



# Water in Utah



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Utah depends on rain and snow for its water supply that comes almost entirely from within the state. Abundant snowfall in the state's mountains is "water in the bank" for Utahns, melting in late spring, filling streams and rivers with runoff for reservoirs and aquifers. Utah's water is nature's whimsey, because amounts of precipitation in Utah can vary dramatically from year to year. Precipitation may be as much as 50 inches in high mountains, but Utah's western and southern desert areas receive less than five inches annually. Utah is ranked the second driest state in the nation, with only 13 inches of average annually precipitation.

Consequently, farms, cities, towns and industries in Utah rely on the efficient use of reservoirs and water distribution systems to meet their water needs. When snow and rain are insufficient to fill reservoirs, farm yields are reduced, groundwater aquifers recede and some communities impose restrictions on water uses. In areas of the state with growing populations, groundwater is being used more extensively.

Approximately 70 percent of Utah's developed water is used in agriculture. As the state's population grows, water is slowly being converted from watering fields to supplying cities and towns.

## Utah Division of Water Resources / Utah Board of Water Resources

The Division of Water Resources and Board of Water Resources are responsible for promoting orderly and timely planning, development, utilization, conservation and protection of Utah's water resources to enhance the quality of life for the citizens of the state. The division is one of seven agencies in the state's Department of Natural Resources. The eight-member board, appointed by the governor, administers three state water conservation and development funds.

The Division of Water Rights administers water rights and regulations. Water quality is the responsibility of the Department of Environmental Quality.

## **Revolving Construction Fund**

This fund started in 1947 with a \$1 million legislative appropriation to help construct irrigation projects, wells and rural culinary water systems. Further appropriations have added to this fund.

## **Conservation and Development Fund**

This fund was created in 1978 with the sale of \$25 million in general obligation bonds. Money was added to this fund with bond sales in 1980 and 1983. The C&D Fund generally helps sponsors finance larger multi-purpose dams and water systems.

## **Cities Water Loan Fund**

Established with an initial legislative appropriation of \$2 million in 1974, and with continuing appropriations, this fund provides financing to help construct new culinary water projects for cities, towns, improvement districts and special service districts.

## **State Accomplishments**

Since 1947, the Board of Water Resources has invested more than \$268 million from its three funds in the state's 29 counties to help construct almost 1,000 projects. The projects are sponsored by private irrigation companies, cities and towns, water conservancy or improvement districts and others. They include dams and reservoirs, canals, wells, pipelines and sprinkler irrigation, culinary and dual water systems. The board and sponsors share project costs and sponsor repayments to the revolving funds help finance other projects.

## **Water Planning**

The *State Water Plan* is a process that is coordinated to evaluate existing water resources in the state, determine water-related issues that should be confronted and recommend how and by whom issues can be resolved. The plan identifies programs and practices of state and federal agencies, water user groups and environmental interests and describes the state's current, future and long-term water-related needs.

The plan is continually updated using current hydrologic data bases, river basin simulations, water supply and demand models and water-related land use inventories. Revisions reflect the

latest water conservation and development options concerning water rights, water transfers, population, zoning and many other complex issues for the next 50 years in the state's major river basins.



### **Interstate Streams**

The director of the Division of Water Resources is Utah's Interstate Streams Commissioner who helps protect Utah's rights in interstate streams from infringement by the federal government or other states. Utah is included in interstate compacts on the Colorado and Bear Rivers.

### **Weather Modification**

The division has supported a weather modification program since 1975 to augment naturally occurring snowpack in high mountains in selected northern, central and southern counties. The effectiveness of Utah's weather modification program is evaluated by a federal/state cooperative project in atmospheric modification research. The state receives federal funds for research through the National Oceanic and Atmospheric Administration.

### **Water Education**

Wise and responsible water use is promoted by the Division of Water Resources in the state's public schools. October is Water Education Month in Utah. The division develops and distributes instructional materials, conducts in-service workshops for teachers, gives assemblies and classroom demonstrations for students and is the Utah sponsor of Project WET (Water Education

for Teachers). The division also conducts a popular, statewide Young Artists' Water Education Poster Contest with valuable prizes and attractive trophies.

## **Water Conservation**

The Utah Division of Water Resources and the Utah Board of Water Resources encourage water conservation.

People in Utah are reminded to be wise and discriminate users of their precious and limited water resources during years of drought or at times when water supplies are adequate. The state recommends water conservation practices such as Xeriscape landscaping designs and efficient turf water management at schools, parks and golf courses. Ultra low- flow toilets and water-restrictive shower heads in homes and businesses will save water.

The state also encourages the development of secondary water systems to use untreated water for non-culinary and industrial purposes and more efficiency in agriculture with sprinklers or surge-flow and watertight canals and turnout structures.

Life-long changes in attitudes, practices and habits are necessary to help provide sufficient, clean water supplies for Utah's future generations.