

# WANT TO LEARN MORE?

## Colorado's Water Future

*Addressing the “water gap” will be key to maintaining quality of life, tourism and natural ecosystems in Colorado.*

### Addressing the “water gap”

The Statewide Water Supply Initiative (SWSI) projects a shortfall of more than 180 billion gallons per year by 2050—the annual water use for 1.25 million families. This “gap” between the water available and the water needed could grow or shrink, depending on population, climate conditions and other factors.

The SWSI and Colorado's Water Plan (see other side) identify projects and programs to secure more usable water for the state, including:

- Conservation and recycling/reuse (see details on recycled water and water reuse, below)
- Developing additional storage capacity (new and/or expanded dams and reservoirs)
- Agricultural water transfers (alternatives to “buy and dry,” which kills farms)
- Infrastructure repairs and maintenance (part of “passive conservation” savings)

### **REUSING WATER TAKES PRESSURE OFF RIVERS!**

Most cities treat wastewater from homes, schools and businesses—and then send it downstream. Why not use it more than once? In Colorado and other states, reusing water could be key to protecting rivers.

**Potable Reuse** means treating wastewater to drinking water standards, and then sending it back to taps (rather than downstream). Water reuse can make use of “the same water” over and over again. The City of Aurora's Prairie Waters reuse plant can produce 9.7 million gallons of drinking water per day.

**Non-potable Reuse** (AKA “Recycled Water”) is wastewater that's treated to make it safe for uses such as irrigation and industry. Recycled water is distributed via a separate system of pipes (separate from drinking water). Currently, 25 Colorado cities operate recycled water facilities, including Denver, Colorado Springs, Fort Collins and Louisville.

### **AMENDING WATER LAW**

Colorado's water law system was developed during settlement days (late 1800s), at a time when needs for water and attitudes about its use were vastly different than today. Certain laws act as obstacles to efficient use of water (specifically “use it or lose it”). As Colorado faces possible dry taps in cities and more dried-up farms in the near future, many people with diverse water interests are motivated to advocate for revisions to particular laws.

### Climate change in Colorado

#### **IMPACT ON WATER SUPPLIES**

The state has warmed by 2°F in the past 30 years, with another 2.5°F–6.5°F increase expected by 2050. Continued warming is expected to reduce Colorado's snowpack levels and result in earlier snowmelt and runoff—and potentially lower runoff overall. These conditions will certainly impact water availability.

#### **IMPACT ON FORESTS**

Forests play a critical role in fighting climate change because of how they utilize carbon. Shade from forests also cools streams and slows snowmelt and evaporation. Colorado's 10 largest fires all occurred since 2002. Continued heat and drought further threaten forests—bad news for the state's rivers and water supplies.



Take a picture of this sheet—to take it home! You can also find this information (and more) at the Headwaters Center website:  
**[www.headwaterscenter.com/resources](http://www.headwaterscenter.com/resources)**



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*Water is a big deal in Colorado! Who makes decisions about it? What agencies and processes are in place to measure water use, predict availability and help plan for future needs?*

### State agencies and entities

- **Colorado Water Conservation Board**  
<http://cwcb.state.co.us/Pages/CWCBHome.aspx>  
The state's central agency charged with creating and implementing state water policy (including conserving, developing, protecting and managing Colorado's water). Formed in 1937.
- In 2005, the State legislature established nine river **Basin Roundtables** (local groups that discuss water issues and develop collaborative solutions) and a committee to facilitate conversations between the basins (the **Interbasin Compact Committee**).

### Independent organizations

- **Colorado Water Institute, Colorado State University:**  
<http://www.cwi.colostate.edu/>  
Focuses the water expertise of higher education (including research) on the evolving water concerns and problems faced by Colorado citizens.
- **Colorado Water Trust:** <https://coloradowatertrust.org/>  
Engages in and supports voluntary, market-based efforts to restore and protect streamflows using water acquisitions, leases and physical solutions.
- **Metro State University, Denver—One World One Water Center:** <https://msudenver.edu/owow/>  
Collaboration between MSU Denver and Denver Botanic Gardens to further educational programs on water and environment, and raise awareness toward greater water stewardship.

- **University of Denver, Sturm College of Law—Water Law Review:** <http://duwaterlawreview.com/>  
Semiannual publication that serves as a forum for the exchange of ideas, information and legal and policy analyses concerning water law (circulated internationally).
- **Western Water Assessment, University of Colorado:**  
<https://wwa.colorado.edu/>  
Interdisciplinary team conducts research in partnership with Rocky Mountain West decision makers toward the best use of science to manage for climate impacts.
- **Colorado's Water Plan**  
Finalized in 2015, Colorado's Water Plan presents findings and solutions for the state's water challenges. Primary work was conducted by the nine Basin Roundtables, the Interbasin Compact Committee, the Colorado Water Conservation Board (CWCB), and partners and stakeholders statewide.

*Sign up for the CWCB newsletter using the button here: <https://www.colorado.gov/pacific/cowaterplan/confluencenewsletter>*

#### SOURCES

1. Colorado's Water Plan: <https://www.colorado.gov/pacific/cowaterplan>
2. Colorado Water Conservation Board: <http://cwcb.state.co.us/water-management/water-supply-planning/Pages/SWSI2010.aspx>
3. <http://waterforcolorado.org/wp-content/uploads/2014/03/CWP-Whitepaper-Urban-Conservation.pdf>
4. <https://www3.epa.gov/region9/water/recycling/#enfbene>
5. Water Reuse Colorado: <https://watereuse.org/sections/watereuse-colorado/>
6. <https://www.watereeducationcolorado.org/news-and-publications/news/full-tilt-aurora-boosts-recycled-water-ops-90-to-cope-with-this-summer-drought/>
7. Colorado State University, Colorado State Forest Service: <https://csfs.colostate.edu/colorados-forests-changing-climate/#1475778323849-01cfbca6-642d>
8. The Rocky Mountain Climate Organization: 2018: <http://nwccog.org/wp-content/uploads/2018/02/Climate-Change-in-the-Headwaters.pdf>

*Note: Many documents, articles and reports exist on these and other important water-related topics. Try your own research online, in addition to viewing these sources.*



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