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, in which much of the planning and implementation authority rests at the local level. Section 2.3 reviews key features of the local control 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 briefly enumerates these agencies, their delegated jurisdictions, and the roles each plays in the approval and 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 as they move forward in planning and implementation processes within Colorado. Moreover, in order to make our state's laws and policies better, we as Coloradans must understand where we stand and how we got here.

The cover of an 1874 issue of Harper's Weekly depicting two irrigators letting water into a sluiceway and the engineering needed to bring water from where it flows to where it is needed. This represents a foundational principle of Colorado water law. Courtesy of Justice Gregory Hobbs.

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IRRIGATION IN COLORADO—LETTING WATER INTO A SIDE SLUICE-WAY.—[See Page 504.]

2.1 COLORADO WATER LAW AND ADMINISTRATION

The evolution and history of Colorado water law is as rich and complicated as the history of the West itself. From the San Luis People's Ditch (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 governs this valuable resource.[1] To sufficiently plan for the opportunities and challenges apparent in Colorado's water future, we as Coloradans must understand the legal framework on which they rest.

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," which is 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]

Colorado established the prior appropriation doctrine, 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 the State adopted in the 1860s, even before Colorado obtained statehood in 1876.[5] Most Western states share this legal system in a pure or hybrid form.

The Colorado Constitution explains the heart of the prior appropriation system. It states: "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]

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—a usufructuary right;

Water-rights owners may build facilities on the lands of others, either 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.

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 intended for public use was subject to appropriation and administration to "maximize the beneficial use of all of the waters of the state."[9]

MAJOR ACCOMPLISHMENTS OF THE 1969 ACT[10]

- 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;
- Resumption of 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 by the Colorado Division of Water Resources and division engineers 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.

Colorado allocates and administers water according to two general categories: (1) Surface water, which includes tributary groundwater, and (2) other groundwater. The first category is subject to Colorado's prior appropriation

JOE GALLEGOS

RIO GRANDE RIVER BASIN

Joe is a Costilla County Commissioner and still works on the land his family farmed five generations ago. His great grandfather helped dig the People's Ditch, which has the oldest water right in Colorado. Joe is pictured next to the People's Ditch.

The Colorado Water Plan is a great start to getting a grasp on the water and a direction when shortages or dispute take place but this plan cannot be written in stone; water, weather, and human situations are dynamic and therefore the plan must also be dynamic. The Plan must be consistently updated and have an ability to improvise for unforeseen occurrences. Like everyone else I worry about the future water supply, but with a plan and power of the community, shortages can be managed. Having a lifestyle that is totally dependent on water, my commitment to being involved in creating a future manageable water situation is part of that lifestyle. I am a fifth Generation rancher and farmer benefiting

CONTINUED AT END OF CHAPTER

PROFILE

doctrine; Article XVI, Sections 5 and 6, of the Colorado Constitution and the 1969 Act generally govern it.[11] This category of water includes all natural stream water and all tributary groundwater, which is groundwater that is hydrologically connected to a surface stream. Colorado law presumes that all groundwater in Colorado is tributary unless law defines it otherwise, or facts prove it.[12]

A modified prior appropriation doctrine governs, and Colorado's Groundwater Management Act ("The Groundwater Act") partially governs, the second category.[13] This category includes groundwater that law or fact has found to be insignificantly hydrologically connected to a surface stream. This category of water encompasses many different types of water, including: (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 (g) other types of groundwater that may require a well permit from the Colorado Division of Water Resources (DWR),[20] or as determined by the Colorado Ground Water Commission.[21] For instance, the doctrine of prior appropriation does not apply to nontributary, Denver Basin, or designated groundwater. Such water is allocated as correlative rights generally based on overlying land ownership.[22] The Colorado Ground Water Commission (comprising 12 members, nine of whom are appointed by the governor and confirmed by the Senate) may determine and alter boundaries of designated groundwater basins and their subdivisions by geographic description; these boundaries are subject to statutory limitations.[23]

The vast majority of Colorado's water rights are subject to the prior appropriation system, which aligns water rights in order of appropriation and adjudication dates. This system can result in a situation in which a downstream water user that has a senior priority right, which the water court has adjudicated, may divert and use water before upstream users with less senior water rights (or 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; in that case, the calling downstream user may receive the quantity of water to which it is entitled. The DWR and division engineers are required to regulate such a call pursuant to state statute.[24]

"Beneficial use," defined as a reasonable level of use beyond which waste may occur,[25] serves as both the measure and the limit of water.[26] There are a number of important water law terms that require definition. Three very good existing glossaries are available online at Colorado State University Extension,[27] Denver Water,[28] and Colorado River Water Conservation District.[29]

The term "beneficial use" is used to both determine and 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, the definition of beneficial use has likewise evolved and expanded to include municipal, industrial, recreational, wildlife, and other uses.[30] Instream flow water rights are held exclusively by the CWCB. The purpose of instream flow water rights is to preserve or improve the environment to a reasonable degree, as codified in the statutory definition of beneficial use.[31] The General Assembly has recently amended the statutory definition to recognize in-channel uses for recreational purposes.[32]

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 in each of the state's seven major watersheds issue decrees confirming water use rights.[33] Water rights may be confirmed for use on a direct flow basis, by storage, or by exchange.[34] With a direct-flow right, the water user directly applies the water from the stream or tributary aquifer for irrigation, domestic, industrial, or other uses. A user typically accomplishes a storage right by placing water into a vessel, such as a reservoir or a tank (or, under certain conditions, into an aquifer), for beneficial use at a later time. A user generally accomplishes an exchange by diverting water at an upstream location while providing a substitute supply of water at a downstream location; that supply must be suitable in quantity and quality to satisfy downstream senior priorities, and must not affect existing, intervening water uses within the exchange reach. Water court decrees generally quantify direct flow and exchange water rights in terms of flow, which is measured in cubic feet per second, while storage water rights are generally measured volumetrically in acre-feet.[35]

The People's Ditch holds the first adjudicated water rights in Colorado, dated in 1851. This is ten years prior to Colorado becoming a U.S. territory and 25 years before statehood. Photo: M. Nager.

Section 6 of Article XVI of the Colorado Constitution sets forth the right to appropriate as "the right to divert the unappropriated waters of any natural stream to beneficial uses shall never be denied."[36] 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 directly applying a specified amount of water for beneficial use.[37] A water user may then receive protection under the priority system by adjudicating that right through the water court process.[38] A user can also obtain a conditional water right by showing an intent to put water to beneficial use and proving that that user "can and will" put the water to beneficial use under Colorado's anti-speculation doctrine.[39] To avoid the requirement of further diligence applications, a user must exercise conditional right in priority, and a court must establish it as an absolute right by decree.

As the prior appropriation system has evolved, more adjudicated water rights exist than some river basins can satisfy in dry years. When this occurs, that basin is described as over-appropriated, meaning that there is limited opportunity to develop new junior water rights in that basin.[40] In over-appropriated basins, a user may create new water uses by changing existing water rights to the new uses, or by developing augmentation plans to increase the water supply.[41]

Changes of Water Rights

The right to use water in Colorado is usufructuary.[43] As such, it is limited to the amount of diversion, location of diversion, place of use, manner of use, and type of use a water court decree allows.[44] A user may convey a water right to another water user or, with appropriate water court or administrative approval, change it to another location of diversion, place of use, manner of use, or type of use, while still retaining its priority. However, changes in water rights are subject to terms and conditions that prevent injury to existing water rights.[45]

USUFRUCTUARY RIGHT

A civil law term 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 of the profit, utility, and advantage which it may produce, providing it be without altering the substance of the thing.[41]

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.[46] In addition to establishing historical consumptive use, an analysis must establish the timing, location, and amount of historical return flows (the non-consumed portion of the diversion). Return flows must be replaced in the stream so that water users senior to the date of the change may continue to enjoy stream conditions that were in place at the time of their appropriation.[47] 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 right[48]), making such changes is a costly proposition that requires complex legal and engineering analyses.

The goal of the net stream depletion assessment, including historical beneficial consumptive use, is to ensure 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 that established their rights before the date of the change in use receive the water to which they are entitled, and do not suffer an injury to their water rights as a result of that change.[49]

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."[50] A typical plan for augmentation allows a user with a junior water-rights holder to divert out of priority ("cutting in line," so to speak), as long as that junior water user can replace or remedy its injurious depletions to the user with senior calling water rights, and avoid injuring other water users in the process.[51] A common scenario is one in which a water user pumps a well out of priority and then replaces stream depletions 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. It also must be available at the same time, location, and amount as the stream depletions the out-of-priority pumping or diversions caused.[52] Permanent or long-term plans for augmentation and changes of water rights require water court approval, but the DWR has statutory authority to approve temporary, substitute water supply plans and interruptible water supply agreements for similar purposes.

State Administration of Water Rights

The DWR, a division of the Department of Natural Resources (DNR), administers water rights. Also referred to as the State Engineer's Office, the DWR evaluates well permits, inspects dams and wells, and oversees the work of field water commissioners who physically allocate the water and enforce compacts, water court decrees, and well permits.[53]

The DWR is headquartered in Denver and has seven field offices in each major river basin across the state. Every field office has a division engineer who serves as the lead and manages the administration of that particular water division.[55] 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 also gather important data for use in water planning studies and decision-support systems.[56]

FIGURE 2.1-1 COLORADO'S WATER DIVISIONS[54]

The water commissioners also administer calls on the river system to ensure that the holder of a senior water right receives its entitlement. Other duties of the water commissioners and other DWR employees include regulating headgates, measuring devices, and administering and enforcing storage water rights, plans for augmentation, exchanges, and transmountain water diversions.[57] The DWR also oversees the well-permitting process for all types of groundwater.[58] The DWR requires well permits for extraction of tributary groundwater, designated groundwater, nontributary groundwater, Denver Basin groundwater, produced water from tributary coalbed methane wells, and geothermal groundwater.[59]

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.[60]

Rainbow over the lower Colorado River near Grand Junction. Photo: M. Nager.

The DWR collects water resources data and makes them available online through Colorado's Decision Support Systems (CDSS), a joint effort of the CWCB and the DWR.[61] 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 about streamflow, diversions, climate, water rights, call records, well permits, aquifer properties and groundwater levels. The CDSS's 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.[62]

The Colorado Ground Water Commission is responsible for adjudicating groundwater rights and issuing large-capacity well permits. Much of the groundwater located within the basin has been authorized as being in a designated groundwater basin. The Colorado Groundwater Commission has also established eight designated basins and 13 groundwater management districts within such basins. Groundwater management districts are local districts that have additional administrative authority.

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 judicial and administrative approvals. Efforts are currently underway to simplify the process and support 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 well the complex Colorado water administration system can adjust.

Recent agreements between multiple stakeholders, such as the Colorado River Cooperative Agreement, between Denver Water and more than two dozen western slope entities,[63] 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 in which 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 19th and early 20th centuries, disputes arose regarding the authority of one state to control the use of an interstate stream that originates in another state.[64] Initially, downstream states sought to resolve water disputes through litigation before the United States Supreme Court.[65]

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

The United States Supreme Court decided two cases that convinced Colorado water leaders that negotiated interstate water agreements were preferable to interstate litigation.[66] Colorado is party to nine formal interstate water agreements called "compacts." These compacts, in addition to 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 and Table 2.2-2).

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 United States Supreme Court announced the doctrine of equitable apportionment.[67] This doctrine provides that the principle of "equality of right" should be applied when determining how states should share rivers to ensure that each state receives equal benefit.[68] 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."[69] *Kansas v. Colorado* left future disagreements about river use to the uncertain and expensive process of protracted, United States Supreme Court litigation. 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.*[70] 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.[71] As a result, this decision required junior water users in Colorado to honor senior water rights in Wyoming.[72]

TABLE 2.2-2 COLORADO'S INTERSTATE DECREES

Laramie River Decree	1957
North Platte Decree	2001

Greeley's Delph Carpenter, 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.[73] Carpenter, an experienced irrigation litigator as well as a rancher and a former state senator, was appointed to be interstate streams commissioner in 1913.[74] As an attorney for Colorado, he worked on negotiations with Nebraska regarding the South Platte River.[75] During that time, he formulated the leading theory on rights and authorities for entering into interstate compacts, which guided the creation of the nine water compacts the State of Colorado ultimately signed.[76]

Historic map of the rivers in the southern Rocky Mountains. Courtesy of Justice Gregory Hobbs.


MAP
Showing the Route pursued by the Exploring Expedition to
NEW MEXICO
AND THE
SOUTHERN ROCKY MOUNTAINS
made under the orders of
CAPTAIN J.C. FREMONT U.S. TOPOGRAPHICAL ENGINEERS
and conducted by
LIEUT. J.W. ABERT assisted by LIEUT. W.G. PECK U.S.T.E.
during the year 1845
Notes
MISSOURI
SIOUX INDIANS
PAWNEE INDIANS
ARAPAHOE AND CHEYENNE INDIANS
COMANCHEE AND KIOWA INDIANS
EL LLANO ESTACADO
SALT PLAINS
Arkansas River
Kansas River
Missouri River
Nebraska or Platte River
North Fork of the Platte
South Fork of the Platte
Republican Fork of the Kansas
Smoky Hill Fork of the Kansas
Red Fork of Arkansas
North Fork of Canadian
Cimarron R.

Carpenter became especially concerned about the Colorado River. California, a prior appropriation state, was growing rapidly.[77] Carpenter feared that without an agreed apportionment between the states, California farmers and municipalities would appropriate the river to the point that Colorado would not be able to provide for future development.[78] With a vision to protect Colorado, Carpenter became the principal force in the negotiation of the Colorado River Compact, and went on to negotiate additional compacts on behalf of Colorado.[79] Carpenter's model guided other negotiators of interstate water compacts, providing greater certainty to water users in all participating states.[a]

Interstate water compacts are formal agreements among participating states. The United States Constitution authorizes these compacts, and state legislatures and the United States Congress must ratify them for them to take effect. 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, over the management of interstate waters. As this chapter more fully describes, litigation still occurs regarding compact interpretation; however, that litigation tends to be more streamlined and 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 states share water. The compacts also identify and delineate the rights and obligations that control the use and future development of every stream in Colorado.

Colorado's Interstate Compacts and Interstate Equitable Apportionment Decrees

Colorado River Compact

The Colorado River Compact is the foundation for a complicated body of law regarding use and management of the Colorado River. Together, the Colorado River Compact and the associated body of law are known as the "Law of the River."[b] Negotiators of the compact signed it on November 24, 1922, and the United States Congress approved it by passage of the Boulder Canyon Project Act in 1929.[80]

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).[81] Lee Ferry, Arizona marks the dividing point between the basins[82] (See Figure 2.2-1). The compact recognizes each basin's right to the beneficial consumptive use of 7.5 million acre-feet of water per year in perpetuity.[83] The Lower Basin states may increase their beneficial consumptive use by 1 million acre-feet per year.[84] 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 zfor any period of 10 consecutive years."[85]

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.[86] If no surplus exists, the Upper and Lower Basin states are to share equally in meeting any such deficiency.[87] In addition to the apportionment provisions, the Colorado River Compact asserts that the compact does not affect present, perfected rights, and recognizes the states' respective authority to regulate and control the appropriation, use, and distribution of water within their boundaries.[88] 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."[89] Complete text of the compact is available here.[90]

[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).

[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.

FIGURE 2.2-1 THE COLORADO RIVER BASIN

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), plus Arizona, which receives an allocation based on the portion of the state that is located in the Upper Basin.[91] These five states signed the compact on October 11, 1948, and subsequently ratified it. Congress then ratified it in 1949.[92] 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.[93] 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.[94] Each of the four Upper Division states and the federal government may appoint a commissioner to the commission.[95]

The Upper Colorado River Basin Compact sets forth specific terms for apportioning, among the states, the use of interstate tributaries to the Colorado River. These interstate tributaries include the Yampa, San Juan, Little Snake, and Henry's Fork.[96] The compact also recognizes water use as decreed by the La Plata River Compact, and accounts for such uses as part of the Upper Colorado River Compact.[97] Complete text of the compact is available here.[98]

Arkansas River Compact

Recognizing the value of settling uncertainties associated with the equitable apportionment decree from *Kansas v. Colorado,* those two states signed the Arkansas River Compact on December 14, 1948, and Congress ratified it in 1949.[99] This compact does not impose any fixed-delivery obligation.[100] Instead, it protects water uses in existence in 1949, and limits future development in either Colorado or Kansas to the extent that it would cause any material depletion of usable state-line flow.[101] The compact also addresses the allocation of benefits from use of storage at John Martin Reservoir, whose construction was complete the same year the Congress approved the compact.[102] Specifically, the compact directs that John Martin Reservoir be operated for the benefit of both states, and provides specific terms for operation.[103] 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.[104] The compact also establishes the Arkansas River Compact Administration, with designated roles and responsibilities.[105]

Based on its authority and obligations, the Arkansas River Compact Administration adopted the 1980 Operating Plan for John Martin Reservoir, substantially modifying the storage and release of water from the reservoir to improve the efficiency of water delivery to users in both states.[106] Recent litigation in *Kansas v. Colorado* provides more specific guidance for administration of the river, within the framework established in the compact and the operating plan.[107] Complete text of the compact is available here.[108]

Animas-La Plata Project Compact

Signed on June 7, 1969, this compact between Colorado and New Mexico informs the operation of the Animas-La Plata Project.[109] The compact recognizes New Mexico's right to divert and store water from the Animas and La Plata Rivers, for uses the federal reclamation Animas-La Plata Project describes, with the same priority as those diversions made under the same project for Colorado users.[110] The compact further clarifies that any of New Mexico's use of these waters counts toward that state's allocation under the Upper Colorado River Basin Compact.[111] Complete text of the compact is available here.[112]

La Plata River Compact

Following on the heels of the Colorado River Compact, New Mexico and Colorado signed the La Plata River Compact on November 27, 1922, and Congress approved it in 1925.[113] 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.[114] This compact allows both states unrestricted use of the river between December 1 and February 15 of each year.[115] During the rest of the year, the compact entitles each state to unrestricted water when the interstate gage station is greater than 100 cubic feet per second.[116] 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.[117] Additionally, the compact allows for alternating periods of use between the two states during times of low flow, and specifies that it will not consider minor deviations from the required water deliveries to be a violation.[118] Complete text of the compact is available here.[119]

Republican River Compact

Colorado, Kansas, and Nebraska signed the Republican River Compact on December 31, 1942, and Congress ratified it in 1943.[120] 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.[121] 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.[122] In addition, the compact allocates the entire water supply originating in the basin downstream from the lowest crossing of the river at the Nebraska-Kansas state line for beneficial consumptive use in Kansas.[123] 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.[124]

Rather than 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 officials may, by unanimous action, adopt rules and regulations consistent with the compact.[125] Consequently, in 1959 the states established the Republican River Compact Administration (RRCA).[126] 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.[127] Under the accounting procedures the RRCA established, 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.[128]

Despite efforts to avoid litigation and promote interstate amiability through 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 United States Supreme Court. Complete text of the compact is available here.[129]

Rio Grande River Compact

The Rio Grande Compact allocates beneficial use of water from the Rio Grande River among Colorado, New Mexico, and Texas. These states signed the Rio Grande Compact on March 18, 1938, and Congress approved it the following year.[130] 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.[131] 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.[132] 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.[133] 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.[134] The compact also establishes a commission for compact administration purposes. Colorado's state engineer serves as Colorado's commissioner.[135] Complete text of the compact is available here.[136]

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.[137] This compact allocates the waters of the South Platte River between Colorado and Nebraska.[138] 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.[139] 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.[140] Like the La Plata Compact, the South Platte Compact specifies that minor irregularities in water delivery will not constitute a violation of the compact.[141] Complete text of the compact is available here.[142]

Amended Costilla Creek Compact

Colorado and New Mexico signed the Costilla Creek Compact on September 30, 1944, and amended the compact in 1963.[143] Congress ratified it in 1963. 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.[144] 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.[145] 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.[146] Costilla Creek flows downstream from where the water leaves the mountains make deliveries to water users in Colorado.[147] Moreover, the compact allocates 36.5 percent of the usable capacity of the Costilla Reservoir to Colorado, and 63.5 percent to New Mexico.[148] 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.[149] A commission comprising the state engineers for both Colorado and New Mexico oversees the compact.[150] Complete text of the compact is available here.[151]

Laramie River Decree

The decree in *Wyoming v. Colorado,* 353 United States 953 (1957), permits Colorado to divert 49,375 acre-feet of water per calendar year from the Laramie River and its tributaries, provided that Colorado diverts no more than 19,875 acre-feet per calendar year of that total amount outside of the Laramie River Basin.[152] Further, Colorado may divert no more than 1800 acre-feet 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 the court designated at the time of the decree, while waters diverted for use outside of the basin are not subject to that restriction. The waters of Sand Creek are specifically excluded from the operation of this decree.[153] Complete text of the decree is available here.[154]

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.[155] 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, orstock-watering purposes.[156] Complete text of the decree is available here.[157]

Other Institutional Interstate and Federal Agreements

To effectively manage water resources, Colorado has entered into many interstate agreements (rather than more formalized compacts) in addition to the compacts and interstate equitable apportionment decrees described above. Two such agreements are memoranda of understandings (MOUs) between Colorado and neighboring states; the MOUs involve Pot Creek in Utah and Sand Creek in Wyoming. This plan more fully describes these less-formally recognized interstate water agreements below.

In addition, Colorado is 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 rise directly to the United States Supreme Court and inevitably result in expensive, protracted litigation, Colorado, the federal government, and downstream states have engaged in an unprecedented amount of cooperation and interstate consensus the last two decades about matters related to enforcement, interpretation, or implementation of the interstate compacts, or reconsideration of equitable apportionment decisions. The result of this cooperation is that interstate agreements have ultimately resolved many disputes. This plan further describes some of these cooperative arrangements below.

Pot Creek Agreement

Rather than using an interstate compact, Colorado and Utah used an MOU to define their relationship regarding Pot Creek.[158] Originating in the Uinta Mountains in Utah, Pot Creek flows for eight miles within Colorado before joining the Green River. The two states signed the Pot Creek MOU on April 1, 1958 and established an equitable and workable division of water. This MOU stipulates that both Colorado and Utah believed that a compact would eventually be necessary to appropriate water between the two states, but that in the meantime, the MOU would help develop a functioning system. 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 MOU also calls for a division of the expenses, with Utah bearing 80 percent of the costs and Colorado bearing 20 percent. Additionally, this MOU states that the states may not exercise direct flow diversions before May 1 of each year, and establishes a schedule of priorities for use in the two states.[159]

Sand Creek Agreement

Sand Creek originates in the Laramie Mountains of Colorado and flows into Wyoming, where it joins the Laramie River.[160] 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 Colorado to deliver 40 cubic feet per second over a seven-day period at the beginning of the irrigation season; after that period, 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.[161]

Colorado River Agreements

Within the Colorado River Basin in the last several decades, states have made extraordinary strides toward cooperation. 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. This plan further describes these programs.

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 (the "Three Species Agreement").[162] Through a collaborative and cooperative interstate effort, the states created this agreement to expedite the implementation of conservation measures for the three species. Using coordinated, state-driven preventative measures, the Three Species Agreement seeks to minimize potential threats to the species that could result in a federal listing.[163]

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.[164] 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.[165]

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 the federal government have also continued to develop a working relationship with Mexico, resulting in Minutes 316-319 to the 1944 Water Treaty.[166] These minutes identify and implement voluntary options for creating a larger quantity of water in the system, enhancing environmental values, providing Mexico with 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 that are mutually beneficial to both countries—and that are consistent with the 1944 Water Treaty and the Law of the River.

In response to the basin-wide drought that began 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 runoff and flow in the Colorado River.[167]

Most recently, the Colorado River Basin states have turned their attention to: 1) Collaborating on drought contingency planning to protect certain reservoir thresholds in the event of continued drought conditions; 2) protecting power generation and instream natural resources, including endangered fish and other natural resources; and 3) 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 enabling endangered species recovery and protecting water development. The Platte River Recovery Implementation Program, established in 1997 and authorized by Congress in 2008, seeks to restore habitat, provide for increased streamflows, and encourage an adaptive management approach to river operations.[168] Chapter 6 further describes this program.

Republican River Agreements

Within the Republican River Basin, the State of Colorado continues to be involved with Colorado water users, as well as with water users in Nebraska and Kansas, to identify reasonable methods for future compact compliance by all parties. Colorado recently constructed the Compact Compliance Pipeline (CCP) 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 the states reach a final agreement, water deliveries from the CCP will count toward Colorado's compact obligations 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). The DWR is addressing groundwater issues 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 with interstate compact rights and authorities. The State is also involved in an interstate lawsuit before the United States 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.[169]

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 State worked with local stakeholders to construct Long Hollow Reservoir 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 State worked with local governments, neighboring states, tribal interests, and the federal government to complete the Animas-La Plata Project. The water the CWCB purchased for this project will be important to Colorado 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, which state law explicitly delegates to them, to address the needs of respective constituents.

Generally, counties have discretionary powers to provide services, including water and sewer, and to operate districts for irrigation and recreation, among other uses. 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.[170] 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.[171]

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.[172] 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 about 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.[173]

The act requires counties and municipalities to adopt master plans for the development of their jurisdictions; these plans which may include a water supply component.[174] State law encourages water efficiency and conservation through public project landscaping guidelines.[175] 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. Counties and municipalities can only use these fees to offset the added burden of new development on existing infrastructure and capital improvements, and cannot use them for ongoing expenses and maintenance.[176] Nearly half of Colorado's cities have implemented impact fees, and the most commonly used fees are for water and sewer.[177] When the market can sustain the full price increase needed to cover the fee, the new development's residents typically bear the costs collectively through increased housing prices, and the developer pays the actual fee.[178]

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 voters approve. State law also authorizes the municipality to protect the waterworks and water supply from pollution for up to five miles above the point from which the water is taken.[179]

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 site selection, construction, or extensions of major new water and sewage treatment systems. This ensures that local governments can consider and mitigate the effects of new developments.[180]

Special Districts Overview

Colorado law allows voters to create many types of local special districts,[181] 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. 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.[182] Several special districts are 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.[183]
- **Sanitation Districts:** Provide for storm or sanitary sewers, or both; flood and surface drainage; treatment and disposal works and facilities; solid waste disposal facilities or waste services; and all necessary or proper equipment.[184]
- **Water and Sanitation Districts:** Provide both water and wastewater services.[185]
- **Metropolitan Districts:** Provide two or more of a variety of services, including parks and recreation, wastewater, and water.[186]
- **Park and Recreation Districts:** Provide park or recreational facilities or programs.[187]
- **Irrigation Districts:** Provide for the irrigation of lands and the drainage work necessary to maintain irrigation in the district.[188]
- **Water Conservancy Districts and Water Conservation Districts:** Build and administer water projects, interface with federal agencies, and administer the repayment of project capital and operations and maintenance costs, as well as 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.[189]
- **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.[190]
- **Groundwater Management Districts:** Adopt rules and regulations to help administer groundwater within the district.[191]

The Department of Local Affairs Overview

The Department of Local Affairs (DOLA) is responsible for supporting Colorado's local communities and augmenting local government capacity by providing training, technical, and financial assistance. 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.

Houses dot the hillside above Grand Lake. Photo: M. Nager.

2.4 LOCAL, STATE, TRIBAL, AND FEDERAL WATER PLANNING, APPROVAL, AND PERMITTING

Those that 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 the State can identify and address environmental issues 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.

Lake Nighthorse is part of the Animas La Plata Project and provides water for local communities including Durango and the Ute Mountain Ute Tribe. Photo: M. Nager.

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, and 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. Section 9.4 of Colorado's Water Plan details those powers.[192]

State Entities:

- *The CWCB* is a division within the Colorado DNR. The CWCB sets water policy and planning in Colorado and has a role regarding the review of mitigation plans.[193]
- *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 DNR and is responsible for water administration. The DWR ensures that the water rights for a project can be administered.

- *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 DNR. CPW reviews state wildlife mitigation plans under Colorado's state statutes, known as 122.2 plans.[194]

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 Indian Reservation.
- The Ute Mountain Ute Tribe Environmental Programs Department is responsible for implementing tribal water-quality standards (including anti-degradation provisions under Section 303 of the CWA) and for federal permitting under Section 401 of the CWA for projects located on the Ute Mountain Ute Indian Reservation.
- The Southern Ute Indian Tribe Water Resources Division is a division of the Southern Ute Indian Tribe overseeing: 1) Water resources planning; 2) project implementation, including cooperative projects with 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. Three federal agencies own substantial tracts of land in Colorado:

- *The U.S. Forest Service (USFS)* manages national forests and grasslands (see also Section 2.5).
- *The U.S. Bureau of Land Management (BLM).*
- *The U.S. National Park Service (NPS)* manages national parks and monuments (see also Section 2.5).

In addition, federal agencies must comply with numerous federal laws in order to issue permits and other authorizations for any water projects. These include, for example, the Federal Land Policy and Management Act (FLPMA), the ESA, the Clean Water Act (CWA), and the Wild and Scenic Rivers Act. The existence of a federal nexus often triggers the need for consultation under Section 7 of the ESA. A water project is considered to have a federal nexus if it involves federal funding, federal permitting or licensing, use of federal lands, or a federal program. All significant federal actions also require compliance with the National Environmental Policy Act (NEPA). In addition to the land management responsibilities listed above, the following agencies can all act as lead agencies responsible for NEPA compliance and other federal authorizations; many of these agencies are responsible for compliance with land-use authorizations for water projects.

- *The Environmental Protection Agency (EPA)* comments on NEPA documents and reviews the United States Army Corps of Engineers' (Corps) Clean Water Act 404 permits.
- *The United States Army Corps of Engineers (Corps)* is responsible for 404-permitting, related to the placement of dredged or fill material in waters of the United States, including jurisdictional wetlands, under the CWA; it is also responsible for the approval of uses of the federally owned flood control and water supply facilities.

- *The United States Forest Service (USFS)* manages national forests and grasslands and has substantial land holdings in Colorado (Section 2.5 describes its role related to water rights). The USFS assumes the lead agency role under NEPA in certain situations.
- *The United States 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 whether 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 a 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, among other projects. The BOR is responsible for contracting water out of these federal projects, and these federally owned facilities.
- *The United States Bureau of Land Management (BLM)* is responsible for managing substantial public-land holdings within Colorado. The BLM assumes the lead agency role under NEPA in certain situations.
- *The United States National Park Service (NPS)* manages substantial land holdings within Colorado for national parks, monuments, recreation areas, and historic sites (see Section 2.5 for the NPS). The NPS assumes the lead agency role under NEPA in certain situations.
- *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 NEPA requires, and they participate as cooperating agencies in other agencies' NEPA processes.[195] The Council on Environmental Quality (CEQ) regulations that address cooperating governing agencies 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.[196]

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. On a case-by-case basis, Colorado participates as both a non-federal project sponsor and as a cooperating technical agency for water projects in the state.

Section 9.4 of this plan explores in greater detail the permitting process, 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 to support Colorado's growing population in the future.[197] In 2005, the General Assembly created the basin roundtables and the IBCC, which are participants in the CWCB's statewide water planning efforts.[198]

The IBCC comprises two representatives from each basin roundtable, six governor appointees, and two appointees from the state legislature.[199] Their charge is to develop agreements among basins and to develop statewide policy issues.[200]

Both the basin roundtables and the IBCC provide critical input to the SWSI and to 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 the SWSI periodically updates 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 through which project proponents can find technical and financial support.[201] 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.[202] These planning efforts and the technical documentation supporting them often provide a baseline of information that is helpful in the permitting process.

CHAIRMAN MANUEL HEART

UTE MOUNTAIN UTE TRIBE
SOUTHWEST RIVER BASIN

Manuel Heart is the current Chairman of the Ute Mountain Ute Tribe. He was sworn in for a three year term on November 1, 2013. Chairman Heart is pictured in front of Lake Nighthorse, the reservoir he worked to get approved.

My first and foremost hope for the future of water supply is to preserve and protect the 1868 Ute Mountain Ute water treaty settlement of the Animas La Plata project water and the McPhee reservoir for my Tribe. I also hope to help with a state water plan and look at upper and lower basin allocations and a water plan for the future.

I believe that in Colorado's Water Plan we must work toward partnerships for the future of water, but we as Ute Mountain Ute Tribe are also looking to work with the state of Colorado on a

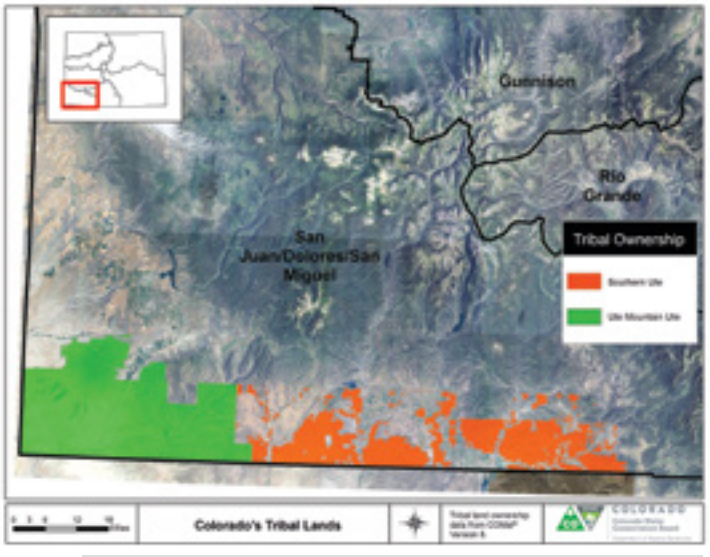
CONTINUED AT END OF CHAPTER

PROFILE

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 (as Section 2.4 describes), 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—totaling 24,996,075 acres, including tribal lands.[203] 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 Indian 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 Indian Tribe is governed by its Tribal Council, whose constitution was approved in 1936.[204] The Ute Mountain Ute Tribe is governed by its Tribal Council, whose constitution was approved in 1940.[205] Beyond the two tribes, only the USFS, the NPS, and the BLM have pursued substantial reserved water rights associated with their landholdings in Colorado.

FIGURE 2.5-1 COLORADO'S TRIBAL LANDS



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."[206] The Winters Doctrine, which the United States Supreme Court established in 1908, generally indicates 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, while establishing the priority date as the date of the reservation's formation.[207] The Winters Doctrine was a landmark case: it was the first time the federal government had deviated from the established convention that water law was purely a state matter.[208] The court subsequently expanded application of the Winters Doctrine beyond tribal reservations, also applying the doctrine to other "reserved" federal lands, such as USFS lands. These lands have been withdrawn from the public domain, and water is deemed either expressly or impliedly necessary to satisfy the primary purposes of the federal reservation.[209] 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 formally list, its federal claims to water, nor was it required to make those claims the subject of any decree or permit within the state water administration system. Rather, federal reserved water rights existed outside of

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

As a direct response to this unintended ambiguity, Congress adopted the McCarran Amendment in 1952. The amendment rectified the fact that "the extent and priority of federal water rights, including federal reserved rights, were unknown and not subject to adjudication or determination in state courts."[210] To overcome this complication, the amendment provides a limited waiver of the United States' sovereign immunity for the purpose of including the United States (on its own behalf or on behalf of the tribes) in state stream adjudications and water administration suits.[211] Since then, Colorado has settled and adjudicated tribal reserved rights claims asserted on behalf of the Southern Ute Indian 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 conjunction with state-based water rights.

Federal Agencies

Water rights held by the USFS, the USFWS, and the NPS have complicated histories.[212] 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 water court denied and withdrew with prejudice the USFS claims for nonconsumptive reserved rights.[213] In Water Division 3, the USFS reached a stipulated decree settlement for both consumptive and nonconsumptive reserved rights in 2000.[214] 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.[215] The USFS's applications for federal water rights are still pending in Water Division 7.[216]

The USFWS manages eight national wildlife refuges and two national fish hatcheries in Colorado. These facilities use water in compliance with water-rights 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 National Park, and Mesa Verde National Park.[217] The federal government also maintains a wild and scenic river designation that includes a federal reserved water right for the upper reaches of the Cache La Poudre under the Wild and Scenic Rivers Act.[218]

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).[219] On behalf of the Southern Ute Tribe and Ute Mountain Ute Tribe, the United States filed claims to water in Southwest Colorado to resolve reserved rights claims for the two reservations in 1976. 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.[220] In 1988, Congress passed the Colorado Ute Indian Water Settlement Act, approving the 1986 Settlement Agreement. The settlement set forth shared responsibilities for the administration of some of the tribal rights.[221] A critical component of the 1986 Settlement Agreement is the provision of water to the tribes from the Animas-La Plata Project, a participating project of the Colorado River Storage Project Act, which the Colorado River Basin Project Act authorized.[222]

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. 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.[223] The Ute Tribes, the State of Colorado, and the United States agreed to an institutional framework that 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 recognizes the need for cooperative and coordinated administration of the tribes' reserved water rights under state and federal law.

A LOOK AT HISTORY

The two-year negotiation of the Colorado Ute Indian Water Rights Final Settlement Agreement was formally concluded at a signing ceremony on December 10, 1986, in the old Supreme Court Chambers, Colorado State Capitol.

source: J. William McDonald's personal collection [Bureau of Reclamation photographer unknown].

A LOOK AT HISTORY

Commission members signing the Rio Grande Compact in 1938, along with their legal and engineering advisors. This compact still guides water supply management between Colorado, New Mexico, Texas, and Mexico.

JOE GALLEGOS, CONTINUED FROM PAGE, 2-4:
from the legacy of water battles that my forefathers endured. They left us a long record and appreciation for the miracles of water. So when misuse or pollution occurs on the ever "blood of the land," the issue becomes very personal.

I am 59 years old and have a college degree in Mechanical Engineering from CSU- Go Rams! Now I am presently a General Partner in the family business, Corpus A. Gallegos Ranches (Colorado Centennial Ranch). I have worked on the Ranch since 1986 when I returned from the oil business (worked five years in oil patch), to be back on the land, or should I say back with the water. My love for clean water drove me out of the oil industry to my family ranch in San Luis only to get involved in a major water battle with a mining company that involved many water quality issues. With personal and economic reasons to be immersed in water issues, I was appointed to be on the Costilla County Conservancy District in 1989. I was also the Mayordomo (ditchrider) for thirteen years for the San Luis Peoples Ditch (SLPD), known as an acequia. SLPD is the first and oldest established water right in the state but the SLPD acequia was established much earlier than Colorado's statehood. In 1851 pioneers like my Great grandfather, Dario Gallegos, dug the first recorded ditch to divert water from a creek to beneficially use the precious resource.

A satisfying and positive accomplishment of mine is having been involved and having the opportunity to testify in front of the Colorado Agricultural Committee in 2009 for the passage of House Bill HB09-1233, known as the Acequia Recognition Law. The newly enacted law speaks for itself as the acequias strive for a special place in Colorado Water Law.

CHAIRMAN MANUEL HEART, CONTINUED FROM PAGE 2-28:
government-to-government basis to help protect and preserve our treaty of 1868 and to our water rights as Ute Mountain Ute Tribe. In Colorado's Water Plan the State needs to look at our tribal lands for the
Ute Mountain Ute Tribe.

Our land base totals around 600,000 acres and extends into three states: Colorado, New Mexico and Utah. Based on Colorado water law and the compacts between the two states, we cannot manage our water in the contiguous tribal lands as one by taking water across state lines, despite the fact that our lands were established before the states were recognized as states.

I've served on the Ute Mountain Ute tribal council since 1994 in various capacities. In addition to my current chairmanship, I've served as Vice Chairman, Treasurer and Secretary Custodian. I am also a board member on various committees Tribal, State, and National level, including for the Weminuche Construction Company, Brunot Hunting Commission, Blue Mountain Hospital Board, Animas La Plata Water Board, La Plata West water Board, Albuquerque Area Health Board, Colorado Commission of Indian Affairs, Utah Tribal Leaders, National Congress of American Indians, Native American Bank, and Council of Energy Resource Tribes.

I have been involved in water for the Ute Mountain Ute Tribe throughout my career on the Tribal Council. Just as his past Ute elders did, I advocate that water is life for everything in this world and we must protect it.

I started my Tribal Council career with the Animas La Plata project (ALP) in Southwestern Colorado where the tribal reservation is located. I started out lobbing Congress for the authorization of the project, taking many trips to Washington DC with tribal council from Ute Mountain Ute Tribe and

Southern Ute Indian Tribal Council and their non-Indian local water board partners from two states. I was there to witness Secretary Babbits signing ceremony of the authorization of the ALP project at the Interior Department in Washington DC.

I am married to my high school sweetheart Marie Heart, and have 6 children, 16 grandchildren, one great grandson, and many relatives from both sides of our family.

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[214] Concerning the Application for Water Rights of the United States of America in Alamosa, Archuleta, Hinsdale, Mineral, Rio Grande, Saguache, Costilla, and San Juan Counties, Colorado (Dist. Ct., Water Div. No. 3 1998) (decreed in 2000) (No. 81-CW-183 consolidated).
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[216] In the Matter of the Application for Reserved and Appropriative Water Rights of the United States of America in Archuleta, Hinsdale, La Plata, Mineral and San Juan Counties (Dist. Ct., Water Div. No. 7, Colo. 1976)(No.w-1605-76B).; In the Matter of the Application for Reserved Water Rights of the United States of American to Water on, in and under the San Juan National Forest (Dist. Ct., Water Div. No. 7, Colo. 1973)(Nos. 1146-73, 1148-73).
[217] Memorandum of Decision Concerning the Application for Water rights of the United States of America for Reserved Rights in Rocky Mountain National Park in Boulder and Laramie Counties (Dist. Ct., Water Div. No. 1, Colo. 1993) (No. W-8439-76 and W-8788-77).; In the Matter of the Application of the United States of America for Water Rights in the Rio Grande River Drainage in Alamosa and Saguache Counties (Dist. Ct., Water Div. No. 3, Colo. 1981) (No. 81-CW-164).; In the Matter of the Application for Water Rights of the United States of America in Alamosa and Saguache Counties (Dist. Ct., Water Div. No. 3, Colo. 2004)(2004CW35) (decided 2008).; Concerning the Application for Water Rights of the United States of America in Montrose County (Dist. Ct., Water Div. No. 4, Colo. 2001)(2001CW05) (decided 2008).; Concerning the Application of Water Rights for the United States of American in the County of Montezuma (Reserved Water Rights for Mesa Verde National Park), Findings of Fact, Conclusions of Law and Decree (Dist. Ct., Water Div. No. 7, Colo. 1997)(No. W-1633-76).
[218] Revised Findings of Fact, Conclusions of Law, and Decree Concerning the Application of the United States of America for Reserved Water Rights for the Cache La Poudre Wild and Scenic River in Larimer County (Rocky Mountain National Park and Roosevelt National Forest) (Dist. Ct., Water Div. No. 1, Colo. 1986) (No.86-CW-67).
[219] Charles Kappler, *Indian Affairs: Laws and Treaties,* vol. 2, ed. (1904; repr., Washington, DC: Government Printing Office, 1972).
[220] Colorado Ute Indian Water Rights Settlement Act of 1988, Pub. L. No.100-585 (102. Stat. 2973).
[221] Colorado Ute Indian Water Rights Settlement Act of 1988.
[222] Colorado Ute Indian Water Rights Settlement Act of 1988.
[223] 1988 Settlement Act in the Colorado Ute Settlement Act Amendments of 2000, Pub. L. No. 106-554, 114 Stat. 2763A 258 (2001).