

Remarks prepared for the Little Hoover Commission

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What constitutes Utah's water system in terms of planning, conveyance, supply, water rights and interstate water agreements?

Local water providers (communities, cities, private companies and water conservancy districts) provide the citizens of Utah the conveyance and supply of water to meet the needs of its citizens (for both agricultural and municipal) needs. The state of Utah, through the Division of Water Resources' State Water Planning Process, works in concert with these providers in the long term strategic planning of water projects this includes comprehensive statewide water planning, and operates an operational cloud seeding program to augment water supplies.

The Division of Water Resources (Division) is responsible to plan for and encourage the wise use of the state's water resources. To do that, the Division has established the following planning objectives:

- Help local, state and federal agencies coordinate water resources planning and development activities.
- Maintain programs with federal and state agencies to obtain streamflow, climatological, SNOTEL, water quality data, water-related land use and municipal and industrial water use data.
- Develop and maintain river basin models for state planning purposes and operational models for specific project feasibility and development studies.
- Study technologies and methods that will help meet future water resource needs.
- Continue to formulate and maintain both a State Water Plan and basin plans that: (1) identify and quantify existing and projected municipal, industrial, agricultural and environmental water use; (2) identifies and

quantifies water supply sources; and (3) identifies how much additional water will be needed and makes recommendations for meeting future needs; (4) identifies and studies water-related topics and issues that must be considered in meeting future water needs.

Since completion of the first Utah State Water Plan in 1990, the Division has completed eleven detailed basin plans covering the entire state. The plans describe water resource development opportunities and problems in the basins, identify options, and make recommendations for future actions. They also help coordinate the activities of local, state and federal water agencies within the river basins. The Division published an updated statewide plan in 2001 entitled "Utah's Water Resources: Planning for the Future". Updates of the eleven previously published basin plans will be done on an as-needed basis. The Division obtains needed data and provides technical modeling and hydrologic analysis for state water planning, water development projects, and coordination with federal and state agencies.

The Division's Water Conservation and Education programs are focused on activities and programs to help Utahns reduce the per capita municipal and industrial water use of Utah residents. The division is committed to expand efforts in water conservation and education by:

- a. Providing materials and teacher training in public schools; sponsoring the Utah Waters Van program and the Water Education Poster Contest and Banquet.
- b. Assisting the Governor's Water Conservation Team
- c. Working with local water agencies to develop and implement water conservation programs, including education of the general public as to how to use Utah's water wisely;
- d. Promoting modification of laws, ordinances and regulations to promote efficient water use.

Cloud seeding has long been recognized by water professionals as a feasible means to augment the natural water supply. Conditions are especially favorable in Utah where topography, climate and water storage reservoirs make winter snowpack enhancement cost-effective. Utah enacted weather modification legislation in 1973, and an operational cloud seeding program was funded in

1976. The field program, which usually extends from November to April, is funded jointly by the Division and local water interests. Statistical analysis of the cloud seeding program since its beginning shows an average increase in precipitation of 8% to 20% in seeded areas at a cost of about \$1.70 per acre-foot for the additional water.

In addition the division also administers water loan programs. In 1909 the Utah State Legislature approved an "Act to Provide for a Utah State Conservation Commission" to prevent waste of the natural resources in Utah. On March 17, 1921, the Legislature created the Utah Water Storage Commission. Its principal powers and duties were "to make investigations, looking to a full and proper development and utilization of the state's water supply." That organization continued until March 31, 1941, when the Legislature abolished the Commission and gave its powers and duties to a newly-created Publicity and Industrial Development Department and Industrial Development Department.

The Utah Water and Power Board was created in 1947. At the same time, the Legislature implemented a Revolving Construction Fund to provide financial assistance for the construction of water development and conservation projects. This began the legacy of the state's participation in a self-help water development cooperative effort that continues to function today. With the creation of the Department of Natural Resources in 1967, the Legislature established the Board of Water Resources (to supersede the Water and Power Board) and the Division of Water Resources to administer the state's responsibilities in water resource matters and act as technical advisor to the Board and Governor. The Division of Water Resources is one of seven agencies of the Utah Department of Natural Resources and is the water resources authority for the state of Utah. The Board of Water Resources is the policy-making body of the Division and consists of eight governor appointed representatives from designated geographic areas of the state.

Beginning in 1947 with the creation of the Water and Power Board, and continuing with the Division of Water Resources, both technical and financial assistance has been provided to public and private entities to more effectively utilize the state's water resources. Since initiation of that policy, the state legislature has appropriated approximately \$288 million for water development. Because the state statute requires financial assistance be repaid (hence the term revolving loan program is often used), the Division has provided over \$576 million through its funding programs, with a ratio of over \$2.94 in construction for each dollar provided. During the past 60 years the Division has been

involved in the planning, design, construction, and financing of 1,311 water projects.

The Director of the Division is Utah's Interstate Stream Commissioner and he administers interstate water agreements and water rights. Geography, history and national politics have a profound influence on water management in Utah. Drainage basins covering more than half the state are associated with interstate streams. The water resources of these areas are governed by state water law, as well as interstate compacts. In addition, over two-thirds of the lands of the state are owned and administered by the federal government and federal laws and regulations associated with these lands present unique problems to state water planners and administrators. Increased environmental awareness has generated federal legislation that significantly constrains the formulation and implementation of water-related activities.

The Board, with the approval of the department executive director and the governor, designates a representative of the state of Utah in all interstate conferences and meetings between the state of Utah and one or more basin states held to enter into compacts to divide interstate waters or to discuss interstate streams issues. Past practice has been that the Division of Water Resources Director serves as Utah's Interstate Streams Commissioner, the governor's representative on Colorado River management issues and is Utah's representative on the Upper Colorado River Commission, and Bear River Commission. In addition the Director serves on the Western States Water Council, Colorado River Basin Salinity Control Forum and Advisory Council, and the Glen Canyon Adaptive Management Work Group.

Because control of much of Utah's water resources is affected by actions of other states and federal agencies, active participation on selected interstate and state/federal bodies is essential to protect Utah's interests.

In his book "Dead Pool" James Lawrence Powell recounts the initial Mormon settlement of Utah and states: "Once in the Salt Lake Valley, their organization and hierarchy allowed the Mormons to make crucial decisions with the authority that history shows is necessary if an irrigation society is to succeed. The church decided where to capture water and how to distribute it. There was no private ownership: water belonged to the people in common. In middle-nineteenth-century America, these were radical, even dangerous notions, a kind of theological socialism that would have been anathema anywhere else in the

country.” This concept persists in current Utah water law. According to Utah water rights law, Title 73, water is the "property of the public" and should be put to "beneficial use." The code states, "Beneficial use shall be the basis, the measure and the limit to the use of water in this state." Utah water law is also based on "prior appropriation." When several people use water from the same source, "the one first in time shall be the one first in rights."

The office of the State Engineer was created in 1897. In 1903, Utah surface water law was established. Legislation passed in 1919 for adjudicating water rights and for governing dam safety. In 1935, groundwater was included in the water law. The name of the State Engineer's Office was changed in 1963 to The Division of Water Rights.

The Division of Water Right's administrative responsibilities are divided into categories as follows:

- Water right application & records: The State Engineer approves all applications to use water in the state and maintains a comprehensive set of water right records, in files and online, assembled from his application approval responsibility.
- Distribution: Water is distributed to water users on a priority basis. Where many users are competing for water from the same source, the State Engineer appoints a commissioner to oversee the day-to-day distribution of water.
- Adjudication: The courts have jurisdiction to adjudicate ownership and validity of water rights. The State Engineer assists in this effort through investigations that compile proposed determinations of water rights for decree by district courts.
- Well drilling: Regulates water well construction by licensing, registering and overseeing construction activities of over 330 water well drillers and drill rig operators.
- Enforcement: Investigates and prosecutes violations of water right statutes with orders, fines and litigation when necessary

What is the structural relationship between the Board of Water Resources and the Division of Water Resources, and how are their authorities determined?

The Division of Water Resources is the water resources authority for the state of Utah and is staff to the Board of Water Resources. The Board is a policy-

making body of the Division. The authority and duties of these entities are in state statute and they are to:

- Protect Utah's rights to interstate waters
- Provide comprehensive water planning
- Manage Utah's water resource project construction programs

How does the Division of Water Resources interact with other agencies, such as the Central Utah Project and the Central Utah Water Conservancy District, to deliver water to Utah residents, industry and agriculture?

As stated above the Division does not currently deliver any waters of the state to Utah residents. However the Division provides funding to the other agencies to develop and make better use of the waters in Utah. Also the state through the Division participated in the planning of most of the federally funded projects like the Central Utah and Weber Basin projects. The federal project sponsor is allowed to operate its project as needed and allowed by the federal authorization. In its current loan programs the Division maintains no continuing authority or direction over project operation as a condition of funding.

The Division is actively involved with water suppliers throughout the state in the common interest of planning, conserving, developing and protecting the state's water resources. The Division has been successful in developing partnerships and consensus for the implementation of better methods of sharing and developing water. A good example of the success of this philosophy is the Division's goal of a 25% reduction in per capita water use by the year 2050. Through education and cooperation, water providers have been shown how water and money can be saved with little or no impact to water users' quality of life or landscape practice and most have adopted the goal. The water saved will be used to provide about 60% of the state's water demand through 2050. The Division helps these suppliers by:

- Assessing water supply and needs
- Planning to help meet future water needs
- Assisting with water conservation programs
- Funding water resource projects
- Providing technical assistance
- Operating cloud seeding projects

- Protecting rights to interstate waters
- Conducting research and studies
- Maintaining a water-related land use database

What are the strengths and weaknesses of Utah's water governance model and methods?

Strengths

- The state's water development programs have enabled economic prosperity and enhanced the standard of living throughout the state.
- The Division of Water Resources has broad authority to plan, conserve, develop and protect Utah's water resources
- The Division of Water Rights regulates the rights to use water to provide order and certainty in the beneficial use of Utah's water.
- The Division of Water Quality protects, maintains and enhances the quality of Utah's surface and underground waters for appropriate beneficial uses and to protect the public health
- The Division of Drinking Water protects the public against waterborne health risks
- The Governor's Water Conservation Team effectively promotes water conservation in the state
- Very active participation by the water community in the legislative process
- There is relative ease in the movement of water from one use to another. This is usually a willing seller/willing buyer transaction.

Weaknesses

- Over-appropriations of water many years ago that the current state engineer will be dealing with for years to come. Both in surface and groundwater
- The Division through its broad authority does not have specific regulatory authority to fully address some sensitive and controversial issues like instream flows, flood control releases from dams, inter and intra-state markets for water and landscape ordinance requirements/limitations.
- Because Utah's local water providers have the primary responsibility to provide water within their boundaries, regional water issues/needs can be

neglected on a larger scale. Typically the older communities have more water than is currently needed and sharing and conjunctive use is not utilized to the extent it could be. Generally where we have water conservancy districts this is not the case.

- Water is becoming like a commodity that moves towards money. Not always toward where it is most needed.

Are there areas in which California leaders should consider adopting a new approach?

As we come to the time in the development of the west when water will play an increasing roll in limiting growth the questions and issues associated with competing uses of and for water will be huge. We have watched and followed California for years and have been and are impressed with what you have done. As water becomes scarce and money tight the time may have come or soon will come when the use of water for people will be in direct conflict with the need for water in the environment and for meeting federal and state responsibilities to the Endangered Species Act. We are looking to you to see if there is indeed a new place to go, a new compromise to be reached that will avoid what looks like an impending train wreck.