasing the ability for farmers to sell or lease their excess water is embedded in ATM programs such as 1248 and the idea of flex markets. Your legislative suggestions will be considered in the drafting of Chapter 10..
Julio Iturreria, Arapahoe County , Metro and South Platte Basin Roundtable	• There is a need for balance and being proactive in water planning. • Colorado is the last western state without a water plan.		Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. The current course Colorado is heading down leads to several of the results that the commenter mentions. For instance, without action, up to 35% of Colorado's farms in the South Platte could be dried up. This is one impetus for why Colorado is pursuing the development of a water plan. Colorado's Water Plan will yield better results through support of conservation, reuse, sharing agreements between farmers and municipalities, incentive-based of water-smart land use, and the development of multi-purpose projects and methods.
Devon Buckels, Coordinator for the South Platte River Urban W aters Partnership, a partnership hosted by the Colorado State Forest Service Also submitted written testimony	• CWP should support the protection and restoration of the lands that support the hydrology which provide and convey the water for our use. • The CWP should support the incorporation of green infras tructure and the work of regional collaborative organizations like the Urban W aters Partnership. • Fires and flooding affect water quality and also affect the financial cost of water provided to the metro area. Meanwhile, trees in the forest affect snowmelt, and trees in the urban area help to m anage stormwater runoff reducing storm water treatment costs for local communities. Forest management work achieved through partnerships with forest service agencies can help protect our watersheds and water supplies. • The CWP should support the protection and restoration of the lands that support the hydrology, including forests, riparian corridors, creeks, and streams which provide and convey the water for our use. • The plan should also support the incorporation of green infras tructure as the region addresses its aging water infrastructure system and associated costs. • The CWP should support the work of regional collaborative organizations like the Urban W aters Partnership, which facilitate coordinated solutions to	6.5, 7	6.5 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. Look to section 7.1 for more info about watershed protection, and 7.2 for natural disaster management. Sections 6.5 and 6.6 feature the work of the basin roundtables, and the projects and methods identified in the BIPs. The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and draft of Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan. Colorado water allocation and governance has always been guided by local users meeting local needs and Colorado's Water Plan will not change that. Rather than diminishing local control or authority over water, Colorado's Water Plan seeks to strengthen local decision-makers' ability to achieve regional and statewide water solutions. To that effect, Colorado's Water Plan will work to encourage, rather than mandate, several of the points presented in the comments.
Brian Loma, President, Metropolitan State University Water Association of Students Stewards Urban Program	• "Use it or lose it" should be changed to encourage water conservation. • Graywater infrastructure needs to be developed for new growth. • Recycling of fracking water should be required. • The CWP should include smart sprinkler systems and requirements for additional technology.	6.3	6.3-Thank you for your comments. Chapter 6.3.1 includes actions on sharing conserved water and adopting WaterSense specified outdoor technologies. Conservation and reuse, including gray water, are strategies considered in Colorado's Water Plan. The issue of graywater in Colorado is addressed within Subsection 6.3.2 Reuse. . Your legislative suggestions will be considered in the drafting of Chapter 10.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Nancy Stocker Also submitted written testimony	• Efficiency as a potential source of water is underestimated in the South Platte BIP. • Composting saves water that would otherwise be used to flush food down the drain and should be encouraged. Waterless toilets can save additional water. • Change the law that makes farmers use all their water rights for the awarded use or lose it. Make it so they can lease out their water. Somehow, the most basic human and environmental needs should be met before leasing is allowed for other uses, particularly new uses. • Consider all other means of getting water before making more trans-basin diversions. They damage the basins from which water is taken. They increase the likelihood of occasional severe flooding in the bas in to which water goes. And they are expensive. • Fracking water must be recycled over and over and over. Both carrots and sticks should be applied. Rec ycling would reduce both fresh water demands and the problems of disposal.	6.3, 6.5, 8	6.3 Thank you for your comments. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. 6.3.1 highlights actions and best practices to increase water conservation statewide. 6.5 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. More information of TBDs, and the cross basin discussion on this subject is found in Chapter 8.
John McKenzie, Executive Director Ditch and Reservoir Company Alliance Also submitted 9-page memorandum (excerpts provided in the following column).	• Given the importance of Colorado's ditch and reservoir companies, it would be appropriate to prov ide these entities with a separate "Ditch and Reservoir Company" chapter within the CW P. • The CWP can be developed that includes decisions that minimize risk, taking into account climate change, demographic patterns, identified projects, and including cultural and politic al considerations. The alliance has reviewed the DRAFT 5.1: Scenario Planning and Developing an Adaptive Water Strategy and believes that the process of formulating plausible scenarios has been useful in developing consensus to the extent possible and orienting the next steps. Now, scenarios and drivers need to be identified from the output of a model, ones that are determined after a carefully constructed analysis of Colorado's water system is complete. • There is a need to recognize the contribution of ditch and reservoir companies to the culture and environmental qualities of Colorado. These delivery systems include the diversion structures, the canals, the laterals, the reservoirs, the farms and ranches they serve, and the return flows. • Colorado's food system should be defended by protecting individual water rights and historic uses through the existing prior appropriation s ystem. • There is not a good database of ditch companies and their service areas, and practices. Baselines can be created to be used as a reference point in determining trends and future changes to the amount of water carried, water use, changes in the service area, amount of water tied to the ground, and financ ial viability of ditch companies. • Ditch companies have been providing substantial benefits to society, both directly and indirectly. Mechanisms for compensating ditch companies need to be explored, both monetary and non-monetary approaches. • Better planning capabilities for ditch and reservoir companies could make it easier for those companies to adapt to changing social and environmental pressures. Planning activities in the medium and long-term should be strengthened. Funds need to be set aside to help ditch companies plan for their futures for many know what needs to be done but need additional res ources. • More educational efforts should be undertaken to promote ATMs. For ATMs to be used in a free market system with willing participants, the various options need to be made clear and understandable. Models of financial impact to the parties need to be developed. More activities like the Fallowing Leasing Pilot Program (HB 13-1248) are important but need to be enhanc ed and promoted.	6.5, 6.1, 6.4	6.4 Regarding increasing education about ATMs and enhancing existing programs such as 1248 pilot projects - Agree. Could be further discussed in education and outreach section of CWP, and suggested future legislation in chapter 10. 6.5 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. The interrelationships of different water uses are discussed throughout the Plan. Regarding comments related to Section 6.1 - The thoughtful comments about doing a technical analysis across the state will be considered as part of the Statewide Water Supply Initiative 2016. This could be further advanced by the development of Colorado Decision Support System tools throughout Colorado. Completing these for the whole state is now one of the actions in Section 6.1. DARCA suggests two recommendations that warrent further discussion and consideration for the second draft of Colorado's Water Plan: Create baselines for ditch and reservoir companies, support ditch and reservoir company long-term planning (including how to manage for the potential impacts of climate change). Regarding comments related to Section 6.3.4 - The comment suggests that irrigation ditches help provide aesthetic and riparian values. Section 6.3.4 of the plan acknowledges that ag return flows and losses can incidentally support riparian vegetation and habitat. The comment also stresses the importance of vibrant ag, which the plan emphasizes throughout. Further the comment requests both technical assistance to ditches to modernize infrastructure and suggests that public and private incentives be provided to increase ditch company efforts to conserve water. As 6.3.4 observes in certain site specific locations ag efficiency changes can provide local instream benefits or salvaged water that could be made available to other uses, and incentives may be appropriate to encourage those efforts. Legal and administrative costs may offset the benefits, and therefore careful site specific analysis must be done to ensure the potential benefits outweigh those costs. Regarding comments related to Section 6.4 - Additional ATM examples have been included, along with a discussion of HB-1248 as suggested. Remainder of ATM enhancements were generally captured in the "action items" section. Education issues are addressed in Section 9.5.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Ditch and Reservoir Company Alliance (cont.)	• There is a lack of recognition by many decision makers and water rights owners on the impacts that climate change will have on ditch and reservoir companies. Individual ditch companies need to better monitor and begin recording their own data including flow patterns, water availability, temperature, evapotranspiration data, and annual precipitation. Seeing the effec ts of climate change through locally collected data that is more granular. • The financial, recreational, agricultural, and environmental costs for the long term as well as the present, along with an increasing concern for the Colorado River Basin, leads to the strong impression that additional transmountain diversions should be considered only after other solutions have been exhausted. • The CWP needs to focus on the development of guidelines and standards that reduce transaction costs and risk by providing more certainty in local regulations, easement definition, storm-water regulations, property rights disputes, taxation, and lender relations hips. Guidelines and standards can take the form of model regulations and laws, as well as conceptual principles that may encourage more effective cooperation between ditch companies and local communities. • Basin implementation plans include requests for approximately $8 billion for projec ts that are mainly focused on meeting future municipal water supply gaps and firming existing M&I supply. Despite the fact that ditch companies handle and distribute far more water across very large and productive areas, the plans omit sufficient requests for the funding of ditc h companies and agricultural needs, including infrastructure (diversion, conveyance, on-farm improvements, and storage) that will help ditch companies and agriculture prosper and shelter them from an uncertain future of climate variability, a growing state population, and other pres sures. • Many ditch companies feel that although im provements to their systems may be of benefit, the benefits do not justify the costs and risks. Other incentives should be considered such as: 1) creation of a transferable state tax credit for improvements much like the ones currently used for conservation easement; 2) lowering the rate of CWCB loans for infrastructure loans; and 3) providing or promoting mechanisms where private individuals can furnish funds for ag ditch company improvements. • Storage water will play a critical role in maintaining and enhanc ing the water portfolio of mutual ditch and reservoir companies. Transaction costs (permits, required studies) in today's regulatory climate make it too costly, and therefore infeas ible for limited resource ditch companies to expand, let alone build, new reservoirs. Until a more streamlined permitting process for reservoir expansion results, few storage expansion projects will be undertaken. • Once water demand overtakes the available supply, sources of water once considered unfeasible or improbable will need investigation. Higher costs may also lead to the widespread utilization of graywater and even the reuse of domestic water. However, conservation and reuse may not be sufficient. All options should be explored including piping water from the water-long area of the Missouri/Mississippi River system to Colorado. Storage could be provided in eastern Colorado in off stream reservoirs or stored in aquifers.	6.1, 10, 6.5, 10, 9.4, 6.2	See DARCA response above.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Robert Longenbaugh Also testified at the September 17, 2014 South Platte Basin hearing and submitted a letter on the CWP (excerpts provided in the following column).	• The draft SPBIP does not adequately consider the quantity of ground water now stored in the South Platte and Republican River drainage basins. Nowhere in the report does it recognize the 10.5 million acre feet of water now stored in the South Platte alluv ial aquifer some of which can clearly be put to beneficial use to further water needs of Colorado, if managed properly. • The history of how irrigation wells were drilled to supplement inadequate and undependable s urface water supplies is crucial to understand current water administration problems. • The ground water aquifers and their use for storing excess river flows when precipitation is above normal must be one of the top priorities in the State W ater Plan. • Both the surface and ground water must be managed to maximize the water available to meet future Colorado citizen's needs. The 1969 Ground W ater Administration Act specifically requires the management of both the ground and surface water while also preventing injury to vested water rights. Current water administration only address the prevention of injury issue. To plan for 2050 we must return to an aggressive program of conjunctive use. • Prudent ground water pumping must be allowed to provide water for irrigation, municipal use and industrial needs when there is insufficient river flows such as early spring before the snow melt, in the fall and winter periods and especially during drought periods . Current well pumping with augmentation does not allow the wells to supply water during droughts. • For ground water management you need data on volumes pumped, volumes recharged, water table levels, and geologic information. Both calibrated ground and s urface water models would be beneficial to better manage Colorado 's water resources. • The South Platte River is now in a very dynamic state. Both physical and hydrologic conditions are changing in both time and space. Conservation, reuse, and using nontributory ground water and transbasin diversions to extinction are having major impact on river flows. It is well documented that river calls and dry up of stream flow reaches is occurring more frequently. Projections for 2050 using past rates of change in this case is not good science or technology and will result in critical errors of the projected deficiencies for all water users. • Water administration must be changed to allow the State Engineer flexibility in how he distributes excess surface runoff from storm events. • There are significant problems with how state water officials are administering water. There are statutes that require the State Engineer to prev ent waste, maximize beneficial use, prevent injury, administer water in the priority system , and impose retained jurisdiction in augmentation decrees to correct how those decrees are administered to prevent over augmentation. The Division I Engineer tells me he does not honor those statutory requirements because either the Bijou Irrigation Dis trict vs . Simpson Colorado Supreme Court Case in 2002 or the legis lation passed in 2002, 2003, or 2004 s pecifically requires him to only consider the accounting of depletions due to pumping and accretions due to artificial recharge in the existing augmentation decrees. If this conflict exists, then the Legislature needs to take action to resolve this problem, clarifying the way the State Engineer should administer the water. • We don't now have priority administration. All the irrigation wells that were drilled prior to 1965 hav e priority dates senior to the artificial recharge structures (first decree for artificial recharge was in 1972). W hy can't irrigation wells pump some water in their own priority? Why do we have over 100 new well permits issued since 2005 in W eld, Morgan, Logan and Sedgwick counties which have resulted in new wells irrigating new lands never before irrigated, while we have over 4,000 wells curtailed that have senior appropriation dates ? This situation needs to be evaluated to measure future potential problem s.	4, 10, 6.1, 6.2	Ch4 - additonal information on SP alluvial aquifer added to CH 3 and Ch 4. Other comments addressed where appropriate. Aquifer storage and recharge is also explored in Section 6.5. Your legislative suggestions will be considered in the drafting of Chapter 10. Regarding your comments related to Section 6.5 - Thank you for your comment, no further incorporation is needed because your comment has already been considered or addressed. These comments were also sent directly to the South Platte Basin Roundtable.
Robert Longenbaugh (Cont)	• We are now wasting water in the South Platte Bas in: Excess flows (400,000 acre feet per year on the average) go to Nebraska; Phreatophytes are consuming over 450,000 acre feet per year and that number is increasing; Increased evaporation from the soil surface due to the high ground w ater levels could easily be over 100,000 acre feet/yr. If we could salvage just a portion of each of those three wastes , then the projected 2050 M&I deficiency could be greatly reduced which would reduce or eliminate the need to im port water from the Colorado River Basin. • There are references in the SPBIP that there are expected changes (problems) coming: 1) in the fractured rock aquifers in the foothills and mountains ; 2) the Ogallala irrigation w ells in the Republican Basin; and 3) the Denver Basin Bedrock Aquifers because of declining piezometric ground water levels. There doesn't appear to be specific action items listed to be implemented prior to 2050 to addres s these critical water issues. Hopefully the State W ater Plan would schedule and initiate ac tion items. • The SPBIP has been structured to implement the recommendations from SWASI 2010 and includes action items: conservation , implement IPP's, address and limit agriculture transfers , and import water from the Colorado River Basin. This is commonly referred to as the "four	6.2, 10, BIP	CWCB Staff will pass these comments along to the South Platte Basin. Your legislative suggestions will be considered in the drafting of Chapter 10. In Section 6.3.4, Colorado's Water Plan addressed the need for reducing nonnative phreatophytes in order to gain salvagled water. Aquifer storage and recharge is also explored in Section 6.5.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Theresa Conley, Conservation Colorado Also testified at the September 17 South Platte Basin hearing and submitted a letter on the CW P (excerpts provided in the following column).	• Focus on demand management first, before exploring “new supply” and developing additional Colorado Riv er Water. This starts with increasing indoor and outdoor c onservation as well as increasing the use of recycled water. SB 14-103 (phase-out of the sale of certain low efficiency plumbing fixtures) and HB 13-1044 (authorizing the use of graywater) are two recent bills that have sought innovative ways to decrease the demands we put on fresh, potable water by increasing the efficiency of bathroom fixtures without impacting their effectiveness and exploring ways to use graywater, such as in our toilets or lawns. These are relatively easy changes that result in a significant impact. • We can and should connect land use planning and water planning. W e know the population of Colorado is growing with an additional four m illion people expected by 2050. A lot of our future water needs are within this new population group. Colorado s hould partner with counties, land use planners, and water utilities to embrace integrated planning that will lower the water footprint of new urban development. W hile education and training is an important first step, we will need additional m easures. • We need to continue the legacy of innovation that Colorado was founded on and find new ways to work smarter, build better, and use less water in the process.	6.3, 6.3.3	6.3-Thank you for your comments. Your comments have already been incorporated into the current draft for both demand management and land use and water use integration. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3.
Theresa Conley, Conservation Colorado (Cont.)	• Increased flexibility in water sharing. Creative water-sharing agreements (Alternative Transfer Mechanisms (ATMs)) can support agriculture, meet growing communities’ needs, and protect Colorado’s rivers. Currently buying and then drying up agricultural land is the easiest way to get water from agriculture. It was repeated several times at my table during small group discussion that we need more sharing opportunities and more flexibility in our water rights system (not an entire overhaul). The state should support water sharing agreements—ones that are voluntary, compensated, temporary, and flexible—to help meet future municipal and healthy flow needs while making agriculture more profitable. Of course, water rights need to be respected but farmers and irrigators should be rewarded for conservation practices, efficiency improvements, and sharing and not penalized. • Cross-basin comparison. I provided a matrix comparing the Basin Implementation Plans to each other on certain aspects – conservation, reuse, trans-mountain diversions, environmental and recreation methods and projects and agriculture (Basin Implementation Plans Matrix) as well as the several elements coming out of the BIPs that are noteworthy (Shareable BIP Elements). Another good comparison would be to examine how the Basin Implementation Plans (BIPs) match up to the Interbasin Compact Committee’s (IBCC) No/Low Regrets Action Plan. Some basins meet the goals laid out by the IBCC’s action plan while others do not. I call your attention to conservation levels, projects or methods designed for meeting environmental goals and success rates of identified projects and processes (IPPs). • Funding & Research. We need funding for and s tream management plans. These plans quantify the flows needed to preserve environmental and recreational attributes, identified by the basins, within specific river reaches. These basin-level stream management plans should be a top tier priority within the BIPs and the CW P. Of note, while watershed management plans are important, stream management plans (SMPs) specifically evaluate the flows and are needed independent of any larger watershed plan. SMPs allow local stakeholders to better assess river resources that need protecting.	6.4, 6.6, 3, 10	6.4 - Staff added language to convey ideas about water sharing agreements and increased flexibility. Flex markets being discussed as well. Could relate to chapter 10 and 6.6 - Thank you for your comments. Section 6.6.7 identifies work on both watershed management plans and stream management plans as necessary actions, and addresses strenthening funding for environmental projects. 6.3.3 includes discussion of integrating land use and water use more closely and the actions to accomplish this. Your legislative suggestions will be considered in the drafting of Chapter 10. Many of your other comments are addressed in the revised draft November sections/chapters.
Pauline P. Reetz, Conservation Chairman, submitted written comments on behalf of the Audubon Soc iety of Greater Denver (excerpts provided in the following column).	• Water Conservation. The Plan should include a significant focus on water conservation (the cheapest, easiest and fastest way to "create" more water), including municipal water conservation, municipal reuse, agricultural efficiency, and water-efficient energy supplies. These measures can save substantial amounts of water and can help ensure that no new water diversions are needed from our already-depleted streams; they can make water available to restore degraded stream reaches. Some of these measures may require changes in Colorado law. We support conservation measures such as: 1) municipal and industrial wastewater reuse and recycling, water metering, tiered pricing, leak detection and repair, xeriscaping incentives, limiting development near stream banks, restoration of stream banks, and incentives for upgrades to water-saving appliances; 2) temporary water sharing agreements between agriculture and cities when agriculture has surplus water; 3) regulations that ensure that adequate and prov en long-term water supplies are available, before new developments are approved; and 4) significant increases in water efficiency by agricultural users. • Quantification of Non-consumptive water needs. So far the documentation for the plan has focused on quantifying the need for water for agricultural, municipal, and industrial uses - the consumptive uses of water. However, Colorado's economy and our Colorado lifes tyle benefit from a	6.3, 10, 6.6	6.3- Thank you for your comments. In the most current drafts for 6.3.1, 6.3.2 and 6.3.3 your comments and ideas have been incorporated and addressed into the discussion and actions for each section. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. 6.6 - Thank you for your comments. Section 6.6 recognizes the need for additional quantification of environmental and recreational water needs and recommends strengthening funding for environmental projects. 7- Thank you for your comment, no further incorporation is needed because your comment has already been considered or addressed. Your legislative suggestions will be considered in the drafting of Chapter 10.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Pauline P. Reetz (Cont.)	• River and stream restoration. Over the last 100 years we have drained, dammed and diverted our rivers and streams to the detriment of most species and to the detriment of the rivers themselves. As you are fully aware, we are not starting out in this planning process with healthy rivers! Most of Colorado's rivers are imperiled, diminished, and sometimes drained completely dry. Any further diversions will cause the loss of the water-based recreation (such as rafting and fishing) and wildlife resources that add billions to Colorado's income each year. The State W ater Plan needs to outline a strategy to restore ecological health and balanc e to our rivers and streams and preserve and enhance our remaining riparian ecosystems. Additionally, the state needs to plan/provide resources for more detailed inventory and assessment of river ecosystem conditions and actual water needs. • Coordination between land use, growth, and water supply. Until recently no developer had to consider where the water for his development would come from, and consumers had no information about it. This has changed slightly since 2008, but we still have a long way to go to integrate water supply planning and land us e. While many Coloradans oppose the "buy and dry" option because it would eliminate productive farmland, that is likely to be our future source of water if we don't plan ahead. W ater providers claim that they cannot be responsible for land use planning, but some of that is happening even now. Why not integrate water and land use, rather than depending on the helter-s kelter, water-wasteful system we have now? • Minimum stream flows are not adequate. W hile they are a good idea, miuimum stream flows are not adequate as a sole protection for environmental needs and values - they are too little, and too rec ent. Streams need spring floods to flush out sediment as well as adequate flows the rest of the year to support riparian and river bottom ecosystems. • Minimize construction of new dams and reservoirs. These store water on the surface where a large percentage is lost to evaporation. "Smarter" storage should be encouraged: underground, in aquifers , or in deep gravel pits where evaporation can be minimized. The State W ater Plan should be flexible enough to deal with changes caused by the warming of our planet due to fos sil fuel consumption and the ensuing increase in evaporation and transpiration rates. Storage in itself does not equal new water supplies. • Rivers and streams need to be viewed as continuous systems, not isolated reaches. Diversions and pollution upstream can have severe impacts on downstream ecosystems. The state should be protecting the upper reaches of our mountain streams, for example, even when they are intermittent, so as to ensure water quality and quantity for downstream users and resources. • Ground and surface water should be viewed as interrelated systems. Recent controversy over the use of ground water in the South Platte alluv ium should have taught us a lesson: often ground water and surface water resources are closely related. W ater planning needs to take this into account and acknowledge that ground water depletions can affect the quantity and quality of surface water in some areas. • Transbasin diversions should be a last option. The Colorado River is over- appropriated and, due to c limate change, it is unlikely that additional water will be available from that river basin. The Front Range should not count on augmenting our water supplies via diversions across the Continental Divide. In addition, mitigation for water removal from a basin cannot be satisfactorily accomplished, especially in light of degradation that has already occurred. Rather, we should focus on conservation and efficient use of our native water on the Front Range. • Audubon's mission, to advocate for the environment by connecting people with nature through educ ation, conservation and research, fully supports Governor Hickenlooper's Executive Order of May 13, 2013 which states	6.6, 6.3.3, 6.5, 7	6.3.3-Thank you for your comments. Your comments have already been addessed in the land use planning section through discussion of integrating land use and water use more closely and the actions to accomplish this. 6.6 - Section 6.6 recognizes the need for additional quantification of environmental and recreational water needs and recommends strengthening funding for environmental projects. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan, and is explored in Section 6.6. .6.5 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. Additionally, the BIPs address these concerns and the values of each basin roundtable. Chapter 7 addresses the importance of healthy watersheds, and climate change is addressed throughout the Plan. Climate change could have a serious effect on Colorado's water supplies, which is why Colorado's Water Plan is engaged in scenario planning. Climate change issues are addressed in various sections throughout Colorado's Water Plan. However, while temperature's impact on demands are understood, hydrolocial impacts are not. Since Colorado's water planners cannot necessarily impact the global climate change situation, Colorado's Water Plan is not directly focused on mitigating climate change. Other agencies within Colorado's state government consider climate mitigation strategies. Aquifer storage and recharge is also explored in Section 6.5
Doug Swartz September 30, 2014 letter to the committee (excerpts provided in the following column).	• The 2050 “water supply gap” is presented as a basic fact upon which much of the Roundtable’s work is based. This gap is predicated on a plethora of as sumptions which could be questioned and which, if modified, might lead to quite different c onclusions. One fundamental assumption is that the state’s population will continue to grow at a rate determined by factors other than water supply. In fact, in semi-arid Colorado, water may be a limiting factor for that growth rate, as it becomes more scarce and expensive. • The current planning process picks up at the present; i.e. the starting point is the present status of Colorado’s waterways. This suggests that the existing environmental degradation caused by the myriad water diversion, storage and usage projects developed in the past (hundreds if not thousands) is accepted. However further degradation from projects recommended for development under the SBPIP cannot be considered on a standalone basis; it must be evaluated from the standpoint of the cumulative impacts of past and new projects and new projects together. • The draft plan tries to convey that it’s possible to do it all: res tore healthy waterways, improve recreational opportunities and develop significant additional water supplies. This doesn’t pass the sniff test; it’s not going to be possible to meet all of these needs and wants. In fact, it is clear that the plan’s highest priority is to increase development of IPPs and new “multipurpose” projects, with a much smaller slice of the pie going to the restoration pieces. • Mention of the possibility of the development of new large-scale water projects and trans-basin diversions. The era of development of such projects is over, with better understanding of their deleterious impacts (and the lack of availability of federal funding for im plementation). • A push for streamlined permitting processes for new water development. I could support this only if environmental protection aspects receive increased, not decreased attention, as part of a process change. • The statement at the end of the Im plementation section of the Executive Summary: “Broader political and financial support is essential if the state is to use integrated projects to meet the supply gap.” Is this a plea for the state to take a larger role in advocating for and funding new water development projects? This is very concerning. • Areas of the planning effort that need additional em phasis and/or more research include: a discussion of carrying capacity must be part of the discussion about Colorado's water future; a shift in emphasis from development of additional supplies to conservation, efficiency, recycling, and creative water-sharing options. If there are obstacles in Colorado water law, we must work to improve the law rather than be handcuffed by it. Significant protection/restoration/enhancement of riparian environments must be accomplished before further degradation is considered. A meaningful plan must	6.1, 6.5, 7, 1, 9.4, 10	6.5 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan, and is explored in Section 6.6. Watershed health concerns are addressed in Chapter 7, and the ongoing interbasin discussions on development of TMDs are discussed in Chapter 8, along with the myriad of concerns that accompany devleopment. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. For more about potential improvements to the permitting process, reference section 9.4. Your legislative suggestions will be considered in the drafting of Chapter 10. Permitting issues are explored in Section 9.4 and the section will be further developed in 2015.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Table 1 Small Group Discussion Report	• Agricultural water efficiency or transfers can hurt downstream uses. Municipalities should only be able to take or transfer the consumptive use. • Land use planning needs to include a focus on water efficiency. • Growth should not be subsidized. • Water should be used more holistically such as rainwater capture and storm water capture. There needs to be a study and data to determine the impacts of rainwater and storm water capture and their impacts or non-impacts on the downstream users. • Alternative uses/demands need to be more accessible and cost effective. • People need to be educ ated about living in an arid state and offered incentives to xeriscape. • Expressed opposition to the Chatfield Res ervoir expansion because reservoirs are inefficient and the CW P should look at underground storage. • Legislation should be considered to prevent HOAs from requiring inefficient water use. • The state, water providers, and other users must educate people coming into the state about water efficiencies be made aware of the state's arid environment.	6.3, 6.5, 10	6.3-Thank you for your comments.Many of your comments have been addressed already in the current draft chapter, such as land use and water use, the current rainwater pilot project at Sterling Ranch, and implementation of outdoor water use best practices. 6.5 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. Colorado's Water Plan will not include any specific water projects. The CWCB would like to encourage multipurpose projects and full mitigation. Xeriscape lawns are allowed statewide. Colorado water allocation and governance has always been guided by local users meeting local needs and Colorado's Water Plan will not change that. Rather than diminishing local control or authority over water, Colorado's Water Plan seeks to strengthen local decision-makers' ability to achieve regional and statewide water solutions. To that effect, Colorado's Water Plan will work to encourage, rather than mandate, several of the points presented in the comments. Your legislative suggestions will be considered in the drafting of Chapter 10.
Table 2 Small Group Discussion Report	• Discussed the need for conservation and whether that should be mandated or incentivized. The table noted that 87% of water goes to agriculture and they talked about the efficiencies and roadblocks to increase agricultural efficiencies. This included challenges with interstate compacts and the need to store water that we're entitled to but goes downstream. • Recreation, ecosystems, and environmental concerns are important to the state's economy. • Questioned whether transbasin diversions should be part of the CW P. • Each basin is unique and questioned haw all the BIPs can be blend together into a s tatewide plan. • What impact will Environmental Protection Agency (EPA) regulations have on the state? • Water reuse and recycling of water is important. • Water education is important The Colorado Foundation for W ater Education Citizen's Guides are a great resource.	6.3, 8, 9.5	6.3-Thank you for your comments.Many of your comments have been addressed already in the current draft chapter. 6.3-The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and draft of Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. The development of Colorado's Water Plan has helped to raise the level of importance placed on education and outreach statewide related to water supply planning. The CWCB is working together with the Basin Roundtables (BRTS) to expand education and outreach activities related to raising awareness regarding the issues presented in the webform comments submitted and Section 9.5 Outreach, Education, and Public Engagement will include recommendations on continuing education on these topics long-term.
Table 3 Small Group Discussion Report	• The data for the models used in the BIP should be better explained in the South Platte BIP. • Alluvial storage in the South Platte Bas in deserves more attention. • Concerned about losing the value of East Slope agriculture due to "buy and dry." • Conservation should result in a reduction in consumptive use. • A better understanding of the water inventory is needed to better manage the water supply. • The legislature's duty is to protect the public's interest in water as well as priority rights to that water.	6.5, 6.3	6.3-Thank you for your comments.Many of your comments have been addressed already in the current draft chapter such as a focus on outdoor water use. 6.3-The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and draft of Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan. 6.5 - Thank you for your comments. These comments and others with similar sentiment have been taken into consideration and will be reflected in the November draft of CWP. Refer to Chapters 2 and 9 for more about the priority system.
Table 4 Small Group Discussion Report	• Water used for fracking should be reused. • More land use and water planning is needed locally and statewide. • Questioned whether there could be legislative support for local green infrastructure. • Flora and fauna are im portant for filtering water and watershed health. • Forest management is important. • Better management of storm water is needed. • High mountain reservoirs are important. • The Federal Environmental Impact Statement process could be streamlined to reduce costs.	7, 6.3, 9.4	6.3-Thank you for your comments.Many of your comments have been addressed already in the current draft chapter,such as better land use and water use integration. 6.3-The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and draft of Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan. 7.1- Thank you for your comment, no further incorporation is needed because your comment has already been considered or addressed. Permitting issues are explored in Section 9.4 and the section will be further developed in 2015.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Public Comments Recieved from Questionnaires on the CWP (Colorado River Basin)			
Steve Acquafresca, Mesa County Board of County Commissioners, Also testified	How much weight will the CO BIP carry in the CWP? No more TMDs as they would devestate the basin's water resources. The conecpt of "water banking" needs a great deal of study, refinement, and additional work	3, 8, 6.4	The revised November draft of Colorado's Water Plan includes additional BIP integration. 8-With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work.
Annie Henderson, Upper Colorado River Private Boaters Association, Also testified	How will real policy be used to enforce CWP's values? Public policy implementatin plan is lacking. How will we identify quanitifiable measurements to gain better use of data and track use and effectiveness of efforts? Who is providing the funding to alow us to create policy around the plan? The Colorado legislature must push to enact regulation that favors conservation effots. They must address rampant growth and encrouage sustainable, responsible development, espcially in basin that diver water of of existing communitites.	10, 4, 9.2	CH 4- noted Your legislative suggestions will be considered in the drafting of Chapter 10. Funding opportunities are discussed in Section 9.2.
Mike McDill, Municipal with recreation and environment interests	Who proposed reservoir in Roaring Fork tributaries for stream health? How will minority interests be adequately represented? The legislature should: 1) Use plan to develop change sin Colorado Law, 2) Establish guidelines for statewide land use planning, 3) Maybe declare irrigation of turf grass NOT a beneficial use, 4) Look to the long term best solution for the while state, 5) Avoid power politics for short term problems. Colorado needs to learn to live within its water means. There should be different rules for water within a bsin versus water from outside a basin. Past experience with Front Range water makes the Western Slope very suspicious of the next "deal." We always have neded up o nthe short of of previous agreements.	8 & 10	8-With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. Your legislative suggestions will be considered in the drafting of Chapter 10.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Ken Neubecker, Also testified	Potential projects should be tiered. Other Comments: There is nothing more important for Colorado's future than water. Given that, few things are more important than the current effort to create a statewide Colorado Water Plan. It is high time that all Coloradans start taking water, water use and the rivers that supply most of our water seriously. Its also high time that we take a hard look at how we use water and start making some long overdue changes to water laws and traditions. We can not meet the stated goals and values of the Colorado Water Plan without new thinking.It has been said that the Colorado Basin Roundtable's BIP has a "defensive" tone, as if that were somehow inappropriate and less than collaborative. Of course the Colorado Basin is defensive. The Colorado River Basin is the major donor basin providing water for the cities and farms of the Eastern Slope and has been for more than a century. It is the only basin that not only has its own water supply "gap" to fill but is also expected to be a significant source for filling at least three other basins "gaps". Yes, the Colorado Basin is defensive. Meeting the West Slope "gaps" is no less important and no less vital to the future of Colorado than meeting the perceived shortfalls of the Eastern Slope basins.There are continued calls for a new, large diversion of water from the already heavily drained Colorado River system. The claim is that such a new diversion will be necessary if the Front Range basins are to fill the "gap" between anticipated water demand and supply for that demand. While we cannot legally say "not one more drop", that is the overwhelming sentiment of the people within the Colorado basin. Any "New Supply" will mean taking water from an existing and valuable West Slope use and thus must be the very last option for filling the Front Range "gaps". Reducing the demand for water through high levels of conservation and efficiency, re-use and significant adaptations through land use planning must occur first.Any new diversion from the Colorado River system, whether it's from the Green River in Wyoming, the Yampa River or the Colorado River can no longer be a reliable source of water for the growing Front Range. There just isn't enough water left without further crippling the West Slope, our rivers and our economy. It also could have grave consequences with Colorado's ability to meet our downstream	8, 6.1, 6.6, 10	8-With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and draft of Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan. Your legislative suggestions will be considered in the drafting of Chapter 10.
Ken Ransford, Recreational Representative of Colorado Basin Roundtable, Also testified	Supports high municipal conservation, smart land use planning (high ddensity, minimize sprawl), protect irrigated ag land, reduce outdoor watering. The IPPs total over 410,000 af in the CO river basin which is not sustainable, the CO roundtable should reduce demand rather than increase supply. There are disincentives to practiving efficient irrigation practies-no one leaves water cour with more rights than they entered with. The opposite is ture, and thus water right holders try to increase thier use to the maximum amount possible, leading to inefficient water use and dried up rivers. The legislature should 1) Adopt a pilot program to adjudicate water rights in a basin and remove barriers so users can freely transfer water for riparian or agriculture needs. 2. Come up with a funding mechanism to lease instream flows when river flows are low. This should be funded by utility customer block rates that increase as gallons per capita per day (GPCD) use more. 3. We need common metrics; * Basin should report numbers for GPCD use indoor and outdoor, residential and commercial. * Gaps should be identified for Municipal, Agricultural and Energy Development and breakeven Municipal (GPCD) should be determined to eliminate the gap. * We should be able to compare BIPs between basins regarding the above. I am concerned about climate change and decreased flow, the over allocation in the Colorado compact states while the CWCB acts like the state can divert more from the river, and the carrying capacity of the Colorado river. I think we need to put more water back into rivers, yet the Colorado Water Plan is weak on this issue. The basin plans all say conservation is important, but they allocate few resources to it. For example, the Gunnison Basin Roundtable has $516 million budgeted for projects, but $0 for nonconsumptive needs. This illustrates the divide I feel that exists between the zeal to take more water out of rivers and the painful reality that we have a weak instream flow program very few miles that are designated as outstanding rivers, and some of our biggest rivers dry up in low flow years (Fraser, Crystal, Roaring Fork, Dolores)	6.1, 8, 9.2, 6.3, 10	The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. 8-With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. Your legislative suggestions will be considered in the drafting of Chapter 10. Funding opportunities will be explored in Section 9.2 and will continue to evolve in 2015.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Rachel Richards, Pitkin County Commissioner, Also testified	Is the outcome of the state water plan supporting the Front Range water providers desire to avoid mitigations, conservation, and smart land use planning a forgone conclusion? Is a new TMD a forgone conclusion of the State Water Plan? Will the Colorado River Basin Plan hold any weight with the state decision makers? The basin plan should insist on more Front Range storage projects; especially to capture flood waters. There should be NO new TMDs until all Front Range flood waters are captured and put to beneficial use! More investigation and investment must be made into agriculture efficiently and agriculture conservation. The state plan is for water needs through 2050 - our basin fears there will be new demands for more TMD after this plan. That the west slope economy and way of life will be sacrificed for Front Range economic gain. That conservation and land use will be ignored while the state pursues new TMDs. That compact compliance costs will fall upon the West Slope rather than the Front Range. The state plan does not adequately acknowledge economic value of the environment. Conservation goals should be increased.Land use planning must be addressed. Full mitigations, social, economic, and environmental for any increased TMDs must be secured for basins of origin. The state plan may "forestall" the demise of agriculture; but it will NOT, by itself, stop the demise of agriculture. The state should fund more non-consumptive. There should be NO state funding for new TMDs. Permitting must stand on its own, after appropriate National Environmental Protection Act (NEPA) processes. State funding should only be allocated to small growth, high conservation communities. With 450,000 to 600,000 acre feet (AF) a year going to the Front Range currently, better conservation of land use planning is a tool that the Front Range must employ to SAVE Agriculture. It is not "the mean West Slope" that doesn't want to give up more water (which we don't have); it is the Front Range that won't admit that they must manage what they already have better.We must find ways to change the "use it or lose it" mindset regarding agriculture rights. We must find ways to allow agriculture to maximize their water conservation savings; selling those rights to municipal and industrial (M and I) or river health needs.	6.1, 6.3, 6.3.4, 6.5, 6.6, 8, 9.2, 10	6.3-The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and draft of Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan. 8-With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. Agricultural water sharing and modernizing agricultural efficiencies are aspects of Colorado's Water Plan and included in Section 6.4 and Subsection 6.3.4. The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues. Your legislative suggestions will be considered in the drafting of Chapter 10. Funding opportunities will be explored in Section 9.2 and will continue to evolve in 2015.
Public Comments Recieved from Questionnaires on the CWP (Rio Grande River Basin)			
Ron Brink, member of the Rio Grande Basin Roundtable Also testified	Protect agriculture water and the "first in time; first in right!" Keep all the water in Colorado that is available and not obligated to compacts! Storage Statewide.	9.1	9.1-The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Nicole Langley	I am a member of the Steering Committee and the M and I Subcommittee for our BIP. I am also co-author of the M and I Guidelines for the BIP, and for 8 years I have written most of the water project grants which have been funded by the Water Supply Reserve Account (WSRA) and other sources. In our basin here in the Rio Grande, as I presume is true in other basins of the Interbasin Compact Committee (IBCC), we do not have a systematic funding plan or strategy. The roundtable has stated its goals and objectives but does not have a funding strategy or a systematic way to prioritize or implement those requests that should move forward. WSRA requests for funds come before the roundtable from (1) internal folks who are leaders on the roundtable or (2) projects which are, in a rather haphazard way, brought to the roundtable as problems or opportunities which we feel are credible or likely to meet the criteria/guidelines. Basins need to have their own internal funding priorities and strategies in addition to the very well developed statewide criteria!! I believe the entire M and I subcommittee's "Guidelines" (we didn't call it a plan) need to be included in the Rio Grande BIP. The recommendations with respect to prioritizing, funding, and providing technical assistance to remote small communities (places where humans live) and a few of the informative tables we created should be included. Yes, M and I only represents a small fraction of water use for us, but if even one town which has 100-year-old infrastructure (as all of ours do) gets its blackwater and greywater mixed up, we will have a disaster on our hands. Remote rural communities frequently cannot qualify for Colorado Department of Public Health and Evironment (CDPHE) or any other forms of funding due to small populations, nonexistent or small staff, inadequate communication tools/skills, or the technical resources to put together the engineering or the scientific aspects of a proposal. Each basin needs to have a Water Resources Outreach program to address/remedy this lacuna. * Legislature should: Please consider ways to expand the IBCC/CWCB funding criteria and guidelines to enable small, poor, remote, rural and otherwise disadvantaged communities to gain access to (CDPHE) and/or other sources of funding. Perhaps you could establish a specific fund for this? Perhaps you could insist that the implementation portion of our basin plans include a requirement for basins to establish ways to support and provide needed technical help? For us, National Resource Conservation Service (NRCS) cutbacks have virtually stopped our ability to bring WSRA requests to the roundtable. I have right now four projects which cannot get the engineering or technical help we have always appreciated from NRCS. They're very backed up. As a result, you will SEE CLEARLY that this year's funding requests from the Rio Grande Basin are at almost zip compared to other years. I would like to be a part of putting such a statewide plan together, working from the perspective of the applicant, because I am well acquainted with the issues in these kinds of communities. It isn't rocket science. Please help us by providing funding for	BIP, 7.3, 9.2, 10	CWCB Staff will work with the BRTs and pass these comments along to the Rio Grande Basin. Your legislative suggestions will be considered in the drafting of Chapter 10. Funding opportunities will be explored in Section 9.2 and will continue to evolve in 2015.
Melissa J Leintz	Supports water conservation - finding out who can conserve and how much and how to regulate. Healthy Rivers! Agriculture is 85% of usage. Maybe we shouldn't focus on it just because they are the biggest. Maybe the smallest user can actually conserve the most. Legislature should force the land development full usage to secure water rights prior to any start up. The amount will continue to decrease. How can we develop new ways to reuse what there is?	6.3, 6.3.3	6.3-The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and draft of Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan. Coordinating land and water use planning is discussed in Section 6.3.3.
Chuck Reel, Also testified	Why is there no allowance for poor people that live on their own land outside of a city limit to grow a small garden? Without the right to grow their own food organically, these people are forced to spend money they may not have on cheap foods that are full of pesticides and herbicides affecting their health in a negative manner. Legislature should allow people with in-house wells only to grow a garden to supply their own food at a minimum. It would also be nice to grow some trees to help conserve energy. Concerned that individual water rights for basic survival will be more important as more people move in to Colorado than the right of people who make money from water. Force farmers to grow crops that are water conservative. Don't let natural gas fracking use huge amounts of water do to fracking that also poisons water wells near fracking sites. Encourage water conservative farming techniques like drip irrigation and the shape of the soil surface to catch water and run it down into the soil instead of running it off the soil.	6.3.4, 6.3.5, 10,	Agricultural water sharing and modernizing agricultural efficiencies are aspects of Colorado's Water Plan and included in Section 6.4 and Subsection 6.3.4. Fracking currently uses approximately 18,000 acre feet per year, which is a very small proportion of Colorado's overall water use. However, there may be some areas where there are greater regional effects. In addition, power plants that burn natural gas to make energy use less water than traditional power plants. Therefore, from an overall resource management perspective, fracking and the resulting energy production do not consume a significant amount of water compared to current levels. Colorado's Water Plan seeks to work collaboratively to uphold Colorado's water values and does not put a value judgement on any one beneficial use. Your legislative suggestions will be considered in the drafting of Chapter 10.
Public Comments Recieved from Questionnaires on the CWP (Southwest River Basin)			

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Margaret Cozine, retired librarian, Also testified	More efficient use of this water resource through education, positive reinforcement. I'm a citizen who wants water harvesting to become a valued method of water conservation.	6.3, 5.6	6.3-The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and draft of Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan. Rainwater harvesting does have some limitations within current Colorado water law. However, CWCB maintains a pilot program to explore how rainwater harvesting can be used. This is further discussed in Subsection 5.6.1.
Raymond Lattin	New storage? Conserve or share without losing water rights? Ensure Colorado water law is observed at all times and protected. Loss of water rights because of a call from other states, will it be for how long?	9.1	9.1-The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues.
John Taylor	Transbasin diversions should be subject to Colorado river compact. Legislature should strongly protect water rights, protect state rights. Grass roots solutions Strongly support agriculture enterprises. Hydro power generation	8, 9.1	8-With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. 9.1-The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues. Energy is explored in Section 6.3.5.
Public Comments Recieved from Questionnaires on the CWP (Arkansas River Basin)			
Gary Barber	CWP requires more solutions to ground water depletions and dependency. * Legislature should take action to relieve ground water augmentation requirements. The quality of any engineering model cannot meet the stringent requirements of a judicial "non-injury" standard. Ground watering subject to the plenary authority of the General Assembly. Most western states manage ground water conjunctively without real injury to surface water rights. * U ncertainty is inherent in the Colorado River Compact. Using "risk mitigation" is a reality that will never be, nor has it ever been, a zero level of risk. Permitting is too expensive. Public/private partnerships maybe a solution, particularly with respect to a future transbasin diversion. The State of Colorado has a role to play but today that role is not clear.	4, 8, 10,	CH 4 - additional GW discussion added. The CWCB and Colorado's Water Plan support water supply management strategies that will allow the state to better conjunctively utilize groundwater within currently existing legal constraints. SWSI 2010 found that unappropriated water in the South Platte, Arkansas, and Rio Grande Basins is extremely limited, and reliance on nonrenewable, nontributary groundwater as a permanent water supply creates reliability and sustainability concerns, particularly along the Front Range. In anticipation of HB 1278 recommendations related to groundwater monitoring and modeling, the CWCB is requesting $500,000 under the 2014 Projects Bill that would allow the CWCB to further evaluate the causes of high groundwater levels within the South Platte River Basin. The CWCB and DWR also maintain Decision Support Systems (DSS) tools that could serve as useful resources to be used in groundwater modeling in the future. The South Platte/Metro BIP states: "The South Platte Basin Roundtable is addressing these concerns through a Groundwater Subcommittee comprised of BRT members and other interested parties and, together with the Metro BRT has formally adopted a process to address these concerns (including potential strategies related to water rights administration) that will extend well beyond the publication of the draft South Platte BIP in July 2014. This process will offer opportunities to build on the work done in response to House Bill 1278 and help determine the degree to which this resource may be effectively, reliably and legally put to some greater level of use." The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. Your legislative suggestions will be considered in the drafting of Chapter 10.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Margaret Vondam, Also testified	The plan is obviously addressed to the needs of human populations in Colorado. Population will nearly double in Colorado between 2015 and 2050. Will the plan meet the goals to supply water for those here in 2050? What about beyond? If we continue to siphon water from agriculture and recreation/wildlife/ environment past 2050, what good does a plan do now for the future? We need to set what the total human population number goal is to address in this plan. * Supports: Need to preserve agricultural values. We cannot count on imported foodstuffs to fulfill all of our consumptive needs. Local agriculture has to be included in the equation. Removing the ability to produce food locally removes our environmental values, wildlife values and recreational values. Most of what I've heard at the meetings that I've attended gives lip service to these subjects, but is mainly concentrated on how to obtain water for M and I. If it's going to be part of the overall plan, then those related topics NEED to be taken seriously. * Would like to see: mphasis on protecting tributary flows. So much of wildlife and recreation also depend on the streams and rivers that flow into the Arkansas. The plan does not address the need to preserve instream flows and wetlands associated with all tributaries of the Arkansas River. Also, per Trout Unlimited, transfer of interbasin flows is counterproductive to the planning in the communities from which this occurs. We need to learn to live with what we have, and not cause damage re: water loss, from other communities. * Legislature should: Conservation -- need to be FAR more proactive in implementing measures that will promote conservation of existing water supplies. DO AWAY WITH the ability of Front Range communities to divert traditional flows from West Slope communities. * No address of tributary protections. Tributaries are "up for grabs" for water right claims but drying up tributaries hurts wildlife and environmental values. Need to address what realistic human population growth numbers can be served with EXISTING appropriations, without implementing more interbasin flow plans. There should be more emphasis on the importance of preserving wildlife and environmental values for every community. This has to be a local effort, not defined by regional interests. The plan should support wildlife, recreation and environmental values equally as the needs of municipality and industries and Agriculture interests.	1, 6.1, 6.3, 6.6, 10	6.3-The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and draft of Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan. Your legislative suggestions will be considered in the drafting of Chapter 10. Updates to Colorado's Water Plan will be explored in Chapter 11.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Sandy White	It appears that the draft BIP is a consultant generated document under guidance from the CWCB staff. There have been very few meaningful opportunities for public input, i.e., input that is actually considered by the consultants, on the general portions of the plan. The consultants generated the draft and it is presumed that their draft is the correct approach. Consequently, the much touted public input is illusory. Input has been given but was not considered. There needs to be a mechanism through which those who took the time to give input get a substantive response. The BIP (and the CWP)need to affirm that existing decreed water rights will be honored. Both plans need to address the question of local control, e.g. the current authority of local governments to regulate projects under HB 74-1041, 1034. *Legislature should: Keep a very close eye on the CWP process; don't let it degenerate into another ignored (or worse, a harmful) attempt at centralized planning. Be sure to fund your staff adequately so that it can exercise independent and informed judgment, free from undue influence by the CWCB or project partisans. * Without a DecisionSupport System (DSS) in the Arkansas, planning is being done by the seat of our pants. That is not always bad and the basin has benefited from individuals' visions that have come to fruition. Nevertheless, now we're at the point where we have a fully appropriated system but we're trying to work around existing rights while looking for more water and flexible water use. For example, one of the inputs received by the roundtable was from the Division Engineer (and others) suggesting a futile call model from some of the tributaries. That is a significant need which could be met by a DSS and would promote both maximization and flexibility in water use. Funding should be influenced by that consistency, but not limited by the vision of the CWP's drafters. Leaving funding decisions to the discretion of the CWCB (rather than some scoring system based on the CWP) is the only reasonable way to ensure that all important projects be given adequate consideration. While an enormous amount of money has been spent on consultant work, the real payoff will be when the result of that work is evaluated and becomes the basis of policy decisions.	BIP/9.5, 9.1, 6.1, 9.2	Each BRT managed extensive outreach efforts throughout the development of their BIPs. CWCB will pass these comments on to the BRT for consideration in the final BIPs by spring 2015. There is a new recommendation in Section 6.1 to support the DSS systems. Colorado water allocation and governance has always been guided by local users meeting local needs and Colorado's Water Plan will not change that. Rather than diminishing local control or authority over water, Colorado's Water Plan seeks to strengthen local decision-makers' ability to achieve regional and statewide water solutions. To that effect, Colorado's Water Plan will work to encourage, rather than mandate, several of the points presented in the comments. The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues.
Public Comments Recieved from Questionnaires on the CWP (Yampa/White River Basin)			
Ken Brenner, Upper Yampa Water Conservancy District, Friends of the Yampa, Yampa River Legacy Project, Colorado Mountain College trustee, representing himself, Also testified	Support: No state funding for any TMD. State Water Plan is East Slope problem, needs Eastern Slope solution. Eastern Slope must focus on conservation, re-use, fallowing (agriculture-municipal water sharing), storage on East Slope, sustainable land use (water policy) Modify: Strong statement that we will NOT SUPPORT ANY transmountain diversion! MORE EMPHASIS THAT THE YAMPA RIVER IS EXTREMELY IMPORTANT SOURCE OF WATER FOR THE COMPACT OBLIGATION. Climate change/extended drought is real problem. * Legislature should: 1) Ensure due process of CWP.2) Help every Colorado resident understand that Colorado has a limited water supply and water suppliers can not keep coming to the West Slope for more water. 3) Allow a more easier, friendly, water sharing (agricultural > municipal and industrial>recreation, etc.) process in water court, less rigidity) * Modify plan to ensure "No State Staff Support of State Funds for a transmountain diversion." Should State Funding or permits for water projects be limited to the CWP?: Yes, Eastern Slope storage assistance only. * The Yampa River is the cornerstone of our regional economy. Supports agriculture, driver recreation valley's environmental integrity, energy production. The Yampa River is the last remaining free flowing (relatively) Colorado River tributary and must be preserved as such. The Yampa River's role in state water plan should be a consistent and reliable source of water to meet the Colorado River compact obligation.	8, 9.1, 10	8-With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues. Your legislative suggestions will be considered in the drafting of Chapter 10.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Anthony D'Aquila, Also testified	A lot of data is presented in summary graphs and tables. I understand the need to do this. But I think access to the assumptions and factors used to derive the numbers expressed in the tables would be helpful. It would let interested individuals like myself see how conclusions being presented were derived. * Modify: First, the plan is "supply-centric" - it seems to only address water supply, and does very little to address "demand". The other side of water policy planning. It needs to include discussion on conservation, demand management and efficiency of water use. These considerations need to be applied to all users, M and I, self-supplied industrial (SSI), and Agriculture. I also take exception to the focus on "preserving historic use." What if historic use is not efficient, is wasteful, or could be improved upon? * Legislature should: Focus on fairness for all. Be aggressive in negotiations with other states and feds concerning Colorado's involvement in the Colorado River Compact. Work to establish water conservation and reuse-reclaim. * Concerned about: Water quality and maintenance of appropriate environmental flows. Oppose trans mountain diversions. Not a good idea. * I generally support the plan, and agree protecting diversity and agriculture are important. But as agriculture represents the largest consumer of water, I think the state should be more aggressive in pursuing best management practices and efficiencies (re-use, reclaim, drip irrigation vs. flood, etc.)	1, 6.3, 7.3, 8	6.3 The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and draft of Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan. 8-With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and draft of Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan. The Water Quality Division of the Colorado Department of Public Health and Environment (CDPHE) regulates water quality issues of this nature in the state. Water Quality has been recognized as critical for Colorado's water future. The CWCB is working closely with the Water Quality Control Division and the Basin Roundtables in order to address Colorado's Water Quality needs. This is further explored in Section 7.3.
Lou Dequine	My family owns property that would be partially covered by the proposed Morrison Creek reservoir. We are not opposed as long as the reservoir could be operated so that it would be significantly lowered only in a severe drought year. We do believe that additional storage is very important in keeping our water in Colorado, and specifically in our basin.	6.5	Colorado's Water Plan will not include any specific water projects. The CWCB would like to encourage multipurpose projects and full mitigation.
James Hicks	Considering the obligations of the Colorado River Compact and the requirement for endangered fish, it has been demonstrated that there is not any excess water for diversion of water out of the basin. Support: Efficiency of agriculture. Water use - weirs and lining ditches. Modify: The plan needs to address in a more understandable language IF there is really any excess water that could be diverted to the Front Range. * Legislature should: Require through laws that water users develop strict conservation plans to reduce water use. Conservation of water use is the key to having enough water in the future. These laws need to be developed now before we have water emergencies like they are having in Colorado. * There is a finite amount of water in the state and we need to find ways to use it more efficiently. There should not be any water diversions out of the basin. The Front Range needs more water storage for water produced there. They have flood control problems and water supply shortages. Plant more trees to replace pines that the pine beetle destroyed. The Yampa River should be designated as a major supplier of water to meet compact requirements. Much of the lower Yampa River should be designated as wild and scenic river by the Federal government.	4, 6.2, 6.3, 8, 7, 10	8-With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. Ch 4 addresed where appropriate. 7.1- Thank you for your comment, no further incorporation is needed because your comment has already been considered or addressed. Your legislative suggestions will be considered in the drafting of Chapter 10.
Bruce Lindahl	We need to keep the water on the Western Slope. We have needs for the water. No more TMDs from West Slope to East Slope.	8	8-With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Jason Peasley	In an environment, where Colorado's population continues to grow, can we preserve our water resources for recreation and wildlife habitat? Concerned about: Diversions to the Front Range; loss of free flowing nature of the Yampa. I support utilizing the Yampa to meet the downstream obligations and letting it flow unregulated down to Lake Powell.	8, 9.1	8-With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work 9.1-The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues.
Cody Perry, college outdoor educ ation teacher, Friends of the Yampa, Also testified	Energy development. I would like to see a plan that recognizes energy development, specifically oil and gas, as having a major impact on water quality and supply. Modify: Additional studies on climate change and effects. * Concerned that the state will develop water supplies to simply sustain short term growth. That the State of Colorado will reduce the quality of life by destroying habitat by creating artificial ones on the Front Range. * Should State Funding or permits for water projects be limited to the CWP?: No, unless the State Water Plan is entirely comprehensive. That would include aspects of the Colorado River compact.	7.3, 6,6	Fracking currently uses approximately 18,000 acre feet per year, which is a very small proportion of Colorado's overall water use. However, there may be some areas where there are greater regional effects. In addition, power plants that burn natural gas to make energy use less water than traditional power plants. Therefore, from an overall resource management perspective, fracking and the resulting energy production do not consume a significant amount of water compared to current levels. Colorado's Water Plan seeks to work collaboratively to uphold Colorado's water values and does not put a value judgement on any one beneficial use. The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and draft of Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan.
Paul Stettner	How can we maintain our Yampa River quality and quantity. Modify: Municipalities must have a water supply intact before development, not look for a water supply after development.	6.6, 6.3.3	Section 6.3.3 discusses the coordination of land and water development. The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and draft of Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan.
Public Comments Recieved from Questionnaires on the CWP (North Platte River Basin)			
Susan Peterson	Modify: Not providing for unlimited growth. Adding conservation incentives. Eliminate Glade Reservoir. * Law to require developers to bring water shares to water district (e.g., East Larimer County Water District) rather than $ for taps.	6.5, 6.3.3, 10	Colorado's Water Plan and the technical work that supports it includes three growth scenarios: low-growth, mid-growth, high-growth. As water planners, Colorado must prepare for any of these future possibilities as we do not have control over the state's economy and how many people are born or choose to move here. While some communities choose to limit growth, doing so on a broad statewide scale is untenable and unconstitutional. The CWCB is working with each basin on their Basin Implementation Plan and will continue to encourage all interested parties to do the same. Your legislative suggestions will be considered in the drafting of Chapter 10.
Public Comments Recieved from Questionnaires on the CWP (South Platte River Basin)			
Alice Bergeron	I think that damming the Poudre River is not an option - especially for the proposed Glade Reservoir. Save the Poudre.	6.5	Colorado's Water Plan will not include any specific water projects. The CWCB would like to encourage multipurpose projects and full mitigation.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Tom Hale	Other Comments: As the Town of Georgetown does not have the resources to participate directly in the South Platte Water Roundtable meetings that are developing the "Colorado Water Plan" for Clear Creek, the Town of Georgetown included our goals and requests in the Basin Implementation Plan for the Colorado Water Plan. Currently contemplated projects include, but are not limited to, any combination of the projects listed below along with a summary of the Town of Georgetown project descriptions.Town of Georgetown Storage Projects PROJECT DESCRIPTIONSOverviewGeorgetown currently supplies water to a customer base of approximately 997.384 equivalent residential units (EQRs) and 591 individual taps for both residential and commercial customers with a permanent population of 1,110 residents. It diverts water for its municipal uses from Clear Creek under the Georgetown Ditch and Reservoir right, decreed in the District Court, City and County of Denver, in Case No. CA 41340 on October 9, 1914, with a priority date of January 10, 1866, for 1.14 Cubic feet per second (CFS) during the period from October 1st to May 1st, and 3.0 cfs from May 1st to October 1st in each year. Although fairly senior, this water right is subject to call. Georgetown therefore also has decreed storage rights and plans for augmentation that allow it to continue to provide a legal, reliable water supply to its existing customers when the 1866 right is out of priority. Georgetown's existing water rights and supplies include junior storage rights and transmountain water that is available by contract. Georgetown anticipates the need to bolster and add to its existing portfolio in order to provide reliable service into the future, as development and infill occur. Additional storage is currently considered to be crucial to meeting future demand with sufficient legal, reliable water supplies. Currently contemplated projects include, but are not limited to, any combination of:• Enlargement of the existing storage capacity at Georgetown Lake;• Agreements, which may require construction of infrastructure, with Clear Creek Skiing Company regarding diversion and use of water for snowmaking during the ski season, with the water used for such snowmaking becoming available for storage by Georgetown as it melts during the runoff season and flows into Clear Creek or its tributaries; • Development of underground storage, which may require infrastructure construction;• Repair and/or reconstruction of the small storage component of Georgetown's 1866 water right to facilitate deliveries of the 1866 right at the Georgetown intake. Successful completion of these projects will provide Georgetown with a permanent interest in facilities, water rights and agreements necessary to enable Georgetown to reliably store and use water rights and water supplies to meet the needs of its existing and future customers. Project SponsorThe Town of Georgetown, and possibly other partners, such as the Clear Creek Skiing Company, the City of Black Hawk, or Clear Creek County. Project BeneficiariesGeorgetown is investigating the feasibility of alternative storage options to meet its own needs, but anticipates that	3, 6.5	CWCB Staff will pass these comments to the South Platte Basin Roundtable.
Chris Kraft, Also testified	Modify: Properly account for agriculture water use. Gross diversions may not be the best way. We use and reuse (from return flows) and are quite efficient. The ultimate users of agriculture water are all of the citizens not just those in agriculture. Concerned that: water use is misunderstood.Return flows from irrigation create a flowing river and allows for water use downstream. Support: Alternatives to buy and dry. Mostly wanted INCREASED STORAGE for all users.	5, 6.4	The four values driving Colorado's Water Plan recognize the importance of sustaining agriculture. Those four values are 1) vibrant and sustainable cities, 2) viable and productive agriculture, 3) a robust recreation and tourism industry, and 4) a thriving environment that includes healthy watersheds, rivers, streams, and wildlife. Colorado's Water Plan will not include any specific water projects. The CWCB would like to encourage multipurpose projects and full mitigation.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Steve Malers, Municipal chair of the Fort Collins Water Board, founded Open Water Foundation	CWP Needs a clear description and visual of relationship of SPDSS, SWSI, BIP, CWP and path forward. (Strategy, tactical, operational), Need clear description of "who does planning in CO and how is planning done - e.g., local master plans - how recognized/integrated regionally.Need more connective content (state, regional, local) How do these connect? * Modify: Disclosure - I am on the consulting team for the South Platte/Metro Basin BIP.The BIP is rushed."Grass Roots" is volunteers - tough to create/review plan. * Legislature should: 1) Don't create a one time plan. 2) Recognize levels of planning and also gaps in planning. 3) Leverage tools like South Platte DSS 4) Be more nimble and adaptive -- should be possible to update plan relatively, frequently like any "Board" works on policy/ strategy, etc. * Concerned about: "Death by a thousand cuts" rather than an integrated systems approach. Lack of understanding and transparency about complex issues. * The BIP, SWSI and CWP are very many pages. Who is CWP intended for? Balancing? Summary and detail is important. Is it a document or truly a plan that is actionable? * Are there projects that state should fund/own?What about regional projects?- Ground water storage- Bring all reservoir storage to original decree- Network of "small" reservoirs. * The Open Water Foundation strives to improve data access and transparency on complex issues - part of the plan should be how to have analysis process and systems in place to support on-going planning, data driven, transparent, ongoing. The gap analysis could be fundamentally improved (I've done some work)	1, 9.3, 10, 11, 4, 6.1, 6.2	Ch 4- noted. The development of Colorado's Water Plan has helped to raise the level of importance placed on education and outreach statewide related to water supply planning. The CWCB is working together with the Basin Roundtables (BRTS) to expand education and outreach activities related to raising awareness regarding the issues presented in the comments submitted and Section 9.5 Outreach, Education, and Public Engagement will include recommendations on continuing education on these topics long-term. The current course Colorado is heading down leads to several of the results that the commenter mentions. For instance, without action, up to 35% of Colorado's farms in the South Platte could be dried up. This is one impetus for why Colorado is pursuing the development of a water plan. Colorado's Water Plan will yield better results through support of conservation, reuse, sharing agreements between farmers and municipalities, incentive-based of water-smart land use, and the development of multi-purpose projects and methods. Your legislative suggestions will be considered in the drafting of Chapter 10.
Diane Marschke, Also testified	Support: Conservation and reuse, and agricultural transfers as part of the "Four Legs of the Stool" of Colorado water planning. * Modify: 1) Top priority seems to be "streamlining" projects approval, like Glade Reservoir. A faulty environmental impact study (EIS) resulted from this attitude the first time around. Please don't cast out environmental and economic concerns, or public input in this rush to get done. 2) Multi-purpose reservoirs beg to be filled! Encouraging recreational use puts pressure to justify the expense and expectations of a reliable and stable shoreline. In Los Angeles, California they actually cover many of their reservoirs. Check it out. * Legislature should: 1) Taxpayers will be more amenable to the likes of Glade if they see efforts by the government to FIRST conserve water. This is a great opportunity to enact statewide municipal conservation standards like more efficient plumbing, tiered water rates, greywater use, rainwater capture, xeriscaping, recyling, etc.2) Research the above as well as alternative transfer methods (ATM's) and aquifer storage and recovery (ASR.) Make the extracting industries pay for treatment of lower quality water resulting from fracking, not the public. * Which comes first, water or the developers? I worry about all of the communities signing up for Glade that rely on projected population growth to pay off the huge bonds. "If you build it they will come" Do we want them to? Barry Goldwater often regretted his work to bring so much Colorado River water to Phoenix. He feared it would become another Los Angeles.	6.3, 6.4, 6.5, 10	6.3-The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. Agricultural water sharing and modernizing agricultural efficiencies are aspects of Colorado's Water Plan and included in Section 6.4 and Subsection 6.3.4 Your legislative suggestions will be considered in the drafting of Chapter 10.
Robert F. Marshke	CWP needs a better focus of conservation and tiered levels of increasing expense for increased water usage. Support: Additional, thorough, environmental impact study is needed to focus upon the protection of the Poudre River flow. * Legislature should: Any bond issue aimed at water storage to the benefit of developers needs to go to a vote as a statewide referendum. * Do NOT build Glade Reservoir. Instead, find other means/plans for water storage to protect water flows in the Poudre River.	6.5, 10	The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. With regard to indoor water conservation and tiered rate structures, the vast majority of water providers currently operate with tiered water rates. Your legislative suggestions will be considered in the drafting of Chapter 10.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Carolyn Mita	1. We live in a desert and thus have high evaporation rates. Therefore - 2. Water should be stored in covered tanks or cisterns to conserve this precious resource.3. They say agriculture needs the H2O, but cities buy up all the H2O rights so we can waste it watering the Kentucky bluegrass laws required by all the HOAs. 4. This is a waste of the little H2O not evaporated in reservoirs.5. We act like we are the only species on the planet. The Whooping Cranes are practically extinct and are we going to send the SandHill Cranes to the same fate by eliminating the water they need in the Platte River in Nebraska during their migrations. 6. Can we please provide a minimum flow in streams and then fight over the rest? * Modify: Any H2O storage should be covered to mitigate our high evaporation rates in our desert environment in which we live. Please provide minimum flows in streams before we fight over the rest of this precious natural resource. * Concerned about: 1. Open storage in reservoirs in high evaporation environments wastes too much H2O.2. Watering bluegrass lawns as required by HOAs is wasteful.3. Minimum streamflows are needed to keep species such as cranes, from going extinct. * Please give us and the other species that share our planet minimum stream flows before we waste the H2O.	6.5, 10, 7	7.1- Thank you for your comment, no further incorporation is needed because your comment has already been considered or addressed. CWCB maintains and operates In Stream Flow and Natural Lake Level programs, both of which are highly regarded as some of the most successful programs of their kind in the Western US. Nonconsumptive needs are critically important aspects of the Basin Implementation Plans and Colorado's Water Plan. Although not fully tested, instream flows can be designed to directly benefit riparian areas, and the CWCB Stream and Lake Protection Section has been working with the BLM to design an approach to in-stream flows by providing a flood flow component It is currently illegal for Homeowners' Associations in Colorado to require bluegrass lawns, and xeriscape lawns are allowed statewide. Colorado water allocation and governance has always been guided by local users meeting local needs and Colorado's Water Plan will not change that. Rather than diminishing local control or authority over water, Colorado's Water Plan seeks to strengthen local decision-makers' ability to achieve regional and statewide water solutions. To that effect, Colorado's Water Plan will work to encourage, rather than mandate, several of the points presented in the comments.in the spring. Your legislative suggestions will be considered in the drafting of Chapter 10.
Kevin McCarty, Little Thompson Watershed Restoration Coalition, Also testified	Modify: The Little Thompson River/ Watershed is never mentioned in SWSI and is noticeably overlooked in the State Water Plan. The gap analysis which has been conducted is on a very broad scale and is certainly not focused on the scale necessary to solve the "gap" that already exists in our watershed. Our water problems include some of the most stringent water restrictions in the state at Pinewood Springs, the river going dry in places and decreasing diversion quantities for ditches diverting our water. Legislature should: Possibly fund small scale projects which can stabilize water supplies in the Little Thompson Watershed.	3, 6.2, 10	Your legislative suggestions will be considered in the drafting of Chapter 10. CWCB is committed to ongoing support of watershed groups and this is discussed in Section 7.1.
Laura Pritchett	Why was the roundtable membership not more inclusive? Few conservationists represented. * Support: I support the fact that an overall plan is in place.Modify: The plan should focus on restoring rivers and conservation - NOT NISP or other dams/reservoirs. * Spend more time on this: Don't fast track permitting reviews. * I'd love to see more focus on water conservation, efficiency, recycling and growth/population management.	6.2, 6.3, 9.4	Each Basin Roundtable is made up of a diverse set of stakeholders and the inclusion of both an environmental and recreational representative is required by the Colorado Water for the 21st Century Act. In addition, representatives from each county, municipalities within each county, industry, agriculture, and domestic water suppliers are required. Lastly, a representative from each water conservation and conservancy district are also mandated. There are also several other at large seats, and many of these are held by environmental interests, and many of the local government representatives are also focused on environmental and recreational issues since their citizens care about these topics and the area may be dependent on tourism. The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and draft of Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan. Colorado's Water Plan will not include any specific water projects. The CWCB would like to encourage multipurpose projects and full mitigation. Permitting issues are explored in Section 9.4 and the section will be further developed in 2015.

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Laurie Thomas	Can the Governor be as aggressive about conservation as he is about growth? * Support: I support the aspects that stress conservation of our water resources and maintaining riparian ecosystems.Modify: The South Platte BIP needs to include more time from local environmental groups and the general public to evaluate the impacts in their own communities. The BIP should not fast track projects - especially not the Northern Integrated Supply Project (NISP) or Glade reservoir - let the Environmental Protection Agency (EPA) and water quality agencies do their due diligences to ensure if the project is environmentally feasible. * Legislature should not fund water storage projects - let municipalities foot the bill if growth is necessitating more water. DO NOT increase availability of cheap water to the oil and gas industry. The industry should be regulated more - subsidized less. * I'm concerned that a new water supply project NISP or Glade Reservoir would be a short sighted, short term solution to the insatiable growth projected for the South Platte Basin. In the end, it will short change the residents of the Fort Collins area which is a wonderful place to live because of the vibrant ecosystem around the Poudre River. * I support expanding existing reservoirs and water conservation measures. I do not think that a new reservoir project in Fort Collins would make enough difference in water storage to justify this unpopular project that would further stress our river. * State funding should not be subsidizing municipal or industrial water. Permits for new growth (albeit on a local zoning level) should always have a component of water conservation. * We cannot survive without water for more than three days. We can live without oil and gas - (it's eventually going to be exported overseas anyway). We cannot continue to strip away our natural resources for short-term profits. Please do what you can to keep Colorado intact.	6.3, 6.3.5, 9.5, 6.5, 10	6.3-The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. Colorado's Water Plan will not include any specific water projects. The CWCB would like to encourage multipurpose projects and full mitigation. Chapter 6.3.3 discusses the connection between land and water planning. Your legislative suggestions will be considered in the drafting of Chapter 10.
Public Comments Recieved from Questionnaires on the CWP (Denver Metro River Basin)			
Jennifer Barrow, also testified	We cannot survive without water for more than three days. We can live without oil and gas - (it's eventually going to be exported overseas anyway). We cannot continue to strip away our natural resources for short-term profits. Please do what you can to keep Colorado intact. * Support: I highly support the conservation and reuse portions of the BIP.Modify: I feel the South Platte BIP needs to adopt a "High Conservation Strategy." I don't think the BIP goes far enough in addressing water conservation. I feel the BIP is structured to favor supply projects. * New development along the Front Range and in Colorado needs to incorporate smart growth strategies and water-wise landscaping in all new developments. I understand that new supply projects are necessary, but I think a high conservation strategy needs to be incorporated as well. Colorado legislature should consider active conservation measaures. HOAs often require lawns for their residents, this should not be a barrier for residents wishing to xeriscape their yards. * I'm concerned that supply projects in the South Platte Basin will permanently affect our river ecosystems. I'm concerned that a double in population by 2050 without implementation of a high conservation strategy will not solve Colorado's water problems. * I support the Colorado River Basin's adoption of a high conservation standard as well as no new transmountain diversions.	BIP, 6.3, 6.3.3, 10	6.3-The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. It is currently illegal for Homeowners' Associations in Colorado to require bluegrass lawns, and xeriscape lawns are allowed statewide. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. CWCB Staff will work with the BRTs and pass these comments along to the Denver Metro Basin. Your legislative suggestions will be considered in the drafting of Chapter 10.

Senate Bill 115 Comments - Summary and CWCB Response

Source of Comment	Summary of Comments	Associated Chapters	Staff Response
Harriet Huddle	1. Will we all end up in court because of water rights? 2. Golden is involved by "water attorney's watching!" the Colorado Water Plan. 3. New Colorado River Supply? - Is this siphoning off at headwaters - Arizona? * Support: Active conservation - Chatfield expansion. Moffat Tunnel expansion. Require fracking to reycle water they use. Modify:Clarification of what obligations are to Colorado River Compact of 1922. New water storage - established conservation goals. Established new TMD's and cost and when construction starts. Mandatory distribution system leak identification and regain data availability for usage - where is water being used. * More public education - hearings. STATEWIDE Town Hall meetings. Mail information to every registered voter. * Concerned about: Distribution system leak identification and repair. Low water use landscapes. Lawn watering restrictions. * Support infrastructure repair. Fix the leaks. Implement low water use landscapes in any new projects. * Water diversion projectsare not part of the Colorado Water Plan, but are in "Colorado Water Portfolio." What does that mean?	4, 6.3.3, 6.5, 8, 9.1, 10	8-With regard to new transmountain diversion projects, the IBCC provided a draft conceptual agreement which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work 9.1-The state is working vigorously with other upper basin states and the Colorado River Basin as a whole to mitigate any risks Colorado may face with regard to compact compliance and other interstate issues. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. Ch 4. noted and addressed where applicable. Section 6.3.3 discusses the connection between land and water planning. Your legislative suggestions will be considered in the drafting of Chapter 10.

APPENDIX C

- **EDUCATION ACTION PLAN FOR 2015**

Southwest Basin Roundtable
Public Education, Outreach, and Participation
Implementation and Action Plan

Presented to the:

Southwest Basin Roundtable Education and Outreach Committee
Southwest Basin Roundtable Members
Colorado Foundation for Water Education
Colorado Water Conservation Board

Prepared and Presented by:

Denise Rue-Pastin
Southwest Basin Roundtable (SBR) Public Education, Participation, and Outreach Liaison,
SBR Education and Outreach Committee Chair,
and
Water Information Program (WIP) Coordinator

March 2015

Introduction

This report presents the Southwest Basin Roundtable's (SBR) updated Public Education, Participation, and Outreach (PEPO) Implementation and Action Plan. The original plan was approved by the SBR in 2011 and updated in 2012. This version focuses on current priorities of the SBR as they relate to the Colorado Water Plan implementation. Specifically, this education plan seeks to address the following taken from the Colorado Water Conservation Board (CWCB) *Basin Implementation Plan Draft Guidance* (CWCB, 2013) document:

> It [the plan] will let the decision makers in the basin understand how they are represented, 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. Where appropriate, this effort can also help roundtables' outreach to potential project proponents for the new projects and methods needed to meet future water needs to determine if they are interested in being partners or the lead entity (p. 7).

Additional reporting requirements for this education plan includes: roundtable involvement in development of this plan; educational priorities; strategies to achieve educational priority goals (including budget and schedule); partnerships; and periodic reporting. To set the context for this education plan, however, it was determined that background information may be helpful, especially for those who may be unfamiliar with the history of the roundtable process. Therefore, background is provided first, followed by sections specifically established to address each of the points referenced above. Conclusions are provided at the end.

Background[1]

The 2005 *Colorado Water for the 21st Century Act* (House Bill 05-1177), is based upon the premise that Coloradans must work together to address the water needs within the state. The legislation created a framework to encourage dialogue on water, broadened the range of stakeholders actively participating in water decisions, and created a locally driven process where the decision-making power rests with those living within the state's nine river basins. The statewide structure, the Interbasin Compact Committee (IBCC), the local structures, and the nine basin roundtables, bring over 300 diverse citizens into water supply planning discussions across the state.

As each basin roundtable carries out its charge to develop basin-wide water needs assessments, they are also required to advance the understanding of future water needs through educational programs and processes. In the statutes of HB 05-1177, each basin roundtable has powers and responsibilities that include the following:

> "(c) ... Basin roundtables shall actively seek the input and advice of affected local governments, water providers, and other interested stakeholders and persons in

[1] This section draws heavily from the Colorado Foundation for Water Education Basin Roundtables Final Education Survey Report (2010).

establishing its needs assessment, and shall propose projects or methods for meeting those needs.
(d) Serve as a forum for education and debate regarding methods for meeting water supply needs; and
(e) As needed, establish roundtable subcommittees or other mechanisms to facilitate dialogue and resolution of issues and conflicts within the basin."

Moreover, the Public Education, Participation, and Outreach (PEPO) Workgroup is a legislatively created committee of the IBCC. This group is tasked with: creating a process to inform, involve, and educate the public on the IBCC's activities and the progress of the interbasin compact negotiations; creating a mechanism by which public input and feedback can be relayed to the IBCC and compact negotiators; and educating IBCC and roundtable members on water issues. The PEPO Workgroup's membership consists of the Education Liaisons, a volunteer position on each basin roundtable, members of the IBCC, statewide water education experts, staff of the Water Supply Planning section of the CWCB, and a consultant firm that facilitates the PEPO Workgroup. The members of this committee work to identify the best approaches for education and outreach at the statewide and basin-specific levels. The PEPO Workgroup and roundtable members are collectively defining the most helpful and meaningful ways in which the public can participate in the work of their basin roundtable.

In May 2013 Governor Hickenlooper issued an Executive Order directing the CWCB to develop a Colorado Water Plan. Creation of this plan is a grassroots effort drawing upon eight years of unprecedented work, dialogue, and consensus-building that water leaders from across the state have engaged in through the IBCC and basin roundtable process discussed above. Colorado's Water Plan will be aligned with the state's water values: vibrant and sustainable cities; viable and productive agriculture; a robust skiing, recreation and tourism industry; and a thriving environment that includes healthy watersheds, rivers, streams, and wildlife.

In December 2014 the Draft Colorado Water Plan was delivered to Governor Hickenlooper. The Colorado Water Plan, written by the CWCB, reflects efforts to confront challenges including a 163 billion-gallon projected water supply shortfall, as well as sustain a growing economy and population expected to double to 10 million by 2050. The Plan draws on river basin discussions held around the state, as well as each Basin's Draft Implementation Plans. The Draft Colorado Water Plan will be finalized in December 2015 (Finley, 2014).

How Will the SBR Inform Decision Makers in the Basin

As presented in the introduction, this section seeks to answer the following questions related to how the SBR plans to inform decision makers in the basin so that they understand: 1) how they are represented, 2) the status of the basin's consumptive and non-consumptive needs, 3) planned projects, 4) current river operations and opportunities, and 5) constraints associated with different hydrologic cycles. In addition, this section will address the SBR's plan to promote partnerships for new projects and methods.

How will decision makers in the SBR area understand: How they are represented

The CWCB produced a very informative Frequently Asked Questions (FAQs) and fact sheet related to the IBCC and roundtable process that does a good job of answering this question. Both pieces are regularly distributed to each of the roundtable members. They were asked to widely share this information with their constituents. In addition, this information is available at the Water Information Program (WIP) office in Durango and is already being used and disseminated at various public events. Moreover, the CFWE will be releasing a Headwaters issue specifically focusing on the Colorado Water Plan. The WIP has already purchased 350 copies to be disseminated to the SBR members and public at various events. The WIP plans to apply for CWCB PEPO funds to help cover the purchase of these publications. In addition, the WIP website (www.waterinfo.org) homepage provides information on the IBCC/roundtable process, including links to provide public input to the Colorado Water Plan. Finally, information about the IBCC/roundtable process and the State Water Plan is presented at local events (e.g., Kiwanis, Rotary, etc.), most local water board meetings (e.g., Animas-La Plata Water Conservancy District, Dolores Water Conservancy District, San Juan Water Conservancy District, Southwestern Water Conservation District, etc.), the annual Water 101 Seminar, and various local newspapers are periodically running information pieces related to this. The SBR plans to continue with all of these activities.

How will decision makers in the SBR area understand: The status of the basin's consumptive and non-consumptive needs

Version I of this action plan indicated that "the gap for the Dolores/San Juan River Basin ranges from a low of 5,120 acre-feet (AF) to a high of more than 15,000 AF. Relaying this information, to include an action plan, conservation, and public participation process, is viewed as a high priority education and outreach component" (Water Information Program, 2012, p. 2). In addition, the same referenced report stated that "keeping the public and roundtable members informed on non-consumptive projects, including an action plan is a high priority education and outreach component. Also, it will be important to incorporate non-consumptive needs into future projects and/or changes to existing projects" (p. 3). Related to this, the SBR hired a consulting team to work on their Basin Implementation Plan (BIP). Carrie Lile, an engineer with Harris Water Engineering, and Ann Oliver, a local river facilitator, were selected for this work. They worked throughout 2014 to update the SBR consumptive and non-consumptive needs assessment as part of the BIP. When this information is finalized in the BIP the WIP will summarize it into an easy to read and understand information sheet to be shared in similar manners to those listed in the previous section (e.g., roundtable members, WIP office and events, etc.).

How will decision makers in the SBR area understand: Planned projects

See previous section related to consumptive and on-consumptive needs.

How will decision makers in the SBR area understand: Current river operations and opportunities

Due to the natural variability of river flows it will be important that decision makers in the SBR area understand the potential for dry as well as wet years. For these reasons, too it will be important for the Colorado Water Plan to include some degree of flexibility related to implementation. The WIP has information related river operations and opportunities—specifically, CFWE Citizen's Guides and Headwaters issues that cover these topics such as the: Citizen's Guide to Colorado Climate Change; Citizen's Guide to Where Your Water Comes From; Headwaters Summer 2014 issue on Floods; Headwaters Winter 2011 Ecosystem Services issue; and the Fall 2003 issue on the 2002 drought. These documents are available at the WIP office and are regularly disseminated at local events.

How will decision makers in the SBR area understand: Constraints associated with different hydrologic cycles

As mentioned above, due to the natural variability in the hydrologic cycle in general, and the American West in particular, it will be important that decision makers in the SBR area understand the potential for dry as well as wet years. The CWCB developed a drought fact-sheet that will continue to be distributed at each of the roundtable meetings. In addition, the WIP has this information, as well as a wealth of additional informational pieces (some of which were listed in the previous section) available on the topic of variations in the hydrologic cycles. These are also available on the WIP website and disseminated at various functions throughout the year.

How will the SBR promote partnerships for new projects and methods

The SBR already promotes partnerships for new projects and methods. Each application to the SBR must provide information related to collaborative efforts, including cost-sharing. The SBR also makes recommendations to applicants about potential future partners. The SBR will continue these efforts indefinitely.

Additional Reporting Requirements

Roundtable involvement in development of this plan

Although the SBR membership has left the development of this EAP primarily to the PEPO representative, numerous members were involved in the planning efforts to varying degrees. As an example, the SBR Chair, BIP consultants, members of the Education and Outreach Committee were involved by providing direction, input, recommendations, and review. Moreover, when the EAP was in draft form various members of the SBR were invited to provide review and comments. All input has been incorporated and the updated EAP will be presented to the SBR membership at their April 2015 meeting.

Educational priorities

The SBR's overall goals and priorities for education, participation, and outreach including target audiences are basically laid out in Section 1 of the BIP—Basin Goals and Measurable Outcomes, which for reference is provided in Appendix A. Appendix B provides a summary of the

education, participation, and outreach goals for this EAP, a synopsis of which is provided as follows:

Short-Term Goals:

- Encourage education and conservation to reduce demand.
- Implement informational events about [water conservation and land-use planning] and water reuse efforts, tools and strategies.
- Promote wise and efficient water use through implementation of municipal conservation strategies to reduce overall future water needs.

Ongoing Activities:

- Implement IPPs to benefit recreational values and the economic value they provide.
- Implement IPPs to directly restore, recover or sustain endangered, threatened, and sensitive aquatic and riparian dependent species and plant communities.
- Implement IPPs to monitor, protect or improve water quality.
- Participate in Compact Water Bank efforts.
- Support agricultural water efficiency projects identified as IPPs.
- Support and participate in IPPs that promote dialogue, foster cooperation and resolve conflict.

Mid- and Long-Term Targets:

- Mid-Term: Promote 60% in-house use and 40% outside use (60/40 ratio) for Southwest Colorado and the entire State by 2020
- Long-Term: Promote 70% in-house use and 30% outside use (70/30 ratio) for Southwest Colorado and the entire State by 2030.

Strategies to achieve educational priority goals

One strategy to achieve the short-term goals of conservation, land-use planning (which will include coverage and discussion of the 60/40 and 70/30 ratios referenced above), and water reuse is to implement a pilot conservation and land-use planning session in 2015—likely in the Durango area. Initially it is anticipated that this would be a 2-4 hour workshop for local decision-makers and water utility personnel. Between local water professionals, including a land-use planner and the WIP Coordinator it is believed the session can be effectively conducted and facilitated at a reasonable cost. Depending upon input from the SBR, PEPO funds—estimated to be about $1.2k could be used for this effort. If the first year pilot is successful, the session could be annually rotated throughout the basin (e.g., Cortez, Telluride, Pagosa Springs, etc.) similar to the Water 101 Seminar. The SBR would also like to pursue a similar water conservation workshop approach, to include water-wise landscaping for the general public, however these details have yet to be determined. Strategies to achieve ongoing activities are discussed in the following partnerships section. Mid-and long-term goals will be incorporated in with the short-

term water conservation, land-use planning, and reuse workshop already discussed. A breakdown of the budget and schedule to achieve the SBR educational goals is provided in Attachment C.

Partnerships

Predominately in relation to the SBR's ongoing activities, partnerships or individuals/entities will assist with the implementation of our EAP strategies include:

- Agricultural Efficiency Projects: The SBR members and organizations have been working with local Conservation District's to promote agricultural efficiency improvements for a number of years and will continue these partnerships into the future.
- Aquatic Species: SBR members and organizations have been working with a variety of local, state, and federal agencies for decades to help protect aquatic species in the Basin. Examples include the Dolores River Dialogue Group, Colorado Parks and Wildlife, and the U.S. Forest Service. The SBR plans to continue these partnerships well into the future.
- Compact Water Bank: Various SBR members and organizations have been working with a number of entities on the West Slope water bank concept. Predominately this has involved the Colorado River and Southwestern Water Conservation Districts, though a host of additional partners are involved. The SBR will continue these partnerships into the future.
- Recreational: The SBR members and organizations have been working with local recreational groups and interests for years and will continue these partnerships into the future.
- Riparian Ecosystems: SBR members and organizations have been working with a variety of local, state, and federal agencies for a number of years to help protect riparian ecosystems in the Basin. Examples include the Animas Watershed Partnership and the Dolores River Dialogue Group. The SBR plans to continue these partnerships well into the future.
- Water Quality: Similar to the examples listed above, various SBR members and organizations have been working water quality issues in the Basin for quite some time. A prime example includes the Animas River Stakeholders Group (http://www.animasriverstakeholdersgroup.org/). The SBR plans to continue water quality partnerships into the future.

All of these projects and partnerships promote dialogue, foster cooperation, and help to resolve conflicts.

Periodic reporting

Period PEPO reporting on this EAP will be submitted to the CWCB and the CFWE by their required deadlines. This will be done in an effort to share challenges, progress, and resources.

Conclusion

In addition to all of the components already discussed as part of this SBR Education and Outreach Action Plan, the original version of this action plan stated that key components will include:

- Consumptive Projects: Relay 'gap' information, to include an action plan and public participation process, to the public; communicate statewide implications of the identified projects and processes; engage diverse stakeholders; SBR members and public education related to prioritizing projects.
- Non-Consumptive Projects: Keep the public and roundtable members informed on non-consumptive projects; bridge the consumptive and non-consumptive communities while highlighting progressive, multi-purpose solutions.
- Roundtable Member Education: SBR members education related to changing demographics, drought planning, the Colorado River Compact, and water supply availability; Provide more SBR member education/information programs and presentations.
- Support and utilize existing water education efforts (WIP, 2012, p. 6).

These components will also continue and be included as part of this SBR implementation plan. The SBR and their education committee believe that a well-informed basin roundtable increases its capacity to effectively contribute to water resource decisions. In addition, well-educated members enhance their ability to better inform and involve their public stakeholders in the water supply planning process. As a result, the SBR and Dolores/San Juan River Basin water community can have an improved awareness of its key water resource issues, leading to demonstrated support for the basin roundtables' strategies to meet their future water supply needs. Implementation of this Education and Outreach Action Plan will help to meet Article VII of the IBCC by-laws by creating a process to inform, involve, and educate the public not only of the SBR processes, but of the IBCC's activities and progress.

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Appendix A:

SBR BIP Basin Goals & Measurable Outcomes

Section 1: Southwest Basin Roundtable Basin Goals & Measurable Outcomes

The Southwest Basin Roundtable is unique for the complexity of hydrography, political entities, water compacts and treaties, and distinct communities that it encompasses. Although the name suggests only one basin, the Roundtable actually provides a forum for water discussions pertaining to nine distinct sub-basins, including the San Juan River, the Piedra, the Pine, the Animas (including the Florida River), the La Plata, the Mancos, McElmo Creek, the Dolores and the San Miguel, eight of which flow out of Colorado. Together these sub-basins make up the interdependent landscape of Southwest Colorado.

Many communities, both natural and human, depend on the water produced by these sub-basins. The Southwest Basin is home to the Southern Ute Indian Tribe and the Ute Mountain Ute Indian Tribe, the only two Indian Reservations in Colorado. Neighboring these tribal lands are 10 counties including Archuleta, La Plata, San Juan, Montezuma, Dolores, San Miguel and portions of Mineral, Hinsdale, Montrose and Mesa. Each of these tribal areas and counties represent distinct communities and landscapes, with their own specific and unique social, economic and environmental values, challenges and opportunities.

Multiple layers of legal agreements govern water use in the Roundtable's area, adding additional complexity, opportunity and challenge. While all of the sub-basins are tributary to the Colorado River and therefore fall under the Colorado River Compact and the Upper Colorado River Basin Compact, seven are part of the San Juan River sub-basin and two, the Dolores and San Miguel basins, are part of the Colorado River sub-basin. All of the water to which the State of New Mexico is entitled under the Upper Colorado River Compact has its origins in the basins that are part of the San Juan River sub-basin.

A Treaty and settlement with both Ute Indian tribes pertain to waters of each sub-basin. The La Plata River Compact apportions water between Colorado and New Mexico with a daily delivery requirement to New Mexico. The San Juan/Chama Project delivers water trans-mountain from the San Juan River sub-basin in Colorado to the Rio Grande River in New Mexico to provide a portion of New Mexico's Colorado River entitlement (annual average of 85,000 to 100,000 AF). These New Mexico obligations are met by the waters of the Southwest Basin, and affect the water available to meet the needs of the area's communities. The Animas La Plata Compact provides for diversion and storage of flows for use in both Colorado and New Mexico.

The area supports many water-dependent species of wildlife, including warm and cold water fish species addressed by three different multi-state conservation agreements, and four terrestrial species that are currently listed under the Federal Endangered Species Act.

Finally, the Southwest Basin is a region of diverse natural systems, agricultural heritage, outstanding beauty, and extensive recreational opportunities. Many communities within the area rely heavily on tourism and the recreational industry as a primary economic driver. Agriculture and the open spaces it maintains contribute to the culture, economy and quality of life of the

Southwest Basin. Municipal and industrial activities round out the economic and social values and help support the diverse and vibrant communities of the region.

This geographic, political, economic and legal complexity leads to unique challenges and opportunities. Appreciation of this context is basic to the development of the Roundtable's goals and to its BIP. Therefore, the Roundtable prefaces its BIP Goals with the following underlying principles. Many of these are also stated in the Colorado Water Plan Southwest Colorado Statement of Importance January 2014, which was adopted by the Roundtable on January 8, 2014. The Roundtable:

- Intends to develop, use, and maintain the Basin Implementation Plan as a living document.
- Agrees that all water uses are important to the future of this region.
- Identifies specific and unique projects that are important to maintaining the quality of life in this region and should accommodate the development and maintenance of flows, including domestic supplies, environmental needs, agriculture, recreation, and commercial/industrial needs to provide for further economic development.
- Supports multi-purpose projects when possible and when they can be accomplished in a manner that is protective of the values present.
- Recognizes and upholds the unique settlement of tribal reserved water rights claims in the Colorado Ute Indian Water Rights Final Settlement Agreement of December 10, 1986, as authorized by Congress in the Colorado Ute Indian Water Rights Settlement Act of 1988, Pub. L. No. 100-585, and as amended by the Colorado Ute Settlement Act Amendments of 2000, Pub. L. No. 106-554 and Pub. L. No, 110-161 (2007); and the 1991 Consent Decrees.
- Recognizes and addresses the downstream challenges faced by water users in southwest Colorado due to continued development and pressures from users in the State of New Mexico; protect interests in southwest Colorado, while complying with existing Compact obligations. The entitlement to Colorado River flows for New Mexico will be based on deliveries from southwest Colorado.
- Intends to preserve the Southwest Basin's ability to develop Colorado River Compact entitlements and to meet our water supply gaps.
- Recognizes and addresses the challenges to all water uses that future drought and/or climate variability may bring.
- Recognizes that the flows necessary to support the full complement of values are not currently well understood.
- Limit Conflicts and Promote Collaboration Within the Framework of State, Tribal and Federal Plans, Policies, Authorities and Rights.

The Roundtable has established 21 goals (Table 1) to address the following seven themes (in no particular order):

A. Balance All Needs and Reduce Conflict
B. Maintain Agriculture Water Needs
C. Meet Municipal and Industrial Water Needs
D. Meet Recreational Water Needs

E. Meet Environmental Water Needs
F. Preserve Water Quality
G. Comply with CO River Compact and Manage Risk

In order to clarify the desired results of these goals and to help the Roundtable gauge progress toward meeting the goals over the planning horizon of this BIP (thru 2050), the Roundtable has agreed upon 31 Measureable Outcomes (Table 1). While recognizing the value of identifying measureable outcomes, the Roundtable is also cognizant of its limitations.

One limitation is that the development of ambitious but realistic measurable outcomes requires an understanding of the extent to which the Roundtable's stated goals are already being met. Measurable outcomes in this BIP were developed without a thorough understanding of the current status of those measures and of water supply needs, particularly for environmental and recreational values.

An additional limitation is that there are factors which may complicate the attainment of these outcomes. These factors include uncertainty around the ability of sponsors to implement Identified Projects and Processes due to issues with funding, permitting, partner support, etc.; lack of sufficient support/interest in implementing a Measureable Outcome, concern for unintended consequences, as well as difficulty in obtaining the necessary data to assess some of the identified outcomes.

Given these limitations and consistent with its principle that this BIP be a "living document," the Roundtable intends periodic reviews and updates of its Measurable Outcomes as more reliable information is developed and attainment is better understood.

NOTE: Yellow highlights indicate EAP priorities

Table 1. Goals and Measureable Outcomes for the Southwest Basin Implementation Plan

A. Balance All Needs and Reduce Conflict		
ID	Goals	Measurable Outcomes (by 2050)
A 1	Pursue a high success rate for identified specific and unique IPPs to meet identified gaps and to address all water needs and values.	1. 100% of IPPs shall consider from the initial planning staging maintaining and enhancing environmental and recreational needs. 2. Complete 19 multipurpose IPPs to meet identified gaps. 3. Support and participate in 10 IPPs (such as processes) that promote dialogue, foster cooperation and resolve conflict. 4. At least 50% of identified watersheds have existing or planned IPPs that are protective of critical infrastructure and/or environmental and recreational areas. 5. All towns and major water supply systems with water supply infrastructure have watershed/wildfire assessments that identify strategies/treatments necessary to mitigate the impacts that occur to hydrology in a post-fire environment. 6. All major reservoirs have watershed/wildfire assessments that identify strategies/treatments necessary to mitigate the impacts that occur to hydrology in a post-fire environment.
A 2	Support specific and unique new IPPs important to maintaining the quality of life in this region, and to address multiple purposes including municipal, industrial, environmental, recreational, agricultural, risk management, and compact compliance needs.	
A 3	Implement multi-purpose IPPs (including the creative management of existing facilities and the development of new storage as needed).	
A 4	Promote dialogue, foster cooperation and resolve conflict among water interests in every basin and between basins for the purpose of implementing solutions to Southwest Colorado's and Colorado's water supply challenges *(SWSI 2010).*	
A 5	Maintain watershed health by protecting and/or restoring watersheds that could affect critical infrastructure and/or environmental and recreational areas.	

Note that several of these outcomes, indicated by an asterisk, pertain directly to supporting implementation of the projects and processes, either planned or in progress, that are currently on the Southwest Basin's IPP list. They will be reviewed and updated in the future.

B. Meet Agricultural Needs		
ID	Goals	Measurable Outcomes (by 2050)
B1	Minimize statewide and basin-wide acres transferred.	1. Implement projects (e.g. ATMs, efficiency, etc.) in order to help preserve agriculture and open space values, and to help address municipal, environmental, recreational, and industrial needs; while respecting private property rights. 2. Implement strategies that encourage continued agricultural use and discourage permanent dry-up of agricultural lands. 3. The water providers in the state that are using dry- up of agricultural land (defined as requiring a water court change case) and/or pursuing a new TMD (as defined by IBCC to be a new west slope to east slope diversion project) shall have a higher standard of conservation. The goal for these water providers is a ratio of 70% use occurs in-house while 30% use occurs outside (70/30 ratio). 4. Implement at least 10* agricultural water efficiency projects identified as IPPs (by sub-basin).
B2	Implement efficiency measures to maximize beneficial use and production.	
B3	Implement IPPs that work towards meeting agricultural water supply shortages.	

C. Meet Municipal and Industrial Water Needs		
ID	Goals	Measurable Outcomes (by 2050)
C1	Pursue a high success rate for identified IPPs to meet the municipal gap.	1. Complete 41* IPPs aimed at meeting municipal water needs. 2. Consistently meet 100% of residential, commercial and industrial water system demands identified in SWSI 2010 in each sub-basin, while also encouraging education and conservation to reduce demand. 3. Implement at least 1* IPP that protect or enhance the ability of public water supply systems to access and deliver safe drinking water that meets all health-based standards. 4. Change the ratio of in-house to outside treated water use for municipal and domestic water systems (referred to as water providers herein) from the current ratio of 50% in-house use and 50% outside use, to 60% in-house use and 40% outside use (60/40 ratio) for Southwest Colorado and the entire State by 2030. 5. Implement 3 informational events about water reuse efforts, tools and strategies. 6. The water providers in the state that are using dry up of agricultural land (defined as requiring a water court change case) and/or pursuing a new Trans Mountain Diversion (TMD) (as defined by IBCC to be a new west slope to east slope diversion project) shall have a higher standard of conservation. The goal for these water providers is a 70/30 ratio by 2030. This is a prerequisite for the Roundtable to consider support of a new TMD.
C2	Provide safe drinking water to Southwest Colorado's citizens and visitors.	
C3	Promote wise and efficient water use through implementation of municipal conservation strategies to reduce overall future water needs.	
C4	Support and implement water reuse strategies.	

D. Meet Recreational Water Needs		
D1	Maintain, protect and enhance recreational values and economic values to local and statewide economies derived from recreational water uses, such as fishing, boating, hunting, wildlife watching, camping, and hiking.	1. Implement 10* IPPs to benefit recreational values and the economic value they provide. 2. At least 80% of the areas with recreational opportunities have existing or planned IPPs that secure these opportunities and supporting flows/lake levels within the contemporary legal and water management context. Based on the map of recreational attributes generated for SWSI 2010 (Figure 1) 80% of each specific value equates to approximately 428 miles of whitewater boating, 185 miles of flat-water boating, 4 miles of Gold medal Trout Streams, 545 miles of other fishing streams and lakes, 3 miles of Audubon Important Bird Area, 143 miles of waterfowl hunting/viewing parcels, and 6 miles of Ducks Unlimited projects. 3. Address recreational data needs.

E. Meet Environmental Water Needs		
E1	Encourage and support restoration, recovery, and sustainability of endangered, threatened, and imperiled aquatic and riparian dependent species and plant communities. *(See list of such species in the Southwest Basin)***	1. Implement 15* IPPs to directly restore, recover or sustain endangered, threatened, and sensitive aquatic and riparian dependent species and plant communities. 2. At least 95% of the areas with federally listed water dependent species have existing or planned IPPs that secure the species in these reaches as much as they can be secured within the existing legal and water management context. 3. At least 90% of areas with identified sensitive species (other than ESA species) have existing or planned IPPs that provide direct protection to these values. Based on the map of environmental attributes generated for SWSI 2010 (Figure 1) 90% for individual species equates to approximately 169 miles for Colorado River cutthroat trout, 483 miles for roundtail chub, 794 miles for bluehead sucker, 700 miles for flannelmouth sucker, 724 miles for river otter, 122 milrd for northern leopard frog, 921 miles for active bald eagle nesting areas and 229 miles for rare plants. 4. Implement 26* IPPs to benefit the condition of fisheries and riparian/wetland habitat. 5. At least 80% of areas with environmental values have existing or planned IPPs that provide direct protection to these values.
E2	Protect, maintain, monitor and improve the condition and natural function of streams, lakes, wetlands, and riparian areas to promote self-sustaining fisheries, and to support native species and functional habitat in the long term, and adapt to changing conditions.	

**Federally Listed:

- Southwest Willow Flycatcher (Endangered)

Sensitive Species:

- Colorado River Cutthroat Trout
- Roundtail Chub
- Bluehead Sucker
- Flannelmouth Sucker
- River Otter
- Northern Leopard Frog
- Active Bald Eagle Nests

Federally Listed Species not included in SWSI 2010 Needs Assessment:

- New Mexico Meadow Jumping Mouse (Proposed Endangered)
- Yellow-billed Cuckoo (Proposed Threatened)
- Gunnison Sage Grouse (Proposed Threatened)

F. Preserve Water Quality		
ID	Goals	Measurable Outcomes (by 2050)
F1	Monitor, protect and improve water quality for all classified uses.	1. By 2016, replace the following statewide outcomes with outcomes based on the current status of these measures in the Roundtable area, followed by a periodic status review every five years. a. 60% of stream miles and 40% of reservoir acres attain water quality standards and support all designated uses. b. 15% of impaired stream miles and reservoir acres are restored to meet all applicable water quality standards. c. 50% of stream miles and 30% of reservoir acres are attaining water quality standards. d. 100% of existing direct use and conveyance use reservoirs attain the applicable standards that protect the water supply use classification. 2. Implement 6* IPPs to monitor, protect or improve water quality.

G. Comply with CO River Compact and Manage Risk		
G1	Plan and preserve water supply options for all existing and new uses and values.	1. Water providers proposing a new TMD shall achieve a 60/40 ratio by 2020 and 70/30 ratio by 2030 as a prerequisite for the Roundtable to consider support of a new TMD. 2. A conceptual agreement is developed between roundtables regarding how to approach a potential future trans-mountain diversion from the West Slope to the East. 3. Protect 100% of pre-compact water rights in the SW Basins Area. 4. Implement 4* IPPs aimed at utilizing Tribal Water Rights Settlement water. 5. Implement 2* IPPs aimed at meeting La Plata River compact. 6. Participate in Compact Water Bank efforts.
G2	Recognize and address the challenges faced by water users in southwest Colorado due to continued development and pressures from users in the State of New Mexico; protect interests in southwest Colorado, while complying with existing Compact obligations. New Mexico's entitlement to Colorado River flows are based on deliveries from southwest Colorado (*SW CO Statement of Importance).*	
G3	Preserve Southwest Basin's ability to develop CO River compact entitlement to meet our water supply gaps. *(SW CO Statement of Importance).*	
G4	Recognize and uphold the unique settlement of tribal reserved water rights claims in the 1988 Tribal Water Rights Settlement and the 1991 Consent Decree. *(SW CO Statement of Importance).*	
G5	Support strategies to reduce demand in the Colorado River Basin to ensure levels in Lake Powell are adequate to produce power.	
G6	Support strategies to mitigate the impact of a Colorado River Compact curtailment should it occur.	

Appendix B:

Summary of the Education, Participation, and Outreach Goals for SBR EAP

Goals and Measureable Outcomes for the Southwest Basin Implementation Plan

Key: All underlined are priorities. **Bold** indicates short-term goals, *italic* provides ongoing activities, while no bold or italic reflects long-term targets.

A. Balance All Needs and Reduce Conflict

Goal A1: Promote dialogue, foster cooperation and resolve conflict among water interests in every basin and between basins for the purpose of implementing solutions to Southwest Colorado's and Colorado's water supply challenges.

Goal A5: Maintain watershed health by protecting and/or restoring watersheds that could affect critical infrastructure and/or environmental and recreational areas.

Measurable Outcome 3: Support and participate in 10 IPPs (such as processes) that promote dialogue, foster cooperation and resolve conflict.

B. Meet Agricultural Needs

Goal B2: Implement efficiency measures to maximize beneficial use and production.

Measurable Outcome 3: The water providers in the state that are using dry- up of agricultural land and/or pursuing a new TMD shall have a higher standard of conservation. The goal for these water providers is a ratio of 70% use occurs in-house while 30% use occurs outside (70/30 ratio).

Measurable Outcome 4: Implement at least 10* *agricultural water efficiency projects* identified as IPPs (by sub-basin).

C. Meet Municipal and Industrial Water Needs

Goal C3: Promote wise and efficient water use through implementation of **municipal conservation strategies to reduce overall future water needs**.

Goal C4: Support and implement water reuse strategies.

Measurable Outcome 2: Consistently meet 100% of residential, commercial and industrial water system demands identified in SWSI 2010 in each sub-basin, while also encouraging **education and conservation to reduce demand**.

Measurable Outcome 4: Change the ratio of in-house to outside treated water use for municipal and domestic water systems from the current ratio of 50% in-house use and 50% outside use, to 60% in-house use and 40% outside use (60/40 ratio) for Southwest Colorado and the entire State by 2030.

Measurable Outcome 5: **Implement 3 informational events about water reuse efforts, tools and strategies.**

Measurable Outcome 6: The water providers in the state that are using dry up of agricultural land and/or pursuing a new TMD shall have a higher standard of conservation. The goal for these water providers is a 70/30 ratio by 2030.

D. Meet Recreational Water Needs

Goal D1: Maintain, protect and enhance recreational values and economic values to local and statewide economies derived from recreational water uses, such as fishing, boating, hunting, wildlife watching, camping, and hiking.

Measurable Outcome 1: Implement 10 IPPs to benefit recreational values and the economic value they provide.*

E. Meet Environmental Water Needs

Goal E1. Encourage and support restoration, recovery, and sustainability of endangered, threatened, and imperiled aquatic and riparian dependent species and plant communities.

Measurable Outcome 1: Implement 15 IPPs to directly restore, recover or sustain endangered, threatened, and sensitive aquatic and riparian dependent species and plant communities.*

Measurable Outcome 4: Implement 26* IPPs to benefit the condition of fisheries and riparian/wetland habitat.

F. Preserve Water Quality

Goal F1. Monitor, protect and improve water quality for all classified uses.

Measurable Outcome 2: Implement 6 IPPs to monitor, protect or improve water quality.*

G. Comply with CO River Compact and Manage Risk

Goal G5. Support strategies to reduce demand in the Colorado River Basin to ensure levels in Lake Powell are adequate to produce power.

Measurable Outcome 1: Water providers proposing a new TMD shall achieve a 60/40 ratio by 2020 and 70/30 ratio by 2030 as a prerequisite for the Roundtable to consider support of a new TMD.

Measurable Outcome 6: Participate in Compact Water Bank efforts.

Attachment C:

Budgets

SBR 2015 EAP and Budget

GOAL	OBJECTIVE/TASK	LEAD	TIMELINE	EXPENSE	ONGOING PROCESS/PROJECT?	COMMENTS & NOTES
Educate decision makers in the SBR area about how they are represented	a) Regularly distribute FAQs and fact sheet related to the IBCC and roundtable process. b) Purchase and distribute Headwaters Colorado Water Plan issue. c) Purchase and distribute information about the IBCC/roundtable process and the State Water Plan at local events, local water board meetings, and the annual Water 101 Seminar.	Denise Rue-Pastin	Throughout 2015	$800	Yes	
Educational priority	Pilot conservation and land-use planning session	Denise Rue-Pastin	Late Fall 2015	$1,200	Pilot	
Roundtable members and general public information and education related to consumptive and non-consumptive projects and CWP	a) Notify all area papers of Roundtable meeting dates, time, and location; including 'open to the public' invitation	Denise Rue-Pastin	Quarterly meetings 2015	$ 108.20	Yes	WIP Coordinator time est.
	b) Post all consumptive and non-consumptive related activities and meetings on WIP website	Denise Rue-Pastin	Throughout 2015	$ 108.20	Yes	
	c) Presentations to various local organizations	Varies	Throughout 2015	$ 125.00	Yes	Copies and materials
	d) Roundtable information is provided at each Annual Water 101 Workshop	Denise Rue-Pastin	Throughout 2015	$ 225.00	Yes	Copies & 75 issues of the CFWE Water Law
	e) Other/Misc:			$ 100.00		
Roundtable Members Education	a) Drought planning information at Roundtable meeting	Handouts; Speaker TBD	TBD	$ 125.00	No, but info needs will be cont. assessed	Copies and materials
	b) Climate change information at Roundtable meeting	Handouts; Speaker TBD	TBD	$ 125.00	No, but info needs will be cont. assessed	Copies and materials
	c) Water quality regulation or groundwater hydrology information at Roundtable meeting	Handouts; Speaker TBD	TBD	$ 125.00	No, but info needs will be cont. assessed	Copies and materials
	d) Interstate compacts information at Roundtable meeting	Handouts; Speaker TBD	TBD	$ 125.00	No, but info needs will be cont. assessed	Copies and materials

	e) Other/Misc: Current river operations and opportunities, constraints associated with different hydrologic cycles			$ 100.00		
TOTAL				$3,266.40		

Roundtable 2016 to 2020 EAP and Budget

GOAL	OBJECTIVE/TASK	LEAD	TIMELINE	EXPENSE	ONGOING PROCESS/PROJECT?	COMMENTS & NOTES
Educate decision makers in the SBR area about how they are represented	a) Regularly distribute FAQs and fact sheet related to the IBCC and roundtable process. b) Purchase and distribute Headwaters Colorado Water Plan issue. c) Purchase and distribute information about the IBCC/roundtable process and the State Water Plan at local events, local water board meetings, and the annual Water 101 Seminar.	Denise Rue-Pastin	2016-2020	$2	Yes	
Educational priority	Water conservation workshop, to include water-wise landscaping for the general public	Denise Rue-Pastin	Starting in 2016	$1,200	Pilot	
Roundtable members and general public information and education related to consumptive and non-consumptive projects AND CWP	a) Notify all area papers of Roundtable meeting dates, time, and location; including 'open to the public' invitation	Denise Rue-Pastin	Quarterly meetings 2016-2020	$541	Yes	WIP Coordinator time est.
	b) Post all consumptive and non-consumptive related activities and meetings on WIP website	Denise Rue-Pastin	2016-2020	$541	Yes	
	c) Presentations to various local organizations	Varies	2016-2020	$625	Yes	Copies and materials
	d) Roundtable information is provided at each Annual Water 101 Workshop	Denise Rue-Pastin	2016-2020	$1,125	Yes	Copies, plus 75 issues of the CFWE Water Law
	e) Other/Misc			$500		
Roundtable members education	a) Information on a variety of topics at Roundtable meetings	Handouts; Speaker TBD	TBD	$625	No, but info needs will be cont. assessed	Copies and materials
	b) Other/Misc:			$500		

Support and utilize existing water education partners and efforts	a) All Roundtable meetings are posted on WIP website and in quarterly newsletters	Denise Rue-Pastin	2016-2020	$541	Yes	WIP Coordinator time est.
	b) There is a Roundtable update section in each of the WIP quarterly newsletters	Denise Rue-Pastin	2016-2020	$947	Yes	WIP Coordinator time est.
	c) There is a Roundtable tab/section on the WIP website	Denise Rue-Pastin	2016-2020	$947	Yes	WIP Coordinator time est.
	d) Water information provided at each of the Roundtable meetings on an information table	Denise Rue-Pastin	2016-2020	$625	Yes	Copies
	e) Other organizations that could help with efforts (e.g., CDWR, CWCB, SJCA, SWCD, etc.)	Varies	2016-2020	N/A	Yes	
	f) Other/Misc.			$500		
TOTAL				**$11,617**		

APPENDIX D

- **COLORADO WATER PLAN - SWCD STATEMENT OF IMPORTANCE JANUARY 2014**
- **WATER RIGHTS ANALYSIS**
- **FINAL WSRA ANNUAL REPORT OCTOBER 2014**

Colorado Water Plan

Southwest Colorado Statement of Importance

January 2014

Background:

Last spring, Governor Hickenlooper issued an Executive Order requesting that all state water interests work together in the development of the Colorado Water Plan and address the identified M&I "Gap". The CWCB is coordinating the efforts with input from the IBCC and Basin Round Tables (BRT), and a draft of the plan is to be ready by December of 2014, and final plan by December 2015. Various positions have been expressed by multiple groups and entities on either the plan itself or the New Supply aspect (4 legs of stool). These groups include; the South Platte and Arkansas BRT's, Front Range entities (FRWC), the West Slope Basin Round Table (new supply), and municipal providers in the Grand Junction area led by Ute Water. The southwest portion corner of Colorado is in a somewhat unique position, since historically it has not been the source of Colorado River supplies for the Front Range needs. Even so, it does have a major federal trans-mountain diversion Project that deliveries supplies to New Mexico interests in the Rio Grande basin. The San Juan-Chama Project diverts around 100,000 af per year out of tributaries to the San Juan River in Colorado. Southwest Colorado is also home to two Indian Reservations and sovereign nations dating back to 1868. The Ute Mountain Ute Tribe and Southern Ute Indian Tribe have built partnerships with the local communities and are partners with non-tribal interests in a number of major water projects in the region. The Southwest BRT is also somewhat different than other West Slope roundtables, since the Southwest roundtable geographic area is all within the Southwestern Water Conservation District boundaries, which encompass nine separate and unique sub-basins. The remaining three Western Slope Roundtables are within the Colorado River District which includes the Gunnison, Yampa/White, and Colorado mainstem. Consumptive and Non-Consumptive interests have worked well on collaborative processes in the southwestern portion of the state, and it is important that we maintain these partnerships and focus on the issues that are the most relevant to this region. Below is a list of core principles that have been discussed and adopted by the board members and staff from the Southwestern Water Conservation District, and by the Southwest Basin Roundtable:

Statement:

On May 14, 2013, Governor Hickenlooper issued Executive Order D 2013-005, which directed the Colorado Water Conservation Board (CWCB) to commence work on the Colorado Water Plan (the Plan). Every major river basin in the State has been enlisted to assist in the development of the Plan to be finalized by December 10, 2015. Although the Plan is intended to address several statewide issues of importance its primary function is to address the gap between water supply and water demand. The Southwestern Water Conservation District (SWCD) and the Southwest Basin Roundtable (SWBRT) share the same geographic boundary that include nine separate and unique sub-basins that flow independently across statelines into New Mexico and Utah. The SWCD and SWBRT also share the same values, and commit to assist in the development of Colorado's Water Plan based on the following principles:

- Colorado's Water Plan (the Plan) should be used as a guiding document to assist with the development of consumptive, non-consumptive, and multi-purpose projects.
- The portion of the Plan for southwest Colorado should identify specific and unique projects that are important to maintaining the quality of life in this region and should accommodate the development of domestic supplies, environmental needs, agriculture, recreation, and commercial/industrial needs to provide for further economic development.
- The Plan will be used as a guiding document for the full development of Colorado's entitlement under the Colorado River Compact and Law of the River.
- Development of the Compact Entitlement should attempt to limit the risk of Compact administration in the future.
- The SWCD and SWBRT agree that all uses are important to the future of this region, and the development of multi-purpose projects (including the creative management of existing facility and the development of new storage as needed) within the southwest basin should be pursued.
- The Colorado Plan should recognize the downstream challenges faced by water users in southwest Colorado due to continued development and pressures from users in the State of New Mexico. The State of Colorado should utilize its resources to protect the interests in southwest Colorado, while complying with existing Compact obligations. The entitlement to Colorado River flows for New Mexico will be based on deliveries from southwest Colorado.
- The Plan should recognize the unique settlement of tribal reserved water rights claims in the 1988 Tribal Water Rights Settlement and the 1991 Consent Decree.
- The Southwest Basin supports the implementation of conservation strategies and the full development of existing supplies within the Front Range basins that will reduce the demands in the Colorado River Basin.
- The Southwest Basin recognizes a common interest with other Western Slope Roundtables and supports coordination with the Colorado River District and other West Slope Roundtables to minimize the risk of overdevelopment of the Colorado River supplies.
- The Southwest Basin supports the concurrent development of all four legs of the stool that have been identified by the IBCC, and discussed by the Southwest Basin Roundtable.
- The SWCD and SWBRT support the concept of a Water Bank, which may be used to prevent or minimize the risk of Compact administration.
- The SWBRT and SWCD believe Colorado's Water Plan should be a "living document" that can be revisited and updated as necessary to provide for adaptive management in meeting the future demands of the State.
- The SWCD and the SWBRT commit to full productive participation in the development of Colorado's Water Plan, and will stress the importance of inclusion of the components of the Basin Implementation Plan (BIP) to address future needs in the southwest part of Colorado.

HARRIS WATER ENGINEERING, INC.
954 EAST SECOND AVENUE, #202
DURANGO, COLORADO 81301
970-259-5322

January 27, 2015

To: Southwest Basin Roundtable's BIP drafting sub-committee; IBCC representatives and Roundtable Chair

From: Carrie Lile

Subject: Risk Management Analysis

Introduction

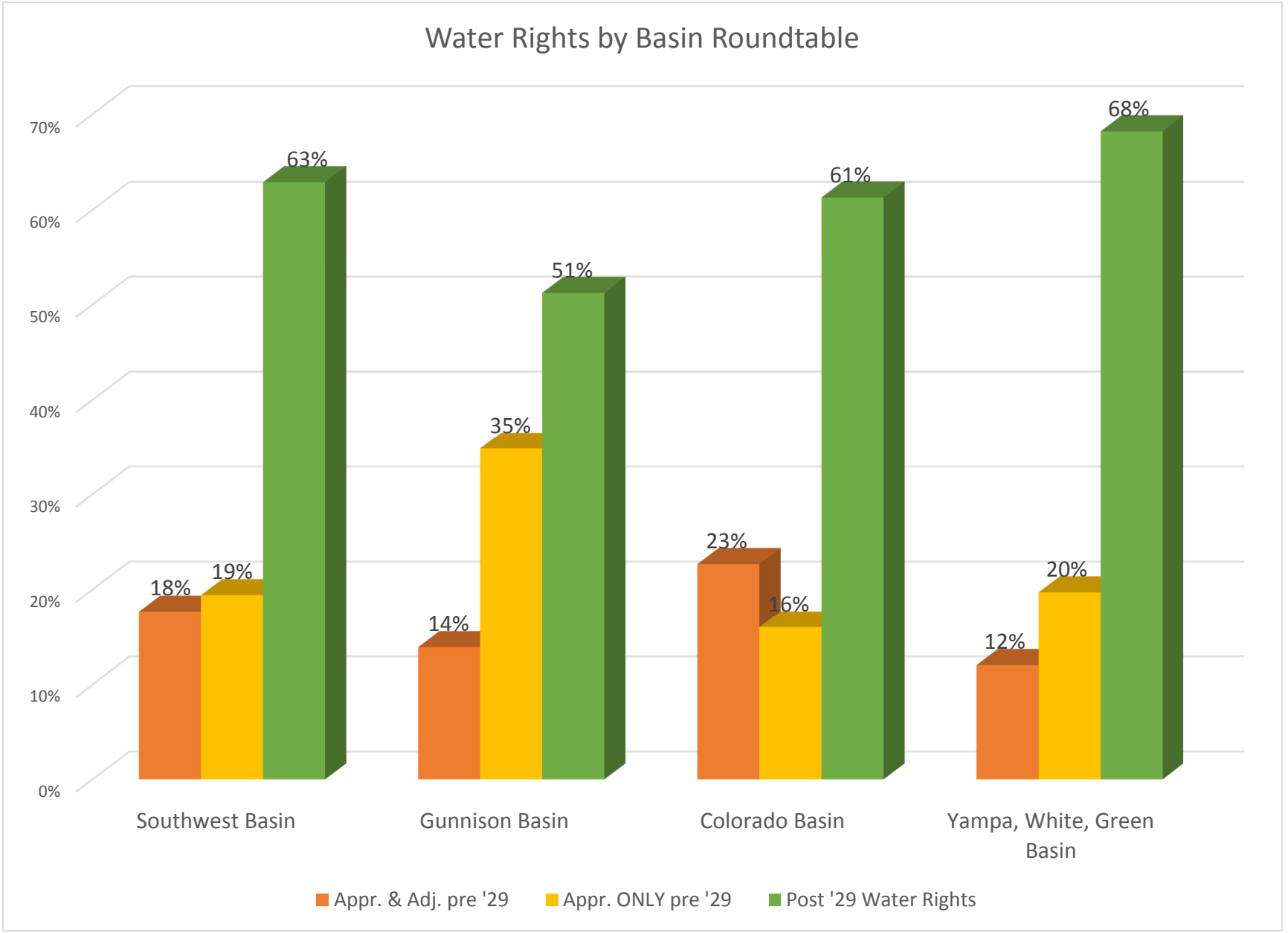
Throughout the development of the Basin Implementation Plans and the Colorado Water Plan the discussion of risk management as occurred. One aspect of risk management is understanding the implications of a Compact call on the Colorado River and how the call could be administrated. A common concern exists that certain basins have "junior, junior" water rights to the Compact and/or other basins; these junior basins could have the majority of their water rights adjudicated and/or appropriated after December 31, 1928 and thus would be curtailed during Compact administration. To better understand this risk, an analysis of Colorado River basins' water rights was conducted to determine the number of water rights each basin has that are pre or post Compact and compare these across the western slope to determine if some basins are more "junior" than others to the Compact and to each other.

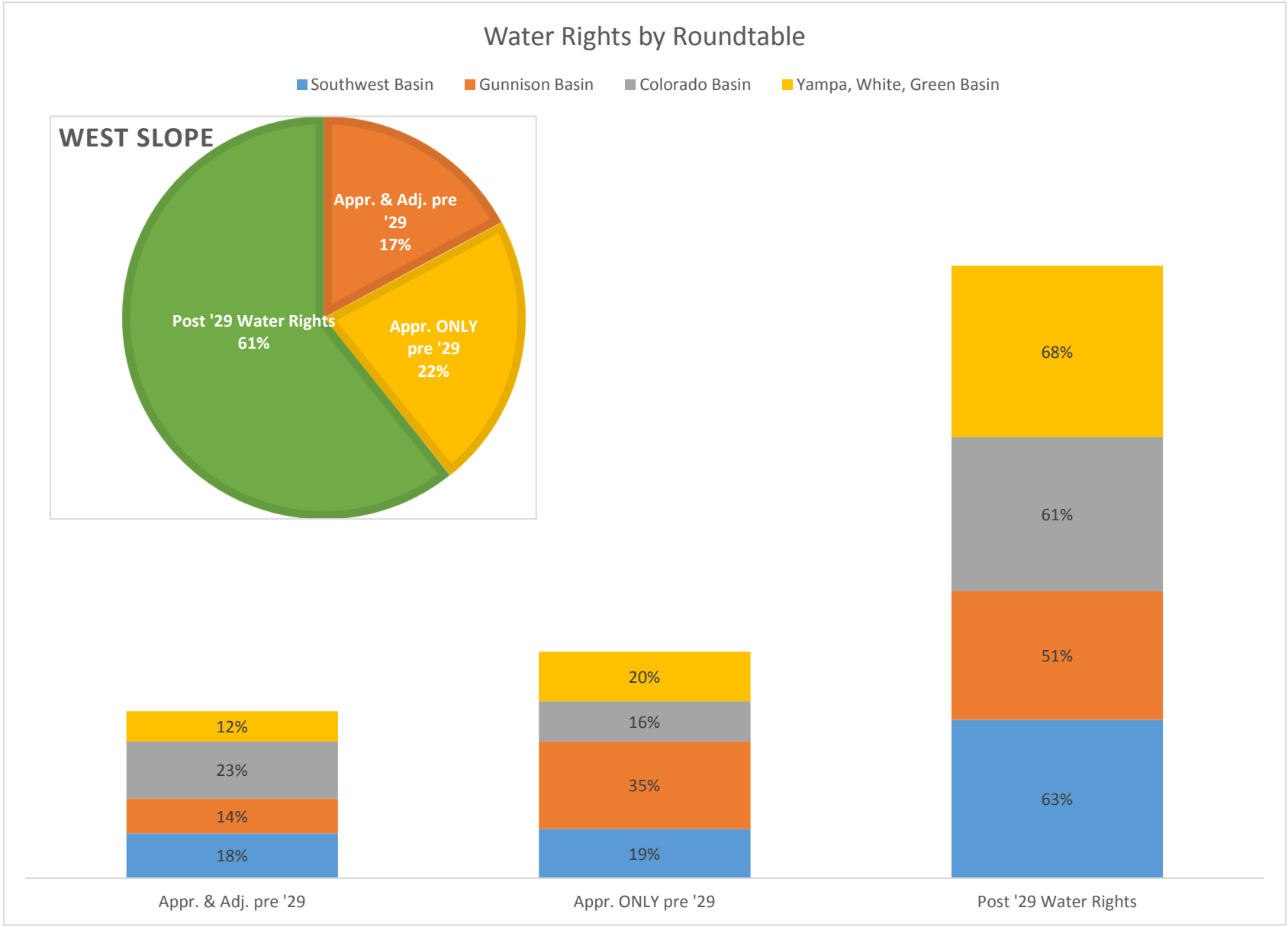
Risk Management Analysis

Colorado's Decision Support System (CDSS) was utilized for exporting the water rights data sets. The Bulk Hydrobase Data Exporter allows users to export water rights data sets for specific Colorado Division of Water Resources (DWR) water districts. The "DWR Water Right Net Amounts" exporter was used. It contains the current status of a water right based on all of its current decreed actions. Water rights for Divisions 4, 5, 6, and 7 were exported into an excel spreadsheet. From here, the lists were sorted by absolute or conditional water rights. The conditional water rights were removed from this analysis. Next, the list of absolute water rights for specific divisions were sorted by either adjudication or appropriation date. These two lists were then compared to determine the number of water rights that were either adjudicated or appropriated prior to December 12, 1928. While the water rights are typically organized by DWR divisions and water districts, they can also be organized by roundtable basins.

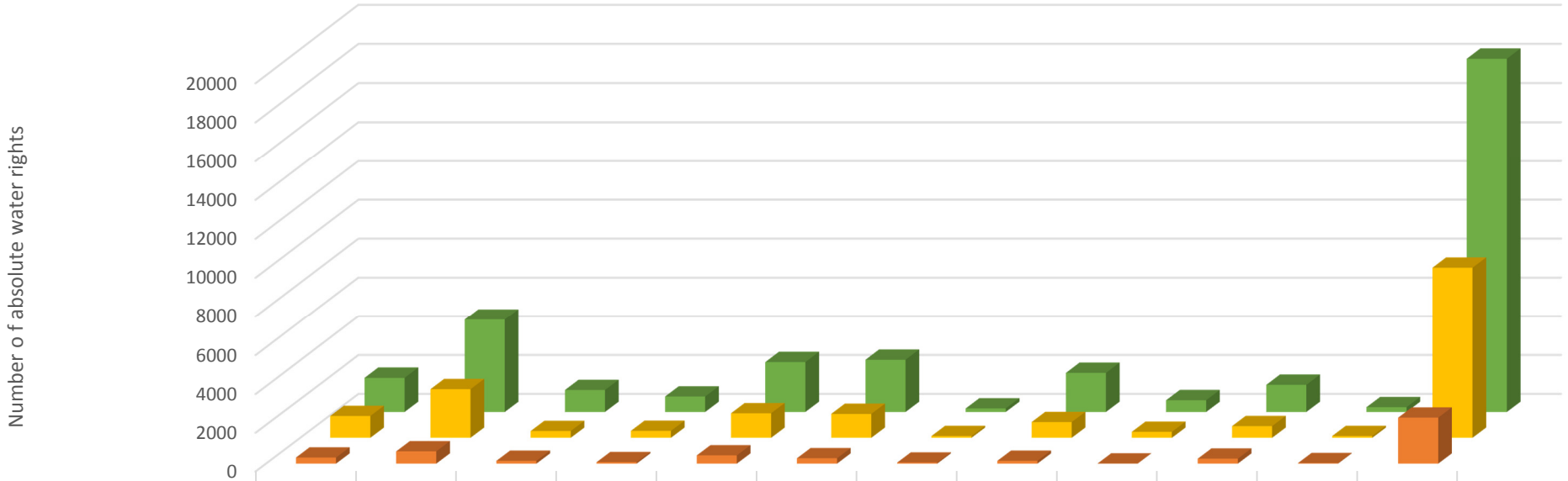
Conclusion

Based on the analysis described above, a series of graphs and charts were generated to depict the results. The data is presented in two different ways: by DWR division and by roundtable basin. This data set could be used as one of the tools to further ongoing discussions of risk management.


Water Rights by Basin Roundtable
70%
60%
50%
40%
30%
20%
10%
0%
18%
19%
63%
14%
35%
51%
23%
16%
61%
12%
20%
68%
Southwest Basin
Gunnison Basin
Colorado Basin
Yampa, White, Green Basin
Appr. & Adj. pre '29
Appr. ONLY pre '29
Post '29 Water Rights

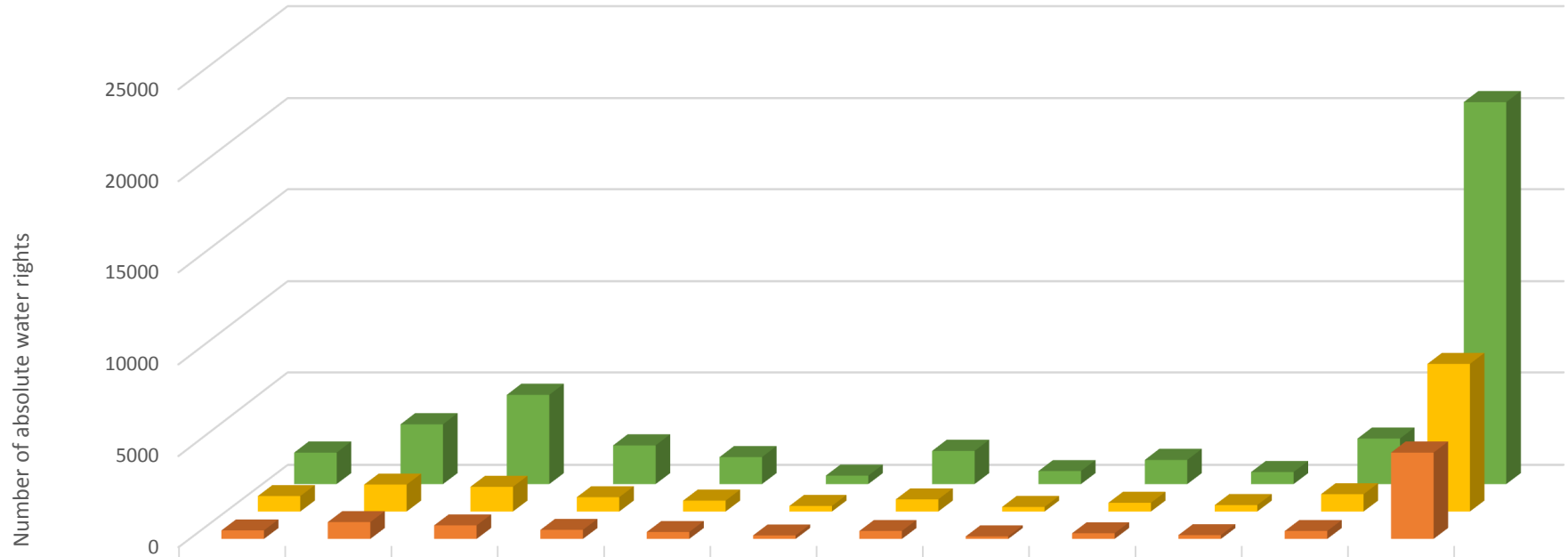

Water Rights by Roundtable
Southwest Basin
Gunnison Basin
Colorado Basin
Yampa, White, Green Basin
WEST SLOPE
Appr. & Adj. pre '29
17%
Appr. ONLY pre '29
22%
Post '29 Water Rights
61%
12%
23%
14%
18%
20%
16%
35%
19%
68%
61%
51%
63%
Appr. & Adj. pre '29
Appr. ONLY pre '29
Post '29 Water Rights

Division 4
Water Rights by Water District



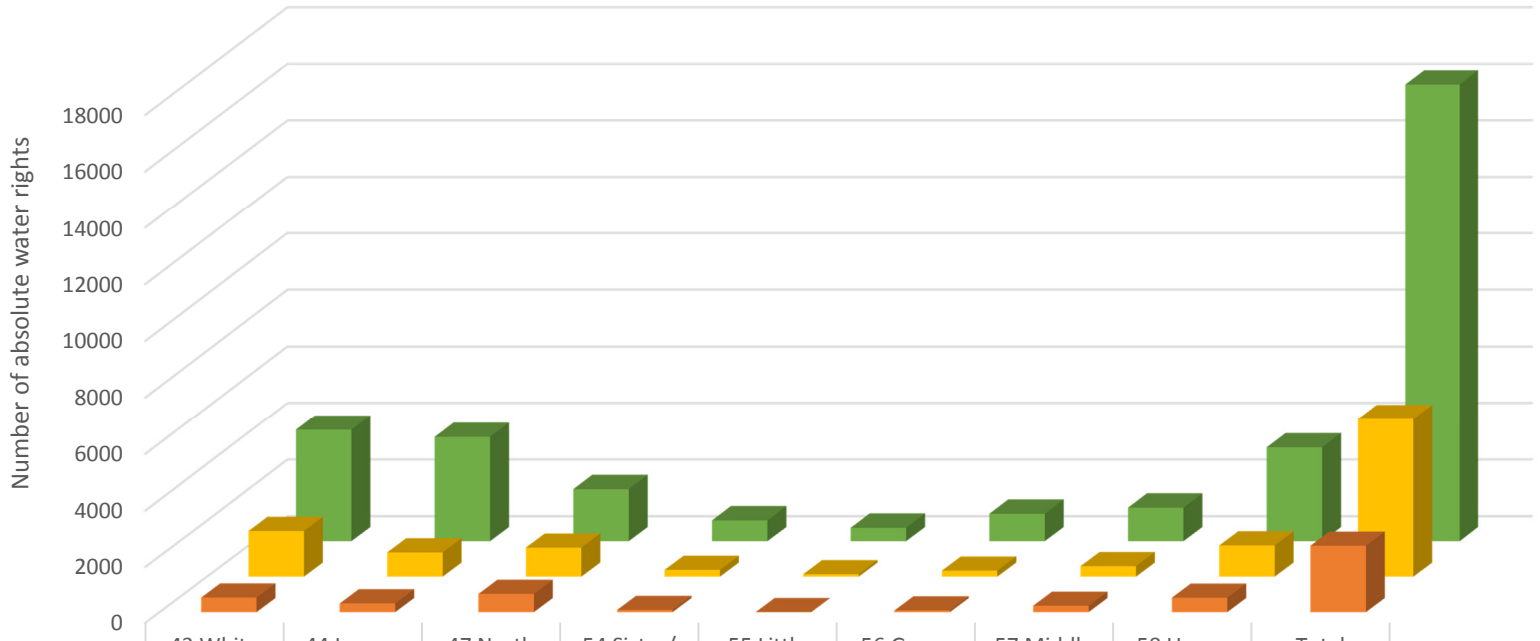
	28 Tomichi Creek	40 North Fork/ Tribs.	41 Lower Uncompahgre River	42 Lower Gunnison River	59 East River Basin	60 San Miguel River Basin	61 Paradox Creek	62 Upper Gunnison River	63 Dolores River Basin	68 Upper Compagh re River	73 Little Dolores River	Total
Adjudicated (pre-1929)	318	637	146	76	427	280	56	147	7	258	27	2379
Appropriated (pre-1929)	1128	2515	351	358	1271	1238	91	815	310	605	94	8776
Total Water Rights	1762	4761	1136	800	2568	2688	184	2015	608	1404	247	18173

Division 5
Water Rights by Water District



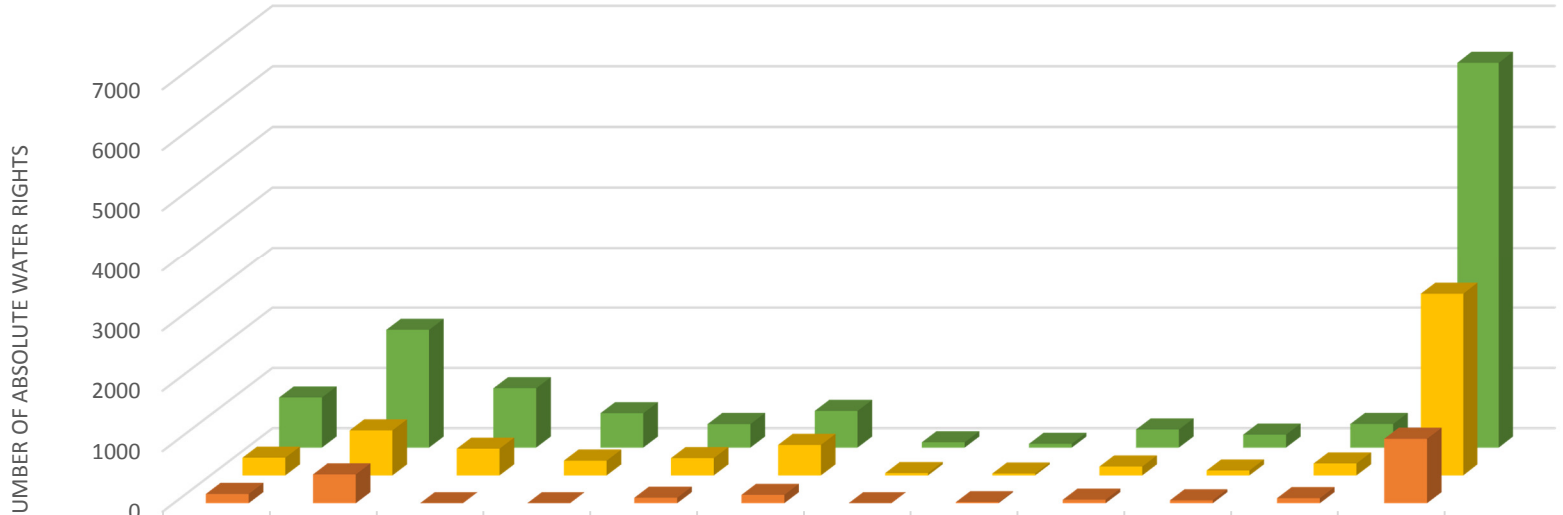
	36 Blue River Basin	37 Eagle River Basin	38 Roaring Fork River Basin	39 Rifle, Elk, Parachute Creeks	45 Divide Creek	50 Muddy/ Trouble-some Creeks	51 Upper Colorado/ Fraser River	52 Piney/ Cotton-wood Creeks	53 Tribs. North of Colorado River	70 Roam Creek Basin	72 Lower Colorado River	Total
Adjudicated (pre-1929)	467	923	741	496	380	192	436	140	310	209	433	4727
Appropriated (pre-1929)	845	1475	1355	785	597	306	666	251	479	353	951	8063
Total Water Rights	1719	3246	4839	2109	1473	464	1811	715	1323	662	2475	20836

Division 6
Water Rights by Water District



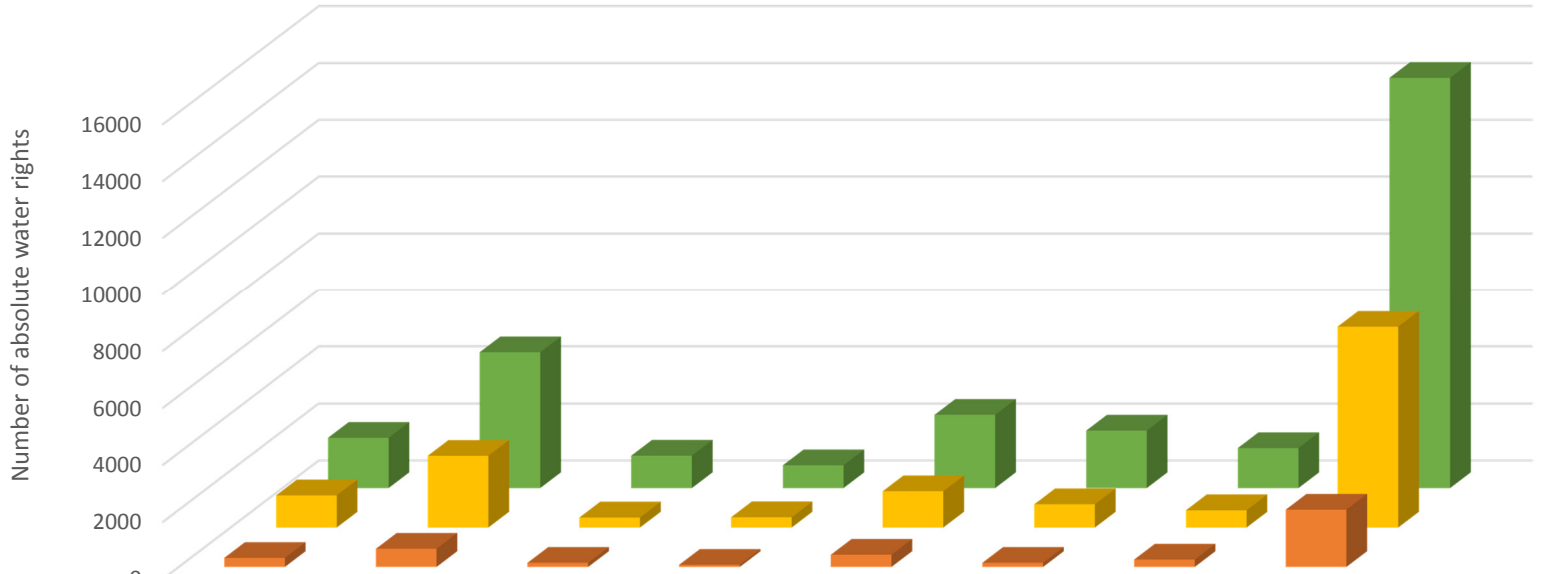
	43 White River Basin	44 Lower Yampa River	47 North Platte River Basin	54 Sister/ Timberlake Creeks	55 Little Snake River	56 Green Riber Basin	57 Middle Yampa River	58 Upper Yampa River	Total
Adjudicated (pre-1929)	520	313	653	80	4	62	229	517	2378
Appropriated (pre-1929)	1634	869	1041	242	90	217	378	1118	5589
Total Water Rights	3938	3682	1840	741	480	974	1188	3313	16156

Division 7
Water Rights by Water District



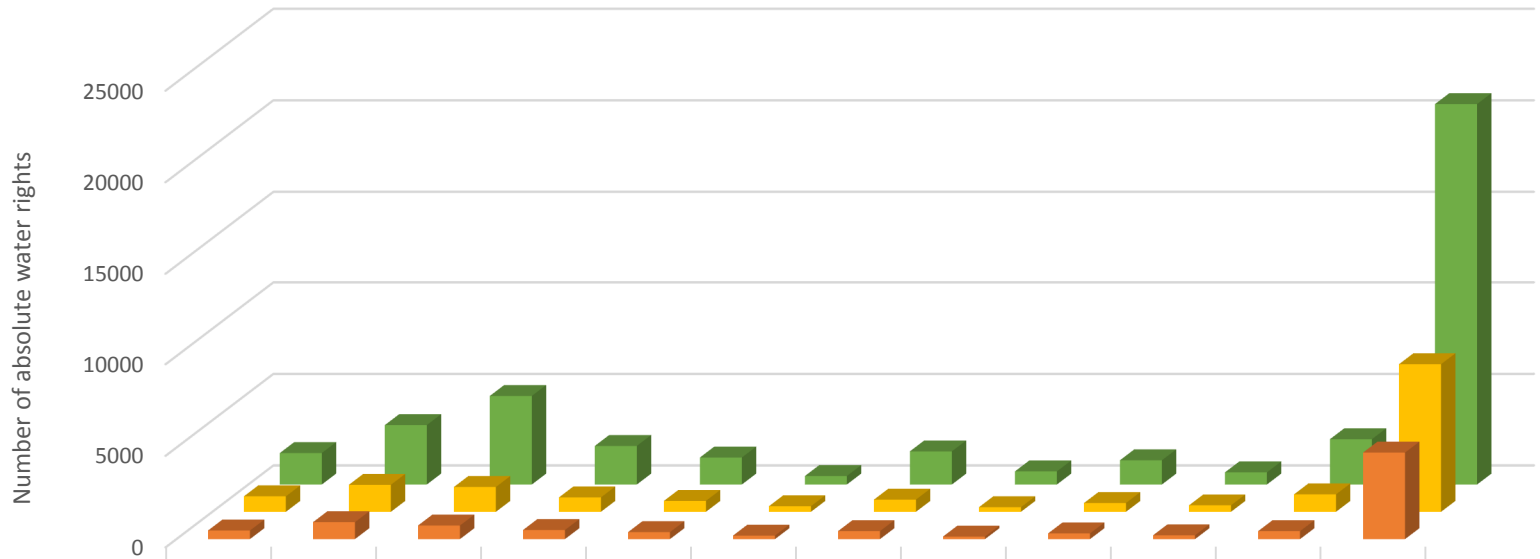
	29 San Juan River Basin	30 Animas River Basin	31 Los Pinos River Basin	32 McElmo Creek Basin	33 La Plata River Basin	34 Mancos River Basin	46 Navajo Reservoir	69 Disappointment Creek Basin	71 West Dolores Creek/ Tribs.	77 Navajo River Basin	78 Piedra River Basin	Total
Adjudicated (pre-1929)	153	476	0	0	91	138	0	16	58	48	84	1064
Appropriated (pre-1929)	293	744	442	244	286	504	39	31	147	81	198	3009
Total Water Rights	829	1950	982	569	389	607	88	62	299	214	390	6379

Gunnison Basin Roundtable
Water Rights by Water District



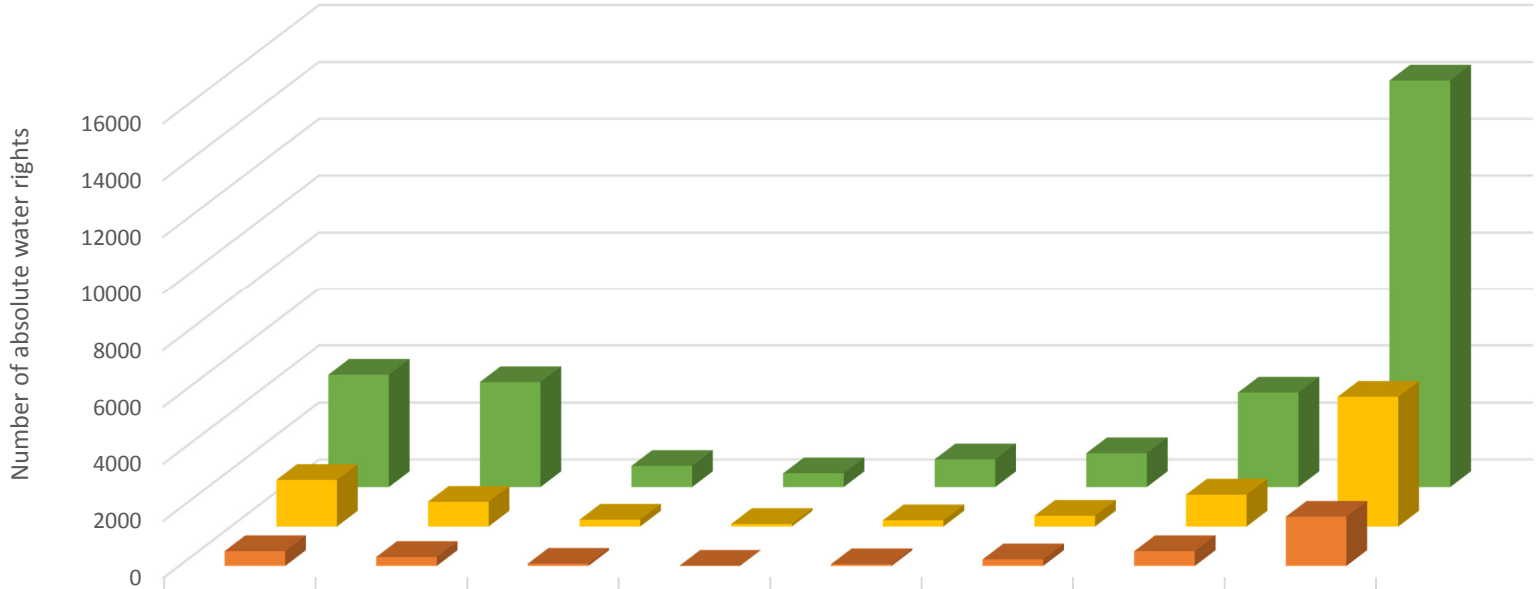
	28 Tomichi Creek	40 North Fork/ Tribs.	41 Lower Uncompahgre River	42 Lower Gunnison River	59 East River Basin	62 Upper Gunnison River	68 Upper Compaghre River	Total
Adjudicated prior to 1929	318	637	146	76	427	147	258	2009
Appropriated prior to 1929	1128	2515	351	358	1271	815	605	7043
Total Water Rights	1762	4761	1136	800	2568	2015	1404	14446

Colorado Basin Roundtable
Water Rights by Water District



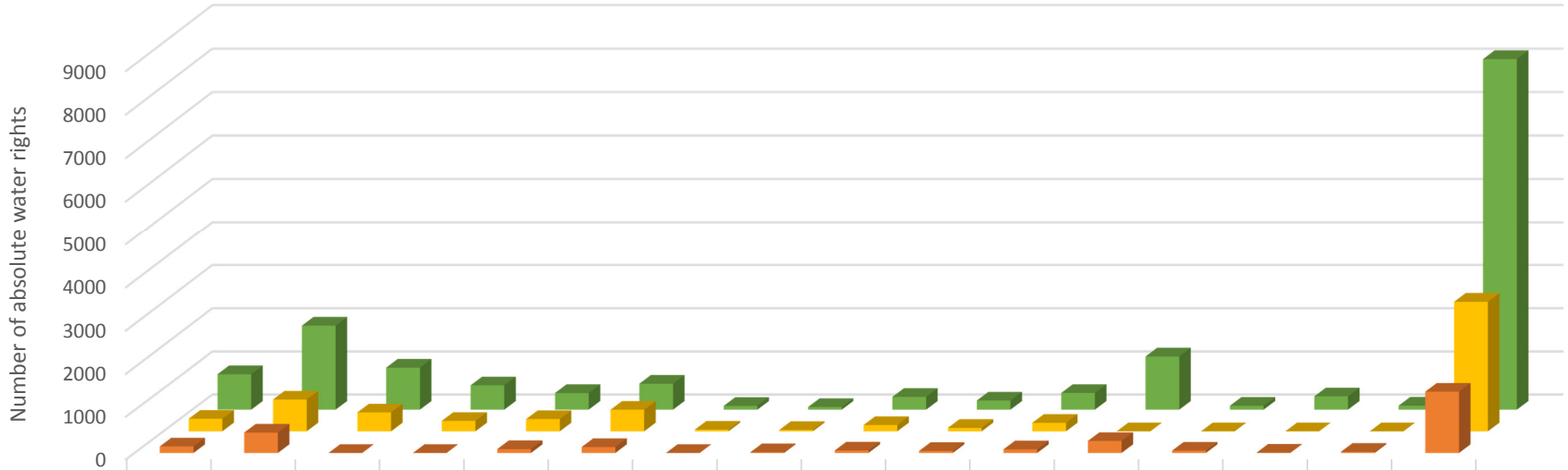
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Adjudicated prior to 1929	467	923	741	496	380	192	436	140	310	209	433	4727
Appropriated prior to 1929	845	1475	1355	785	597	306	666	251	479	353	951	8063
Total Water Rights	1719	3246	4839	2109	1473	464	1811	715	1323	662	2475	20836

Yampa, White, Green Basin Roundtable
Water Rights by Water District



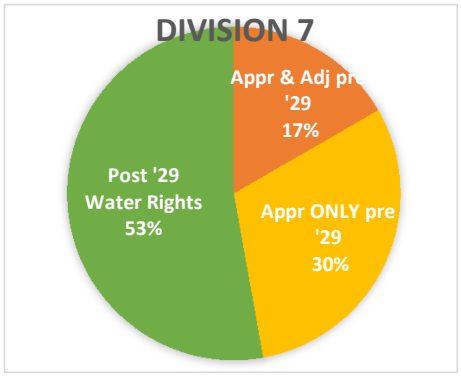
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Adjudicated prior to 1929	520	313	80	4	62	229	517	1725
Appropriated prior to 1929	1634	869	242	90	217	378	1118	4548
Total Water Rights	3938	3682	741	480	974	1188	3313	14316

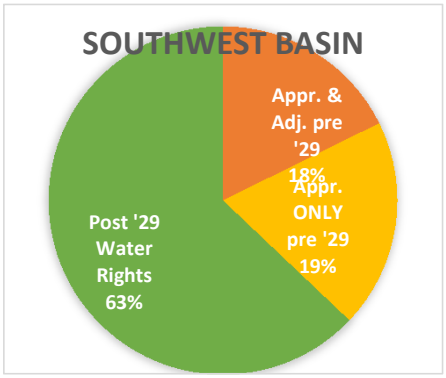
Southwest Basin Roundtable
Water Rights by Water District

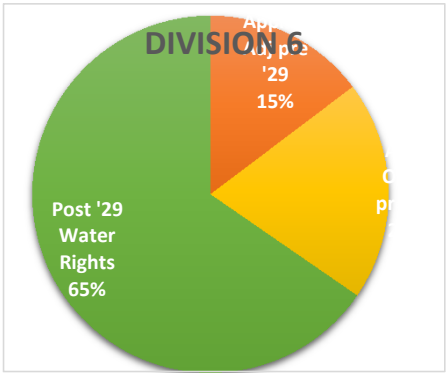


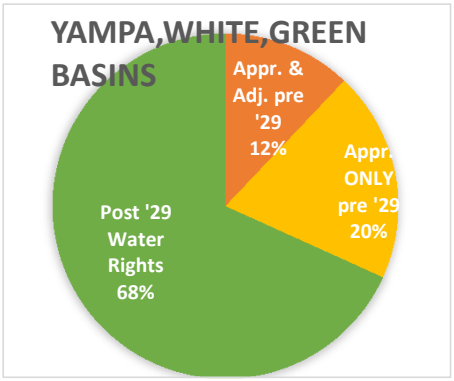
	29 San Juan River Basin	30 Animas River Basin	31 Los Pinos River Basin	32 McElmo Creek Basin	33 La Plata River Basin	34 Mancos River Basin	46 Navajo Reservoir	69 Disap-pointment Creek Basin	71 West Dolores Creek /Tribs.	77 Navajo River Basin	78 Piedra River Basin	60 San Miguel River Basin	61 Paradox Creek	63 Dolores River Basin	73 Little Dolores River	Total
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Appropriated prior to 1929	293	744	442	244	286	504	39	31	147	81	198	0	0	0	0	3009
Total Water Rights	829	1950	982	569	389	607	88	62	299	214	390	1238	91	310	94	8112

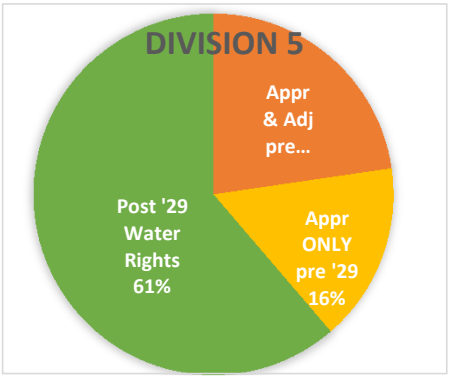
Overall Comparisions by Divsions and Roundtable basins

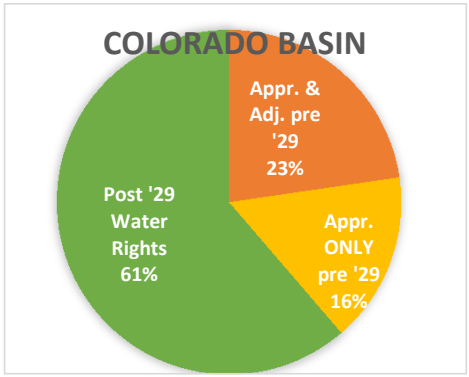


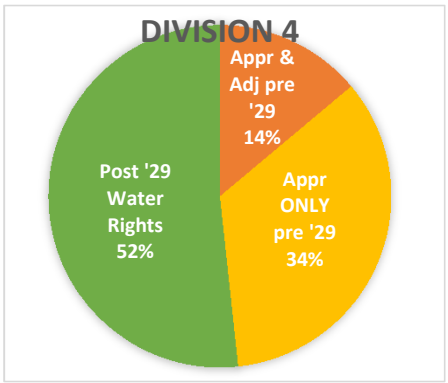


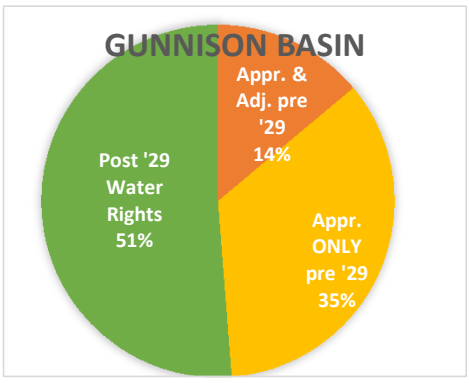












Water Supply Reserve Account Annual Report

October 31, 2014



The Rough & Ready Ditch Rides Again
2013 Flood Restoration efforts continue with CWCB's $2.6M Emergency Flood Recovery Grant Program

To the House of Representatives Committee on Agriculture, Livestock, and Natural Resources and the Senate Committee on Agriculture, Natural Resources, and Energy

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Background

The Water Supply Reserve Account (Account) was created in 2006 by Senate Bill 06-179. The legislature created the Account to help citizens identify and meet their critical water supply and management needs. The Account may be used to:

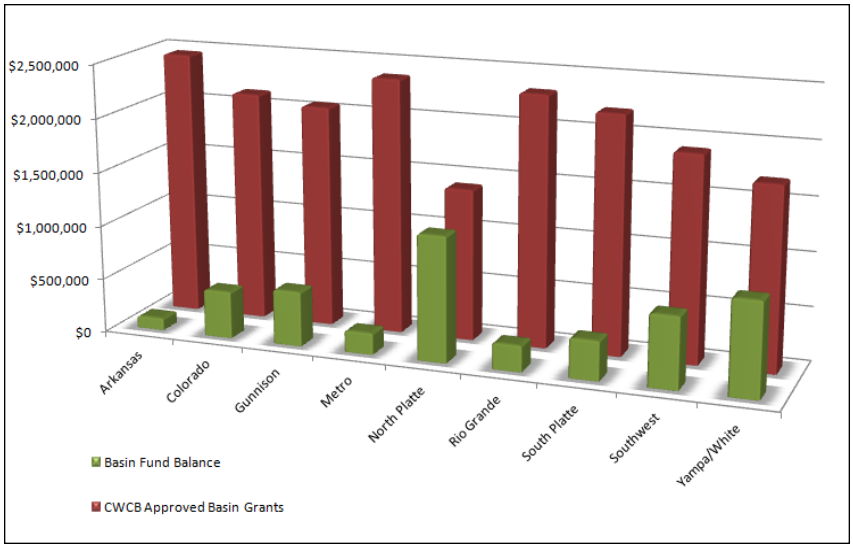
- Identify human, environmental, or recreational water needs (also commonly referred to as "Needs Assessments")
- Evaluate water supplies in each basin
- Build projects or identify methods to meet the water supply needs of the river basin

The authorizing legislation provides funds for a broad range of eligible activities including: construction of infrastructure (storage, pipelines, river improvements, etc.), feasibility studies, studies of human and environmental needs, and technical assistance for permitting or environmental compliance.

Overview

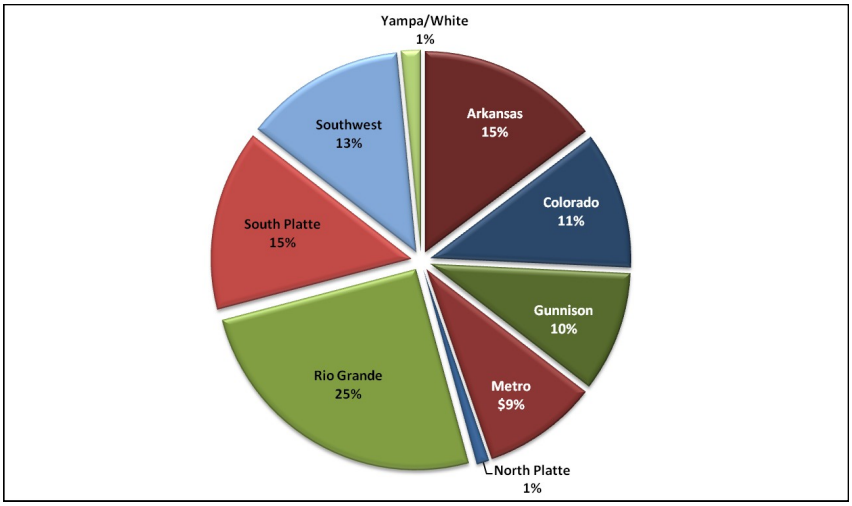
The Account is administered by the Colorado Water Conservation Board (CWCB) in collaboration with the Interbasin Compact Commission (IBCC) and the 9 Basin Roundtables established under House Bill 05-1177 (Colorado Water for the 21st Century Act). Requests for funding begin at the Basin Roundtables. Applications approved by the local Roundtable are submitted to the CWCB. To date, all funding has been for grants, though most project sponsors provide matching funds and/or leverage other monies.

Monies from the Account are distributed according to the Criteria and Guidelines, which were jointly developed by the CWCB and IBCC in collaboration with the Basin Roundtables. The Criteria and Guidelines are reviewed annually in October to consider changes to the Account's operation. The Criteria and Guidelines, application, and other materials are available on the CWCB website.



Total, Approved, and Remaining Funds for the WSRA Basin Accounts			
Basin	Total Basin Funds Allocated	CWCB Approved Basin Grants	Basin Fund Balance
Arkansas	$2,569,542	$2,458,419	$111,123
Colorado	$2,569,542	$2,132,430	$437,112
Gunnison	$2,569,542	$2,060,544	$508,998
Metro	$2,569,542	$2,369,979	$199,563
North Platte	$2,569,542	$1,408,668	$1,160,874
Rio Grande	$2,569,542	$2,326,422	$243,120
South Platte	$2,569,542	$2,204,386	$365,156
Southwest	$2,569,542	$1,906,626	$662,916
Yampa/White	$2,569,542	$1,696,190	$873,352
Grand Total	$23,125,877	$18,563,663	$4,562,214

Figure 1. Basin Fund Distribution Approved per Basin



Basin	Arkansas	Colorado	Gunnison	Metro	North Platte	Rio Grande	South Platte	Southwest	Yampa/ White
Approved from Statewide Account	$5,871,379	$4,388,010	$3,867,287	$3,696,968	$408,078	$10,034,323	$5,810,973	$5,162,859	$612,063
Number of Projects	33	15	19	17	4	29	22	18	7

*Note: Some projects are associated with multiple Basins, in this case the project was counted for each associated basin

Figure 2. Statewide Fund Distribution Approved per Basin ($39,851,939)

Program Highlights

- Almost $58,000,000 Granted for 289 Projects Across Colorado
- Over $102,000,000 Leveraged with Matching contributions (cash and in-kind) from Numerous Other CWCB, Other State, Federal, and Local Sources
- Projects Recommended by Basin Roundtables on a Consensus Basis with Final Approval by the CWCB

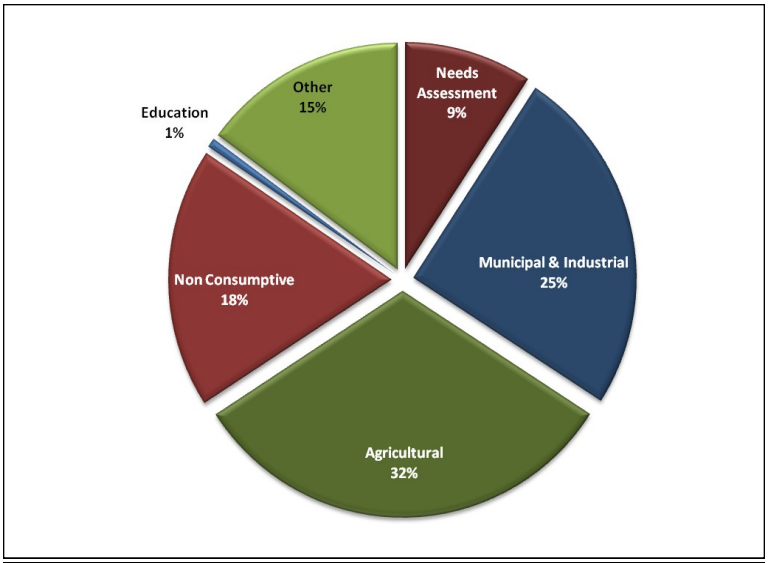
Accomplishments

Water Supply Reserve Account projects have been approved across the entire state (see map on page 6). The WSRA Criteria and Guidelines split the funds into Basin Accounts and a Statewide Account. Each Basin Account has received $2,569,542 to date.

Figure 1 on page 2 show the amounts approved from each Basin Account (totaling $18,563,663).

To date, the Statewide Account has received $42,756,420, with $39,851,939 in approved grants. The distribution of WSRA funds from the Statewide Account per basin is shown in Figure 2 (page 2).

Projects funded from the Account have addressed both consumptive (agricultural and municipal) and nonconsumptive (environmental and recreational) needs with most of the projects addressing multiple needs. Figure 3 shows the distribution of WSRA funding by primary category.



Type	Needs Assessment	Municipal & Industrial	Agricultural	Nonconsumptive	Education	Other
Arkansas	$1,123,975	$2,033,868	$1,418,948	$981,805	$71,237	$2,746,936
Colorado	$870,171	$990,000	$2,132,499	$2,467,364	$51,263	$9,143
Gunnison	$235,000	$2,367,987	$2,362,014	$307,165	$17,730	$637,935
Metro	$1,122,337	$3,417,928		$1,175,000	$30,839	$320,843
North Platte	$301,602	$385,000	$423,586	$202,000	$14,040	$490,517
Rio Grande	$310,800		$8,105,530	$3,133,371	$97,337	$713,707
South Platte	$853,513	$552,737	$1,726,579	$2,012,387	$32,038	$2,838,105
Southwest	$203,142	$4,331,158	$1,840,449	$294,093	$20,000	$230,643
Yampa/White	$351,410	$449,897	$476,778	$269,002	$60,000	$701,166
Total Funding	$5,371,950	$14,528,575	$18,486,383	$10,842,187	$394,483	$8,688,995
Number of Projects						
Arkansas	6	10	12	9	4	13
Colorado	5	6	12	13	2	1
Gunnison	2	15	18	6	1	5
Metro	5	12		5	2	5
North Platte	2	1	5	2	1	4
Rio Grande	1		29	9	4	6
South Platte	4	6	9	10	1	6
Southwest	3	21	20	5	1	4
Yampa/White	2	5	5	3	3	6

*Note: Some projects are associated with multiple basins, in this case projects were counted for each associated basin

Figure 3: WSRA distribution of funding by primary category

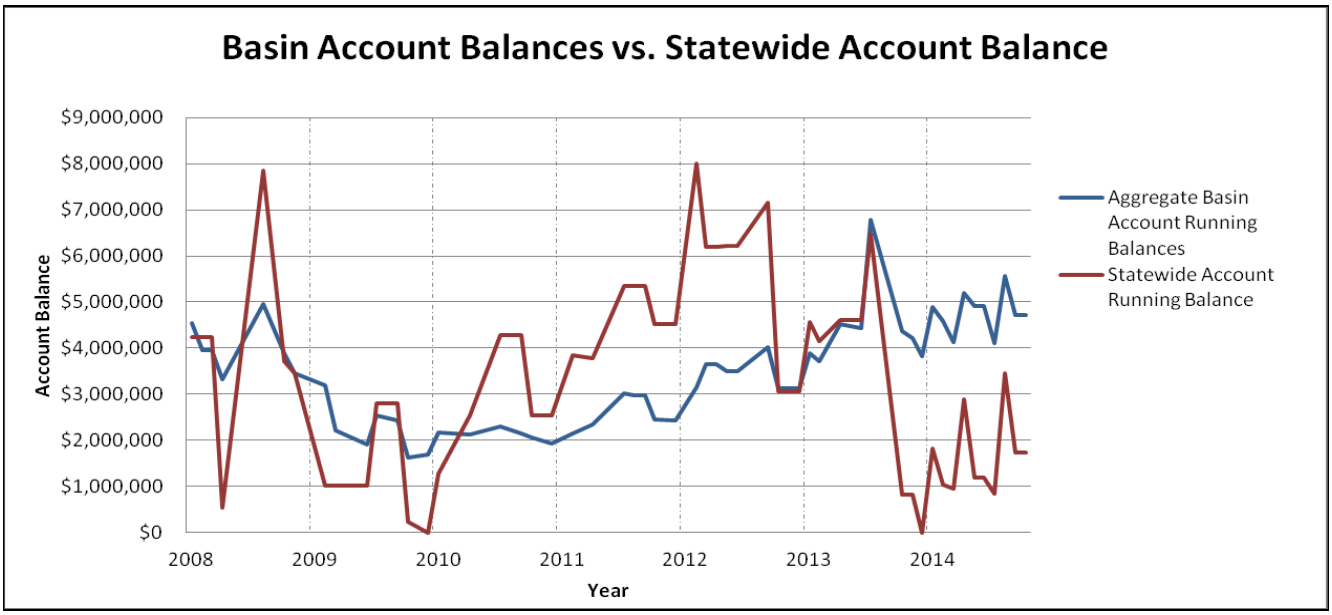


Figure 4: Basin and Statewide Account Balances

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In the Spotlight

Josh Ames Diversion Deconstruction and Sterling Pond Reconstruction on the Cache la Poudre

Initiated by local interests, the Colorado Water Trust has led this collaborative effort to restore a large segment of the Cache la Poudre River to a more natural condition. The removal of the Josh Ames Diversion Structure (abandoned in 1971) and restoration of Sterling Ponds is the first phase and one component of an ambitious and so far successful attempt by the South Platte Basin Roundtable ($75,000), the Metro Roundtable ($25,000), CWCB ($200,000 Statewide Account funds), Colorado Water Trust, the City of Fort Collins, Larimer County and local breweries to implement the *Poudre River Vision.* This project is an excellent example of Basin Roundtables working together, and the opportunity to leverage other funding sources to achieve a common goal.

WSRA Grant funds have been expended to restore ½ mile of the riparian corridor, restoration of 5.7 acres of wetlands and riparian habitat as well as reconnection of the floodplain to the river. Removal of this barrier (one of many barriers planned for removal as part of the larger project) will cumulatively improve the transitional habitat that may be used by several threatened and endangered plains fish species (cutthroat trout, minnow & darter species). Removal of the diversion structure also provides increased safety; and enhances enjoyment of the river by float-boaters.

CWCB Responds to 2013 Flooding with $2.6 Million in WSRA Emergency Flood Recovery Grants

The CWCB approved $2,555,000 ($2,255,000 Statewide Account, $150,000 South Platte Basin Account, and $150,000 Metro Account) to assist Coloradoans in their recovery efforts resulting from the September 2013 flooding. This funding has been administered and distributed by the Northern Colorado Water Conservancy District (Northern Water) in cooperation with CWCB staff. Northern Water has stepped forward as a community leader and has offered their services without charge to reach out to the community to administer and distribute WSRA Funds.

Grant funds are to be used by water users and water providers as "seed money" to perform damage assessments, facilitate loan and additional grant applications which may be required to fund the full cost of needed repairs, master planning, engineering and permitting for projects, as well as to accomplish initial needed repairs and construction that will assist beneficiaries in getting back online temporarily or permanently.

Currently, 113 grants have been approved through the good efforts of Northern Water with approximately $1.3 million having been distributed to grantees as of September 2014. 54 grants, or 30% of the total approved have been completed and are considered closed, with a remaining balance of $1.3 million waiting to be distributed.

Funds from the Account provide the means to conduct studies of water needs and actual project implementation. Figure 5 (page 5) shows how the Account has supported both aspects of water projects by amount of funding as well as number of projects funded. Though the Account has funded a large amount of studies it is clear that much more focus and funding has gone towards the implementation of projects to meet critical water supply needs.

Observations

The Water Supply Reserve Account Program has been a tremendous success. The Account has funded a mix of consumptive and nonconsumptive water projects and promoted multi-purpose projects throughout the State. The Account has funded projects that help Colorado meet its water supply needs with funding that was not available until the passage of the legislation. A sampling of concrete results from the program can be seen in Table 2.

By the Numbers: A Sampling of data from the WSRA Program	
New Storage Created (acre-feet)	875
New Annual Water Supplies (acre-feet)	13,498
Existing Storage Preserved or Enhanced (acre-feet)	135,209
Length of Stream Restored or Protected (linear feet)	578,909
Length of Pipe/Canal Built or Improved (linear feet)	964,888
Area of Restored or Preserved Habitat (acres)	58,453
Efficiency Savings (acre-feet/year)	65,779
Efficiency Savings (dollars/year)	25,000
Reports/Studies (engineering, feasibility, water-shed, etc.)	139

Table 2: Data from approved WSRA projects

The annual review of the Criteria and Guidelines allows for program adjustments. Adjustments to the Criteria and Guidelines have enabled the WSRA to adapt to the changing needs of Colorado's water community and meet the diverse needs of projects throughout the state.

Figure 6 summarizes the status of all approved WSRA projects. Currently there are 135 active grants (In Progress and Contracting), involving approximately $29.8 million. Per the WSRA Criteria and Guidelines applications for the Basin Account are considered at each of the CWCB's bi-monthly board meetings once they have received approval from the appropriate basin roundtable as documented in a letter from the roundtable's chair. Applications to the Statewide Account are considered twice a year, at the September and March CWCB board meetings.

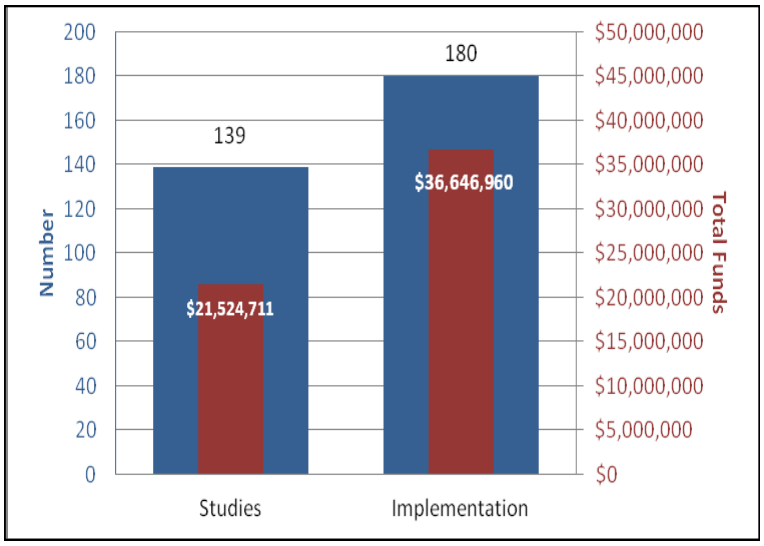


Figure 5. WSRA Funding for Studies and Implementations

Funding Summary

Table 3 displays the legislative appropriations and actual funds received by the Water Supply Reserve Account Program since its inception in 2006. In 2009, the Water Supply Reserve Account Program was reauthorized in perpetuity by SB 09-106. SB 09-106 appropriates $10,000,000 per year from the Severance Tax Trust Fund, subject to available funding. Due to budget shortfalls the WSRA has received reduced funding in some years. It is authorized to receive $10,000,000 in FY2015.

As a Severance Tax "Tier II" program appropriated funds are distributed on a 3-part schedule as available with 40% on July 1, 30% on January 1, and

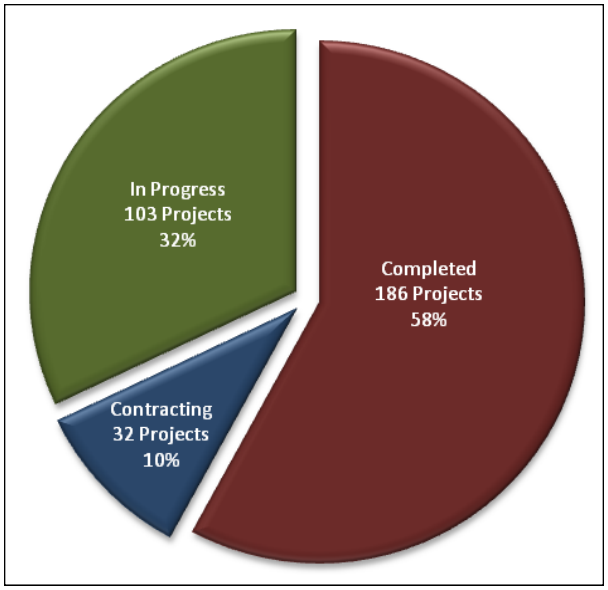


Figure 6. Summary of WSRA Project Status (321 Total Projects)

WSRA Fund Appropriation and Receipts
October 2014

Fiscal Year	Legislative Appropriation	Funds Received	Statewide Account	Basin Accounts
2006/2007	$10,000,000	$10,000,000	$5,500,000	$4,500,000
2007/2008	$6,000,000	$6,000,000	$4,200,000	$1,800,000
2008/2009	$10,000,000	$7,000,000	$4,300,000	$2,700,000
2009/2010	$5,775,000	$5,775,000	$4,215,750	$1,559,250
2010/2011	$6,000,000	$6,000,000	$4,380,000	$1,620,000
2011/2012	$7,000,000	$7,000,000	$4,732,000	$2,268,000
2012/2013	$10,000,000	$7,157,724	$4,580,943	$2,576,781
2013/2014	$10,000,000	$10,091,639	$6,458,649	$3,632,990
2014/2015	$10,000,000	$4,000,000	$2,560,000	$1,440,000
Interest	N/A	$2,857,935	$1,829,078	$1,028,856
TOTAL	$74,775,000	$65,882,298	$42,756,420	$23,125,877

Note: The WSRA is a Severance Tax "Tier II" program with 40% of funds distributed on July 1, 30% on January 1, and the final 30% on April 1.
In FY 2008/2009 the final 30% installment of $3,000,000 was not received due to the State's budgetary shortfall.
In January 2012 interest for the program from its inception to date was credited directly to the Statewide Account.
Interest from January 2012 on is regularly calculated by the Treasury and credited to the Statewide Account.

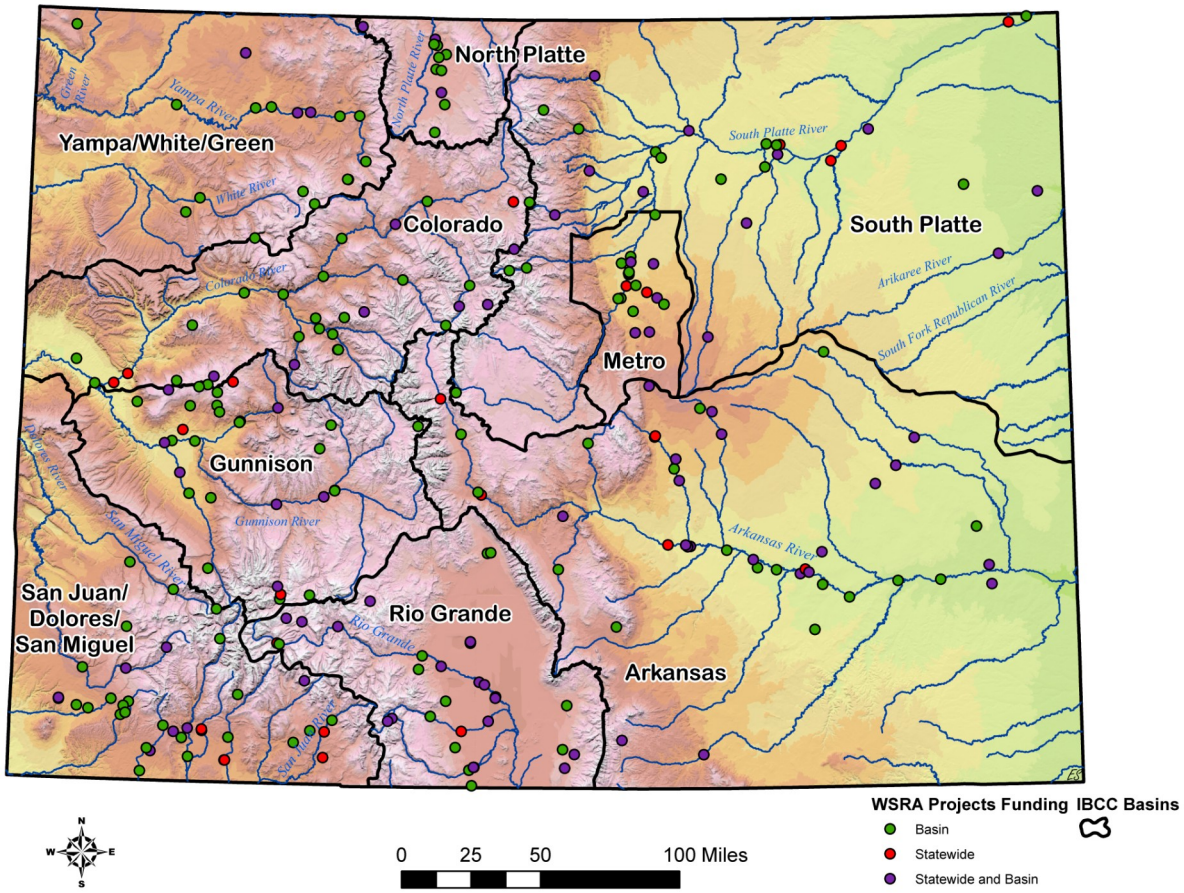
Table 3. Summary of WSRA Appropriations and Receipts

the final 30% on April 1 of the fiscal year. All funds are subject to availability of revenues from current severance tax collection. In Fiscal Year 2008/2009 the final 30% installment was not received due to the state's budgetary shortfall. Table 3 also shows the breakdown of funds between the Basin and Statewide Accounts as directed by the Criteria and Guidelines. The Basin Account funds are then distributed evenly among the 9 basin roundtables.

Colorado's Water Plan & Basin Implementation Plans

The Basin Roundtables have played a critical role in the development of Colorado's Water Plan. Each Basin Roundtable has submitted to the CWCB their Draft Basin Implementation Plan on July 31, 2014. These plans offer solutions for how each basin's future water needs will be addressed at the local level. These Basin Implementation Plans are being incorporated into Colorado's Water Plan so that we can understand at both the basin and statewide level how Colorado's water needs will be addressed. The Basin Roundtable efforts continue beyond the Draft submittal of Colorado's Water Plan to the Governor on December 10, 2014, with a Final Basin Implementation Plans submittal date of April 2015. Funding for the Basin Implementation Plans has been provided by the Basin Roundtables and the CWCB via the WSRA Grant Program where approximately $3.9 million has been expended ($2.6 million from the Basin Accounts, and $1.3 million from the Statewide Account).

Geographic Distribution of WSRA Projects



Water Supply Reserve Account Applications Approved by the CWCB

Name of Water Activity	Basin Account	Statewide Account	Total
Arkansas Basin Total Request	**$2,458,419.00**	**$5,871,378.64**	**$8,277,864.64**
Arkansas Valley Conduit	$64,300.00		$64,300.00
Ground Water Conference	$24,721.00		$24,721.00
Non-native Phreatophyte Trees & Mapping Project	$50,000.00		$50,000.00
Upper Black Squirrel Creek Aquifer Recharge Investigation	$45,200.00		$45,200.00
Fountain Creek Vision Task Force	$75,000.00		$75,000.00
Round Mountain Water & Sanitation District Water System Improvements Project	$120,000.00		$120,000.00
Rotational Land Fallowing-Water Leasing Program -Lower Arkansas Super Ditch Company	$150,000.00		$150,000.00
Upper Big Sandy Water Balance	$45,000.00		$45,000.00
Model Transfers- Agriculture to Urban, Arkansas Basin	$23,860.00		$23,860.00
Arkansas Headwaters Diversion Structure Improvement Project Arkansas River Basin		$57,954.50	$57,954.50
City of Las Animas Water System Improvements	$100,000.00	$200,000.00	$300,000.00
Colorado State Parks Zebra Mussel Response		$1,000,000.00	$1,000,000.00
Telemetry data collection platforms at six reservoirs plus flow control equipment & gauging at six reservoir outlet channels & nine streams w/in the Upper Ark River basin	$75,000.00	$210,332.00	$285,332.00
Demonstration of Membrane Zero Liquid Discharge Process for Drinking Water Systems	$25,000.00	$233,333.00	$258,333.00
Geospatial Decision Support System for Integrated Water Management in the Arkansas River Basin	$100,000.00	$500,000.00	$600,000.00
John Martin Wetlands & Neenoshe Reservoir Nonconsumptive Needs Quantification	$148,975.00		$148,975.00
UAWCD Hydrologic Water Balance Study		$180,000.00	$180,000.00
Bedload/Sediment Collection and Removal Technology - Fountain Creek	$75,000.00	$150,000.00	$225,000.00
Flaming Gorge Project Task Force Assessment	$40,000.00		$40,000.00
Stakeholder's Cooperative Management Analysis for the Upper Arkansas River Basin	$33,600.00		$33,600.00
Fountain Creek Fish Marking and Monitoring Study	$7,000.00	$28,000.00	$35,000.00
Trinidad/Purgatoire River Reach 4 Demonstration Project	$75,000.00		$75,000.00
The use of excess storage capacity in Blue Mesa Reservoir to avoid or reduce the impact of a Colorado River Compact curtailment in Colorado	$24,500.00	$98,000.00	$122,500.00
Helena Diversion Structure/BV Boat Chute Improvement Project	$35,000.00	$290,000.00	$325,000.00
Raising Awareness in 2012: A Statewide Celebration of Colorado Water		$30,515.00	$30,515.00
Super Ditch Delivery Engineering		$225,837.00	$225,837.00
A Multi-Media Program for Reporting Crop and Turf Water Use Estimates from the Colorado Agricultural Meteorological Network (CoAgMet)	$9,394.00	$37,577.00	$46,971.00
Rotating Agricultural Fallowing Public Policy Working Group	$20,000.00		$20,000.00
Basin Roundtable Project Exploration Committee: Flaming Gorge	$5,300.00	$7,142.87	$12,442.87
Colorado Water 2012	$6,255.00		$6,255.00
North Lake Dam Rehabilitation Project	$36,962.00	$702,273.00	$739,235.00
Groundwater Quality Study - Phase 2 - Upper Black Squirrel Creek Alluvial Aquifer in the Arkansas River Basin	$35,000.00		$35,000.00
Ag-Municipal Conservation Easement Demonstration	$54,000.00	$216,000.00	$270,000.00
Hale Reservoir Renovation – Final Design & Permitting	$20,000.00	$100,000.00	$120,000.00
Mount Pisgah Dam/Wrights Reservoir Outlet Works Rehabilitation	$25,000.00	$136,345.00	$161,345.00
Build, Assess, and Document Accounting and Administration Tools for Lease Fallowing in the Arkansas River Valley	$20,000.00	$39,215.00	$59,215.00
Purgatorie River Reach 3 Habitat Improvement Project	$25,250.00		$25,250.00
Arkansas River Basin Study		$205,691.00	$205,691.00
Fountain Creek Bank Restoration at the Frost Ranch	$30,000.00	$75,000.00	$105,000.00
Agricultural Economics and Water Resources: Methods, Metrics and Models - A Speciality Workshop	$9,746.00		$9,746.00
Ordway Cattle Feeders Water Line Extension, Phase II	$50,000.00	$22,500.00	$72,500.00
Water Tank Replacement	$64,300.00		$64,300.00
Bear Creek Sediment Mitigation Project (Phase I)	$15,000.00	$85,000.00	$100,000.00
Royal Gorge Wildfire Water Quality Impact and Protection Project – Emergency Mitigation, Stabilization, and Reclamation	$24,260.00	$267,284.27	$291,544.27
Pikes Peak Regional Water Supply Infrastructure Study	$25,000.00	$50,000.00	$75,000.00
Lamar Raw Water Transmission Line Replacement Project	$50,000.00	$150,000.00	$200,000.00

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Water Supply Reserve Account Applications Approved by the CWCB

Name of Water Activity	Basin Account	Statewide Account	Total
Arkansas Basin Continued			
Arkansas Basin Implementation Plan	$183,471.00	$51,709.00	$235,180.00
Helena Diversion Structure/BV Boat Chute Improvement Project - Phase 2	$43,125.00		$43,125.00
Red Wing Augmentation Facility	$50,000.00	$200,000.00	$250,000.00
Arkansas Basin Implementation Plan - Phase 2	$209,200.00	$104,600.00	$313,800.00
Arkansas Basin Implementation Plan - Modeling & Shortage Analysis	$70,000.00	$30,000.00	$100,000.00
FIRI Analysis and Tailwater Return Flow Study on Fort Lyon Canal	$30,000.00	$145,137.00	$175,137.00
El Paso County Groundwater Quality Study Phase 2c	$10,000.00	$41,933.00	$51,933.00
Name of Water Activity	Basin Account	Statewide Account	Total
Colorado Basin Total Request	**$2,132,429.51**	**$4,388,009.86**	**$6,520,439.37**
Enlargement of Eagle Park Reservoir	$100,000.00	$400,000.00	$500,000.00
Upper Colorado Endangered Fish Recovery Alternatives Analysis (10,825)		$200,000.00	$200,000.00
Roaring Fork Watershed Assessment	$40,000.00		$40,000.00
Vail Ditch Project		$1,500,000.00	$1,500,000.00
Bull Creek Reservoir No. 5 Spillway Adequacy Analysis	$50,000.00		$50,000.00
Missouri Heights	$25,000.00		$25,000.00
Energy Development Water Needs Assessment (300,000 Joint Application see Colorado)		$150,000.00	$150,000.00
Old Dillon Reservoir	$100,000.00		$100,000.00
Fraser Sedimentation Basin	$60,000.00	$127,900.00	$187,900.00
Grand County Stream Flow Management Plan	$100,000.00		$100,000.00
Roaring Fork Watershed Assessment -Phase 2	$40,000.00		$40,000.00
Battlement Reservoir #3 Dam reconstruction to enhance recreational & environmental opportunities	$80,000.00		$80,000.00
Feasibility and design assessment of off-channel reservoir sites in the Crystal River watershed	$40,000.00		$40,000.00
Colorado Basin Nonconsumptive Needs Quantification	$315,171.00		$315,171.00
Solicitation of Stakeholders input and advice through a Colorado River Basin edition of Headwaters Magazine Colorado	$25,000.00		$25,000.00
Grand River Ditch Pipeline	$25,000.00		$25,000.00
L.E.D.E. Ditch and Reservoir Reconstruction	$50,000.00	$175,000.00	$225,000.00
Small Acreage Irrigation Audit Program	$18,273.00		$18,273.00
Canal #1 Check Structure Pilot Project at Dalton, Kiefer & Springer Properties	$25,212.00		$25,212.00
Basin Roundtable Project Exploration Committee: Flaming Gorge	$2,000.00	$7,142.86	$9,142.86
Colorado Water 2012	$26,262.51		$26,262.51
Investigation of Water Savings, Water Quality benefits and Profitability of Sub Surface Drip on Alfalfa in Grand Valley	$46,894.00		$46,894.00
Upper Swan River Restoration Project	$30,000.00		$30,000.00
Colorado River Inventory & Assessment	$30,000.00		$30,000.00
Robinson Ditch Piping Improvements	$60,000.00		$60,000.00
Tenmile Creek Restoration Project	$17,500.00	$332,500.00	$350,000.00
Colorado River Restoration and Conservation Projects	$20,000.00	$90,000.00	$110,000.00
Crystal River Watershed – Assessment and Design of Restoration Projects	$15,854.00	$288,610.00	$304,464.00
Grand Valley Riparian Restoration Collaborative (GVRRC) Project	$42,726.00	$207,274.00	$250,000.00
Gore Canyon Whitewater Park at pumphouse - Colorado River	$100,000.00	$400,000.00	$500,000.00
Grace and Shehi Diversion Rehabilitation Project (Phase I & II – Alternatives Evaluation & Detailed Design)	$40,500.00		$40,500.00
Colorado Basin Implementation Plan	$266,667.00	$83,333.00	$350,000.00
Upper Colorado River Irrigation and Restoration Assessment Phase 1.	$50,000.00		$50,000.00
Missouri Heights - Mountain Meadow Irrigation Company	$50,000.00		$50,000.00
Reservoir 2 Enlargement and Lining Project	$41,620.00	$165,000.00	$206,620.00
Customer Meter Replacement Program	$100,000.00		$100,000.00
Energy Development Water Needs Assessment Study Update	$25,000.00		$25,000.00
East Mesa Water Company Tunnel Bypass Pipeline	$60,000.00		$60,000.00
Tenmile Creek Restoration Project Phase II	$13,750.00	$261,250.00	$275,000.00

Water Supply Reserve Account Applications Approved by the CWCB

Name of Water Activity	Basin Account	Statewide Account	Total
Gunnison Basin Total Request	**$2,060,543.59**	**$3,867,286.86**	**$5,927,830.45**
Safety and Serviceability Needs Inventory for Reservoirs in the Leroux Creek Drainage Basin	$60,000.00		$60,000.00
Orchard City Water Reservoir Project (Task 1-3)	$60,000.00		$60,000.00
Orchard City Water Reservoir Project (Remaining Tasks)		$480,000.00	$480,000.00
Off-System Raw Water Storage Project 7 Water Authority/Uncompahgre Valley Water Users Association	$56,700.00		$56,700.00
Paonia-Feldman Diversion Reconstruction; North Fork of the Gunnison River (Part 1 and 2)	$48,000.00	$62,700.00	$110,700.00
Sedimentation Management Study For Paonia Reservoir - North Fork of the Gunnison	$79,000.00	$230,000.00	$309,000.00
Overland Reservoir Dam Expansion/Restoration		$68,000.00	$68,000.00
Phase II Engineering for Lake San Cristobal Outlet Modification	$75,265.00		$75,265.00
Lake San Cristobal Outlet Structure Modification--Phase III		$120,960.00	$120,960.00
Ridgway Ditch and Lake Otonawanda Improvement Project	$109,500.00		$109,500.00
Juniata Reservoir Spillway Modification	$97,000.00		$97,000.00
Hartland Diversion Dam Fish Passage Feasibility Study	$22,100.00		$22,100.00
Development of Augmentation Supplies	$50,000.00		$50,000.00
75 Ditch Diversion Improvement and Feature Enhancements	$46,100.00		$46,100.00
Lake San Cristobal Outlet Structure	$150,000.00		$150,000.00
Hanson Reservoir Outlet Rehabilitation	$50,000.00		$50,000.00
The Rehabilitation of Blanche Park Reservoir	$75,000.00		$75,000.00
Valley View Irrigation Improvement	$11,817.00		$11,817.00
Blue Mesa Reservoir	$24,500.00	$98,000.00	$122,500.00
Relief Ditch Diversion Dam Design	$20,650.00		$20,650.00
Basin Roundtable Project Exploration Committee: Flaming Gorge	$2,000.00	$7,142.86	$9,142.86
Hartland Diversion Dam — Partial Dam Removal and Stabilization	$53,100.00		$53,100.00
Agricultural Weather Data Delivery Improvements to Uncompahgre Valley Irrigators	$77,000.00	$35,000.00	$112,000.00
Lining Outlet for Grand Mesa Reservoir #6	$19,840.00		$19,840.00
Gunnison Basin Roundtable Education Program	$17,729.59		$17,729.59
Tunnel Reconstruction Project	$40,000.00	$690,110.00	$730,110.00
North Fork of the Gunnison Invasive Weed Removal	$20,000.00		$20,000.00
Leon Park Reservoir Dam Outlet Repair	$31,372.00		$31,372.00
Town of Ridgway Lake Otonowanda Renovation Project	$60,000.00	$540,000.00	$600,000.00
Lake San Cristobal Inlet Preservation and Fishing Access Project	$16,700.00	$150,300.00	$167,000.00
Henson Creek and Lake Fork Confluence Channel Improvements	$28,975.00	$260,111.00	$289,086.00
Curry Easements Woody Invasives Removal Project - West Side of the North Fork of the Gunnison River	$8,865.00		$8,865.00
Lake San Cristobal Controlled Outlet Structure	$40,000.00		$40,000.00
Bonita Reservoir Dam Outlet Pipe Rehabilitation	$54,285.00		$54,285.00
Replacement of Measuring Devices on Grand Mesa	$40,000.00		$40,000.00
Gunnison Basin Implementation Plan	$133,333.00	$66,667.00	$200,000.00
Somerset Diversion Improvement Study – North Fork of the Gunnison River Corridor Project	$4,800.00	$43,200.00	$48,000.00
Lamborn Water Treatment Plant Upgrade	$75,000.00	$310,000.00	$385,000.00
Lone Cabin Dam Rehabilitation Project	$121,150.00	$46,000.00	$167,150.00
Gunnison River Riparian and Diversion Restoration Project	$45,540.00	$400,752.00	$446,292.00
No Chico Brush Agricultural Water Research Project	$35,000.00		$35,000.00
Ditch System Study (a continuation of the Tunnel Reconstruction Project)		$82,686.00	$82,686.00
Stewart Mesa Water Company Improvement Project	$12,876.00		$12,876.00
McCormick Ditch Reconstruction	$21,346.00		$21,346.00
Upper Ohio Creek Flow Restoration	$6,000.00		$6,000.00
West Reservoir No.1 Outlet Pipe Replacement	$50,000.00	$175,658.00	$225,658.00
Repair of Gunnison Whitewater Park	$10,000.00		$10,000.00
Name of Water Activity	Basin Account	Statewide Account	Total
Metro Basin Total Request	**$2,369,979.00**	**$3,717,967.83**	**$6,087,946.83**
Chatfield Reallocation EIS/FR (South Platte BRT contributing $27,000)	$103,000.00		$103,000.00
Zero Liquid Discharge Pilot Study	$200,000.00	$200,000.00	$400,000.00
Parker Water & San. & CO. State Univ Joint Project on the Rural/Urban Farm Model	$150,000.00		$150,000.00

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Water Supply Reserve Account Applications Approved by the CWCB

Name of Water Activity	Basin Account	Statewide Account	Total
Metro Basin Continued			
Upper Mountain Counties Water Needs Assessment	$43,587.00		$43,587.00
Solicitation of Stakeholder Input through a South Platte Edition of Headwaters	$16,019.00		$16,019.00
South Metro Water Supply Authority - Regional Aquifer Supply Assessment	$100,540.00		$100,540.00
Demonstration of Membrane Zero Liquid Discharge Process for Drinking Water Systems	$50,000.00	$233,333.00	$283,333.00
South Platte River Recreation and Habitat Feasibility Study	$150,000.00		$150,000.00
Lost Creek Aquifer Recharge and Storage Study	$80,000.00		$80,000.00
Aquifer Recharge Pilot Study		$550,000.00	$550,000.00
Feasibility Study for Bureau of Reclamation Funding from the National Rural Water Supply Act	$100,000.00	$500,000.00	$600,000.00
Flaming Gorge Project Task Force Assessment	$20,000.00		$20,000.00
Rotary Sprinkler Nozzle Retrofit		$250,000.00	$250,000.00
Rural Douglas County groundwater-level monitoring network	$78,263.00	$84,792.00	$163,055.00
Educating Denver Metro elected officials and decision makers on solutions-oriented water supply planning	$14,820.00		$14,820.00
South Platte River Recreation and Habitat Improvement Preliminary Design	$25,000.00	$100,000.00	$125,000.00
Basin Roundtable Project Exploration Committee: Flaming Gorge	$8,700.00	$7,142.83	$15,842.83
Denver South Platte River Implementation Project - Frontier/Overland Final Design	$175,000.00	$300,000.00	$475,000.00
Plum Valley Heights Water Supply Pipeline	$50,000.00		$50,000.00
Josh Ames Diversion Removal on Poudre River	$25,000.00	$100,000.00	$125,000.00
South Platte & Metro Integrated Basin Implementation Plan - Consumptive	$303,000.00	$152,000.00	$455,000.00
South Platte & Metro Integrated Basin Implementation Plan - Nonconsumptive	$142,000.00	$71,500.00	$213,500.00
Grant-Frontier Park West Bank Riparian Floodplain Design and Construction Project	$100,000.00	$250,000.00	$350,000.00
Water Infrastructure and Supply Efficiency (WISE) Partnership: Western Pipeline Connection Engineering/Design	$68,800.00	$619,200.00	$688,000.00
Emergency Flood Recovery Assessment, Design, and Recovery including Cycle #2	$150,000.00		$150,000.00
South Platte River Diurnal Flow Study	$50,000.00		$50,000.00
Rural Elbert County Groundwater-Level Monitoring Network	$12,000.00		$12,000.00
8th Avenue to 20th Street In-River , Recreation and Environmental Improvements and Floodplain Mitigation	$150,000.00	$300,000.00	$450,000.00
Meadow and South Ledge Diversion Reconstruction and Fish Passage Demonstration Project	$4,250.00		$4,250.00
Name of Water Activity	Basin Account	Statewide Account	Total
North Platte Basin Total Request	**$1,408,667.56**	**$408,077.92**	**$1,816,745.48**
New Pioneer Ditch Diversion Reconstruction Project	$116,000.00		$116,000.00
Town of Walden Water Supply Improvement Project	$385,000.00		$385,000.00
Effects of Mtn pine beetle and forest mgmt on water quantity, quality, and forest recovery N.P. and Upper CO River basins	$212,305.56	$164,617.92	$376,923.48
Identification and assessment of important wetlands in N.P. River watershed	$86,000.00	$96,000.00	$182,000.00
Monitoring the effects of weather conditions on the evaportranspiration in N.P.Basin	$50,409.00	$50,409.00	$100,818.00
North Park Irrigated Meadow Conservation Program - Phase I	$20,000.00		$20,000.00
Structure for Water Control	$36,000.00		$36,000.00
Solicitation of stakeholder input through production of a North Platte Basin education package	$14,040.00		$14,040.00
Structures for Water Control: Headgates and Diversion (and Additiional Funds)	$183,883.00		$183,883.00
Basin Roundtable Project Exploration Committee: Flaming Gorge	$1,000.00		$1,000.00
Seneca Ditch - Structure for Water Control	$57,539.00		$57,539.00
Mutual Ditch - Structure for Water Control	$41,940.00		$41,940.00
North Platte Basin Implementation Plan	$107,500.00		$107,500.00
Re-establishment of Lysimeters in North Park to Determine High Altitude, Hay Meadow Crop Coefficients	$97,051.00	$97,051.00	$194,102.00

Water Supply Reserve Account Applications Approved by the CWCB

Name of Water Activity	Basin Account	Statewide Account	Total
Rio Grande Basin Total Request	**$2,326,422.00**	**$10,034,322.86**	**$12,360,744.86**
Alamosa River In-stream Flow Project	$64,500.00		$64,500.00
Preliminary Design Multi-use Rio Grande Reservoir Rehabilitation and Enlargement		$288,000.00	$288,000.00
Rio Grande Basin Conservation Reserve Enhancement Program	$36,750.00		$36,750.00
Alamosa River Watershed Restoration Project		$104,000.00	$104,000.00
Romero-Guadalupe Channel Rectification Project	$83,700.00		$83,700.00
Rio Grande Initiative	$200,000.00	$1,300,000.00	$1,500,000.00
Santa Maria and Continental Reservoirs: Rehabilitation and Multiple Use Studies	$72,000.00	$141,700.00	$213,700.00
2008 Rio Grande Riparian Stabilization Project	$35,000.00	$250,000.00	$285,000.00
Platoro Reservoir Restoration	$50,000.00	$200,000.00	$250,000.00
Conejos River and North Branch Diversion and Stabilization	$50,000.00	$333,700.00	$383,700.00
Rio Grande Reservoir Multi-Use Rehabilitation: Refinement and Enhancement of Reservoir Reoperation and Optimization Model	$100,000.00		$100,000.00
San Antonio River - El Codo Ditch Diversion and Rehabilitation	$65,000.00		$65,000.00
Lower Willow Creek Restoration Project	$50,000.00	$200,000.00	$250,000.00
Sangre de Cristo Trinchera Diversion Canal Restoration	$50,000.00	$150,000.00	$200,000.00
Conservation Reserve CREP Phase II	$31,500.00		$31,500.00
Shortfall Request - Sangre de Cristo Trinchera Diversion Canal Restoration	$54,000.00		$54,000.00
2009 Rio Grande Riparian Stabilization Project - Phase 4	$50,000.00	$98,000.00	$148,000.00
Educating Today to Balance Tommorow's Water Supplies & Needs	$25,000.00		$25,000.00
San Luis Peoples Ditch Upgrade and Rehabilitation Project - Phase I	$40,000.00		$40,000.00
Conejos North Branch Water Conservation and Management	$75,000.00		$75,000.00
The McDonald Ditch and Plaza Project, Phase I Planning	$40,000.00		$40,000.00
Rio Grande Initiative: North Rio Grande Ranch Conservation Easement	$15,000.00	$55,000.00	$70,000.00
Basin Roundtable Project Exploration Committee: Flaming Gorge	$1,000.00	$7,142.86	$8,142.86
Platoro Reservoir Crest of Dam Repair	$15,000.00	$135,000.00	$150,000.00
Sanchez Reservoir Rehabilitation - Phase I Assessment & Upgrade	$10,000.00	$85,000.00	$95,000.00
Water 2012: The Rio Grande Basin Partnering for Colorado's Water Future	$15,600.00		$15,600.00
Terrace Reservoir Spillway Replacement	$75,000.00	$1,425,000.00	$1,500,000.00
Conejos River System Gauging Stations Project	$20,000.00	$387,280.00	$407,280.00
Rio Grande County Hydrogeologic Study	$99,564.00		$99,564.00
Rio Grande Initiative: Haywood Ranch Conservation Easement	$25,000.00	$400,000.00	$425,000.00
Sanchez Reservoir Phase 2 - Outlet Rehabilitation and Gate Tower Replacement	$55,000.00	$859,400.00	$914,400.00
Solicitation of Stakeholders Input & Advice through publication of a Rio Grande Edition of Headwaters Magazine	$33,237.00		$33,237.00
SANTA MARIA RESERVOIR SIPHON & CANAL SYSTEM REHABILITATION	$23,000.00	$440,750.00	$463,750.00
Quantifying Mogote/Romero Flows & Effects on the Conejos System	$16,700.00	$268,300.00	$285,000.00
Culebra Watershed Vallejos Ditch Headgate Replacement	$10,000.00	$90,000.00	$100,000.00
The Rio Grande Basin “Narrowing the Gap” for Colorado’s Water Future	$23,500.00		$23,500.00
Drip Irrigation Field Trial for Sustainable Potato Cropping in the San Luis Valley	$40,000.00		$40,000.00
Kerber Creek Restoration Project	$34,871.00		$34,871.00
Rio Grande Basin Implementation Plan	$211,000.00	$99,800.00	$310,800.00
Lower Willow Creek Restoration Project: Phase 2	$55,000.00		$55,000.00
Plaza Project – Phase 2: McDonald Ditch Implementation Project	$42,000.00	$684,000.00	$726,000.00
Radar Monitoring & Hydrologic Modeling in the Upper Rio Grande Basin	$37,000.00	$200,000.00	$237,000.00
Santa Maria Reservoir Phase 2 - Continental Dam and Spillway Restoration	$51,000.00	$962,750.00	$1,013,750.00
Rehabilitation and Ditch Lining	$100,000.00		$100,000.00
Hydrologic Recharge Feasibility Study for the Rio Grande Basin Augmentation-Phase I	$8,000.00	$142,000.00	$150,000.00
Mountain Home Reservoir Dam Outlet Works Upgrade Feasibility Study	$25,000.00		$25,000.00
Plaza Project - Phase 3: Prairie Ditch Implementation Project	$21,500.00	$408,500.00	$430,000.00
Conejos River System Confluence Management Project	$15,000.00	$280,000.00	$295,000.00
Rio Grande Basin Implementation Plan- Phase 2	$76,000.00	$39,000.00	$115,000.00

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Name of Water Activity	Basin Account	Statewide Account	Total
South Platte Basin Total Request	**$2,204,385.90**	**$5,939,972.86**	**$8,144,358.76**
Chatfield Reallocation EIS/FR (Metro BRT contributing $103,000)	$27,000.00		$27,000.00
Clear Creek Water Banking/High Altitude Storage	$52,000.00		$52,000.00
Ovid Reservoir Comprehensive Feasibility Study	$176,000.00		$176,000.00
Lower South Platte Wetland Initiative Phase I South Platte River, CO		$278,476.00	$278,476.00
Stage Discharge Data Loggers and Telemetry	$48,800.00		$48,800.00
Upper Mountain Counties Water Needs Assessment	$130,763.00		$130,763.00
Weld County School Dist RE1 Wetland Partnership	$42,109.90		$42,109.90
Solicitation of Stakeholder Input through a South Platte Edition of Headwaters	$32,038.00		$32,038.00
S.P. Water protection and restoration		$825,552.00	$825,552.00
Arikaree River Well retirement program, Republican River basin, CO.	$19,984.00	$79,936.00	$99,920.00
Halligan Seaman Water Mgmt project share vision planning model	$25,435.00	$76,305.00	$101,740.00
Demonstration of Membrane Zero Liquid Discharge Process for Drinking Water Systems	$25,000.00	$233,334.00	$258,334.00
Lost Creek Aquifer Recharge and Storage Study	$80,000.00		$80,000.00
Central South Platte Wetland Partnership	$150,000.00		$150,000.00
FMRICo Recharge & Wetlands Project	$250,000.00	$420,000.00	$670,000.00
Data Logger and Telemetry Installation Project	$46,000.00		$46,000.00
Colorado Agricultural Meterological Network (CoAgMet)	$20,000.00		$20,000.00
Lower South Platte Water Cooperative Organizational Analysis	$60,977.00	$200,000.00	$260,977.00
Development of Decision Support Model for Identifying & Ranking Waterfow and Wildlife Related Recharge Projects along the South Platte River		$85,421.00	$85,421.00
Alluvial Aquifer Accretion/Depletion Analysis Tool		$200,000.00	$200,000.00
South Platte River Recreation and Habitat Improvement Preliminary Design	$25,000.00	$100,000.00	$125,000.00
Basin Roundtable Project Exploration Committee: Flaming Gorge	$2,000.00	$7,146.86	$9,146.86
South Platte River Phreatophyte Control Pilot	$35,000.00	$30,000.00	$65,000.00
Denver South Platte River Implementation Project - Frontier/Overland Final Design	$25,000.00	$150,000.00	$175,000.00
Prewitt Reservoir Wetland Partnership	$45,414.00	$45,414.00	$90,828.00
Data Logger Installation Project, South Platte River Basin	$88,958.00		$88,958.00
Josh Ames Diversion Removal on Poudre River	$75,000.00	$100,000.00	$175,000.00
State Land Board South Platte Recharge Study	$33,663.00		$33,663.00
South Platte & Metro Integrated Basin Implementation Plan - Nonconsumptive	$142,000.00	$71,500.00	$213,500.00
South Platte & Metro Integrated Basin Implementation Plan - Consumptive	$303,000.00	$152,000.00	$455,000.00
Emergency Flood Recovery Assessment, Design, and Recovery including Cycle #2	$150,000.00	$2,255,000.00	$2,405,000.00
South Platte River Diurnal Flow Study	$50,000.00		$50,000.00
Green Ditch Rehabilitation and Fish Passage Project	$25,000.00	$220,000.00	$245,000.00
Meadow and South Ledge Diversion Reconstruction and Fish Passage Demonstration Project	$4,250.00	$161,500.00	$165,750.00
Rural Elbert County Groundwater-Level Monitoring Network	$6,000.00	$96,500.00	$102,500.00
Economic Analysis and Design of Policies to Reduce Colorado's Groundwater Use in the Northern High Plains Ground Water Basin	$7,994.00	$151,888.00	$159,882.00
Name of Water Activity	Basin Account	Statewide Account	Total
Southwest Basin Total Request	**$1,906,626.00**	**$5,162,858.86**	**$7,069,484.86**
Dry Gulch Reservoir/San Juan Reservoir Land Acquisition		$1,000,000.00	$1,000,000.00
Goodman Point Water Association Pipeline Environmental Assessment	$7,700.00		$7,700.00
Jackson Gulch Reservoir Expansion Project	$80,000.00		$80,000.00
Goodman Point Phase 2	$20,000.00	$120,000.00	$140,000.00
Bauer Lakes Water Co. Dam Outlet Structure Upgrade	$40,000.00		$40,000.00
La Plata West Rural Water Supply System	$100,000.00	$1,000,000.00	$1,100,000.00
Town of Sawpit Engineering/Planning for Domestic Water System; Southwest Basin	$25,000.00		$25,000.00
MVIC Summit Irrigation Company feasibility study	$39,300.00		$39,300.00
Water System Well, Treatment System and Distribution Upgrades	$50,000.00		$50,000.00
Water System Master Planning	$100,000.00		$100,000.00
Molas Lake Ditch Rehabilitation and Diversion Structures	$95,000.00		$95,000.00
Lower Blanco River Restoration Project	$100,000.00	$150,000	$250,000
Ditch Loss, Hydropower, and Monitoring Improvement Program	$100,000.00		$100,000.00

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Name of Water Activity	Basin Account	Statewide Account	Total
Southwest Basin Continued			
Red Mesa Dam Incremental Damage Analysis (IDA) and Emergency Action Plan (EAP)	$29,000.00		$29,000.00
Park Ditch Improvements	$85,000.00		$85,000.00
Domestic Water System Construction	$25,000.00		$25,000.00
La Plata Archuleta Water District Permitting		$400,000.00	$400,000.00
Lower Blanco River Restoration Project		$150,000.00	$150,000.00
Animas River Needs Assessment	$57,000.00		$57,000.00
Mancos River Diversion Project, Phase I	$24,753.00		$24,753.00
Protecting Irrigated Agricultural Lands and Water Rights for Agricultural Production	$31,500.00		$31,500.00
Canal Seepage Reduction Project		$225,000.00	$225,000.00
Raw Water System Update and Future Needs Study	$58,458.00		$58,458.00
Canal Seepage Reduction Program		$775,000.00	$775,000.00
Totten Reservoir Hydrographic Survey	$29,500.00		$29,500.00
A Way Forward: The Dolores River Below McPhee Reservoir	$25,000.00		$25,000.00
Recreational Plan for Lake Nighthorse	$25,000.00		$25,000.00
La Plata Cherry Creek Ditch Headgate Improvement Project	$25,000.00		$25,000.00
Aspen Springs Metro Water Filling Station	$30,000.00		$30,000.00
Groundhog Reservoir Bathymetric Survey	$35,000.00		$35,000.00
Town of Rico Alluvium Pipeline Water Supply Project - Well Drilling and Water Quality Testing	$20,000.00	$80,000.00	$100,000.00
Pagosa Lakes Area Village Lake Dam Outlet Pipe Repair Project	$25,000.00		$25,000.00
Basin Roundtable Project Exploration Committee: Flaming Gorge	$1,000.00	$7,142.86	$8,142.86
Lake Durango Water Authority/ Source Water Infrastructure	$50,000.00	$450,000.00	$500,000.00
Construction of Municipal Water Distribution Pipeline and Related Facilities	$25,000.00	$475,000.00	$500,000.00
Mancos River Habitat and Diversion Project - Phase 2	$20,000.00	$99,340.00	$119,340.00
Improved Water User, Conservation, Management and Operations through the Implementation of Water Accounting Software	$52,500.00		$52,500.00
Red Mesa Dam & Reservoir – Spillway Alternatives Analysis	$19,400.00		$19,400.00
Animas Airpark Water Distributution System	$20,000.00		$20,000.00
Amimas River Diversion Headgate Montoring Study	$14,500.00		$14,500.00
La Plata River Water Resources Operations Model and SUPPLEMENTAL FUNDING		$155,749.00	$155,749.00
Southwest Basin Implementation Plan	$51,015.00	$25,127.00	$76,142.00
Ute Mountain Ute Tribe Water Conservation and Management Plan	$30,000.00	$40,000.00	$70,000.00
Evaluation of Potential Infrastructure Upgrades	$26,000.00		$26,000.00
Telluride Pines Water Augmentation	$25,000.00		$25,000.00
La Plata County Palo Verde PID #3 Water Delivery Project	$25,000.00		$25,000.00
Animas Valley Ditch & Water Co. Emergency Ditch Repair	$23,000.00		$23,000.00
Geothermal Greenhouse Partnership Project	$25,000.00	$50,000.00	$75,000.00
McElmo Flume Rehabilitation Project	$20,000.00		$20,000.00
Red Mesa Feasibility Study	$30,000.00		$30,000.00
Rehabilitation of the Old Fort at Herperus Water System	$25,000.00		$25,000.00
Long Hollow Reservoir Compact Water Delivery Study	$38,000.00		$38,000.00
Southwest Basin Impementation Plan- Phase 2	$24,000.00	$12,000.00	$36,000.00
Redburn Ranch Diversion Dam Project	$50,000.00	$98,500.00	$148,500.00
Thompson-Epperson Ditch Stabilization	$30,000.00		$30,000.00
Name of Water Activity	Basin Account	Statewide Account	Total
Yampa/White Basin Total Request	**$1,696,190.35**	**$612,063.00**	**$2,308,253.35**
Morrison Creek Reservoir Feasibility Study	$49,500.00		$49,500.00
Agricultural Water Needs Assessment	$201,410.00		$201,410.00
Common Data Repository	$106,600.00		$106,600.00
Energy Development Water Needs Assessment (300,000 Joint Application see Colorado)		$150,000.00	$150,000.00
Sparks Reservoir	$16,000.00		$16,000.00

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Name of Water Activity	Basin Account	Statewide Account	Total
Yampa/White Basin Total Request	**$1,696,190.35**	**$612,063.00**	**$2,308,253.35**
Town of Yampa Water Facilities Plan and storage tank upgrades	$61,062.00		$61,062.00
Sandwash basin coalbed methane production depletive effects on water resources	$20,000.00	$98,835.00	$118,835.00
Headwaters Magazine - January 2010	$20,000.00		$20,000.00
Development and Implementation of Water Forums, Workshop, and/or Tours	$10,000.00		$10,000.00
Stillwater Reservoir Seepage Project	$189,000.00		$189,000.00
Yellow Jacket Water Storage Feasibility Study	$220,800.00		$220,800.00
Yampa White Basin Nonconsumptive Needs Assessment Watershed Flow Evaluation Tool	$169,002.35		$169,002.35
Improvement of Lysimeter Operations and Consumptive Use Quantification in High-Altitude, Irrigated Meadows in the Yampa /White Basin	$10,000.00	$10,978.00	$20,978.00
Yampa River Structures Project	$50,000.00		$50,000.00
Rangely Irrigation System Master Plan Study	$12,500.00		$12,500.00
Armstrong Creek Restoration Project	$15,000.00	$35,000.00	$50,000.00
Development & Implementation of Water Education & Networking 3 year Program of Discussions, Forums, Workshops Tours	$30,000.00		$30,000.00
Energy Development Water Needs Assessment Study Update	$25,000.00		$25,000.00
Yampa/White Basin Implementation Plan	$177,066.00		$177,066.00
White River Storage Feasibility Study	$67,500.00	$67,500.00	$135,000.00
Yampa-White Basin Projects and Methods Analysis	$58,000.00	$152,000.00	$210,000.00
Supplemental Funding - Yampa BIP	$60,000.00		$60,000.00
White River Storage Study - Phase 2	$97,750.00	$97,750.00	$195,500.00
White River-Highland Ditch Diversion & Headgate Redesign	$30,000.00		$30,000.00

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Mike King
DNR Executive Director

James Eklund
CWCB Director

For more information, please contact:

Craig Godbout
1313 Sherman St. Room 718
Denver, CO 80203
303-866-3441, ext. 3210
www.cwcb.state.co.us
craig.godbout@state.co.us