Chapter 08

Chapter Highlights

• The Division of Water Rights provides order and certainty to the administration and distribution of Utah’s water.

• The seven Colorado River Basin states (Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming) work together to address opportunities and challenges within the basin, including drought contingency planning.

• The Colorado River compacts and agreements are collectively known as “The Law of the River.”

• The Bear River compact governs how the water supply is apportioned along its 500-mile course through Idaho, Utah, and Wyoming.

• Water banking is being studied to assess how it can help water managers respond to shortages on a local and regional level.
Introduction to Utah Water Rights Law

By: Utah Division of Water Rights

The Office of the State Engineer was created in 1897. In 1967, the name of the Office of the State Engineer was changed to the Division of Water Rights with the State Engineer designated as the Director. The State Engineer, as Director of the Division of Water Rights, is responsible for the general administrative supervision of the waters of the state and the measurement, appropriation, apportionment, and distribution of those waters. The State Engineer apportions and distributes the water according to the respective rights of appropriators. (Utah Code 73-2-1)

All water use within the State of Utah is governed by Utah Code, Title 73. Water law in Utah is based on the principles of public ownership of water, the doctrines of prior appropriation and beneficial use. Tens of thousands of water rights exist in Utah based on these principles. It is the role of the State Engineer to create and maintain a public record of all water rights within the state to provide order and certainty in the appropriation and distribution of the public’s water.

Water Rights

Under Utah law, water rights can be acquired in only three ways: (1) by application to the State Engineer's Office; (2) by diligent use prior to the enactment of the statutes establishing the application process as the sole method of appropriation ("diligence rights"); and (3) by adverse use or adverse possession.

Currently, the only way to initiate a new water right is by application to the State Engineer’s Office. If the State Engineer approves an application, the applicant may proceed, within a set time, to divert the water and put it to beneficial use. After putting the water to use in accordance with the application, the applicant files proof of beneficial use and, if the State Engineer determines that the water is put to use as contemplated by the application approval, the State Engineer issues a certificate of appropriation perfecting the right.

Diligence claims are based on the continuous beneficial use of water dating back to before March 12, 1903, for surface water, or March 22, 1935, for underground water. Prior to these dates, a water user could acquire a water right by diverting and using the water for a beneficial use. After those dates, new water rights could be acquired only by application to the State Engineer's Office.

Prior to 1939, water rights could also be acquired by the adverse use of a valid right. In 1939, the Utah Legislature amended the statutes to prohibit acquisition of a water right by adverse use or adverse possession.

The State Engineer processes thousands of applications annually. Many areas of the state are administratively “closed” to new appropriations of water. In those areas, new diversions and uses of water are established by the modification of existing water rights. Such modifications are accomplished by the filing of change applications. The State Engineer is continually working to bring transparency and efficiency to these records and application processes.
Water Right Adjudication

The Division of Water Rights’ Adjudication Program brings order and certainty to the water rights record by defining existing rights, quantifying unknown rights, removing forfeited rights from the record, and submitting appealed actions to a district court to be confirmed by judicial decree.

The State Engineer is directed in statute (Utah Code 73-4) to conduct surveys of water diversions and uses, provide notice to all potential water right claimants to submit claims, evaluate those claims, and prepare a proposed determination of water rights. A proposed determination is the recommendation of the State Engineer to the court with respect to water rights within an area. Statutorily, the court defers to the State Engineer’s determination, unless the determination is contested. After any objections to a proposed determination are resolved by the court, a final decree is entered for all rights to the use of water which removes ambiguity about unrecorded claims.

Although water right adjudications have been ongoing throughout the state for more than a century, recent efforts and increased funding have focused on efforts in the Utah Lake, Jordan River, Spanish Valley (i.e., Moab), and Virgin River drainages. Within the next five years, it is anticipated that the State Engineer will have finalized recommendations within those adjudication areas and will proceed with obtaining interlocutory (provisional decree) and final decrees from the respective courts.

Water Distribution According to Existing Water Rights

The State Engineer is responsible for apportioning and distributing water according to existing water rights. When it is deemed necessary to ensure accurate distribution, the State Engineer can establish distribution systems and appoint river commissioners (Utah Code 73-5) to oversee the diversion of water. Within a distribution system, a river commissioner regulates and controls the diversion of water according to established water rights.

Large amounts of data are collected on every system and distribution accounting models are created to accurately determine the amount of available water to each user under the respective water rights. The river commissioners, under the direction of the State Engineer, are responsible to adjust diversions as water supply fluctuates throughout the year. These water deliveries are based on the priority of a water right and available water supply. The developed accounting models and records are publicly available on the Division of Water Rights’ website.

Federally Reserved Water Rights

When the federal government reserves public lands for Native American reservations, military reservations, national parks, national forests, or monuments, water is implicitly reserved to satisfy the purposes for which the reservation was created. These federal reserved water rights can create conflict with already established state-based water rights and uses.
To mitigate the impact from federal reserved water rights, the State of Utah has successfully negotiated settlements of federally reserved water right claims for both Native American trust lands and other existing federal reservations.

As of 2021, Utah has negotiated reserved rights settlements for:

- Uintah Ouray Indian Reservation, Shivwits Band Reservation, and Navajo Nation
- Cedar Breaks, Hovenweep, Promontory Point, Rainbow Bridge, Timpanogos Cave, and Natural Bridges National Monuments
- Arches, Bryce Canyon, and Zion National Parks, and Golden Spike Historical Park.

Utah is negotiating settlements for:

- Goshutes Tribe
- Dinosaur National Monument
- Capitol Reef and Canyonlands National Parks
- Certain U.S. Forest Service areas

Conclusion

Water law in Utah is a long established legal framework providing for the effective management of the state’s water supply. Modifications to water law and policy have been made over the years to ensure continued order and certainty in the use of water. Additional resiliency and adaptability are key for stable communities and the expected economic growth. Building transparency and clarity into the water rights system will provide security for existing rights and allow for economic development and stability in the future.

Interstate Streams

Utah shares the waters of the Colorado River and the Bear River with other western states. The Colorado River is also shared with Mexico. Both rivers are significant sources of water for Utah and its citizens, and the allocation of water among the various parties is dictated by compact and subsequent agreements.

Colorado River Compact

The Colorado River Compact is an agreement among the seven states in the Colorado River Basin. The compact, signed in 1922 by all of the basin states except Arizona, divided the river’s waters between the Upper and Lower Basin states. Subsequent agreements and decrees added Arizona and divided each basin’s allotment between member states, and have adapted the regulation and use of the river as needed. Utah, Colorado, Wyoming, and New Mexico comprise the Upper Basin, and California, Arizona, and Nevada comprise the Lower Basin. Mexico signed a treaty with the U.S. in 1944 regarding Colorado River allocations. These compacts and agreements along with other laws and regulations are collectively known as “The Law of the River.” The Law of the River is dynamic and is adapted to changing conditions.

The compact allocates an annual 7.5 million acre-feet (maf) to both the upper and lower basins and was based on the 1905 to 1922 average annual flow of 16.4 maf at Lee Ferry (the measuring point, as designated by the 1922 Compact for meeting the Lower Basin’s allocation). Mexico receives 1.5 maf out of the total flow. Recent estimates indicate the
The river’s current flows are approximately 14.6 maf, according to the 2019 Upper Colorado River Commission’s 71st Annual Report, indicating that the 16.4 maf per year used for compact negotiations may have been from a relatively wet period. Consequently, the 2007 Upper Basin's Hydrologic Determination is closer to 6.0 maf inclusive of Colorado River Storage Project evaporations.

In 2007, the Lower Basin states agreed to share shortages in the Colorado River. Under this agreement, releases from Lake Powell are made in accordance with the Law of the River, but they are also adjusted based on the expected elevations of Lake Mead and Lake Powell. The Upper Basin may not deplete more water than would allow 75 maf over a 10-year period to be released to the lower basin plus half of the Mexican deficiency (750,000 acre-feet).

In addition to reductions for the lower basin states during shortages as outlined in the 2007 Interim Guidelines, Mexico has agreed to reductions in its 1.5 maf annual treaty allotment in exchange for water storage in the U.S. through a 2012 amendment to the 1944 treaty, titled “Minute 319.” This minute, along with “Minute 323” signed in 2017, specifies how surplus water will be shared with Mexico and provides for repairs and improvements to Mexico’s canal system, which delivers water from the Colorado River to Tijuana and other parts of Mexico. These have been financed by entities in the U.S. in exchange for some of the water conserved by the improvements.

Drought Contingency Planning

Due to persistent drought, Colorado River inflows have been below normal for most years since 2000. Only five years have been above normal during that period. Because of this, the seven Colorado River Compact states are developing agreements that will help preserve storage in Lake Powell and Lake Mead, and protect river operations. The Upper and Lower Colorado River Basin states have developed contingency plans both independently and collaboratively. The product of these discussions is five agreements that comprise the Drought Contingency Plan (DCP) for the Colorado River.

They are:

- Companion Agreement
- Upper Basin Drought Response Operations Agreement
- Upper Basin Demand Management Storage Agreement
- Lower Basin Drought Contingency Plan Agreement

Graphic 8-1 Colorado River Allocations
• Lower Basin Drought Contingency Operations

These documents were all signed into law in the spring of 2019. While the greater details of the documents have been agreed upon, finer details regarding the Upper Basin’s Drought Response Operations Agreement (DROA) and a potential Demand Management Program are still ongoing.

The primary focus of these agreements and programs is to ensure compact compliance. Another related focus is to protect power generation of Lake Powell at Glen Canyon Dam. Power revenues are critical to supporting irrigation projects, salinity control projects, several important environmental programs (such as the San Juan and Upper Colorado River Endangered Fish Recovery Programs), and other important costs.

Recovery of endangered fish species is vital to preserving the Upper Basin’s ability to use and develop its remaining shares of the Colorado River. Keeping Lake Powell’s water-elevation at 3,525 feet above sea level accomplishes both protecting the power generation pool and meeting the Upper Basin’s release obligations to the Lower Basin. As water levels decline toward this elevation, drought-storage releases from Colorado River Storage Project reservoirs augment river flows. Drought response operations for these reservoirs are still being developed. Under the DROA, projections from the Bureau of Reclamation are used to determine whether drought response operations are triggered. These operations were triggered for the first time in 2021, requiring 183,000 acre-feet of water to be released from upstream reservoirs to Lake Powell.
Utah’s Colorado River Use

Utah’s allocation of the Colorado River is 23% of the Upper Basin’s total available supply. Reserved water right settlements for the Ute Tribe and the Utah portion of Navajo Nation must be satisfied from Utah’s allocation. The proposed Lake Powell Pipeline will deliver a portion of Utah’s allocation to southwest Utah.

In 2007, the seven Colorado River Basin states negotiated shortage sharing guidelines that expire in 2026. The states will renegotiate these guidelines. Current and projected climatic conditions are expected to impact the amount of water available for use by the Colorado River Basin states. Taking this into consideration, along with the water reserved for the Ute Indian Tribe and Navajo Nation based on negotiated settlements and the need for water for the Lake Powell Pipeline, energy development, agriculture, and municipalities in Utah, most, if not all, of Utah’s Colorado River apportionment is committed.

Colorado River Authority

During the 2021 legislative session, the Utah State Legislature created a new entity focusing on the Colorado River. The Colorado River Authority of Utah is a state agency under the Governor’s Office whose mission is to protect, preserve, conserve, and develop Utah’s Colorado River system interests. The Division will work closely with the Authority and its River Commissioner to strengthen its relationships with the six other Colorado River Basin states and will work to develop collaborative and science-based solutions to the many challenges facing the river.

Salinity Control Agreements

The Colorado River Basin Salinity Control Act of 1974 (Public Law 93-320) authorized salinity control projects in the U.S. in an effort to meet water quality obligations made by agreement with Mexico. Minute 242 (1973) sets the criteria for the water quality standard that gets delivered to Mexico. Under provisions of the Minute, water delivered to Mexico cannot exceed a flow-weighted average total dissolved solids of 115 parts per million (ppm), plus or minus 15 parts per million.
30 ppm above the salinity of water reaching Imperial Dam in the U.S. As part of the Act, salinity control projects in the Colorado River Basin have been implemented along with the construction of a desalinization plant near Yuma, Arizona. On-farm efforts that reduce salinity through improved irrigation efficiency, thereby reducing deep percolation and runoff, have been applied to lands in Utah with good results. Efforts basin-wide have decreased salinity in the river to provide significantly improved water quality for Mexico and the Lower Basin states.

Bear River Compact

The Bear River is the largest river in North America that ends at an inland sea. It runs through northern Utah, southwestern Wyoming, and southeastern Idaho. Originating in Utah’s Uinta Mountains, the river crosses state borders five times before terminating in the Great Salt Lake, approximately 90 miles from where it began.

The average annual supply of the Bear River that reaches Great Salt Lake has historically been 1.2 million acre-feet (1941-1990). Due to the effects of drought in subsequent years, that amount has been reduced to about 850,000 acre-feet annually.

Formed in 1959, the Bear River Commission (Commission) is responsible for dividing and managing the waters of the Bear River. The Commission is made up of three representatives from each of the states. In addition to the nine state commissioners, the U.S. President appoints a non-voting Federal Government Commissioner who acts as chair of the Commission.

The Bear River Compact (Compact), like the Colorado River Compact, governs how the water supply is apportioned along its course. The Compact is the guiding document for river operations. Every 20 years, the Commission reviews the Compact and river operations, allowing public and stakeholder discussion, and incorporates necessary changes. The most recent review was in 2017 and was formally adopted in April 2020.
The Compact is a document, voluntarily negotiated and adopted by the states, which establishes the rights and obligations of Idaho, Utah, and Wyoming with respect to the waters of the Bear River. The Compact refers to provisions established in the original (1958) and amended (1980) Bear River Compact.

The Compact:

- Divides the Bear River into three main divisions: the Upper Division, the Central Division, and the Lower Division.
- Specifically identifies which river flows and canal diversions are to be assigned to each of the divisions.
- Apportions direct flows of the Bear River and its tributaries between Utah and Wyoming in the Upper Division.
- Apportions direct flows of the Bear River and its tributaries between Idaho and Wyoming in the Central Division.
- Grants Idaho the first right to develop and deplete 125,000 acre-feet in the Lower Division.
- Grants Utah the second right to develop and deplete 275,000 acre-feet in the Lower Division.
- Divides the next 150,000 acre-feet of water depletion equally between Utah and Idaho in the Lower Division.
- Divides water in excess of the above allocations between Utah and Idaho, with Idaho receiving 30% and Utah 70% in the Lower Division.
- Defines 36,500 acre-feet of “Original Compact Storage” above Bear Lake and allocates storage to each of the states as follows:
  - Utah 17,750 acre-feet
  - Wyoming 17,750 acre-feet
  - Idaho 1,000 acre-feet
- Grants additional storage above Bear Lake for 74,500 acre-feet, of which 4,500 acre-feet is granted to Idaho and 35,000 acre-feet is granted both to Utah and Wyoming.

These and other Compact provisions are carried out by the Commission. Apportionments of Bear River flows are made by the Commission’s Engineer-Manager to each state. Every two years, the Commission publishes a report of its activities and operations under the Compact. The Twentieth Biennial Report, covering the 2017 – 2018 water years, along with all prior reports, can be found on the Bear River Commission website.

Water Banking in Utah

Temporary water shortages may occur as the result of drought conditions. Developing a cooperative plan for water resource and system management at the local and regional level can help water managers cope with shortages if they occur. This is often accomplished without committing large sums of money for capital expenditures for new supplies that would otherwise be required. Water banking, as described in Chapter 7, is one method that can help managers cope with shortages.

The 2017 Recommended State Water Strategy (Strategy) recognized that “Utah faces a daunting challenge. We have the distinction of being both one of the
The driest states in the nation and one of the fastest-growing.” The Strategy proposed developing a water banking program in Utah. Water banking as described in Utah 2020 legislative documents, “...facilitates the voluntary temporary transfer of the use of water rights from one user to another” (SB26). Water banking was included in the Strategy to facilitate:

- Protection or enhancement of instream flows for the natural system, wildlife and recreation uses
- Balancing the competing uses of Utah’s water supply
- Flexibility to Utah water law
- Protection of agricultural uses

Such transfers would need to be expedited through the Division of Water Rights with minimal administrative processes and low transaction costs.

In 2017, the “Public Water Supplier Amendments” (SB214) would have expanded the current instream flow provisions to allow municipal suppliers to hold water rights for instream flow purposes. While this bill did not pass, it stirred active debate about the role of instream flows in Utah. A work group was convened to discuss Utah’s instream flow processes with stakeholders.

After extensive research, the work group identified water banking as a mechanism to increase instream flows and to carry out many other recommendations from the Strategy, such as:

- Facilitating non-permanent transfers of water through leases, contracts, or other voluntary arrangements to support competing water uses, including increasing municipal demands
- Creating an alternative to permanent “buy and dry” water transfers in which agricultural water rights are acquired for municipal and industrial use and the related farmland is permanently retired
- Developing water markets to incentivize wise use and efficient allocation of scarce water resources

The focus of the work group transitioned to water banking in order to determine how water marketing organizations could be created and operated in Utah. Specifically, the committee examined how water marketing can be implemented within the limitations of Utah water law, which laws needed to be expanded to support water banking, and also created a pilot project group intended to test administrative and systematic concepts.

In 2018 and 2019, the water banking work group developed a model in which local water users would create and manage water banks in a given region, with each organization tailoring the program to the needs of its specific area or watershed. The water banking work group explored the legal and logistical barriers to water markets in Utah.

In 2020, “Water Banking Amendments” (SB26) was passed to run a 10-year pilot project to allow for the creation of state recognized water banks. The objectives of SB26 are to:

**Promote**

- Transparency and access to water markets
- Temporary, flexible, and low-cost water transactions between water users
- Optimal use of the public’s water
• Utah’s agricultural economy by providing access to water resource and income

Facilitate

• Robust and sustainable agricultural production while meeting municipal and industrial demand

• Water quality improvement

• Water rights administration and distribution

• A healthy and resilient natural environment

Recommendations

The Division will work with cooperating partners to implement the following recommendations:

• Develop a policy to establish a process for consultation with federally recognized Indian Tribes to comply with Executive Order 2014/005.

• Research and engage stakeholders in the development of a Demand Management program for water users that rely on the Colorado River.

• Continue to work closely with other interstate compact states to adapt to changing conditions, find collaborative solutions to difficult challenges, and preserve each state’s rights to their respective compact allocations.

Chapter 8 Links

State Engineer (Utah Code 73-2) - https://le.utah.gov/xcode/Title73/Chapter2/73-2.html

Division of Water Rights, Compacts and Agreements - https://www.waterrights.utah.gov/wrinfo/policy/compacts.asp


Bear River Commission Website - http://bearrivercommission.org/

Recommended State Water Strategy - https://envisionutah.org/utah-water-strategy-project

Water Banking Amendments (SB26) - https://le.utah.gov/~2020/bills/static/SB0026.html

Colorado River Authority of Utah - https://cra-utah.org/