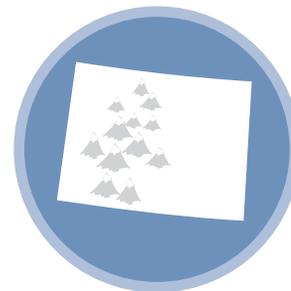


Colorado

Water Fact Sheet



Just as Colorado's topography varies from the towering Rocky Mountains in the west to the flat Eastern Plains, freshwater resources in Colorado fluctuate depending on location and elevation. Despite relatively abundant precipitation in the mountains of Colorado, most of the state is semi-arid and heavily dependent on annual snowmelt and runoff from the mountains to the plains, where a majority of the population resides and most of the state's water is used.



In the mountains, headwaters, small creeks, and tributaries form from snowmelt, precipitation, and groundwater discharge. Because no major rivers flow into Colorado, the state relies almost completely on precipitation to replenish its freshwater resources. The Rocky Mountain states obtain 70 to 90 percent of their water from snowmelt, so a dry winter can mean drought in the summer.

The annual precipitation in Colorado averages only 17 inches statewide and is highly variable, with the San Luis Valley in south-central Colorado receiving only 7 inches of precipitation per year. Complicating matters further, most of Colorado's precipitation does not fall near populated centers or at times when it is needed most. More than half of Colorado's water flows downstream to Southwestern states. As a result, Colorado experienced significant drought events from 2000 to 2004.

Colorado's fast-growing population has also led to increased demand for both drinking water and landscape irrigation water, and continues to strain the drought-prone state's freshwater resources. Colorado's population growth is expected to maintain its rapid pace, increasing from nearly 4.4 million people in 2000 to 6 million by 2025 and 10 million by the end of the 21st century. Consequently, statewide municipal and industrial water use is predicted to increase by 170 percent from 1998 to 2100.

In the Front Range, the eastern part of the state where the majority of the population resides, ground water is being tapped at a rate that will likely exhaust supplies. Front Range communities could face a significant water supply deficit by 2030, and shortages could be even more drastic depending on the effectiveness of municipal conservation efforts across the state.

Doing More With Less

Colorado's water resources are affected by climate, population growth, and existing agreements to supply water to downstream states. All of these issues highlight the value of water-efficiency measures to ensure the continued health of Colorado's water supply.

Ever since Colorado introduced Xeriscaping during the 1981 drought (see below), the state has often been ahead of the curve in addressing water supply issues. For example, many Colorado cities have begun charging for water usage based on the water's true cost, or adopting a tiered system, with heavy users paying more per gallon after they exceed certain thresholds.

Promoting the slogan "Use only what you need," Denver Water encourages water efficiency with rebates on water-saving products and tips for conservation and Xeriscaping at home and work. For example, by watering lawns and gardens more efficiently, Colorado residents can potentially save a total of 50 million gallons of water each day—equal to the amount that flows from more than 5,400 garden hoses running fully open for 24 hours.

In Thornton, Colorado, residents are encouraged to become Water Saving Champions by pledging to save 10 gallons of water each day. With a mix of tips, rebates, and outreach, the city's social marketing campaign has significantly reduced local water consumption. In 2009, each Water Saving Champion household saved an average of 630 gallons of water per month, or 7,560 gallons per year.

Water-efficient products, services, and new homes such as those labeled by the U.S. Environmental Protection Agency's WaterSense® program can help consumers reduce water use by 20 percent or more. In fact, if half the households in Colorado installed WaterSense labeled faucets or faucet aerators, the state could save 500 million gallons of water annually—enough to supply nearly 4,000 Colorado households with water for a year.

If every household in Colorado replaced its showerheads with WaterSense labeled models, the state could save enough water every day to meet the needs of every household in Boulder, Colorado. For more information and water-saving tips, visit www.epa.gov/watersense.

What Is Xeriscaping?

After an unusually dry winter of 1980-1981 left the state's freshwater supplies severely depleted, Colorado was hit by a brief but intense drought period from the fall of 1980 into the summer of 1981. In response to this crisis, Denver Water developed the concept of Xeriscaping, one of the first formal approaches to water-efficient landscape design.

Xeriscape landscaping is defined as "quality landscaping that conserves water and protects the environment" and is based on seven fundamental principles:

- Proper planning and design
- Soil analysis and improvement
- Appropriate plant selection
- Practical turf areas
- Efficient irrigation
- Use of mulches
- Appropriate maintenance

For more information about Xeriscaping in Colorado, visit www.xeriscape.org. For more information about WaterSense labeled products and new homes, visit www.epa.gov/watersense.

