

From the Gunnison Basin Roundtable

Colorado's Water Plan, The Gunnison Basin, & You

In 2013 Colorado water leaders and interested citizens across the state began a grassroots planning process to address projected midcentury water supply shortfalls, due to changing climate, new population, and other variables.

Now, 8 basin plans, including the Gunnison Basin's, have been consolidated into a second statewide Water Plan draft to guide our water supply development to mid-century.

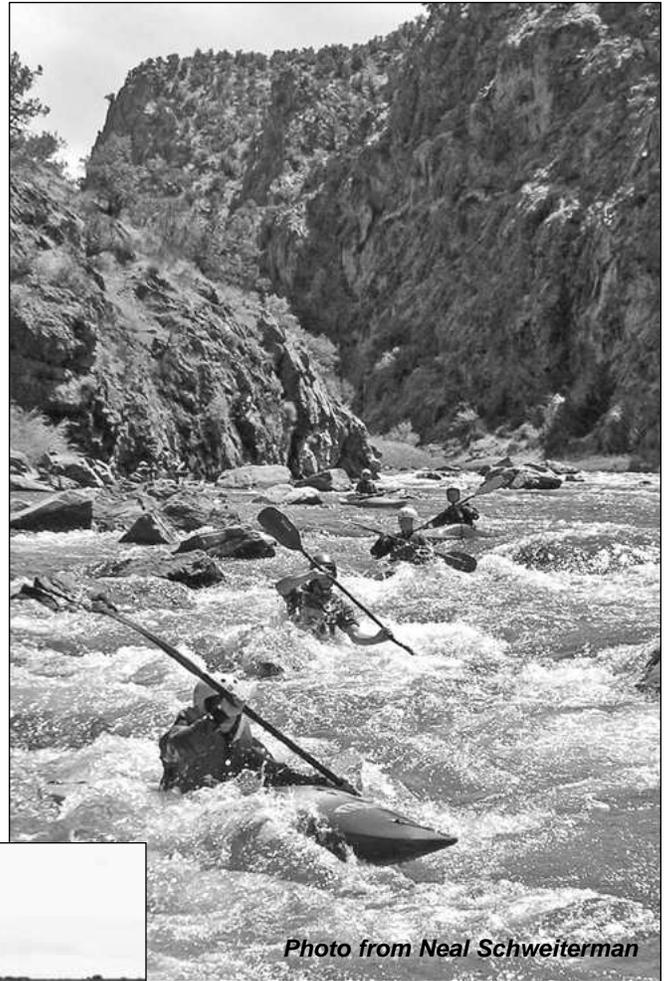


Photo from Neal Schweiterman



Photo from Uncompahgre Valley Water Users Assn.

Next step: We want to hear from you. Inside you will find a guide to this new draft of the Colorado Water Plan, *and some questions for you to ponder in giving us your thoughts on the Plan - due by September 17.*

COLORADO WATER PLAN - Second Draft: Summaries of Chapter Contents

Find Plan at coloradowaterplan.com, click on 'Resources'. Page numbers here from pdf downloads of each chapter.

CHAPTER 1: Introduction Summary history of the rationale for planning now. Analysis of challenges to be met in creating and implementing a water plan. Values and goals for the water plan.

CHAPTER 2: Our Legal and Institutional Setting & CHAPTER 3: Overview of Each Basin These two chapters describe the background and contexts for the planning process, including Colorado appropriations doctrine basics and interstate compacts (ch. 2). Brief Gunnison Basin overview - p4 of Ch. 3.

CHAPTER 4: Water Supply **p1:** Description of Colorado's surface and groundwater resources (Groundwater map p2). **p3:** Discussion of precipitation & streamflow variability (graph of annual flows by basin p5, map p8). **p10:** Climate change & other supply uncertainties (summary table p10, 2050 flow projections p13). **p14:** Water storage facilities & potential storage increases (graphs of storage p14-15).

CHAPTER 5: Water Demands **p1:** Overview of Colorado water use (consumptive use graph p1). **p2:** Discussion of Municipal & Industrial (M&I) needs (graph of projected M&I needs to 2050 p3). **p4:** Discussion of water conservation (tables for potential low, medium & high water conservation p5, 6-7). **p8:** Discussion of municipal reuse. **p9:** Brief discussion of land use patterns. **p10:** Discussion of agricultural needs & climate change impacts (graph of projected ag demands & climate change impacts p11) **p11:** Discussion of environmental & recreational needs (map p14).

CHAPTER 6: Water Supply Management The entire 'Toolbox' for the Plan, and strategies to employ the tools. Each section incorporates information from the basin plans, and ends with a set of 'Actions' the CWCB will support.

6-1 (p1): Scenario planning & adaptive-management strategy (five scenarios described 5). **p8:** Discussion of 'low-and-no-regrets portfolio' of tasks for near term (to 2025/2030) & 'primary drivers' of demand to watch. **6.2 (p13):** Meeting Colorado's Water Gaps from basin level (chart of common themes across basins p15). **p16:** M&I discussion (chart p18), Gunnison basin p23. **p32:** Agricultural needs discussion (map of acreages & projected losses p33). Gunnison basin p38. **p44:** Environmental & Recreational needs discussion (summary chart p46). Gunnison basin p50.

6.3 (p65): Water Conservation & Reuse. **p65:** M&I. New to 2nd draft is a 'Stretch Goal' of 400,000 af conserved by 2050 p71. **p88:** Land use strategies. Gunnison basin p93. **p97:** Agricultural conservation & efficiency. Actions p105. **p106:** Energy extraction & production discussion (including 'fracking'). **6.4 (p115):** Alternative Agricultural Transfers to minimize 'buy & dry' (summary chart p117, existing examples p118+). Actions p124. **6.5 (p126):** M&I and ag multi-purpose infrastructure discussion. Gunnison basin p132,141. Actions p146+. **6.6 (p148):** Environmental & recreational projects/programs discussion (nonconsumptive only) - Instream flows, RICDs, endangered fish programs, wild & scenic rivers, stream management plans. Gunnison Basin p165+.

CHAPTER 7: Water Resource Management & Protection **7.1 (p1):** Watershed health & management discussion, including watershed plans (important for watershed, forest health & other conservation organizations). Actions p8+.

7.2 (p9): Natural disaster management, including potential climate change effects. **7.3 (p14):** Water Quality discussion including integration with quantity issues. Actions, policy & financial considerations p27+.

CHAPTER 8: Interbasin Projects & Agreements **p1:** Existing inter- and intra-basin agreements described.

p5: Conceptual intrastate agreements, initiative & points of consensus (i.e., SWSI, HB05-1177, etc.). **p6:** No-&Low-Regrets Action Plan with goals listed. **p7:** Draft IBCC Conceptual Framework for Transmountain Diversions from Colorado River tributaries (most recent draft p9+). Actions p14.

CHAPTER 9: Alignment of State Resources & Policies Covers numerous areas of policy & funding concern.

9.1 (p1): Protecting Colorado's compacts & upholding Colorado water law, including relations with the federal government, and relations with local governments. **9.2 (p6):** Economics & funding discussion - the estimated total for all basin projects is +\$20 billion (table 7). **p10:** Current funding opportunities described. **p13:** Potential future funding opportunities. Funding actions p17+ - note emphases on public-private partnerships and other multipurpose/multi-partner projects. **9.3 (p21):** State water rights and using organizations (CWCB, CPW, etc.). **9.4 (p29):** Framework for a more efficient project permitting process. Summary of current water permitting processes & efforts at coordination.

p39: Potential conceptual framework for facilitating permitting process (table w/BIP suggestions p45). Actions p43.

9.5 (p50): Outreach, education and public engagement - overview of previous & ongoing efforts; funding for out-reach activities p54; outreach efforts for the BIPs & first CWP draft p60. Actions p65.

CHAPTER 10: Critical Action Plan This chapter is new since the first draft, and is essentially an organized and condensed summary, in the form of goals and critical actions, of everything covered in chapters 6-9, with references back to sections of those chapters. **It warrants close reading as it will probably guide project funding.**

CHAPTER 11: Updating Colorado's Water Plan - as needed under adaptive management of the Plan.



Lost Lake Rainy Day -
Photography by Luke Reschke

Colorado's Water Plan & the Gunnison River Basin

A Guide prepared by the Gunnison Basin Roundtable

Colorado's Water Plan can be found at coloradowaterplan.com, click on 'Resources' in top menu. Access is easiest if you download a chapter at a time - see adjacent page for summaries indexed to chapter downloads. The Gunnison Basin Water Plan is found at the same website, but click on 'Community'.

The Colorado Water Plan (CWP) is largely compiled from water plans drafted for the eight river basins (including the Gunnison River Basin) that originate in Colorado and eventually supply water to most of the American Southwest and lower Midwest. The need for the water planning process was precipitated by projected mid-century water shortfalls for urban areas, primarily along the Front Range of the Rockies - as much as 600,000 acre-feet statewide, or 190+ billion gallons, per year. Concern about possibly reduced water supplies due to climate change also drives the planning process. The plan's horizon is 2050. **Major changes to this draft are noted below and in the adjacent Guide.**

A thorough review of the new draft of Colorado's Water Plan shows no major conflicts between it and the Gunnison Basin Plan - although protecting agriculture plays a more central role in the Gunnison Basin Plan.

Chapter 10 (Critical Action Plan) is new to this draft, and posits a fast start on executing the plan, referencing issues dealt with in more detail in earlier chapters. Its 'near-term' (3 years) and 'mid-term' (6 years) targets for these 'critical actions' may be overly ambitious, especially those that warrant changes in historic and traditional practices.

This guide to the CWP is organized around the questions below that Colorado's water leaders and involved citizens in all Colorado river basins have had to answer in putting together the eight basin water plans and the assembled CWP; the questions are referenced to the sections of the CWP that address them. The guide also includes on the adjacent page here a chapter-by-chapter index to the CWP with page references to important sections noted below.

How do we know what is actually going to be happening in 2050?

We don't, due to uncertainties of population growth, climate change, levels of conservation, and other variables. So the CWP is an 'adaptive management' plan, which will be constantly reviewed and refined as future conditions emerge (or don't), according to five scenarios factoring in those variables. See the contemplated scenarios in Ch. 6.1.

What values underlie the Colorado Water Planning process?

When Governor John Hickenlooper initiated the planning process in 2013, he stated some values for the process:

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

QUESTIONS: From your Colorado perspective, do you perceive any tensions or conflicts among these values? If it were not possible to 'have it all,' to which values should we give priority?

What are the possible sources of water for meeting The Gap?

There are really only three sources of water for meeting 'The Gap' - the projected mid-century shortfall between projected new water demand (mostly from urban growth) and currently known or planned supplies:

- ♦ **Municipal & Industrial Conservation - including upfront Demand Reduction, Land Use Reform, & Reuse:** CWP Chapters 5 & 6.3 cover efforts to make M&I water go farther - including a new 'Stretch Goal' of 400,000 acre feet of M&I conservation in the new draft CWP (Ch.6.3), most of which burden would fall on the metropolitan Front Range. This is a higher goal than the State Water Supply Initiative (SWSI 2010) 'Medium' water saving strategy (360,000 af) that metro water providers sought in the first draft - but lower than the 'High' strategy (460,000 af) that the West Slope water users thought the cities should go for. The four West Slope plans all include High M&I conservation goals.
- ♦ **New Supply:** This generally refers to new or expanded transmountain diversions (TMDs), but also includes existing storage expansion (p14, Ch.4), weather modification, etc. Ch.8 of the CWP analyzes TMD options in a 'Draft Conceptual Framework' (p9) - conditions the Front Range agrees it would need to meet for any future TMDs. A new TMD from the Gunnison Basin is unlikely under the Framework, but the Gunnison Basin is vulnerable to possible future Colorado River Basin administration driven by new development anywhere in the Colorado River Basin, especially in Colorado.
- ♦ **Transfers from Agriculture:** At least 85% of the water consumed in Colorado is used agriculturally; some of the 'Gap' water will have to come from agricultural transfers to Municipal and Industrial uses. The challenge - in both the CWP and the Gunnison Basin Plan - is to free up some ag water without serious impacts on food production. CWP Chapters 6.3, 6.4 & 6.5 address this, as do a number of projects and programs in section 4 of the GB Plan.

QUESTIONS: *How do you think we should draw on these three sources to meet people's future needs? How much domestic conservation are you willing to engage in to counter climate changes? To support new growth? Are the 'conceptual framework' conditions on future TMDs sufficient to protect the West Slope? Can or should our food producers be expected to learn to 'do more with less' (or 'do differently with less')?*

Can we meet the growing water demands and still maintain our generally high quality environment?

Nonconsumptive environmental, recreational and electric-energy needs for Colorado water receive considerable attention in the CWP, as does water quality. All chapters include environmental and recreational considerations, usually toward the end of each chapter; CWP Chapters 6.6 and 7 are most important here. The new draft has better focus on resilience in ecosystems. Section 4.3 of the Gunnison Basin Water Plan is devoted to 'Watershed Health' in the Gunnison Basin.

QUESTIONS: *What suggestions do you have for better integrating nonconsumptive needs with agricultural, municipal and industrial needs? Should (or can) nonconsumptive needs be quantified? How can relations between recreational and ag users be improved? Is the Gunnison Basin watershed health plan sufficient?*

How will we pay for all of the work laid out in these Plans? Let alone get it all permitted?

Chapter 9, Section 9.2 (p6) of the CWP explores funding options, opportunities and challenges. The Colorado Water Conservation Board estimates the current cost of all projects & programs in the eight Basin Plans would be ±\$20 billion. After discussing all existing state, federal and local funding options, potential future funding options are discussed (p13+). Sec. 9.4 (p29) also goes into more depth in exploring ways to make currently complex and redundant permitting processes for water projects more efficient and affordable. **Public-private partnerships, multi-party and multi-purpose projects will be encouraged for available funds.**

Will the Colorado Water Plan change the prior appropriation doctrine?

No. The Water Plan itself states several times that 'Colorado will continue to uphold the prior appropriation doctrine' as the legal foundation for water use as the state moves into its changing future (see Ch.9.1, p2). All existing interstate and intrastate compacts and agreements will also be upheld as the foundation for the future.

How can you participate?

Comments on the Colorado Water Plan second draft are being accepted online through **September 17, 2015**, for incorporation into a final drafts to be submitted to Governor Hickenlooper in December. Go to **coloradowaterplan.com** and click on '**Get Involved**'; the Colorado Water Conservation Board (CWCB) has a 'General Input Form'. Or you can send written comments to Gunnison Basin Roundtable Outreach, c/o George Sibley, by email (george@gard-sibley.org) no later than September 14. **Please let the Roundtable and CWCB know what you think!**

