

A COMPARATIVE ANALYSIS OF STATE WATER PLANNING EFFORTS
IN
ARIZONA, COLORADO, MONTANA, OKLAHOMA, OREGON, TEXAS & UTAH

WITH

COMMENTARY ON NEW MEXICO WATER PLANNING STATUTES,
OBJECTIVES, AND TRIBAL CONSULTATION

PREPARED FOR THE NEW MEXICO INTERSTATE STREAM COMMISSION
BY
THE UTTON TRANSBOUNDARY RESOURCES CENTER

MAY 2017



Utton Transboundary Resources Center

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Introduction

The New Mexico Interstate Stream Commission (ISC) engaged the University of New Mexico's Utton Transboundary Resources Center and former State Water Planner Emily Geery to assist with New Mexico's State Water Planning initiative.

The Utton Center and the ISC met once to discuss the State Water Planning statute and again to discuss the potential role of tribes in State Water Planning. Subsequent meeting focused on governance issues and the objectives of the New Mexico State Water Plan.

The Utton Center also conducted a study of seven other states' water planning processes. This comparative analysis of water planning governance processes was framed around questions presented by ISC planning staff.

This report provides a synopsis of these advisory meetings and responses to the ISC's questions about other states' water planning efforts.

It is important to note that the ISC maintains its own legal counsel and that the Utton Center does not represent the ISC. This report is provided to assist the ISC in developing its own understanding of State Water Planning governance in New Mexico and across the West. Any legal analysis contained in this report is the product of the Utton Center, not the ISC. This report conveys general information only and is not intended to provide legal advice.

The State Water Planning Statute

The ISC completed the State Water Plan in 2004 and two subsequent reviews of the State Water Plan in 2008 and 2013. The ISC is now seeking clarification about the scope of its legal obligation to update the State Water Plan. The ISC posed specific questions to the Utton Center about the State Water Plan statute and the answers are presented here.

QUESTIONS ADDRESSED

- I. What does the statute say? What does the ISC have to do?

The Legislature requires that the ISC prepare,¹ adopt,² and implement³ a State Water Plan. The State Water Plan shall be subject to *adoption* by the ISC, after public

*This report was prepared by Adrian Oglesby, Christal Weatherly, and Diana Doublehead-KickingWoman.

¹ §72-14-3.1(A).

² §72-14-3.1(G).

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review and comment.⁴ Adoption of the State Water Plan means that the ISC will accept the Plan as its own and put it into effective operation. The State Water Planning statute provided detailed requirements for the content of the State Water Plan.⁵ The 2003 State Water Plan generally conforms to the outline of requirements called for in the New Mexico State Water Planning statute.

The Legislature requires that the State Water Plan be reviewed, updated, and amended at least every five years *in response to changing conditions*.⁶ Both the 2008 and 2013 State Water Plan Reviews identified conditions that have changed since 2003, such as:

- awareness of climate change;
- population growth;
- initiation of interbasin transfer proposals;
- initiation of instream flow proposals;
- additional endangered species listings;
- implementation of Active Water Resource Management;
- expanded development of water resources; and,
- settlement of water right adjudications.

There have been further changes since the 2013 State Water Plan Review. Therefore, the ISC should now review, update, and amend the State Water plan in response to those *changing conditions* it identifies.

The ISC should also consider including an update of accomplishments that relate to issues identified in the State Water Plan and State Water Plan Reviews. Achievements like the completion of the updates of all sixteen Regional Water Plans in 2016 should be highlighted to recognize the robust effort put forth by so many dedicated New Mexicans and the ISC staff.

Water planning is an ongoing process. The ISC can strategize to enhance the State Water Plans over time. By requiring a regular update process every five years in response to changing conditions, the Legislature has recognized that the State Water Plan will be an evolving document. There will be future opportunities for the ISC to identify its priorities for updating the State Water Plan, including what will be addressed in future phases of the quinquennial update process.

³ §72-14-3.1(A).

⁴ §72-14-3.1(G).

⁵ §72-14-3.1 (C) & (D).

⁶ §72-14-3.1(H).

II. What parts of the State Water Plan should the ISC focus on for the 2017-2018 update?

As described above, the ISC is obligated to update and amend the State Water Plan in response to “changing conditions.” While the “changing conditions” that the ISC decides to address are entirely within its own discretion, the following short- and long-term items were identified by the ISC and the Utton Center as items that could be addressed in the State Water Plan update.

- A. Short-term
 - 1. Refined Water Budgets
 - a. Developed integrable formats for regions
 - b. Developed improved climate change knowledge⁷
 - i. Water availability
Precipitation and temperature variability
 - ii. Water management
New capture & storage strategies
 - 2. Current Critical Infrastructure Needs
 - a. State priorities (major works)
 - b. Regional Water Plan infrastructure priorities
 - 3. Updated Regional Water Plans
 - a. Identify items to be implemented prior to next update
 - b. Define roles and responsibilities
 - c. Plan schedules
 - d. Estimate costs
- B. Long-term
 - 1. Integrate the following water budget information from the WRRRI Statewide Water Assessment:
 - a. Dynamic Statewide Water Budget
 - b. Aquifer mapping
 - c. Surface Water inflow, outflow, gains, and losses
 - d. Groundwater recharge
 - e. Produced Water
 - f. Energy-Water nexus
 - 2. Although not required by law, the Utton Center does recommend that the ISC consider updating and reissuing its Water Atlas to reflect changes since it was first produced as an appendix to the 2003 State Water Plan. The ISC is monitoring

⁷ See The Upper Rio Grande Impact Assessment, available at: <http://www.usbr.gov/watersmart/wcra/reports/urgia.html>

the Statewide Water Assessment being lead by the New Mexico State University's Water Resources Research Institute, which could be used to inform an updated Water Atlas when it is complete.

3. Assess Agricultural Water Efficiency and Conservation
 - a. Advances in on-farm efficiency
 - b. Improvements in conveyance efficiencies
 - c. New water storage and release strategies
4. Promote Active Water Resource Management implementation progress
5. Promote water permit applications processing efficiency
6. Promote advancements in the licensing, adjudication, and settlement of water rights
7. Continued development of Regional water plan policy recommendations

III. Should the State Water Plan be a policy document or an implementation plan?

The State Legislature has mandated that the State Water Plan be a *comprehensive, coordinated strategic management tool*.⁸

Strategic management is a term of art that has evolved in the area of business planning since the 1950s. The term is generally used today to describe the development of an *implementation plan* for an entity's major objectives and programs. This includes an assessment of the resources available to achieve identified goals and plans in the context of the internal organizational capacity and the external working environment.

It is unclear whether the Legislature intended to refer to the academic strategic management doctrine with its use of the term "strategic management." Entire journals are devoted to the topic and academic careers have been built around developing concepts of "strategic management." Full implementation of "strategic management" in the purest academic sense is most likely unachievable given available resources.

The Utton Center recommends the ISC pursue "strategic management" in a more general sense. The term "strategic management" has entered the common lexicon

⁸ §72-14-3.1(B) & (C).

where it now refers to a straightforward process of identifying and implementing strategies designed to reach particular objectives in light of available resources and operating environments.

There are different types of strategies. Some strategies simply identify a goal and a process for achieving that goal. Other strategies incorporate adaptive management, where resources can be redistributed in response to changes in the operating environment. The more adaptive a strategy, the more fluid and complex it tends to be. Nonetheless, adaptive strategies can allow for changes in behavior without a formal plan revision or update.

Knowing your strategic planning operating environment includes understanding societal expectations. Maintaining an awareness of the current expectations of stakeholders will allow the ISC to refine its messaging about and marketing of the State Water Plan. In a traditional marketing plan, a company might want to identify what its customers want before developing a product. While the general public might assume that it is the customer base for the ISC's State Water Plan, it is actually the Legislature that has called for this product and has defined what it shall include. Therefore, the ISC should strive to meet the expectation of the Legislature while controlling the wider expectations of the general public about the State Water Plan.

IV. What are the respective roles of the ISC, Office of the State Engineer, the Water Trust Board, and the water planning regions?

It is the role of the ISC to prepare, implement, and update the State Water Plan. The Office of the State Engineer and the Water Trust Board were specifically named by the Legislature as entities that the ISC was to collaborate with in developing the State Water Plan.⁹ In addition, the Legislature required that the ISC consult with other government agencies as appropriate in developing the State Water Plan.¹⁰

The section of the State Water Planning statute that governs the update of the State Water Plan does not state which agency shall play a role in the update process.¹¹ The ISC is not specifically named as the entity responsible for the State Water Plan update. Nonetheless, when read in the full context of the State Water Planning statute it should be inferred that the ISC is responsible for the update process and may collaborate in that process with the Office of the State Engineer and Water Trust Board. Likewise, consultation with other government agencies may also be included as a component of the update process if ISC feels that will be useful. The extent of collaboration and consultation undertaken in the update process appears to be within the discretion of the ISC.

⁹ §72-14-3.1(A).

¹⁰ §72-14-3.1(C).

¹¹ §72-14-3.1(H).

The role of the regional water plans within the State Water Plan and the update process is also within the discretion of the ISC. The State Water Planning statute simply states that the ISC shall integrate regional water plans into the State Water Plan *as appropriate and consistent with State Water Plan policies and strategies*.¹² The determination of what aspects of a regional water plan are appropriate and consistent with the overall State Water Plan is a matter for the ISC to decide. Clearly, the ISC is making a serious effort to make the regional water plans more integrable with the State Water Plan, and it is anticipated that the regional plans will be increasingly integrated with the State Water Plan as they each go through the continual revision process in the future.

V. What essential approaches or steps need to be taken to integrate regional water plans as appropriate and consistent with the State Water Plan?

The State Water Plan must be *adopted* by the ISC. This means that the ISC shall be responsible for implementing the State Water Plan. The ISC is only required to *accept* the regional water plans. This does not require the ISC to implement the regional water plans. This distinction should guide the ISC's determination of what elements of the regional water plans are integrated into the State Water Plan, as the ISC will become responsible for implementing actions integrated into the State Water Plan from regional plans. This important distinction between the ISC responsibilities for adopting the State Water Plan and merely accepting regional water plans should also guide how the ISC describes what it assimilates into the State Water Plan from regional plans. The ISC will want to carefully phrase items drawn into the State Water Plan from regional plans to ensure that it can implement what it describes in the State Plan.

VI. What is the role of Pueblos and Tribes in the State Water Plan update process?

Tribal Consultation

The ISC has long-standing relationships with New Mexico's Native American Nations, Tribes, and Pueblos. These relationships are governed in part by State law that directs the ISC to promote communication, collaboration, positive government to government relations, and cultural competency with the Nations, Tribes, and Pueblos within the State.

The interactions of the ISC and New Mexico's twenty-two federally recognized Native American tribes are guided by the State of New Mexico's State-Tribal Collaboration Act.¹³ This Act has three main requirements, all of which the ISC has complied with. This Act requires the development of a policy to promote

¹² §72-14-3.1(C)(11).

¹³ §11-18-2, et seq.

communication and collaboration with tribes.¹⁴ The ISC has complied with this requirement with the adoption of the Office of the State Engineer and Interstate Stream Commission's Tribal Communication and Collaboration Policy on December 16, 2009. In addition, the State-Tribal Collaboration Act calls for State agencies to designate a tribal liaison,¹⁵ which the ISC has also done. Lastly, the Act requires the ISC to submit an annual report to the Indian Affairs Department. This report should include a description of the programs and services that affect tribes.¹⁶

The principles espoused in the ISC's Tribal Communication and Collaboration Policy are already embraced in the State Water Plan. These basic principles include respecting tribal sovereignty, promoting intergovernmental relations, establishing partnerships, mutually resolving concerns, and utilizing informal communications.¹⁷ The Tribal Communication and Collaboration Policy also sets forth sample procedures for State-Tribal Working Groups and for State-Tribal Consultations.

The State Water Planning statute itself calls for the ISC to consult directly with Indian Nations, Tribes, and Pueblos to form a policy and process to guide (1) the integration of tribal water plans with the State Water Plan, and (2) the final adjudication or settlement of Indian water right claims.¹⁸

A great deal of scholarship and many guidance documents have been developed to assist federal, state, and local governmental agencies with their tribal relationships. At the end of the day, most of the concepts espoused by these guidance documents can be condensed to the simple concepts of being considerate neighbors and maintaining positive working friendships.

Historically, the ISC-Tribal relationships have focused largely on the settlement of Indian water right claims. This history should serve the ISC as it consults with tribes on the State Water Plan. As noted above, the State Water Planning statute calls for the ISC to develop a process to guide the adjudication and settlement of Indian water right claims. The ISC's State-Tribal Collaboration Act Annual Report for 2014–2015 highlights the ongoing consultations on the topics of the Navajo Settlement, the Aamodt Settlement, and the Taos-Abeyta Settlement.

The ISC also participates in an Annual State-Tribal Water Institute. During the 2014 State-Tribal Water Institute the tribes requested that they be notified of regional water planning meetings and that their comments be incorporated into the state water planning process. This illustrates the interest of some tribes in the regional and State water planning processes.

¹⁴ §11-18-3(A)(4).

¹⁵ §11-18-3(E).

¹⁶ §11-18-3(C)(6).

¹⁷ Tribal Communication and Collaboration Policy, Office of the State Engineer/Interstate Stream Commission, §4; State Water Plan, §E.

¹⁸ §72-14-3.1(E).

The ISC is already aware that tribes may not want to engage in the State Water Planning process. The inherent tension between parties with unresolved water rights claims can create a disincentive to work together resolving water management issues. This tension may be overcome in some areas, particularly where tribes have concerns about the application of State water administration and development outside of tribal borders that impact the amount of water flowing into Indian Country. Nonetheless, unless there is a productive preexisting relationship between the ISC and a tribe with a solid foundation of mutual understanding and some measure of trust, it may be very difficult to engage that tribe in the planning process.

It is important to note that the Legislature stated specifically that nothing in the State Water Plan shall be construed to determine, abridge, or affect the water rights of Indian Nations, Tribes, or Pueblos.¹⁹ While this should provide some comfort to tribes, it is a statement that is intended to direct public officials (such as judges) in their interpretation of the State Water Plan. This important reassurance should be highlighted by the ISC when dealing with tribes. It may not necessarily be effective with those tribes who have seen their water rights affected by other documents that make similar proclamations, such as the Rio Grande Compact.

Clearly, the ISC needs to make an effort to collaborate with the tribes in the update of the State Water Plan. While this could be viewed as a burden, it can also be seen as an excellent opportunity to strengthen the ISC's working relationships with New Mexico's tribes.

The Utton Center recommends that the ISC take this opportunity to consult with tribes above and beyond the two topics required by the State Water Planning statute, primarily because consulting on either the integration of tribal water plans with the State Water Plan or the adjudication or settlement of Indian water right claims may not be sufficient reasons for some tribes to consult with the ISC. Those same tribes may be eager to consult and collaborate with the ISC on other issues. Approaching consultation with a broader view may lead to the development of mutual understanding and the level of trust required ultimately to consult on water planning and water rights issues.

Good relationships take time and effort. Government to government relations in particular are time consuming. The complexities of interacting at multiple levels of leadership within twenty-two individual and separate governments make this a difficult mandate to fulfill. While standardized consultation approaches may make the task appear easier initially, the consultation process will eventually have to be tailored to the character and needs of each tribe.

¹⁹ §72-14-3.1(J).

Good relationships also take personal commitment. The Utton Center is particularly enthusiastic about the potential for greatly improved tribal-ISC collaborations given the interest and character of the staff that are charged with maintaining the tribal relationship in the State Water Plan context. New leadership brings new opportunity for improved relationships. Committed and culturally aware staff provides the infrastructure to develop multiple levels of relationships, which are critical for real collaboration.

The Utton Center proposes the ISC pursue a “Blue Sky Portfolio” approach with those tribes with whom it already has established an adequate foundation of communication and understanding. The concept is to work with each tribe to develop a portfolio of all the water issues, policies, and projects that are of specific interest to each tribe. This would serve as a guidance tool for the ISC to develop productive collaborations with each tribe. This would also provide a source of continuity as leadership and staff changes over time. For example, with those Pueblos that change government leaders every year, a portfolio of all the water issues under the “blue sky” that are specific to a tribe will serve as a cornerstone for continued consultation, collaboration, and progress. Of course, the ISC should expect and respect that tribes may not want to include each and every one of their water issues in a shared portfolio with the ISC due to confidentiality and privacy concerns.

The Utton Center encourages the ISC to consider what it may learn through its relationships with New Mexico’s Tribes and Pueblos. New Mexico’s Native Americans are proven leaders in water management, both historically and today. The Pueblos were successfully irrigating long before Spanish colonizers appeared in the Southwest. In the sixteenth and seventeenth centuries the Pueblos showed great hospitality when treated well and equal strength and cunning when mistreated. They have been leaders in the sharing of shortages (e.g. the Jemez River Shortage Sharing Agreement). In recent decades they have been at the forefront of riparian²⁰ and in-stream flow restoration.²¹ The ISC can only benefit by recognizing and appreciating that these communities have proven resilient in the face of repeated incursions, foreign epidemics, multiple governments, vicious cycles of drought and flood, and western water law. New Mexico’s Tribes and Pueblos have much to teach about good water management and water ethics. We are fortunate to have them as neighbors and should make the most of our common interests and concerns.

²⁰ See Greg Hanscom, Bringing Back the Bosque, High Country News, Nov. 19, 2001, available at: <http://www.hcn.org/issues/215/10856>.

²¹ See Sandra Postel, Native Americans and Conservationists Collaborate to Return Vital Flow to the Rio Grande, National Geographic, Sept. 28, 2016, available at: <http://voices.nationalgeographic.com/2016/09/28/native-americans-and-conservationists-collaborate-to-return-vital-flow-to-the-rio-grande/>

Water Planning Governance around the West

Arizona

I. What is the statutory basis for water planning and what types of water plans exist?

According to the 2014 Arizona water plan, known as the *Strategic Vision for Water Supply Sustainability*, the Arizona water law system is “a complex mixture of State and federal laws.”²² Arizona’s groundwater and surface water are regulated under separate statutes and rules. Colorado River supplies are managed “in cooperation with the State,” but the contracts for Colorado River water “are initiated through the U.S. Secretary of the Interior and administered by the Bureau of Reclamation.”²³ Reclaimed water is managed under a completely different set of regulations and policies and “its management framework was significantly influenced by case law.”²⁴

Title 45 of the Arizona Revised Statutes governs water management.²⁵ It establishes a Department of Water Resources²⁶ and calls for a Director of the Department of Water Resources who “shall be responsible for the direction, operation and control of the Department.”²⁷ The Governor appoints the Director.²⁸ The Department, through the Director, now holds the authority, powers, duties, and responsibilities formerly held by the Arizona Water Commission and the State Water Engineer relating to surface water, groundwater and dams, and reservoirs.²⁹

The powers and duties of the Director of the Department of Water Resources include the power to formulate plans and develop programs for the development, management, conservation and use of surface water, groundwater, and the watersheds in Arizona.³⁰ The Director has the authority to investigate works, plans, or proposals pertaining to surface water and groundwater and acquire, preserve, publish, and disseminate related information that the Director considers prudent.³¹

The Director shall coordinate with and may contract with State agencies regarding matters that relate to surface water and groundwater and the development of state water plans.³² The Director shall coordinate with the Department of Environmental

²² ADWR, *Arizona’s Next Century: A Strategic Vision for Water Supply Sustainability*, 15, (2014), available at: http://www.azwater.gov/AzDWR/Arizonas_Strategic_Vision/

²³ *Id.*

²⁴ *Id.*

²⁵ Ariz. Rev. Stat. Ann. § 45-101 et seq.

²⁶ Ariz. Rev. Stat. Ann. § 45-101(a).

²⁷ Ariz. Rev. Stat. Ann. § 45-102(b).

²⁸ Ariz. Rev. Stat. Ann. § 45-101(c).

²⁹ Ariz. Rev. Stat. Ann. § 45-103(B).

³⁰ Ariz. Rev. Stat. Ann. § 45-105(A)(1).

³¹ Ariz. Rev. Stat. Ann. § 45-105(A)(2).

³² Ariz. Rev. Stat. Ann. § 45-105(B)(4).

Quality with respect to water quality control for its assistance in the development of state water plans.³³ The Director shall coordinate with the Department of Environmental Quality regarding water plans, water resource planning, and other aspects of water management pertaining to studies, investigations, site prioritization, including the selection of remedies and implementation of the water quality assurance revolving fund program.³⁴

In 2010, the Arizona Legislature created the Water Resources Development Commission. The purpose of the Commission was to assess the then current and future water needs of Arizona. The Director of the Arizona Department of Water Resources was tasked to appoint the members of the Commission, who were all to “possess knowledge about various water resources and water management issues in Arizona and represent a regional and geographic cross-section of the state.”³⁵ The Commission was aided by the technical staff of the Department of Water Resources, the Central Arizona Project, the Arizona Water Banking Authority, and rural study groups. Their final report of findings and recommendations was completed in October of 2011.³⁶ The Water Resources Development Commission Report found that there was a “possible imbalance of approximately 3.2 million acre-feet in Arizona by the year 2110.”³⁷

In January 2014, under the direction of Governor Janice K. Brewer, the Arizona Department of Water Resources developed a comprehensive water supply and demand analysis for Arizona and released its findings in a publication entitled *Arizona’s Next Century: A Strategic Vision for Water Supply Sustainability*.

There are other types of water related plans in Arizona, such as county-level plans. Arizona law allows for the creation of County Water Augmentation Authorities. They are charged, in conjunction with local governmental entities and the Director of Water Resources, to develop water resource augmentation plans for the county in which each Authority is established, to guide the development of water augmentation efforts in that county.³⁸ These Authorities are also charged with coordinating water conservation efforts in their jurisdiction.³⁹

The Arizona Legislature has also authorized the creation of a State Water and Power Plan. This pertains only to Arizona’s share of the Colorado River. The Arizona Legislature has declared that “the State’s right and obligation to receive two million eight hundred thousand acre feet of main stream Colorado river water annually...is

³³ Ariz. Rev. Stat. Ann. § 45-105(B)(4)(b).

³⁴ Ariz. Rev. Stat. Ann. § 45-105(B)(4)(c).

³⁵ http://www.azwater.gov/AzDWR/WaterManagement/WRDC_HB2661/

³⁶ The Arizona Water Resource Development Commission Final Report is available here: http://www.azwater.gov/AzDWR/WaterManagement/WRDC_HB2661/Meetings_Schedule.htm

³⁷ ADWR, *A Strategic Vision for Water Supply Sustainability*, Appendix I-13.

³⁸ Ariz. Rev. Stat. Ann. § 45-1944.

³⁹ *Id.*

essential to the continued well-being, health and prosperity of the people of the State and that the State proceed promptly to establish, develop and execute an appropriate program for the development and utilization of such water.”⁴⁰ The Legislature connected water and power initiatives, stating, “development of the state’s power resources is an essential and integral part of the effectuation or such program, including the financing thereof.”⁴¹ It has declared that power and energy resources must be developed “in order to provide effective support for and implementation of the state’s water program” and for the benefit of the people of the state.⁴²

The Water and Power Plan is under the control of the Arizona Power Authority. It encompasses the Central Arizona Project, the Montezuma pumped storage power project, the Hoover power plant modifications project, the Hoover power plant uprating project, the financing or refinancing of the State’s proportionate share of the costs incurred by the United States with respect to the Hoover visitor facilities, and by the Bureau of Reclamation “with respect to the Air Slot Treasury Loan for the construction of air slots at Hoover Dam.”⁴³ In the future, the State Water and Power Plan could include new water and power projects that utilize Colorado River water authorized by the Arizona Legislature.⁴⁴

II. Who governs Arizona’s water planning process?

As described above, the Director of the Department of Water Resources is responsible for and oversees the water planning process.

III. Who develops Arizona’s water plan(s)? How is it structured? Who is represented? How are decisions made?

For five years prior to the release of the Strategic Vision, the Department of Water Resources participated in the development of the comprehensive water supply and demand analysis through the work of its Water Resources Development Commission.⁴⁵ During that same time, the U.S. Bureau of Reclamation and the other six Colorado River Basin States identified projected supply and demand imbalances on the Colorado River system.⁴⁶

Utilizing the work of its Water Resources Development Commission and the Colorado River Basin Water Supply and Demand Study, the Department of Water Resources identified the potential water supply and demand imbalance that could

⁴⁰ Ariz. Rev. Stat. Ann. § 45-1701(3).

⁴¹ Ariz. Rev. Stat. Ann. § 45-1701(4).

⁴² *Id.*

⁴³ Ariz. Rev. Stat. Ann. § 45-1703.

⁴⁴ Ariz. Rev. Stat. Ann. §45-1703(B).

⁴⁵ ADWR, *A Strategic Vision*, 9.

⁴⁶ *Id.*

potentially result in Arizona if no action is taken. The Strategic Vision concluded that local and regional efforts can mitigate potential supply impacts, but will not resolve overall anticipated impacts to the State’s water supply.⁴⁷ The challenge was to “explore viable solutions” to address the projected imbalances and initiate the action necessary to develop those solutions.⁴⁸

In an effort to recognize the uniqueness of the various regions throughout the State and the specific challenges facing those regions, the Strategic Vision identified a “portfolio of strategies,” or key priorities and action items to maintain sustainable water supplies for the needs of each area.⁴⁹ It also recognized specific measures that would have “widespread potential benefit” for all Arizonans.⁵⁰ It laid out a framework for the development of strategies to address projected imbalances between water availability and demand over the following hundred years.⁵¹ It also provided context for maximizing the effectiveness of those strategies to address the needs of multiple water users across Arizona.⁵²

The strategic priorities identified by the Department of Water Resources were:

1. Resolution of Indian and Non-Indian Water Rights Claims;
2. Continued Commitment to Conservation and Expand Reuse of Reclaimed Water;
3. Expand Monitoring and Reporting of Water Use;
4. Identify the Role of In-State Water Transfers;
5. Supply Importation and Desalination; and,
6. Develop Financing Mechanism to Support Water Supply Resiliency

Financing of large-scale projects was also addressed in the Strategic Vision. The Department of Water Resources concluded that “only Arizona’s community, political, and business leaders are capable of garnering financial resources and mechanisms necessary” to meet the water supply needs.⁵³

The Strategic Vision outlined a Ten-Year Action Plan, as follows:

- Legislate Strategic Vision update every ten years (year one)
- Begin discussions with Mexico and California about ocean desalination (year one)
- Resolve right-of-way issues for utilities (year one)
- Establish adjudication study committee (year one)
- Begin discussions on water development financing (year two)

⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ *Id at Strategic Vision Overview*

⁵⁰ *Id.*

⁵¹ *Id.*

⁵² *Id.*

⁵³ *Id at 19.*

- Remove current statutory limitation (*A.R.S. § 45-801.01(22)*) on the ability to receive long-term storage credits for recharging reclaimed water beyond 2024 (year two)
- Review legal and institutional barriers to direct potable reuse of reclaimed water – develop and implement plan for resolution (year three)
- Review and implementation of adjudication study committee findings (year three)
- Develop and begin implementation of direct potable reuse of reclaimed water public perception campaign (year four)
- Begin discussions with New Mexico on an interstate cooperative program for watershed management/weather modification in the Upper Gila watershed (year four)
- Resolve remaining Indian settlements (years one–ten)
- Resolve general stream adjudication (year five–ten)

The Department of Water Resources concluded by declaring that this Strategic Vision needs to be implemented in order to address the challenges of avoiding future water crisis.⁵⁴

Between January and August 2014, the ADWR presented the Strategic Vision on a statewide outreach tour to “receive input from local stakeholders and other interested parties.”⁵⁵

Water planning has continued in Arizona since the release of the Strategic Vision. On November 4, 2014, Governor Janice K. Brewer established the Governor’s Council on Water Supply Sustainability.⁵⁶ The Council consisted of members appointed by the Governor. The Arizona Department of Water Resources provided staffing and technical support to the Council. The Council prepared and submitted to the Governor a report that identifies the priorities for implementation of the action items and strategic priorities identified in the Strategic Vision to develop a secure and sustainable water supply for Arizona’s next century.

The Governor directed that the plan should include:

- Recommendations on water supply augmentation;
- Recommendations on water supply infrastructure needs;
- Identification of potential partnerships for water supply augmentation and infrastructure needs including the federal government, political subdivisions of Arizona and other states, private parties, and international parties;
- Identification of potential funding and financing solutions;
- Recommendations on legal procedural changes; and,

⁵⁴ *Id* at 22.

⁵⁵ *Id.* Past meeting dates, locations and presentations can be found here: http://www.azwater.gov/AzDWR/Arizonas_Strategic_Vision/.

⁵⁶ See <http://azmemory.azlibrary.gov/cdm/singleitem/collection/execorders/id/741/rec/3>

- Timetables for implementation.

On December 31, 2014, The Governor’s Council on Water Supply Sustainability published an Initial Report. The Initial Report recommended that working groups be formed to develop, evaluate, and prioritize recommendations and potential partnerships regarding water supply augmentation and water supply infrastructure needs. It proposed workgroups to address desalination, funding, rural issues, and stakeholder engagement.

The Arizona Water Initiative was then announced by Governor Ducey in October 2015. The Initiative is “based off of and furthers the activities” that were identified in the 2014 Strategic Vision for Water Supply Sustainability Report.⁵⁷ The Water Initiative is designed to implement the Strategic Vision and address the recommendations of the Governor’s Council on Water Supply Sustainability through two tracks.

Track One is to focus on a stakeholder-driven analysis of the twenty-two Planning Areas identified in the Strategic Vision. In this track, the Arizona Department of Water Resources will “work closely with the Planning Areas to identify issues that are resulting in demand and supply imbalances and to develop strategies that are likely to be successful in addressing them.”⁵⁸ This first track will identify and prioritize the twenty-two planning areas identified in the Strategic Vision, beginning with rural areas.⁵⁹

Track Two creates the Governor’s Water Augmentation Council. The Council, appointed by the Governor and chaired by the Director of the Department of Water Resources, consists of “a wide array of experts including water providers and leaders in Arizona agriculture, mining, agribusiness, homebuilding, watershed groups and government.”⁶⁰ The Council is tasked to “investigate long-term water augmentation strategies” for the twenty-two areas identified in the Strategic Vision, as well as “additional water conservation opportunities, funding and infrastructure needs,” and report to the governor annually with recommendations for policy or statutory changes.⁶¹ The Council has been directed to prepare an annual report and submit it to the Governor by July 1, 2016, and by July 1 every year thereafter.

⁵⁷ See http://www.azwater.gov/AzDWR/Arizona_Water_Initiative/

⁵⁸ ADWR, Planning Area Process, available at:

http://www.azwater.gov/AzDWR/Arizona_Water_Initiative/PlanningAreaProcess.htm

⁵⁹ <http://azgovernor.gov/governor/news/2015/10/governor-doug-ducey-announces-arizona-water-initiative> (last visited May 24, 2016).

⁶⁰ *Id.*

⁶¹ ADWR, Governor’s Water Augmentation Council, available at:

http://www.azwater.gov/AzDWR/Arizona_Water_Initiative/GovernorsWaterAugmentationCouncil.htm

The Council completed their first Annual Report at the third quarterly meeting on June 10, 2016. The report was scheduled to be submitted to the Governor and the Legislature on July 1, 2016, but is not yet available. A draft of the report (May 18, 2016) is currently available online.⁶²

IV. How is Arizona's water planning funded?
How much, from where, how often?

The baseline operating budget for the Arizona Department of Water Resources is \$9.2M, which supports forty-eight fulltime employees. Adjudication support is also funded at \$1.25M, which supports 14.5 fulltime employees. Within its operating budget, the Department of Water Resources appears to fund most of its water planning work through its Water Resources Fund, which is currently funded with a baseline annual appropriation of \$641,200. The Water Resource Fund is to be used to carry out the purposes of Title 45 of the Arizona Revised Statutes.⁶³ The Arizona Legislature appropriates these funds annually.

V. How is Arizona's water planning staffed?
What is the professional background of the planning staff?

The Arizona Department of Water Resources has staff that performs a variety of planning functions. Four staffers implement the management of critical groundwater management areas. An additional two staffers manage statewide strategic planning and tribal affairs. Five more staffers oversee community level planning, promote water conservation through education, and facilitate technology and data transfers. The Department of Water Resources Assistant Director for Water Planning oversees all of these positions.

The Utton Center has been unable to ascertain the professional backgrounds of these staffers.

ADDITIONAL INFORMATION

Arizona's Tribal Issues

In 2010, the Arizona Department of Water Resources produced the *Arizona Water Atlas* to provide "water-related information on a local, regional and statewide level to frame and support water planning and development efforts."⁶⁴ This also inspired the creation of a "statewide water resources data repository housed at ADWR" that

⁶² Available at:

http://www.azwater.gov/AzDWR/Arizona_Water_Initiative/documents/2016GWACAnnualReportDraft_May_18_2016.pdf.

⁶³ Ariz. Rev. Stat. Ann. § 45-117(C).

⁶⁴ ADWR, *Strategic Vision*, 14.

is updated continuously “as water use information is reported and collected.”⁶⁵ The Atlas is organized into seven Planning Areas that contain a total of fifty-one groundwater basins. Each Planning Area is discussed in a different volume of the Atlas and can all be accessed online.⁶⁶

In recognizing the uniqueness of the various regions throughout the State, the Strategic Vision for Water Supply Sustainability also recognized the varying challenges each of those regions faces. It developed a “portfolio of strategies” that need to be implemented according to the needs of each area of the State and then prioritized them based on their widespread potential to benefit all Arizonans.

Among the identified statewide strategic priorities is the *Resolution of Indian and Non-Indian Water Rights Claims*. Arizona has resolved, wholly or partially, thirteen of twenty-two Indian water rights claims. However, until Arizona’s general stream adjudications are complete, uncertainty makes it difficult for the Department of Water Resources to identify all the strategies necessary for meeting projected water demands. The Strategic Visions recommends the creation of a Study Committee to “develop options in a short time frame” that would help guide the Department of Water Resources towards adequate funding to complete the technical work to support completing the adjudications process.⁶⁷ According to the Strategic Vision, “development of options could initially focus on conceptualization of water rights administration in a post-adjudicated Arizona. This will streamline the Court and the Department of Water Resources’ effort to collecting and evaluating only that information that will assist in administering the final water rights decrees.”⁶⁸

The federal government holds twenty-eight percent of Arizona lands in trust for Native Americans. Negotiation of Indian water rights claims has traditionally been through litigation. Under the “Winters Doctrine,” the “reserved water rights” for federal reservations were recognized.⁶⁹ In *Winters v. United States*, the U.S. Supreme Court found that “a federal reservation includes an amount of water necessary to fulfill the reservation’s purpose.”⁷⁰ Priority dates are based on the treaty enactment date, an act of Congress, or an Executive Order establishing the reservation. In *Arizona v. California* (1963), the U.S. Supreme Court included the standard of practicably irrigable acreage as a method of quantifying water rights.

In 2001, the Arizona Supreme Court rejected practicably irrigable acreage as the sole standard for quantification of Indian water rights and instead found that

⁶⁵ *Id.*

⁶⁶ The Arizona Water Atlas is available at: <http://www.azwater.gov/AzDWR/StatewidePlanning/WaterAtlas/>.

⁶⁷ ADWR, *Strategic Vision*, 17.

⁶⁸ ADWR, *Strategic Vision*, 17-18.

⁶⁹ ADWR, Arizona Water Atlas, Volume 1, Appendix G, 163 (2010).

⁷⁰ *Id.*

“Indian reserved rights must account for the present and future needs of the reservation as a tribal homeland.”⁷¹

Litigation and settlement are the processes for quantifying Indian water rights claims in Arizona. According to the Department of Water Resources’ Arizona Water Atlas:

When the settlement process begins, parties potentially impacted by the Indian water rights claims identify the sources of water necessary to satisfy the tribal needs. A federal negotiating team works with the parties to assure that federal requirements, including local cost contribution, are met. ADWR [Division of Water Resources] participates in the settlement discussion, offering technical assistance and ensuring state water laws and policies are followed.⁷²

After the parties agree on a settlement, the United States Congress is engaged for approval and funding. The Congressional act generally ratifies the agreement, authorizes congressional appropriations, and sometimes requires a state contribution. The parties finalize the agreement and, if necessary, “seek approval of the court in either the Gila River General Stream Adjudication or the Little Colorado General Stream Adjudication.”⁷³

Arizona v. California decreed entitlements to divert water from the Colorado River to four Indian reservations along the river: Cocopah, Colorado River Tribes, Fort Mohave, and Fort Yuma.

In addition there are eight Congressionally authorized Indian water rights settlements in Arizona for the following tribes:

- Ak Chin Indian Community
- Tohono O’odham Nation
- Salt River-Pima Maricopa Indian Community
- Fort McDowell Indian Community
- San Carlos Apache Tribe
- Yavapai-Prescott Indian Tribe
- Zuni Indian Tribe
- Gila River Indian Community

Settlement negotiations are in process with the White Mountain Apache Tribe, the Hopi Tribe, and the Yavapai Apache Tribe. Tribes with unresolved claims include the following tribes:

- Havasupai

⁷¹ *Id.*

⁷² *Id.*

⁷³ *Id.*

- Hualapai
- Kaibab Paiute
- Pascua Yaqui
- San Carlos Apache (Gila River tributaries)
- Tohono O'odham (Sif Oidak District)
- Tonto Apache
- Navajo Nation

Colorado

I. What is the statutory basis for water planning and what types of water plans exist?

Colorado completed a new Colorado Water Plan at the end of 2015. The completion of the final Water Plan was the culmination of twelve years of data gathering, public meetings, regional planning, and goal setting.

It was the drought of 2002 and 2003 that spurred Colorado into action. When some towns in Colorado came within weeks of running out of water, it became clear that meaningful water planning was needed. In 2003 the Colorado General Assembly (the Colorado legislature) created the Office of Water Conservation and Drought Planning within the Colorado Water Conservation Board (CWCB).⁷⁴ This also included the initiation of Colorado's Statewide Water Supply Initiative (SWSI) and the organization of river basin planning groups.

Colorado's Office of Water Conservation and Drought Planning is charged with promoting water conservation and drought planning. This includes serving as a repository for drought mitigation and conservation information, disseminating that information to the general public, providing technical assistance, providing financial assistance for conservation and drought planning, and even helping other agencies with the water-wise landscaping projects.

Colorado's SWSI is an ongoing analysis of water resources. It provides current water data to decision makers. It has been used to develop Colorado's understanding of its agricultural, environmental, recreational, and municipal water needs. It includes climate variability scenarios to assist with long-term planning. The information collected by Colorado's SWSI served as the foundation for the creation of Colorado's 2015 Water Plan.

In 2004 Colorado passed a Water Conservation and Drought Mitigation Planning Act. It directed all municipalities, agencies, and private and public drinking water utilities to develop their own water conservation plans.⁷⁵ The creation of an individualized water conservation plan is now required before these entities can receive financial assistance from the CWCB.

In 2005 Colorado enacted the Colorado Water for the 21st Century Act.⁷⁶ It created permanent Basin Roundtables in each of Colorado's eight river basins. An additional Roundtable was created for the Denver area. A committee of basin representatives was also formed to serve as the Interbasin Compact Committee, which is tasked

⁷⁴ Colo. Rev. Stat. §37-60-124.

⁷⁵ Colo. Rev. Stat. §37-60-126.

⁷⁶ Colo. Rev. Stat. §37-75-101, et seq.

with assisting with interbasin compact negotiations.⁷⁷ The intent of these Roundtables is to, “facilitate continued discussions within and between basins on water management issues, and to encourage locally driven collaborative solutions to water supply challenges.”⁷⁸

By the end of 2013 each Roundtable had developed a Basin Implementation Plan. These Plans looked at future water needs with the assistance of representatives from industry, agriculture, environmental and recreation groups, and other water users. These Plans reflect a decade of stakeholder engagement through public meetings focused on developing balanced, stakeholder-developed collaborative water management solutions.⁷⁹

In 2013 there was another watershed moment in Colorado water planning. Governor John Hickenlooper issued an Executive Order directing the CWCB to commence work on the Colorado Water Plan.⁸⁰ Touting Colorado’s historic leadership on water management issues, the Governor recognized the good work of the Interbasin Compact Committee and the Basin Roundtables. He acknowledged that the SWSI predicts a 500,000 acre-foot supply-demand gap by 2050.

Governor Hickenlooper’s Executive Order set forth some principles that might apply equally in New Mexico. He stated that the buying and drying of agricultural lands was not acceptable to Coloradans. He declared that water quantity and water quality must be thought of together and no as longer as separate issues. Most importantly, he tasked the CWCB with developing a water plan that incorporated the following values:

- A productive economy;
- Vibrant and sustainable cities;
- Productive agriculture;
- Robust skiing, recreation and tourism;
- Efficient and effective water infrastructure that promotes smart land use; and,
- A strong environment with healthy watersheds, rivers, streams, and wildlife.

II. Who governs Colorado’s water planning process?

As described above, the Governor has directed the CWCB to develop the Colorado State Water Plan. The Governor is given great credit for his leadership on water planning. However, one main criticism is the lack of clarity about who is going to implement the Plan. There is considerable discussion of collaborative solutions throughout the plan and its supporting documents but little analysis of who will do

⁷⁷ Colo. Rev. Stat. §37-75-105.

⁷⁸ Colo. Rev. Stat. §37-75-104.

⁷⁹ *Id.*

⁸⁰ Colo. Exec. Order D 2013-005, May 14, 2013.

exactly what. For example, the chapter on legislative proposals to improve water management was left blank in the new Plan.

The Governor and the CWCB are now trying to retroactively control expectation about their new Water Plan. They are working to clarify that the 2014 Water Plan is a foundational document that sets forth objectives but leaves the process of determining how to meet those objectives to the Basin Roundtables. Their argument is that the inclusion of specifics in this draft of the Water Plan would discourage the development of solutions at the local (basin) level.

While the Governor has clearly tasked the CWCB with leading the development of the Water Plan, he is also deferring to the Basin Roundtables to develop specific actions. This well-intentioned structure still requires some adjustments to find the balance between robust civic participation and strong centralized leadership. As the CWCB has stated, “Finalizing the Plan is the first step.”

THE CWCB BOARD

Given its primary role in the creation of the Colorado State Water Plan and its similarities to the New Mexico ISC, it is useful to outline the structure of the CWCB. The CWCB was created over seventy-five years ago to provide policy direction on water issues.⁸¹ The CWCB is governed by a fifteen-member Board.⁸² “Each CWCB program is directed by the agency’s Strategic Framework, as well as through Statutory Authorities and Responsibilities. Reviewed annually by the Board, the Strategic Plan also contains a Board Member Work Plan, which guides the Board’s actions and helps implement the authorities and objectives of the CWCB.”⁸³

There are fifteen members on the CWCB Board. Eight voting members represent the State’s major water basins. One voting member represents the City and County of Denver. The tenth ex-officio voting member is the Director of the Department of Natural Resources. There are also five ex-officio non-voting members: the Director of the CWCB, the State Engineer, the Attorney General, the Director of the Division of Parks & Wildlife, and the Commissioner of Agriculture. These members “inform and advise the voting Members on water issues as they relate to or impact their agencies.”⁸⁴

“Board Members serve three-year terms, are appointed by the Governor after they apply or are nominated for the position, and must be confirmed by the Senate. Board appointees are generally experienced in water resource management; water project financing; engineering, planning, and development of water projects; water law; irrigated farming; and/or ranching. No more than five appointees can be

⁸¹ <http://cwcb.state.co.us/about-us/about-the-cwcb/Pages/main.aspx>

⁸² *Id.*

⁸³ *Id.*

⁸⁴ <http://cwcb.state.co.us/about-us/cwcb-board/Pages/main.aspx>

members of the same political party, and all appointees must reside in the area they represent.”⁸⁵

The CWCB Board reviews its Strategic Framework annually. The CWCB Strategic Framework “creates a strategy that enables the agency to successfully implement its mission. The Framework’s focus is to emphasize implementation of projects, policies, and partnerships resulting from intense planning activities.”⁸⁶ The Board uses the “Board Member Work Plan” within the Strategic Framework to “identify policy development needs, set program direction, define program and project priorities, and develop staff performance goals.”⁸⁷

III. Who develops Colorado’s water plan(s)?
How is it structured? Who is represented? How are decisions made?

Colorado’s Water Plan was built upon a long-term consistent public planning process, led by the Basin Roundtables. The final document was drafted and compiled by the CWCB. Representatives from all water use sectors were represented in the Basin Roundtables. In addition, the Colorado General Assembly’s Water Resources Review Committee held hearings across the state to solicit comments on the Water Plan. A team of eighteen state employees from various agencies actually authored the Water Plan, with an additional thirteen people serving as a review committee.

The Colorado Water Plan is framed around the values set forth by Governor Hinkenlooper in his Executive Order, listed above. The Plan begins with an overview of Colorado’s water history, then it details Colorado’s water law and governance structure. It describes the projected supply-demand gap, followed by a discussion of strategies that can be used to meet future needs. The Colorado Plan includes ideas for funding water management and infrastructure in the future. It also emphasized the need for effective water rights permitting and increased water education throughout the State.

Overall the mission of the Colorado Water Plan is to encourage Coloradans to “close the gap by 2030.” This includes a goal to conserve 400,000 acre-feet a year. The Water Plan contemplates closing the remaining 100,000 acre-feet of the gap by increasing water storage capacity in Colorado.

IV. How is Colorado’s water planning funded?
How much, from where, how often?

⁸⁵ *Id.*

⁸⁶ CWCB, *Strategic Framework*, 3, (2013).

<http://cwcbweblink.state.co.us/WebLink/ElectronicFile.aspx?docid=169613&searchid=1bda1d2a-a8e0-4e31-9140-953cd1443900&&dbid=0>

⁸⁷ <http://cwcb.state.co.us/about-us/cwcb-board/Pages/main.aspx>

The CWCB, which is almost entirely self-funded, receives the majority of its funding appropriations from the CWCB Construction Fund. The Construction Fund is also referred to as the “Cash Funds.”⁸⁸ Revenues are generated from interest collected on CWCB issued loans, mineral lease income, severance taxes, and an occasional transfer from the Colorado General Fund. The CWCB operational budget, which in part supports water planning, was \$5.75 million in 2015. The Interbasin Compact Commission’s Operating Budget for fiscal year 2016 was approximately \$740,000, which includes funding for the basin Roundtables and the SWSI.

The Colorado Water Plan is unique in that it attempts to address how the implementation of the Plan will be funded. The Plan estimates that Colorado will need to raise an additional \$100 million per year starting in 2020. The Plan proposes to explore public-private partnerships, utilize severance tax funds, and develop a guarantee repayment fund and a new bond program. This appears to be the least developed portion of the Colorado Water Plan. Most notably, the Plan estimates that \$1 million or more will be needed annually to support ongoing stream management and watershed planning efforts.

Additional information about how Colorado funds water projects and management can be found below.

- V. How is Colorado’s water planning staffed?
What is the professional background of the planning staff?

The CWCB is staffed with more than forty employees and functions under six major program areas:⁸⁹

1. Management
2. Finance and Administration
3. Interstate and Federal
4. Stream and Lake Protection
5. Water Supply Planning
6. Watershed and Flood Protection

Specialties within the CWCB include hydrologists, engineers, natural resource scientists, geomorphologists, attorneys, financial managers and public policy leaders.⁹⁰

Within the Management Program there is a director, a deputy director for resource management, and a deputy director for integrated resources.⁹¹

⁸⁸ <http://cwcb.state.co.us/ABOUT-US/ABOUT-THE-CWCB/Pages/main.aspx>

⁸⁹ <http://cwcb.state.co.us/ABOUT-US/ABOUT-THE-CWCB/Pages/main.aspx>

⁹⁰ <http://cwcb.state.co.us/about-us/cwcb-jobs/Pages/main.aspx>

⁹¹ <http://cwcb.state.co.us/about-us/CWCBStaff/Pages/main.aspx>

The Water Supply Planning Section includes a section chief, three program managers, a program assistant, an administrative assistant, a climate change risk management specialist, a water conservation technical specialist, a water conservation coordinator, and an outreach, education & public engagement coordinator.⁹²

The CWCB worked closely with many other state agencies in the formulation of their Water Plan. Employees within CWCB's other program areas drafted portions of the Water Plan, according to their expertise.

The CWCB Water Supply Planning Section also supports the Interbasin Compact Committee with financial, technical, and staff support, ensuring "the proper coordination of CWCB information, policies and resources for each of the Basin Roundtables."⁹³

ADDITIONAL INFORMATION

Implementation Funding

Colorado's Water Plan implicates existing funding sources and explores additional funding opportunities with the objective to sustainably fund implementation of the water plan. Colorado is also seeking to federal funding options.

The estimated financial need for future improvements to the municipal and industrial water infrastructure, including Basin Implementation Plans, water infrastructure improvements, and the ninety watershed and stream management plans, is more than \$20 billion. This amount is projected only to fill the municipal and industrial gap and to maintain current infrastructure.⁹⁴ This figure does not include statewide environmental or recreation needs, or water treatment project needs.

Clearly Colorado's funding need for water projects is substantial. Current funding sources can assist with future needs, including the CWCB Water Project Loan Program, the CWCB Water Resource Supply Fund, the Species Conservation Trust Fund, and the Water Resources and Power Development Authority's Water Revenue Bond Program. Although these programs cannot solely fund the state's water needs, they can assist in bridging funding gaps when combined with other funding sources.⁹⁵

The CWCBs also offers Water Efficiency Grants that are available for eligible

⁹² *Id.*

⁹³ *Id.*

⁹⁴ *Id.*

⁹⁵ Colorado's Water Plan – Final 2015, 9.2 Economics and Funding, <http://cwcwweblink.state.co.us/WebLink/ElectronicFile.aspx?docid=197277&searchid=c39986f7-7670-4457-aa01-2a92b22450e8&dbid=0>

conservation activities and projects, such as planning:

- Water Conservation Planning Grants: for water providers seeking to develop or update their water conservation plans.
- Water Conservation Implementation Grants: For water providers implementing water conservation plan goals and programs identified in locally adopted and CWCB-approved water conservation plans.
- Drought Mitigation Planning Grants: for water providers or state and local governmental entities developing drought mitigation and response plans.
- Water Resource Conservation Public Education and Outreach Grants: for agencies seeking to promote the benefits of water resource conservation through public education and outreach.

“To meet long-term water demands, Colorado will need to secure funding through a combination of legislation, partnerships, and state and federal grant and loan programs. It is the CWCBs intent to promote, and potentially financially and politically support, projects that evaluate water supply, storage, and conservation reports on a regional, multipurpose, multi-partner, multi-benefit basis, and projects that evaluate the consolidation of services where practical, feasible, and acceptable.”⁹⁶ Projected costs for projects identified in all the Basin Implementation Plans currently total \$2,235,580,000.

Colorado’s Tribal Issues

There are only two federally recognized tribes in Colorado, the Ute Mountain Ute and the Southern Ute.⁹⁷ The two Colorado Ute reservations were established in 1868, at which time their priority date for reserved water rights was also set.⁹⁸

The Colorado General Assembly established the Colorado Commission of Indian Affairs in 1976.⁹⁹ The Commission was designed to engender government-to-government relationships between the two Ute tribes and the State of Colorado.¹⁰⁰ The Colorado State Tribal Consultation Guide defines consultation as asking for advice or seeking an opinion, and that “consultation does not mean obtaining consent.”¹⁰¹

The two tribes, water conservancy districts, and the State of Colorado began negotiations to resolve the tribes’ water rights claims in the 1980s. In 1986, the Colorado Ute Indian Water Rights Settlement Act was completed and ratified in

⁹⁶ *Id.*

⁹⁷ Numerous other tribes were historically in Colorado.

⁹⁸ *Winters v. United States*, 207 U.S. 564 (1908).

⁹⁹ C.R.S. §§24-44-101 et seq.

¹⁰⁰ Colorado Commission of Indian Affairs, Letter from CCIA Executive Director, <https://www.colorado.gov/pacific/ccia/about-us-40>

¹⁰¹ Colorado Commission of Indian Affairs, State-Tribal Consultations, <https://www.colorado.gov/pacific/ccia/about-us-40>

1988 by Congress, thus settling the tribes' water rights on three rivers.¹⁰² The settlement was to supply both Ute tribes with water from the Animas-La Plata Project. However, by 2000 the project had not been constructed. As a result, Congress enacted the scaled-down Colorado Ute Settlement Amendments of 2000.¹⁰³

The Animas-La Plata project's Ridge Basin Dam was completed in 2007. In 2011 Lake Nighthorse began filling with water.¹⁰⁴

Southern Ute Indian Tribe

The Southern Ute Tribe's reservation headquarters are near Ignacio, Colorado. The reservation is a small portion of the historical land base of the Utes, which once encompassed Utah and New Mexico as well as Colorado.¹⁰⁵ The reservation once comprised one-third of the western portion of the State of Colorado. Numerous acts of Congress divested the Southern Utes of their land. This, combined with encroachment by settlers looking for gold, reduced the reservation to a checkerboard of land approximating 300,000 acres. Current tribal membership is 1,059.¹⁰⁶

Under an 1874 treaty commonly known as the Brunot Agreement, the Southern Ute Tribe has the right to hunt, fish, and gather in an off-Reservation area that is approximately four million acres in size. The area within which the Tribe retained reserved hunting and fishing rights is the San Juan Mountain region of Colorado and includes parts of nine counties and the towns of Naturita, Lake City, Pagosa Springs, and Cortez. Tribal members can hunt, fish, and gather in that area subject to regulation by the Tribe. Importantly, treaty rights cannot be exercised on private property without landowner consent.¹⁰⁷

In the 1930s the Southern Ute Tribe acquired water rights on the Pine River and more water rights from the Florida river when the Lemon Reservoir was built in the 1960s.¹⁰⁸

The Southern Ute Tribe has a Water Resources Division within its Natural Resources Department.

¹⁰² Pub. L. 100-585, 102 Stat. 2973 (1988).

¹⁰³ Colorado Ute Indian Water Rights Final Settlement Agreement, Nov. 9, 2001, https://www.usbr.gov/uc/progact/animas/pdfs/1_ALPCostSharingAgt313_02.pdf

¹⁰⁴ Gail Binkly, *For Colorado's Two Indian Tribes, the Long Awaited Promise of Water Fulfilled at Last, Brings Hope for Continued Economic Growth*, Colorado Foundation for Water Education, https://www.yourwatercolorado.org/CitGuides/index.php?option=com_content&view=article&id=533:ute-water&catid=128&Itemid=149

¹⁰⁵ Southern Ute Indian Tribe, *Living in La Plata County*, <https://www.southernute-nsn.gov/natural-resources/lands/living-in-la-plata-county/>

¹⁰⁶ *Id.*

¹⁰⁷ *Id.*

¹⁰⁸ *Id.*

Ute Mountain Ute Tribe

The Ute Mountain Ute Tribe headquarters are in Towaoc, Colorado, but the reservation borders reach into New Mexico and Utah.

When the Southern Ute Tribe was securing their water rights in the 1930s and 1960s, the Ute Mountain Tribe received nothing. A project known as the Dolores Project was proposed to bring water to the Ute Mountain Utes in the early 1970s. It was put on hold due to the change in public opinion regarding dams.¹⁰⁹

In 1977, the Secretary of the Interior recommended that President Carter reconsider cancelling the Dolores Project, stating that the Ute Mountain Ute Tribe had suffered long enough from broken promises and failed expectations, and that they “were entitled to ‘prompt water delivery from the project.’¹¹⁰ At the time the city of Cortez within the Ute Mountain reservation had no significant drinking water or municipal plumbing. Eventually the Dolores Project moved forward. In 1994, water flowed into the Ute Mountain Ute Reservation, filling the McPhee Reservoir at the head of the Dolores Project.¹¹¹

The tribes are continuing to work with other entities in a number of other water management efforts. When the Animas-La Plata Project was downsized, each tribe received a \$20 million tribal resource fund as compensation for the water they gave up in the downsizing.

The Utes used some of those monies to help build an intake structure on the upper end of Lake Nighthorse for future uses by the tribes, as well as the La Plata West Water Authority, which contributed funding. The Southwest Basin Roundtable and Colorado Water Conservation Board also provided funding through the regional planning process.¹¹²

¹⁰⁹ Binkly, *supra*.

¹¹⁰ *Id.*

¹¹¹ *Id.*

¹¹² *Id* (emphasis added).

Montana

I. What is the statutory basis for water planning and what types of water plans exist?

Like New Mexico, Montana has a statute that specifically requires the creation of a State Water Plan.¹¹³ This statute directs the Montana Department of Natural Resources and Conservation (DNRC) to create a state water plan.

The Montana Department of DNRC was created by the Executive Reorganization Act of 1971. Within the DNRC is the Water Resources Division. The Water Resources Division is divided into five bureaus: State Water Projects, Water Adjudications, Water Management, Water Operations, and Water Rights.

Montana's State Water Plan statute calls for a plan that includes a comprehensive inventory of the state's water resources. It is to set forth, "a progressive plan for the conservation, development, utilization, and sustainability of the state's water resources and propose the most effective means by which these water resources may be applied for the benefit of the people..."¹¹⁴

The statute mandates that the Plan include sections for the Missouri, Yellowstone, and Clark Fork River basins. These sections are required to include water budgeting and plans for meeting future water needs, including proposed new legislation.¹¹⁵

The law also created "water user councils" in both the Missouri and Yellowstone basins and embraced the preexisting Clark Fork River Basin Task Force.¹¹⁶ The Missouri basin now has two councils, an Upper Missouri and a Lower Missouri council. These four regional planning groups are referred to as Basin Advisory Councils. They are composed of up to twenty members who make recommendations to DNRC on their basin's plan.

The Legislature did not give full authority over the State Water Plan to the DNRC; it reserved the power to revise the Plan.¹¹⁷ It also required the DNRC to consult with the Legislature's Interim Water Policy Committee when developing and revising the Plan.¹¹⁸

Montana completed a new revision of its State Water Plan in 2015. Individual basin plans were concurrently completed for Montana's four main river basins: the Clark Fork/Kootenai River Basin, the Upper Missouri River Basin, Lower Missouri River

¹¹³ Title 85, Chapter 1, Montana Water Use Code, Water Resources (2009).

¹¹⁴ Montana Code Ann. §85-1-203(2) (2015).

¹¹⁵ Montana Code Ann. §85-1-203(3) (2015).

¹¹⁶ Montana Code Ann. §85-1-203(4)(a) (2015).

¹¹⁷ Montana Code Ann. §85-1-203(7) (2015).

¹¹⁸ Montana Code Ann. §85-1-203(10) (2015).

Basin, and the Yellowstone River Basin. The State Water Plan “provides a high-level overview of the state’s water resources and lays out a path for managing those resources over the next twenty years.”¹¹⁹ The four basin plans contain much more detailed plans but, as in New Mexico, these regional plans are not formally adopted by the DNRC and do not carry the authority of official state policy.

II. Who governs Montana’s water planning process?

The Director of the Department of Natural Resources and Conservation adopted the State Water Plan, after eighteen months of planning and public input.

III. Who develops Montana’s water plan(s)?

How is it structured? Who is represented? How are decisions made?

The Water Management Bureau developed the State Water Plan. It is located within the Water Resources Division of the Montana DNRC. The planning process includes the following steps:

- Identify issues, appoint regional Basin Advisory Councils;
- Issue analysis and hold public meetings;
- Invite public review and comment, public hearings;
- Adopt and approve, after DNRC accepts legislature can adopt and/or revise; and,
- Implement and evaluate.

During the issue identification phase, the Basin Advisory Councils held five to six public meetings in the four planning basins. Twenty-three total meetings were held that included over five hundred members of the public. Technical experts then provided presentations on topics identified by the Basin Advisory Councils. All Basin Advisory Councils then collated information to contribute to the Basin Advisory Councils’ recommendation reports.

In 2014, each Basin Advisory Council facilitator prepared a Draft Basin Recommendations Report based on the background, issue statements, goals, and objectives for comprehensive objectives. The information and recommendations from the Basin Advisory Councils are the basis for the state water plan. These basin plans were also made available to the public for review and feedback. The basin plans are extremely detailed and stand alone as guides for developing water resources in each basin, while contributing to the overall state water plan.

The Water Management Bureau of the DNRC then organized a State Water Plan Advisory Committee comprised of DNRC staff and two Basin Advisory Council members to translate the recommendations made at the watershed level to the statewide plan.

¹¹⁹ Montana State Water Plan at 3.

After a draft of the State Water Plan was created, it was submitted to the Legislature's Interim Water Policy Committee and the Environmental Quality Council for their consideration. The public comment period was open for one month and thirteen public hearings were held across the state. After a 30-day comment period the Bureau made final adjustments to the State Water Plan.

The final State Water Plan contains sixty-eight recommendations for improving management and utilization of Montana's water resources over the next twenty years. Montana's focus throughout the planning process was on local watersheds and local problem solving to provide communities with tangible results.

IV. How is Montana's water planning funded?
How much, from where, how often?

There is no dedicated budget for water planning or water programs, according to Paul Azevedo, Bureau Chief of the Water Management Bureau.¹²⁰ Water Management received \$280,000 appropriated from the state Legislature for the development of the State Water Plan, "but there has been no dedicated funding beyond that."¹²¹ Most water projects in the state are funded from a variety of sources, usually beginning at the local level. The state offers thirteen different grants, available through the DNRC website.¹²² Grant funding from the grants ranges from \$15,000 (Renewable Resource Planning Grant) to \$800,000 (Future Fisheries Improvement Program).

V. How is Montana's water planning staffed?
What is the professional background of the planning staff?

There are three main Sections in the Water Management Bureau: The Water Planning Section, the Hydro Sciences Section, and the Water Compact Implementation Section

The Water Management Bureau has nineteen staff members. They are:

- One Bureau Chief
- One Water Source Program Director
- Four Water Resource Planners (one is Planning Section Supervisor)
- One Water Resource Specialist
- One Water Conservation Specialist (Compact Implementation Section Supervisor)
- Six Surface Water Hydrologists
- Two Ground Water Hydrologists (one is Hydro Science Section Supervisor)
- One Hydrologist

¹²⁰ Email from Paul Azevedo, Chief Bureau Chief, Water Management, Montana Department of Natural Resources (August 4, 2016) 2:09 P.M.

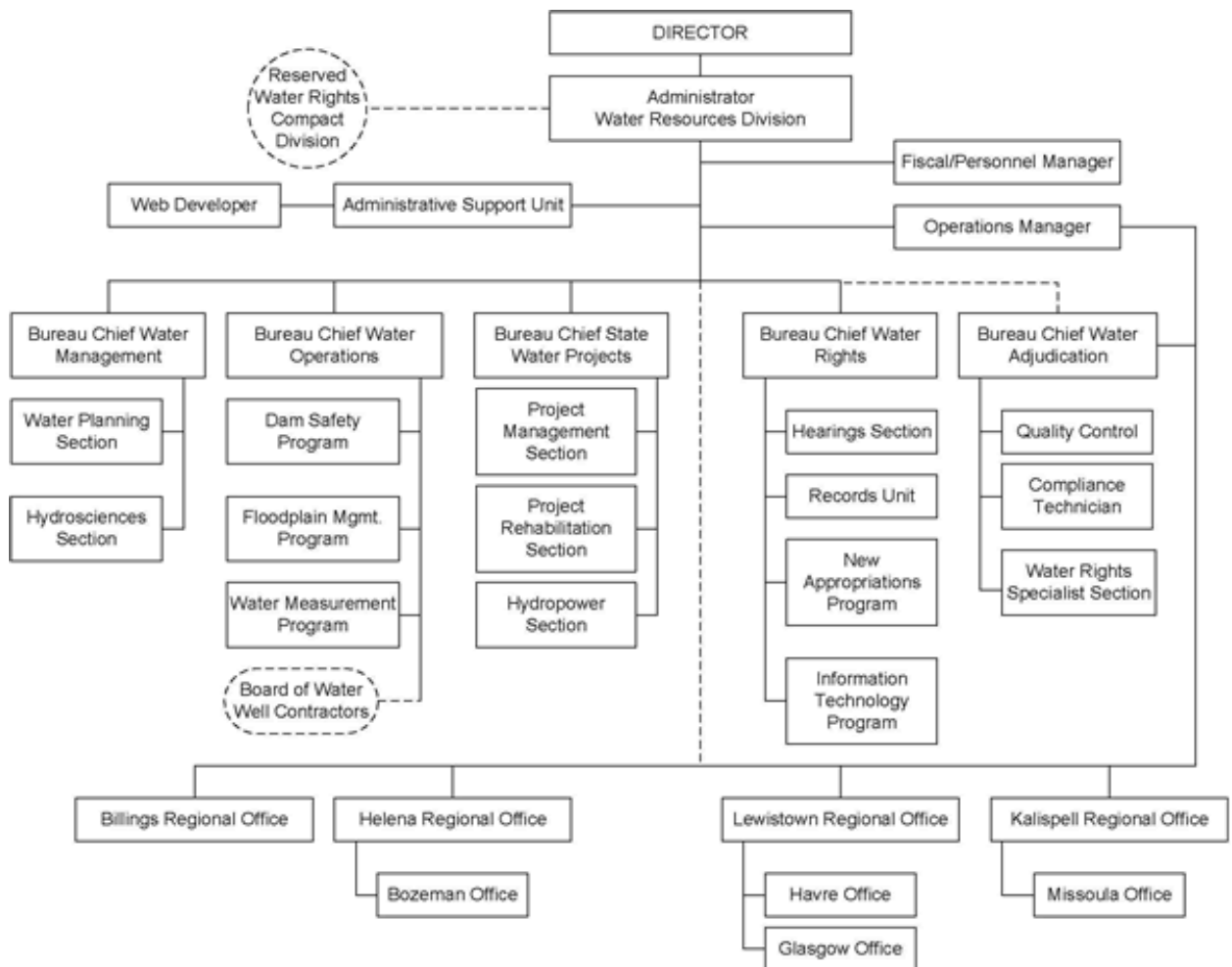
¹²¹ *Id.*

¹²² *Id.* at 21.

- One Stream Gaging Program Lead
- One Administrative Support

In addition to water planning, the Water Management Bureau also does hydrologic assessments; supports development of water planning resource studies; fosters stewardship of the state’s water resources through educational programs; and supports the implementation of federal and tribal water compacts. The Bureau staff frequently partners with local watershed groups and conservation districts, other divisions within the DNRC, other units of state government, the U.S. Geological Survey, and the Bureau of Reclamation.

Below is a table that shows the organization of the Montana Water Resources Division.



ADDITIONAL INFORMATION

Montana's Tribal Issues

From east to west, tribes in present-day Montana include: Salish and Kootenai of Flathead, Blackfeet, Chippewa Cree of Rocky Boys, Fort Belknap, Crow, Northern Cheyenne, and the Assiniboine and Sioux of Fort Peck.

A goal of the 2015 Montana State Water Plan is to complete all outstanding tribal and federal reserved water rights compacts and work closely with federal partners to better manage federal water projects. In 1979 the Montana Legislature created the Montana Reserved Water Rights Compact Commission (MRWRCC), with the goal of adjudicating all of the reserved water rights claims in the state. As of 2015, seventeen compacts have been negotiated and Legislature approved: Six tribal compacts and eleven federal non-tribal compacts.

All four Basin Advisory Councils discussed the issue of outstanding reserved water right compacts and agreed that it is in the interest of the state, federal government, and the tribes to complete this important work. The State of Montana should work with the tribes, Montana's Congressional delegation and the federal government to complete the compacting process through congressional ratification and decree by the Water Court. Montana takes pride that is part of a handful of states that have relied upon negotiation and settlement rather than litigation to resolve claims.

Oklahoma

I. What is the statutory basis for water planning and what types of water plans exist?

STATE WATER PLANS

The Oklahoma State Water Planning Act states, “the purpose of this act is to provide means for the expeditious and coordinated preparation of a comprehensive state water plan and decennial updates thereof for submission to the Legislature providing for the management, protection, conservation, structural and nonstructural development and utilization of water resources of this state.”¹²³ The overall objective of the Oklahoma State Water Plan is to develop all of the waters of Oklahoma for use by Oklahomans, and to prevent out-of-state downstream users from obtaining vested water rights to the detriment of Oklahomans.¹²⁴

The Planning Act authorizes, empowers, and directs the Oklahoma Water Resources Board (OWRB), “to prepare a comprehensive state water plan and decennial updates thereof for submission to the Legislature and, in connection therewith, to conduct surveys and cooperate with other state and federal agencies.”¹²⁵ The OWRB “shall permit representatives of the United States Army Corps of Engineers, the Bureau of Reclamation, the Soil Conservation Service and other appropriate federal agencies, as well as representatives of state agencies involved in tourism, parks, fish and wildlife, recreation, soil conservation, public health, agriculture, public utilities, and industrial development to participate to the extent of their authority and capacity in the development of the comprehensive state water plan.”¹²⁶

In 1970, the OWRB produced an initial water planning report that described efforts to inventory water and economic resources in eleven regions around the state. The report focused primarily on the southern half of the state.

In 1980, the OWRB produced the Oklahoma Comprehensive Water Plan. This plan outlined water supply information and projected water need information. It proposed the development of a massive statewide water conveyance system to move water from the eastern side of the state to the arid western side.

In 1992, the Oklahoma Legislature directed the OWRB to prepare an update of the initial 1980 Oklahoma Comprehensive Water Plan.¹²⁷ The Legislature also mandated decennial updates of the Water Plan, in addition to implementing a

¹²³ Okla. Stat. 82 § 1086.1(A)(2016).

¹²⁴ Okla. Stat. 82 § 1086.1 (2016).

¹²⁵ Okla. Stat. 82 § 1086.2(1)(2016).

¹²⁶ *Id.*

¹²⁷ OWRB, *Oklahoma Comprehensive Water Plan Executive Report*, 23, (2012).

continual planning process.¹²⁸ This resulted in the production of the 1995 Comprehensive Water Plan Update. The 1995 Update was based on eight planning regions and recommended a vast array of planning efforts and studies.

The 1995 Update prioritized policy solutions. It addressed eleven water resource issues by assessing general needs; identifying problem areas and opportunities; establishing objectives; and, recommending specific and appropriate policy choices to achieve desired goals. The eleven water resource policy issues addressed were:

- water rights;
- water quality;
- water and wastewater systems;
- reservoir operations;
- water marketing;
- water supply augmentation;
- water conservation;
- water resource planning;
- floodplain management;
- problem mediation and arbitration; and,
- data collection and management.¹²⁹

Between 2009 and 2011, the OWRB developed the 2012 Oklahoma Comprehensive Water Plan Update. This Update was developed using a robust public participation process paired with strong technical support. The Update is based on thirteen regional reports, intensive public input, recommendations from other agencies, and the assistance of the Oklahoma Water Resources Research Institute and Oklahoma Academy for State Goals. The 2012 Update planning process is described in more detail below.

WATER FOR 2060 REPORT

In 2012 the Oklahoma Legislature passed the Water for 2060 Act. It set the goal that Oklahoma use no more fresh water in 2060 than it used in 2012. A fifteen-member advisory council was commissioned by the Governor, which developed twelve recommendations to encourage efficient water use in all major use sectors.¹³⁰

AGENCY STRATEGIC PLAN

It is interesting to note that the OWRB has its own agency Strategic Plan for Fiscal Years 2019–2023. The OWRB’s Strategic Plan sets out its mission, vision, and values.¹³¹ It then provides action plans for ten management categories:

¹²⁸ *Id.*

¹²⁹ *Id.* at 5.

¹³⁰ Report of the Oklahoma Water for 2060 Advisory Council (2015) at 3, available at <http://www.owrb.ok.gov/2060/pdf/2060Recommendations.pdf>

¹³¹ Available at http://www.owrb.ok.gov/about/about_pdf/OWRBStrategicPlanFY2019.pdf

- Data collection;
- Loan assistance;
- Hydrologic Investigations and Water Allocation Assessments;
- Water Conservation, Efficiency, and Reuse;
- Regional/Drought Planning Assistance;
- Providing Data and Information to the Public;
- Public Outreach and Education;
- Employee training;
- Succession Planning; and,
- Employee Well-being and Fitness.

II. Who governs Oklahoma’s water planning process?

When completed, the State Water Plan is to be submitted to the Oklahoma Legislature.¹³² The OWRB is “not authorized to implement the plan or any part or update thereof except by express authorization and consent of the Legislature.”¹³³ Work on updates is to remain continuous and ongoing throughout the ten-year periods between submission of the updates.¹³⁴

III. Who develops Oklahoma’s water plan(s)?

In 1957, recommendations from the Oklahoma Governor’s Water Study Committee led to the creation of the Oklahoma Water Resources Board (OWRB).¹³⁵ The OWRB consists of nine members appointed by the Governor, with the advice and consent of the Senate.¹³⁶ The OWRB “defines policy and conducts the state’s water business.”¹³⁷

The OWRB members are appointed by the Governor, they are representative of all the geographic areas of Oklahoma and “diverse groups of water users.”¹³⁸ The OWRB membership has historically been based on a mixture of at-large positions and positions based on congressional districts. Beginning on July 1, 2014, the OWRB Board regions began a five-year transition from being based on congressional districts to watershed-based districts.¹³⁹ This move has been controversial in urban areas as it is a shift from population-based representation to geographically based representation, allowing some areas with low population to have the same level of representation as densely populated areas.

¹³² Okla. Stat. 82 § 1086.1 (2016); OWRB, *Oklahoma Comprehensive Water Plan Executive Report*, 23, (2012).

¹³³ Okla. Stat. 82 § 1086.2 (2016); OWRB, *Oklahoma Comprehensive Water Plan Executive Report*, 23, (2012).

¹³⁴ *Id.*

¹³⁵ http://www.owrb.ok.gov/supply/ocwp/pdf_ocwp/2evolutionofocwp.pdf

¹³⁶ Okla. Stat. 82 § 1085.1(A) (2016).

¹³⁷ <http://www.owrb.ok.gov/about/management/board.php>

¹³⁸ <http://www.owrb.ok.gov/about/management/board.php>

¹³⁹ Okla. Stat. 82 § 1085.1(B)(1-9) (2016).

There is an additional statutory requirement that at least one member be “well versed” in each of the following types of water use: recreational, industrial, irrigational, municipal, rural residential, agricultural, soil conservation work and oil and gas production, with a maximum of two members selected to represent any one of the major types of water use.¹⁴⁰

The Mission of the OWRB is “to protect and enhance the quality of life for Oklahomans by managing and improving the state’s water resources to ensure clean and reliable water supplies, a strong economy, and a safe and healthy environment.”¹⁴¹ The OWRB has the authority “to develop statewide and local plans,” and to “cooperate in such planning with any public or private agency, entity or person interested in water, and is directed to prepare such plans for consideration and approval by the Legislature.”¹⁴²

In addition to promulgating and adopting “water quality standards and related implementation documents for the state,” the OWRB updates the state water plan.¹⁴³

The OWRB developed the 2012 Update with planning partners and “facilitated an unprecedented number of public and stakeholder input meetings.”¹⁴⁴ Stakeholder groups were “commissioned specifically representing agricultural, climatological, and water quality interests,” providing “input and recommendations” to “assess and prioritize future water research, monitoring, and policy requirements.”¹⁴⁵

The OWRB implements the state water plan through “agency-wide action plans” that include “specific tasks and timelines for completing projects.”¹⁴⁶

THE 2012 OKLAHOMA COMPREHENSIVE WATER PLAN

The 2012 Oklahoma Comprehensive Water Plan is “the state’s official long-range strategy for managing and protecting its invaluable surface and groundwater resources through at least the next 50 years.”¹⁴⁷ The OWRB adopted the 2012 Update on October 17, 2011.¹⁴⁸

¹⁴⁰ Okla. Stat. 82 § 1085.1(E) (2016).

¹⁴¹ OWRB, Strategic Plan FY 2016-2020.

¹⁴² Okla. Stat. 82 § 1085.2(4) (2016).

¹⁴³ OWRB, *Oklahoma Comprehensive Water Plan Executive Report*, 38, (2012).

¹⁴⁴ OWRB, *Oklahoma Comprehensive Water Plan Executive Report*, 3, (2012).

¹⁴⁵ OWRB, *Oklahoma Comprehensive Water Plan Executive Report*, 4, (2012).

¹⁴⁶ OWRB, Strategic Plan FY 2016-2020, 1.

<http://www.owrb.ok.gov/about/management/OWRBStrategicPlanFY2016.pdf>

¹⁴⁷ OWRB, *Oklahoma Comprehensive Water Plan Executive Report*, 3, (2012).

¹⁴⁸ *Id.*

The 2012 Update was built on the “two pillars of extensive public participation and detailed technical evaluations.”¹⁴⁹ The primary objective of the 2012 Update is to establish a reliable water supply for state users through the next fifty years.¹⁵⁰ The 2012 OCWP Update set two goals to achieve this objective:

1. Provide safe and dependable water supply for all Oklahomans while improving the economy and protecting the environment.
2. Provide information so that water providers, policy makers, and water users can make informed decisions concerning the wise use and management of Oklahoma’s water resources.¹⁵¹

The result is presented as a “strategic vision” for four critical areas:

- Infrastructure
- Data
- Management
- Regional Planning¹⁵²

The 2012 Update of the Oklahoma Comprehensive Water Plan is not really a single water plan, but a “compilation of reports and other resources.”¹⁵³ The Update consists of an Executive Report, thirteen Watershed Planning Region reports and twenty-one other supplemental and technical background reports.¹⁵⁴

Water planning oversight is required at the state level in Oklahoma, but the 2012 Update of the OCWP encouraged and advanced regional water planning. The Update involved studies that were conducted “according to geographic (watersheds) rather than political boundaries (counties).”¹⁵⁵ The state was subdivided into eighty-two planning basins for water supply availability analysis. Basins were then aggregated into thirteen distinct Watershed Planning Regions.¹⁵⁶

The OWRB engaged the Oklahoma Water Resources Research Institute (OWRRI) to develop and implement a four-year public participation process. More than one hundred public meetings were held, with over one thousand attendees, and thirty thousand hours of volunteer time contributed. Local meetings were held to identify water-planning issues and appoint regional representatives. Regional meetings were held to identify the top ten issues for the Water Plan Update.

Once the top ten issues were identified, the OWRB and OWRRI held two seminars to present information about water policy and water science related to the top ten

¹⁴⁹ OWRB, *Oklahoma Comprehensive Water Plan Executive Report*, 1, (2012).

¹⁵⁰ OWRB, *Oklahoma Comprehensive Water Plan Executive Report*, 23, (2012).

¹⁵¹ *Id.*

¹⁵² OWRB, *Oklahoma Comprehensive Water Plan Executive Report*, 1, (2012).

¹⁵³ http://www.owrb.ok.gov/supply/ocwp/pdf_ocwp/brochure.pdf

¹⁵⁴ All available at www.owrb.ok.gov.

¹⁵⁵ *Id.*

¹⁵⁶ OWRB, *Oklahoma Comprehensive Water Plan Executive Report*, 23, (2012).

issues. They then held thirty meetings to develop strategies for each issue, three meetings for each issue. Two hundred forty participants from the regional meetings attended these subsequent meetings and helped develop water management strategies for each issue. In between meetings, technical experts evaluated the proposed strategies to help refine them at subsequent meetings. Fifty-four strategies were developed. These were then vetted at a three-day statewide Town hall, organized into six panels of thirty citizens with experts, who developed fifty-five final strategy recommendations.

Thirteen Watershed Planning Region Reports were prepared for inclusion in the 2012 OCWP Update. Each report “presents information from both a regional and multiple basin perspective.”¹⁵⁷ The reports include “water supply/demand analysis results, forecasted water supply shortages, potential supply solutions and alternatives, and supporting technical information.”¹⁵⁸ The reports are considered “living” documents that can be readily updated to reflect changes in data, demographic, and economic information.¹⁵⁹

IV. How is Oklahoma’s water planning funded? How much, from where, how often?

Section 1085.2 (12) of the Oklahoma Statutes authorizes the OWRB to “provide funding from federal and state monies for water and wastewater project purposes to eligible entities for preliminary engineering reports and planning and feasibility studies.”

Section 1085.7B of the Oklahoma Statutes designates the “OWRB Revolving Fund,” created in the State Treasury for the OWRB to hold monies that “may be budgeted and expended by the Oklahoma Water Resources Board for the purpose of duties imposed upon the Oklahoma Water Resources Board by law.”

The OWRB is “authorized, empowered and directed” to receive and accept money from the “State of Oklahoma or the United States of America or any agency or instrumentality thereof” and to “expend income and funds of the Board in the exercise of any or all of the powers granted to the Board under the provisions of this act.”¹⁶⁰

The Oklahoma Comprehensive Water Plan was funded (FY 2007–2013) through State Appropriations and federal funds, including Oklahoma Water Resources Research Institute, State Gross Production Tax, Corps of Engineers, Bureau of Reclamation and United States Geological Survey.¹⁶¹

¹⁵⁷ *Id.*

¹⁵⁸ *Id.*

¹⁵⁹ *Id.*

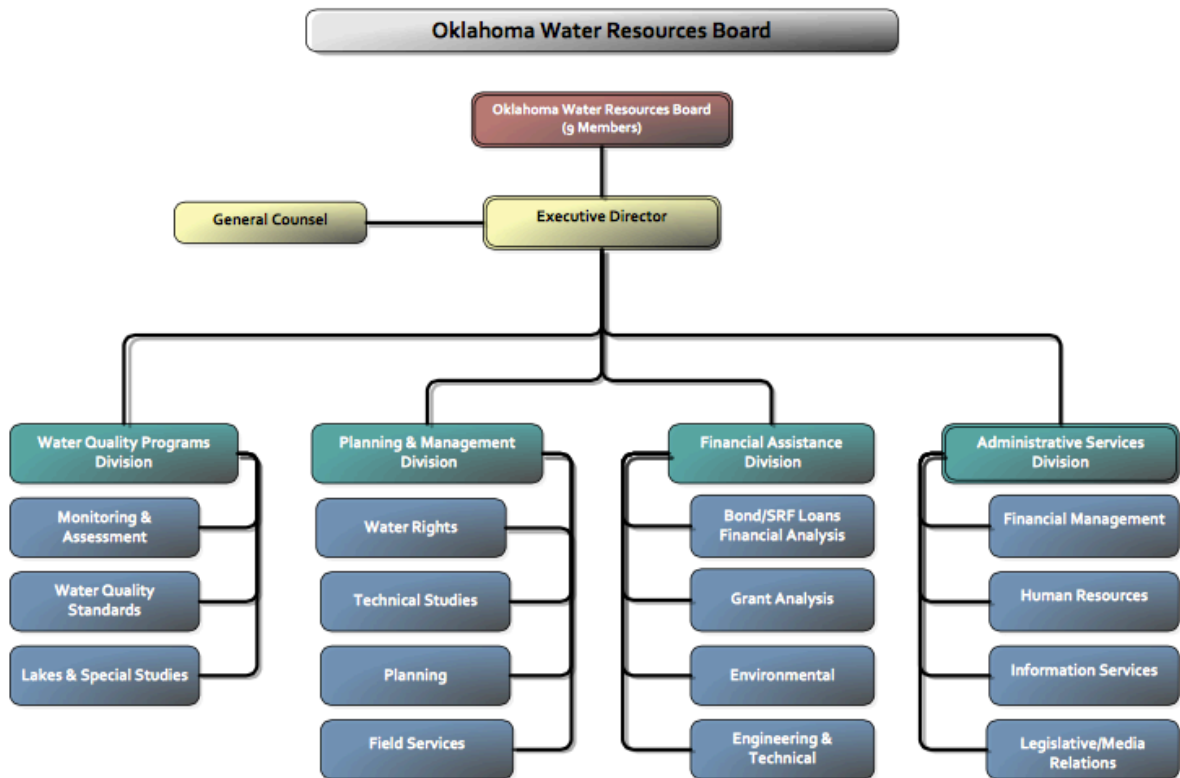
¹⁶⁰ Okla. Stat. tit. 82 § 1086.2(4)(5) (2016).

¹⁶¹ http://www.owrb.ok.gov/supply/ocwp/pdf_ocwp/OCWPIImplementationYearOneReview-June2013.pdf

In 2006, the Legislature made an oil gross production tax appropriation of \$1.2 million every year for six years to support state water planning. That has been extended through 2016 and is now approximately \$1.2-\$1.3 million per year.

- V. How is Oklahoma’s water planning staffed?
 What is the professional background of the planning staff?

Water planning is managed by the Planning and Management Division of the OWRB. The director of this division was appointed Interim Executive Director of the OWRB in late 2016.



ADDITIONAL INFORMATION
Oklahoma’s Tribal Issues

Oklahoma contains more Native American Nations than any other state in the country. It did not recognize Indian water rights until quite recently. Forty federally recognized tribes reside within Oklahoma. Most tribes have asserted treaty-based water right claims, although other tribal water right claims have been asserted by tribes based on fee simple ownership of land. Complicating the matter is the fact that Oklahoma embraces both the riparian and prior appropriation

doctrines. Most Tribal water right claims have yet to be legally resolved in Oklahoma.¹⁶²

The 1995 Oklahoma State Water Plan Update recommended developing a mutually acceptable negotiation system or process to fairly resolve current and future water rights issues with Oklahoma tribes.¹⁶³

Tribes were relatively quiet about the issue until 1997, when the Choctaw Nation claimed most of the surplus water in the State. In February of 2012 the OWRB filed to adjudicate the water rights of the Choctaw and Chickasaw Nations. After mediation, a Water Settlement was entered into between the Choctaw Nation, the Chickasaw Nation, Oklahoma City, and the State of Oklahoma in August of 2016.¹⁶⁴ This Water agreement was approved in the Water Resources Development Act of 2016 without ever having a Congressional hearing.

During the planning process for the 2012 Update, the OWRB contracted with Professor Lindsay Robertson at the University of Oklahoma School of Law to “liaison with representatives of Oklahoma's Indian tribes for the purpose of identifying the state's pertinent water-related tribal issues and offer appropriate recommendations concerning water rights claims and mutual water interests.”¹⁶⁵

Professor Robertson held twenty meetings with groups of tribal officials, including representatives of every tribe in Oklahoma. Tribes expressed concern about sharing information in public forums. They also insisted on government-to-government consultations, rather than being lumped in with the public. He recommended the development of a process for finding mutually agreeable solutions with tribes, citing the Montana Reserved Rights Compact Commission as a workable example. In particular, he suggested creating negotiating teams to settle water rights claims with each Tribe.¹⁶⁶

¹⁶² Helton, Taiawagi. "Indian Reserved Water Rights in the Dual-System State of Oklahoma." 33 Tulsa L.J. 979 (1997).

¹⁶³ OWRB, *Oklahoma Comprehensive Water Plan Update* at 119 and 138(1995).

¹⁶⁴ Agreement available at: <https://www.waterunityok.com/media/1075/agreement-160808.pdf>

¹⁶⁵ Oklahoma Comprehensive Water Plan Supplemental Report, Tribal Water Issues & Recommendations, Dr. L. Robertson (2011).

¹⁶⁶ *Id.*

Oregon

I. What is the statutory basis for water planning and what types of water plans exist?

In 2009 the Oregon Legislature directed the Oregon Water Resources Department (OWRD) to develop Oregon's first Integrated Water Resources Strategy (Strategy).¹⁶⁷ In doing so, the Legislature posed two questions: "what is the current state of Oregon's water supply relative to its needs and what must Oregon do to ensure that sustainable supplies of clean and abundant water are available to meet future instream and out-of-stream needs?"¹⁶⁸ The Legislature also directed the Water Resources Department to review and update the Strategy every five years.¹⁶⁹

The Oregon Legislature explicitly recognized in its planning statute that policies, laws, and management schemes of water that are single-purposed create conflict among agencies, confusion about beneficial use, and management inefficiencies.¹⁷⁰ The Legislature went so far as to say, "The economic and general welfare of the people of this state have been seriously impaired and are in danger of further impairment by the exercise of some single-purpose power or influence over the water resources of this state..."¹⁷¹

The Legislature called for the Oregon Strategy to be an integrated water policy with plans and programs to encourage the maximum beneficial use of water. The Legislature mandated that the plan consider beneficial use of water with, "an impartiality of interest except that designed to best protect and promote the public welfare generally."¹⁷²

The OWRD was required to work closely with the Department of Environmental Quality and the Department of Fish and Wildlife in developing the Strategy.¹⁷³ It was also required to work with these departments to continuously develop data to forecast water needs, both in and out-of-stream.¹⁷⁴ By doing so, the Legislature ensured that water quality and ecosystem concerns were addressed in the Strategy.

¹⁶⁷ O.R.S. 536.200(3)(a) (Current with 2016 Reg. Sess.).

¹⁶⁸ Oregon Water Resources Department, *Oregon's Integrated Water Resources Strategy*, 4 (August 2012). Available at https://www.oregon.gov/owrd/Pages/law/integrated_water_supply_strategy.aspx (last viewed Nov. 11, 2016).

¹⁶⁹ O.R.S. § 536.220(3)(e)(B).

¹⁷⁰ O.R.S. § 536.220(1)(C).

¹⁷¹ *Id.*

¹⁷² O.R.S. § 536.220(2)(A).

¹⁷³ O.R.S. § 536.220(3)(B).

¹⁷⁴ O.R.S. § 536.220(3)(C).

The Legislature left it up to the OWRD to develop the objectives of the Strategy, and the actions intended to meet those objectives.¹⁷⁵ However, the Legislature called for the Strategy to identify processes for communicating with stakeholders.¹⁷⁶ It also required that the OWRD identify the functions of the Strategy to be carried out by any other relevant state agencies.¹⁷⁷

II. Who governs Oregon’s water planning process?

The Strategy took effect upon adoption by the Oregon Water Resources Commission.¹⁷⁸ The Water Resources Commission is a Governor-appointed commission of seven that sets the operational policies for the OWRD.¹⁷⁹ On August 2, 2012, after three years of planning, the Oregon Water Resources Commission formally adopted its Integrated Water Resources Strategy.¹⁸⁰ The OWRD first gave the Oregon Environmental Quality Commission, the State Department of Agriculture, and the State Department of Fish and Wildlife notice of the Strategy prior to its adoption, as required by law.¹⁸¹

Throughout the planning and development of the Strategy, information and progress was “shared regularly with the Water Resources Commission, other boards and commissions, the Oregon State Legislature, and the Governor’s Office.”¹⁸²

III. Who develops Oregon’s the water plan(s)? How is it structured? Who is represented? How are decisions made?

As required by the Oregon planning statute¹⁸³ the OWRD, which is the state agency responsible for water quantity, worked closely with the Oregon Department of Environmental Quality, the Oregon Department of Fish and Wildlife, and the Oregon Department of Agriculture to develop the Strategy.¹⁸⁴ Extensive outreach to Oregon’s tribes, public and private sector stakeholders, and state and federal agencies helped to identify water-related challenges and solutions to communities

¹⁷⁵ O.R.S. § 536.220(2)(D).

¹⁷⁶ O.R.S. § 536.220(3)(d)(E).

¹⁷⁷ O.R.S. § 536.220(3)(d)(F).

¹⁷⁸ O.R.S. § 563.220(3)(e)(A).

¹⁷⁹ O.R.S. § 536.025(1).

¹⁸⁰ Oregon Water Resources Commission, *Resolution Adopting The State’s Integrated Water Resources Strategy*, August 2, 2012. https://www.oregon.gov/owrd/LAW/docs/c_WRC_Resolution.pdf (last visited Nov. 11, 2012).

¹⁸¹ O.R.S. § 563.220(3)(e)(A).

¹⁸² Oregon Water Resources Department, *Oregon’s Integrated Water Resources Strategy Executive Summary*, 2 (August 2012). Available at https://www.oregon.gov/owrd/Pages/law/integrated_water_supply_strategy.aspx (last visited Nov. 11, 2016).

¹⁸³ O.R.S. § 536.220(3)(b).

¹⁸⁴ *Supra* note 25 at 1.

in the state.¹⁸⁵ The four agencies held discussions in eleven communities across the state, seeking input from the public, as well as from stakeholders and water-related organizations.¹⁸⁶ A contract facilitator was hired to assist with the public meetings. Over forty stakeholder workshops were held over a three-month period, in addition to eleven open house events.

The Strategy focuses on a commitment to meet water needs for human health and economic growth, as well as environmental protection.¹⁸⁷ It “places an emphasis on collaboration and voluntary efforts,”¹⁸⁸ identifying incentives (financial, technical or policy), that could “serve as powerful tools for progress.”¹⁸⁹ It also identifies where public and private partnerships could provide financial efficiency and progress toward overall water goals.¹⁹⁰ It does not identify specific projects; rather it provides the framework for developing future projects. It is an advisory document that identifies strategies for meeting future water needs.

The Strategy considers both in-stream needs and out-of stream needs, “including water quality, water quantity, and ecosystem needs.”¹⁹¹ It is “organized around four main objectives, which are presented as chapters, and within each chapter, sections highlight the critical issues and recommended actions needed to address those issues.”¹⁹² The four main objectives are:

- (1) Understand Oregon’s water resources today;
- (2) Understand in-stream and out-of-stream needs;
- (3) Understand the coming pressures that affect needs and supplies; and,
- (4) Meet Oregon’s in-stream and out-of stream needs.¹⁹³

There are also four “cross-cutting issues” that are considered of “vital importance for Oregon’s water future: groundwater, climate change, funding, and institutional coordination.”¹⁹⁴ These issues are integrated into the discussion within every section of the Strategy.

The Strategy concludes by describing the opportunities to develop a long-term approach to water resources management, with steps for a Five-Year Outcome (2012–2017) and a Ten-Year Outcome (2017–2022).¹⁹⁵

¹⁸⁵ *Id.*

¹⁸⁶ *Id.*

¹⁸⁷ *Supra* note 2.

¹⁸⁸ *Id.* at 4.

¹⁸⁹ *Id.*

¹⁹⁰ *Id.*

¹⁹¹ *Id.* at 1.

¹⁹² *Id.* at 4.

¹⁹³ *Id.* at 5-6.

¹⁹⁴ *Id.* at 5.

¹⁹⁵ *Id.* at 121.

- IV. How is Oregon's water planning funded?
How much, from where, how often?

The funding of the development of the Strategy was a small one-time appropriation. However, since the adoption of the Strategy, the Legislature has funded the creation of over fifty employees at various agencies involved with implementation of the Strategy. The OWRD has hired a Strategy Implementation Coordinator. In its 2013 session, the Oregon Legislature appropriated \$34 million to implement activities identified in the Strategy.

- V. How is Oregon's water planning staffed?
What is the professional background of the planning staff?

The OWRD does not have planning staff. It used to have a Resource Management Division that developed basin plans but that was eliminated due to budget cuts over two decades ago. In 2009 the Legislature appropriated \$283,000 for the OWRD to hire two term positions, a policy coordinator and a science coordinator, for the development of the Strategy. No other appropriations were made to other state agencies involved in the development of the Strategy.

The directors of the OWRD, Department of Fish and Wildlife, Department of Environmental Quality, and Department of Agriculture developed a Project Team of senior staff members who formed three advisory groups. The advisory groups were a Policy Advisory Group comprised of eighteen citizen members and stakeholders, an Agency Advisory Group consisting of eighteen economic development and natural resource state agency staffers, and a Federal Liaison Group comprised of ten federal natural resource agency staffers.¹⁹⁶

ADDITIONAL INFORMATION

Oregon's Tribal Issues

The Oregon Strategy makes only a few references to tribes, addressing them in the same group as federal agencies and neighboring states. It acknowledged the importance of partnering and consulting with tribes but gives little detail. It does recognize the existence of standing agreements regarding fisheries management and restoration. Otherwise it simply recommends that the State partner with tribes on water resource management.¹⁹⁷

¹⁹⁶ Oregon Water Resources Department, *Oregon Launches Its First Integrated Water Resources Strategy*, PRESS RELEASE (August 14, 2012). Available at https://www.oregon.gov/owrd/Pages/law/integrated_water_supply_strategy.aspx (last visited Nov. 11, 2016).

¹⁹⁷ Oregon Water Resources Department, *Oregon's Integrated Water Resources Strategy*, Recommendation 9c, at 120.

Texas

I. What is the statutory basis for water planning and what types of water plans exist?

In 1957, the Texas legislature passed the Water Planning Act of 1957, which created the Texas Water Resources Planning Division of the Board of Water Engineers, now the Texas Water Development Board (TWDB), which was assigned the responsibility of water resources planning on a statewide basis.¹⁹⁸ Texas' first water plan, A Plan for Meeting the 1980 Water Requirements of Texas, was published in 1961.¹⁹⁹

The state water plans evolved over the years with the 1997 State Water Plan being the first to organize the state into sixteen regional planning areas.²⁰⁰ The modern Texas State Water Planning statute was passed in 1997,²⁰¹ establishing the regional water planning process in Texas and directing water planning "to be conducted from the bottom up."²⁰² The Texas Water Code provides for three levels of water planning, including the State Water Plan,²⁰³ Regional Water Plans,²⁰⁴ and Local Water Planning.²⁰⁵

The 2017 State Water Plan was adopted by the TWDB on May 19, 2016.²⁰⁶ The Texas 2017 State Water Plan is the tenth plan created since the TWDB's inception in 1957 and the fourth since the current bottom up regional water planning approach began in 1997.²⁰⁷ A new water plan is drafted and adopted every five years.²⁰⁸ Each new state water plan "considers a fifty-year horizon" and "must reflect and respond to changes in population, water supplies, technological improvements, economic shifts, project viability, and state policy."²⁰⁹

The bottom up approach is focused primarily on the regional level. Texas is divided into sixteen regional water planning areas and each area is represented by a planning group that consists of about twenty-three members representing at least

¹⁹⁸ Texas Water Development Board, *2017 State Water Plan: Water for Texas*, Appendix A.1.2. (2017).

¹⁹⁹ Texas Water Development Board, *2017 State Water Plan: Water for Texas*, Appendix A.1.2. (2017).

²⁰⁰ Texas Water Development Board, *2017 State Water Plan: Water for Texas*, Appendix A.1.2. (2017).

²⁰¹ Tex. Water Code Ann. §16.051 et seq.

²⁰² Texas Water Development Board, *2017 State Water Plan: Water for Texas*, Appendix A.1.3. (2017).

²⁰³ Tex. Water Code Ann. §16.051.

²⁰⁴ Tex. Water Code Ann. §16.053.

²⁰⁵ Tex. Water Code Ann. §16.054.

²⁰⁶ <http://www.twdb.texas.gov/waterplanning/swp/2017/>

²⁰⁷ Texas Water Development Board, *2017 State Water Plan: Water for Texas*, Acknowledgments (2017).

²⁰⁸ Tex. Water Code Ann. §16.051.

²⁰⁹ Texas Water Development Board, *2017 State Water Plan: Water for Texas*, Executive Summary, 4 (2017).

twelve statutorily required interests:²¹⁰ the public, counties, municipalities, industries, agriculture, environment, small business, electric-generating utilities, river authorities, water districts, water utilities, and groundwater management areas.²¹¹ The bottom up regional approach “allows the planning groups to assess specific risks and uncertainties in their own regions and evaluate potential impacts of water management strategies on their region as well as on the state’s water, agricultural, and natural resources.”²¹²

Within the regions, Texas encourages groundwater planning at the local level by groundwater districts. The TWDB offers technical and financial assistance to groundwater districts so that they may develop groundwater plans, which are then submitted to their regional planning group.²¹³

The state water plan also serves as a guide for state water policy and includes the TWDB’s policy recommendations to the Texas Legislature.²¹⁴

II. Who governs the Texas water planning process?

The Texas Water Code directs the TWDB to “prepare, develop, formulate, and adopt” the state water plan.²¹⁵ Upon adoption, the TWDB is to “deliver the state water plan to the governor, the lieutenant governor, and the speaker of the house of representatives and present the plan for review to the appropriate legislative committees.”²¹⁶

III. Who develops the Texas water plan(s)?

How is it structured? Who is represented? How are decisions made?

The Texas Water Code establishes the Texas Water Development Board as “the state agency primarily responsible for water planning and for administering water financing for the state.”²¹⁷ The TWDB is the state’s lead water planning and infrastructure financing agency and is statutorily responsible for administering the regional water planning process.²¹⁸

²¹⁰ Tex. Water Code Ann. §16.053(c).

²¹¹ Texas Water Development Board, *2017 State Water Plan: Water for Texas*, Executive Summary, 5 (2017).

²¹² Texas Water Development Board, *2017 State Water Plan: Water for Texas*, Executive Summary, 5 (2017).

²¹³ Tex. Water Code Ann. §16.054(a).

²¹⁴ Tex. Water Code Ann. §16.051(b). “The state water plan, as formally adopted by the board, shall be a guide to state water policy. The commission shall take the plan into consideration in matters coming before it.”

²¹⁵ Tex. Water Code Ann. §16.051(a).

²¹⁶ Tex. Water Code Ann. §16.051(e).

²¹⁷ Tex. Water Code Ann. § 6.011.

²¹⁸ Tex. Water Code Ann. §16.051(a).

The TWDB provides technical and financial support for the development of sixteen regional water plans and is responsible for developing the state water plan every five years.²¹⁹ The sixteen regions are based on watersheds, aquifers, and metro areas. Each region produces an updated regional plan every five years.

Once the regional planning groups develop and adopt their regional water plans, the plans are approved by the TWDB.²²⁰ The TWDB then “releases a draft for public comment, publishes in the Texas Register its intent to adopt the state water plan, notifies the planning groups, and holds [at least] one public hearing.”²²¹ After the regional plans are approved, the TWDB prepares the state water plan based on the regional water plans.²²²

A number of State and Federal agencies participate in the regional planning process. Among them, the “Texas Parks and Wildlife Department, the Texas Commission on Environmental Quality, and the Texas Department of Agriculture all have non-voting representatives on each regional water planning group.”²²³ These groups “participate in developing population projections and are consulted in the development and amendment of rules governing the planning process.”²²⁴

IV. How is Texas water planning funded? How much, from where, how often?

Funding for the water planning process in Texas is divided between grants and staffing. Grants are directed to the regional water planning groups that are responsible for developing regional water plans. In 2014, there were \$2.1 million available in grants to regional planning groups. These grants are funded with proceeds from state-backed bonds.

In Texas funding for planning staff is dependent on appropriations determined in each legislative session. There is no dedicated funding stream. The TWDB staff is responsible for oversight of the regional planning process, research, and data collection and dissemination. TWDB staff is also responsible for writing the State Water Plan in the year following the completion of regional water plans. The budget for staff devoted to water planning in 2014 was \$1.13 million. An additional \$600,000 was budgeted for groundwater availability modeling, which is integrated into the regional planning process through the local planning process. Funding for

²¹⁹ Texas Water Development Board, *2017 State Water Plan: Water for Texas*, Appendix A.1.4. (2017).

²²⁰ Texas Water Development Board, *2017 State Water Plan: Water for Texas*, Executive Summary, 5 (2017).

²²¹ Texas Water Development Board, *2017 State Water Plan: Water for Texas*, 19 (2017).

²²² Texas Water Development Board, *2017 State Water Plan: Water for Texas*, Executive Summary, 5 (2017).

²²³ Texas Water Development Board, *2017 State Water Plan: Water for Texas*, Appendix A.1.4. (2017).

²²⁴ Texas Water Development Board, *2017 State Water Plan: Water for Texas*, Appendix A.1.4. (2017).

planning has been decreased in each of the past two biennial legislative sessions, driven by budget decisions.

The Texas Water Code also authorizes the chief executive of the TWDB to “take all necessary action to qualify for federal assistance in financing the development and improvement of the regional water plans.”²²⁵

- V. How is Texas water planning staffed?
What is the professional background of the planning staff?

The TWDB’s organization begins with the Water Development Board itself. The Board is comprised of three members appointed by the Governor with the advice and consent of the Senate. The composition of the Water Development Board is reminiscent of the old adage in Western water that one should bring along lawyers, guns and money: “one member must have experience in the field of engineering, one member must have experience in the field of public or private finance, and one member must have experience in the field of law or business.”²²⁶

The TWDB staff is organized into divisions, including Internal Audit, Executive Administration, Office of General Counsel, Water Supply and Infrastructure, Water Science and Conservation, Texas Natural Resources Information System, and Operations and Administration, and Finance.²²⁷ Within Water Supply & Infrastructure is the Water Use, Projections, & Planning Department, which includes Regional Water Planning.²²⁸

The Water Use, Projections & Planning Department is comprised of a Director, Managers, Team Leads and staff for Water Supply & Strategy Analysis, Regional Water Planning, Economic & Demographic Analysis, and Water Use Survey.²²⁹

The Regional Water Project Development Department includes six teams. The teams are comprised of Managers, Project Managers, Financial Analysts, Engineers, Project Reviewers, Regional Water Planners, Environmental Reviewers, Attorneys, and Administrative Assistants.²³⁰ According to the latest TWDB organizational

²²⁵ Tex. Water Code Ann. §16.056.

²²⁶ Tex. Water Code Ann. §6.052(a).

²²⁷ TWDB Organizational Chart, Available at <http://www.twdb.texas.gov/contact/doc/TWDBOrgchart.pdf>.

²²⁸ Staff list and contact information available at <http://www.twdb.texas.gov/waterplanning/staff.asp>

²²⁹ Staff list and contact information available at <http://www.twdb.texas.gov/waterplanning/staff.asp>

²³⁰ Staff list and contact information available at <http://www.twdb.texas.gov/waterplanning/staff.asp>

chart, there are over forty employees dedicated to the regional water planning process.²³¹

²³¹ TWDB Organizational Chart, Available at <http://www.twdb.texas.gov/contact/doc/TWDBOrgchart.pdf>.

Utah

QUESTIONS ADDRESSED

I. What is the statutory basis for water planning and what types of water plans exist?

The statutory basis for the Utah State Water Plan is found in Title 73, Chapter 10 of the Utah Code (1963).²³² The Utah Board of Water Resources and Division of Water Resources are authorized and required to undertake water planning by §73-10-15, 16 & 17. These statutes are relatively general. They require all other government agencies to cooperate in the creation of the State Water Plan. State Water Plan funds may be made available to other state agencies so they may develop materials to contribute to the State Water Plan.

Another Utah water statute requires that retail water providers and water conservation districts prepare and adopt individual water conservation plans.²³³ These entity-specific water conservation plans must include a water reduction goal and strategies for achieving that goal. These plans must be updated every five years and a public hearing must be held before either adopting or updating a water conservation plan. Retail water suppliers and conservation districts must have a water conservation plan to be eligible to receive state funding for water development.

There is also a statutory provision that authorizes the Utah State Engineer to produce groundwater management plans.²³⁴ These plans establish critical management areas where groundwater is being mined. The goal of these plans is to limit withdrawals to the safe yield limit while protecting the integrity and quality of the aquifer.

The Utah State Water Plan has actually been developed as a series of documents. There is the overall State Water Plan with an additional eleven individual water plan for each of the Utah's major hydrologic river basins.

The following documents comprise the Utah State Water Plan:

- The Utah Statewide Water Plan (1990)
- Utah's Water Resources "Planning for the Future" (a 2001 update of the 1990 State Water Plan)

²³² Title 73, Chapter 10, Utah Water and Irrigation Code, Board of Water Resources-Division of Water Resources (1963). Available at http://le.utah.gov/xcode/Title73/Chapter10/73-10.html?v=C73-10_1800010118000101.

²³³ Utah Code §73-10-31.

²³⁴ Utah Code §73-5-15 (2012).

- Utah’s Hydrologic River Basin Water Plans:²³⁵
 - Bear River (1992, updated 2004)
 - Cedar/Beaver (1995)
 - Jordan River (1997, updated 2010)
 - Kanab Creek/Virgin River (1993)
 - Sevier River (1999)
 - Southeast Colorado (2000)
 - Uintah Basin (1998, updated 2015)
 - Utah Lake (1998, updated 2014)
 - Weber River (1997, updated 2009)
 - West Colorado (2000)
 - West Desert Basin (2001)

II. Who governs Utah’s water planning process?

The Utah Board of Water Resources governs the acceptance of the State Water Plan. The Board of Water Resources is the policy-making body for the Utah Division of Water Resources. The Board of Water Resources consists of nine members including the director of the Division of Water Resources. The members serve four-year terms and are appointed by the Governor with the consent of the Senate. No more than four members can be from the same political party, and members cannot receive compensation for their services.

The Board of Water Resources has the power and duty to authorize studies, investigations, and plans for the full development, utilization, and promotion of water use and power resources through a variety of methods, and to “do all other things on behalf of the State for any purposes which relates to the development, conservation, protection, and control of water and power resources of the state.”²³⁶

III. Who develops Utah’s water plan(s)? How is it structured? Who is represented? How are decisions made?

Utah began water planning in 1963 at the direction of the Utah Legislature. The Water Resource Board and the Water Resource Division have been authorized to conduct Utah’s water planning. The Division is responsible for the state’s comprehensive water planning, which it produces for the Board.²³⁷

The Board of Water Resources selects projects for construction, which “in its opinion, will conserve the water of this state for the best interests of the citizens of the state.”²³⁸ The order of planning and implementation is as follows: the Board of

²³⁵ www.water.utah.gov/Planning/PlanningPage2.html.

²³⁶ Utah Code §73-10-4.

²³⁷ E-mail from Todd D. Adams, P.E., Deputy Director, Utah Division of Water Resources (May 24, 2016, 12:18 MST).

²³⁸ Utah Code §73-10-5.

Water Resources selects water projects, has plans and cost estimates prepared, and refers them to the Director of the Division of Finance. Upon approval of funds the Utah Water Board enters into contracts for the construction of the projects.²³⁹

The Water Resource Division answers to the Department of Natural Resources, which answers to the Governor of the State of Utah. The Division is under the policy direction of the Board of Water Resources. The Director oversees the Project Development branch and the State Water Planning Branch. The Deputy Director of Project Development oversees Geologic Investigations, Design and Construction, and Investigation and Management. The Assistant Director of State Water Planning oversees Technical Services; River Basin Planning; Water Conservation, Education, and Use; and Hydrology and Computer Application.

All other State agencies shall cooperate with the Division of Water Resources in the formulation of a state water plan.²⁴⁰ In addition, the Utah Center for Water Resources Research (“UCWRR”) works on projects that address a wide range of planning and management problems across the State, providing valuable information to individuals and to the State, to assist with water planning and management.²⁴¹ For example, the 1990 State Water Plan was prepared in cooperation with the State Water Plan Coordinating Committee, consisting of: Department of Natural Resources, Division of Water Rights, Division of Parks and Recreation, Division of Wildlife Resources, Department of Environmental Quality, Division of Drinking Water, Division of Water Quality, Department of Agriculture and Food, Governor’s Office of Planning and Budget, Division of Comprehensive Emergency Management, and the Utah Water Research Laboratory.

The Utah State Engineer plays a limited role in water planning. The Utah Division of Water Rights is an agency of Utah State government within the Department of Natural Resources. Its mission is to provide order and certainty in the beneficial use of Utah’s water. The Division of Water Rights is currently led by the State Engineer, Kent L. Jones, P.E. The State Engineer is responsible for the general administrative supervision of Utah’s waters and the measurement, appropriation, apportionment, and distribution of those waters.²⁴² The Utah State Engineer also makes rules, brings suit in courts, requests water surveys, establishes water distribution systems, and defines their boundaries.²⁴³ The State Engineer is included in some advisory committees and has the opportunity to review the planning documents, but that is the extent of the Engineer’s participation in water planning.²⁴⁴

²³⁹ Utah Code §73-10-5.

²⁴⁰ Utah Code §73-10-13.

²⁴¹ Utah State University, Utah Center for Water Resources Research, available at: <http://uwrl.usu.edu/partnerships/ucwrr>.

²⁴² Utah Code §73-2-1(3)(a).

²⁴³ § 73-2-1(1-8).

²⁴⁴ Adams, *supra* note 24.

State and local entities implement the State Water Plan. Local advisory committees direct water planning efforts in each region with extensive interagency and public involvement.²⁴⁵ Those entities include towns, cities, irrigation districts, and water conservancy districts.²⁴⁶ The state and regional plans focus on providing financial, technical, and communication tools to assist State and local entities. The Department of Environmental Quality is responsible for implementing the state's water quality programs.

The Board and Division of Water Resources welcome extensive public and interagency involvement in the water planning process. Many tools are used for public outreach, education, and engagement to involve other state agencies and the public in the process. They are:

1. State and Federal agencies, conservancy districts, and other partners advertise meetings and post links to the Division of Water Resources website;
2. The Division staff meet with municipalities to seek input;
3. A public relations firm facilitates listening sessions and crafts outreach tools;
4. Public service announcements and press releases;
5. Videos; and,
6. Printed flyers posted around communities advertise local listening sessions.

After the Board completed drafting the 2001 State Water Plan in 2000, the Division made it available to the public during the month of October. In November 2000, several public hearings were scheduled statewide in order to take public comment.

IV. How is Utah's water planning funded? How much, from where, and how often?

The operating budget of the Division of Water Resources is approximately \$6.2 million per year. That amount comes from the State General Fund and the Restricted Water Funds. The State General Fund is for water planning and the Restricted Water Fund is for development. These funds consist of Four Revolving Loan Funds: the Revolving Construction Fund (for irrigation projects), the Cities Water Loan (for domestic systems), the Conservation and Development Fund (for multipurpose projects over \$1 million), and the Water Infrastructure Restricted Account (to be used for \$33 billion in identified essential infrastructure needs).²⁴⁷

²⁴⁵ Public Outreach, Education, and Engagement for State Water Planning: A Survey of Western States Water Council Members, September 2013, http://dnrc.mt.gov/divisions/water/management/docs/state-water-plan/survey_publicoutreach_ed_statewaterplan.pdf

²⁴⁶ Adams, *supra* note 24.

²⁴⁷ Adams, *supra* note 24.

Currently the Division of Water Resources receives a 1/16-cent dedication from the state's sales tax; however over the next six years the Division will be getting an additional 1/16-cent from the state's sales tax that will go to the Water Infrastructure Restricted Account.

- V. How is Utah's water planning staffed?
What is the professional background of the planning staff?

The Division staffs approximately fifty employees, not including the Board. The planning branch alone has twenty-six positions. Engineers make up approximately seventy-five percent of the total staff. The Director of the Division is a professional engineer. The remaining staff persons of the Division are geologists, accountants, administrative staff, and a public outreach officer.²⁴⁸

ADDITIONAL INFORMATION

Utah's Tribal Issues

Utah has six federally recognized tribes: The Confederated Tribes of the Goshute Reservation, the Navajo Nation, the Northern Ute Tribe, the Paiute Tribe (five bands), the Northwestern Bank of Shoshoni Nation, and the Skull Valley Indian Community.

The Utah State Water Plan does not include a section on the State's tribes' water allocations or rights, except to mention that the only reserved water right claim that has been fully settled in Utah is that of the Shivwits Band of the Paiute, listed under the "Other Considerations" portion of the water plan.²⁴⁹ Since the Utah State Water Plan was updated, the State has entered into a water rights settlement with the Navajo Nation. More information about those tribes that are involved in water issues with the State is provided below.

I. Shivwits Band of the Paiute

The Paiute Indian reservation was created in 1891 and the tribe was federally recognized in 1903. It consists of five bands that live independently of each other on separate reserved lands in Utah: the Cedar Band, the Indian Peaks Band, the Kanosh Band, the Koosharem Band, and the Shivwits Band. All but one band of the Paiute Tribe were federally terminated in 1954.²⁵⁰ In 1980 the bands' federal recognition was restored, but by then nearly one half of the Paiutes had died, and the tribe had lost over fifteen thousand acres.²⁵¹

²⁴⁸ Adams, *supra* note 24.

²⁴⁹ Utah's Water Resources "Planning for the Future" at 59.

²⁵⁰ 25 U.S. Code, §17, XXXII, Paiute Indians of Utah – Termination of Federal Supervision.

²⁵¹ Utah American Indian Digital Archive, available at: <https://www.google.com/#q=1891+establishment+of+paiute+reservation>.

The relationship between the Paiute and the State of Utah has been extremely strained, especially considering that Utah Senator Arthur V. Watkins, the former chair of the Senate Interior Committee Subcommittee on Indian Affairs, promoted Indian termination legislation of 1954 by specifically pushing for the termination of four bands of Paiute Indians in Utah.²⁵² The Paiute Tribe has struggled to survive, and as of 2015 there were only a total of 918 Paiute tribal members among all five bands.

The Utah Code requires the State of Utah and the Engineer adjudicate all water rights.²⁵³ In 1980 the State initiated an adjudication of water rights on the Virgin River. In 1987, the United States joined as a party and claimed a water right on behalf of the Shivwits Band. Nearly all of the area's water was put to use by settlers in Utah after the Paiute Reservation was created. As a result the tribe had very little access to water and not enough to engage in agriculture. After 112 years of fighting for water rights, the Shivwits Band agreed to a settlement for its reserved water rights claim in 2001.²⁵⁴ The settlement appropriates 4,000 acre-feet annually to the Band. The Department of the Interior credits the Shivwits Band, the City of St. George, and the State of Utah for coming together to negotiate a settlement for "the benefit of all the parties," rather than using litigation.²⁵⁵

II. Northern Ute of the Uintah and Ouray Reservation

The Northern Ute Reservation was established in 1861. After Congress authorized additional acreage for the Ute's homeland, the reservation totaled over 4 million acres. After various Congressional acts that took lands from the tribe, the Northern Utes currently have one-fourth of their original reservation.²⁵⁶

In 1965, the Northern Ute signed an agreement with the federal government and the Central Utah Water Conservancy District ("CUWCD"), which stated that the tribe would receive a water project for the reservation as long as the Central Utah Project ("CUP") could proceed.²⁵⁷ The CUP project proceeded but the Ute Project was never built. The Ute Project was later de-authorized in 1992.²⁵⁸ In 1980, the CUWDC and the state of Utah, along with federal representatives, began negotiations with the Ute Tribe to settle the tribe's outstanding water claims and to compensate it for the

²⁵² Paiute Indian Tribe of Utah History, available at: <http://www.utahpaiutes.org/about/history/>.

²⁵³ Utah Code §73-4-1 et seq.

²⁵⁴ Pub. L. 106-263, 114 Stat. 737, 746-46.

²⁵⁵ U.S. Dept. of the Interior, Office of the Secretary, Secretary Norton Announces Completion of Shivwits Band Water Rights Settlement Act, Nov. 20, 2003, available at: https://www.doi.gov/sites/doi.gov/files/archive/news/archive/03_News_Releases/031120a.htm

²⁵⁶ 25 U.S.C.A. § 349, Patent in Fee to Allottees (known as the Dawes Act); High Country News, Utah and the Utes are at War, available at: <https://www.hcn.org/issues/9/285> (the large northern section of the reservation was taken to create a national forest).

²⁵⁷ High Country News, *supra* note 19.

²⁵⁸ U.S. Department of the Interior, Bureau of Reclamation, available at: http://www.usbr.gov/projects/Project.jsp?proj_Name=Central+Utah+Project.

government's failure to deliver in the 1965 water agreement.²⁵⁹ The state is still working with the Tribe on the settlement.²⁶⁰

III. Navajo Nation

The Navajo Nation Reservation was created by treaty in 1868. In 1884 the portion of the Navajo Nation that is in present-day Utah was added to the existing Navajo Nation by Congress. The Navajo Reservation is the largest in the United States. Despite the Nation's early priority date and the fact that the San Juan River runs through its Reservation, approximately forty percent of Navajo homes do not have running water.²⁶¹

In January 2016, the Navajo Nation approved the Utah Navajo Water Rights Agreement, which allocates 81,500 acre-feet annually to the Navajo.²⁶² Like other tribal-reserved rights claims, the Navajo have given up a large portion of their claim in exchange for federal and state funded water projects that will bring water to the many who do not have it.²⁶³ Utah has allocated \$2 million out of the \$8 million it has promised to contribute to the Agreement; Congress has yet to appropriate any of its contribution to the Agreement.

²⁵⁹ High Country News, *supra* note 19; 73 U.C.A. § 21, The Ute Indian Water Compact (1980); Ute Indian Water Settlement Act of 1989, Pub. L. 102-575, 106 Stat. 4601.

²⁶⁰ E-mail from Eric Millis, P.E., Director, Utah Division of Water Resources (June 9, 2016, 7:15 MST).

²⁶¹ Navajo Nation Water Project (<http://www.navajowaterproject.org>).

²⁶² 23rd Navajo Nation Council, Office of the Speaker, available at: http://www.navajonationcouncil.org/pressReleases/2016/Jan/NNC_approves_the_Utah_Navajo_Water_Rights_Agreement.pdf; See also <http://www.deseretnews.com/article/705396522/Navajo-water-rights-settlement-with-Utah-inching-closer.html?pg=all>

²⁶³ Erica Gies, the Navajo Are Fighting to Get Their Water Back, Huffpost Politics, available at: http://www.huffingtonpost.com/entry/navajo-water_us_571a6c52e4b0d912d5fe8816.

The Gold Nuggets from these State Water Plans

Arizona *2014 Strategic Vision for Water Supply Sustainability*

- Focus on demand-supply imbalance.
- Coordinated with water quality authority.
- Developed in parallel with WaterSmart Colorado River Basin Study.
- Stakeholder driven analysis of issues in 22 regions.
- Resulted in creation of a Governor's Water Augmentation Council to identify conservation, funding, and infrastructure needs. It reports annually to Governor on needs of each region.
- Two staffers dedicated to statewide strategic planning and tribal affairs. Five more staffers oversee community level planning, promote water conservation through education, and facilitate technology and data transfers.

Colorado *2015 Colorado Water Plan*

- Dedicated Office of Water Conservation and Drought Planning.
- Statewide Water Supply Initiative: and ongoing assessment of water resources.
- Permanent Basin Roundtables for each of Colorado's eight river basins and one for Denver.
- Also has a permanent Interbasin Compact Committee, constituted of Basin Roundtable members.
- Governor's mandate to consider quantity and quality together and avoid agricultural "buy and dry."
- Annual development of a CWCB Strategic Framework that guides implementation of projects, policies, and partnerships resulting from planning activities.
- State Water Plan authored by a multi-agency team.
- Robust staffing: Water Supply Planning Section includes a Section Chief, three Program Managers, a Program Assistant, an Administrative Assistant, a Climate Change Risk Management Specialist, a Water Conservation Technical Specialist, a Water Conservation Coordinator, and an Outreach, Education & Public Engagement Coordinator.
- Regional planning groups get their own funding.

Montana *2015 Montana State Water Plan*

- Four permanent regional Basin Advisory Councils.
- Four dedicated water resources planners.
- Active partnerships between Water Management Bureau and others, from the local level to the feds.
- Held 23 basin level meetings to identify issues, followed by technical presentations to the Basin Advisory Councils, who compiled the basin level reports for agency and then public review.
- State Water Plan was compiled by MWMB staff and reps from the BACs.
- Heavy emphasis on local issues to create tangible results.

- Heavy emphasis on negotiated settlement of Tribal water rights through the Montana Reserved Water Rights Compact Commission.

Oklahoma *2012 Oklahoma Comprehensive Water Plan*

- Long history of regionally based water planning (1970).
- Willingness to change regions based on circumstances (11 to 8 to 13).
- Now transitioning to watershed based regions (from Congressional districts).
- OWRB has its own agency Strategic Plan, available to the public, which includes administrative as well as water management goals.
- Emphasis on extensive public participation (13 regions) and detailed technical evaluations (82 basins).
- Over 100 public meetings (held by OWRRI), which identified 10 major issues.
- Followed by two public educational events on those identified issues- a technical and a policy seminar.
- Followed by a three-day statewide town hall.
- \$1.2M/year for ten years for planning, from oil severance tax.
- Although not addressed in the water plan, Choctaw & Chickasaw water right claims helped defeat Texas water export attempt (Tarrant County case).
- During planning, OWRB hired a law professor to hold twenty meetings with tribal officials, now looking at Montana Compact Commission as a model for settling water right claims.

Oregon *2012 Integrated Water Resources Strategy*

- Includes consideration of instream use requirements.
- Mandated that it be developed with an, “impartiality of interest except that designed to best protect and promote the public welfare.”
- Recognized that policies, laws and management schemes of water that are single-purposed create conflict among agencies, confusion about beneficial use, and management inefficiencies.
- Developed and implemented in partnership with the Departments of Environmental Quality, Fish and Wildlife, and Agriculture.
- It encourages collaboration, incentivizing good water management practices, and private-public partnerships.
- Emphasis on groundwater, climate change, funding, and institutional coordination.
- Small appropriation for planning but \$34M to implement Strategy in 2013.
- Strategy Implementation Coordinator hired.

Texas *2017 Texas State Water Plan*

- Planning since 1957, 2017's is the 10th version.
- 16 regional planning areas with statutorily required membership. Based on watersheds, aquifers, and metro areas.
- Departments of Ag, Wildlife, and Environment all have non-voting positions on all regional boards.
- Regional planning groups get their own funding.
- Robust Water Planning Department:

The Water Use, Projections & Planning Department is comprised of a Director, Managers, Team Leads and staff for Water Supply & Strategy Analysis, Regional Water Planning, Economic & Demographic Analysis, and Water Use Survey.

- The Regional Water Project Development Department includes six teams. The teams are comprised of Managers, Project Managers, Financial Analysts, Engineers, Project Reviewers, Regional Water Planners, Environmental Reviewers, Attorneys, and Administrative Assistants.

Utah

2001 Water resources Plan: Planning for the Future

11 Hydrologic River Basin Water Plans (between 1995 and 2015)

- Legislature can fund other agencies to help with planning.
- Retail water providers and conservancy districts must have their own water conservation plan with use reduction goals.
- State Water Plan is really a general statement documents with the substance in the collection of regional basin plans.
- Board of Water Resources wrote plan.
- Board of Water Resources develops water project plans and priorities.
- Local advisory committees direct water-planning efforts in each region.
- Division of Water Resources funded with 1/16 cent dedication from the state sales tax. Double over next 6 years.

Take Home Lessons

- Developing state water plans in partnership with sister agencies results in a more robust and holistic plan. Environment, Agriculture, and Game & Fish in particular.
- Continuous regional planning processes result in better plans and more community and political support.
- Larger partnerships leverage funds and knowledge. Linking with federal and local planning efforts gives the plan more credibility.
- Maintaining continuous dedicated staff for planning and implementation results in better plans and more political support.
- Remember planning is an evolving process that must be flexible.
- Regional groups based on hydrologic boundaries are more popular with the public and are the most commonly used by other states.
- The public planning process for developing the State Water Plan needs to be well defined from the beginning.
- Without Executive and Legislative follow through, our Plan will lack credibility (and funding).
- Consultation and negotiations with tribes should be distinct from the State Water Planning process, tailored to each tribe, and ongoing.
- Values endorsed by leadership can guide the planning process (such as the Oregon Legislature's public welfare values and the Colorado Governor's agricultural preservation values) but must be widely held.

- Effective planning can be done well one time with little funding but implementation gets very expensive. Continuous planning makes implementation more effective.