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COLORADO WATER LAW: AN HISTORICAL OVERVIEW

JUSTICE GREGORY J. HOBBS, JR.

TWO RIVERS

Thomas Hornsby Ferril

Two rivers that were here before there was
A city here still come together: one
Is a mountain river flowing into the prairie;
One is a prairie river flowing toward
The mountains but feeling them and turning back
The way some of the people who came here did.

Most of the time these people hardly seemed To realize they wanted to be remembered, Because the mountains told them not to die.

I wasn't here, yet I remember them, That first night long ago, those wagon people Who pushed aside enough of the cottonwoods To build our city where the blueness rested.

I After receiving his J.D. from the University of California Berkeley (Boalt Hall), Justice Hobbs was law clerk to Judge William E. Doyle of the Tenth U.S. Circuit Court of Appeals. He then served as an enforcement attorney with the U.S. Environmental Protection Agency, and then as the First Assistant Attorney General for the State of Colorado, Natural Resources Section. Upon entering the private sector, Justice Hobbs developed a practice that emphasized water, the environment, land use, and transportation. Formerly a senior partner with the Denver law firms of Davis, Graham & Stubbs, LLP, and then of Hobbs, Trout & Raley, PC, he was appointed Justice of the Colorado Supreme Court in May of 1996.

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They were with me, they told me afterward,
When I stood on a splintered wooden viaduct
Before it changed to steel and I to man.
They told me while I stared down at the water:
'If you will stay we will not go away.'

INTRODUCTION

Rivers, plains, and mountains make us Coloradans. Residing on one of two sides of this Continent's backbone, some of us look to the West to the Great Divide, others to the East. When our hearts follow our eyes, when we think about this magnificent land and our fellow Coloradans on the other side, we truly gain the power of this rivered place. Thomas Hornsby Ferril called on us—his fellow Coloradans—to remember and to live our origins: strength of mountain stream, hope of prairie stream.

Beneficial use and preservation are two primary public policies which guide western natural resource law; they are the two chambers of our western heart, the two lobes of our brain. Colorado water law establishes the right of water appropriation to serve public and private needs. New uses and changes in existing water rights continue to exist and evolve within the framework of the water law. The preservation interests are addressed primarily by state and federal land use law and environmental regulatory law, such as is evidenced by the acquisition of open space and parks by public entities, as well as federal land reservations for national parks, monuments, wilderness areas, and wildlife preserves.

Western prior appropriation water law is a property rights-based allocation and administration system, which promotes multiple use of a finite resource. The fundamental characteristics of this system guarantee security, assure reliability, and cultivate flexibility. Security resides in the system's ability to identify and obtain protection for the right of use. Reliability springs from the system's assurance that the right of use will continue to be recognized and enforced over time. Flexibility emanates from the fact that the right of use can be transferred to another, subject to the requirement that other appropriators not be injured by the change.

Dean Frank Trelease described an "ideal water law" as being a property rights system of uses, which rewards initiative, promotes reliable planning and decision making, and subjects those property rights to regulation in the public interest:

An ideal water law should give a water right those characteristics that will encourage and enable people to make the best decisions as to wa-

^{1.} Thomas Hornsby Ferril, Two Rivers, in Thomas Hornsby Ferril and the American West 122 (Robert C. Baron et al. eds., 1996).

ter use in their own interests and hence ultimately in the public interest. Private uses of water should be based upon property rights not dissimilar to the property rights in more stable and tangible assets, and like other property rights they should be subject to regulation in the public interest.

Colorado water law illustrates the public interest at work through the interplay of two forces. On the one hand, individual and public entity initiative secure water supplies for beneficial use in a system of property rights creation. On the other hand is the enforcement of those rights, subject to local, state, and federal regulation aimed at meeting societal choices made by legislative means.

This article focuses on major historical and legal themes that emerge from Colorado's water experience. It is accompanied by an appendix intended to highlight the major historic, statutory, and case law events that give structure to Colorado water law.

CUSTOM AND NECESSITY IN THE COLORADO TERRITORY

President Thomas Jefferson wrote to Meriwether Lewis that "[t]he object of your mission is single, the direct water communication from sea to sea formed by the bed of the Missouri & perhaps the Oregon." His use of the term *perhaps* suggests that Jefferson, the scientist, was at work. But Jefferson's mistaken belief in a mighty waterway of commerce crossing an entire continent stemmed directly from his grounding in the law of running water, and from his assumption that the geography of well watered climes also existed in the Louisiana Territory.

The Justinian Code of the fifth century enunciated what we recognize today as the riparian doctrine: running water is the property of the public for use by traders and fisherman, whereas the banks of the river are the property of the adjoining landowner. The law of running water was inclusive of a riparian landowner's right to make a de minimus use, or reasonable use, for milling and domestic purposes. Of course, this use was subject to the water's return to the stream without substantial alteration to either its quality or quantity. This law of running water was carried into the English common law. But as the waters ran out in the vast mountainholds of the new American West, Lewis and Clark would ultimately ditch their boats and trek by foot and horse. So, too, would the western territories ultimately ditch ri-

^{2.} Frank J. Trelease, Policies for Water Law: Property Rights, Economic Forces, and Public Regulation, 5 NAT. RESOURCES J. 1, 8-9 (1965).

^{3.} LETTERS OF THE LEWIS AND CLARK EXPEDITION, WITH RELATED DOCUMENTS 1783-1854, 136-38 (Donald Jackson ed., 2d ed. 1978) reprinted in Stephen E. Ambrose, Undaunted Courage: Meriwether Lewis, Thomas Jefferson and the Opening of the American West 116 (Simon and Schuster 1996).

^{4.} See James Williams, The Institutes of Justinian Illustrated by English Law 84 (2d ed. 1893).

^{5.} *Id*.

parian water law as inapplicable to their clime and use.

Of the public lands secured to the United States by the Louisiana Purchase of 1803 and the 1848 Treaty of Guadeloupe Hidalgo, Colorado was carved out of the then-existing Kansas and Utah Territories when Kansas became a state in 1861. Thirty-seven percent of Colorado still resides in federal ownership. The settlers of the new frontier were invited onto the public domain through policies enacted by the federal government aimed at securing the occupation of the continent by citizens of the United States. One of these settlers, Benjamin Eaton, was to have a profound role in early Colorado water use.

After gold was discovered at the confluence of Cherry Creek and the South Platte River, Eaton traveled from Iowa to the very western part of the Kansas Territory, journeying with an 1859ers hope of locating vast riches. Born into an Ohio farming family, he viewed canals as a means by which to float boats and barges towards the mighty rivers rather than a means by which to water crops. First attempting to make a life in the Front Range mining camps, Eaton eventually struck out for the San Juans in the dead of winter by way of the Sangre de Christos. The promise of quick riches was soon played out. However, in the course of his introduction to the extremes of mountain weather and living, Eaton came to learn how water could be re-routed from a more abundant stream for use at water deficient mining locations.

Eaton ventured away from the Colorado mining camps to work the irrigated farm land of the Maxwell Land Grant outside Cimarron in northern New Mexico. Tapping into a rich Southwestern water heritage, he soon added to his growing appreciation for Western water usage. It was in New Mexico that he was introduced to acequias, the community ditches that had utilized gravity to deliver water to the fields of northern New Mexico since the founding of Santa Fe in 1609. By 1700, an estimated sixty acequias were operating in New Mexico, with an additional one hundred in the 1700s, and then three hundred more in the 1800s.8 Because the official seats of government were located far away in Spain and Mexico, expediency dictated that local custom become the law in a pioneering New Mexico. In order to serve local conditions, many equitable principles of community cooperation were applied when distributing water.9 Of course, these early Spanish settlers did not invent Southwestern irrigation. Native peoples of the Americas had practiced irrigation long before the Spanish entrance into the New World. Indeed, a Spanish explorer entering New Mexico in 1583 reported finding "many irrigated corn fields with canals and dams" built by Pueblo Indians."

^{6.} See People v. Schafer, 946 P.2d 938 (Colo. 1997).

^{7.} Jane E. Norris & Lee G. Norris, Written In Water: The Life of Benjamin Harrison Eaton 32, 220-22 (1990).

New Mexico State Engineer's Office, 1997 Acequias 4 (1997).

^{9.} IRA G. CLARK, WATER IN NEW MEXICO: A HISTORY OF ITS MANAGEMENT AND USE 15 (1987).

^{10.} New Mexico State Engineers Office, supra note 8, at 3.

Eventually, Benjamin Eaton left the New Mexico territory and began to draw on his experiences with the New Mexican acequias. In 1864, he dug a direct flow ditch from the Poudre river to his farm. He helped other settlers in Greeley in the construction of the Union Colony No. 2 Canal in the early 1870s. It was Eaton who oversaw the construction of the incredibly long and wide Larimer and Weld Canal in Northern Colorado. He then assisted in laying out the High Line Canal that would run through the Denver basin. As a member of the Territorial and State Legislatures, Eaton worked to shape water legislation, including the Adjudication Acts of 1879¹¹ and 1881. He served as Governor from 1885-87, and later founded the town of Eaton, to which he brought a sugar beet factory.

Eaton was just one of many Colorado pioneers. Throughout the state, farms and towns took shape interdependently. The Homestead Act of 1862¹⁴ was instrumental in promoting settlement on the public domain, and as the mining camps disappeared, communities sprang up as agricultural activity and productivity increased. Soon the valleys of the Arkansas, the Gunnison, the San Luis, and the Grand, blossomed. The homestead entries in the State of Colorado totaled 107,618, and covered 22,146,400 acres of land. Only Montana and North Dakota experienced more entries.¹⁵

Settlers of the West favored independent action and feared corporate monopolies. The Jeffersonian ideal of strong families civilizing the continent through farming animated the Homestead Law as well as the Western water doctrine of beneficial use, whose principles spurned waste and speculation. Water served the public interest as that interest was then perceived in Colorado. In 1861, the Territorial Legislature provided that water could be taken from the streams to lands not adjoining the waterways. Thus occurred, at the earliest opportunity, Colorado's departure from the common law riparian doctrine and its reasonable use corollary. In 1872, the Colorado Territorial Supreme Court recognized rights of way by reason of the "natural"

^{11. 1879} Colo. Sess. Laws 99-100.

^{12. 1881} Colo. Sess. Laws 142.

^{13.} Norris & Norris, supra note 7, at 94, 104, 122, 139, 140, 146, 214.

^{14.} Homestead Act of 1862, ch. 75, §1, 12 Stat. 392 (1862) (repealed 1976).

^{15.} CARL UBBELOHDE ET AL., A COLORADO HISTORY 259 (1972).

^{16.} In the words of Jefferson, "[t]hose who labor in the earth are the chosen people of God." (Thomas Jefferson, Jefferson Himself: The Personal Narrative of a Many-Sided American 34 (Bernard Mayo ed., 1970)).

^{17.} Colo. Territorial Laws 67-68 (1861).

^{18.} See Tyler v. Wilkinson, 24 F. Cas. 472, 474 (C.C.D.R.I. 1827) (No. 14,812); Pyle v. Gilbert, 265 S.E. 2d 584 (Ga. 1980). This "pure" prior appropriation doctrine contrasts, for example, with California's riparian/prior appropriation/public trust hybrid which California chose by reason of its own custom and law; see National Audubon Soc'y v. Superior Court, 658 P.2d 709 (Cal. 1983); Lux v. Haggin, 10 P. 674 (Cal. 1886).

law" of custom and necessity. No one could now dispute that water could be carried to the place of use through intervening lands owned by others.¹⁹

CONGRESSIONAL DEFERENCE AND THE COLORADO CONSTITUTION

Through the 1866 Mining Act,²⁰ the 1877 Desert Lands Act,²¹ and subsequent legislation, Congress provided that states and territories could establish their own water laws and create property rights to unappropriated water on and off the federal lands:

What we hold is that following the act of 1877 if not before, all non-navigable waters then a part of the public domain became *publici juris*, subject to the plenary control of the designated states, including those since created out of the territories named, with the right in each to determine for itself to what extent the rule of appropriation or the common-law rule in respect of riparian rights should obtain.

The oft-reiterated congressional choice not to adopt a federal water law system reflected the nation's pro-settlement agenda and its preference for federalism. Just like the appropriation doctrine itself, congressional deference to state water law choices arose out of the westward-leaning frontier experience.

The Colorado Constitution of 1876 declared that unappropriated water is "the property of the public . . . dedicated to the use of the people of the state, subject to appropriation," that the right to appropriate the unappropriated waters of the natural streams of the state for beneficial use in order of priority shall never be denied, and that rights of way for the conveyance of water by ditches, canals, and flumes can be secured for agricultural, domestic, mining, and manufacturing purposes from the stream across intervening public, private, or corporate lands by payment of just compensation.

Riding on the notoriety of his audacious Colorado River expeditions of 1869 and 1871, ²⁶ John Wesley Powell informed Congress of the

^{19.} Yunker v. Nichols, 1 Colo. 551, 570 (1872).

^{20.} Mining Act of 1866, ch. 262, §9, 14 Stat. 253 (1866) (current version at 43 U.S.C. §§661-66 (1994)).

^{21.} Desert Lands Act, ch. 107, 19 Stat. 377 (1877) (current version at 43 U.S.C. §§641-48 (1994)).

^{22.} California Oregon Power Co. v. Beaver Portland Cement Co., 295 U.S. 142, 163-64 (1935); see also California v. United States, 438 U.S. 645, 662 (1978) ("[E]xcept where the reserved rights or navigation servitude of the United States are invoked, the State has total authority over its internal waters.").

^{23.} COLO. CONST. art. XVI, § 5.

^{24.} COLO. CONST. art. XVI, § 6.

^{25.} Colo. Const. art. XVI, § 7.

^{26.} See David Lavender, River Runners of the Grand Canyon 12-21 (1985).

need for an irrigation survey to locate reservoir sites, and the need for recognition of the "natural law" of appropriation and use of water arising by custom and necessity in the arid lands west of the hundredth meridian. Powell wrote that "monopoly of land need not be feared. The question for legislators to solve is to devise some practical means by which water rights may be distributed among individual farmers and water monopolies prevented. In Colorado, neighboring farmers also recognized this critical fact and began to form mutual ditch companies for water delivery. A share in a mutual ditch company represents the ownership pro rata of the water rights and the waterworks of that company. In contrast, carrier ditches were corporate entities formed to construct and operate waterworks for profit. Under the state constitution, they were made the subject of county commission rate regulation.

Colorado water law often exhibits its anti-speculation, proindividual public policy choice. Within the context of state water law, governmental regulation is employed for the primary purpose of identifying and administering rights which water users enjoy by virtue of appropriation for beneficial use under Colorado's Constitution and statutes. Colorado Supreme Court case law and the statutes of the Colorado General Assembly are the primary sources which define and describe this state's water law. Of course, United States' public land law, natural resource law, and environmental law have also had a profound effect on water development and use in Colorado.

ENDURING AND EVOLVING PRINCIPLES OF BENEFICIAL USE

A water right is a property right that arises solely by the act of placing water, theretofore unappropriated, to the appropriator's beneficial purpose. Its place of diversion and use may occur in different watersheds. Successful application to a beneficial use is required, regardless of the method of capture or conveyance. The essential element and value of a water right is its priority for beneficial use to the exclusion of others not then in priority. Beneficial use, the concept of fructifying the land and its product through human labor, is the means by which a water use ripens into a vested water right. Over an

^{27.} JOHN WESLEY POWELL, LANDS OF THE ARID REGION OF THE UNITED STATES 12-14, 41-43 (Harvard Press 1983) (1879).

^{28.} Id. at 41.

^{29.} See Carl Abbott et al., Colorado, A History Of The Centennial State 166 (3d ed. 1994).

^{30.} See Jacobucci v. District Court, 541 P.2d 667, 672 (Colo. 1975).

^{31.} See Bennett Bear Creek Farm Water & Sanitation Dist. v. City & County of Denver, 928 P.2d 1254, 1264 (Colo. 1996).

^{32.} Coffin v. Left Hand Ditch Co., 6 Colo. 443, 447, 449 (1882).

^{33.} See Thomas v. Guiraud, 6 Colo. 530, 532-33 (1883).

^{34.} See Navajo Dev. Co. v. Sanderson, 655 P.2d 1374, 1378-80 (Colo. 1982).

extended period of time, a pattern of historic diversions and use under the decreed right at its place of use will mature and become the measure of the water right for purposes of change. The right is typically quantified not in a flow measurement of cubic feet per second of diversion, but rather in acre-feet of water consumed. Beneficial use is not a defined term in the Colorado Constitution, but the statutory definition of beneficial use is the "use of that amount of water that is reasonable and appropriate under reasonably efficient practices to accomplish without waste the purpose for which the appropriation is lawfully made."

An efficient means of diversion suitable to the use must be effectuated. For example, a municipality diverting a domestic water supply cannot utilize a large, open and leaky structure for conveyance to a location remote from the source of supply. Indeed, an irrigator utilizing an inefficient surface diversion may be required to employ wells to effectuate the diversion if a junior appropriator who might benefit undertakes to pay the expenses involved.

Following application to beneficial use, unconsumed water in the form of return flows must be made available to fill subsequent appropriations. The owner of a water right has no right as against a junior appropriation to waste water or to divert more than can be used beneficially. Nor may that owner extend the time or quantity of diversion and use above that for which the appropriation was made. Imported or developed water, such as trans-mountain or non-tributary water, may be consumed to extinction for beneficial purposes. Reservoirs may be constructed in the natural bed of a stream, provided that their operation does not injure senior water rights.

Discharge of pollution by a senior appropriator which impairs junior beneficial uses, such as mining waste, cannot be justified as a beneficial use of water under the senior appropriation. Extended non-use or intentional acts may result in an abandonment of either the whole water right, or a part thereof. 44

Colorado case law and statutes have emerged which recognize myr-

^{35.} See Williams v. Midway Ranches Property Owners Ass'n, 938 P.2d 515, 521 (Colo. 1997).

^{36.} COLO. REV. STAT. § 37-92-103(4) (1997).

^{37.} See Montrose Canal Co. v. Loutsenhizer Ditch Co., 48 P. 532, 534 (Colo. 1896).

^{38.} See Alamosa La Jara Water Users Protection Ass'n v. Gould, 674 P.2d 914, 935 (Colo. 1983).

^{39.} See Comstock v. Ramsay, 133 P. 1107, 1110-11 (Colo. 1913).

^{40.} See Weibert v. Rothe Bros., Inc., 618 P.2d 1367, 1371 (Colo. 1980).

^{41.} See City & County of Denver v. Fulton Irrigating Ditch Co., 506 P.2d 144, 147 (Colo. 1972).

^{42.} See Larimer County Reservoir Co. v. People ex rel. Luthe, 9 P. 794, 796 (Colo. 1886).

^{43.} See Suffolk Gold Mining & Milling Co. v. San Miguel Consol. Mining & Milling Co., 48 P.2d 828, 832-33 (Colo. Ct. App. 1897).

^{44.} See City & County of Denver v. Middle Park Water Conservancy Dist., 925 P.2d 283, 286 (Colo. 1996); Master's Inv. Co. v. Irrigationists Ass'n, 702 P.2d 268, 271-72 (Colo. 1985).

iad purposes. These include traditional agricultural, stock watering, domestic, municipal, commercial, and industrial uses, power generation, and flood control uses, as well as new and ever-evolving uses such as minimum stream flow appropriations by the Colorado Water Conservation Board, dust suppression, mined land reclamation, boat chutes, fish ladders, nature centers, fish and wildlife culture, recreation, residential environment, release from storage for boating and fishing flows, and augmentation of depletions in order to divert water out-of-priority for the purpose of making a beneficial use which otherwise would be curtailed.⁴⁵

Only the State Water Conservation Board may obtain an appropriation without a means for capturing, possessing and controlling water. This exception was made for the purpose of preserving the natural environment to a reasonable degree. The Board may appropriate water for minimum flow and lake levels in priority, and it may also buy or accept the donation of other rights for change of use to instream flow. The Water Conservation Board holds instream flow rights on approximately 8,000 miles of Colorado streams.

ADJUDICATION OF RIGHTS FOR ADMINISTRATION OF PRIORITIES

So as to assure that rights may be administered in relation to each other under varying conditions of available supply, a priority system of water rights for beneficial use requires a mechanism for determining the source of supply, type of uses, date and amount of appropriation, location and identity of the diversion structure, and place of use.

Soon after statehood, Colorado undertook the identification of existing rights and claimed rights through a litigation process. The Adjudication Acts of 1879⁵⁰ and 1881⁵¹ provided: (1) for the identification

^{45.} See Board of County Comm'rs v. Upper Gunnison River Water Conservancy Dist., 838 P.2d 840, 849-50 (Colo. 1992) (providing reservoir release for fish, wildlife, boating, and recreation); City of Thornton v. City of Fort Collins, 830 P.2d 915, 919, 932 (Colo. 1992) (utilizing boat chute, fish ladder, nature center); Zigan Sand & Gravel, Inc. v. Cache La Poudre Water Users Ass'n, 758 P.2d 175, 182 (Colo. 1988) (providing for residential environment); Three Bells Ranch Associates v. Cache La Poudre Water Users Ass'n, 758 P.2d 164, 173 (Colo. 1988) (utilizing mined land reclamation); May v. United States, 756 P.2d 362, 371 (Colo. 1988) (providing for reservoir recreation, fishery); State v. Southwestern Colo. Water Conservation Dist., 671 P.2d 1294, 1322-23 (Colo. 1983) (recognizing dust suppression); Cache La Poudre Water Users Ass'n v. Glacier View Meadows, 550 P.2d 288, 295 (Colo. 1976) (recognizing augmentation).

^{46.} See COLO. REV. STAT. § 37-92-103(3), 37-92-305(9) (1997).

^{47.} See Board of County Comm'rs v. United States, 891 P.2d 952, 972 (Colo. 1995).

^{48.} See Colo. Rev. Stat. § 37-92-102(3) (1997).

^{49.} See COLORADO WATER CONSERVATION BOARD, INSTREAM FLOW/NATURAL LAKE LEVEL PROGRAM UPDATE OF 1996 ACTIVITIES 1 (1997).

^{50. 1879} Colo. Sess. Laws 99-100.

^{51. 1881} Colo. Sess. Laws 142.

of irrigation rights by priority and quantity through judicial decree proceedings, and (2) for the administration of these court judgments to occur under the watch of state water officials. This intermixed governance of water rights by the state legislative, executive, and judicial branches continues to this day under the provisions of the State Constitution and statutes. Of course, the act of an appropriator placing water to beneficial use alone can bring into existence a Colorado water right.⁵²

Government surveys of sections and townships had not yet been completed when settlers made their agricultural claims under the 1879 and 1881 Adjudication Acts. They estimated their present and future need for water. The result was that considerably more water was allotted in some instances than actually utilized, and priorities were recognized for more than the flow of the stream. Because claims not yet perfected do not enjoy the full status of being water rights, courts began to distinguish between "conditional" rights and those water rights arising by application of water to beneficial use.⁵³

Failure to timely adjudicate a water right results in its postponement to those rights which have been adjudicated. Priorities are now set according to the year in which the application for a decree is filed and then ranked in order of the date of appropriation. The 1969 Water Right Determination and Administration Act created a system of seven water divisions with water judges and division engineers assigned to adjudicating and administering decreed rights to the natural streams and all surface and groundwater tributary thereto.

A conditional water right, pursued diligently to completion, preserves a priority which relates back to the first step initiating the appropriation, assuming the use is perfected. An absolute decree: (1) confirms that amount of depletion from the stream which can be taken in priority as a property right, and (2) entitles the subsequent operation of the right in the amount of its decreed quantity, so long as the water is applied beneficially. Water officials enforce decrees of the courts, not unadjudicated claims. 58

^{52.} See Platte Water Co. v. Northern Colo. Irrigation Co., 21 P. 711, 713 (Colo. 1889).

^{53.} See Dallas Creek Water Co. v. Huey, 933 P.2d 27, 34-35 (Colo. 1997).

^{54.} See United States v. Bell, 724 P.2d 631, 641-42 (Colo. 1986).

^{55.} Colo. Rev. Stat. § 37-92-101 to -602 (1997).

^{56.} City & County of Denver v. Northern Colo. Water Conservancy Dist., 276 P.2d 992, 1001 (Colo. 1954); see also Dallas Creek Water Co., 933 P.2d at 35.

^{57.} Dallas Creek Water Co., 933 P.2d at 35.

^{58.} See Fort Morgan Reservoir & Irrigation Co. v. McCune, 206 P. 393, 394 (Colo. 1922).

CHANGES OF WATER RIGHTS

Not until 1903 did the Legislature provide for the adjudication of domestic and all uses other then irrigation. Because of its relatively small consumptive burden and its obvious necessity for sustenance of farmers, miners, laborers, and residents of nascent towns, the use of domestic water was considered incidental and non-injurious to agricultural use. Also, the Colorado Constitution might have appeared to provide that domestic use could supersede all other uses, regardless of appropriation date: "[W]hen the waters of any natural stream are not sufficient for the service of all of those desiring the use of the same, those using the water for domestic purposes shall have the preference over those claiming for any other purpose."

The rise of cities claiming the domestic use preference to supersede other water rights resulted in two important legal developments: (1) water rights can be sold and changed from one use and location to another, and (2) senior vested water rights cannot be taken or superseded without payment of just compensation. In 1891, the Colorado Supreme Court determined that agricultural water rights could be sold to a city provided that the water rights of others are not injuriously affected by the change. The court reasoned that running water in its natural course is "the property of the public."62 However, a "right . . . to its use . . . will be regarded and protected as property "6" "The exclusive right to divert and use the water . . . may be transferred and conveyed like other property."64 Invoking the Fourteenth Amendment of the United States Constitution, and the takings and due process clauses of the state constitution, the court held that a city could not rely upon the domestic water preference clause of the Colorado Constitution to supersede the priority of a senior appropriation unless the city paid just compensation for the senior right and proceeded in accordance with authorizing eminent domain legislation."

The Colorado Supreme Court also held that changes of water rights require notification and the opportunity to be heard so that those who might be adversely affected may be protected.⁶⁸ A water rights transfer is limited in time and quantity to the amount of water

^{59. 1903} Colo. Sess. Laws 298.

^{60.} Armstrong v. Larimer County Ditch Co., 27 P. 235, 238 (Colo. Ct. App. 1891).

^{61.} COLO. CONST. art. XVI, § 7.

^{62.} Strickler v. City of Colorado Springs, 26 P. 313, 316 (Colo. 1891).

^{63.} Id. at 316 (quoting Kid v. Laird, 15 Cal. 161 (1860)).

^{64.} Id. (quoting JOHN M. GOULD, LAW OF WATERS, § 234, (3d ed 1900)).

^{65.} COLO. CONST. art. II, § 15.

^{66.} COLO. CONST. art. II, § 25.

^{67.} Strickler, 26 P. at 317.

^{68.} See New Cache La Poudre Irrigating Co. v. Arthur Irrigation Co., 87 P. 799, 800 (Colo. 1906).

historically withdrawn and consumed over time in the course of applying water to beneficial use under the tributary appropriation without diminishment of return flows.⁵⁹

PROGRESSIVE CONSERVATION

The progressive conservation movement of the late nineteenth and early twentieth century had its most dramatic test of conflict and durability in Colorado. The principal subject was water. Again, natural law and gravity played strongly into law, policy, and politics. President Grover Cleveland, followed by President Theodore Roosevelt, withdrew millions of acres of forest land from settlement under the Homestead Act. 70 Senator Henry Teller of Colorado literally screamed for the federal lands in Colorado to be transferred to state and private ownership. John Muir of California argued just as passionately for preservation and non-use of the public lands. Gifford Pinchot, Roosevelt's progressive forester, argued eloquently for the scientific management of timber so as to preserve and enhance water supplies. Because the forested watersheds were the site of numerous ditches, dams, reservoirs, and settled water rights utilized for the capture, possession and control of water for a beneficial use of federal property by both farmers and municipalities, farmers and municipalities in Colorado, dependent for their water on continued access to the forests, supported Roosevelt and Pinchot:

The attitude of Coloradans toward Roosevelt and Pinchot clearly illustrated the divergence of opinion that existed in the state over the conservation issue. For while the two men were accorded widespread contempt in the Colorado backwoods, they also commanded a large following all across the state. Roosevelt's support came primarily from urban centers, plains cities such as Denver, Colorado Springs, and Pueblo and Western Slope settlements like Delta and Montrose, areas dependent on the preservation of mountain watersheds for irrigation and water supplies.

The pledge to Colorado and the West that congressional forest reservations would not operate in derogation of state water law was enacted as a provision of the National Forest Organic Act of 1897. Nearly a century later, the United States Supreme Court relied on this provision to reject the notion that the National Forest reservations

^{69.} Williams v. Midway Ranches Property Owner's Ass'n, Inc., 938 P.2d 515, 522 (Colo. 1997).

^{70.} Homestead Act of 1862, ch. 75, §1, 12 Stat. 392 (1862) (repealed 1976).

^{71.} G. MICHAEL McCarthy, Hour of Trial: The Conservation Conflict in Colorado and the West 1891-1907, 76-77 (1977).

^{72. 16} U.S.C. § 475 (1994) (dictating in part the applicability of state water law within forest reservations).

were intended to create federal instream flow rights.⁷³ As of 1973, the Forest Service was administering 14.3 million acres of Colorado timberland.⁷⁴

THE RECLAMATION ERA

Progressive conservationists viewed water storage as a matter of the public interest: "The movement to construct reservoirs so as to conserve spring flood waters for use later in the dry season gave rise both to the term 'conservation' and to the concept of planned and efficient progress, a concept which lay at the heart of the conservation idea." With its provisions for both storage and distribution works, farmers in Colorado embraced the 1902 Reclamation Act. These works would be constructed and financed by the federal government subject to low interest repayment of a portion of the capital and operating costs. As with the National Forest Organic Act, the Reclamation Act preserved the application of state water law.

Whether constructed with federal funds or other financial resources, reservoirs were essential to Colorado's economic well-being. Because stream levels radically drop after the mountain snow melt, Colorado farmers found that direct flow water rights could not supply the "finish water" in August and September before the harvests were in. The growing municipalities were junior in time and right to the senior agricultural ditches and required year round supply. Water storage rights allowed unappropriated water to be captured and preserved for the time of need. Farmers and small towns could not afford the construction of significant and expensive waterworks for storage and long distance conveyance. A revision to the Reclamation Act allowed municipal use to be added as a component of Bureau of Reclamation Reservoirs.78 The Reclamation Era thus took Powell's survey of water storage sites into the Twentieth Century-first for agricultural use, and then for multi-purpose municipal, industrial, power, and recreational use.

The Reclamation Act gave rise to Colorado irrigation districts, water conservancy districts, and water conservation districts. These districts were empowered by the General Assembly with contracting and financing authority designed to enable local sponsors to enter into reclamation partnerships with the federal government. The earliest proj-

^{73.} See United States v. New Mexico, 438 U.S. 696, 712 (1978); United States v. City & County of Denver, 656 P.2d 1, 17-18 (Colo. 1982).

^{74.} Id. at 262.

^{75.} SAMUEL P. HAYS, CONSERVATION AND THE GOSPEL OF EFFICIENCY: THE PROGRESSIVE CONSERVATION MOVEMENT 1890-1920, 5 (1959).

^{76.} Reclamation Act, ch. 1093, 32 Stat. 388 (1902) (current version at 43 U.S.C. §§ 371-616 (1994 and Supp. 1995)).

^{77. 43} U.S.C. § 383 (1994).

^{78. 43} U.S.C. § 390 (1994).

ects served Western Slope irrigation uses, such as the Uncompandere Project on the Gunnison and the Grand Valley Project on the Colorado. The immediate result was that irrigated land on the Western Slope doubled from three hundred thousand to six hundred thousand acres. Much of the effort by Colorado Congressmen Ed Taylor and Wayne Aspinall on behalf of the state was to ensure that citizens on the Colorado River side of the Divide would also benefit. 80

The Colorado-Big Thompson Project (C-BT) was the first reclamation project to pierce the Continental Divide. It included the Adams Tunnel for bringing water to the farms, cities, and businesses of the seven counties lying in the northeastern part of the state. In 1937, an historic agreement between Western Slope and Eastern Slope water users provided for the construction and operation of Green Mountain Reservoir for the benefit of the Western Slope as a mitigation plan in connection with Eastern Slope diversions through the C-BT Project. The Fryingpan-Arkansas Project of the Bureau of Reclamation and the Southeastern Water Conservancy District, which included Reudi Reservior for the Western Slope, followed suit.

As a result of this 1937 agreement, the Colorado Legislature created the Colorado Water Conservation Board, 85 the Colorado River Water Conservation District,84 and the Northern Colorado Water Conservancy District.85 Other reclamation projects followed. The Rio Grande Water Conservation District sponsored the Closed Basin Project86 while the Animas-La Plata Water Conservancy District and Southwestern Water Conservation District are attempting to implement the Ute Indian Water Rights Settlement—a settlement predicated on Bureau of Reclamation construction of the Animas-La Plata Project. To ensure Upper Colorado River Basin water uses while Colorado River compact deliveries are made to the Lower Basin States of Arizona, Nevada, and California, the Aspinall (Curecanti) Unit of the Colorado River Storage Project exists outside of Gunnison to operate in connection with Navajo Dam in New Mexico, Glen Canyon Dam in Utah, and Flaming Gorge Dam in Wyoming. 88 Were Major Powell to have returned in 1951, he would have "g[otten] the impression that

^{79.} ABBOTT ET AL., supra note 28, at 179-80; MEL GRIFFITHS & LYNNEL RUBRICHT, COLORADO 145, 224 (1983).

^{80.} See CAROL EDMONDS, WAYNE ASPINALL: MR. CHAIRMAN (1980).

^{81.} See Daniel Tyler, The Last Water Hole in the West (1992).

^{82.} ABBOTT ET AL., supra note 28, at 183.

^{83.} COLO. REV. STAT., § 37-60-101 to -130 (1997).

^{84.} Colo. Rev. Stat., § 37-45-101 to -153 (1997).

^{85.} Id.

^{86.} See Closed Basin Landowners Ass'n v. Rio Grande Water Conservation Dist., 734 P.2d 627, 629 (Colo. 1987).

^{87.} See Taxpayers for the Animas-La Plata Referendum v. Animas-La Plata Water Conservancy Dist., 739 F.2d 1472 (10th Cir. 1984).

^{88.} See Norris Hundley, Jr., Water and the West 334-36 (1975); John Upton Terrell, War for the Colorado River, Vol. 2, 276 (1965).

resurrection morn had really dawned."89

Reclamation reservoirs form only a part of Colorado and the West's water supply infra-structure. As of 1990, Colorado reservoirs numbered more than 1,900 statewide, with the capability of storing 8.85 million acre feet of water.⁹⁰

GREAT AND GROWING CITIES

In 1908, the Colorado Supreme Court reiterated that cities could not divert water belonging to senior priorities for domestic or other uses without paying just compensation for the taking of property. The court also cautioned that municipal users must be efficient: "the law contemplates an economical use of water . . . Water is too valuable to be wasted, either through an extravagant application for the purpose appropriated or by waste resulting from the means employed to carry it to the place of use." 92

A 1913 case established that one town could not prevent another town's water pipeline from passing through its boundaries. The court determined that any person, corporation, or public entity has a right of condemnation under the Colorado Constitution for the conveyance of domestic water, but the town through which the pipeline passes may reasonably regulate the manner in which the pipeline is maintained. 94

Ownership by a city of its public works, including water, was another goal of progressive conservationists. Denver's purchase of the Union Water Company and its establishment of a citizen water board in 1918 had the primary aim of converting a privately owned monopoly into a public asset. Denver's Moffat Tunnel, built between 1922 and 1928 for the dual purpose of carrying the railroad and Denver's Fraser River and Williams Fork River water, preceded the Northern District's Adams Tunnel, which was commenced in 1944. Denver's Dillon Reservoir on the Blue River, a reservoir which stores water for de-

^{89.} WALLACE STEGNER, BEYOND THE HUNDREDTH MERIDIAN: JOHN WESLEY POWELL AND THE SECOND OPENING OF THE WEST 353 (1954) (But Stegner, Powells' biographer, a quintessential westerner, and an early admirer of both beneficial use and preservation, later became a severe critic of the Reclamation Bureau as the environmental era progressed; see WALLACE STEGNER, Striking the Rock, in WHERE THE BLUEBIRD SINGS TO THE LEMONADE SPRINGS: LIVING AND WRITING IN THE WEST 76, 79-80 (1992)).

^{90.} COLORADO WATER RESOURCES INSTITUTE, COLORADO'S WATER: CLIMATE, SUPPLY AND DROUGHT 6 (1990).

^{91.} Town of Sterling v. Pawnee Ditch Extension Co., 94 P. 339, 340-41 (Colo. 1908).

^{92.} Id. at 341.

^{93.} Town of Lyons v. City of Longmont, 129 P.198, 200 (Colo. 1913).

^{94.} Id. (Explaining that the town of Lyons has the authority to prescribe all reasonable and necessary rules and regulations).

^{95.} See Bennett Bear Creek Farm Water & Sanitation Dist. v. City and County of Denver, 928 P.2d 1254, 1259 (Colo. 1996).

livery through the Roberts Tunnel, is junior to Green Mountain Reservoir and the Colorado-Big Thompson project. Decades of litigation between Denver on the one hand, and the United States, the Northern District, and the Colorado River District on the other hand, established the senior status of the Western Slope and Northeastern Colorado diversions in this regard.

The General Assembly has vested cities with the authority outside of the jurisdiction of the Public Utilities Commission to set water rates for service within their boundaries and extra-territoriality, and to enter into perpetual water contracts. That great and growing cities have a broad need to serve municipal water purposes was enunciated by the Colorado Supreme Court in 1939. The colorado Supreme Court in 1939.

Today, municipal and quasi-municipal governmental entities such as water and sanitation districts, intergovernmental authorities, water conservancy and water conservation districts, are the foremost actors in the water acquisition arena. For example, the City of Thornton acquired close to half of the shares of a northern Colorado mutual irrigation company. Subsequently, the city's decree for conditional water rights, and exchange and augmentation plans was quantified and approved with numerous conditions to prevent injury. The retained jurisdiction of the water court is included in the decree to monitor uses by the city that may not mature until the mid-twenty first century. 99

Between 1960 and 1990, withdrawals for domestic uses of water in the West more than doubled, rising from six and a half to fourteen million acre-feet while the region's population grew by seventy-five percent. Agriculture still accounted for seventy-eight percent of total water withdrawals and ninety percent of total consumptive use. None-theless, over the next twenty-five years it is projected that the West will add another twenty-eight million residents, and the significance of municipal and quasi-municipal entities will continue to grow.

Because of contemporary permitting difficulties in constructing additional projects for capturing unappropriated water, ¹⁰¹ municipalities must consider alternative water supplies. Possible alternative supplies include the following: the conversion of senior agricultural water through change of use proceedings, the tapping of tributary and nontributary groundwater, and demand side conservation management, recharge, exchange, and augmentation.

^{96.} See United States v. Northern Colo. Water Conservancy Dist., 608 F.2d 422 (10th Cir. 1979).

^{97.} Id. at 1261-62.

^{98.} See City & County of Denver v. Sheriff, 196 P.2d 836 (Colo. 1939).

^{99.} See City of Thornton v. Bijou Irrigation Co., 926 P.2d 1 (Colo. 1996).

^{100. &}quot;WATER IN THE WEST: THE CHALLENGES FOR THE NEXT CENTURY," REPORT BY THE WESTERN WATER POLICY REVIEW ADVISORY COMMISSION 2-27, 2-44, (October 1997).

^{101.} See Alameda Water & Sanitation Dist. v. Reilly, 930 F. Supp. 486, 488-89 (D. Colo. 1996) (Two Forks permit veto under Clean Water Act); City of Colorado Springs v. Board of County Comm'rs, 895 P.2d 1105 (Colo. Ct. App. 1994) (exercise of authority under Land Use Act and Local Government Land Use Control Act).

EQUITABLE APPORTIONMENT AND WATER COMPACTS

At midnight on December 21, 1857, Lieutenant Joseph Ives of the United States Corps of Topographical Engineers commenced a steamboat journey up the Colorado River from the Gulf of California. Progress upstream was steady but slow as the explorers surveyed the River and the surrounding countryside. In early March of 1858, the steamboat came to a stunning crash on a rock where Lake Mead now stands in the Black Canyon outside of Las Vegas, Nevada. Ives declared that point of the Colorado River to be the upper end of navigation, and he proceeded overland to the rim of the Grand Canyon where he proclaimed an end to human visitation of this region: "Ours has been the first, and will doubtless be the last, party of whites to visit this profitless locality. It seems intended by nature that the Colorado River, along the greater portion of its lovely and majestic way, shall be forever unvisited and undisturbed." "102"

The 1858 Ives map shows the Little Colorado River as the source of the Colorado River. Eleven years later, Major Powell, tied to a chair on a wooden dory, roared into the gut of the primordial chasm of the Grand Canyon from a long upstream reach. From that point on, the water geography, politics, and law of the Colorado River would tie the Upper Basin and the Lower Basin together.

Colorado came to the 1922 Colorado River Compact negotiations fully informed of the equitable apportionment doctrine and its consequences. In 1907, the United States had argued that the remaining unappropriated waters of the West had been withdrawn from appropriation through the enactment of the 1902 Reclamation Act; development would occur under this theory as the national government saw fit, not otherwise. 103

Kansas and Colorado argued diametrically opposing theories. Kansas alleged that its riparian water law should require Colorado to by-pass water supplies of the Arkansas River to Kansas because the Kansas Territory, created in 1854, had run to the Continental Divide origins of that river prior to the formation of the Colorado Territory in 1861. Colorado contended that its state constitutional doctrine of prior appropriation had been accepted by the United States Congress when Colorado was admitted to the Union in 1876; thus, all water arising in Colorado was subject to use therein.

Enunciating the doctrine of equitable apportionment, the Supreme Court ruled that each state can choose its own water law, whether riparian or prior appropriation, but no state can impose its choice of law on another state. 104 The national government's interest in the reclamation of arid lands could not supplant the water law selection of either state, and an equitable apportionment of the interstate

^{102.} JOSEPH IVES, ARMY CORPS OF TOPOGRAPHICAL ENGINEERS, REPORT UPON THE COLORADO RIVER OF THE WEST 100 (1861).

^{103.} Kansas v. Colorado, 206 U.S. 46, 92 (1907).

^{104.} Id. at 113-14.

water body can be ordered through the exercise of the Court's original jurisdiction. Although they had defeated the national government's water reservation claim, both states were left with the possibility of continuous litigation to determine from time to time what an equitable apportionment between them might be.

Because the irrigated valley of the Arkansas River within Colorado had perfected water rights and productive uses, Colorado won the opening rounds of its struggle with Kansas. However, in 1922, Colorado received a bitter lesson in the judicial application of prior appropriation to the equitable apportionment doctrine. The Court found Wyoming's uses in the Laramie and North Platte River basins to be senior and controlling, thereby precluding future development within Colorado. Even the most ardent proponents of Western prior appropriation law were thunderstruck with the nerve shattering implications of a first in time–first in right state anchoring the interstate river and controlling the destiny of its elevated neighbors.

Delph Carpenter had represented Colorado in the Wyoming case and in disputes with Nebraska over the waters of the Platte River. He turned to the Compact Clause of the United States Constitution as Colorado's best hope for a secure and perpetual allocation of waters arising in Colorado, but shared by eighteen downstream states.¹⁰⁶

The Colorado River Compact negotiators intended to allow each state to effectuate its own choice of water law and to use its allocated water within its boundaries whenever it might choose in the future—this all without fear of the timing of development in other states, and also to ensure that the United States would not allocate the water contrary to the choice of the states. However, Arizona did not ratify the Colorado River Compact until 1944. As a result of Arizona's delay, and pursuant to the terms of the 1928 Boulder Canyon Project Act, the Secretary of Interior became the administrator and contracting officer for the Lower Basin apportionment among Arizona, California, and Nevada.

A compact is both state and federal law. It is meant to govern interstate water allocation and replace the original jurisdiction of the United States Supreme Court, except with regard to enforcement of the compact. For example, in 1995, the 1948 Arkansas River Compact was enforced against Colorado by decision of the United States Supreme Court. Ratification of a compact may be seen as the exercise by Congress of its power to consent to interstate commerce limitations

^{105.} Wyoming v. Colorado, 259 U.S. 419, 496 (1922).

^{106.} See Daniel Tyler, Delph E. Carpenter And The Principle Of Equitable Apportionment, in 9 WESTERN LEGAL HISTORY 36, 43 (1996).

^{107.} See L. Ward Bannister, The Silver Fox Of The Rockies: A Critic's Views of Delphus Emory Carpenter And The Colorado River Compact 15 (presented by Daniel Tyler at the Colorado River Compact Symposium, Water Education Foundation, May 29, 1997).

^{108.} See Arizona v. California, 376 U.S. 340, 342-43 (1964).

^{109.} See Kansas v. Colorado, 514 U.S. 673 (1995).

inherent in fulfillment of the compact's purpose. A state may create and vest water rights as property, but only with regard to its allocated share of the interstate waters.

Due to the work of Carpenter and many others, Colorado is a signatory to nine congressionally ratified interstate compacts with other states commencing with the Colorado River agreement in 1922: Colorado River Compact, 112 La Plata River Compact, 113 South Platte River Compact, 114 Arkansas River Compact, 115 Rio Grande River Compact, Republican River Compact, 116 Upper Colorado River Compact, 118 Amended Costilla Creek Compact, 119 and Animas-La Plata Project Compact. 120

Three equitable apportionment decrees in which Colorado has a continued water allocation interest are Nebraska v. Wyoming, Wyoming v. Colorado, and Colorado v. New Mexico. 121

INTEGRATION OF FEDERAL RIGHTS

Colorado, like other western states, allocated water and created water rights under its own system of law. In 1907, the United States Supreme Court enunciated the federal reserved water rights doctrine, first recognized for Native American tribal reservations. A federal land reservation, by necessary implication, may involve a United States reservation of unappropriated waters necessary for the primary purposes of the reservation. The water reservation dates to the creation of the land reservation.

Due to the fact that the states could not integrate the federal reserved water rights claims into a unitary system of water rights administration without congressional waiver of sovereign immunity and consent to join federal agencies in state forums, Congress adopted the

^{110.} See Simpson v. Highland Irrigation Co., 917 P.2d 1242, 1249 (Colo. 1996).

^{111.} Hinderlider v. La Plata River & Cherry Creek Ditch Co., 304 U.S. 92, 106 (1938).

^{112. 43} U.S.C. 617 (Boulder Canyon Project Act ratifying the Colorado River Compact), Colo. Rev. Stat. 37-61-101 ch. 72 (1997), 42 Stat. 171 ch. 72 (1921) (congressional consent to enter into the compact).

^{113.} COLO. REV. STAT. 37-63-101, ch. 110 (1997), 43 STAT. 796 ch. 110 (1925).

^{114.} Colo. Rev. Stat. 37-65-101, ch. 46 (1997), 44(2) Stat. 195 ch. 46 (1926).

^{115.} COLO. REV. STAT. 37-69-101, ch. 155 (1997), 63 STAT. 145 ch. 155 (1949).

^{116.} COLO. REV. STAT. 37-66-101, ch. 155 (1997), 53 Stat. 785 ch. 155 (1939).

^{117.} COLO. REV. STAT. 37-67-101, ch. 104 (1997), PUB.L. 60, 57 STAT. 86 ch. 104 (1943).

^{118.} Colo. Rev. Stat. 37-62-101, ch. 38 (1997), 63 Stat. 31 ch. 48 (1949).

^{119.} COLO. REV. STAT. 37-68-101, Pub.L. 88-198, 77 STAT. 350 (1963).

^{120.} COLO. REV. STAT. 37-64-101 (1997), Pub.L. 90-537, 82 STAT. 898 (1968).

^{121.} Colorado v. New Mexico, 467 U.S. 310 (1984); Wyoming v. Colorado, 353 U.S. 953 (1957); Nebraska v. Wyoming, 325 U.S. 589 (1945).

^{122.} See Winters v. United States, 207 U.S. 564 (1907).

McCarran Amendment in 1952.¹²⁵ This provided for state court adjudication jurisdiction over federal claims. Colorado led the way in three different cases before the United States Supreme Court in requiring the appearance of the United States in state water proceedings.¹²⁴ As a result, the United States has obtained decrees in the seven water division courts for its federally reserved and state appropriative rights to serve uses on federal lands and in federal facilities.

GROUNDWATER

Between 1943 and 1969, the use of tributary groundwater rose dramatically as surface irrigators and municipalities (particularly in the South Platte and Arkansas River Basins) discovered that wells were an efficient means of diversion and were not then subject to curtailment administration in the same manner as surface diversions.

The 1943 Adjudication Act¹²⁵ recodified the provisions of Colorado's adjudication law, provided a mechanism for supplementary adjudication and transfers of water rights to changed uses, but made no specific mention of adjudicating rights to groundwater. In contrast, the 1969 Water Right Determination and Administration Act declared that "it is the policy of this state to integrate the appropriation, use, and administration of underground water tributary to a stream with the use of surface water in such a way as to maximize the beneficial use of all of the waters of this state."

Knowledge of groundwater and its impact on surface rights grew in the years between the 1943 and the 1969 Adjudication Acts. As out-of-priority pumping of groundwater connected to surface streams came to be recognized as a significant detriment to surface supply, the Colorado Supreme Court, in 1951, articulated a presumption that all groundwater finds its way to a surface stream and is subject to appropriation and administration in priority in times of short supply. One claiming that groundwater is not tributary has the burden of proving that fact by clear and convincing evidence. The Court also held that a well user must sink a tributary well to a reasonable depth and cannot command the level of the aquifer by fixing the point of withdrawal at a shallow depth. However, when the well is at a reasonable depth, a jun-

^{123. 43} U.S.C. § 666 (1994 and Supp. 1995).

^{124.} See Colorado River Water Conservation Dist. v. United States, 424 U.S. 800, 810, 820 (1976); United States v. District Court, 401 U.S. 527, 530 (1971); United States v. District Court, 401 U.S. 520, 525 (1971).

^{125.} Adjudication Act of 1943, ch. 190, 1943 Colo. Sess. Laws 613 (codified at COLO. REV. STAT. §§ 148-9-1 to -27 (1963), repealed by The Water Right Determination and Administration Act of 1969, ch. 373, 1969 Colo. Sess. Laws 1200, 1223.)

^{126.} The Water Right Determination and Administration Act of 1969, ch. 373, 1969 Colo. Sess. Laws 1200, 1220 (codified as amended at Colo. Rev. Stat. § 37-92-102(1)(a) (1997)).

^{127.} See Safranek v. Town of Limon, 228 P.2d 975, 977 (Colo. 1951).

ior may be required by decree to bear the expense of providing the senior with an adequate means of diversion if the junior's lowering of the water table will cause the senior well to fail.¹²⁸

In 1965, the General Assembly adopted the Groundwater Management Act, 129 thereby providing the State Engineer with the authority to issue, condition against injury, or deny permits for any diversion effectuated by means of a well. The Act also established the means for designating groundwater basins to be managed by local groundwater districts, subject to the authority of the Ground Water Commission. Designated groundwater basins are those wherein aquifers with modest recharge and attenuated connection to the stream system are the main source of an area's water supply, such as the Ogallala Aquifer. 130

With the advent of conjunctive use of tributary groundwater and surface water, the maximum utilization of the waters of the state, through vested rights, was heralded as Colorado's constitutional water law doctrine. Wells which make out-of-priority diversions must replace their depletions by an approved substitute supply or augmentation plan to enable continued operation.

Non-tributary water is not part of the "natural stream" to which the Colorado Constitution's appropriation provisions apply. It is subject instead to the plenary power of the Legislature with regard to its allocation and use. The General Assembly has provided for the establishment of non-tributary groundwater rights according to surface land ownership. Non-tributary groundwater rights become vested rights either by construction of a well or an adjudication, with the amount of authorized withdrawals based upon a hundred year life of the non-tributary supply and the acreage amount of surface ownership. Certain Denver Basin deep groundwater formations are the subject of provisions requiring some augmentation of the surface stream; these bear the confusing designation "not non-tributary."

The Legislature has provided that small capacity wells which draw from tributary aquifers for domestic single household purposes may

^{128.} See City of Colorado Springs v. Bender, 366 P.2d 552, 555 (Colo. 1961).

^{129.} COLO. REV. STAT. §§ 37-90-101 to -143 (1997).

^{130.} See Colorado Ground Water Comm'n v. Eagle Peak Farms, Ltd., 919 P.2d 212, 215 (Colo. 1996); Danielson v. Vickroy, 627 P.2d 752, 756 (Colo. 1981).

^{131.} See Fellhauer v. People, 447 P.2d 986, 994-95 (Colo. 1968).

^{132.} See COLO. REV. STAT. §§ 37-90-137(2), 37-92-305(5), (6), (8) (1997).

^{133.} See State v. Southwestern Colo. Water Conservation Dist., 671 P.2d 1294, 1316 (Colo. 1983).

^{134.} See Colo. Rev. Stat. § 37-90-137(4) (1997); Bayou Land Co. v. Talley, 924 P.2d 136 (Colo. 1996).

^{135.} See COLO. REV. STAT. § 37-90-137(9) (c) (I) (1997). (The definition of "not non-tributary is found at COLO. REV. STAT. § 37-90-103(10.7). "Not nontributary ground water" means ground water located within those portions of the Dawson, Denver, Arapahoe, and Laramie-Fox Hills aquifers that outside the boundaries of any designated ground water basin in existence on January 1, 1985, the withdrawal of which will, within one hundred years, deplete the flow of a natural stream, including a natural stream as defined in sections 37-82-101(2) and 37-92-102(1)(b), at an annual rate of greater than one-tenth of one percent of the annual rate of withdrawal').

divert under a presumption of non-injurious effect to other rights. These wells may be adjudicated with a date of priority relating back to issuance of their permit for the purpose of seeking protection vis-a-vis water rights that are junior to them.¹³⁶

THE ENVIRONMENTAL ERA

In 1965 the Colorado Supreme Court declared that the maintenance of instream flow "is a riparian right and is completely inconsistent with the doctrine of prior appropriation."137 However, in 1979, the Court upheld the constitutionality of Colorado's 1973 statute which allowed the Colorado Water Conservation Board to make and enforce minimum stream flow and lake level appropriations in priority for the purpose of preserving the environment to a reasonable degree. The environmental era had intervened. The Legislature was concerned about potential preemption of Colorado water law if a way to integrate instream flow rights within the appropriation doctrine could not be devised. The Conservation Board's statutory program requires the Board to consult with and take into account federal agency recommendations, including those of the Forest Service and the U.S. Fish and Wildlife Service, but the ultimate determination of the amount to be appropriated and maintained is assigned to the Conservation Board's sound discretion under the statute's criteria. 139

In contrast to California, Colorado has not adopted the public trust doctrine. 140 Nor is "the public interest" employed as a water allocation factor in Colorado water adjudication proceedings. 141 Nonetheless, since a water right comes into being only by application of water to beneficial use, the inability to obtain a needed regulatory permit or obtain financing for needed waterworks may effectively prevent the maturation of a conditional right into a perfected water right. Colorado's "can and will" doctrine recognizes that conditional rights, which hold a place in the priority system predicated on actual use being made, might not ripen into water rights. 142 Speculative acquisition or retention of conditional rights is not allowed, 143 and water users hoping

^{136.} See Shirola v. Turkey Canon Ranch Ltd. Liab. Co., 937 P.2d 739 (Colo. 1997).

^{137.} See Colorado River Water Conservation Dist. v. Rocky Mountain Power Co., 406 P.2d 798, 800 (Colo. 1965).

^{138.} See Colorado River Water Conservation Dist. v. Colorado Water Conservation Board, 594 P.2d 570, 574-76 (Colo. 1979).

^{139.} See Colo. Rev. Stat. § 37-92-102(3), (4) (1997); City of Thornton v. Bijou Irrigation Co., 926 P.2d 1, 94 (Colo. 1996).

^{140.} See People v. Emmert, 597 P.2d 1025, 1027-28 (Colo. 1979).

^{141.} See Aspen Wilderness Workshop, Inc. v. Hines Highlands Ltd. Partnership, 929 P.2d 718 (Colo. 1996).

^{142.} See Board of County Comm'rs v. United States, 891 P.2d 952, 972 (Colo. 1995).

^{143.} See Dallas Creek Water Co. v. Huey, 933 P.2d 27, 35 (Colo. 1997); Colorado River Water Conservation Dist. v. Vidler Tunnel Water Co., 594 P.2d 566, 568 (Colo. 1979).

to improve the priority status of their rights often challenge each others' conditional rights at the time a finding of reasonable diligence is sought from the water court.

The maximum utilization doctrine enunciated in Fellhauer¹⁴ has been tempered by the Colorado Supreme Court's reference to "optimum use" requiring that "proper regard for all significant factors, including environmental and economic concerns," be taken into account. The court foreshadowed the possibility that a balancing of resource use might be applicable when it refused to endorse the removal of water loving vegetation as a means for "developing" water free of the river's call. Draining of a peat bog or wetlands, ¹⁴⁷ or creating impermeable land surfaces, such as by paving, ¹⁴⁸ have likewise been disallowed as a means for obtaining additional consumptive use or augmentation water.

The Endangered Species Act, 149 the Federal Clean Water Act 150 and the Federal Land Policy and Management Act 151 have created significant environmental review and approval requirements attendant to obtaining a federally required permit to build waterworks necessary to perfect a water right. 152 The Environmental Protection Agency ("EPA") vetoed the Two Forks Project Permit under its section 404(c) Clean Water Act authority. 153 At the state level, Eagle County invoked Colorado land use statutes to review a water project of the cities of Aurora and Colorado Springs. 154 In Riverside Irrigation District v. Andrews, the court construed section 101(g) of the Clean Water Act as expressing that "Congress did not want to interfere any more than necessary with state water management." Furthermore, the Court refused to decide whether, in the event of irreconcilable conflict, the Endangered Species Act supersedes the congressionally ratified South Platte River Compact. 156 Colorado has worked to avoid head-on conflict. Endangered species recovery plans in the Platte and Upper Colorado River Basins are being pursued in conjunction with Colorado's use of its water compact entitlements. 157

^{144.} See Fellhauer v. People, 447 P.2d 986, 986 (Colo. 1968).

^{145.} See Alamosa La Jara Water Users Protection Ass'n. v. Gould, 674 P.2d 914, 923 (Colo. 1983).

^{146.} See Southeastern Colo. Water Conservancy Dist. v. Shelton Farms, Inc., 529 P.2d 1321, 1327 (Colo. 1974).

^{147.} R.J.A., Inc. v. Water Users Ass'n, 690 P.2d 823, 828 (Colo. 1984).

^{148.} See State Eng'r v. Castle Meadows, Inc., 856 P.2d 496, 510 (Colo. 1993).

^{149. 16} U.S.C. §§ 1531-1544 (1994 and Supp. 1995).

^{150. 33} U.S.C. §§ 1251-1387 (1994 and Supp. 1995).

^{151. 43} U.S.C. §§ 1701-1784 (1994 and Supp. 1995).

^{152.} See Riverside Irrigation Dist. v. Andrews, 758 F.2d 508, 514 (10th Cir. 1985).

^{153. 33} U.S.C. § 1344(c) (1994 and Supp. 1995). See Alameda Water & Sanitation Dist. v. Reilly, 930 F. Supp. 486, 488-89 (D. Colo. 1996).

^{154.} See City of Colorado Springs v. Board of County Comm'rs, 895 P.2d 1105 (Colo. Ct. App. 1995).

^{155. 33} U.S.C. § 1251(g) (1994 and Supp. 1995).

^{156.} See Riverside Irrigation Dist., 758 F.2d at 513.

^{157.} See David H. Getches, Colorado River Governance: Sharing Federal Authority as an

Basin wide efforts to meet environmental standards while the states continue development and use of their interstate apportioned waters have precedent. The Colorado River Basin Salinity Control Program is a seven basin state/federal initiative designed to maintain water quality standards for salinity at three compliance points in the Lower Basin. State line salinity standards were deemed unnecessary in light of this undertaking to achieve salinity water quality standards adopted by the EPA. An effort to require EPA permit regulation of dams throughout the United States as point sources of pollution was also rejected by the Federal Court of Appeals. The State of Colorado and several of its water user districts appeared as amicus on behalf of EPA in both cases, while environmental organizations active in Colorado appeared as plaintiff in those suits.

Colorado environmental and water user interests joined in supporting the 1986 congressional designation of seventy-five miles of the Cache La Poudre River as a Wild and Scenic River with its attendant creation of a federal water right junior to pre-existing state water rights. These interests also supported the 1993 Colorado Wilderness Act¹⁶¹ which preserved any pre-existing federal water rights and disclaimed congressional intention to create a wilderness reserved water right with regard to that Act.

State and federal statutes and administrative policies have always affected Colorado's prior appropriation law. The Colorado Water Quality Control Commission has extensive authority to regulate point and non-point sources of pollution, but cannot impose minimum stream flows for pollution program purposes. State water law does not attempt to comprehensively address environmental concerns; those are addressed primarily though land use and environmental regulatory laws, and land and water purchase and reservation programs.

Colorado's system of transferable water rights allows a market in new and changed uses to occur. Riparian water law, unlike prior appropriation law, is not well suited to a market approach because that legal system restricts the use of water to riparian landowners within the watershed, severely limits the amount of water that can be consumed, and does not promote the efficient allocation of water. 164

Incentive to Create a New Institution, 68 U. COLO. L. REV. 573, 623-65 (1997) (examining the Cooperative Agreement For Platte River Research And Other Efforts Relating To Endangered Species Habitats Along The Central Platte River in Nebraska).

^{158.} See Environmental Defense Fund, Inc. v. Costle, 657 F.2d 275, 288 (D.C. Cir. 1981).

^{159.} See National Wildlife Fed'n v. Gorsuch, 693 F.2d 156, 175 (D.C. Cir. 1982).

^{160.} Act of Oct. 30, 1986, Pub. Law No. 99-590, 100 Stat. 3330-32.

^{161.} Colorado Wilderness Act of 1993, Pub. Law No. 103-77, 107 Stat. 756-65.

COLO. REV. STAT. § 25-8-101 to -703 (1997).

^{163.} See City of Thornton v. Bijou Irrigation Co., 926 P.2d 1, 91-92 (Colo., 1996).

^{164.} See A. Dan Tarlock, Law of Water Rights and Resources, 2.05(1) at 2-12.

Market transfers are grounded in property law and depend upon the right to reduce a public resource to private possession:

Four characteristics (have been identified as) necessary to convert a common property resource to a regime of individual property rights in order to induce market allocation. They are (1) maximum exclusivity within the constraint of the physical nature of the resource; (2) free transfer at costs which are low relative to the value of the resource; (3) absence of positive and negative externalities that prevent the transfer of the resource or impose excessive, unaccounted for costs on third parties, and (4) a clear, general definition of permitted and prohibited activities.

As a result of over-appropriated streams, environmental permitting requirements for surface diversions, and resistance by local areas to diversions for other areas of the state, cities seeking additional water supplies are looking increasingly to water transfers, out-of-priority diversions by wells and augmentation plans utilizing replacement water sources, and use of with non-tributary water.¹⁶⁶

CONCLUSION

The irrigated use sector contains a large reservoir of water for agricultural production, conserved open space, and infra-structure that has long-lasting value to Colorado. To what extent that resource should support the increasing urbanization of the state will be determined by voluntary market transfers and regulatory choices. Under Colorado law, conditional water rights and water storage rights will continue to function as an essential element in use of the state's allocated share of interstate waters. The needs and values of twenty-first century citizens will shape and reshape a water law which is well-grounded in the history and heritage of this magnificent land.

Prior appropriation law is egalitarian, equitable, and efficient in that: (1) beneficial uses are recognized without regard to the economic value which will be produced therefrom (e.g., the individual subsistence farmer and the manufacturing corporation are equally entitled to appropriate unappropriated water); (2) access to the available supply is based on the need for a beneficial purpose; and (3) no more water belongs to the water right than the amount reasonably necessary under the circumstances to effectuate the use.

If economic efficiency is defined to mean that water should serve the highest value need, then economic efficiency is not achieved by

^{165.} See DeVany et al., A Property System for Market Allocation of the Electromagnetic Spectrum: A Legal-Economic Engineering Study, 21 STAN. L. REV. 1499 (1969), cited in A. DAN TARLOCK, LAW OF WATER RIGHTS AND RESOURCES, 2.05(1) at 2-11, n.3.

^{166.} See Williams v. Midway Ranches Property Owners Ass'n, Inc., 938 P.2d 515, 521-22 (Colo. 1997).

the system except through voluntary transfers in the market place. Furthermore, reallocating water to junior uses by involuntary means to serve emerging social and environmental policy choices is not permitted under the water law, unless that reallocation is carried out through the proper channels of condemnation, with payment of just compensation. Nevertheless, regulation within the police power of local, state and federal government authority may significantly affect the operation of the appropriation doctrine. For example, when the necessary permits to construct water works cannot be obtained, a conditional water right may not become a vested, perfected water right.

Because of its birth within the public domain, the West has been, is, and always will be shaped by values of beneficial use and preservation amidst a vast, beautiful, and rapidly urbanizing landscape. Water, the intermediary substance of life, will flow and pool, be guarded and traded, dance and sing, be used, consumed, and returned as Colorado, mother of many rivers, continues to play its vital role in water policy.

APPENDIX

COLORADO WATER LAW: A SYNOPSIS OF STATUTES AND CASE LAW

SELECTIONS BY JUSTICE GREGORY J. HOBBS, JR.

Institutes of Justinian

"By the law of nature these things are common to mankind—the air, running water, the sea, and consequently the shores of the sea. No one, therefore, is forbidden to approach the seashore, provided that he respects habitations, monuments, and buildings, which are not, like the sea, subject only to the law of nations."

Institutes of Justinian, II.I.1 (with Introduction, Translation and Notes by Thomas Collett Sandars, 1876).

"All rivers and ports are public; hence the right of fishing in a port, or in rivers, is common to all men."

Id. at II.1.2.

"The public use of the banks of a river is part of the law of nations, just as is that of the river itself. All persons therefore are as much at liberty to bring their vessels to the bank, to fasten ropes to the trees growing there, and to place any part of their cargo there, as to navigate the river itself. But the banks of a river are the property of those whose land they adjoin; and consequently the trees growing on them are also the property of the same persons."

English Common Law

"Running water, as far as it is not tidal, belongs prima facie to the owners of the land on either side of it, subject to the public right of navigation, where such exists . . . therefore the public cannot gain by prescription or otherwise a legal right to fish in a non-tidal river, even though it be navigable"

JAMES WILLIAMS, THE INSTITUTES OF JUSTINIAN ILLUSTRATED BY ENGLISH LAW 84 (2d ed. 1893).

Constitution of the United States

Property Clause

Territory or Property of the United States

"The Congress shall have Power to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States; and nothing in this Constitution shall be so construed as to Prejudice any Claims of the United States, or of any particular State."

U.S. CONST. art. IV, § 3(2).

Commerce Clause

Power of Congress to regulate commerce

"To regulate commerce with foreign nations, and among the several States, and with the Indian tribes."

U.S. CONST. art. I, § 8(3).

Supremacy Clause

Supreme Law

"The Constitution, and the Laws of the United States which shall be made in Pursuance thereof; and all Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land; and the Judges in every State shall be bound thereby, any things in the Constitution or Laws of any State to the Contrary notwithstanding."

U.S. CONST. art. VI, (2).

Takings Clause of Fifth Amendment

"No person shall . . . be deprived of life, liberty, or property, without due process of law . . . nor shall private property be taken for public use, without just compensation."

U.S. CONST. amend. V.

Takings Clause of Fourteenth Amendment

"[N]or shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws."

U.S. CONST. amend. XIV, § 1.

The Louisiana Purchase of 1803

Treaty between the United States of America and the French Republic, Apr. 30, 1803, U.S. - Fr., 8 Stat. 200-13.

The Lewis and Clark Expedition

"The object of your mission is single, the direct water communication from sea to sea formed by the bed of the Missouri & perhaps the Oregon."

LETTERS OF THE LEWIS AND CLARK EXPEDITION, WITH RELATED DOCUMENTS 1783-1854, 136-38 (Donald Jackson ed., 2d. ed. 1978) reprinted in Stephen E. Ambrose, Undaunted Courage: Meriwether Lewis, Thomas Jefferson and the Opening of the American West 116 (Simon and Schuster 1996).

Homestead Act of 1862

An Act to secure Homesteads to actual Settlers on the Public Domain.

"[A]ny person who is the head of a family, or who has arrived at the age of twenty-one years, and is a citizen of the United States, or who shall have filed his declaration of intention to become such, as required by the naturalization laws of the United States, and who has never borne arms against the United States Government or given aid and comfort to its enemies, shall, from and after the first January, eighteen hundred and sixty-three, be entitled to enter one quarter section or a less quantity of unappropriated public lands, upon which said person may have filed a preemption claim"

Homestead Act of 1862, ch. 75, §1, 12 Stat. 392 (1862) (repealed 1976).

Mining Act of 1866

"Whenever, by priority of possession, rights to the use of water for mining, agricultural, manufacturing, or other purposes, have vested and accrued, and the same are recognized and acknowledged by the local customs, laws, and the decisions of courts, the possessors and owners of such vested rights shall be maintained and protected in the same; and the right of way for the construction of ditches and canals for the purposes aforesaid is hereby acknowledged and confirmed"

Mining Act of 1866, ch. 262, §9, 14 Stat. 253 (1866) (current version at 43 U.S.C. §661 (1994)).

Riparian Doctrine (common law) Tyler v. Wilkinson

"Prima facie every proprietor upon each bank of a river is entitled to the land, covered with water, in front of his bank, to the middle thread of the stream, or, as it is commonly expressed, usque ad filum aquae. In virtue of this ownership he has a right to the use of the water flowing over it in its natural current, without diminution or obstruction. But, strictly speaking, he has no property in the water itself; but a simple use of it, while it passes along. The consequence of this principle is, that no proprietor has a right to use the water to the prejudice of another. It is wholly immaterial, whether the party be a proprietor above or below, in the course of the river; the right being common to all the proprietors on the river, no one has a right to diminish the quantity which will, according to the natural current, flow to a proprietor below, or to throw it back upon a proprietor above. This is the necessary result of the perfect equality of right among all the proprietors of that, which is common to all... There may be, and there must be allowed of that, which is common to all, a reasonable use. The true test of the principle and extent of the use is, whether it is to the injury of the other proprietors or not."

Tyler v. Wilkinson, 24 F. Cas. 472, 474 (C.C.D.R.I. 1827) (No. 14,312).

Reasonable Use Pyle v. Gilbert

"Under a proper construction [of the pertinent Code sections] every riparian owner is entitled to a reasonable use of the water in the stream. If the general rule that each riparian owner could not in any way interrupt or diminish the flow of the stream were strictly followed, the water would be of but little practical use to any proprietor, and the enforcement of such rule would deny, rather than grant, the use thereof. Every riparian owner is entitled to a reasonable use of the water. Every such proprietor is also entitled to have the stream pass over his land according to its natural flow, subject to such disturbances, interruptions, and diminutions as may be necessary and unavoidable on account of the reasonable and proper use of it by other riparian proprietors. Riparian proprietors have a common right in the waters of the stream, and the necessities of the business of one cannot be the standard of the rights of another, but each is entitled to a reasonable use of the water with respect to the rights of others."

Pyle v. Gilbert, 265 S.E.2d 584, 587 (Ga. 1980) (quoting Price v. High Shoals Mfg. Co., 64 S.E. 87, 88 (Ga. 1909)).

Riparian/Prior Appropriation Hybrid (California Doctrine) Lux v. Hagin

"[O]ne who acquired a title to riparian lands from the United States prior to the act of July 26, 1866, could not (in the absence of reservation in his grant) be deprived of his common-law rights to the flow of the stream by one who appropriated its waters after the passage of that act."

Lux v. Hagin, 10 P. 674, 727 (Cal. 1886).

Colorado Territorial Laws 1861 An Act to Protect and Regulate the Irrigation of Lands

Section 1.

"That all persons who claim, own or hold a possessory right or title to any land or parcel of land within the boundary of Colorado Territory, as defined in the Organic Act of said Territory, when those claims are on the bank, margin or neighborhood of any stream of water, creek or river, shall be entitled to the use of the water of said stream, creek or river, for the purposes of irrigation, and making said claims available, to the full extent of the soil, for agricultural purposes."

Colo. Territorial Laws 67 (1861).

Section 2.

"That when any person, owning claims in such locality, has not sufficient length of area exposed to said stream in order to obtain a sufficient fall of water necessary to irrigate his land, or that his farm or land, used by him for agricultural purposes, is too far removed from said stream and that he has no water facilities on those lands, he shall be entitled to a right of way through the farms or tracts of land which lie between him and said stream, or the farms or tracts of land which lie above and below him on said stream, for the purposes as herein before stated."

Id. at 67.

Section 4.

"That in case the volume of water in said stream or river shall not be sufficient to supply the continual wants of the entire county through which it passes, then the nearest justice of the peace shall appoint three commissioners as hereinafter provided, whose duty it shall be to apportion, in a just and equitable proportion, a certain amount of said water upon certain or alternate weekly days to different localities, as they may, in their judgment, think best for the interests of all parties concerned, and with due regard to the legal rights of all"

Id. at 68.

Prior Appropriation (Colorado Doctrine) Yunker v. Nichols

"When the lands of this territory were derived from the general government, they were subject to the law of nature, which holds them barren until awakened to fertility by nourishing streams of water, and the purchasers could have no benefit from the grant without the right to irrigate them. It may be said, that all lands are held in subordination to the dominant right of others, who must necessarily pass over

them to obtain a supply of water to irrigate their own lands, and this servitude arises, not by grant, but by operation of law." Yunker v. Nichols, 1 Colo. 551, 555 (1872).

"I conceive that, with us, the right of every proprietor to have a way over the lands intervening between his possessions and the neighboring stream for the passage of water for the irrigation of so much of his land as may be actually cultivated, is well sustained by force of the necessity arising from local peculiarities of climate"

Id. at 570.

"It seems to me, therefore that the right springs out of the necessity, and existed before the statute was enacted, and would still survive though the statute were repealed."

Id.

"If we say that the statute confers the right, then the statute may take it away, which cannot be admitted."

Id.

Colorado Constitution of 1876 Article XVI Mining and Irrigation

Irrigation

Section 5. Water of Streams of public property.

"The water of every natural stream, not heretofore appropriated, within the state of Colorado, is hereby declared to be the property of the public, and the same is dedicated to the use of the people of the state, subject to appropriation as hereinafter provided."

Colo. Const. art. XVI, § 5.

Section 6. Diverting unappropriated water-priority preferred uses.

"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; but when the waters of any natural stream are not sufficient for the service of all those desiring the use of the same, those using the water for domestic purposes shall have the preference over those claiming for any other purpose, and those using the water for agricultural purposes shall have preference over those using the same for manufacturing purposes."

COLO. CONST. art. XVI, § 6.

Section 7. Right-of-way for ditches, flumes.

"All persons and corporations shall have the right-of-way across public, and corporate lands for the construction of ditches, canals and flumes for the purpose of conveying water for domestic purposes, for the irrigation of agricultural lands, and for mining and manufacturing purposes, and for drainage, upon payment of just compensation." Colo. Const. art. XVI, § 7.

Adjudication Act of 1879

Section 18.

"It shall be the duty of said water commissioners to divide the water in the natural stream or streams of their district among the several ditches taking water from the same, according to the prior rights of each respectively; in whole or in part to shut and fasten, or cause to be shut and fastened, by order given to any sworn assistant sheriff or constable of the county in which the head of such ditch is situated, the head-gates of any ditch or ditches heading in any of the natural stream of the district, which, in a time of a scarcity of water, shall not be entitled to water by reason of the priority of the rights of others below them on the same stream."

1879 Sess. Laws at 99-100.

Section 19.

"For the purpose of hearing, adjudicating and settling all questions concerning the priority of appropriations of water between ditch companies and other owners of ditches drawing water for irrigation purposes from the same stream or its tributaries within the same water district, and all other questions of law and questions of right growing out of or in any way involved or connected therewith, jurisdiction is hereby vested exclusively in the district court of the proper county; but when any water district shall extend into two or more counties, the district court of the county in which the first regular term after the first day of December in each year shall soonest occur, according to the law then in force, shall be the proper court in which the proceeding for said purpose, as hereinafter provided for, shall be commenced"

Adjudication Act of 1881

Section 1.

"In order that all parties may be protected in their lawful rights to the use of water for irrigation, every person, association or corporation owning or claiming any interest in any ditch, canal or reservoir, within any water district, shall, on or before the first day of June, A.D. 1881, file with the clerk of the district court having jurisdiction of priority of right to the use of water for irrigation in such water district, a statement of claim, under oath, entitled of the proper court, and in the matter of priorities of water rights in district number _____, as the case may be"

1881 Sess. Laws at 142.

Coffin v. Left Hand Ditch Company

"We conclude, then, that the common law doctrine giving the riparian owner a right to the flow of water in its natural channel upon and over his lands, even though he makes no beneficial use thereof, is inapplicable to Colorado. Imperative necessity, unknown to the countries which gave it birth, compels the recognition of another doctrine in conflict therewith. And we hold that, in the absence of express statutes to the contrary, the first appropriator of water from a natural stream for a beneficial purpose has, with the qualifications contained in the constitution, a prior right thereto, to the extent of such appropriation."

Coffin v. Left Hand Ditch Co., 6 Colo. 443, 447 (1882).

"We have already declared that water appropriated and diverted for a beneficial purpose, is, in this country, not necessarily an appurtenance to the soil through which the stream supplying the same naturally flows. If appropriated by one prior to the patenting of such soil by another, it is a vested right entitled to protection, though not mentioned in the patent."

Id. at 449.

"In the absence of legislation to the contrary, we think that the right to water acquired by priority of appropriation thereof is not in any way dependent upon the *locus* of its application to the beneficial use designed."

Id.

Thomas v. Guiraud

"We concede that Guiraud could not appropriate more water than was necessary to irrigate his land; that he could not divert the same for the purpose of irrigating lands which he did not cultivate or own, or hold by possessory right or title, to the exclusion of a subsequent bona fide appropriator."

Thomas v. Guiraud, 6 Colo. 530, 532 (1883).

"The true test of appropriation of water is the successful application thereof to the beneficial use designed; and the method of diverting or carrying the same, or making such application, is immaterial."

Id. at 533.

Larimer County Reservoir Co. v. People ex rel. Luthe

"While a diversion must of necessity take place before the water is actually applied to the irrigation of the soil, the appropriation thereof is, in legal contemplation, made when the act evidencing the intent is performed. Of course such initial act must be followed up with reasonable diligence, and the purpose must be consummated without unnecessary delay The act of utilizing as a reservoir a natural depression, which included the bed of the stream, or which was found at the source thereof, was not in and of itself unlawful."

Larimer County Reservoir Co. v. People ex rel. Luthe, 9 P. 794, 796 (Colo. 1886).

"He who attempts to appropriate water in this way does so at his peril. He must see to it that no legal right of prior appropriators, or of other persons, is in any way interfered with by his acts. He cannot lessen the quantity of water, seriously impair its quality, or impede its natural flow, to the detriment of others who have acquired legal rights therein superior to his"

Id.

"While the legislature cannot prohibit the appropriation or diversion of unappropriated water, for useful purposes, from natural streams upon the public domain, that body has the power to regulate the manner of effecting such appropriation or diversion. It may, by reasonable and constitutional legislation, designate how the water shall be turned from the stream, or how it shall be stored and preserved."

Id. at 797.

Farmers High Line Canal & Reservoir Co. v. Southworth

"It is well established that no mere diversion of water from a stream will constitute the constitutional appropriation. To make it such it must be applied to some beneficial use, and in case of irrigation it must be actually applied to the land before the appropriation is complete."

Farmers High Line Canal & Reservoir Co. v. Southworth, 21 P. 1028, 1029 (Colo. 1889).

Strickler v. City of Colorado Springs

"The fundamental principle of this system is that priority in point of time gives superiority of right among appropriations for like beneficial purposes [I]f . . . the appropriator of water from a stream be held to have no claim upon the water of the tributaries of that stream, then defendant's water supply is liable to be cut off by settlers above at any time,—a conclusion so manifestly unjust that it must be discarded." Strickler v. City of Colorado Springs, 26 P. 313, 315 (Colo. 1891).

"The authorities seem to concur in the conclusion that the priority to the use of water is a property right. To limit its transfer, as contended by appellee, would in many instances destroy much of its value . . . We grant that the water itself is the property of the public. Its use, however, is subject to appropriation, and in this case it is conceded that the owner has the paramount right to such use. In our opinion this right may be transferred by sale so long as the rights of others, as in this case, are not injuriously affected thereby."

1d. at 316.

Suffolk Gold Mining & Milling Co. v. San Miguel Consol. Mining & Milling Co.

"[W]e are quite of the opinion that the title and rights of the prior appropriating company were not absolute, but conditional, and they were obligated to so use the water that subsequent locators might, like lower riparian owners, receive the balance of the stream unpolluted, and fit for the uses to which they might desire to put it."

Suffolk Gold Mining & Milling Co. v. San Miguel Consol. Mining & Milling Co., 48 P. 828, 832 (Colo. Ct. App. 1897) (citations omitted).

"It is therefore quite consonant with the apparent purpose and declared will of the people to subject the rights of the appropriators of the public waters of the state to such limitations as shall tend not only to conserve the property interests which the appropriators may acquire, but to preserve the remaining unappropriated waters in their original condition for the use and benefit of late comers, who by their labors and industry may further develop our interests and resources."

Id.

National Forest Organic Act of 1897

"All waters within the boundaries of national forests may be used for domestic, mining, milling, or irrigation purposes, under the laws of the State wherein such national forests are situated, or under the laws of the United States and the rules and regulations established thereunder."

National Forest Organic Act of 1897, ch. 2, § 1, 30 Stat. 36 (1897) (current version at 16 U.S.C. § 481 (1994).

Reclamation Act of 1902

§ 372. Water right as appurtenant to land extent of right.

"The right to the use of water acquired under the provisions of this Act shall be appurtenant to the land irrigated, and beneficial use shall be the basis, the measure, and the limit of the right."

Reclamation Act of 1902, ch. 1093, § 8, 32 Stat 390 (1902) (current version at 43 U.S.C. § 372 (1994)).

§ 383. Vested rights and State laws unaffected.

"Nothing in this Act shall be construed as affecting or intended to affect or to in any way interfere with the laws of any State or Territory relating to the control, appropriation, use or distribution of water used in irrigation, or any vested right acquired thereunder, and the Secretary of the Interior, in carrying out the provisions of this Act, shall proceed in conformity with such laws, nothing herein shall in any way affect any right of any State or of the Federal government or of any landowner, appropriator, or user of water, in, to, or from any interstate stream or the waters thereof."

Reclamation Act of 1902, ch. 1093, § 8, 32 Stat 390 (1902) (current version at 43 U.S.C. § 383 (1994)).

Adjudication Act of 1903

Section 1.

"That the owner or owners of any water rights derived from any natural stream, water-course or any other source, acquired by appropriation and used for any beneficial purpose other than irrigation, may have his or their right thereto established and decreed by the district court having jurisdiction of the adjudication of water rights for irrigation purposes in the water district in which said water rights are situated, by petitioning said court in the same manner and by complying with the procedure and the requirements of the law now applicable to the adjudication of water rights for irrigation purposes."

1903 Colo. Sess. Laws at 297.

New Cache La Poudre Irrigating Co. v. Arthur Irrigation Co.

"The object of the irrigation statutes providing for the adjudication of priorities was to settle such priorities and secure the orderly distribution of water for irrigation purposes. To further effect this object officials have been designated, whose duty it is to distribute the water in accordance with the adjudication. The decree in such proceedings is the guide for such officials from which they must determine, in the discharge of their duties, the relative rights of parties, the volume to which different ditches are entitled, the point of diversion, and all other data necessary to a distribution of water in accordance with its provisions. To obtain an order allowing a change in the point of diversion is, in effect, a modification or change in the adjudication decree. In order to protect officials in the discharge of their duties in distributing water, to preserve the peace, to prevent a multiplicity of suits, to relieve the officer from being required to ascertain, at his peril, any of the various questions which he might be required to consider when requested to change the point of diversion, and finally, that there may be a judicial ascertainment of the right to such change, which shall bind all parties and not leave the place of diversions to the whim of interested parties, the act of 1899 was passed All persons who may be affected by the desired change must be notified of the proceeding, and given an opportunity to be heard before the court is authorized to enter an order allowing such change."

New Cache La Poudre Irrigating Co. v. Arthur Irrigation Co., 87 P. 799, 800 (Colo. 1906).

Kansas v. Colorado

"[Each State] may determine for itself whether the common law rule in respect to riparian rights or that doctrine which obtains in the arid regions of the West of the appropriation of waters for the purposes of irrigation shall control. Congress cannot enforce either rule upon any state."

Kansas v. Colorado, 206 U.S. 46, 94 (1907).

"[I]f the depletion of the waters of the river by Colorado continues to increase there will come a time when Kansas may justly say that there is no longer an equitable division of benefits, and may rightfully call for relief against the action of Colorado, its corporations and citizens in appropriating the waters of the Arkansas for irrigation purposes. The decree will also dismiss the bill of the state of Kansas as against all the defendants, without prejudice to the right of the plaintiff to institute new proceedings whenever it shall appear that through a material increase in the depletion of the waters of the Arkansas by Colorado, its

corporations or citizens, the substantial interests of Kansas are being injured to the extent of destroying the equitable apportionment of benefits between the two states resulting from the flow of the river."

Id. at 117-18.

Winters v. United States

Id. at 577 (citations omitted).

"The case, as we view it, turns on the agreement of May, 1888, resulting in the creation of Fort Belknap Reservation."
Winters v. United States, 207 U.S. 564, 575 (1907).

"The power of the government to reserve the waters and exempt them from appropriation under the state laws is not denied, and could not be. That the Government did reserve them we have decided, and for a use which would be necessarily continued through years. This was done May 1, 1888, and it would be extreme to believe that within a year Congress destroyed the reservation and took from the Indians the consideration of their grant, leaving them a barren waste—took from them the means of continuing their old habits, yet did not leave them the power to change to new ones."

Town of Sterling v. Pawnee Ditch Extension Co.

"Section 6, art. 16, Const., states that those using water for domestic purposes shall have the preference over those claiming for any other purpose, but this provision does not entitle one desiring to use water for domestic purposes, as intended by the defendant town of Sterling to take it from another who has previously appropriated it for some other purpose, without just compensation. Rights to the use of water for a beneficial purpose, whatever the use may be, are property, in the full sense of that term, and are protected by section 15, art. 2, Const., which says that 'private property shall not be taken or damaged for public or private use without just compensation."

Town of Sterling v. Pawnee Ditch Extension Co., 94 P. 339, 340 (Colo. 1908).

"The law contemplates an economical use of water. It will not countenance the diversion of a volume from a stream which, by reason of the loss resulting from the appliances used to convey it, is many times that which is actually consumed at the point where it is utilized. Water is too valuable to be wasted, either through an extravagant application for the purpose appropriated or by waste resulting from the means employed to carry it to the place of use, which can be avoided by the exercise of a reasonable degree of care to prevent unnecessary loss, or loss of a volume which is greatly disproportionate to that actually con-

sumed. An appropriator, therefore, must exercise a reasonable degree of care to prevent waste through seepage and evaporation in conveying it to the point where it is used."

Id. at 341-42 (citations omitted).

Sternberger v. Seaton Mountain Electric, Light, Heat & Power Co.

"Not only the name of the corporation, but certain allegations of the complaint, indicate that defendant corporation was organized for a legitimate purpose and can lawfully acquire, by making an appropriation in its own behalf, or by purchase a valid appropriation of the waters of a natural stream in this state, by using which, as an agency, it may produce and sell light, heat, and power."

Sternberger v. Seaton Mountain Electric, Light, Heat & Power Co., 102 P. 168, 170 (Colo. 1909).

Town of Lyons v. City of Longmont

"The sole question involved is, whether the city of Longmont has the right to condemn a right of way for its pipeline through the streets and alleys of the town of Lyons. Independent of statutory provisions cited by counsel for plaintiff in error, we think this right is conferred by the constitutional provision above quoted. It declares that all persons and corporate lands, for the purpose of conveying water for domestic purposes. The intent of a constitutional provision is the law. Manifestly the intent of the provision under consideration was to confer upon all persons and corporations the right of way across lands, either public or private, by whomsoever owned, through which to carry water for domestic purposes, and necessarily embraces a municipal corporation seeking a right of way for such purposes. It covers every form in which water is used, domestic, irrigation, mining, and manufacturing, the kind of conduit employed and utilized is of no material moment . .

Town of Lyons v. City of Longmont, 129 P. 198, 200 (Colo. 1913).

Comstock v. Ramsay

"We take judicial notice of the fact that practically every decree on the South Platte River, except possibly only the very early ones, is dependent for its supply, and for years and years has been, upon return, waste and seepage waters. This is the very thing which makes an enlarged use of the waters of our streams for irrigation possible. To now permit one who has never had or claimed a right upon or from the river to come in, capture, divert and appropriate waters naturally tributary thereto, which are in fact nothing more or less than return and waste waters and upon which old decreed priorities have long depended for their supply, would be in effect to reverse the ancient doctrine, 'first in time first in right,' and to substitute in its stead, fortunately, as yet, an unrecognized one, 'last in time first in right.'"

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

Wyoming v. Colorado

"In suits between appropriators from the same stream, but in different states recognizing the doctrine of appropriation, the question whether rights under such appropriations should be judged by the rule of priority has been considered by several courts, state and federal, and has been uniformly answered in the affirmative."

Wyoming v. Colorado, 259 U.S. 419, 470 (1922).

Ft. Morgan Reservoir & Irrigation Co. v. McCune

"Under the statutes and decisions of this court, the water officials must distribute water according to the tabulated decrees; they have to do only with decreed priorities; with unappropriated waters they have no concern."

Ft. Morgan Reservoir & Irrigation Co. v. McCune, 206 P. 393 (Colo. 1922).

"So long as all the water is required to supply decreed priorities, said officials should permit no water to be diverted for new appropriations. Whenever there is a surplus of water, either from floods, or because of small demands therefor by appropriators, the officers have no right to interfere in the diversion of such surplus. All new appropriations must be made from surplus water, whether for storage or direct irrigation."

Id. at 394.

California Oregon Power Co. v. Beaver Portland Cement Co.

"What we hold is that following the act of 1877, if not before, all non-navigable waters then a part of the public domain became *publici juris*, subject to the plenary control of the designated states, including those since created out of the territories named, with the right in each to determine for itself to what extent the rule of appropriation or the common-law rule in respect of riparian rights should obtain."

California Oregon Power Co. v. Beaver Portland Cement Co., 295 U.S. 142, 163-64 (1935).

Hinderlider v. La Plata River & Cherry Creek Ditch Co.

"Whether the apportionment of the water of an interstate stream be made by compact between the upper and lower States with the consent of Congress or by a decree of this Court, the apportionment is binding upon the citizens of each State and all water claimants, even where the State had granted the water rights before it entered into the compact."

Hinderlider v. La Plata River & Cherry Creek Ditch Co., 304 U.S. 92, 106 (1938).

Safranek v. Town of Limon

"Under our Colorado law, it is the presumption that all ground water so situated finds its way to the stream in the watershed of which it lies, is tributary thereto, and subject to appropriation as part of the waters of the stream. The burden of proof is on one asserting that such ground water is not so tributary, to prove that fact by clear and satisfactory evidence."

Safranek v. Town of Limon, 228 P.2d 975, 977 (Colo. 1951) (citations omitted).

McCarran Amendment of 1952

"Consent is given to join the United States as a defendant in any suit (1) for the adjudication of rights to the use of water of a river system or other source, or (2) for the administration of such rights, where it appears that the United States is the owner of or is in the process of acquiring water rights by appropriation under State law, by purchase, by exchange, or otherwise, and the United States is a necessary party to such suit. The United States, when a party to any such suit, shall (1) be deemed to have waived any right to plead that the State laws are inapplicable or that the Untied States is not amenable thereto by reason of its sovereignty, and (2) shall be subject to the judgments, orders, and decrees of the court having jurisdiction, and may obtain review thereof, in the same manner and to the same extent as a private individual under like circumstances: *Provided*, That no judgment for costs shall be entered against the United States in any such suit."

McCarran Amendment of 1952, ch. 651, title II, § 208 (a)-(c), 66 Stat. 560 (1952) (current version at 43 U.S.C. § 666 (1994).

City and County of Denver v. Northern Colorado Water Conservancy Dist.

"[A]n appropriation is not complete until actual diversion and use, still, the right may relate back to the time when the first open step was taken giving notice of intent to secure it, (4) that right to relate back is conditional that construction thereafter was prosecuted with reasonable diligence, and conditional further that there was then 'a fixed and definite purpose to take it up and carry it through."

City and County of Denver v. Northern Colorado Water Conservancy Dist., 276 P.2d 992, 999 (1954) (citations omitted).

"The priority of a water right may not be dated back to the date of survey or filing of plat of a diversion proposal which has been abandoned in favor of another and very different plan."

Id. at 1001.

"The doctrine of relation back is a legal fiction in derogation of the constitution for the benefit of claimants under larger and more difficult projects and should be strictly construed."

Id.

Federal Power Comm'n v. Oregon

"There thus remains no question as to the constitutional and statutory authority of the Federal Power Commission to grant a valid license for a power project on reserved lands of the United States, provided that, as required by the Act, the use of the water does not conflict with vested rights of others."

Federal Power Comm'n v. Oregon, 349 U.S. 435, 444-45 (1955) (footnote omitted).

Colorado Springs v. Bender

"At his own point of diversion on a natural water course, each diverter must establish some reasonable means of effectuating his diversion. He is not entitled to command the whole or a substantial flow of the stream merely to facilitate his taking the fraction of the whole flow to which he is entitled. This principle applied to diversion of underflow or underground water means that priority of appropriation does not give a right to an inefficient means of diversion, such as a well which reaches to such a shallow depth into the available water supply that a shortage would occur to such senior even though diversion by others did not deplete the steam below, where there would be an adequate supply for the senior's lawful demand."

Colorado Springs v. Bender, 366 P.2d 552, 555 (Colo. 1961) (citation omitted).

"In determining the facts mentioned . . . the conditions surrounding the diversion by the senior appropriator must be examined as to whether he has created a means of diversion from the aquifer which is reasonably adequate for the use to which he has historically put the water of his appropriation. If adequate means for reaching a sufficient supply can be made available to the senior, whose present facilities for diversion fail when water table is lowered by acts of the junior appropriators, provision for such adequate means should be decreed at the expense of the junior appropriators, it being unreasonable to require the senior to supply such means out of his own financial resources."

Id. at 556.

Arizona v. California

"We agree with the Master that apportionment of the Lower Basin waters of the Colorado River is not controlled by the doctrine of equitable apportionment or by the Colorado River Compact. It is true that the Court has used the doctrine of equitable apportionment to decide river controversies between States. But in those cases Congress had not made any statutory apportionment. In this case, we have decided that Congress has provided its own method for allocating among the Lower Basin States the mainstream water to which they are entitled under the Compact. Where Congress has so exercised its constitutional power over waters, courts have no power to substitute their own notions of an 'equitable apportionment' for the apportionment chosen by Congress."

Arizona v. California, 373 U.S. 546, 565-66 (1963) (footnote omitted).

Colorado River Water Conservation Dist. v. Rocky Mountain Power Co.

"There is no support in the law of this state for the proposition that a minimum flow of water may be 'appropriated' in a natural stream for piscatorial purposes without diversion of any portion of the water 'appropriated' from the natural course of the stream."

Colorado River Water Conservation Dist. v. Rocky Mountain Power Co., 406 P.2d 798, 800 (Colo. 1965).

"[M]aintenance of the 'flow' of the stream is a riparian right and is completely inconsistent with the doctrine of prior appropriation."

Id.

Colorado Groundwater Management Act of 1965

"It is declared that the traditional policy of the state of Colorado, requiring the water resources of this state to be devoted to beneficial use in reasonable amounts through appropriation, is affirmed with respect to the designated ground waters of this state, as said waters are defined in section 37-90-103(6). While the doctrine of prior appropriation is recognized, such doctrine should be modified to permit the full economic development of designated ground water resources. Prior appropriations of ground water should be protected and reasonable ground water pumping levels maintained, but not to include the maintenance of historical water levels. All designated ground waters in this state are therefore declared to be subject to appropriation in the manner defined in this article."

COLO. REV. STAT. § 37-90-102(1) (1997).

Fellhauer v. People

"It is implicit in these constitutional provisions that, along with vested rights, there shall be maximum utilization of the water of this state. As administration of water approaches its second century the curtain is opening upon the new drama of maximum utilization and how constitutionally that doctrine can be integrated into the law of vested rights. We have known for a long time that the doctrine was lurking in the backstage shadows as a result of the accepted, though oft violated, principle that the right to water does not give the right to waste it."

Fellhauer v. People, 447 P.2d 986, 994 (Colo. 1968).

Water Right Determination and Administration Act of 1969

"It is hereby declared to be the policy of the state of Colorado that all water in or tributary to natural surface streams, not including non-tributary ground water as that term is defined in section 37-90-103, originating in or flowing into this state have always been and are hereby declared to be the property of the public, dedicated to the use of the people of the state, subject to appropriation and use in accordance with sections 5 and 6 of article XVI of the state constitution and this article. As incident thereto, it is the policy of this state to integrate the appropriation, use, and administration of underground water tributary to a stream with the use of surface water in such a way as to maximize the beneficial use of all of the waters of this state."

COLO. REV. STAT. § 37-92-102(1)(a) (1997).

United States v. District Court ex rel. Eagle County

"[W]e do not read § 666(a) (2) [of the McCarran Amendment] as being restricted to appropriative rights acquired under state law (2) covers rights acquired by appropriation under state law and rights acquired 'by purchase' or 'by exchange', which we assume would normally be appropriative rights. But it also includes water rights which the United States has 'otherwise' acquired. The doctrine of ejusdem generis is invoked to maintain that 'or otherwise' does not encompass the adjudication of reserved water rights, which are in no way dependent for their creation or existence on state law. We reject that conclusion for we deal with an all-inclusive statute concerning the adjudication of rights to the use of water of a river system' which in §666(a) (1) has no exceptions and which, as we read it, includes appropriative rights, riparian rights, and reserved rights."

United States v. District Court ex rel. Eagle County, 401 U.S. 520, 524 (1971) (footnote omitted).

United States v. District Court for Water Div. No. 5

"It is pointed out that the new statute [1969 Colorado Adjudication Act] contemplates monthly proceedings before a water referee on water rights applications. These proceedings, it is argued, do not constitute general adjudications of water rights because all the water users and all water rights on a stream system are not involved in the referee's determinations. The only water rights considered in the proceeding are those for which an application has been filed within a particular month. It is also said that the Act makes all water rights confirmed under the new procedure junior to those previously awarded."

United States v. District Court for Water Div. No. 5, 401 U.S. 527, 529 (1971).

"The present suit, like the one in the Eagle County case, reaches all claims, perhaps month by month but inclusively in the totality; and, as we said in the other case, if there is a collision between prior adjudicated rights and reserved rights of the United States, the federal question can be preserved in the state decision and brought here for review."

Id. at 529-30.

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City and County of Denver v. Fulton Irrigating Ditch Co.

"'[D]eveloped water' is that water which has been added to the supply of a natural stream and which never would have come into the stream had it not been for the efforts of the party producing it It follows

that the developers without hindrance could use, re-use, make successive use of and dispose of the water."

City and County of Denver v. Fulton Irrigating Ditch Co., 506 P.2d 144, 147 (Colo. 1972).

Federal Water Pollution Control Act

"The objective of this chapter is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. 1251(a) (1994 and Supp. 1995) (originally enacted June 30, 1948 as Act, ch. 758, 62 Stat. 1155).

Southeastern Colo. Water Conservancy Dist. v. Shelton Farms, Inc.

"The planting and harvesting of trees to create water rights superior to the oldest decrees on the Arkansas would result in a harvest of pandemonium. Furthermore, one must be concerned that once all plant life disappears, the soil on the banks of the river will slip away, causing irreparable erosion."

We are not unmindful that the statute speaks of the policy of maximum beneficial and integrated use of surface and subsurface water. But efficacious use does not mean uplifting one natural resource to the detriment of another. The waters of Colorado belong to the people, but so does the land. There must be a balancing effect, and the elements of water and land must be used in harmony to the maximum feasible use of both."

Southeastern Colo. Water Conservancy Dist. v. Shelton Farms, Inc., 529 P.2d 1321, 1327 (Colo. 1974).

Jacobucci v. District Court

"Mutual ditch companies in Colorado have been recognized as quasipublic carriers."

Jacobucci v. District Court, 541 P.2d 667, 671 (Colo. 1975).

"[T]he shares of stock . . . represent a definite and specific water right, as well as a corresponding interest in the ditch, canal, reservoir, and other works by which the water right is utilized."

Id. at 672.

"The condemnation action here in issue has the potential of seriously disrupting the shareholders' property interests. That the water rights owned by Farmers' shareholders are property rights is well established by Colorado law."

Id. at 675 (citations omitted).

"Their ability to protect those individualized interests would surely be impaired if this action were allowed to proceed in their absence."

Id.

Colorado River Water Conservation Dist. v. United States

"We conclude that the state court had jurisdiction over Indian water rights under the [McCarran] Amendment."

Colorado River Water Conservation Dist. v. United States, 424 U.S. 800, 809 (1976).

"The clear federal policy evinced by that legislation is the avoidance of piecemeal adjudication of water rights in a river system."

Id. at 819.

Federal Land Policy and Management Act of 1976

"The Congress declares that it is the policy of the United States that—
(1) the public lands be retained in Federal ownership, unless as a result of the land use planning procedure provided for in the Act, it is determined that disposal of a particular parcel will serve the national interest"

43 U.S.C. § 1701(1) (1994).

California v. United States

"[E]xcept where the reserved rights or navigation servitude of the United States are invoked, the State has total authority over its internal waters."

California v. United States, 438 U.S. 645, 662 (1978).

United States v. New Mexico

"Each time this Court has applied the 'implied-reservation-of-water doctrine,' it has carefully examined both the asserted water right and the specific purposes for which the land was reserved, and concluded that without the water the purposes of the reservation would be entirely defeated."

United States v. New Mexico, 438 U.S. 696, 700 (1978) (footnote omitted).

"This careful examination is required both because the reservation is implied, rather than expressed, and because of the history of congressional intent in the field of federal-state jurisdiction with respect to allocation of water. Where Congress has expressly addressed the question of whether federal entities must abide by state water law, it has almost invariably deferred to the state law. Where water is necessary to fulfill the very purposes for which a federal reservation was created, it is reasonable to conclude, even in the face of Congress' express deference to state water law in other areas, that the United States intended to reserve the necessary water. Where water is only valuable for a secondary use of the reservation, however, there arises the contrary inference that Congress intended, consistent with its other views, that the United States would acquire water in the same manner as any other public or private appropriator."

Id. at 701-02 (footnote and citations omitted).

"Not only is the Government's claim that Congress intended to reserve water for recreation and wildlife preservation inconsistent with Congress' failure to recognize these goals as purposes of the national forests, it would defeat the very purpose for which Congress did create the national forest system The water that would be 'insured' by preservation of the forest was to 'be used for domestic, mining, milling, or irrigation purposes, under the laws of the State wherein such national forests are situated, or under the laws of the United States and the rules and regulations established thereunder.' As this provision and its legislative history evidence, Congress authorized the national forest system principally as a means of enhancing the quantity of water that would be available to the settlers of the arid West. The government, however, would have us now believe that Congress intended to partially defeat this goal by reserving significant amounts of water for purposes quite inconsistent with this goal."

Id. at 711-13 (footnote and citations omitted).

Colorado River Water Conservation Dist. v. Vidler Tunnel Water Co.

"To initiate an appropriation, two elements—an intent and an act—must co-exist. First, the applicant must have an *intent* to take the water and put it to beneficial use. Secondly, the applicant must demonstrate this intent by an open physical act sufficient to constitute notice to third parties."

Colorado River Water Conservation Dist. v. Vidler Tunnel Water Co., 594 P.2d 566, 568 (Colo. 1979) (footnote and citation omitted).

"Our constitution guarantees a right to appropriate, not a right to speculate. The right to appropriate is for use, not merely for profit. As we read our constitution and statutes, they give no one the right to preempt the development potential of water for the anticipated future use of others not in privity of contract, or in any agency relationship, with the developer regarding that use. To recognize conditional decrees grounded on no interest beyond a desire to obtain water for sale would—as a practical matter—discourage those who have need and use for the water from developing it. Moreover, such a rule would encourage those with vast monetary resources to monopolize, for personal profit rather than for beneficial use, whatever unappropriated water remains."

Id

Colorado River Water Conservation Dist. v. Colorado Water Conservation Board

"[I]t is obvious that the General Assembly in the enactment of S.B. 97 certainly did intend to have appropriations for piscatorial purposes without diversion.

We hold that under S.B. 97 the Colorado Water Board can make an in-stream appropriation without diversion in the conventional sense."

Colorado River Water Conservation Dist. v. Colorado Water Conservation Board, 594 P.2d 570, 574 (Colo. 1979).

"The legislative intent is quite clear that these appropriations are to protect and preserve the natural habitat and that the decrees confirming them award priorities which are superior to the rights of those who may later appropriate. Otherwise, upstream appropriations could later be made, the streams dried up, and the whole purpose of the legislation destroyed."

Id. at 575.

"The legislative objective to preserve reasonable portions of the natural environment in Colorado. Factual determinations regarding such questions as which areas are most amenable to preservation and what life forms are presently flourishing or capable of flourishing should be delegated to an administrative agency which may avail itself of expert scientific opinion."

Id. at 576.

People v. Emmert

"It is the general rule of property law recognized in Colorado that the land underlying non-navigable streams is the subject of private ownership and is vested in the proprietors of the adjoining lands." People v. Emmert, 597 P.2d 1025, 1027 (1979).

"We recognize the various rationales employed by courts to allow public recreational use of water overlying privately owned beds, i.e., (1) practical considerations employed in water right states such as Florida, Minnesota and Washington; (2) a public easement in recreation as an incident of navigation; (3) the creation of a public trust based on usability, thereby establishing only a limited private usufructary right; and (4) state constitutional basis for state ownership. We consider the common law rule of more force and effect, especially given its long-standing recognition in this state."

Id. at 1027.

"The interest at issue here, a riparian bed owner's exclusive use of water overlying his land, is distinguished from the right of appropriation. Constitutional provisions historically concerned with appropriation, therefore, should not be applied to subvert a riparian bed owner's common law right to the exclusive surface use of waters bounded by his lands. Without permission, the public cannot use such waters for recreation. If the increasing demand for recreational space on the waters of this state is to be accommodated, the legislative process is the proper method to achieve this end."

Id. at 1029 (citations omitted).

Weibert v. Rothe Bros.

"We have always recognized limitations on the right of the owner of a water right to divert at the full decreed rate at all times. The owner of a water right has no right as against a junior appropriator to waste water, *i.e.*, to divert more than can be used beneficially. Nor may he extend the time of diversion to enable him to irrigate lands in addition to those for which the water was appropriated. These limitations are read into every water right decree by implication."

"The right to change a point of diversion or type of use with respect to water rights decreed for irrigation purposes is limited to the 'duty of water' with respect to the decreed place of use."

Weibert v. Rothe Bros., 618 P.2d 1367, 1371 (1980) (citations omitted).

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"The right to change a point of diversion or place of use is also limited in quantity and time by historical use....'Historical use' as a limitation on the right to change a point of diversion has been considered to be an application of the principle that junior appropriators have vested rights in the continuation of stream conditions as they existed at the time of their respective appropriations."

Id. at 1371-72 (citations omitted).

"A plan for augmentation is to be approved by the water judge based on the same criterion involved in evaluating an application for change of water right"

Id at 1373.

"In order to determine the adequacy of the plan to accomplish its intended purpose, it is necessary to consider the adequacy of the replacement water rights."

Id.

Danielson v. Vickroy

"The Colorado Ground Water Management Act... was enacted in 1965 to establish a procedure for appropriation of designated ground water and for devoting it to beneficial use. It was designed to permit the full economic development of designated ground water resources. Designated ground water, the definition of which is considered in more detail later, includes water not tributary to any stream, and other water not available for the fulfillment of decreed surface rights."

Danielson v. Vickroy, 627 P.2d 752, 756 (Colo. 1981) (citations omitted).

"The Management Act creates a Ground Water Commission . . . which has authority to determine designated ground water basins"

Id.

Fort Lyon Canal Company v. Catlin Canal Company

"The concept that the rights incident to water right ownership can be modified by private agreement is not novel." Fort Lyon Canal Company v. Catlin Canal Company, 642 P.2d 501, 506 (Colo. 1982).

"[A] mutual ditch company bylaw imposing reasonable limitations, additional to those contained in section 37-92-305, C.R.S. 1973, upon the right of a stockholder to obtain a change in the point of diversion can be enforced."

Id. at 508.

"We find no reason in public policy to deny the directors, pursuant to bylaw authorization, the right to review a proposed change of place of delivery to assure that it does not create the injury upon which the bylaw focuses."

Id. at 509 (footnote omitted).

Navajo Development Co. v. Sanderson

"Federal reserved water rights, by their nature, exist from the time that the legislative or executive action created the federal enclave to which the water right attaches. If Congress or the President wish to obtain more water for the federal lands after the initial reservations, they must use the state appropriation machinery or condemn the desired water."

Navajo Development Co. v. Sanderson, 655 P.2d 1374, 1379 (Colo. 1982) (citations omitted).

"Federal reserved water rights must be understood as a doctrine which places a federal appropriator within the state appropriation scheme by operation of federal law."

Id.

"A grantor cannot warrant that it will snow or rain, or that all senior appropriators will not withdraw their share of water. The value of a water right is its priority and the expectations which that right provides."

Id. at 1380.

United States v. City and County of Denver

"The power of the United States to legislate a federal system for the use and disposition of unappropriated non-navigable waters on federal lands generally, and on reserved lands specifically, is derived from the Property Clause of the United States Constitution."

United States v. City and County of Denver, 656 P.2d 1, 17 (Colo. 1982) (footnote omitted).

"[T]he existence of a federal reservation does not in and of itself denote a reservation of water. Rather, there must be a determination of the precise federal purpose to be served, a determination that the purpose would be frustrated without water, and a determination of the minimum quantity of water required to fulfill the purpose."

Id. at 18.

"For each federal claim of a reserved water right, the trier of fact must examine the documents reserving the land form the public domain and the underlying legislation authorizing the reservation; determine the precise federal purposes to be served by such legislation; determine whether water is essential for the primary purposes of the reservation; and finally determine the precise quantity of water—the minimal need . . . required for such purposes."

Id. at 20.

"Thus, any water in excess of that needed to fulfill the purposes of the national forests was made available by congress to subsequent private appropriators."

Id. at 22.

"We conclude that MUSYA [Multiple Use Sustained Yield Act] does not reserve additional water for outdoor recreation, wildlife, or fish purposes. We believe that Congress intended that the federal government proceed under state law in the same manner as any other public or private appropriator."

Id. at 27.

Public Trust - California National Audubon Soc'y v. Superior Court of Alpine County

"This case brings together for the first time two systems of legal thought: the appropriative water rights system which since the days of the gold rush has dominated California water law, and the public trust doctrine which, after evolving as a shield for the protection of tidelands, now extends its protective scope to navigable lakes. Ever since we first recognized that the public trust protects environmental and recreational values the two systems of legal thought have been on a collision course."

National Audubon Soc'y v. Superior Court of Alpine County, 658 P.2d 709, 712 (Cal. 1983).

"In our opinion, the core of the public trust doctrine is the state's authority as sovereign to exercise a continuous supervision and control over the navigable waters of the state and the lands underlying those waters."

Id. at 712.

"Once the state has approved an appropriation, the public trust imposes a duty of continuing supervision over the taking and use of the appropriated water. In exercising its sovereign power to allocate water resources in the public interest, the state is not confined by past allocation decisions which may be incorrect in light of current knowledge or inconsistent with current needs."

"The state accordingly has the power to reconsider allocation decisions even though those decisions were made after due consideration of their effect on the public trust."

Id. at 728 (footnote omitted).

Alamosa La Jara Water Users Protection Ass'n v. Gould

"We note that the policy of maximum utilization does not require a single-minded endeavor to squeeze every drop of water from the valley's aquifers. Section 37-92-501(2)(e) makes clear that the objective of 'maximum use' administration is 'optimum use.' Optimum use can only be achieved with proper regard for all significant factors, including environmental and economic concerns."

Alamosa La Jara Water Users Protection Ass'n v. Gould, 674 P.2d 914, 935 (Colo. 1983) (footnote omitted).

Colorado v. Southwestern Colo. Water Conservation District

"[W]e believe that, given the state's plenary control over development of water law, the traditional property concept of fee ownership is of limited usefulness as applied to nontributary ground water and serves to mislead rather than to advance understanding in considering public and private rights to utilization of this unique resource."

State v. Southwestern Colo. Water Conservation District, 671 P.2d 1294, 1316 (Colo. 1983).

"Nontributary ground water is not subject to appropriation under Colo. Cons. Art. XVI, §§ 5 and 6, or to adjudication or administration under the 1969 Act. The modified doctrine of prior appropriation provided for the 1965 Act applies to nontributary ground water, and rights to such water in designated ground water basins must be obtained through the procedures established in that Act."

Id. at 1319.

"In light of the flexible approach taken in the case law toward application of the 'beneficial use' concept, and given the legislative expressions of concern for reclamation of mined land and abatement of dust pollution, we believe that land reclamation and dust control are beneficial uses."

Id. at 1322.

Great Western Sugar Co. v. Jackson Lake Reservoir and Irrigation Co.

"Absent some express exception, a shareholder of stock in a mutual ditch company is entitled to a ratable portion of the water obtained by exercise of the company's water rights."

Great Western Sugar Co. v. Jackson Lake Reservoir and Irrigation Co., 681 P.2d 484, 490 (Colo. 1984).

"The right of a shareholder of a mutual ditch company to change its water rights is limited by the requirement that such change not injure others who possess vested water rights."

Id. at 493.

Masters Investment Co., Inc. v. Irrigationists Ass'n.

"In Colorado, the issue of whether a water right has been abandoned invariably turns on the question of whether the owner of the right intended to abandon the right."

Masters Investment Co., Inc. v. Irrigationists Ass'n., 702 P.2d 268, 271 (Colo. 1985).

"Evidence of an unreasonably long period of non-use is sufficient to create a presumption of the owner's intent to abandon, requiring the owner to produce some evidence supporting the argument that the owner did not intend to abandon the water right."

Id. at 272.

Riverside Irrigation Dist. v. Andrews

"Plaintiffs argue that, even if the Corps can consider effects of changes in water quantity, it can do so only when the change is a direct effect of the discharge. In the present case, the depletion of water is an indirect effect of the discharge, in that it results from the increased consumptive use of water facilitated by the discharge. However, the Corps is required, under both the Clean Water Act and the Endangered Species Act, to consider the environmental impact of the discharge that it is authorizing. To require it to ignore the indirect effects that result from its actions would be to require it to wear blinders that Congress has not chosen to impose. The fact that the reduction in water does not result 'from direct federal action does not lessen the appellee's duty under § 7 [of the Endangered Species Act].' The relevant consideration is the total impact of the discharge on the crane."

Riverside Irrigation Dist. v. Andrews, 758 F. 2d 508, 512 (1985) (citations omitted).

"The Wallop Amendment does, however, indicate 'that Congress did not want to interfere any more than necessary with state water management.' A fair reading of the statute as a whole makes clear that, where both the state's interest in allocating water and the federal government's interest in protecting the environment are implicated, Congress intended an accommodation. Such accommodations are best reached in the individual permit process.

We need not reach the question raised by plaintiffs of whether Congress can unilaterally abrogate an interstate compact. The action by the Corps has not denied Colorado its right to water use under the South Platte River Compact."

Id. at 513-14 (citation omitted).

United States v. Bell

"The resume notice provision of the Act, § 37-92-302(3), 15 C.R.S. (1973 & 1985 Supp.), requires the water clerk to prepare a resume of all applications in the water division filed during the preceding month, to publish the resume in newspapers of general circulation, and to mail a copy of the resume to persons who will be affected or to those who have requested resumes."

United States v. Bell, 724 P.2d 631, 636 (Colo. 1986).

"Under Colorado law, vested appropriative water rights are subject to the postponement doctrine set out in section 37-92-306, 15 C.R.S. (1973). Priority of appropriation determines the relative priority among water rights or conditional water rights awarded in one calendar year, but, regardless of the date of appropriation, water rights or conditional water rights decreed in one year are necessarily junior to all priorities awarded in decrees in prior years. § 37-92-306. Water rights are obtained by a combination of acts and intent constituting appropriation and are not dependent upon adjudication. [B]ut failure to adjudicate the rights results in the rights being junior to rights previously adjudicated.... The priority of unadjudicated water rights, relative to previously adjudicated water rights, is therefore 'post-poned.'

Because the United States was not subject to joinder prior to the McCarran Amendment and its absence from previous adjudications was privileged, once it is properly joined and provided the opportunity to adjudicate its claims, it may be decreed reserved water rights with priorities that antedate other adjudicated water rights to the date of the reservation. To that extent the postponement doctrine does not prevent the United States from receiving the priorities to which it would otherwise have been entitled. However, the postponement doctrine does apply to the United States' amendment claiming water from the mainstem of the Colorado River. Were the amendment to relate back to the original application, and thus antedate prior claims, the

Id.

purposes of the McCarran Amendment would be frustrated, and the United States would have avoided the equivalent of a filing deadline." *Id.* at 641-42 (footnotes and citations omitted).

FWS Land and Cattle Co. v. State Div. of Wildlife

"[F]ollowing the enactment of section 37-92-305(9) (b), an applicant seeking a conditional decree must prove by a preponderance of the evidence that the appropriation will be completed with diligence before a conditional decree may be issued."

FWS Land and Cattle Co. v. State Div. of Wildlife, 795 P.2d 837, 840 (Colo. 1990).

"FWS must be able to establish that water 'can and will be diverted, stored, or otherwise captured, possessed, and controlled . . . and that the project can and will be completed with diligence and within a reasonable time.' The ownership of and an applicant's right of access to a reservoir site are appropriate elements to be considered in the determination of whether a storage project will be completed. In granting DOW's motion for summary judgment, the water court properly considered FWS's ability to use the state lands for increased storage purposes."

City of Thornton v. City of Fort Collins

"To establish the date of the appropriation, the applicant must show the 'concurrence of the intent to appropriate water for application to beneficial use with an overt manifestation of that intent through physical acts sufficient to constitute notice to third parties.' The concurrence of intent and overt acts qualifies as the first step toward an appropriation of water, and the date on which the first step is taken determines the date of the appropriation."

City of Thornton v. City of Fort Collins, 830 P.2d 915, 924-25 (Colo. 1992) (citation omitted).

"The relevant acts 'must be of such character as to perform three functions....' The three required functions are: '(1) to manifest the necessary intent to appropriate water to beneficial use; (2) to demonstrate the taking of a substantial step toward the application of water to beneficial use; and (3) to constitute notice to interested parties of the nature and extent of the proposed demand upon the water supply."

Id. at 925.

"[T]he appropriation date cannot be set before the latest date in that series, which is the date on which it can be said that the first step has been taken to appropriate water."

Id. at 925.

"Water can be appropriated either by diverting water or by otherwise controlling water. An application for a conditional water right may be adjudicated if either diversion of water or control of water is established, assuming that the resultant use is beneficial. A diversion in the conventional sense is not required."

Id. at 929.

"This statute [37-92-103(4)] provides that water appropriated for municipal, recreation, piscatorial, fishery and wildlife purposes is water put to beneficial uses."

Id. at 930.

"The type of beneficial use to which the controlled water is put may mean that the water must remain in its natural course. This is not an appropriation of a minimum stream flow, an appropriation given exclusively to the CWCB. A minimum stream flow does not require removal or control of water by some structure or device. A minimum stream flow between two points on a stream or river usually signifies the complete absence of a structure or device."

Id. at 931.

"[I]t is clear that the Nature Dam is a structure which either removes water from its natural course or location or controls water within its natural course or location given that the Poudre's 'historic' channel may be considered the River's natural course or location. The uses of the Poudre River water so controlled are recreational, piscatorial and wildlife uses, all valid under the Act."

Id.

"In general, boat chutes and fish ladders, when properly designed and constructed, are structures which concentrate the flow of water to serve their intended purposes. A chute or ladder therefore may qualify as a 'structure or device' which controls water in its natural course or location under section 37-92-103(7)."

Id. at 932.

Board of County Comm'rs of the County of Arapahoe v. Upper Gunnison River Water Conservancy Dist.

"As we have previously determined, the provisions of the 1975 contract demonstrate the District's control over the application of refill water in

the Taylor Park Reservoir to further fishery and recreational beneficial uses. The contract authorizes the District to request the Association to release refill water from the Taylor Park Reservoir, with the approval of the United States, and to participate in supervising and coordinating exchanges of water between the Aspinall Unit and the Taylor Park Reservoir. It is undisputed that refill water was in fact released from the Taylor Park Reservoir."

Board of County Comm'rs of the County of Arapahoe v. Upper Gunnison River Water Conservancy Dist, 838 P.2d 840, 849 (Colo. 1992).

"The evidence also supports the water court's finding that these releases resulted in the following specific benefits, with no injury to any downstream junior appropriations: easing headgate management by downstream irrigators; aiding fisheries by avoiding disruption of spawn and fry life stages and maintaining constant flows within an optimum range for all life stages; reducing flooding to the benefit of landowners; enhancing recreation uses by providing more predictable river and boating flows; and minimizing reservoir spills."

Id. at 849-50.

Board of County Comm'rs of the County of Arapahoe v. United States

"A conditional water right decree does not reflect actual water usage. The extent to which a conditional decree will be perfected cannot be predicted with certainty and depends upon the completion of the requirements necessary to appropriate and put the water to a beneficial use."

Board of County Comm'rs of the County of Arapahoe v. United States, 891 P.2d 952, 970 (Colo. 1995).

"The water court's interpretation of the 'can and will' statute prohibits future appropriations based on unrealistically high assumptions of water utilization by holders of absolute and senior conditional water rights decrees."

Id.

"Although a conditional water rights decree may affect the calculation of the availability of water when the rights are exercised, it is difficult to predict whether, and to what extent, the appropriation will be completed. Rather than speculate about the extent to which conditional rights will be exercised, and without the assumption that conditional rights will be exercised to the decreed amount, river conditions existing at the time of the application for a conditional water rights decree should be considered to determine water availability. Present conditions provide a more accurate representation of what water is being beneficially used and what water is available for appropriations. Conditional water rights under which diversions have not been made

or none are being made should not be considered in determining water availability."

Id. at 970-71.

"We have consistently recognized that the General Assembly has acted to preserve the natural environment by giving authority to the Colorado Water Conservation Board to appropriate water to maintain the natural environment, and we will not intrude into an area where legislative prerogative governs. The degree of protection afforded the environment and the mechanism to address state appropriation of water for the good of the public is the province of the General Assembly and the electorate."

Kansas v. Colorado

"Article IV-D of the Compact permits future development and construction along the Arkansas river Basin provided that it does not materially deplete stateline flows 'in *usable* quantity or availability.'" Kansas v. Colorado, 514 U.S. 673, 684-85 (1995).

"[I]improved and increased pumping by existing wells clearly falls within Article IV-D's prohibition against 'improved or prolonged functioning of existing works,' if such action results in 'materia[l] deplet[ions] in usable' river flows."

Id. at 690.

Simpson v. Highland Irrigation Company

"[T]he Engineer can and should enforce compact delivery requirements with regard to Colorado water rights, adhering to the terms of the Compact and consistent, insofar as possible, with Colorado constitutional and statutory provisions for priority administration. In this manner, citizens of Colorado can partake reliably of the state's compact apportionment through property rights perfected for beneficial use within the state."

Simpson v. Highland Irrigation Company, 917 P.2d 1242, 1248 (1996) (citation omitted).

"Colorado law favors efficient water management, optimum use, and priority administration."

Id. at 1252 (footnote omitted).

"Its priority is the essential element of a Colorado water right. Under the decreed, priority, the owner or beneficiary of a water right is entitled to effectuate capture, possession, and control of a specified quantity of water from the physically available, decreed source of supply at an identified point of diversion for application to beneficial use to the exclusion of all other uses not then operating in decreed priority."

Id. at 1252 n.17.

"Security for the rights of Colorado water users largely depends upon the sound exercise of the Engineer's diversion curtailment enforcement power."

Id. at 1253.

Colorado Ground Water Comm'n v. Eagle Peak Farms, Ltd.

"The [1965 Ground Water Management] Act creates a permitting system for the allocation and use of ground waters within designated ground water basins. The Commission is empowered to act on conditional and final well permit applications, changes of water rights to designated ground water... and to 'supervise and control the exercise and administration of all rights acquired to the use of designated ground water.'"

Colorado Ground Water Comm'n v. Eagle Peak Farms, Ltd., 919 P.2d 212, 215 (Colo. 1996).

"Here, the ground water judge for Adams County recognized that APA rulemaking review in the Denver District Court would 'provide for uniformity in review of rules in one central authority rather than providing for the balkanization of decision making.' The ground water judge correctly interpreted the Act and the APA. The 'acts' and 'decisions' of the Commission referenced in section 37-90-115 are non-rulemaking in nature, such as those involving the application of statutes or rules to specific well permit applications, water rights, change of water rights, or other matters focusing on particular water users in specific circumstances."

Id. at 220-21 (citation omitted).

Bayou Land Co. v. Talley

"[I]t is clear that the legislature intended from its enactment of Senate Bill 213 and later Senate Bill 5 to confer control over nontributary ground water to owners of the overlying land. The legislature has done so by making ownership of land or consent of the landowner a prerequisite to application for a well permit and ultimately to the utilization of ground water. Through these enactments, the legislature has created an inchoate right to control and use a specified amount of nontributary ground water in owners of the overlying land.

Because this right is incident to ownership of land, it is not dependent upon formal adjudication by a water court. For instance, the right to withdraw nontributary ground water may be severed from the land prior to adjudication through the consent provisions of section 37-90-137(4) or by sale."

Bayou Land Co. v. Talley, 924 P.2d 136, 148-49 (Colo. 1996) (citations omitted).

"We describe the right to extract nontributary ground water prior to construction of a well and/or adjudication as inchoate to emphasize that it is not a vested right. The right does not vest until the landowner or an individual with the landowner's consent constructs a well in accordance with a well permit from the state engineer and/or applies for and receives water court adjudication. Until vesting occurs, the right to extract nontributary ground water is subject to legislative modification or termination."

Id. at 149 (footnote and citations omitted).

"We conclude that because the right to withdraw nontributary ground water is integrally associated with and incident to ownership of land, such right is presumed to pass with the land either in a deed or a deed of trust unless explicitly excepted from the conveyance instrument. A party claiming that the right to withdraw nontributary ground water was not transferred with the land must prove that the grantor affirmatively did not intend to transfer such right."

Id. at 150.

"The presumption may be overcome by a showing that the landowner previously transferred the right to withdraw ground water to a third party or entity explicitly or by operation of statute. See 37-90-137(4)(b)(II), 15 C.R.S. (1995 Supp.)."

Id. at 151 n.23.

City of Thornton v. Bijou Irrigation Co.

"We have applied the inquiry notice standard in a number of recent cases. With the exception of cases presenting circumstances that suggested the misleading inclusion or omission of material facts, we have consistently accepted a broad definition of inquiry notice and found adequate the resume notice provided by the applicant."

City of Thornton v. Bijou Irrigation Co., 926 P.2d 1, 26 (Colo. 1996).

"In Department of Natural Resources v. Ogburn, we determined that jurisdiction over a change of transmountain water rights rested with the water courts in both the basin of origin and the basin of use. However, we noted that the appropriate venue for determination of the requested change of use is the court in the basin of use."

Id. at 30 (citation omitted).

"[U]nder section 37-92-103(3)(a), a municipality may be decreed conditional water rights based solely on its projected future needs, and without firm contractual commitments or agency relationships, but a municipality's entitlement to such a decree is subject to the water court's determination that the amount conditionally appropriated is consistent with the municipality's reasonably anticipated requirements based on substantiated projection of future growth."

Id. at 39 (footnote omitted).

"[T]he 'can and will' requirement should not be applied rigidly to prevent beneficial uses where an applicant otherwise satisfies the legal standard of establishing a nonspeculative intent to appropriate for a beneficial use."

Id. at 43 (footnote omitted).

"[I]t is within the water court's authority to include conditions in the decree that limit the yield of the rights to the amount for which water is available and for which the applicant has established a need and a future intent and ability to use."

Id. at 47.

"[T]he court's setting of a project yield limit below established need and availability could be valid if necessary to protect other water users against injury to their existing rights."

Id. at 48.

"Thornton's proposals violate both the spirit of the WCA and the Repayment Contract and the letter of the NCWCD rules and the Allotment Contract. Thornton's proposal to use CBT water to satisfy replacement obligations will allow the city to increase the amount of water that it applies to municipal uses outside the boundaries of NCWCD. Although the direct use remains within the district, Thornton would receive indirect benefits outside of the district that derive from its use of CBT water within the district. Similarly, the operation of the exchange on CBT water, even if the character of exchange rule applies and the direct use is deemed to occur within the district, results in significant quality and quantity benefits to Thornton outside of the NCWCD boundaries. Furthermore, Rule IV(A) of the NCWCD rules and Article 2 of the Allotment Contract specifically preclude the acquisition of extra-district benefits by exchange. The trial court correctly assessed Thornton's proposals as attempts to extend benefits to

its lands outside of the district in contravention of the provisions of the governing statutes, rules, and contracts."

Id. at 59 (footnotes omitted).

"A contract water user is, in effect, a consumer whose rights are determined by the terms of that contract, and successors in interest can acquire no greater right."

Id. at 60.

"Appropriators of water native to a public stream have no automatic right to capture and reuse this water after the initial application to beneficial use. Instead, these return flows and seepage waters become water tributary to a natural stream and subject to diversion and use under the appropriations and associated system of priorities existing on the stream. Thus, a user of native water can secure a right to reuse return flows only by establishing the elements necessary to complete an independent appropriation of those waters."

Id. at 65.

"[W]e conclude that an importer of transmountain water need not have an intent to reuse this water at the time of the original appropriation and importation to maintain the subsequent right of reuse."

Id. at 70.

"The reuse right remains with the importer until the right is transferred by the importer or the importation ceases."

Id.

"[W]e have consistently maintained that appropriators on a stream have no vested right to a continuance of importation of foreign water which another has brought to the watershed."

Id. at 72.

"[L]aches is not applicable to a party who has no duty to act." *Id.* at 74.

"We noted above that it has long been the rule in Colorado that downstream users cannot establish vested rights in the continuation of the importation of foreign water. In light of this rule, Fort Collins and the other downstream users were not justified in relying on the continued release of these foreign water return flows. Because their reliance was unreasonable, the downstream users cannot establish the requisite prejudice attributable to WSSC's alleged delayed initiation of its reuse right. Thus, we hold that Thornton's proposed reuse of its foreign water is not barred by the doctrine of laches." "One of the basic tenets of Colorado water law is that junior appropriators are entitled to maintenance of the conditions on the stream existing at the time of their respective appropriations.... This protection extends not only to surface water users but to users of all water tributary to a natural stream, including appropriators of tributary underground water.... [T] his protection extends to junior appropriators' rights in return flows...."

Id. at 80.

"Thus, unlike water imported from across the Continental Divide, Thornton's irrigation water is not new to the system; Thornton essentially changed only the place of use of that water. This type of diversion is common in Colorado and users downstream from these diversions have every reason to believe that they are among those protected against injury."

Id. at 81.

"Senator McCormick's statements reveal a recognition that a water court has acted properly in imposing revegetation requirements prior to the consideration and passage of Senate Bill 92-92. The bill was intended to codify and institutionalize the use of these revegetation conditions and did not represent the creation of a new form of condition on changes in use of water rights."

Id. at 85.

"In addition to this dual focus on maximum beneficial use and the protection of water rights, water judges must give consideration to the potential impact of the utilization of water on other resources. Our decisions establish that the goal of maximum utilization must be 'implemented so as to ensure that water resources are utilized in harmony with the protection of other valuable state resources."

Id. at 86.

"[W]e agree with the trial court that the legislative water quality scheme is not designed to protect against quality impacts unrelated to discharges or substitute water and specifically prohibits the water court from imposing the protective measures necessary to remedy depletive impacts of upstream appropriations on an appropriator in Kodak's situation."

Id. at 93.

"The sole negative impact of the Poudre River exchange on Kodak's treatment operations results from a diminution in the flow of excess river water—i.e., water that would otherwise flow by Kodak's plant but that is in excess of the amount that can be diverted under Kodak's water right....[T]o avoid this impact on Kodak's treatment operations, the trial court would have had to impose conditions that required maintenance of sufficient volume in the stream to preserve the average

low-flow values that determine Kodak's effluent limits. Despite Kodak's arguments to the contrary, such protection would necessarily require the imposition of conditions creating a private instream flow right for Kodak for the purpose of waste dilution or assimilation."

Id.

"Pursuant to section 37-92-102(3), 15 C.R.S. (1990), the General Assembly vested exclusive authority in a state entity, the Colorado Water Conservation Board (CWCB) to appropriate minimum stream flows and limited the purpose for these appropriations to 'preserv[ation of] the environment to a reasonable degree.'

Id. at 93.

"[T]he judiciary is without authority to decree an instream flow right to a private entity.... "The legislature similarly prohibited the Colorado Water Quality Commission and the Water Quality Division from imposing minimum instream flows in the course of their water quality protection activities. These agencies must perform their duties subject to the following restriction: 'Nothing in this article shall be construed to allow the commission or the division to require minimum stream flows' § 25-8-104(1), 11A C.R.S. (1989). This language reinforces the legislative intent expressed in the water right adjudication provisions that minimum stream flows are not a valid tool for protecting water quality."

Id.(citations omitted).

"The decision whether further to integrate the consideration and administration of water quality concerns into the prior appropriation system is the province of the General Assembly or the electorate."

Id. at 94-95.

"Under both the statute and the regulations, the mandate of the state engineer in reviewing the quality aspects of an exchange is clear: the substitute supply must be of a quality to meet the requirements of use to which the senior appropriation has normally been put. The regulations are sufficiently broad to allow the state engineer's office to exercise its professional judgment in adopting a method of regulation that will ensure that the statutory standard is met, and the absence of more specific direction will not compromise the protective goals of the statute. Accordingly, we hold that the state engineer is capable of ensuring compliance with these provisions without specific instructions on where to measure the quality of the substituted water If water quality monitoring at the point of discharge is insufficient to ensure compliance with section 37-80-120(3), the decree does not prevent the state engineer's office from taking additional action to fulfill its statutory duty to protect downstream users." Id. at 97.

"The state engineer and division engineer are legislatively assigned broad powers and responsibilities for administration, distribution, and regulation of waters of the state. We have discovered no statutory authority that would authorize a court to impose on a private party any part of the expense incident to exercise of those powers or fulfillment of those responsibilities."

Id. at 99 (citation omitted).

The City and County of Denver v. Middle Park Water Conservancy Dist.

"Intent is the critical element in determining abandonment. Continued and unexplained non-use of a water right for an unreasonable period of time creates a rebuttable presumption of intent to abandon." The City and County of Denver v. Middle Park Water Conservancy Dist., 925 P.2d 283, 286 (Colo. 1996) (citations omitted).

"Water rights are usufructary in nature, and the use entitlement may be lost or retired to the stream. When this occurs, the property rights adhering to the particular water right no longer exist. The effect of such abandonment on any other water right diverting from the same source of supply is not the subject of the abandonment inquiry."

Id. (citations omitted).

Bennett Bear Creek Farm Water and Sanitation Dist. v. City and County of Denver

"The legislature chose not to confer extraterritorial water service ratesetting authority on the PUC. Section 31-35-402(1)(f) has displaced the common law and the PUC in regard to rate making for extraterritorial water service. Rate setting under section 31-35-402(1)(f) is legislative in nature."

Bennett Bear Creek Farm Water and Sanitation District v. City and County of Denver, 928 P.2d 1254, 1262 (Colo. 1996) (footnote omitted).

"Contracts containing terms regarding rates and charges must be construed and given effect in light of the legislative authority of the governmental entity which supplies the water service."

"[O]ur inquiry regarding the applicable standard must be informed by rules, statutes, and case law pertinent to judicial review of local governmental legislative action. Such review occurs by means of declaratory judgment under C.R.C.P. 57 and sections 13-51-101 to -115, 6A C.R.S. (1987), not by way of on-the-record review under the State Ad-

ministrative Procedure Act, § 24-4-106, 10 A.C.R.S. (1988), or C.R.C.P. (106) (a) (4)."

Id. at 1268.

"Rates that are not rationally related to a local governmental utility purpose are subject to being set aside if those challenging the rate carry their burden of proving lack of such a relationship."

Id. at 1269.

"Contracts of a governmental entity cannot divest its legislative powers, and contracting parties are charged with knowledge of the retained nature of such authority."

Id. at 1269-70.

"Legitimate utility factors, and the justified use of governmental power, must be the basis for decisionmaking, and a judicial remedy is available by way of declaratory judgment action to redress rate-making actions which lack a rational relationship to the utility function of the governmental entity."

Id. at 1273.

Aspen Wilderness Workshop, Inc. v. Hines Highlands Limited Partnership

"Under the can and will statute, the applicant must make a threshold showing of reasonable availability of water to prove that the applicant "can" complete the appropriation. The applicant for water rights must demonstrate that 'water is available based upon river conditions existing at the time of the application, in priority, in sufficient quantities and on sufficiently frequent occasions, to enable the applicant to complete the appropriation with diligence and within a reasonable time.'

A showing of reasonable availability does not require a demonstration that water will always be available to the full extent applied for in the decree. The applicant need only prove that there is a substantial probability that the appropriation can and will be completed, based upon necessarily imperfect prediction of future conditions."

Aspen Wilderness Workshop, Inc. v. Hines Highlands Limited Partnership, 929 P.2d 718, 723-24 (Colo. 1996) (footnotes and citation omitted).

"Any potential injury caused by new appropriations from streams that are not over-appropriated can normally be mitigated if junior appropriators curtail their diversions when senior users need water."

Id. at 724.

"We recognize that there may be situations in which any use by a junior appropriator would cause persistent injury to senior water users. In those cases, the water court must eliminate the injury by imposing conditions on the exercise of the junior right. The water court may require the applicant to provide augmentation water to protect against injury to senior users."

Id. (citation omitted).

"Whether the proposed appropriation can and will be completed is a question of fact for the water court to determine. The issues of water availability and injurious effect are inherently fact specific and thus require factual findings by the water court. The water court's findings will not be disturbed on appeal if they are supported by competent evidence in the record."

Id. at 725 (citation omitted).

Id. (citation omitted).

"[A] public interest argument is not a valid objection to a decree for a new conditional water right because such an argument conflicts with the doctrine of prior appropriation. Second, such an argument presupposes that the existing rights will not be administered fairly and in compliance with the priority system."

"[T]o the extent the appellants argue injury to the CWCB's decreed instream flow rights, we note that the CWCB was an objector in the case. The CWCB holds the decreed instream flow right."

Id. at 726.

"Therefore, the argument of injury to the instream flow is much less persuasive when the holder of that right was a party to this action, satisfied itself that its interests were being protected, and did not oppose entry of the decree."

Id.

Dallas Creek Water Co. v. Huey

"An absolute decree confirms that amount of depletion from the stream that can be taken in priority as a property right."

Dallas Creek Water Co. v. Huey, 933 P.2d 27, 34 (Colo. 1997).

"Since conditional water rights function to reserve a priority date for an appropriation of water to beneficial use that has not been achieved yet, they are subject to continued scrutiny to prevent the hoarding of priorities 'to the detriment of those seeking to apply the state's water beneficially."

Id. at 35.

"The above-emphasized reference to diligence in the statutory provisions governing conditional water rights plainly indicates legislative intent to require, in subsequent diligence proceedings, a demonstration that the decreed conditional appropriation is being pursued in a manner which affirms that capture, possession, control and beneficial use of water can and will occur in the state, thereby justifying continued reservation of the antedated priority pending perfection of a water right."

Id. at 37 (footnote omitted).

"Its priority, location of diversion at the source of supply, and amount of water for application to beneficial uses are the essential elements of the water right."

Id. at 38.

"Water rights are decreed to structures and points of diversion, in recognition that a water right is a right of use and constitutes real property in this state, and the owners and users of such water rights may change from time to time."

Id. at 39 (citation omitted).

"Water application requirements should not be construed to defeat substitution of parties when a water user who depends upon the appropriation at issue has, in fact, filed a timely diligence application through an agent and the resume notice sufficiently describes the right for which diligence is sought."

Id. at 41.

"A person desiring to pursue the conditional decreed appropriation to completion must show that the preferential status enjoyed for the initial appropriation is entitled to continuation under the antedated priority. This is accomplished by a demonstration of due diligence by an owner or lawful user of the conditionally decreed appropriation."

Id. at 42.

Shirola v. Turkey Canon Ranch Ltd. Liab. Co.

"Therefore, in a water adjudication involving a proposed plan for augmentation or a change of water right, any person may object to the application itself and participate in the adjudication by holding the applicant to a standard of strict proof. However, for that objector to have standing to assert injury to his or her water right, the objector must show that he or she has a legally protected interest in a vested water right or a conditional decree."

Shirola v. Turkey Canon Ranch Ltd. Liab. Co., 937 P.2d 739, 747 (Colo. 1997) (footnote omitted).

"Absent an adjudication under the Act, water rights are generally incapable of being enforced. Once a water right has been adjudicated, it receives a legally vested priority date that entitles the owner to a certain amount of water subject only to the rights of senior appropriators and the amount of water available for appropriation. The holder of an adjudicated right is entitled to the use of a certain amount of water unless called out by senior users or unless the stream itself contains insufficient flow."

Id. at 749 (citations omitted).

"In an effort to protect small agricultural or domestic well water users, the General Assembly has created a statutory category for exempt wells that differs from all other water rights. By that statutory exception, the General Assembly has awarded the expectancy of a certain priority date, unaffected by the year in which the exempt well owner files for adjudication. Thus, vested water rights in exempt wells are not subject to the postponement doctrine set forth in section 37-92-306. Because of the statutory provisions regarding exempt wells, we conclude that an exempt well owner may attain a legally protected interest in his or her vested water fight merely by filing an application for adjudication of such well."

Id. at 749-50 (footnote and citation omitted).

"Rather, upon adjudication, 602 wells will receive as a priority date the date of their well permit, without reference to the date of the application for the adjudication. See § 37-92-602(4)."

Id. at 751.

"We read the statute to require the state engineer to take into account all vested water rights of which he has notice whether or not adjudicated, in determining the impact of a proposed non-exempt well. The General Assembly provided that exempt wells are entitled to a presumption that they do not materially injure the rights of others; the General Assembly did not provide that exempt wells are burdened by an inverse presumption that no other use materially injures them."

Id. at 752.

"Consistent with encouraging maximum beneficial use of the waters of the state, the senior appropriator is not entitled to command the whole or a substantial flow of the underground aquifer merely to facilitate his taking the fraction of the flow to which he is entitled. The cost to the senior of reaching a lowered water table can be assigned to the junior."

Id. at 754 (citation omitted).

Williams v. Midway Ranches Property Owners Ass'n, Inc.

"Over an extended period of time, a pattern of historic diversions and use under the decreed right at its place of use will mature and become the measure of the water right for change purposes, typically quantified in acre-feet of water consumed."

Williams v. Midway Ranches Property Owners Ass'n, Inc., 938 P.2d 515, 521 (Colo. 1997) (footnote omitted).

"Absolute water rights used in one location may be quantified and changed for use in an augmentation plan to provide replacement water releases, so that diversion and use of water may be made out-ofpriority elsewhere."

Id. at 521-22 (footnote omitted).

"Thus, the decreed flow rate at the decreed point of diversion is not the same as the matured measure of the water right. Into every decree awarding priorities is read the implied limitation that diversions are limited to those sufficient for the purposes for which the appropriation was made.

Because water rights are usufructary in nature, the measure of a water right is the amount of water historically withdrawn and consumed over time in the course of applying water to beneficial use under the tributary appropriation without diminishment of return flows." *Id.* at 522.

"Determining the historic usage of a tributary water right is not restricted to change and augmentation plan proceedings . . . equitable relief is available, upon appropriate proof, to remedy expanded usage which injures other decreed appropriations."

Id. at 522-23.

"All water rights are subject to beneficial use as the measure of the right. When prior change decrees are subject to interpretation in subsequent change proceedings, the ordinary interpretation to be made in the absence of a quantification or otherwise controlling terms of a prior judgment is that historic usage under the appropriation at its decreed point of diversion governs the extent of usage under the change decree."

Id. at 523 (citation omitted).

"Under the 1969 Act, water courts have jurisdiction, based upon an adequate application and resume notice, to adjudicate the amount of water allocable to each share for augmentation plan replacement purposes, calculated upon the historic usage of a ditch company's tributary water right."

Id. at 525 (citation omitted).

"[W]hen historical usage has been quantified for the ditch system by previous court determination, the yield per share which can be removed for use in an augmentation plan is not expected to differ from augmentation case to augmentation case, absent a showing of subsequent events which were not previously addressed by the water court but are germane to the injury inquiry in the present case."

Id. at 526 (footnote omitted).