
2. Colorado's Legal and Institutional Setting

Chapter 2 provides an overview of the regulatory framework that guides water management in Colorado. The doctrine of prior appropriation establishes much of the foundation of water law within the state. This chapter presents a brief explanation of this system along with an overview of how this resource is administered by state and federal agencies. As a headwaters state, Colorado is subject to interstate agreements and international treaties regarding usage of water and obligations downstream. Section 2.2 of this chapter explains interstate compacts and equitable apportionment decrees as well as their effects on water availability within the state. Colorado also has the distinction of being a local control state, where a variety of planning and implementation authority rests at the local level. Section 2.3 of this chapter reviews key features of this system and describes the importance of these processes to water management within the state. When moving a water project or method forward in Colorado, interaction with regulatory agencies is necessary at the federal, state, and local levels. Section 2.4 of this chapter briefly enumerates these agencies, their delegated jurisdiction, and the roles each play in the approval or permitting processes. Finally, Section 2.5 of this chapter examines the issue of federal and tribal reserved water rights, as these types of water designations affect the management and decision-making of entities within the state. An understanding of this legal and institutional landscape is very important for water managers, moving forward in the planning and implementation processes within Colorado. Moreover, in order to make our laws and policies better, we must understand where we stand and how we got here.

2.1 Colorado Water Law and Administration

To plan for the opportunities and challenges apparent in Colorado's water future, we must understand the legal framework on which they rest. The evolution and history of Colorado water law is as rich and complicated as the history of the West itself. From the People's Ditch of San Luis (the oldest operational water right in Colorado, developed before the creation of the Colorado territory) to the innovations of Aurora's Prairie Waters project, the result of this complex and varied history is the current massive body of law, legal precedent, rules, and regulations that govern this valuable resource.¹

Water users in Colorado's semi-arid climate require a flexible system that honors private water rights, provides reliable administration, and responds to changes in supply and demand. As the Colorado Supreme Court articulated in 2001, "The objective of the water law system is to guarantee security, assure reliability, and cultivate flexibility in the public and private use of this scarce and valuable resource."² Through ever-evolving case law, policies established by state and local government, and laws passed by the General Assembly, Coloradans are constantly working together to maintain this flexible and reliable system.

The Prior Appropriation System

The foundation of Colorado water law is the prior appropriation system, a framework for establishing one water user's priority for use over that of another. This framework was necessary because of the arid nature of the Western United States, and because the riparian water laws of Europe and the Eastern United States would not have adequately protected older water rights from new uses when there were water shortages.³ The prior appropriation doctrine was established, in large part, to protect gold mining claims, and it is not a coincidence that the basic tenets of the prior appropriation doctrine are similar to early mining laws.⁴ Colorado was the first to formalize the prior appropriation system, in a set of principles known as the "Colorado Doctrine," which was adopted in the 1860's, even before Colorado obtained statehood in 1876.⁵ This legal system is shared in a pure or hybrid form with most western states.

The heart of the prior appropriation system is found in the Colorado Constitution, which states that: "The right to divert the unappropriated waters of any natural stream to beneficial uses shall never be denied. Priority of appropriation shall give the better right as between those using the water for the same purpose."⁶ The simple distillation of this legal framework is "first in time, first in right."⁷

After constitutional establishment of the prior appropriation system, the Water Right Determination and Administration Act of 1969, ("The 1969 Act"), which applies to surface water and tributary groundwater,⁸ further codified the procedure for adjudication and administration of water rights in Colorado. The 1969 Act specified that all water in the state meant for public use was subject to appropriation and administration to "maximize the beneficial use of all of the waters of the state."⁹

The Colorado Doctrine

- All surface and groundwater in Colorado is a public resource for beneficial use by public agencies and private persons;
- A water right is a right to use a portion of the public's water resources - an usufructory right;
- Water rights owners may build facilities on the lands of others, by agreement or with just compensation, to divert, extract, or move water from a stream or aquifer to its place of use; and
- Water rights owners may use streams and aquifers for the transportation and storage of water.

Colorado allocates and administers water according to two general categories of (1) surface water, which includes tributary groundwater, and (2) other groundwater. The first category is subject to Colorado's prior appropriation doctrine, and is generally governed under Article XVI, Sections 5 and 6, of the Colorado Constitution and the 1969 Act.¹⁰ This category of water includes all water of natural streams and all tributary groundwater, which is groundwater that is hydrologically connected to a surface stream. By law, all groundwater in Colorado is presumed to be tributary unless otherwise defined by law or proven by facts.¹¹

Major Accomplishments of the 1969 Act¹²

- Integration of surface water and tributary groundwater into a unitary adjudication and administration system;
- Specialized water court jurisdiction and engineer administration on a watershed basis;
- Resume notice procedure for obtaining jurisdiction for adjudication of rights;
- Case-by-case decrees and appeals in the context of an ongoing and comprehensive adjudication;
- Authorization of augmentation plans to enable otherwise out-of-priority water use through the provision of replacement water;
- Effective rulemaking and enforcement authority in the state and division engineer for the protection of state, federal, and interstate rights; and
- Explicit procedures for filing and pursuing applications and objections to applications for water rights, conditional water rights, changes of water rights, and augmentation plans.

The second category is governed by a modified prior appropriation doctrine, and is partially governed by Colorado's Groundwater Management Act ("The Groundwater Act").¹³ This category includes groundwater that has been found by law or fact to be not significantly hydrologically connected to a surface stream. This category of water includes many different types such as: (a) designated groundwater (within a designated groundwater basin);¹⁴ (b) nontributary groundwater outside of designated groundwater basins;¹⁵ (c) not nontributary groundwater;¹⁶ (d) Denver Basin groundwater;¹⁷ (e) geothermal groundwater;¹⁸ (f) exempt groundwater,¹⁹ and other types of groundwater that may require a well permit from the State Engineer's Office,²⁰ or determinations by the Colorado Ground Water Commission.²¹ For instance, the doctrine of prior appropriation shall not apply to nontributary, Denver Basin, or designated ground water. Such water is allocated as correlative rights generally based on overlying land ownership.²² The Colorado Ground Water Commission (composed of twelve members, nine of whom are appointed by the governor and confirmed by the senate) may determine and alter boundaries of designated groundwater basins and subdivisions thereof by geographic description, subject to statutory limitations.²³

The vast majority of Colorado's water rights are subject to the prior appropriation system that aligns water rights in order of appropriation and adjudication dates. This system can result in a situation where a downstream water user who has a senior priority right adjudicated by the water court may divert and use water before upstream users with less-senior water rights (i.e. junior rights) on the same stream. This becomes particularly vital during a time of water shortage when senior water rights are more highly valued. A "call" on a stream by a downstream senior water rights holder may cause an upstream user with junior rights to reduce diversions or curtail water usage completely so that the calling downstream user may receive the quantity of water to which it is entitled. The State Engineer and Division Engineers are required to regulate such a "call" pursuant to statute.²⁴

"Beneficial use," defined as a reasonable level of use beyond which waste may occur,²⁵ serves as both the measure and limit of the water.²⁶ There are a number of important water law terms that require definition, and there are three very good existing glossaries found at: <http://www.ext.colostate.edu/pubs/crops/04717.html>; <http://denverwater.org/AboutUs/GlossaryofTerms/>; and

<http://www.coloradoriverdistrict.org/education-resources/water-glossary/>. The term “beneficial use” is used both to determine and to administer water rights. In the early territorial days, beneficial use extended primarily to domestic and agricultural use. As the state’s population has grown and water values have evolved and changed, the definition of “beneficial use” has likewise evolved and expanded to include municipal, industrial, recreational, and wildlife uses, among others.²⁷ Instream flow water rights held exclusively by the Colorado Water Conservation Board (CWCB) to preserve or improve the environment to a reasonable degree are codified in the statutory definition of beneficial use.²⁸ The statutory definition of beneficial use has more recently been amended to recognize in-channel uses for recreational purposes.²⁹

Water Rights and Adjudication

The prior appropriation system today is a product of our constitutional, legislative, regulatory, and judicial processes. Colorado’s seven water courts, established in each of the seven major watersheds of the state, issue decrees confirming water-use rights.³⁰ Water rights may be confirmed for use on a direct-flow basis, by storage, or by exchange.³¹ With a direct-flow right, the water user applies the water from the stream or tributary aquifer directly to use for irrigation, domestic, industrial, or other uses. A storage right is typically accomplished by placing water into a vessel, such as a reservoir or tank (or under certain conditions into an aquifer), for beneficial use at a later time. An exchange is generally accomplished by diverting water at an upstream location, while providing a substitute supply of water at a downstream location suitable in quantity and quality to satisfy downstream senior priorities, so long as existing intervening water uses within the exchange reach are not affected. Water court decrees generally quantify direct flow and exchange water rights in terms of flow, measured in cubic feet per second, while storage water rights are generally measured volumetrically in acre-feet.³²

Section 6 of Article XVI of the Colorado Constitution sets forth the right to appropriate, “the right to divert the unappropriated waters of any natural stream to beneficial uses shall never be denied.”³³ In Colorado, a user appropriates a water right by demonstrating intent and taking steps to put water to beneficial use. A user makes that right absolute by storing or applying a specified amount of water directly to beneficial use.³⁴ A water user may then receive protection under the priority system by adjudicating that right through the water-court process.³⁵ A user can also obtain a conditional water right by showing an intent to put water to beneficial use and proving that the user “can and will” put the water to beneficial use under Colorado’s anti-speculation doctrine.³⁶ To avoid the requirement of further diligence applications, a conditional right must be exercised in priority and be established as an absolute right by court decree. As the prior appropriation system has evolved, more adjudicated water rights exist than can be satisfied in dry years in some river basins. When this occurs, that basin is described as over-appropriated, which means that the opportunity to develop new junior water rights in that basin is limited.³⁷ In over-appropriated basins, new water uses may be created by changing existing water rights to the new uses, or by developing augmentation plans to increase the water supply.³⁸

Changes of Water Rights

The right to use water in Colorado is usufructory.⁴⁰ As such, it is limited to the amount of diversion, location of diversion, place of use, manner of use, and type of use allowed by a water court decree.⁴¹ A water right may be conveyed to another water user or, with appropriate water court or administrative approval, changed to another location of diversion, place of use, manner of use, or type of use, while still retaining its priority. However, changes of water rights are subject to terms and conditions that prevent injury to existing water rights.⁴²

Usufructory Rights

A term used in civil law referring to the right of enjoying a thing, the property of which is vested in another (in this case the state) and to draw from the same all the profit, utility, and advantage which it may produce providing it be without altering the substance of the thing.³⁹

The engineering analysis in a change of water right proceeding establishes the time, place, and amount of decreed and historical consumptive use, which serves as the volumetric limitation on any new consumptive use.⁴³ In addition to establishing historical consumptive use, an analysis must establish the timing, location, and amount of historical return flows (the nonconsumed portion of the diversion), which must be replaced in the stream so that water users senior to the date of the change in use may continue to enjoy stream conditions in place at the time of their appropriation.⁴⁴ A full analysis considering time, place, and amount of historical use on a stream is generally referred to as a “net stream depletion” analysis. Because the prior appropriation doctrine forbids the change of one water right to the injury of another (even a junior water right⁴⁵), making such changes is a costly proposition with complex legal and engineering analyses required.

The goal of the net stream depletion assessment, including historical beneficial consumptive use, is to make sure that future depletions or consumptive use do not exceed historic depletions or consumptive use. Maintaining flows after a change of water right ensures that water users who established their rights before the date of the change in use receive the water that they are entitled to, and do not suffer an injury to their water rights as a result of the change.⁴⁶

Augmentation Plans

Colorado water law allows users to divert water out-of-priority if they replace any injurious depletions under what is called a “plan for augmentation.”⁴⁷ A typical plan for augmentation allows a user with a junior water right holder to divert out-of-priority, (“cutting in line” so to speak), so long as that junior water user can replace or remedy its injurious depletions to the user with senior calling water rights and not injure other water users in the process.⁴⁸ A common scenario is that a water user pumps a well out of priority and then replaces stream depletions caused by the pumping with other senior surface water or nontributary groundwater. Under an augmentation plan, the replacement water must generally be available in the same quality and quantity as well as the same time, location, and amount as the stream depletions caused by out-of-priority pumping or diversions.⁴⁹ Permanent or long-term plans for augmentation and changes of water rights require water-court approval, but the State Engineer has statutory authority to approve temporary substitute water-supply plans and interruptible water-supply agreements for similar purposes.

State Administration of Water Rights

Water rights are administered by the Colorado Division of Water Resources (DWR), a division of the Department of Natural Resources. Also referred to as the State Engineer's Office, the DWR evaluates well permits, inspects dams and wells, and oversees the work of water commissioners in the field who physically allocate the water and enforce compacts, water court decrees, and well permits.⁵⁰

The State Engineer's Office is headquartered in Denver, with seven field offices spread across the state in each major river basin. Every field office has a division engineer, who serves as the lead, managing the administration of that particular water division.⁵² Water commissioners, who work under the division engineer, not only monitor diversion structures and streams in the field for immediate administration of water rights, but they also gather important data for use in water-planning studies and decision support systems.⁵³

Figure 2-1: Colorado's Water Divisions⁵¹



The water commissioners also administer calls on the river system to ensure the holder of a senior water right receives its entitlement. Other duties of the water commissioners and other DWR employees include regulating headgates and measuring devices as well as administering and enforcing storage water rights, plans for augmentation, exchanges, and transmountain water diversions.⁵⁴ The DWR also oversees the well permitting process for all types of groundwater.⁵⁵ Well permits are required for extraction of tributary groundwater, designated groundwater, nontributary groundwater, Denver Basin groundwater, produced water from tributary Coal Bed Methane wells, and geothermal groundwater.⁵⁶

In its management of water records statewide, the DWR maintains decrees, permits, maps, historical streamflow and diversion measurements, real-time streamflow and major diversions, and groundwater levels. The DWR also maintains a repository of policy documents, planning materials, rules, and regulations.⁵⁷

Water resources data collected by the DWR is available online through Colorado's Decision Support Systems (CDSS), a joint effort of the CWCB and the DWR.⁵⁸ The CDSS consists of data, mapping, and analytical tools and models to assist the state and stakeholders in water-resources planning and management. The CDSS contains historical data and information on streamflow, diversions, climate, water rights, call records, well permits, aquifer properties and groundwater levels. The CDSS

analytical resources include an online map viewer, data-processing and graphing tools, crop-consumptive-use models, and surface water and groundwater models. The CDSS map viewer is available [here](#).⁵⁹

Moving Forward

The evolution of Colorado water law through the courtroom and the legislative process presents both challenges and opportunities for Colorado's Water Plan. The institution of the prior appropriation system can be difficult to navigate because of the planning and costs associated with the necessary judicial and administrative approvals. Efforts are currently underway to simplify the process and support the evolving water uses in Colorado. Alternatives, such as the Alternatives to Agricultural Transfer Grant Program, new legislation, water-court rule changes, and ongoing studies and processes on water banking have helped increase the flexibility within this landscape and demonstrate how the complex Colorado water administration system can adjust.

Recent agreements between multiple stakeholders, such as the Colorado River Cooperative Agreement, ("CRCA") between Denver Water and more than two dozen western slope entities,⁶⁰ and subsequent agreements with various entities including the CWCB, illustrate the ability to work collaboratively and creatively within of Colorado's water administration system to achieve maximum use of the state's water resources for the greatest benefit.

2.2 Interstate Compacts and Equitable Apportionment Decrees

Colorado is a headwaters state wherein the major rivers flow to downstream states on both sides of the Continental Divide. As Colorado and other downstream states developed those rivers in the late nineteenth and early twentieth centuries, disputes arose regarding the authority of one state to control the use of an interstate stream that originates in another state.⁶¹ Initially, downstream states sought to resolve water disputes through litigation before the United States Supreme Court.⁶²

Two cases decided by that Court convinced Colorado water leaders that negotiated interstate water agreements were preferable to litigation.⁶³ Colorado is a party to nine formal interstate water agreements, called compacts. These compacts, as well as water administration within Colorado, place limits on Colorado's ability to use all of the water supplies that originate within the state (see Table 2.2-1).

In the 1907 case of *Kansas v. Colorado*, which arose from the contention that water users in Colorado were depriving users in Kansas of their fair share of Arkansas River flows, the U.S. Supreme Court announced the doctrine of equitable apportionment.⁶⁴ This doctrine provides that the principle of "equality of right" should be applied when determining how states should share rivers to ensure each state receives equal benefit.⁶⁵ The court dismissed Kansas' claim because it could not show sufficient injury from Colorado's diversions, but allowed Kansas to bring a new action in the event of a "material increase in the depletion of the waters of the Arkansas by Colorado."⁶⁶ *Kansas v. Colorado* left future disagreements about river use to the uncertain and expensive process of protracted, U.S. Supreme Court litigation.

Table 2.2-1: Colorado's Interstate Compacts

Colorado River Compact, 1922
La Plata River Compact, 1922
South Platte River Compact, 1923
Rio Grande River Compact, 1938
Republican River Compact, 1942
Upper Colorado River Compact, 1948
Arkansas River Compact, 1948
Costilla Creek Compact, 1963
Animas-La Plata Compact, 1969

A similar dispute over Colorado's proposed diversions from the Laramie River to the detriment of downstream senior appropriators in Wyoming led to the case of *Wyoming v. Colorado*.⁶⁷ Resolving the dispute in Wyoming's favor, the Supreme Court ruled in 1922 that when two states each use the prior appropriation doctrine, the doctrine should be applied to determine relative priorities on an interstate basis.⁶⁸ Thus, this decision required junior water users in Colorado to honor senior water rights in Wyoming.⁶⁹

One of the attorneys representing Colorado in the Wyoming litigation was a visionary who recognized that the law resulting from the *Kansas* and *Wyoming* decisions put Colorado's future at great risk.⁷⁰ Delph Carpenter of Greeley, an experienced irrigation litigator as well as a rancher and former state senator, was appointed interstate streams commissioner in 1913.⁷¹ As an attorney for Colorado, he worked on negotiations with Nebraska regarding the South Platte River.⁷² During this time, he formulated the leading theory on the rights and authorities for entering into interstate compacts that guided the creation of the nine water compacts ultimately signed by Colorado.⁷³

Table 2.2-2: Colorado's Interstate Decrees

Laramie River Decree, 1957
North Platte Decree, 2001

Carpenter became especially concerned about the Colorado River. California, a prior appropriation state, was growing rapidly.⁷⁴ Carpenter feared that without an agreed apportionment between the states, California farmers and municipalities would appropriate the river to the point that Colorado could not provide for future development.⁷⁵ To protect Colorado, Carpenter was the principal force in the negotiation of the Colorado River Compact, and he went on to negotiate additional compacts on behalf of Colorado.⁷⁶ Carpenter's model guided other negotiators of interstate water compacts, which provided certainty to water users in all participating states.^a

Interstate water compacts are formal agreements among the participating states, authorized by the United States Constitution, and ratified by state legislatures and the United States Congress. Under this framework, compacts are considered federal law, state law, and legally binding contracts among the signatory states. These compacts help the states negotiate, rather than litigate, about the management of interstate waters. However, as more fully described within this Chapter, litigation still occurs regarding compact interpretation, but that litigation tends to be streamlined and more efficient as a result of an existing water compact. The nine water compacts, along with two court decrees, are fundamental elements of Colorado's Water Plan because they dictate how water is shared among states and therefore identify and impose the rights to, and limitations of, use and future development of every stream in Colorado.

^a Carpenter also negotiated the South Platte River Compact and the La Plata River Compact. Other negotiators of interstate water compacts include: Clifford H. Stone (Upper Colorado River Compact and original Costilla Creek Compact); M.C. Hinderlider (Rio Grande River Compact and Republican River Compact); J.E. Whitten (amended Costilla Creek Compact); Henry C. Vidal, Gail L. Ireland and Harry B. Mendenhall (Arkansas River Compact); and multiple negotiators (Animas-La Plata Compact).

Figure 2-2: The Colorado River Basin



Colorado's Interstate Compacts and Interstate Equitable Apportionment Decrees

Colorado River Compact

The Colorado River Compact is the foundation for a complicated set of legal requirements regarding use and management of the Colorado River, known as the “Law of the River.”^b The negotiators of this compact signed it on November 24, 1922, and the U.S. Congress approved it by passage of the Boulder Canyon Project Act in 1929.⁷⁷

Generally, the compact divides the right to consume water for beneficial use from the Colorado River System among the upper basin states (Colorado, Utah, Wyoming, and New Mexico) and the lower basin states (California, Arizona, and Nevada).⁷⁸ The dividing point between the basins is Lee Ferry, Arizona.⁷⁹ The compact recognizes each basin's right to the beneficial consumptive use of 7.5 million acre-feet of water per year in perpetuity.⁸⁰ The lower basin states may increase their beneficial consumptive use by 1 million acre-feet per year.⁸¹ The compact also obligates the upper division states to “not cause the flow of the river at Lee Ferry to be depleted below an aggregate of 75 million acre-feet for any period of 10 consecutive years.”⁸² Anticipating a potential treaty between the United States and Mexico, the compact further specifies that the states are to address any obligation to deliver water to Mexico under a future treaty by using water in excess of the apportionments between the basins.⁸³ If no surplus exists, the upper and lower basins are to share equally in meeting any such deficiency.⁸⁴ In addition to the apportionment provisions, the Colorado River Compact asserts that present perfected rights are not affected by the compact and recognizes the states' respective authority to regulate and control the appropriation, use, and distribution of water within their boundaries.⁸⁵ Present perfected rights are defined as “perfected rights, as here defined, existing as of June 25, 1929, the effective date of the Boulder Canyon Act.”⁸⁶ Complete text of the compact can be found [here](#).

Upper Colorado River Basin Compact

The Upper Colorado River Basin Compact divides the right to beneficial consumptive use of the Colorado River among the upper division states (Colorado, Wyoming, Utah, and New Mexico) and Arizona.⁸⁷ The compact was signed by these five states on October 11, 1948 and ratified by Congress in 1949.⁸⁸ The compact allocates the consumptive use as follows: Colorado, 51.75 percent; New Mexico, 11.25 percent; Utah, 23 percent; Wyoming, 14 percent; and Arizona, 50,000 acre-feet per year.⁸⁹ In addition to the allocation provisions, the compact outlines parameters for the upper division states to assure compliance with the flow obligation at Lee Ferry under the Colorado River Compact, and establishes a commission to implement and administer the compact.⁹⁰ Each of the four upper division states and the federal government may appoint a commissioner to the commission.⁹¹

The Upper Colorado River Basin Compact also sets forth specific terms for apportioning among the states the use of interstate tributaries to the Colorado River, including the Yampa, San Juan, Little Snake, and Henry's Fork.⁹² The compact also recognizes water use as decreed by the La Plata River

^b The “law of the river” is a colloquial phrase that generally refers to the collective body of compacts, decrees, statutes, regulations, contracts, treaty, and other legal documents and agreements applicable to the allocation, appropriation, development, exportation, and management of the waters of the Colorado River.

Compact and accounts for such uses as part of the Upper Colorado River Compact.⁹³ Complete text of the compact can be found [here](#).

Arkansas River Compact

Recognizing the value of settling uncertainties associated with the equitable apportionment decree from *Kansas v. Colorado*, the two states signed the Arkansas River Compact on December 14, 1948, which Congress ratified in 1949.⁹⁴ This compact does not impose any fixed delivery obligation.⁹⁵ Instead, it protects water uses in existence in 1949, and limits future development in either Colorado or Kansas to the extent it would cause any material depletion of useable stateline flow.⁹⁶ The compact also addresses the allocation of benefits from use of storage at John Martin Reservoir, which was completed the same year the compact was approved.⁹⁷ Specifically, the compact directs that John Martin Reservoir be operated for the benefit of both states and provides specific terms for operation.⁹⁸ Based on the compact, storage periods are divided between winter (November 1 to March 31) when all inflows are stored, and summer (April 1 to October 31), when generally only large flood flows are stored.⁹⁹ The compact also establishes the Arkansas River Compact Administration with designated roles and responsibilities.¹⁰⁰

Based on its authority and obligations, the Administration adopted the 1980 Operating Plan for John Martin Reservoir, which substantially modified the storage and release of water from the reservoir to improve the efficiency of water delivery to users in both states.¹⁰¹ Recent litigation in *Kansas v. Colorado* provides more specific guidance for administration of the river, within the framework established in the compact and operating plan.¹⁰² Complete text of the compact can be found [here](#).

Animas-La Plata Project Compact

Signed on June 7, 1969, this compact between Colorado and New Mexico is designed to inform the operation of the Animas-La Plata Project.¹⁰³ This compact recognizes New Mexico's right to divert and store water from the Animas and La Plata Rivers for uses under the federal reclamation Animas-La Plata Project with the same priority as those diversions made under the same project for Colorado users.¹⁰⁴ The compact further clarifies that any use by New Mexico of these waters is counted toward its allocation under the Upper Colorado River Basin Compact.¹⁰⁵ Complete text of the compact can be found [here](#).

La Plata River Compact

Following on the heels of the Colorado River Compact, the La Plata River Compact was signed by New Mexico and Colorado on November 27, 1922, and approved by Congress in 1925.¹⁰⁶ The La Plata River Compact designates the location and operation of two gages on the river and defines the calculation for determining La Plata River flows.¹⁰⁷ This compact allows both states unrestricted use of the river between December 1 and February 15 of each year.¹⁰⁸ During the rest of the year, each state is entitled to unrestricted water when the interstate gage station is greater than 100 cubic feet per second.¹⁰⁹ When the interstate gage station is less than 100 cubic feet per second, Colorado must deliver half of the mean flow measured at the Hesperus gage station to New Mexico.¹¹⁰ Additionally, the compact allows for alternating periods of use between the two states in

times of low flow and specifies that minor deviations from the required water deliveries will not be considered a violation.¹¹¹ Complete text of the compact can be found [here](#).

Republican River Compact

Colorado, Kansas, and Nebraska signed the Republican River Compact on December 31, 1942, which Congress ratified in 1943.¹¹² The compact quantifies the average annual “Virgin Water Supply” (defined as water within the basin “undepleted by the activities of man”) within the basin and its tributaries as 478,900 acre-feet of water per year.¹¹³ For beneficial consumptive use each year, the compact allocates 54,100 acre-feet of water to Colorado, 190,300 acre-feet of water to Kansas, and 234,500 acre-feet of water to Nebraska.¹¹⁴ In addition, the entire water supply originating in the basin downstream from the lowest crossing of the river at the Nebraska-Kansas state line is allocated for beneficial consumptive use in Kansas.¹¹⁵ If the water supply of any sub-basin varies by greater than 10 percent relative to the period of record used as a basis for the compact, the allocations also change by the same percentage.¹¹⁶

Instead of establishing principles for dispute resolution, the compact calls for each state to administer the compact through its respective water administration officials, and acknowledges that those three officials may, by unanimous action, adopt rules and regulations consistent with the compact.¹¹⁷ Consequently, in 1959 the states established the Republican River Compact Administration (RRCA).¹¹⁸ Each year, by unanimous action, the three RRCA members compute the Virgin Water Supply within the basin and the beneficial consumptive use of each state.¹¹⁹ Under the accounting procedures established by the RRCA, Colorado's allocation for beneficial consumptive use in the Republican River sub-basins under normal conditions includes 10,000 acre-feet from the North Fork of the Republican, 15,400 acre-feet from the Arikaree River, 25,400 acre-feet from the South Fork of the Republican, and 3300 acre-feet from the Beaver Creek. Kansas and Nebraska may each consume 190,300 acre-feet and 234,500 acre-feet of water, respectively.¹²⁰

Despite efforts to avoid litigation and promote interstate amiability by entering into the Republican River Compact, the states have been involved in formal disputes regarding compact compliance and interpretation since 1999. Currently, the lack of consensus regarding accounting procedures and compact compliance has formed the basis of several non-binding arbitrations and litigation before the U.S. Supreme Court. Complete text of the compact can be found [here](#).

Rio Grande River Compact

The Rio Grande Compact allocates beneficial use of water from the Rio Grande among Colorado, New Mexico, and Texas. These states signed the Rio Grande Compact on March 18, 1938, and it was approved by Congress the following year.¹²¹ The compact defines the boundaries of the Rio Grande River Basin and establishes the operation of six gage stations and recorders near reservoirs built after 1929.¹²² It requires that Colorado deliver a certain amount of water at the New Mexico/Colorado state line annually based on an index schedule, and includes provisions for New Mexico to deliver certain amounts to Elephant Butte Reservoir based on a similar, though separate, index schedule.¹²³ The compact assumes a normal release of 790,000 acre-feet from Elephant Butte to irrigate lands in southern New Mexico and Texas and to provide water to Mexico consistent with the 1906 Treaty.¹²⁴ Additionally, the compact creates a system of water credits and debits, storage,

spills, and releases from the Rio Grande Project at Elephant Butte and places further restrictions on storage within Colorado and New Mexico.¹²⁵ The compact also establishes a commission for compact administration purposes. Colorado's State Engineer serves as Colorado's Commissioner.¹²⁶ Complete text of the compact can be found [here](#).

South Platte River Compact

Colorado signed the South Platte River Compact shortly after the La Plata River Compact on April 27, 1923; however, Congress did not fully ratify the compact until 1926.¹²⁷ This compact allocates the waters of the South Platte River between Colorado and Nebraska.¹²⁸ It relies on the western boundary of Washington County to separate the upper and lower sections of the South Platte River within Colorado and establishes a gage at Julesburg to measure flow.¹²⁹ The South Platte Compact provides Colorado unrestricted use of water in the lower section between October 15 and April 1 and includes several provisions relating to Nebraska's canals. Between April 1 and October 15, the compact stipulates that Colorado curtail diversions in the lower section by appropriators with decrees junior to June 14, 1897 when the mean flow (as measured at the Julesburg gage) is less than 120 cubic feet per second.¹³⁰ Like the La Plata Compact, the South Platte Compact specifies that minor irregularities in water delivery will not constitute a violation of the compact.¹³¹ Complete text of the compact can be found [here](#).

Amended Costilla Creek Compact

Colorado and New Mexico signed the Costilla Creek Compact on September 30, 1944, and amended the compact in 1963.¹³² The Costilla Creek Compact is intended to establish integrated operations between Colorado and New Mexico for existing and prospective irrigation facilities and to equalize the benefits of the water and its beneficial use between the two states.¹³³ The compact defines May 16 to September 30 as the irrigation season, designates October 1 to May 15 as the storage season, and prohibits direct flow diversions during the storage season.¹³⁴ The compact further sets forth the amount of water to be delivered among the water users within both states and provides for allocation of surplus flows and storage in reservoirs constructed after the compact took effect.¹³⁵ Deliveries to water users in Colorado are to be made from flows of Costilla Creek downstream of where it leaves the mountains.¹³⁶ Moreover, the compact allocates 36.5 percent of the usable capacity of the Costilla Reservoir to Colorado and 63.5 percent to New Mexico.¹³⁷ The 1963 amendment to the compact allows for a change in point of diversion for the Cerro Ditch, where delivery from Costilla Reservoir is made.¹³⁸ A commission comprising the state engineers for both Colorado and New Mexico oversees the compact.¹³⁹ Complete text of the compact can be found [here](#).

Laramie River Decree

The decree in *Wyoming v. Colorado*, 353 U.S. 953 (1957), permits Colorado to divert 49,375 acre-feet of water per calendar year from the Laramie River and its tributaries provided that no more than 19,875 acre-feet per calendar year of that total amount be diverted by Colorado outside the Laramie River Basin.¹⁴⁰ Further, no more than 1800 acre-feet may be diverted by Colorado after July 31 of each year for use within the basin. All waters diverted for use within the Laramie River Basin in Colorado are restricted to irrigation use on those lands designated by the court at the time of the decree, while waters diverted for use outside the basin are not subject to that restriction. The

waters of Sand Creek are specifically excluded from the operation of this decree.¹⁴¹ Complete text of the decree can be found [here](#).

North Platte Decree

The amended decree in *Nebraska v. Wyoming*, 534 U.S. 40 (2001), equitably apportions water in the North Platte River among Colorado, Nebraska, and Wyoming.¹⁴² The decree limits Colorado's diversion of water from the North Platte River in Jackson County for irrigation of no more than 145,000 acres during one irrigation season (May 1 to September 30) and limits storage to no more than 17,000 acre-feet of water for irrigation purposes between October 1 of any year and September 30 of the following year. The decree also limits total water exports from the North Platte River Basin in Colorado to no more than 60,000 acre-feet during any 10-year period. The decree does not affect or restrict the use or diversion of water for ordinary and usual domestic, municipal, and stock watering purposes.¹⁴³ Complete text of the decree can be found [here](#).

Other Institutional Interstate and Federal Agreements

In addition to the compacts and interstate equitable apportionment decrees described above, Colorado has entered into many interstate agreements (rather than more formalized compacts) to manage water resources. Two such agreements, which are described below, are Memoranda of Understandings between Colorado and neighboring states involving Pot Creek (Utah) and Sand Creek (Wyoming). These less formally recognized interstate water agreements are more fully described below. In addition, Colorado has remained actively involved in interstate and federal water matters to protect the State's rights and interests in water resources. Recognizing that formal disagreements or disputes among states regarding enforcement, interpretation, or implementation of the interstate compacts or reconsideration of equitable apportionment decisions rise directly to the U.S. Supreme Court as state-to-state controversies and inevitably result in expensive, protracted litigation, the last two decades have seen an unprecedented amount of cooperation and interstate consensus among Colorado, the federal government, and downstream states. The result of this cooperation is that many disputes have ultimately been resolved through interstate agreements, and some of these cooperative arrangements are further described below.

Pot Creek Agreement

Colorado and Utah used a Memorandum of Understanding (MOU) to define their relationship regarding Pot Creek, rather than an interstate compact.¹⁴⁴ Originating in the Uinta Mountains in Utah, Pot Creek flows for eight miles within Colorado before joining the Green River. The Pot Creek MOU was signed on April 1, 1958 and established an equitable and workable division of water between the two states. This MOU stipulates that both Colorado and Utah believed that a compact would eventually be necessary to appropriate the water between the two states, but that the MOU would help develop a functioning system before the formulation of an interstate compact. One aspect of the Pot Creek MOU defines the parameters for appointing a water commissioner with the authority to administer water in both Colorado and Utah. The expenses are to be divided with Utah bearing 80 percent of the costs and Colorado 20 percent. Additionally, this MOU states that direct flow diversions may not be exercised before May 1 of each year and establishes a schedule of priorities for use in the two states.¹⁴⁵

Sand Creek Agreement

Sand Creek originates in the Laramie Mountains of Colorado and flows into Wyoming where it joins the Laramie River.¹⁴⁶ To equitably apportion Sand Creek, Colorado and Wyoming signed an MOU on March 13, 1939. The Sand Creek MOU allocates waters according to the priority water rights in Colorado and Wyoming, recognizing that Wyoming was entitled to 50.68 cubic feet per second before any Colorado diversions. This provision was later revised on August 7, 1997 to require the delivery of 40 cubic feet per second by Colorado over a seven day period at the beginning of the irrigation season, after which Colorado was required to deliver 35 cubic feet per second. Finally, the Sand Creek MOU limits diversions of the Sand Creek Ditch and the Wilson Supply Ditch to amounts of water in excess of the water allocated to Wyoming.¹⁴⁷

Colorado River Agreements

Within the Colorado River Basin, states have made extraordinary strides toward cooperation in the last several decades. For example, the Upper Colorado River Endangered Fish Recovery Program and the San Juan River Recovery Implementation Program enable Colorado to fully use its compact entitlements, while striving to support the recovery of endangered fish species. These programs are further described in this plan.

In 2006, Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming also signed the Range-Wide Conservation Agreement and Strategy for Roundtail Chub, Bluehead Sucker, and Flannelmouth Sucker (Three Species Agreement).¹⁴⁸ The states created this agreement to expedite the implementation of conservation measures for the three species through a collaborative and cooperative interstate effort. The Three Species Agreement seeks to minimize the potential threats to the species that could result in a federal listing using coordinated state-driven preventative measures.¹⁴⁹

In 2007, the states overcame substantial disagreement to collectively support the Bureau of Reclamation's (BOR's) Record of Decision on Interim Guidelines for Lower Basin Shortages and Coordinated Operation for Lake Powell and Lake Mead through 2026.¹⁵⁰ Among other things, these guidelines: 1) set forth coordinated, operational protocols between Lakes Mead and Powell to allow the system to operate more efficiently during drought; 2) establish shortage guidelines in the lower basin; and 3) implement the Intentionally Created Surplus mechanism for banking water in Lake Mead.¹⁵¹

Continued cooperative efforts have helped lower basin interests to use water more efficiently. Such efforts include the creation of the Intentionally Created Surplus, the pilot operation of the Yuma Desalting Plant, and the construction and operation of Brock Reservoir.

The states and federal government have also continued to develop a working relationship with Mexico, resulting in Minutes 316-319 to the 1944 Water Treaty.¹⁵² These minutes identify and implement voluntary options for creating a larger quantity of water in the system, enhancing environmental values, providing Mexico access to storage in the United States, providing improved water management during drought in both countries, and establishing the foundation for developing and implementing cooperative projects mutually beneficial to both countries consistent with the 1944 Water Treaty and the Law of the River.

In response to the basin-wide drought beginning in 2000, there has also been increased interstate activity in the field of weather modification. Weather modification, or cloud seeding, is designed to increase winter precipitation through aerial and ground-based techniques. The Colorado Basin States are pursuing winter cloud seeding efforts in Colorado, Wyoming, and Utah. Additionally, New Mexico helps fund Colorado's weather modification program in southwest Colorado to increase run-off and flow in the Colorado River.¹⁵³

Most recently, the Colorado River Basin states have turned their attention to collaborating on contingency planning to protect certain reservoir thresholds in the event of continued drought conditions, to protecting power generation and instream natural resources, including endangered fish and other natural resources, and to ensuring the continued use and development of existing water supplies.

Platte River Agreements

On the South and North Platte Rivers, Colorado, Wyoming, and Nebraska are currently working with the Department of the Interior to collectively manage the rivers with the dual goals of endangered species recovery and water development protection. The Platte River Recovery Implementation Program, established in 1997 and authorized by Congress in 2008, seeks to restore habitat, provide for increased stream flows, and encourage an adaptive management approach to river operations.¹⁵⁴ This program is further described in Chapter 6.

Republican River Agreements

Within the Republican River Basin, the state of Colorado continues to be involved with Colorado water users, as well as Nebraska and Kansas, to identify reasonable methods for future compact compliance by all parties. The Compact Compliance Pipeline (CCP) was recently constructed to facilitate Colorado's ongoing and future compact compliance, while mitigating any negative effects of compact compliance on Colorado water users. Before the pipeline can become fully operational, Nebraska, Kansas, and Colorado must agree on how to account for the water under the compact. This includes negotiating, and in some instances arbitrating, appropriate changes to compact accounting procedures and implementing new operations in the basin. Once a final agreement or decision is implemented, water delivery from the CCP will be counted towards Colorado's compact obligation to Nebraska and Kansas.

Rio Grande River Agreements

On the Rio Grande, the state continues to work on intrastate and interstate issues related to groundwater administration and compliance with the compact and the Endangered Species Act (ESA). Groundwater issues are being addressed in the San Luis Valley through the establishment of basin sub-districts and ongoing efforts to develop groundwater administration rules for the Rio Grande Basin in Colorado. Additionally, the state continues to work with the federal government and stakeholders to address survival and recovery efforts of endangered and threatened species in a manner that respects and complies with existing Colorado water rights as well as interstate compact rights and authorities. The state is also involved in an interstate lawsuit before the U.S. Supreme Court concerning groundwater pumping and usage between Texas and New Mexico below Elephant Butte Reservoir. Because interpretation and enforcement of the Rio Grande River

Compact may form the basis for part of the controversy between Texas and New Mexico, Colorado, as a signatory to the compact, is a named party to the lawsuit.¹⁵⁵

San Juan/Dolores River Agreements

In the San Juan/Dolores Basin, a major project was recently built to assist Colorado in meeting its compact obligations to New Mexico. The Long Hollow Reservoir was constructed to both supplement the irrigation needs for the region and to assist in fulfilling compact requirements. This reservoir allocates 300 acre-feet of annual storage to be used for deliveries to New Mexico during summer low-flow months. In addition, the Animas-La Plata Project was recently completed. The water purchased by the CWCB for this project will be important to the state in the future.

2.3 Colorado's Local Control Structure

Colorado's local governments have considerable authority in making water development and management decisions. The state's 64 counties and 271 municipalities exercise a broad range of powers to address the needs of respective constituents that are explicitly delegated to them by state law.

Generally, counties have discretionary powers to provide services, including water and sewer, and to operate districts for irrigation and recreation, among others. Cities and towns have the ability to address the needs of their denser populations through self-government, including administrative, police, and financial powers. Furthermore, the state constitution authorizes municipalities and counties to adopt home rule charters, which provide even greater autonomy and flexibility to address local problems.¹⁵⁶ Municipal home rule is intended to ensure that cities can make decisions on expending funds, incurring debt, building and maintaining public facilities, and undertaking other activities to meet their needs. County home rule charters are authorized to establish the organization and structure of county government, but do not provide the "functional" home rule powers of municipal charters.¹⁵⁷

Land and Water Use Planning Authority

State law also provides local governments with authority specific to land use and water planning. The Local Government Land Use Control Enabling Act broadly allows counties and municipalities to balance environmental protection with the need to provide for the planned and orderly use of land.¹⁵⁸ The act allows a local government to provide for the phased development of services and to regulate the location of activities and development that may cause substantial changes in population density. The act also requires a local government to make a determination whether an applicant for larger developments (in excess of 50 units or single-family equivalents) has demonstrated that the proposed water supply is adequate to serve the proposed development.¹⁵⁹

Counties and municipalities are also required to adopt master plans for the development of their jurisdictions, which may include a water-supply component.¹⁶⁰ State law encourages water efficiency and conservation through public project landscaping guidelines.¹⁶¹

Counties and municipalities have the authority to impose an impact fee as a condition of a development permit to pay for certain costs associated with growth. These fees can only be used to offset the added burden of new development on existing infrastructure and capital improvements

and cannot be used for ongoing expenses and maintenance.¹⁶² Nearly half of Colorado's cities have implemented impact fees, and the most commonly used fees are for water and sewer.¹⁶³ Although the developer pays the fee, the costs are typically borne collectively by residents of the new development through increased housing prices, when the market can sustain the full price increase needed to cover the fee.¹⁶⁴

In addition to providing a tool for offsetting burdens on existing infrastructure, state law allows a municipality to construct or authorize the construction of new waterworks, if approved by voters. The municipality is also authorized to protect the waterworks and water supply from pollution for up to five miles above the point from which the water is taken.¹⁶⁵

Finally, HB-74-1041 powers (further explained in Section 2.4) allow local governments, primarily counties, to identify, designate, and regulate 21 statutorily defined "areas and activities of state interest," including the site selection, construction, or extensions of major new water and sewage treatment systems. This is intended to ensure that local governments can consider and mitigate the effects of new developments.¹⁶⁶

Special Districts

Colorado law allows voters to create many types of local special districts,¹⁶⁷ which are governing entities that oversee specific services, such as fire protection, water, and sewer. Special districts have the autonomy to solve local problems using local funds to devise local solutions. Districts do this by dividing the costs of services among all property owners and residents. They are also able to finance larger infrastructure and public facility projects and repay these costs over time as development occurs and property values increase.¹⁶⁸ There are several special districts related to water use and water planning, including:

- Water Districts—supply water for domestic and other public and private purposes by any available means and provide all necessary or proper reservoirs, treatment works, and facilities.¹⁶⁹
- Sanitation Districts—provide for storm or sanitary sewers, or both; flood and surface drainage; treatment and disposal works and facilities; or solid waste disposal facilities or waste services; and all necessary or proper equipment.¹⁷⁰
- Water and Sanitation Districts—provide both water and wastewater services.¹⁷¹
- Metropolitan Districts—provide two or more of a variety of services including parks and recreation, wastewater, and water.¹⁷²
- Park and Recreation Districts—provide park or recreational facilities or programs.¹⁷³
- Irrigation districts—provide for the irrigation of lands in the district and the drainage work necessary to maintain irrigation.¹⁷⁴
- Water Conservancy Districts and Water Conservation Districts—transmit information and coordinate efforts among agencies, political subdivisions, and private citizens and businesses concerning the conservation, protection, and development of Colorado's water resources.¹⁷⁵
- Urban Drainage and Flood Control—assist local governments with multi-jurisdictional drainage and flood control challenges and provide funding or levy property taxes to fund programs and projects.¹⁷⁶

- Groundwater Management Districts—adopt rules and regulations to help administer groundwater within the district.¹⁷⁷

The Department of Local Affairs (DOLA) Overview

The DOLA is responsible for supporting Colorado's local communities and augmenting local government capacity by providing training, technical, and financial assistance to localities. The department's divisions serve several purposes, including: provision of affordable housing, property tax assessment and collection, training for local government issues, and distribution of state and federal funds for community projects. Within the DOLA, the Division of Local Government (DLG) provides local governments with demographic data, technical assistance for local governments on common issues (such as budgeting and planning), technical resources, and financial assistance programs. Specifically within the DLG, the Community Development Office provides technical and financial assistance to local governments on land-use planning and general community development, including training for planners and planning commissioners. The DLG often funds county and municipal comprehensive plans and encourages water supply and conservation elements.

2.4 Local, State, Tribal, and Federal Water Planning, Approval, and Permitting

Those who wish to implement a water project in Colorado must have permits, licenses, contracts, certifications, or other approvals from numerous local, state, and federal governmental entities. Partnerships with and among these agencies at all levels of government are critical to ensure that environmental issues can be identified and addressed in a timely and effective manner. This section provides an overview of the entities typically involved in permitting and the State's role in planning.

Governmental Entities with Permitting, Licensing, Contract, and Certification Responsibilities

Typically, the following organizations are involved in the permitting process.

Local Entities:

- *Project proponents* include a wide array of water users and water providers including, but not limited to, local governments that run a utility, private water companies that act as a local utility, special districts, ditch companies, or regional water conservancy and conservation districts that sell water to local water providers. These entities are responsible for coordinating with state and federal permitting entities to successfully permit their water project.
- *Local governments* have jurisdiction and authority over parts of development projects and can request mitigation for any effects resulting from proposed water projects because of their 1041 powers, which are detailed below under the state planning section.¹⁷⁸

State Entities:

- *The CWCB* is a division within the Colorado Department of Natural Resources. The CWCB sets water policy and planning in Colorado.¹⁷⁹

- *The Colorado Water Quality Control Division (WQCD)* is housed within the Colorado Department of Public Health and Environment (CDPHE). The agency reviews water quality certifications under Section 401 of the federal Clean Water Act (CWA).
- *The DWR* is housed in the Colorado Department of Natural Resources and is responsible for water administration. The DWR ensures that the water rights for a project can be administered. New water rights and well permits must be filed with the DWR.
- *The Colorado Attorney General's Office* is the legal authority regarding matters of law, including whether or not a particular project or agreement is legal under Colorado law.
- *Colorado Parks and Wildlife (CPW)* is a division within the Colorado Department of Natural Resources. CPW reviews state wildlife mitigation plans under Colorado's state statutes, known as 122.2 plans.¹⁸⁰

Tribal Entities:

- The Southern Ute Indian Tribe and the Ute Mountain Ute Tribe are federally-recognized tribal governments with responsibilities for the protection and use of water on the Southern Ute Indian Reservation and the Ute Mountain Ute Reservation.
- The Ute Mountain Environmental Programs Department is a Ute Mountain Ute Tribal department and is responsible for implementing tribal water quality standards (including antidegradation provisions under Section 303 of the Clean Water Act) and for federal permitting under Section 401 of the Clean Water Act for projects located on the Ute Mountain Ute Reservation.
- The Southern Ute Water Resources Division is a division of the Southern Ute Indian Tribe overseeing: 1) water resources planning; 2) project implementation, including cooperative projects with the non-Indian communities coordinating tribal actions in Colorado's water courts; and, 2) the Tribe's role in the cooperative and coordinated administration of the Tribe's water rights.

Federal Entities:

Federal entities have several roles that relate to water-management issues in Colorado. As land managers, federal agencies provide land-use authorizations for water projects that occupy federal lands. In addition, the federal agencies have many federal laws that federal agencies must comply with when they issue land authorizations for any water projects. These include, for example, the Federal Land Policy and Management Act, the Endangered Species Act, and the Wild and Scenic Rivers Act, and the National Environmental Policy Act (NEPA). In addition, the following can all act as lead agencies responsible for NEPA compliance and oversight, and many of these agencies are responsible for compliance with land-use authorizations for water projects.

- *The Environmental Protection Agency (EPA)* is the federal agency responsible for oversight of permitting related to the placement of dredged or fill material in waters of the United States, including jurisdictional wetlands under Section 404 of the CWA.
- *The U.S. Army Corps of Engineers (Corps)* is responsible for 404 permitting under the CWA and for the approving uses of their federally owned flood control and water-supply facilities.

- *The U.S. Forest Service (USFS)* manages national forests and grasslands and has substantial land holdings in Colorado (role related to water rights described in Section 2.5).
- *The U.S. Fish and Wildlife Service (USFWS)* manages threatened and endangered species recovery programs and regulates actions affecting threatened or endangered species listed under the ESA. This agency is responsible for determining if a project exceeds the bounds of any programmatic biological opinions regarding further water development. In addition, under the Fish and Wildlife Coordination Act, federal agencies responsible for coordinating federal NEPA compliance must consult with the USFWS regarding the project's potential effects on threatened and endangered fish and wildlife species.
- *The BOR* is the agency that built, and now manages, several water supply and hydropower projects. In Colorado, these include Blue Mesa Reservoir and the Fryingpan-Arkansas Project. The BOR is responsible for contracting water out of these federal projects and for the use of these federally owned facilities by third parties.
- *The U.S. Bureau of Land Management (BLM)* is responsible for managing substantial public land holdings within Colorado.
- *The U.S. National Park Service (NPS)* manages substantial land holdings within Colorado for national parks and monuments (see Section 2.5 for the NPS).
- *The Federal Energy Regulatory Commission (FERC)* is responsible for licensing non-federal hydropower projects.

Cooperating Agency Status

Federal agencies actively consider designation of cooperating agencies in the preparation of analyses and documentation required by NEPA, and they participate as cooperating agencies in other agency's NEPA processes.¹⁸¹ The Council on Environmental Quality (CEQ) regulations addressing cooperating governing agencies NEPA specify that federal agencies responsible for preparing NEPA analyses and documentation do so "in cooperation with State and local governments" and other agencies with jurisdiction by law or special expertise.¹⁸²

Stakeholder involvement is important in ensuring that decision makers have the environmental information necessary to make informed and timely decisions. Cooperating agency status is a major component of agency stakeholder involvement in the NEPA process. The benefits of early cooperating agency participation in the preparation of NEPA analyses include: disclosing relevant information early in the analytical process; applying available technical expertise and staff support; avoiding duplication with other federal, state, tribal, and local procedures; establishing a mechanism for addressing intergovernmental issues; and other benefits. Colorado participates as both a non-federal project sponsor and as a Cooperating Technical Agency on a case-by-case basis for water projects in the state.

The permitting process is explored in greater detail in Section 9.4, along with potential permitting-process improvements.

State Planning

The CWCB is the primary state agency responsible for statewide water planning. Water planning determines the types of water projects and quantity of water needed in the future to support

Colorado's growing population.¹⁸³ The basin roundtables and the Interbasin Compact Committee (IBCC) were created in 2005 and are participants in the CWCB's statewide water-planning efforts.¹⁸⁴

The IBCC is made up of two representatives from each basin roundtable, six governor appointees, and two appointees from the state legislature.¹⁸⁵ Their charge is to develop agreements among basins and to develop statewide policy issues.¹⁸⁶

Both the basin roundtables and the IBCC provide critical input to the Statewide Water Supply Initiative (SWSI) and Colorado's Water Plan. The SWSI creates a technical foundation and a common technical platform that stakeholders and Colorado's Water Plan use and build upon. The report, which is periodically updated with the latest technical information, tracks Colorado's changing water supply and demand. In addition, the basin roundtables and the CWCB have developed a forum where project proponents can find technical and financial support.¹⁸⁷ Other state agencies have a critical role in planning for other water related aspects. For instance, CPW develops management plans for fish and other water-dependent species.¹⁸⁸ These planning efforts and the technical documentation supporting them often provide a baseline of information that is helpful in the permitting process.

2.5 Tribal and Federal Reserved Water Right Issues within Colorado

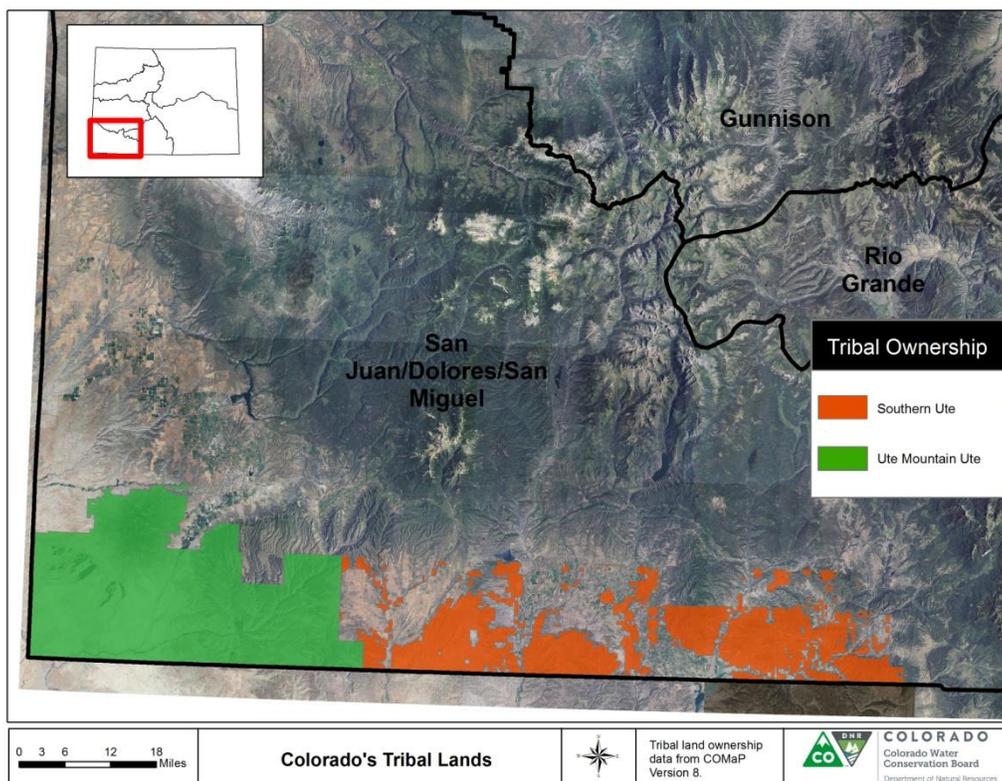
In addition to the patchwork of local, state, and federal agencies involved in water planning (described in Section 2.4), many federal agencies and Native American tribes hold water rights that serve as part of the existing institutional setting for water planning. Colorado is home to a substantial amount of tribal and federally held lands. Of the 66,485,760 acres that form the state of Colorado, the federal government holds title to more than one-third of this land (24,996,075 acres, including tribal lands).¹⁸⁹ Federal agencies with major federal land holdings in Colorado include: the USFS, the BLM, the NPS, and the USFWS. In addition, two different Native American tribes have reservations located within Colorado borders: the Southern Ute Tribe and the Ute Mountain Ute Tribe are both located in Southwestern Colorado (and the Ute Mountain Ute Reservation also includes lands in northwestern New Mexico and in southeastern Utah). The Southern Ute Tribe is governed by its tribal council whose constitution was approved in 1936.¹⁹⁰ The Ute Mountain Ute Tribe is governed by its tribal council whose constitution was approved in 1940.¹⁹¹ Beyond the two tribes, only the USFS, the NPS, and the BLM have pursued substantial reserved water rights associated with their landholdings in Colorado.

The history of federal and tribal water rights, as they relate to these land holdings in Colorado, is unique and complicated. Any discussion of federal water rights must begin with a discussion of "the Winters Doctrine."¹⁹² The Winters Doctrine, established by the U.S. Supreme Court in 1908, generally provides that when the United States sets aside an Indian Reservation, it also reserves a sufficient amount of water necessary to fulfill the purposes of the reservation, with the priority date established as of the date of the reservation.¹⁹³ The Winters Doctrine was a landmark case because it was the first time the federal government deviated from the established convention that water law was purely a state matter.¹⁹⁴ The Court subsequently expanded application of the Winters Doctrine beyond tribal reservations to also apply to federal lands withdrawn from the public

domain to the extent that water is deemed either expressly or impliedly necessary to satisfy the primary purposes of the federal reservation.¹⁹⁵ This expanded version of the judicially created Winters Doctrine resulted in what is generally referred to as “federal reserved water rights.”

Federal reserved rights differ from rights acquired under state law in that reserved rights typically but not always rest on the date a reservation was created—not when the water was first put to beneficial use—and cannot be lost through non-use. Moreover, before 1952, the United States avoided, and was not required to have, its federal claims to water either formally listed or made the subject of any decree or permit within the state water administration system. Rather, federal

Figure 2-3: Colorado's Tribal Lands



reserved water rights existed outside of (and separate from) the procedure for administering all other water rights within the states. The ability, therefore, of the state systems to function to avoid conflict and create a firm water supply through a comprehensive and cohesive water administration system was complicated by the federal reserved water rights.

As a direct response to this unintended ambiguity, Congress adopted the McCarran Amendment in 1952 to rectify the fact that “the extent and priority of federal water rights, including federal reserved rights, were unknown and not the subject to adjudication or determination in state courts.”¹⁹⁶ To overcome this complication, the amendment provides a limited waiver of the United States’ sovereign immunity for purposes of including the United States (on its own behalf or on behalf of the tribes) in state stream adjudications and water-administration suits.¹⁹⁷ Since then, Colorado has settled and adjudicated tribal reserved rights claims asserted on behalf of the

Southern Ute and Ute Mountain Ute Tribes in Colorado as well as claims for federal reserved water rights by federal agencies throughout the state. The State and the Tribes administer the reserved rights recognized by these proceedings in priority in conjunction with state-based water rights.

Federal Agencies

Water rights held by the USFS, the USFWS, and the NPS have complicated histories.¹⁹⁸ Each agency has sought substantial federal reserved water rights in a variety of locations throughout the western United States. In Colorado, the USFS has filed for reserved water rights in all seven water divisions. In Water Divisions 1 and 2, the USFS claims for nonconsumptive reserved rights were denied by the water court and withdrawn with prejudice.¹⁹⁹ In Water Division 3, the USFS reached a stipulated decree settlement for both consumptive and nonconsumptive reserved rights in 2000.²⁰⁰ Stemming from the Colorado Supreme Court decision in *U.S. v. Denver*, the USFS may not claim federal reserved water rights for instream flow purposes in Water Divisions 4, 5, or 6.²⁰¹ The USFS's applications for federal water rights are still pending in Water Division 7.²⁰² The USFWS manages eight National Wildlife Refuges and two National Fish Hatcheries in Colorado. These facilities use water in compliance with water-right decrees based on Colorado's system of prior appropriation. The NPS has obtained federal reserved water rights for Rocky Mountain National Park, Great Sand Dunes National Park, Colorado National Monument, the Black Canyon of the Gunnison, and Mesa Verde National Park.²⁰³ The federal government also maintains a wild and scenic river designation for the upper reaches of the Cache La Poudre under the Wild and Scenic Rivers Act that includes a federal reserved water right.²⁰⁴

Tribes

In 1895, the United States established the Southern Ute Indian Reservation in southwest Colorado and the Ute Mountain Ute Reservation in the southwest corner of Colorado and northern New Mexico (later adding lands in southeastern Utah).²⁰⁵ In 1976, the United States, on behalf of the Southern Ute Tribe and Ute Mountain Ute Tribe, filed claims to water in southwest Colorado to resolve reserved rights claims for the two reservations. Through an enormous effort of the Ute Tribes, the State of Colorado, the United States, water districts, and local water users, all of the parties were able to resolve the Tribal litigation claims in 11 river basins through negotiated settlement (resulting in the 1986 Colorado Ute Indian Water Rights Final Settlement Agreement).²⁰⁶ In 1988, Congress passed the Colorado Ute Indian Water Settlement Act approving the 1986 Settlement Agreement. The settlement set forth shared responsibilities for administration of some of the tribal rights.²⁰⁷ A critical component of the 1986 Settlement Agreement is provision of water to the tribes from the Animas-La Plata Project, a participating project of the Colorado River Storage Project Act, authorized by the Colorado River Basin Project Act.²⁰⁸

In the early 1990s, complications concerning endangered species, water quality, and other issues prevented the full implementation of the 1986 Settlement Agreement as it related to the Animas and La Plata Rivers; and for the second time, the parties forged a new compromise related to the down-sizing of the Animas-La Plata Project. Congress approved the modifications and amended the 1988 Settlement Act in December 2000.²⁰⁹ The institutional framework agreed to by the Ute Tribes, the State of Colorado, and the United States in the overall settlement establishes quantities of water rights, priorities of tribal rights, permitting requirements, conditions for changing water rights,

conditions for leasing, and other terms. Most importantly, it recognized the need for cooperative and coordinated administration of the Tribes' reserved water rights under state and federal law.

¹ Mortimer Stone ed., "A Survey of Colorado Water Law," *Denv. L. J.* 47 (1970): 231-247.

² *Empire Lodge Homeowners' Ass'n v. Moyer*, 39 P.3d 1139, 1147 (Colo. 2001).

³ A. Dan Tarlock, James N. Corbridge, Jr., David H. Getches, and Reed D. Benson, *Water Resource Management: A Casebook in Law and Public Policy, Sixth Edition* (New York: The Foundation Press, 2009): 154-265.

⁴ Tarlock et al., *Water Resource Management: A Casebook in Law and Public Policy*, 67-70, 154-158.

⁵ Mortimer Stone ed., "A Survey of Colorado Water Law," 230-235.

⁶ Colo. Const. amend. XVI, § 6.

⁷ *Comstock v. Ramsay*, 133 P. 1107, 1110 (Colo. 1913).

⁸ Water Right Determination and Administration Act of 1969, Colo. Rev. Stat. §§ 37-92-101 through -602 (2014).

⁹ C.R.S § 37-92-102 (1)(a).

¹⁰ Colo. Const. amend. XVI, §§ 5, 6; C.R.S § 37-92-101 et seq.

¹¹ *Safranek v. Limon*, 228 P.2d 975, 977 (Colo. 1951).

¹² Justice Gregory J. Hobbs, Jr., "Colorado's 1969 Adjudication and Administration Act: Settling In," *University of Denver Water Law Review* 3 (1999): 18.

¹³ Colorado Groundwater Management Act, C.R.S. §§ 37-90-101 through -143 (2014)

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