

Utah research (2017 Gov's Recommended Strategy Water Report)

Flood irrigation, for example, is often criticized as inefficient when compared to sprinkler irrigation, yet it is often the most efficient irrigation method when analyzed on a basin-wide view, and sometimes even at the farm level. Flood irrigation also augments streams in certain areas through return flows and sustains ecosystems that would otherwise lack sufficient flows or water levels. In other river systems, however, sprinkler irrigation helps control downstream salinity problems better than flood irrigation with its inherent return flows. Water "conservation" in the agricultural sector may be inhibited by legal protections of downstream water users. Utah's existing water management policies, whether expressed in law or practice, presently provide very few tools to optimize water use while still protecting the historic return flow rights of downstream users and ecosystems that have grown up around irrigation water systems. (Gov's Recommended State Strategy Report, 2017; Sec 3.5, page 37)

Instream flows

Instream flows sustain fish and wildlife, provide recreational opportunities, and supply critical components of healthy river ecosystems. It is possible to legally secure instream flows in Utah, but the law is complicated. The existing legal tools fall into two categories: first, the instream flow statute (Utah Code 73-3-30); and, second, other legal tools such as water leasing, non-diversion agreements, and changes to the point of diversion. The existing instream flow statute is restricted to two state agencies (the Department of Parks and Recreation and the Division of Wildlife Resources) and non-profit fishing groups. While the provisions for each organization differ, they are all complex and limited. For example, state agencies must get the approval of the Legislature to fund purchase of water for in-stream flows, and non-profit fishing groups are limited to 10-year leases for three native trout species. These and other restrictions have resulted in limited use of the statute and few stream segments protected. As noted above, other legal tools are available but remain rarely used, limited, poorly understood, and subject to high transaction costs. While shifting public values support managing water to protect and enhance the environment, change applications to shift water instream are often viewed as competing with other, consumptive uses.

Delivery efficiencies

In some areas, agricultural water users divert large volumes of water to provide a relatively small delivery at the end of the ditch or canal. New and improved technologies make it possible to divert far less water and still provide for the same consumptive uses. However, the financial investment in these new and improved technologies sometimes creates an expectation by water right holders that they should be able to benefit from the "conserved" part of their water rights to expand acreage or to lease or sell the surplus water that results. However, the original consumptive use cannot be enlarged, so investors in new and improved technology may not see the anticipated benefit from their investment. In addition, changes in conveyance systems can alter water tables, return flows, and even artificial wetlands that have grown up around leaky ditches and canals.

Great Salt Lake

The Great Salt Lake is unique from other water bodies in the State of Utah and even unique among saline lakes globally by virtue of its system of interconnected bays, depth, and other features. That uniqueness poses several challenges from a water quality standpoint. An example of the consequences of this is that only a single water quality standard, selenium, has thus far been developed to protect the lake. This is because Utah generally relies on the EPA to perform the necessary science and to develop standards, but the EPA generally only does so for freshwater systems, thus leaving the State to develop specific water quality standards for the brackish to hypersaline waters of the Great Salt Lake. The Great Salt Lake is important economically to the State and provides a vital and vibrant ecosystem that sustains millions of perennial, wintering, and migratory birds and their food web. Additionally, the Great Salt Lake adds to our quality of life and represents an important part of our heritage. Protecting its waters and wetlands must be a priority.

Economics

According to a 2014 study, 63% of businesses consider water availability and sustainability of water resources when determining where to locate new facilities

Utah farming and ranching has a great impact on the State's economy, and most Utahns believe farming and ranching are critical to Utah's future. In addition, food growers, processors, and other agriculture-related businesses employ more than 66,000 people and contribute approximately 14 percent of the state's economy, not including grocers.

Prior Appropriation in Utah

Utah, from the first settlement by non-native Americans, has allocated water based on the common-law doctrine of prior appropriation. The doctrine developed out of custom and usage in the mining camps of Colorado and California and was adopted by almost all Western states. The basic tenets of the Prior Appropriation Doctrine are first in time, first in right (Priority of Appropriation); beneficial use is the measure and limit of the water right; non-interference with other water rights; and forfeiture (Use it or Lose it), which is a statutory penalty imposed if the appropriator ceases to beneficially use water without a defense to that non-use. The doctrine was codified in Utah in 1903, but the early statutes were mostly procedural. The body of law remained case law, and, as a common-law doctrine, it continued to evolve as societal values and practical experience dictated.

The water resources are the property of the State, and it holds title in trust for the benefit of its people. An appropriated water right is a conditional property right, protected by priority and the noninterference doctrine, but only so long as the appropriator keeps her end of the bargain by continuous beneficial use. If the appropriator ceases to use the water for beneficial purposes, the water right will forfeit by statute and the water will go back in the common pool to satisfy other vested rights, and any excess thereafter is open to new appropriation. Water is simply too precious in the West to allow it to be hoarded or to go to waste. There can be no appropriated water right in the absence of continuous beneficial use.

Today, the doctrine is struggling to keep pace with the changing social and environmental values of the 21st Century. The law needs to be modernized but through legislative changes, as we no longer have time to wait for the courts to mold the law on a case-by-case basis. The world is simply moving too fast, and the law must keep pace as best it can to meet the needs of a modern and evolving society. There are now new stakeholders who were not at the appropriation table

when most of the water was appropriated. These new interests represent environmental concerns, conservation, wildlife concerns, recreation, and those who find value in a flowing stream rather than diverting every drop of available water for some depletive beneficial use. These new stakeholders are demanding a share of the water, and in the absence of state water law reform, are using tools such as the Clean Water Act, the Endangered Species Act, the Federal Power Act, and the Winters Doctrine to force the reallocation of water from existing beneficial uses to these new public oriented uses that are outside the appropriation hierarchy.

Water Strategies for Great Salt Lake

Legal Analysis and Review of Select Water Strategies for Great Salt Lake

Final (updated) September 10, 2020

Conserved Water defined

The assumed irrigation depletion for each irrigation water right is defined by the DWRi as the volume of water that is potentially consumed as ET during beneficial use for irrigation on the basis of the most consumptive crop which can be grown on the limited acreage, usually alfalfa.

Conserved water is that portion of permitted water depletion that was not depleted and is available to put to an alternative beneficial use. Thus, accurate quantification of conserved water will require accurate quantification of actual depletions. (Id., at page 3-46, Section 3.6.2.1)