Community Roles

ROLE	CONCERN
Farmer	Uses flood irrigation practices and water for livestock.
Homeowner	Uses water for garden, lawn, household.
Golf course	Uses water for golf greens.
Industry	Uses water for production.
Tax payers	Concerned about tax increase.
Local conservancy group	Concerned with water pollution issues.
Local business owner	Concerned about taxes, may also be concerned about limits on growth.
Electric company	Needs water for power generation.
Water district	Supplies local drinking water.
Fishing group (e.g., Trout Unlimited)	Concerned about water in streams for fish habitat.
Whitewater recreation group (e.g., kayaking group)	Want high flows left in river to restore/maintain good kayaking.
State agency decision makers	Division of Water Resources is required by law to provide water. Division of Water Quality is required by law to protect water quality.

History of water management in Utah

The following list chronicles the gradual evolution of Utah's role in water resources planning and management since statehood.

• 1897 The office of the State Engineer (later renamed the Division of Water Rights) was established to oversee water appropriations.

• 1903 The Water Code became part of Utah law and The Doctrines of Prior Appropriation and "Beneficial Use" were officially adopted.

• 1921 The Utah Water Storage Commission was created to oversee important water developments and obtain the necessary water rights.

• 1935 Groundwater was added to the state's water code.

• 1947 The Utah Water and Power Board was created to continue the mission of the Utah Water Storage Commission, which was discontinued in 1941.

• 1953 Specific legislation was passed directing the Water and Power Board to develop a state water plan.

• 1963 The Bureau of Water Pollution Control was created.

• 1967 The Water and Power Board was renamed the Board of Water Resources, and the Division of Water Resources was created.

• 1979 The Bureau of Drinking Water and Sanitation was created.

• 1991 The Department of Environmental Quality was created. As part of this department, the Division of Drinking Water and the Division of Water Quality were formed, replacing the Bureau of Drinking Water and Sanitation and the Bureau of Water Pollution and Control.

Source: Utah State Water Plan: Planning for the Future.
http://www.water.utah.gov/waterplan/

Guidelines for State Water Plans

Utah State Water Plans use the following guidelines when developing documents.

1. All waters, whether surface or subsurface, are held in trust by the state as public property and their use is subject to rights administered by the State Engineer.

2. Water rights owners are entitled to transfer their rights under free market conditions. Any change in place or nature of use is subject to approval by the State Engineer.

3. The state of Utah's role is to set policy, provide assistance and protect statewide water resource interests.

4. The responsibility for making many local decisions regarding water resources resides with local leaders.

5. Educating the public on water resources issues and seeking their input in the decision-making process is vital to effective planning, management and development.

6. Long-term water planning will help ensure sufficient water supplies needed for Utah's growing population.

7. Local, state and federal water resources planning and management activities should be coordinated to effect cooperation and minimize duplication.

8. The maintenance of water quality within the state's water quality standards will help sustain all present and future uses of Utah's water resources.

9. Water conservation and efficient management of existing water supplies are needed to help satisfy future water demands in the most economical and timely fashion.

10. Water development, based on sound engineering, economic and environmental principles, will help meet future water needs.

11. Recreation, aesthetic and environmental uses of water should be included in water planning, management and development activities.

Source: Utah State Water Plan: Planning for the Future.
http://www.water.utah.gov/waterplan/

Water Usage and Cost

Present and Projected Total Municipal & Industrial Water Use by Basin			
Basin	(acre-feet / yr)		
	Present*	2020†	2050†
Jordan River	332,000	449,000	650,000
Weber River	170,000	267,000	358,000
Utah Lake	134,000	207,000	338,000
Bear River	50,000	71,000	103,000
West Colorado River	51,000	55,000	62,000
Sevier River	48,000	55,000	64,000
Kanab Creek/ Virgin River	42,000	86,000	183,000
West Desert	24,000	35,000	53,000
Uintah	24,000	27,000	31,000
Cedar/Beaver	20,000	33,000	51,000
Southeast Colorado River	9,000	10,000	12,000
TOTAL	**904,000**	**1,320,000**	**1,950,000**

Water Prices of Various Western Cities	
City	Estimated Cost per 1,000 gallons
Reno	$3.39
Seattle	$2.30
Los Angeles	$2.22
Park City, UT	$2.20
Tucson	$1.81
Boise	$1.68
Las Vegas	$1.65
Phoenix	$1.61
Albuquerque	$1.41
Denver	$1.14
Sandy, UT	$0.99
Salt Lake City	$0.87
Provo, UT	$0.75
Sacramento	$0.75
AVERAGE	$1.63
Utah Average	$1.15
National Average	$1.96

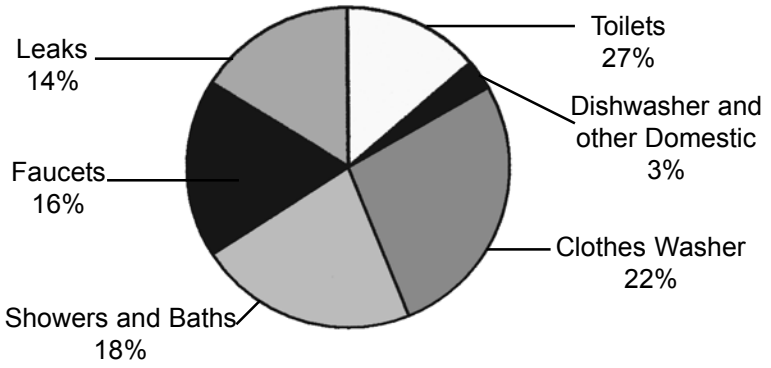
Source: Utah State Water Plan: Planning for the Future.
http://www.water.utah.gov/waterplan/

Typical Water Use Within the Home

The typical U.S. residence consumes about 69 gallons per person per day inside the home. This is approximately equivalent to one completely full bathtub. Utah is the second driest state in the nation, but typical Utah residents consume 293 gallons per person per day, 214 more gallons per person than the U.S. average. As indicated by the accompanying chart, approximately 27 percent of all the water used indoors goes down the toilet. The clothes washer uses another 22 percent for a total of nearly 50 percent of indoor water use from just two household appliances. Showers and baths consume about 18 percent and faucets another 16 percent. Leaks account for a significant 14 percent.

Surprisingly, only 3 percent of water used indoors is used by the dishwasher or other domestic purposes such as cooking and cleaning. Despite this fact, 100 percent of water supplied inside the home must meet stringent drinking water standards. The American Water Works Association (AWWA) estimates that a comprehensive program to install water efficient plumbing fixtures within the home and fix leaks could reduce total indoor water consumption by as much as 30 percent.

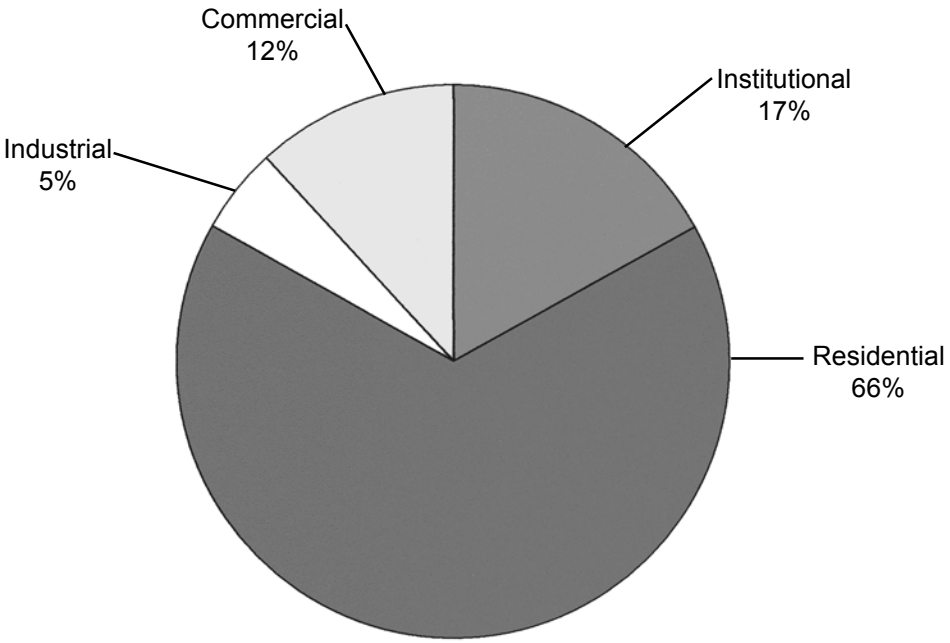
Residential Water Use



Source: Mayer, Peter W. et al., Residential End Uses of Water [AWWA Research Foundation, 1999], xxvi

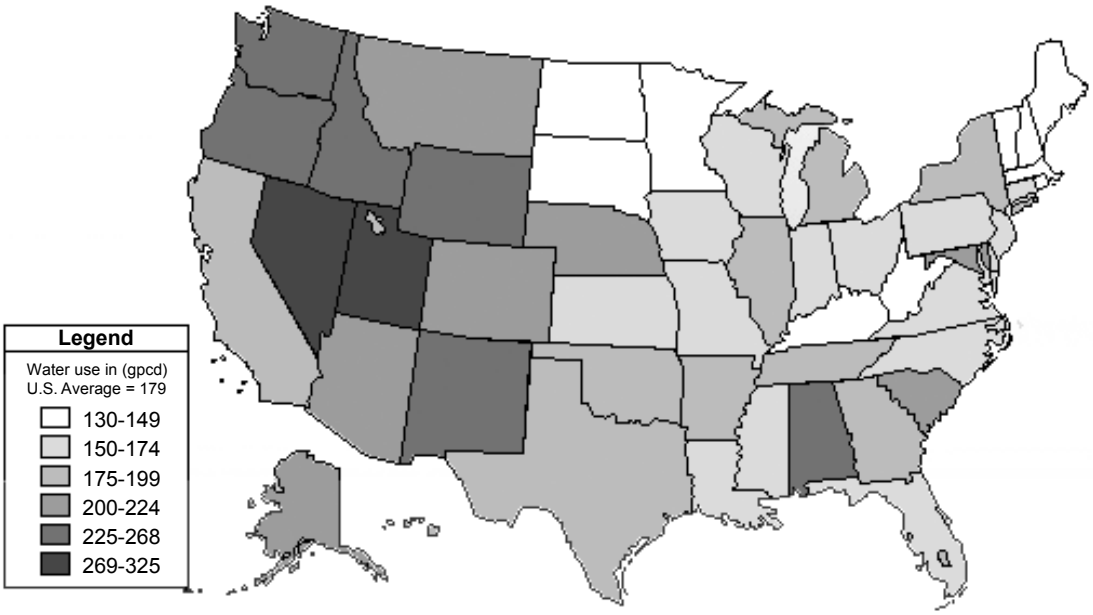
Water Use Facts

Breakdown of Public Supply Water Use



Source: Division of Water Resources. Municipal and Industrial Water Supply and Uses. 2000

Per Capita Water Use of Public Water Supplies in the United States



Source: USGS, Estimated Use of Water in the United States in 1995.