Reviving the Public Ownership, Anti-Speculation, and Beneficial Use Moorings of Prior Appropriation Water Law

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by Gregory J. Hobbs, Jr.[1]

Scarce and Dear

A river can be killed by treating it only as a commodity rather than the habitat of life itself. When we nurture our singing and working rivers, we celebrate the greater community in which we live.

What we consider a river in the southwest is different from other parts of our country. It looks nothing like the Mississippi or the Potomac in their breadth or depth. It may not run at all for a portion of the year. It may gush abundantly at other times.

Our southwestern rivers are scare, dear, and worthy of respect at all times. Because we live in community, we understand that water rights are valuable use rights and states sharing an interstate stream system are entitled to an equitable division of the natural flow.

We also understand that water rights do not carry with them a right to pollute a stream or choke its course to extinction. There is much we can do to help a river keep or revive its natural course.

Pools, riffles, runs, meanders, cover, insects, fish, water clean enough to serve agriculture, domestic drinking water, recreation and fisheries—this picture of a restored western river is becoming for us a basic lesson in western civics.[2]

Introduction

This article arises out of an invitation to speak at a symposium in honor of David Getches at the University of Colorado School of Law in April of 2012. Water law was one of David's primary interests. Charles Wilkinson and Sarah Krakoff, who organized the symposium, asked me to address what I consider to be significant developments in water law. Because I know them best, I have chosen to focus on a set of recent Colorado Supreme Court cases that demonstrate how prior appropriation law can change and adapt while applying its most fundamental principles. Consistent with the expert peer format of this symposium, this article assumes familiarity with water law and law review literature

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[2] JUSTICE GREG HOBBS, *Scarce and Dear*, *in* INTO THE GRAND 21, 21 (2012).

but I hope its content also speaks to others interested in an overview of Colorado's water system. The short prose poem I set forth above encapsulates a viewpoint David advocated wholeheartedly, that streams for all their worth are scarce and dear.[3]

The cases I examine are *Empire Lodge,*[4] *Park County Sportsmen's Ranch*,[5] *Fort Lyons/ISG*,[6] *Pagosa I and II*,[7] *Burlington Ditch*,[8] and *Rio Grande Subdistrict No.1*.[9] The major themes these decisions illustrate include public ownership of the water resource, allocation and voluntary market-driven re-allocation of a scare water supply to public and private uses, integration of tributary groundwater and surface water into the prior appropriation adjudication[10] and administration system, application of the beneficial use and anti-speculation doctrines to water transfers as well as to water right claims, and incorporation of non-consumptive uses such as instream flow and recreational water rights into the water rights system.

These are emerging themes across the prior appropriation states of the West. Many streams are over-appropriated due to natural and legal constraints. These constraints include the erratic amount of water available under weather and climatic conditions affected by climate change,[11] interstate water apportionments allocated by interstate compacts[12] and U.S. Supreme Court equitable apportionment decrees,[13] and integration of federal agency and Tribal reserved water right priorities into the state's

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[3] I believe David persistently pressed the center to hold together. He did this by consistently cultivating an understanding of the peoples and the magnificence of this great land. Advocate and scholar of Native American Tribes, of water, natural resources and the environment, of the way our country has grown while also despoiling the environment mindlessly and needlessly in the course of growing, he committed himself— lawyer, teacher of many, law school Dean, father, husband, and colleague—to the justice of restoration, a conservative conviction, that we must preserve what we most hold dear so we can learn to prosper together. *See* JUSTICE GREG HOBBS, *David Getches, Passionate Intensity Holding the Center from Flying Apart*, *in* INTO THE GRAND 105, 105–107 (2012).

[4] Empire Lodge Homeowners' Ass'n v. Moyer, 39 P.3d 1139 (Colo. 2001).

[5] Bd. of Cnty. Comm'rs of the Cnty. of Park v. Park Cnty. Sportsmen's Ranch, 45 P.3d 693 (Colo. 2002).

[6] High Plains A & M, LLC v. Se. Colo. Water Conservancy Dist., 120 P.3d 710 (Colo. 2005); ISG, LLC v. Ark. Valley Ditch Ass'n, 120 P.3d 724 (Colo. 2005).

[7] Pagosa Area Water and Sanitation Dist. v. Trout Unlimited (*Pagosa I*), 170 P.3d 307 (Colo. 2007); Pagosa Water and Sanitation Dist. v. Trout Unlimited (*Pagosa II*), 219 P.3d 774 (Colo. 2009).

[8] Burlington Ditch Reservoir and Land Co. v. Metro Wastewater Reclamation Dist., 256 P.3d 645 (Colo. 2011).

[9] San Antonio, Los Pinos and Conejos River Acequia Pres. Ass'n v. Special Improvement Dist. No. 1 of the Rio Grande Water Conservation Dist. (*Subdistrict No. 1*), 270 P.3d 927 (Colo. 2011) (en banc).

[10] Adjudication is the process through which a Colorado Water Court decrees the point of diversion, the amount of diversion, the type of use, and the place of use of a water right. *See High Plains A & M, LLC*, 120 P.3d at 718–19.

[11] *See generally* COLO. FOUND. FOR WATER EDUC., CITIZEN'S GUIDE TO COLORADO CLIMATE CHANGE (2008) [hereinafter CLIMATE CHANGE].

[12] *See* COLO. REV. STAT. § 37-61-101 (1921) (Colorado River Compact); *id.* § 37-62-101 (1948) (Upper Colorado River Compact); *id.* § 37-63-101 (1921) (La Plata River Compact); *id.* § 37-64-101 (1968) (Animas—La Plata Project Compact); *id.* § 37-65-101 (1923) (South Platte River Compact); *id.* § 37-66-101 (1938) (Rio Grande River Compact); *id.* § 37-67-101 (1942) (Republican River Compact); *id.* 37-68-101 (1963) (Amended Costilla Creek Compact); *id.* § 37-69-101 (1948) (Arkansas River Compact).

[13] *See generally* COLO. FOUND. FOR WATER EDUC., CITIZEN'S GUIDE TO COLORADO'S INTERSTATE COMPACTS (2010), http://www.courts.state.co.us/userfiles/file/Court_Probation/19th_Judicial_District/Court_House_History/cfwe%20Compacts%20Guide%20text%20as%20published.pdf [hereinafter INTERSTATE COMPACTS].

adjudication and administration system.[14] A stream is considered to be over-appropriated when there is not enough water available to fill the needs of all adjudicated appropriations that have been made absolute by actual usage.[15]

Where there is un-appropriated water still available for appropriation, traditional agricultural, municipal, and commercial uses must compete, as I explain below, for a share of water with the new instream flow and recreational kayak course water uses. As competition for appropriation of the relatively little remaining unappropriated water intensifies, the Colorado General Assembly, the seven water courts, the Colorado Supreme Court, and the State Engineer are employing the originating principles of public ownership, anti-speculation, beneficial use, and prior appropriation administration in fulfilling their responsibility to maintain a stable, reliable, and adaptable water law system.

Part I of this article addresses the originating principles of prior appropriation water law as seen through Colorado constitutional, statutory and case law precedent. These fundamental principles include public ownership of the water resource wherever it may be found within the state, allocation of available un-appropriated surface water and tributary groundwater for appropriation by private and public entities in order of their adjudicated priorities, and the anti-speculation and beneficial use limitations that circumscribe the amount and manner of use each water right is subject to. This part describes the forces that helped to shape prior appropriation water law and the creation of prior appropriation water rights that operate within an adjudication and administration system that integrates federal and tribal reserved water rights into a stable, reliable, and adaptable water law. This part also discusses government's responsibility to manage water and protect vested water use rights as an operative paradigm of prior appropriation water law.

Part II of this article examines six early twenty-first century cases of the Colorado Supreme Court that confirm and apply originating principles of prior appropriation law in an era of ever-increasing demand and erratically available water supply.

Empire Lodge teaches that the right to share in a portion of the public's water resource allocated to Colorado under the applicable nine interstate compacts and two equitable apportionment decrees[16] is dependent upon faithful enforcement of water rights in order of their adjudicated priorities when there is not enough water available to serve all needs. At the same time, innovative methods have emerged to ameliorate strict prior appropriation enforcement. For example, junior water rights that would otherwise be curtailed in times of short water supply can divert out of priority by replacing sufficient water to the stream for the protection of senior water rights under court approved augmentation plans or, under certain circumstances, state engineer approved substitute supply plans

Park County Sportsmen's Ranch holds that the water bearing capacity of aquifers throughout the state belong to the public's water resource and is not owned by the

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[14] *See, e.g.*, City and Cnty. of Denver v. United States, 656 P.2d 36, 38-39 (Colo. 1982); Southern Ute Indian Tribe v. King Consolidated Ditch Company, 250 P.3d 1226, 1236-67(Colo. 2011)(holding that Colorado's resume notice and newspaper Publication procedure is equally applicable to federal reserved and tribal water rights as it is to Colorado prior appropriation water rights).

[15] *See* Empire Lodge Homeowners' Ass'n v. Moyer, 39 P.3d 1139, 1150 (Colo. 2011).

[16] *See generally* INTERSTATE COMPACTS, *supra* note 13.

overlying landowner. This decision illustrates how the water law of Colorado differs remarkably from states, like Texas,[17] that adhere to a common law doctrine of groundwater under which groundwater use is controlled or owned by the overlying or adjoining landowner as an incident of land property rights. In Colorado, the public owns all forms of surface water and groundwater; in turn, the Colorado constitution, statutes and case decisions allocate and define the nature, extent and interrelationship of public agency and private water use rights.

High Plains and *ISG* demonstrate the interplay between the judicial and legislative branches of Colorado government in applying the anti-speculation and beneficial use principles of prior appropriation water law to water transfer cases. The water courts can decree changes of water rights, retaining their senior appropriation dates for use elsewhere, subject to conditions preventing injury to other water rights and identification of the place and type of use where the water right being changed will be utilized.

Pagosa I and Pagosa II stand for the proposition that there is so little unappropriated water remaining to Colorado under its interstate apportionments that water should remain in the stream un-adjudicated until such time as a viable consumptive or non-consumptive water right proves the need for an appropriation. Conditional water rights are place holders in the priority system and should not be decreed in the absence of proof that the water can and will be placed to actual beneficial use in the amount and for the purpose claimed. Cities seeking to appropriate an additional long term supply of water must prove that the planning period, the population projections, and the additional amount of water they propose to be conditionally decreed are reasonable, taking into account conservation measures and future land use mixes that affect per capita water consumption.

Burlington demonstrates that municipalities and businesses seeking to have the benefit of transferred senior agricultural water rights priorities will be limited in a change of water right proceeding to the amount of water historically consumed beneficially over a representative historical period of time under the decreed water right being changed. Unadjudicated water use practices and undecreed enlargements of water rights will not be recognized, because they have not been subjected to the water court notice and decree procedure enacted by the General Assembly for the protection of other water rights.

Subdistrict No. 1 teaches that the Colorado General Assembly may fashion new conjunctive use management tools for operation of the surface water and tributary groundwater regime consistent with the Colorado Constitution's prior appropriation provisions. Through legislative enactment, sustainability now joins optimum use and protection against injury as goals of the water law.

Based on an examination of these cases and connected statutory innovations, I conclude that Colorado water law is changing and adapting to the needs of a growing state whose economy and environment must be served co-jointly. The resiliency of the state's prior appropriation law harkens back to its founding principles, public ownership of the water resource, establishment of non-speculative actual beneficial use water rights by public agencies and private persons, and administration of water rights in order of their adjudicated priorities, with provisions for innovative management tools that ameliorate strict priority enforcement in order to optimize use of the available water

[17] *See* Edwards Aquifer Auth. v. Day, No. 08-0964, 2012 WL 592729, at *11 (Tex. Feb. 24, 2012).

resource. The integration of federal and Tribal reserved and appropriative rights into Colorado's adjudication and administration system through the 1969 Act of the Colorado General Assembly is a hallmark accomplishment. Living within the state's interstate water allocation limits is an ongoing obligation owed by Colorado to downstream states. The continued viability of Colorado water law depends upon the faithful performance by public officials of their constitutional and statutory responsibilities, as well as water user respect for the rights of others.

I.
Principles of Colorado Prior Appropriation Law

1. Constitutional Fundamentals of Public Ownership, Anti-Speculation, Beneficial Use and Priority Administration

Any system of water law adopted by a state or nation will necessarily reflect the needs and values of its populace and, most significantly, the supply of water available for use in addressing those needs and values. The premise that birthed prior appropriation[18] water law is that water users in a water scarce region undergoing population increase must have an actual and continuing beneficial use[19] need in order to obtain and retain a share of the public's water resource.[20] In his brilliant work analyzing the Colorado Constitution's water provisions and nineteenth Century Colorado Supreme Court water opinions implementing them, Professor David Schorr demonstrates that prior appropriation water law broke radically from riparian water law in order to prevent moneyed land interests from monopolizing the scarce waters of the arid west through

[18] "Appropriation" is defined as "the application of a specified portion of the waters of the state to a beneficial use pursuant to the procedures prescribed by law; but no appropriation of water, either absolute or conditional, shall be held to occur when the proposed appropriation is based upon the speculative sale or transfer of the appropriative rights to persons not parties to the proposed appropriation, as evidenced by either of the following: (I) The purported appropriator of record does not have either a legally vested interest or a reasonable expectation of procuring such interest in the lands or facilities to be served by such appropriation, unless such appropriator is a governmental agency or an agent in fact for the persons proposed to be benefitted by such appropriation. (II) The purported appropriator of record does not have a specific plan and intent to divert, store, or otherwise capture, possess, and control a specific quantity of water for specific beneficial uses." COLO. REV. STAT. § 37-92-103(3)(a) (2011). "Conditional water right" is defined as "a right to perfect a water right with a certain priority upon the completion with reasonable diligence of the appropriation upon which such water right is to be based." *Id.* § 37-92-103(6).

[19] "Beneficial use" is defined as "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, and, without limiting the generality of the foregoing, includes the impoundment of water for recreational purposes, including fishery or wildlife, and also includes the diversion of water by a county, municipality, city and county, water district, water and sanitation district, water conservation district, or water conservancy district for recreational in-channel diversion purposes. For the benefit and enjoyment of present and future generations, 'beneficial use' shall also include the appropriation by the state of Colorado in the manner prescribed by law of such minimum flows between specific points or levels for and on natural streams and lakes as are required to preserve the natural environment to a reasonable degree." *Id.* § 37-92-103(4).

[20] *See* High Plains A & M, LLC v. Se. Colo. Water Conservancy Dist., 120 P.3d 710, 718–19 (Colo. 2005).

land ownership of stream banks, a characteristic of riparian law.[21] *Use only what you need subject to the prior established use rights of others* became institutionalized as a means for distributing water fairly to those who could put it to use. As Professor Schorr explains,

> Colorado was admitted as the thirty-eighth state of the Union in the centennial year of 1876. Article XVI of its new constitution contained four sections dealing with water rights, under the heading of "Irrigation." These constitutional provisions reveal a "radical Lockean" scheme of acquisition based on use and limitations on the aggregation of private property. Present were the by-now familiar rules allowing ditch easements and providing for restraint of corporate power, as well as the priority principle, in what was a decidedly supporting role. Most importantly, the constitution set out clearly for the first time three central principles of the Colorado appropriation doctrine: public ownership of the state's surface waters, the beneficial use requirement, and the complete abolishment of riparian privileges.[22]

Colorado's Constitution spells out the framework for the public's water resource ownership, the creation of non-speculative beneficial water use property rights in public and private users, and prior appropriation water administration.[23] Shortly after admission to the Union in 1876, the General Assembly took an active role in formulating statutes implementing these constitutional principles.[24]

2. Adjudication Statutes

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[21] David B. Schorr, *Appropriation as Agrarianism: Distributive Justice in the Creation of Property Rights*, 32 ECOLOGY L.Q. 3 (2005); DAVID B. SCHORR, PROPERTY RIGHTS, DISTRIBUTIVE JUSTICE, AND THE ORIGINS OF PRIOR APPROPRIATION (forthcoming 2012).

[22] *Id.*

[23] Article XVI, section 5 of the Colorado Constitution provides:
"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. Article XVI, section 6 of the Colorado Constitution provides, in part, "The right to divert the unappropriated waters of any natural stream to beneficial uses shall never be denied." *Id.* § 6. Article XVI, section 7 of the Colorado Constitution provides: "All persons and corporations shall have the right-of-way across public, private 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." *Id.* § 7.

[24] *See* Gregory J. Hobbs, Jr., *Colorado Water Law: An Historical Overview*, 1 U. DENV. WATER L. REV. 1 (1997); Gregory J. Hobbs, Jr., *Colorado's 1969 Adjudication and Administration Act: Settling In*, 3 U. DENV. WATER L. REV. 1 (1999); COLO. FOUND. FOR WATER EDUC., CITIZEN'S GUIDE TO COLORADO WATER LAW (3d ed. 2009). These and other water articles and writings by the author are collected in JUSTICE GREG HOBBS, IN PRAISE OF FAIR COLORADO, THE PRACTICE OF POETRY, HISTORY, AND JUDGING (2004); JUSTICE GREG HOBBS, COLORADO MOTHER OF RIVERS, WATER POEMS (2005); GREGORY J. HOBBS, JR., THE PUBLIC'S WATER RESOURCE, ARTICLES ON WATER LAW, HISTORY AND CULTURE (2007); JUSTICE GREG HOBBS, LIVING THE FOUR CORNERS, COLORADO CENTENNIAL STATE AT THE HEADWATERS (2010); and JUSTICE GREG HOBBS, INTO THE GRAND (2012).

Shortly after admission to the Union in 1876, the General Assembly began to adopt a series of adjudication acts designed to restrict water appropriations to the need of actual users. When the Territorial General Assembly enacted its first water statute in 1861,[25] it mentioned only one type of use, agriculture. In my view, this is due to the essentially non-consumptive character of mining uses along streams in the mountains. Hydraulic and sluice-box mining were primarily non-consumptive in nature. Most of the water diverted returned to the stream mountain streams that flowed downstream onto the plains. Wherever it occurred in the state, domestic use of water for drinking and stock-watering was incidentally consumptive, whereas irrigation on cropland to feed the miners required recognition of a law that allocated and protected a consumptive use share of the public's water resource.[26] By the early Twentieth Century, a rapidly growing municipal and commercial economy was emerging out of farm land, requiring adjudication of all other beneficial uses in order of their decreed priorities. Consequently, the General Assembly enacted in 1903 an adjudication act applicable to all beneficial uses.[27]

The 1881[28] and 1903[29] statutes required district courts in counties throughout the state to issue decrees awarding priority dates to those appropriators who had made actual beneficial use of the water. Because junior appropriations often depend upon return flows from pre-existing uses, case law arising under these adjudication acts required the courts to prevent senior appropriators from enlarging their consumptive use to the detriment of decreed junior rights.[30] The original intent of the appropriator regarding the extent of the acreage to be irrigated governs the scope of the appropriation.[31] Under the 1899[32] and 1943[33] acts, changes in point of diversion, amount, use or place of use required adjudication including protective conditions necessary to prevent injury to other water rights.[34]

In a 1883 case, the Colorado Supreme Court clearly articulated the fundamental beneficial use principle of prior appropriation law, that no one can "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."[35] In an 1892 case, the court reiterated that "the ownership of the prior right can be acquired originally only by

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[25] *See* An Act to Protect and Regulate the Irrigation of Land, 1861 Colo. Territorial Laws § 1, 67.

[26] Recognizing that in-house drinking water and sanitation use is a human necessity, Colorado statutory law contains an exemption from administration of the priority system for small capacity wells and rain water harvesting systems for this purpose where a family does not have access to a centralized water system. *See* Justice Gregory J. Hobbs, Jr., *Protecting Prior Appropriation Water Rights Through Integrating Tributary Groundwater: Colorado's Experience*, 47 IDAHO L. REV. 5, 20–21 (2010).

[27] *See* 1903 Colo. Sess. Laws 297.

[28] *See* 1881 Colo. Sess. Laws 142–46.

[29] *See* 1903 Colo. Sess. Laws 278–80, 291–92.

[30] *See* Ready Mixed Concrete Co. in Adams Cnty. v. Farmers Reservoir and Irrigation Co., 115 P.3d 638, 642–43 (Colo. 2005).

[31] *See* Cent. Colo. Water Conservancy Dist. v. City of Greeley, 147 P.3d 9, 12 (Colo. 2006).

[32] 1899 Colo. Sess. Laws 235–36.

[33] 1943 Colo. Sess. Laws 628–29.

[34] *See* Empire Lodge Homeowners' Ass'n v. Moyer, 39 P.3d 1139, 1149 (Colo. 2001).

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

the actual beneficial use of the water. The very birth and life of a prior right to the use of water is [an] actual *user*."[36]

Late nineteenth and early twentieth-century Colorado Supreme Court cases consistently iterated that seepage water from ditches and reservoirs and return flows from irrigation of crops is available for appropriation in priority by other water rights.[37] Decisions of the Colorado Supreme Court have since read into every decree an implied limitation that actual beneficial use of the water diverted is the scope, measure and limit of any water right.[38]

Through a 1919 Act, the legislature provided for adjudication of all previously un-decreed water rights to occur through court filings made within the next two years; if not, their original appropriation dates would be presumed abandoned.[39] The 1943 Act provided for supplemental adjudications throughout the state.[40]

3. The Role of Government to Conserve the Public's Water Resource and Enforce Adjudicated Water Use Rights

In their article published by the University of Colorado's Natural Resources Law Center, Clyde Martz and Bennett Raley articulated government's responsibility to conserve and manage water and protect vested water use rights through priority administration. Citing the Mining Act of 1866[41] and the water provisions of the Colorado Constitution, they identified what they characterized as a trusteeship role of government officials for water administration. This responsibility includes conservation of the public's water resource and enforcement of adjudicated water rights:

> Colorado declared that all of the waters of natural streams are the property of the public and dedicated to public use. By such declaration with respect to waters in which it had no proprietary interest, the state assumed a trusteeship role to administer the waters of the state for the benefit of the public. As such, it became responsible not only for minimal administrative functions but also for administration of the kind a trustee owes to the beneficiary of the trust. Its responsibilities include, first and foremost, the conservation of the estate and avoidance of waste; second, the promotion of beneficial use by assisting the appropriator in achieving use objectives to the maximum extent feasible; third, the representation of beneficiaries in a *parens patriae* capacity and maintaining the use regimen on the river system; and fourth, the promotion of efficiency and prudence of the kind expected of a trustee.[42]

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[36] Combs v. Agric. Ditch Co., 28 P. 966, 968 (1892) (emphasis in original).
[37] *See, e.g.*, Comstock v. Ramsay, 133 P. 1107, 1110 (1913).
[38] *See* Weibert v. Rothe Bros., Inc., 618 P.2d 1367, 1371 (Colo. 1980).
[39] *See* 1919 Colo. Sess. Laws 487–89.
[40] *See* 1943 Colo. Sess. Laws 614–18.
[41] *See* Act of July 26, 1866, ch. 262, § 9, 14 Stat. 251, 253 (codified at 43 U.S.C. § 661 (2006).
[42] Clyde O. Martz & Bennett W. Raley, *Administering Colorado's Water: A Critique of the Present Approach*, *in* TRADITION, INNOVATION AND CONFLICT: PERSPECTIVES ON COLORADO WATER LAW 41, 42 (1986). Clyde Martz was a distinguished natural resources professor at the University of Colorado School of Law and later a partner of Davis, Graham & Stubbs and Solicitor of the Department of Interior under President Jimmy Carter. Bennett Raley was also a partner of Davis, Graham & Stubbs, served as Assistant

The General Assembly has defined and implemented such a role for public agencies and officials. It has empowered and directed public officials in the performance of their water duties through numerous statutes, in particular but not limited to the 1969 Water Right Determination and Administration Act (1969 Act). Therein it has codified basic tenets of Colorado water law, an important component of which is the integration of tributary groundwater and surface water into the prior appropriation adjudication and administration system.[43] Colorado statutes establish seven geographical water divisions, each having a division engineer and a water judge.[44] These water judges adjudicate water right applications on a case by case basis, providing notice to other water users and the public through the state's unique resume notice system.[45]

The State Engineer, seven Division Engineers, and local water commissioners have the duty to enforce the seven water court judgments and decrees.[46] The value of any water right, whether a prior appropriation water right or federal agency or tribal reserved right, depends on its ranking in order of decreed priority system in times of short supply.[47] Without enforcement of the priority system, the value of a water right diminishes or disappears, and the adaptability of the market to reallocate water to different uses through willing buyer/seller transactions flounders for lack of reliability.[48]

4. The Role of Reservoirs and Voluntary Water Transfers

The doctrine of prior appropriation is a rule of scarcity, not of plenty. When the call for priority administration is in effect, which is often in most of Colorado's river basins even in average water years, the inevitable need of a growing population for water has pitted water rights holders against each other, seniors calling out juniors through priority administration and juniors seeking to improve the reliability of their water supply by buying or leasing senior water rights or providing replacement water through exchange, augmentation or substitute supply plans. This struggle pits the rural economy, which typically holds the senior water rights, against the urbanizing economy, which has sufficient financial resources to purchase senior agricultural priorities, often resulting in the dry-up of agricultural lands that adversely impacts the rural economy.[49]

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[43] COLO. REV. STAT. § 37-92-102 (2011); 37-80-102,-105,-117.

[44] *Id.* §§ 37-92-201, -203.

[45] *Id.* § 37-92-302. *See, e.g.*, S. Ute Indian Tribe v. King Consol. Ditch Co., 250 P.3d 1226 (Colo. 2011).

[46] COLO. REV. STAT. §§ 37-92-501, -502; 37-80-102(a); Vaughn v. People *ex rel.* Simpson, 135 P.3d 721, 723 (Colo. 2006).

[47] Navajo Dev. Co., Inc. v. Sanderson, 655 P.2d 1374, 1380 (Colo. 1982). *See also* Kobobel v. State Dept. of Natural Res., 249 P.3d 1127, 1130 (Colo. 2011) (stating that one does not own water but owns right to use water within limitations of prior appropriation doctrine).

[48] *See* Gregory J. Hobbs, Jr., *Priority: The Most Misunderstood Stick in the Bundle*, 32 ENVTL. L. 37, 49-52 (2002).

[49] *See generally Colorado's Water Supply Future: Cooperation vs. Competition*, HEADWATERS, Spring 2009, http://www.cfwe.org/index.php?option=com_content&view=category&layout=blog&id=49&Itemid=149. (This issue is devoted to Colorado's water planning process commenced through the Colorado Water for the 21st Century Act, *see* COLO. REV. STAT. § 37-92-101).

During the twentieth century, importation of western slope water from the Colorado River basin through the Continental Divide into the Platte and Arkansas River basins ameliorated the impact of over-appropriation of the native waters of these two Front Range basins where the bulk of Colorado's population resides.[50] The U.S. Bureau of Reclamation constructed reservoir projects in connection with repayment contracts involving local conservancy districts, such as the Colorado-Big Thompson Project serving northeastern Colorado (Northern Colorado Water Conservancy District) and the Frying Pan-Arkansas Project serving southeastern Colorado (Southeastern Colorado Water Conservancy District).[51] Cities such as Denver, Aurora, Colorado Springs and Pueblo built their own trans-mountain diversion and storage projects.[52] Supplementing the relatively meager native waters of the Platte and the Arkansas River basins, these importations utilizing compact apportioned water available to the state out of its Colorado River interstate apportionment were absolutely indispensable to the agricultural, municipal and commercial economies of the Front Range.[53]

Such importations bridged and muted agricultural and urban conflicts even as irrigated agricultural ground gave birth to the great and growing cities.[54] As the cities have grown, and recreation and the environment have taken their place in prior appropriation adjudication and administration, the market in transferring senior priority agricultural water rights to municipal and environmental uses has accelerated.[55] The long-standing water market in Colorado is more active than ever. The 1891 *Strickler* decision[56] of the Colorado Supreme Court recognized that the valuable water use property rights of farmers could be transferred to other uses, provided that changes of water rights would be accomplished through the court process without injury to other water rights:

> 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.[57]

As a result of *Strickler*, Colorado's 120 years old water market underscores the value and flexibility of private water use rights—they can be voluntarily reallocated to other types and places of use, as need and opportunity dictates, subject to notice and the opportunity

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[50] *Id*. at 4-7.
[51] *See* Gregory J. Hobbs, Jr., *Colorado Water Law: An Historical Overview*, 1 U. DENV. WATER L. REV. 1, 13-14 (1997).
[52] *Id*. at 15-16.
[53] *See* JUSTICE GREG HOBBS, FOREWORD TO COLORADO WATER LAW BENCHBOOK ix (Carrie L. Ciliberto & Timothy J. Flanagan, eds., Rev. Ed. 2012).
[54] COLO. FOUND. FOR WATER EDUC., CITIZEN'S GUIDE TO COLORADO WATER LAW 20-21 (3d ed. 2009).
[55] *See generally A Decade of Colorado Supreme Court Water Decisions: 1996-2006*, HEADWATERS, Fall 2006 at 12-14, http://www.cfwe.org/index.php?option=com_content&view=category&layout=blog&id=49&Itemid=149 (discussing recent change of water rights cases).
[56] Strickler v. City of Colorado Springs, 26 P. 313 (Colo. 1891). In this case, a city successfully obtained recognition of the right to purchase a senior agricultural priority and change it to municipal use subject to protection against injury to other water rights.
[57] *Id.* at 316.

to oppose a transfer that does not conform to the applicable legal standards governing a change of water right.

5. Balancing Land and Water Resources

If any resource has currency as a common resource as valuable as the air we breathe, it is water. Water flows where it will and blesses everyone and everything it touches. As Mark Fiege says about western settlement, "Water, deer, and similar commons resources moved, and they moved in relation to the land or a habitat."[58]

Water is the quintessential fluid resource requiring a common understanding on how it shall be shared by means of a possessory interest that does not constitute ownership of the resource itself. Good snowpack propels our hope; drought levels our dreams. The great dust bowl drought of the 1930s sobered up any lingering romantic notions about the amount of water available for use in the hard times.

Susan Schulten describes how the Federal Writers' Project Guide to Colorado restrains the lyric romanticism evident in prior guides describing this state's allures.[59] This guide presented a leaner, more factual description of this semi-arid land, its varied peoples, and labor conflicts that spread to the state's irrigated sugar beet fields.

In twenty-first century Colorado and into the future, we must learn to share between human economies and the environment what is predominantly—save pockets of unappropriated water here and there—an already-developed water resource. The Colorado General Assembly has declared the goals of the water law to include "optimum use,"[60] sustainability,[61] and protection against injury to water rights.[62] Accordingly, the state's policy of water use does not require a single-minded endeavor to squeeze every drop of water out of surface streams and tributary aquifers. Instead, these goals can only be achieved by optimum use through proper regard for "all significant factors, including environmental and economic concerns"[63] and a "balancing of land and water resources."[64]

The sextuplet of cases I examine in this article demonstrate judicial and legislative fidelity to the trusteeship role that Martz and Raley articulated.[65] The early twenty-first century drought, the over-appropriated status of three of Colorado's major steam systems—the Platte, the Arkansas and the Rio Grande—and the limited availability of unappropriated water remaining in the Colorado River under the state's 1922 Colorado River Compact and 1948 Upper Colorado River Basin Compact apportioned share—have revived the public ownership, anti-speculation and beneficial use moorings of Colorado water law.

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[58] Mark Fiege, *The Weedy West: Mobile Nature, Boundaries, and Common Space in the Montana Landscape*, 36 THE W. HIST. Q., Spring 2005, at 26.
[59] Susan Schulten, *How to See Colorado: The Federal Writers' Project, American Regionalism, and the "Old New Western History"*, THE W. HIST. Q., Spring 2005, at 63.
[60] COLO. REV. STAT. § 37-92-501(2)(e) (2011).
[61] *Id.* § 37-92-501(4).
[62] *Id.* § 37-92-501(4).
[63] Alamosa-La Jara Water Users Prot. Ass'n v. Gould, 674 P.2d 914, 935 (Colo. 1983).
[64] San Antonio, Los Pinos and Conejos River Acequia Pres. Ass'n v. Special Improvement Dist. No. 1 of the Rio Grande Water Conservation Dist. (*Subdistrict No. 1*), 270 P.3d 927, 952 (Colo. 2011) (en banc).
[65] *See supra* note 42 and accompanying text.

II.
Contemporary Case Law Decisions Illustrating Application of Originating Principles of Colorado Prior Appropriation Water Law

1. *Empire Lodge,* Regulating Out-of-Priority Diversions to Prevent Injury to Adjudicated Water Use Rights

Empire Lodge[66] is a 2001 case illustrating enforcement of Colorado's prior appropriation doctrine in an over-appropriated stream system. It teaches that augmentation plans are a legislatively-created device engineered to provide replacement water for senior water rights and thereby allow junior appropriators to divert water when they otherwise would be curtailed under strict prior appropriation administration. This decision became highly significant in the very next year when a deepening drought caused the curtailment of wells lacking decreed augmentation plans.

This case started from a seemingly inconsequential dispute between a homeowners' association and a neighboring ranch along Empire Creek, a tributary to the Arkansas River high in its headwaters outside of Leadville. Empire Lodge Homeowners' Association, residents of a 261 lot rural subdivision, had been filling two fishing ponds (created no doubt by a long-gone developer who had departed after marketing a desirable amenity).[67] Anne and Russell Moyer owned an adjudicated irrigation right for a ranch downstream on Empire Creek.[68] The Moyers placed frequent calls for Division Engineer enforcement of their water rights, in order to curtail the Homeowners' Association from intercepting fishing pond water the Moyer's claimed as part of their irrigation rights.[69] Due to over-appropriation of the Arkansas River, junior water rights are frequently curtailed because there is not enough available water to fill all the adjudicated water rights in the basin.[70]

The Homeowners' Association decided to take on the Moyers. They filed suit in water court alleging that the Moyers had illegally enlarged the use of their water rights.[71] The Moyers responded with a counter-claim alleging that the Homeowners' Association lacked the required augmentation plan decree authorizing their out-of-priority diversions.[72] The State Engineer had been allowing the Homeowners' Association to fill the fishing ponds under an annual "substitute supply plan" accompanied by a warning to file in the water court for an augmentation plan that would provide for suitable replacement water to protect adjudicated water rights against injury at the time, place, and in the amount the Moyers' right was in priority.[73] Injury typically takes the form of a diminution in the amount of water a senior would otherwise receive were it not for the interception of the water by persons taking the water out of priority.[74]

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[66] Empire Lodge Homeowners' Ass'n v. Moyer, 39 P.3d 1139 (Colo. 2001).
[67] *Id.* at 1144.
[68] *Id.* at 1143–44.
[69] *Id.* at 1145.
[70] *Id.* at 1144 n.3.
[71] *Id.* at 1145.
[72] *Id.* at 1146.
[73] *Id.* at 1144,-46.
[74] Farmers Reservoir & Irrigation Co. v. Consol. Mut. Water Co., 33 P.3d 799, 807 (Colo. 2001).

The water court and the Colorado Supreme Court sided with the Moyers, ruling that the General Assembly in 1977 had revoked the State Engineer's authority to approve temporary augmentation plans and there was no legislative authorization for an administratively-approved substitute supply plan to accomplish the same purpose as a judicially-approved augmentation plan.[75]

In resolving the *Empire Lodge* dispute, the Colorado Supreme Court identified Colorado's prior appropriation system as centering on three fundamental principles:

> (1) that waters of the "natural stream,"[76] including both surface water and groundwater tributary thereto, are a public resource subject to the establishment of public agency or private use rights in un-appropriated water for beneficial purposes;
> (2) that water courts adjudicate the water rights and their priorities; and
> (3) that the State Engineer, Division Engineers, and Water Commissioners administer the waters of the natural stream in accordance with the judicial decrees and statutory provisions governing administration.[77]

The Colorado Supreme Court held that "[t]he right guaranteed under the Colorado Constitution is to the appropriation of unappropriated waters of the natural stream, not to the appropriation of appropriated waters."[78] The court said that:

> The objective of the water law system is to guarantee security, assure reliability, and cultivate flexibility in the public and private use of this scarce and valuable resource. Security resides in the system's ability to identify and obtain protection for the right of water use. Reliability springs from the system's assurance that the right of water use will continue to be recognized and enforced over time. Flexibility emanates from the fact that the right of water use can be changed, subject to quantification of the appropriation's historic beneficial consumptive use and prevention of injury to other water rights.[79]

Once an appropriator makes an actual beneficial use, the appropriator holds a vested property right of use.[80] Thus, the property recognized as a Colorado prior appropriation water right "is a right to use beneficially a specified amount of water, from the available supply of surface water or tributary groundwater, that can be captured, possessed, and controlled in priority under a decree."[81] This right may be exercised "to the exclusion of all others not then in priority under a decreed water right."[82] It "comes into existence only through application of the water to the appropriator's beneficial use;

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[75] *Empire Lodge Homeowners' Ass'n*, 39 P.3d at 1150–52, 1155.
[76] This is the term used in Article XVI, Section 5 of the Colorado Constitution.
[77] *Id.* at 1147.
[78] *Id.*
[79] *Id.*
[80] *Id.*
[81] *Id.*
[82] *Id.*

that beneficial use then becomes the basis, measure, and limit of the appropriation."[83] "Depletions not adequately replaced shall result in curtailment of the out-of-priority diversions,"[84] a non-discretionary duty the water administration officials must discharge.[85]

The state supreme court reasoned that the General Assembly in the 1969 Act had "created a new statutory authorization for water uses that, when decreed, are not subject to curtailment by priority administration. This statutory authorization is for out-of-priority diversions for beneficial use that operate under the terms of decreed augmentation plans."[86] Plans for augmentation allow diversions of water out-of-priority while ensuring the protection of senior water rights.[87] Decreed water rights receive a replacement water supply that offsets the out-of-priority depletions. Replacement water can come from any legally available source of water, such as mutual ditch company shares, successive use of trans-mountain water, non-tributary water, and/or artificial recharge of aquifers to generate augmentation credits.[88]

No one knew at the time of the *Empire Lodge* decision that Colorado had already entered into a prolonged drought that in 2002-03 would result in the curtailment of many junior groundwater wells (many drilled in the 1950s and 60s, a century after the establishment of the senior Platte River direct surface flow ditches) that were pumping South Platte River tributary groundwater. In *Simpson v. Bijou*,[89] the supreme court relying on *Empire Lodge* (a surface water dispute in an entirely different river basin) held that the General Assembly through the 1969 Act had required the wells to be integrated into the priority system. The 1969 Act introduced the concept of augmentation plans into the water law adjudication and administration design as the primary means to integrate tributary groundwater into the state priority system.[90] The Act encouraged the adjudication of existing wells by allowing well owners who filed an application by July 1, 1971, to receive a water decree with a priority dating back to their original appropriation date.[91]

As I recount in an article for the University of Idaho Law Review,[92] Colorado's perfect prior appropriation storm hit the South Platte Basin with extraordinary force.[93] While many junior irrigation well pumpers with priority dates as recent as the 1950s had adjudicated augmentation plans under the 1969 Act, many had not, yet they continued to enjoy State Engineer approval of annual "substitute supply plans."[94] Because the 1980s and 1990s had been relatively good water years, senior water right owners had not

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[83] Santa Fe Trail Ranches Prop. Owners Ass'n. v. Simpson, 990 P.2d 46, 53 (Colo. 1999).
[84] *Empire Lodge Homeowners' Ass'n*, 39 P.3d at 1150 (internal citations omitted).
[85] *Id.*at 1154.
[86] *Id.*
[87] *Id.*
[88] *Id.*
[89] Simpson v. Bijou Irrigation Co., 69 P.3d 50, 67 (Colo. 2003).
[90] *Empire Lodge Homeowners' Ass'n*, 39 P.3d at 1140–51.
[91] *Id.* at 1151.
[92] Gregory J. Hobbs, Jr., *Protecting Prior Appropriation Water Rights Through Integrating Tributary Groundwater, Colorado's Experience*, 47 IDAHO L. REV. 5 (2010).
[93] *Id.* at 16 (citing P. Andrew Jones, *South Platte Well Crisis, 2002–2010: Evolving Alluvial Groundwater Regulation*, 78 THE WATER REPORT 1, 8 (2010)).
[94] *Id.* at 7.

pressed the issue.[95] But, when drought slammed the river, the State Engineer commenced curtailing junior surface priorities all the way back to the very earliest senior 1860-61 South Platte River surface water rights.[96]

Meanwhile, junior wells that lacked augmentation plan decrees were creating galling green circles of growth right in the face of curtailed seniors.[97] The State Engineer's policy of nursing along wells that lacked decreed augmentation plans imploded.[98] The Division 1 water court and the Colorado Supreme Court ordered the State Engineer to enforce Colorado's prior appropriation law in *Simpson v. Bijou*.[99]

The General Assembly responded by authorizing the State Engineer to approve substitute supply plans for out-of-priority tributary groundwater diversions under limited circumstances and approving the Arkansas river basin amended rules governing the diversion and use of tributary groundwater in that basin.[100] Through 2004 legislation, it allowed South Platte tributary groundwater wells to operate out-of-priority under State Engineer approved substitute supply plans, with provisos that augmentation plan applications in Division No. 1 Water Court must be filed by December 31, 2005, and wells not included in an adjudicated augmentation plan or State Engineer approved substitute supply plan shall be "continuously curtailed" from operating out of priority.[101]

Unfortunately, many of the South Platte junior well owners suffered from being unable to find sufficient replacement water to take advantage of the Legislature's authorization.[102] Those who cannot find sufficient replacement water at a price they can afford cannot operate their wells.[103] "Today . . . 4,500 wells are enrolled in augmentation plans . . . though most of these are partially curtailed," and "3,700 wells have been completely curtailed."[104]

Wells that have caused depletions in the past, whose effect on the river is yet to be felt due to the lag time between the use and its impact on the river, must provide sufficient replacement water to prevent the upcoming injury.[105] Some wells now gathered together in augmentation plans cannot be operated, because whatever replacement water they have been able to afford must be dedicated to rectifying past depletions causing ongoing injury.[106] These plans will require additional replacement water to enable operation at pre-curtailment levels.[107]

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[95] *Id*.
[96] *Id*. at 8.
[97] *Id.*
[98] *Id.*
[99] Simpson v. Bijou Irrigation Co., 69 P.3d 50, 67 (Colo. 2003).
[100] 2002 Colo. Sess. Laws 459–63.
[101] 2004 Colo. Sess. Laws 1205.
[102] Jones, *supra* note 93, at 8.
[103] *Id.* at 10.
[104] *Id*. (explaining how augmentation decrees are being fashioned to comply with Colorado's water laws, Jones has called for a more systematic way to assist water users, avoid unnecessary cost, and stretch a severely limited water supply). *See* Gregory J. Hobbs, Jr., *Protecting Prior Appropriation Water Rights Through Integrating Tributary Groundwater, Colorado's Experience*, 47 IDAHO L. REV. 5, 16-17 (2010).
[105] Well Augmentation Subdist. of Cent. Colo. Water Conservancy Dist. v. Aurora, 221 P.3d 399, 411 (Colo. 2009).
[106] *Id*.
[107] Jones, *supra* note 93, at 10.

At the outset of the 21st Century, *Empire Lodge* signified that the ebullient development era of the 20th Century had run up against the inevitable necessity to share a largely already-developed water resource through replacement water supply plans and market-driven changes of water rights. The supreme court ruled in *Empire Lodge* that lack of state engineer enforcement cannot be invoked to prevent water court enforcement of injured water use rights:

> Administrative action, forbearance of enforcement, or State Engineer acquiescence in water use practices does not substitute for judicial determination of use rights . . . Decreed prior appropriations are entitled to maintenance of the condition of the stream existing at the time of the respective appropriation. Lacking an adjudication of its rights, Empire Lodge did not possess a legally cognizable right to invoke, in court, the futile call doctrine or enlargement doctrines against the Moyers' water use. These are rights that only decreed water rights holders have standing to assert. Exercise of the State Engineer's enforcement discretion does not obviate the requirement that those making water uses must obtain a decree adjudicating their rights if they desire to have standing to enforce them.[108]

Accordingly, *Empire Lodge* teaches that the right to share in a portion of the public's water resource allocated to Colorado under the applicable nine interstate compacts and two equitable apportionment decrees[109] is dependent upon faithful enforcement of water rights in order of their adjudicated priorities when there is not enough water available to meet all needs. This applies to every water use, consumptive or non-consumptive, state appropriative right or federal or tribal reserved right, so that the public's interest in a stable, reliable and adaptable water law system may be served.[110]

2. *Park County Sportsmen's Ranch*, Affirming the Public's Water Resource Ownership of the Water-Bearing Capacity of Streams and Aquifers

Park County Sportsmen's Ranch establishes that the public, not the overlying landowner, owns the water bearing capacity of aquifers throughout the state as part of the public's water resource[111] and this capacity may be used to store and convey water appropriated by public agencies and private persons.

The case arose when the mushrooming City of Aurora east of Denver on the plains looked to South Park high in the headwaters of the South Platte River for additional water. Through a conditional water right application in the Division 1 water court, it proposed what it characterized as an innovative conjunctive use plan, involving the use tributary groundwater and surface water.[112] Contracting with a private property owner of 2,307 acres of land in South Park – Park County Sportsmen's Ranch – the city

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[108] Empire Lodge Homeowners' Ass'n v. Moyer, 39 P.3d 1139, 1156–57 (Colo. 2001).
[109] *See generally* INTERSTATE COMPACTS, *supra* note 13, at 3.
[110] Navajo Dev. Co. v. Sanderson, 655 P.2d 1374, 1380 (Colo. 1982).
[111] Bd. of Cnty. Comm'r of the Cnty. of Park v. Park Cnty. Sportsmen's Ranch, 45 P.3d 693, 707 (Colo. 2002).
[112] *Id*. at 696.

would pump tributary groundwater from twenty-six wells located on the ranch.[113] In return, it would artificially recharge the aquifer underlying lands in South Park by placing surface water into six unlined surface reservoirs also located on the ranch.[114] This water would percolate into the ground, collect in the aquifer and migrate into the upper South Platte River system to replace water for senior priorities to protect against injury to them.[115]

To effectuate this plan, Park County Sportsmen's Ranch on behalf of Aurora and itself claimed the right to use the saturated and unsaturated portions of the aquifer underlying land others owned.[116] Attempting to block this project, neighboring South Park property owners claimed ownership of the aquifer storage space underneath their lands.[117] Despite the fact that the wells and recharge reservoirs would not be located on their lands, they brought a declaratory judgment trespass action asserting that Aurora and Park County Sportsmen's Ranch had

> . . . no right to occupy the space beneath the lands of the Plaintiffs to store water or other substances on or below the surface of the lands. Any such placement or storage of water or other substances on or below the surface constitutes a trespass for which the Defendant may be liable for damages. [118]

However, the General Assembly had enacted conjunctive use statutes authorizing issuance of a conditional decree for appropriations involving storage of water in underground aquifers and artificial recharge into aquifers.[119] In addition, decreed augmentation plans up and down the South Platte River depended upon using aquifers for generating replacement water recharge credits by means of unlined ditches and ponds.[120]

In resolving this dispute, *Park County Sportsmen's Ranch*[121] plumbs the profound depths of the rubrics "water is a public resource" and "waters of the natural stream, including surface water and tributary ground water."[122] Relying on the appropriation provisions of the Colorado Constitution, it held that Colorado law had wholly supplanted the riparian and *cujus*[123] common law ownership doctrines that tie water use rights to ownership of overlying or adjoining lands. This break from the common law was so complete as to render all surface water and groundwater in the state, along with the water-bearing capacity of streams and aquifers, a public resource dedicated to the establishment and exercise of water use rights created in accordance with the applicable laws.[124]

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[113] *Id.* at 696–97.
[114] *Id.* at 697.
[115] *Id.*
[116] *Id.*
[117] *Id.* at 700.
[118] *Id.* at 696.
[119] *See* COLO. REV. STAT. §§ 37-92-305(9)(b)–(c), 37-87-101(1)–(2), 37-92-103(10.5) (2011).
[120] *Park Cnty. Sportsmen's Ranch*, 45 P.3d at 714–15.
[121] *Id.* at 696.
[122] *Id.* at 706, 709.
[123] "To whomsoever the soil belongs, he owns also to the sky and to the depths." *See id.* at 696 n.1 (citing Norman W. Thorson, *Storing Water Underground: What's the Aqui-Fer?*, 57 NEB. L. REV. 581, 588 (1978)).
[124] *Id.* at 706.

Accordingly, the supreme court held that the "Colorado Doctrine" includes these primary features:

> (1) water is a public resource, dedicated to the beneficial use of public agencies and private persons wherever they might make beneficial use of the water under use rights established as prescribed by law; (2) the right of water use includes the right to cross the lands of others to place water into, occupy and convey water through, and withdraw water from the natural water bearing formations within the state in the exercise of a water use right; and (3) the natural water bearing formations may be used for the transport and retention of appropriated water.[125]

In so holding, the court relied on a water act adopted by the first Colorado Territorial General Assembly in 1861[126] and a series of United States Congress public domain acts, including the 1866 Mining Act[127] and subsequent acts. Together, these past state and federal acts had:

> (1) effectuated a severance of water from the land patents issuing out of the public domain; (2) confirmed the right of the states and territories to recognize rights to water established prior to the federal acts; and (3) granted the right to states and territories to legislate in regard to water and water use rights.[128]

Although the water and the water-bearing formations constitute a public resource, the supreme court also recognized that constructing a water feature on another person's land — such as a ditch, reservoir, or well — requires the consent of the landowner or the exercise of the private right of condemnation over private lands upon payment of just compensation.[129]

Construing the General Assembly's conjunctive use statutes, the supreme court held that the applicant for an underground storage and recharge appropriative right must meet certain conditions. The applicant must:

> (1) capture, possess, and control the water it intends to put into the aquifer for storage;
> (2) not injure other water use rights, either surface or underground, by appropriating the water for recharge;
> (3) not injure water use rights, either surface or underground, as a result of recharging the aquifer and storing water in it;
> (4) show that the aquifer is capable of accommodating the stored water without injuring other water use rights;
> (5) show that the storage will not tortiously interfere with overlying landowners' use and enjoyment of their property;

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[125] *Id.*
[126] 1861 Colo. Territorial Laws 57-68.
[127] Mining Act of 1866, ch. 262, § 9, 14 Stat. 253 (1866); 43 U.S.C. § 661 (2006).
[128] *Park Cnty. Sportsmen's Ranch*, 45 P.3d at 708.
[129] *Id.* at 711, 713–14. *See also* COLO. CONST. art. XVI, § 7; *id.* art. II, §§ 14,15 and implementing statutes.

> (6) not physically invade the property of another by activities such as directional drilling, or occupancy by recharge structures or extraction wells, without proceeding under the procedures for eminent domain;
> (7) have the intent and ability to recapture and use the stored water;
> (8) have an accurate means for measuring and accounting for the water stored and extracted from storage in the aquifer. [130]

The opposers to the City of Aurora's proposed conjunctive use project ultimately succeeded in defeating that project, but not on their aquifer space ownership theory.[131] Instead, in its subsequent decision involving the Aurora and Park County Sportsmen's Ranch proposal, the Division 1 water court found that the applicants' groundwater model failed to produce sufficiently reliable results to permit a reasonably accurate determination of the timing, amount, and location of depletions, or the timing and amount of aquifer recharge.[132] The water court further found that the surface water model failed to produce sufficiently reliable results to permit a reasonably accurate determination of either average stream flow or legal availability of augmentation water.[133] In upholding the water court's dismissal of the conditional decree application, the Colorado Supreme Court relied upon the water court's findings that the models were unsuitable in the case and did not assist reliably in meeting the applicant's burden of predicting and protecting against injury to other water rights.[134]

Park County Sportsmen's Ranch demonstrates the public's water resource ownership interest in streams and aquifers for the purpose of serving the prior appropriation doctrine, but this interest is not a manifestation of the public trust doctrine. Referring to one of its earlier decisions, the supreme court ruled that the adjoining property owner owns the bed of the stream subject to use of the stream for water conveyance purposes:

> In *People v. Emmert*, 198 Colo. 137, 141, 597 P.2d 1025, 1027 (1979), we held that the beds of non-navigable streams in Colorado are not held by the state under a public trust theory; this holding however, did not affect the right of appropriators to conduct their appropriated water through the natural channel across the landowner's property without interference.[135]

Emmert[136] has been a controversial case in Colorado. Landowners seek to invoke it for the proposition that they may exclude rafters from passing over stream beds they own. Rafters counter that they may travel on the public's water. In my view, *Emmert* is best read for the proposition that the Colorado Constitution does not address the recreational use of water and this subject is properly a matter for legislative consideration. The common ground of agreement between the majority and dissent in *Emmert* resides in the majority's statement that, "If the increasing demand for

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[130] *Park Cnty. Sportsmen's Ranch*, 45 P.3d at 704–05 n.19.
[131] City of Aurora v. Colo. State Engineer, 105 P.3d 595, 617 (Colo. 2005).
[132] *Id.* at 612–13.
[133] *Id.* at 616.
[134] *Id.*
[135] *Park Cnty. Sportsmen's Ranch*, 45 P.3d at 709 n.29.
[136] People v. Emmert, 597 P.2d 1025 (Colo. 1979).

recreational space on the waters of this state is to be accommodated, the legislative process is the proper method to achieve this end."[137] Justice Carrigan's dissent agrees with this proposition, "The majority opinion expressly acknowledges that 'it is within the competence of the General Assembly to modify rules of common law within constitutional parameters.'"[138]

While the Majority opinion cites the General Assembly's codification of a portion of the common law *cujus* doctrine—that the space above the land and waters is controlled by the owners of the surface beneath[139]—it also recognizes the right of the General Assembly to change both the common law and this statute if it wishes to address the matter of rafters using recreational space on flowing stream waters.

Emmert is clear on the point that title to the beds of non-navigable streams in Colorado belongs to the adjoining landowners, not the state, and the Colorado Supreme Court will not rely on public trust theory to resolve the issue of recreational use of the public's water resource as it runs through the beds and banks of the stream.[140] As a recent U.S. Supreme Court decision holds, the applicability of public trust doctrine to non-navigable streams is a matter consigned to the states under their own laws, subject to the federal power to regulate vessels and navigation under the Commerce Clause and admiralty power.[141] In sum, the U.S. Supreme Court leaves formulation and applicability of public trust doctrine to the individual states:

> Under accepted principles of federalism, the States retain residual power to determine the scope of the public trust over waters within their borders, while the federal law determines riverbed title under the equal-footing doctrine.[142]

Threaded between the lines of the 1979 *Emmert* decision, Justice Mullarkey's dissent in *Aspen Wilderness Workshop*,[143] and my dissent in the recent public trust ballot title cases[144] are a recognition that the public trust doctrine, particularly as applied by the California Supreme Court, is fundamentally incompatible with the Colorado Constitution's design for allocation of valuable water use property rights to public entities and private persons in order of their adjudicated priorities. In holding that the Colorado Water Conservation Board must enforce the instream flow water rights it appropriates, the initial majority opinion in *Aspen Wilderness Workshop* contained language referencing the public trust doctrine; on rehearing, the majority opinion was

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[137] *Id*. *See generally* Cory Helton, *The Right to Float: The Need for the Colorado Legislature to Clarify River Access Rights*, 83 COLO. L. REV. 845 (2012); *see generally*, *Conflict on the Rocky Mountain Playground*, HEADWATERS, Fall 2010, http://www.cfwe.org/index.php?option=com_content&view=category&layout=blog&id=108&Itemid=149.

[138] *Emmert*, 597 P.2d at 1033.

[139] *See* COLO REV. STAT. § 41-1-107 (2011); *Emmert*, 597 P.2d at 1097.

[140] *See* COLO REV. STAT. § 41-1-107 (2011); *Emmert*, 597 P.2d at 1027.

[141] PPL Montana, LLC v. Montana, 132 S.Ct. 1215, 1235 (2012).

[142] *Id*.

[143] Aspen Wilderness Workshop Ltd. v. Colo. Water Conservation Bd., 901 P.2d 1251, 1260 (Colo. 1995).

[144] *See*, *e.g.*, *In re* Title, Ballot Title, Submission Clause for 2011-2012 #3, 274 P.3d 562, 570 (Colo. 2012) (Hobbs, J., dissenting); *In re* Title, Ballot Title, Submission Clause for 2011-2012 #45, 274 P.3d 576, 583 (Colo. 2012) (Hobbs, J., dissenting).

modified as follows to enunciate a "unique statutory fiduciary duty" to enforce those rights.[145]

> The Conservation Board has a unique statutory fiduciary duty to protect the public in the administration of its water rights decreed to preserve the natural environment . . . [B]oth the Board's duty and its authority to appropriate instream flow find their source in the Water Rights Determination and Administration Act of 1969 . . . Thus, we can only view the Board's actions regarding such appropriations as involving water matters reserved for our water courts.[146]

Justice Mullarkey's dissent in the Aspen Wilderness Workshop case emphasizes that Colorado has never recognized the public trust doctrine:

> This court has never recognized the public trust doctrine with respect to water. Furthermore, whatever the nature of the fiduciary duty recognized by the majority in this case, I do not understand the majority to mean that a breach of this fiduciary duty would support a public claim for damages.[147]

While Colorado does not recognize the public trust doctrine, it nevertheless adheres to a strong state constitutionally based public water ownership doctrine. This doctrine serves the public interest by allowing public and private entities to appropriate water for beneficial use, subject to exercise of the state's police power in making those uses. The *Park County Sportsmen's Ranch* case illustrates just how much Colorado differs from states, like Texas,[148] that adhere to a common law doctrine of groundwater controlled by or being owned outright by the overlying landowner as an incident to land ownership. In Colorado, the public owns surface water and all forms of groundwater;[149] in turn, the Colorado constitution, statutes and case decisions provide for the creation of private use rights to the public's resource.[150]

3. *High Plains and ISG*, Applying the Anti-Speculation and Beneficial Use Doctrines to Changes of Water Rights

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[145] In particular, this language in the California Supreme Court's 1983 Mono Lake public trust case provides for the involuntary uncompensated re-allocation of beneficially used amounts of water allocated to vested water rights, a concept foreign to Colorado's jurisprudence:

> 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.

Nat. Audubon Soc'y v. Superior Court of Alpine Cnty., 658 P.2d 709, 728 (Cal. 1983).
[146] *Aspen Wilderness Workshop Ltd.*, 901 P.2d at 1260–61.
[147] *Id*. at 1263.
[148] *See* Edwards Aquifer Auth. v. Day, No. 08-0964, 2012 WL 592729 (Tex. Feb. 24, 2012).
[149] State v. Sw. Colo. Water Conservation Dist., 671 P.2d 1294, 1307 (Colo. 1983); Bd. of Cnty. Comm'rs of the Cnty. of Park v. Park Cnty. Sportsmen's Ranch, 45 P.3d 693, 707–08 (Colo. 2002).
[150] Empire Lodge Homeowners' Ass'n v. Moyer, 39 P.3d 1139, 1147–49 (Colo. 2001).

High Plains applies the anti-speculation doctrine to water transfer cases. In order to change a senior agricultural priority and retain it for use elsewhere, the application to the water court must identify where the water will be actually used.[151] The case arose when a group of investors bought up one-third of the shares of the Fort Lyon Canal Company in the lower Arkansas River Valley, a ditch company that operates an extensive system of canals and reservoirs with direct flow and storage water rights irrigating nearly 93,000 acres of agricultural land located between La Junta and Lamar.[152] They filed a change of water right application in Division 2 water court, seeking to sell water to any municipal or quasi-municipal water supplier in twenty-eight counties along Colorado's Front Range.[153]

However, the investors did not identify the need, amount, or place where these senior water rights would be utilized under the change of water rights decree they sought.[154] Accordingly, the Colorado Supreme Court upheld the water court's dismissal of the application for violating the state's anti-speculation doctrine.[155] The court held that, in order to retain the benefit of the original appropriation's senior priority (the aim of any change of water rights proceeding), the applicant has the burden of demonstrating where and how the water right will continue to be put to actual beneficial use.[156]

Citing David Schorr's work in its decision, the supreme court stated, "The roots of Colorado water law reside in the agrarian, populist efforts of miners and farmers to resist speculative investment that would corner the water resource to the exclusion of actual users settling into the territory and state."[157] The court pointed out that High Plains change of water right application involved the following factors:

> (1) the water resource is the property of the public; (2) the priority of a use right obtained by irrigating a particular parcel of land is a property right that can be separated from the land; (3) the owner of the use right may sell it to another person or governmental entity; and (4) the courts may decree a change in the point of diversion, type, time, and/or place of beneficial use, subject to no injury of other water rights.[158]

Because actual beneficial use defines the genesis and maturation of every appropriative water right, every decree recognizing a right to use the public's water resource includes an implied limitation that diversions cannot exceed those that can be beneficially used; the right to change a point of diversion, or time, type or place of use is limited in quantity by the appropriation's historical beneficial consumptive use.[159] Quantification of the amount of water beneficially consumed in acre-feet by the exercise of the appropriator's adjudicated right over a representative period of time guards against

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[151] High Plains A & M, LLC v. Se. Colo. Water Conservancy Dist., 120 P.3d 710 (Colo. 2005).
[152] *Id*. at 714.
[153] *Id*. at 715.
[154] *Id*. at 721.
[155] *Id*. at 724.
[156] *Id*. at 721–22.
[157] *Id*. at 719 n.3.
[158] *Id*. at 718.
[159] Santa Fe Trail Ranches v. Simpson, 990 P.2d 46, 54–55 (Colo. 1999).

speculation, expanded use, or rewarding wasteful practices.[160] "Hence, the fundamental purpose of a change proceeding is to ensure that the true right—that which has ripened by beneficial use over time—is the one that will prevail in its changed form."[161]

Just as with the original appropriation, the change of water right applicant must demonstrate a legally vested interest in the land to be served and a specific plan and intent to use the water for designated purposes under the change decree.[162] This requirement can be satisfied by a showing that the water will be used by a governmental agency, or a person who will use the changed water right for his or her own lands or business or through an agreement to provide water to a public entity and/or private lands or businesses to be served.[163]

The supreme court reasoned that every water right includes a specific situs identified by the point of the diversion and the time, type, amount and place of use to which the water is delivered for actual beneficial use.[164] A water right requires both an appropriator and a place where the appropriation is put to actual beneficial use.[165] Accordingly, the function of a change decree is to recognize a new situs for the appropriation.[166] The application must therefore contain a sufficiently described actual beneficial use to be made at an identified location or locations under the change decree.[167]

For failure to meet these criteria, the supreme court upheld the water court's dismissal of High Plains' applications without prejudice, saying that its applications could be re-filed "when a definite location or locations for beneficial use of the water can be identified in the applications and confirmed in the water court proceedings."[168]

The companion *ISG* decision,[169] announced the same day as *High Plains,* provided the supreme court with the opportunity to discuss new legislation the General Assembly had enacted providing an alternative to permanent changes of water rights. This new legislation allows a variety of means by which the use may be changed temporarily upon approval by the State Engineer.[170] Allowed temporary water right changes include: (1) water banking programs for leasing, loaning, and exchanging stored water rights; (2) exchanges of water between streams or between reservoirs and ditches; (3) loans between agricultural water users in the same stream system for up to 180 days in a year; and (4) temporary interruptible water supply agreements for up to three-out-of-ten years.[171]

A statutorily authorized temporary change of use proceeds through the state or division engineer.[172] Each temporary change requires particular evidence to be presented regarding the timing, duration, purpose, and volumetric measure of the temporary change

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[160] *Id*.
[161] *Id*. at 55.
[162] *High Plains A & M, LLC*, 120 P.3d at 720.
[163] *Id*. at 717.
[164] *Id*. at 718.
[165] *Id*. at 720.
[166] *Id*.
[167] *Id*.
[168] *Id*. at 714.
[169] ISG, LLC v. Ark. Valley Ditch Ass'n, 120 P.3d 724 (Colo. 2005).
[170] *Id*. at 732.
[171] *Id*. at 732–34.
[172] *Id*. at 733.

to be made and approved.[173] For example, the applicant for an interruptible water supply agreement is required to submit a written report estimating historical consumptive use, return flows, and potential for injury.[174] The State Engineer provides copies of approval or denial to all parties and the decision can be reviewed by the water court.[175] On appeal, the water court reviews questions of injury.[176] The water court may review the applicant's initial estimate of the historical consumptive use of water and the state or division engineer's determination that no injury to other users will result.[177]

Thus, the General Assembly has authorized short-term changes that do not penalize the appropriator owning the water right in any subsequent change of water right proceeding.[178] The methodology for calculating historical consumptive use of the water rights over a representative period of time for a permanent change will not count or discount the years of authorized temporary use.[179] Statutes provide that temporary nonuse of water under state conservation programs, municipal conservation programs, approved land fallowing programs, or water banks does not indicate intent to abandon or discontinue permanent use.[180]

The legislature clearly intended to promote flexibility in the administration of water rights, especially in the circumstances of temporarily transferring water from agricultural use to municipal use on a contract basis. It did not intend to penalize owners of decreed appropriations for properly taking advantage of these statutes in accordance with their terms.[181]

In its 2006 session, the Colorado General Assembly authorized rotational crop management contracts that may be the subject of change of water right applications and decrees.[182] These are written contracts in which owners or groups of owners of irrigation water rights agree, by fallowing and crop rotation, to implement a change of rights to a new use by foregoing irrigation of a portion of the lands historically irrigated, without injury to other water rights.[183]

This innovative string of legislation demonstrates the legislature's concern about preserving irrigated agriculture in Colorado while, at the same time, addressing the needs of Colorado's growing population. The *High Plains* and *ISG* decisions amply demonstrate the interplay between the judicial and legislative branches of Colorado government in applying the anti-speculation and beneficial use principles of prior appropriation water law to water transfer cases. The details of implementing the doctrine of prior appropriation evolve as the needs of the people do.[184]

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[173] *Id*. at 733–74.
[174] *Id*.
[175] *Id*.
[176] *Id*.
[177] *Id*.
[178] *Id*.
[179] *Id*.
[180] *Id.*; *see* COLO. REV. STAT. § 37-92-103(2) (2011).
[181] *ISG, LLC*, 120 P.3d at 733–34.
[182] COLO. REV. STAT. §§ 37-92-103(10.6), -305(3) (2011).
[183] *Id.*
[184] *See generally* Reed D. Benson, *Alive but Irrelevant: The Prior Appropriation Doctrine in Today's Western Water Law*, 83 U. COLO. L. REV. 675 (2012). This is a fine article demonstrating how different states adjust the implementation of their prior appropriation doctrine to account for the geography, mix of water uses and legal precedent within their jurisdictions. I question only the "but irrelevant" thesis. In my

4. *Pagosa I and II*, Restraining Municipal Monopolization of the Remaining Unappropriated Water

Pagosa I and *II* demonstrate that conditional water right decrees will be increasingly difficult to obtain, and maintain through subsequent diligence periods, as Colorado's remaining unappropriated water shrinks and competition for a share in the public's water resource intensifies.[185] The case arose when two public water districts in Southwestern Colorado filed a conditional water right application for municipal water from the San Juan River to fill their ideal 35,000 acre-foot reservoir site. What started out as a claim for 64,000 acre-feet annually of fully consumable water, by fill and re-fill with the right of reuse, became a conditional decree the water court entered for storage of 11,000 acre-feet annually to address a fifty-year planning period.[186]

These decisions involved two public entities, a water and sanitation district and a water conservancy district, that applied jointly for a one hundred year supply of consumptive use water to address possible residential growth in their service areas.[187] Unlike other parts of the state, there is unappropriated water in the San Juan River available for appropriation within Colorado.[188] However, recognition of the claims sought by the two districts would have made them senior to potential but yet-unfiled instream flow and kayak course water right appropriations by other public entities.[189] In fact, the large size of the conditional right sought appeared to be in reaction to the possibility that non-consumptive use rights might be obtained by other public entities, in particular, the Colorado Water Conservation Board (CWCB) for an instream flow right and the City of Pagosa Springs for a kayak course right.[190]

Colorado Trout Unlimited filed a statement of opposition in the Division 7 water court challenging the population projections, the planning period, and the need requirements for the claimed conditional water rights.[191] Citing prior cases and, most importantly, construing a Colorado statute providing for a limited exception to the present need requirement, the Colorado Supreme Court identified the considerations and parameters governing the "great and growing cities" doctrine.[192]

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view, the enforcement of water rights, state and federal, in accordance with their adjudicated priorities will always be the most relevant premise to protecting the values incorporated into the water law.

[185] Pagosa Area Water and Sanitation Dist. v. Trout Unlimited (*Pagosa I*), 170 P.3d 307 (Colo. 2007); Pagosa Area Water and Sanitation Dist. v. Trout Unlimited (*Pagosa II*), 219 P.3d 774, 777 (Colo. 2009).

[186] On October 31, 2011, the Water Court for Water Division 7 in Case No. 2004CW085 entered a judgment and decree to this effect incorporating a stipulation of the parties following remand from the Pagosa II decision.

[187] *Pagosa I*, 170 P.3d at 317–18.

[188] *Id.* at 315 (stating that appropriator must have a non-speculative intent to appropriate unappropriated water). The entire case turned on the proposition that there was unappropriated water remaining in the San Juan within Colorado's interstate water compact allocation. The only question concerned how much of that water should be conditionally decreed to the applicant districts.

[189] *Id.* at 318 n.11.

[190] *Id.*

[191] *Id.* at 311–12.

[192] *See generally* Derek L. Turner, *Pagosa Area Water & Sanitation District v. Trout Unlimited and An Anti-Speculation Doctrine for a New Era of Water Supply Planning*, 82 U. COLO. L. REV. 639 (2011).

Again citing David Schorr's work[193] and relying on an act of the Colorado General Assembly[194] the Colorado Supreme Court in *Pagosa I* held that "a governmental water supply agency has the burden of demonstrating three elements in regard to its intent to make a non-speculative conditional appropriation of un-appropriated water:

> (1) what is a reasonable water supply planning period;
> (2) what are the substantiated population projections based on a normal rate of growth for that period; and
> (3) what amount of available un-appropriated water is reasonably necessary to serve the reasonably anticipated needs of the governmental agency for the planning period, above its current water supply."[195]

Pagosa II articulates "four non-exclusive considerations relevant to determining the amount of the conditional water right:

> (1) implementation of reasonable water conservation measures during the planning period;
> (2) reasonably expected land use mixes during the planning period;
> (3) reasonably attainable per capita usage projections for indoor and outdoor use based on the land use mixes during the planning period; and
> (4) the amount of consumptive use reasonably necessary to serve the increased population."[196]

In addition, the applicant must show that "it can and will put the conditionally appropriated water to beneficial use within a reasonable period of time."[197] In the initial conditional decree proceedings, followed by any six year diligence proceeding that follows, "the factors the water court considers under the can and will requirement include, but are not limited to:

> 1) economic feasibility;
> 2) status of requisite permit applications and other required governmental approvals;
> 3) expenditures made to develop the appropriation;
> 4) ongoing conduct of engineering and environmental studies;
> 5) design and construction of facilities; and
> 6) nature and extent of land holdings and contracts demonstrating the water demand and beneficial uses which the conditional right is to serve when perfected."[198]

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[193] *Pagosa I*, 170 P.3d at 313 n.5; David B. Schorr, *The First Water-Privatization Debate: Colorado Water Corporations in the Gilded Age*, 33 ECOLOGY L.Q. 313, 319–20 (2006).
[194] COLO. REV. STAT. § 37-92-103(3)(a)(I)–(II) (2011).
[195] *Pagosa I*, 170 P.3d at 309–10.
[196] Pagosa Area Water and Sanitation Dist. v. Trout Unlimited (*Pagosa II*), 219 P.3d 774, 780 (Colo. 2009).
[197] *Pagosa I*, 170 P.3d at 309–10.
[198] *Id.* at 316.

As the supreme court explained, the applicable statute[199] "excuses governmental water supply agencies from the requirement to have a legally vested interest in the lands or facilities served, but the exception does not completely immunize municipal applicants" from a speculation challenge.[200] "A governmental agency need not be certain of its future water needs; it may conditionally appropriate water to satisfy a projected normal increase in population within a reasonable planning period."[201]

"The conditional appropriation must be consistent with the governmental agency's reasonably anticipated water requirements based on substantiated projections of future growth within its service area."[202] "Only a reasonable planning period for the conditional appropriation is allowed."[203] Based on prior cases, the supreme court concluded that a planning period in excess of 50 years should be closely scrutinized.[204] The conditional water right decree should include volumetric (acre-feet) numbers for the anticipated municipal need, as well as "reality checks" to reassess and adjust the decree amount when a diligence application is made to keep the conditional decree in effect.[205]

The supreme court emphasized that the "reason for continued scrutiny of the conditional appropriation through diligence proceedings is to prevent the hoarding of priorities to the detriment of those seeking to use the water beneficially."[206] The effect of a long-term conditional right, a place holder in the priority system pending perfection of the water right by beneficial use, is "to preclude other appropriators from securing an antedated priority that will justify their investment."[207] "Those in line behind a conditional appropriation for a long planning period risk losing any investment they may make in the hope that the prior conditional appropriation will fail," in whole or part.[208] Because of the chilling effect of senior conditional appropriations, they may not be able to raise the necessary funds in the first instance that will enable them to proceed, in light of their subordinated status.[209]

Pagosa II again returned the case to the water court for further findings.[210] It required the water court to closely examine the population and water supply projections the two water supply districts were asserting, in light of considerably lower population and water supply and demand studies for the year 2050 conducted by the CWCB as part of a statewide planning process initiated by the Colorado General Assembly.[211] The supreme court rejected the "speculative nature" of the local water districts' "claims for appropriation of water to counter hypothetical recreational in-channel diversion, instream flow, and/or bypass flows."[212] It refused to accept the position of the water supply districts and the amicus "municipal water suppliers that they act in a legislative capacity"

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[199] COLO. REV. STAT. § 37-92-103(3)(a)(I) (2011).
[200] *Pagosa I*, 170 P.3d at 315.
[201] *Id.*
[202] *Id.*
[203] *Id.* at 317.
[204] *Id.*
[205] *Id.* at 316.
[206] *Id.*
[207] *Id.*
[208] *Id.*
[209] *Id.* at 316–17.
[210] Pagosa Area Water and Sanitation Dist. v. Trout Unlimited (*Pagosa II*), 219 P.3d 774, 777 (Colo. 2009).
[211] *Id.* at 786–87.
[212] *Id.* at 782.

and are entitled to deference in the "claimed amounts of water the suppliers deem reasonably necessary for their future use:"

> "While the General Assembly has made an accommodation to governmental water suppliers by allowing their conditional appropriations to be made and decreed for a future reasonable water supply period in reasonably anticipated amounts, it has assigned to the courts the responsibility to conduct the necessary proceedings for these determinations under a de novo standard of review."[213]

A significant aspect of *Pagosa I* and *II* is the emergence of non-consumptive instream flow and kayak course water rights as legitimate competitors to consumptive uses in obtaining a right to the public's remaining unappropriated water resource. Trout Unlimited was able to vindicate the public's interest in keeping water in the stream unadjudicated while governmental entities examined the possibility of making non-consumptive appropriations. In particular, Trout Unlimited was interested in the CWCB initiating additional instream flow appropriations on the San Juan River to supplement their existing ones, and the City of Pagosa Springs making a new recreational in-channel appropriation. A successful effort by the two water districts to obtain a one-hundred year water supply conditional priority would have jeopardized the viability of either or both of these possible non-consumptive appropriations. In the context of the *Pagosa* decisions, the law of Colorado instream flow water rights and kayak course rights illustrates how Colorado's prior appropriation law has adapted to accommodate the changing customs and values of the people.

The CWCB is authorized to appropriate instream flow and lake level water rights.[214] These rights are creatures of statute, they do not require points of diversion, and they cannot be appropriated by any person or entity other than this state agency. The Board holds them in the name of the people for flow in a stream segment between an upstream point and a downstream point, and it has a duty to enforce them.[215]

The CWCB may also acquire interests in other water rights to supplement its appropriated junior instream flow water rights through grant, purchase, donation, bequest, conveyance, lease, exchange or other contractual agreement, but it may not use eminent domain or deprive the people of Colorado of their beneficial use allocations under interstate law and compact.[216] Instream flow water rights must be protected against injury by changes of water rights and augmentation plans.[217] Despite their relatively junior status in the priority system, the primary value of an instream flow right is its constraint on changes of water rights that might interfere with the appropriated instream flow. Any water right, including an instream flow water right, is entitled to the maintenance of stream conditions existing at the time of its appropriation.[218] The CWCB is authorized to "resist all proposed changes in time, place, or use of water from a source which in any way materially injures or adversely affects the decreed minimum flow in the

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[213] *Id.* at 788.
[214] COLO. REV. STAT. § 37-92-102(3) (2011).
[215] Aspen Wilderness Workshop Ltd. v. Colo. Water Conservation Bd., 901 P.2d 1251, 1260 (Colo. 1995).
[216] COLO. REV. STAT. § 37-92-102(3) (2011).
[217] Colo. Water Conservation Bd. v. City of Central, 125 P.3d 424, 439–40 (Colo. 2005).
[218] Empire Lodge Homeowners' Ass'n v. Moyer, 39 P.3d 1139,1157 (Colo. 2001).

absence of adequate protective conditions in the change of water right or augmentation decree."[219]

The Colorado General Assembly has also enacted statutory provisions for the appropriation of recreational in-channel diversion water rights.[220] These water rights for the popular kayak courses popping up across the state are limited to appropriation in priority by "a county, municipality, city and county, water district, water and sanitation district, water conservation district, or water conservancy district."[221]

Such rights involve the diversion, capture, control, and placement to beneficial use of water at a specific point defined by an in-channel structural control system designed to make waves.[222] These water rights are limited to the minimum amount of stream flow needed for "a reasonable recreational experience in and on the water from April 1 to Labor Day of each year, unless the applicant can demonstrate that there will be demand for the reasonable recreational experience on additional days."[223] They are also limited to a specified flow rate for each period claimed by the applicant.[224]
Within 35 days of initiating a filing for adjudication of such a water right, the applicant must submit a copy of it to the Colorado Water Conservation Board.[225] After deliberation in a public meeting, the Board is obligated to consider a number of factors and make written findings as to each.[226]

Board findings regarding recreational in-channel diversion applications must include: (1) whether the adjudication and administration of the recreational in-channel diversion would materially impair the ability of Colorado to fully develop and place to consumptive beneficial use its compact entitlements; (2) whether exercise of the right would cause material injury to instream flow rights appropriated by the board; and (3) whether adjudication and administration of the right would promote maximum utilization of the waters of the state.[227]

The water court must consider the Board's findings of fact, which are presumptive as to such facts, subject to rebuttal.[228] In addition, the water court must consider evidence and make certain affirmative findings.[229] Water court affirmative findings must include determining that the recreational in-channel diversion will:

> (1) Not materially impair the ability of Colorado to fully develop and place to consumptive beneficial use its compact entitlements;
> (2) Promote maximum utilization of waters of the state;
> (3) Include only that reach of stream that is appropriate for the intended use;
> (4) Be accessible to the public for the recreational in-channel use proposed; and

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[219] *City of Central*, 125 P.3d at 439–40.
[220] COLO. REV. STAT. § 37-92-103(10.3), -102(6)(b), -305(13), (2011). *See also* Colo. Water Conservation Bd. v. Upper Gunnison River Water Conservancy Dist., 109 P.3d 585, 588-89 (Colo. 2005).
[221] *Empire Lodge Homeowners' Ass'n*, 39 P.3d at 1148; COLO. REV. STAT. § 37-92-103(10.3) (2011).
[222] *Upper Gunnison River Water Conservancy Dist*., 109 P.3d at 591.
[223] COLO. REV. STAT. § 37-92-103(10.3) (2011).
[224] *Id.*
[225] *Id.* § 37-92-102(5).
[226] *Id*. § 37-92-102(6)(b).
[227] *Id.* § 37-92-102(6)(I), (IV), (V).
[228] *Id.* § 37-92-305(13)(a).
[229] *Id*. § 37-92-305(13)(a)(I)-(V).

(5) Not cause material injury to the board's instream flow water rights . . .[230]

The statute contains other criteria for determining the flow rate and for state engineer enforcement.[231] The 2006 legislative amendments occurred after the Colorado Supreme Court issued its opinion addressing a prior version of the statute, under which previous and now-grandfathered recreational water rights were established.[232] While Trout Unlimited could not claim an instream flow water right or a kayak course water right, it was successful in preventing the municipal water districts from obtaining a decree for a large amount of water that would have dampened the opportunity for the CWCB and the City of Pagosa Springs to claim such rights.[233]

In my view, *Pagosa I and Pagosa II* stand for the proposition that there is so little unappropriated water remaining to Colorado under its interstate apportionments that the water should remain in the stream un-adjudicated until such time as a viable consumptive or non-consumptive water right proves the need for an appropriation. Restraining a rash of senior "paper water" rights that could chill the exercise of junior rights for actual beneficial use is true to the originating anti-speculation and beneficial use principles of Colorado's appropriation doctrine.

5. *Burlington Ditch,* Reinforcing Prohibitions Against Illegal Enlargements and Undecreed Changes of Water Rights

Burlington Ditch[234] plays out the consequences of an illegal early twentieth-century enlargement along the over-appropriated South Platte River just below the City and County of Denver. The Colorado Supreme Court disallowed this undecreed enlargement when calculating the amount of consumptive use water that could be transferred from agricultural to municipal use.

Through a 1909 agreement, the Burlington Company sold to the Farmers Reservoir and Irrigation Company (FRICO) what that agreement described as water "in excess of the water now obtained and used for direct irrigation."[235] Eyeing FRICO shares as a source of water to fill municipal needs in the southern Denver Metropolitan area, United Water and Sanitation District Sanitation District combined with the East Creek Valley Water and Sanitation District and FRICO to file a change of water rights application implementing a 2003 agreement they had made.[236] The Division No. 1 water court found that the 1909 agreement and FRICO's subsequent use of water thereunder constituted an illegal enlargement of the Burlington Company's 1885 water right.[237]

Burlington upheld the water court's anti-enlargement judgment, pointing out that what the 1909 termed to be "excess" water belonged to the public and FRICO lacked an

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[230] *Id.*
[231] *Id.* § 37-92-305(13)(b)-(f).
[232] *Id.* § 37-92-305(15). *See* Colo. Water Conservation Bd. v. Upper Gunnison River Water Conservancy Dist., 109 P.3d 585, 591 (Colo. 2005).
[233] Pagosa Area Water and Sanitation Dist. v. Trout Unlimited (*Pagosa II*), 219 P.3d 774, 788 (Colo. 2009).
[234] Burlington Ditch Reservoir and Land Co. v. Metro Wastewater Reclamation Dist., 256 P.3d 645 (Colo. 2011) (en banc).
[235] *Id.* at 657 (emphasis omitted).
[236] *Id.* at 654.
[237] *Id.*

adjudicated priority for use of that water: "[T]his 'excess water' belongs to the public under Colorado water law, subject to appropriation and use in order of decreed priority; any purported conveyance of water that the appropriator does not "need" or has not put to beneficial use flags an illegal enlargement."[238]

The water court found that the Burlington Ditch Company had made only 200 c.f.s. of diversions onto land above Barr Lake under its 1885 decreed water right, although it had originally claimed 350 c.f.s.[239] Not needing the extra 150 c.f.s. for a period of 24 intervening years, it purported to sell that amount to the FRICO company, which then built 140 miles of canal below Barr Lake to spread that water in addition to water FRICO diverts under its own 1908 and 1909 decreed rights.[240]

In the *Burlington Ditch* change of water right proceeding involving the Burlington and FRICO shares, the Division 1 water court found the use of the extra 150 c.f.s. on lands below Barr Lake to be an illegal enlargement that could not be counted as allowable historical consumptive use under the 1885 Burlington right.[241] It did allow average annual releases from Barr Lake storage of 5,456 acre-feet on lands below that reservoir through ditches existing before FRICO's expansion of the irrigation works.[242] The supreme court upheld both findings.[243]

The change of water right and augmentation plan applications in *Burlington* sought a ditch-wide consumptive use analysis.[244] Opposers, including the City of Aurora, won on facts demonstrating a hundred-year old illegal enlargement. Although the result seems shocking – that so much use could turn out useless after nearly a hundred years – the supreme court ruled that prior appropriation law in existence since the first Territorial law of 1861 compelled it.[245] The law of Colorado water is actual beneficial use, without speculation or waste.[246] Colorado is an adjudication state and its laws have consistently required slotting enlargements into the priority system through application, notice to other users and the public, and court adjudication.[247]

Accordingly, FRICO shareholders had no legally protected expectation in the enlarged use they made as a result of the contract they made with the Burlington Company.[248] In fact, for nearly a century to the detriment of intervening decreed water rights, they received more water than they were entitled to.[249] Regardless, a water right decreed for irrigation purposes cannot lawfully be enlarged beyond the amount of water necessary to irrigate the number of acres for which the appropriation was originally perfected, even though the decree stated only a flow rate of water for irrigation use.[250] In

[238] *Id.* at 665.
[239] *Id.* at 656–57.
[240] *Id.* at 656–58.
[241] *Id.* at 657.
[242] *Id.* at 656–57.
[243] *Id.* at 665.
[244] *Id.* at 655.
[245] *Id.* at 665.
[246] High Plains A & M, LLC v. Se. Colo. Water Conservancy Dist., 120 P.3d 710, 719 (Colo. 2005).
[247] *Burlington*, 256 P.3d at 661–62.
[248] *Id.* at 665.
[249] *Id.*
[250] *Id.* at 662.

a change proceeding, the determination of transferable beneficial consumptive use does not include illegally enlarged use.[251]

To ensure that a change of water right does not injure decreed water rights, the change in use must be accomplished:

> (1) by proper court decree;
> (2) only for the extent of use contemplated at the time of appropriation; and
> (3) strictly limited to the extent of formal actual usage.[252]

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.[253] 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.[254] Because water rights are usufructuary 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 appropriation, without diminishment of return flows upon which other water rights depend.[255]

Determining the historical usage of a water right is not restricted to change and augmentation plan proceedings. "[E]quitable relief is available, upon appropriate proof, to remedy expanded usage which injures other decreed appropriations."[256] When historical usage has been quantified for a ditch system by previous court determination, the yield per share removable for use in a change of water right or augmentation plan is not expected to differ from case to case, absent a showing of subsequent events which were not previously addressed by the water court but are germane to the injury inquiry.[257] Colorado statutes address six features of a judgment and decree involving changes of water rights and augmentation plans. These six features include:

> (1) the judgment and decree for changes of water rights and augmentation plans must contain a retained jurisdiction provision for reconsidering the question of injury to the vested rights of others;
> (2) the water judge has discretion to set the period of retained jurisdiction;
> (3) the water judge has discretion to extend the period of retained jurisdiction;
> (4) the water judge's findings and conclusions must accompany the condition setting forth the period of retained jurisdiction;

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[251] Water Rights of Cent. Colo. Water Conservancy Dist. v. City of Greeley, 147 P.3d 9, 14, 17–19 (Colo. 2006).
[252] Farmers Reservoir and Irrigation Co. v. City of Golden, 44 P.3d 241, 246 (Colo. 2002) (quoting Santa Fe Trail Ranches Prop. Owners Ass'n v. Simpson, 990 P.2d 46, 53 (Colo. 1999) (en banc)).
[253] Williams v. Midway Ranches Prop. Owners Ass'n, Inc., 938 P.2d 515, 521 (Colo. 1997).
[254] *Burlington*, 256 P.3d at 662.
[255] *Id.* at 661.
[256] *Williams*, 938 P.2d at 523.
[257] *Id.*

(5) all provisions of the judgment and decree are appealable upon their entry, including those relating to retained jurisdiction or extension of retained jurisdiction; and
(6) the water judge has discretion to reconsider the injury question.[258]

The terms and conditions of a change of water right decree must include provisions for re-vegetation of lands from which water is removed.[259] The water court can also impose transition mitigation payments to offset reduced property tax revenues, as well as bonded indebtedness payments, due to the removal of agricultural water from one county for use in another.[260]

Even if the FRICO change of water right had been for a handful of shares instead of a ditch-wide analysis, it is likely the issue of an illegal enlargement would have been raised and litigated. Whether changed share by share in different proceedings or all of the shares in one proceeding, no more consumptive use water of a ditch company may be transferred than was needed under the original matured appropriation.[261] Re-quantification of an irrigation water right from rate of flow to acre feet of water lawfully consumed under an adjudicated decree is the essence of a change proceeding.[262]

The purpose for allowing a senior priority to be retained through a change decree, typically moving the consumptive use water from agriculture to municipal or instream flow use through voluntary transactions, is to reward a true and continuing beneficial use appropriation of the public's water resource without causing injury to other decreed water rights.[263]

Burlington demonstrates that municipalities and businesses seeking to have the benefit of senior agricultural water rights priorities will be limited, in a change of water right proceeding, to the amount of water actually utilized beneficially in accordance with the adjudicated water right for which the transfer is sought. The supreme court's holding eliminates reliance on un-adjudicated water use practices, no matter how long they have occurred. The court's ruling plainly discourages speculation in shares of mutual ditch company stock; a potential investor in such stock must make a diligent inquiry regarding its potential value in light of its past and future contemplated uses within the prior appropriation system.

6. *Subdistrict No 1,* Respecting Legislative Rulemaking Choices for Sustaining Aquifers While Preventing Injury to Other Water Rights

Sustainability joins optimum use and protection against injury as goals of the water law. This is the result of General Assembly legislation as applied by the Colorado

[258] Farmers Reservoir and Irrigation Co. v. Consolidated Mut. Water Co., 33 P.3d 799, 808 (Colo. 2001); Upper Eagle Water Authority v. Wolfe, 230 P.3d 1203, 1212-13 (Colo.2010).
[259] COLO. REV. STAT. § 37-92-305(4.5)(a) (2012).
[260] *Id.* § 37-92-305(4.5)(b)(I).
[261] *Consolidated Mut. Water Bd.*, 33 P. 3d at 814–15.
[262] Burlington Ditch Reservoir and Land Co. v. Metro Wastewater Reclamation Dist., 256 P.3d 645, 662 (Colo. 2011) (en banc).
[263] High Plains A & M, LLC v. Se. Colo. Water Conservancy Dist., 120 P.3d 710, 719 (Colo. 2005).

Supreme Court in the *Subdistrict No. 1* decision.[264] In the ten years between the *Empire Lodge* and the *Burlington* decisions, competition for water has resulted in tightened administration of the priority system and the creation of innovative methods and means for managing the public's water resource, as shown by case decisions and legislative acts discussed above in this article.

In *Subdistrict No. 1*, the Division 3 water court and the supreme court approved a locally-adopted management plan for sustaining aquifer levels in the San Luis Valley while protecting against injury to senior decreed surface rights and ensuring compliance with Rio Grande Compact delivery obligations.[265] This plan includes using fees paid by landowners in the Subdistrict to fallow up to 40,000 acres of currently irrigated land and replace approximately 6,000 acre-feet of water annually to the Rio Grande River, in order to protect against ongoing injury to surface water rights.[266] A series of statutory amendments and much work by the people of the San Luis Valley made approval of this plan possible.[267]

The Sangre de Cristo Range on the east and the San Juan Range on the west encapsulate this lovely and historical Colorado place, which opens on the south towards Taos as the Rio Grande River winds its way from San Juan Mountain sources. Senior irrigation surface water rights in the valley include Hispano acequia rights located on the Sangre de Cristo Land Grant, which came to Colorado by virtue of the 1848 Treaty of Guadalupe Hidalgo and the creation of Colorado Territory in 1861.[268]

Later Anglo settlers brought under cultivation the two aquifers underlying the Closed Basin portion of the valley north of the Rio Grande River.[269] Today, this land continues to be irrigated by junior priority groundwater wells aided by recharge importation through junior Rio Grande surface ditches.[270] These two aquifers, the unconfined and the confined aquifers, are tributary to the Rio Grande River. Use of Rio Grande surface and tributary groundwater is subject to the Rio Grande River Compact administration among Colorado, New Mexico and Texas and the U.S. Mexico Treaty of 1944.[271]

The Closed Basin has seen depletions of nearly a million acre-feet due to the late 20th early 21st Century drought, resulting in unsustainable groundwater conditions. In 1998, the General Assembly adopted HB 98-1011 to help address the lack of collective knowledge about the valley's aquifers and their connection to the surface streams.[272] Pursuant to this directive, the State Engineer and the Colorado Water Conservation Board

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[264] San Antonio, Los Pinos and Conejos River Acequia Preservation Ass'n v. Special Improvement Dist. No. 1 of the Rio Grande Water Conservation Dist. (*Subdistrict No. 1*), 270 P.3d 927 (Colo. 2011) (en banc).
[265] *Id.* at 935.
[266] *Id.* at 942–43.
[267] *Id.* at 937–39.
[268] *See generally* Gregory A. Hicks and Devon G. Peña, *Community Acequias in Colorado's Rio Culebra Watershed: A Customary Commons in the Domain of Prior Appropriation*, 74 U. COLO. L. REV. 387 (2002); Tom I. Romero, *The Color of Water: Observations of a Brown Buffalo on Water Law & Policy in Ten Stanzas*, 15 U. DENV. WATER L. REV. 329 (2012).
[269] *Subdistrict No. 1*, 270 P.3d at 932 n. 2, 933-34.
[270] *Id*. at 933–34.
[271] *Id.* at 931.
[272] 1998 Colo. Sess. Laws 852–53; COLO. REV. STAT. §§37-90-102, -137 (2011).

initiated the Rio Grande Decision Support System (hereinafter "RGDSS").[273] RGDSS is based on the widely accepted MODFLOW model designed to simulate the occurrence and movement of groundwater.[274] Using a central database of observed climatological, hydrological, and agricultural data, RGDSS models and projects the movement of groundwater between aquifers, water consumption, and the effect of groundwater withdrawals on surface water.[275]

Drought increased the urgency for a sustainable water supply solution. In 2004, the General Assembly adopted SB 04-222, providing guidance to the State Engineer in drafting rules for Division 3 underground water use.[276] The management plan the supreme court approved in *Subdistrict No. 1* involves a program to fallow land in the Closed Basin to promote recovery of a sustainable aquifer system while replacing injurious well depletions causing impacts to Rio Grande River surface water rights.[277]

In accordance with a provision of the 1967 Rio Grande Water Conservation District Act,[278] a majority of landowners within the boundaries of the proposed Subdistrict obtained its formation through a petition process in the Alamosa County District Court. Lands included within Subdistrict boundaries comprise around 174,000 irrigated acres relying on approximately 3000 wells, 300 pumping from the confined aquifer and the rest from the unconfined aquifer. The Subdistrict's board of managers drafted a management plan that contained a ground water management plan under provisions of the Rio Grande Water Conservation District Act, requiring State Engineer approval.[279]

The State Engineer approved the plan, triggering a right of review in the Alamosa District Court and Division 3 water court.[280] Trial judge John Kuenhold, the water judge and Chief Judge for the judicial district, consolidated the two cases.[281] After two trials, the first of which resulted in an order by which the trial remanded the Plan to the Subdistrict for revisions, the trial court approved the groundwater management plan and decree with conditions.[282]

The applicable provision of the 1969 Act, as amended, defines a "plan of water management" as:

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[273] For more information and ongoing updates of RGDSS, see *Rio Grande River Basin, Colorado's Decision Support Systems*, COLO. WATER CONSERVATION BD., http://cdss.state.co.us/basins/Pages/RioGrande.aspx (last visited August 8, 2012). RGDSS is the effort of numerous engineering contractors working with the State Engineer and the Colorado Water Conservation Board. As the supreme court noted in *Cotton Creek Circles*, the water court called the study "one of the most comprehensive studies of the Valley's geology and hydrology that has ever been undertaken." Simpson v. Cotton Creek Circles, LLC. 181 P.3d., 252,257 (Colo. 2008).

[274] MODFLOW stands for "modular three-dimensional finite-difference groundwater model" and it was first developed by the United States Geological Survey in 1984. *See MODFLOW and Related Programs*, U.S. GEOLOGICAL SURVEY, http://water.usgs.gov/nrp/gwsoftware/modflow.html (last visited August 8, 2012).

[275] *Subdistrict No. 1*, 270 P.3d at 943.

[276] *See* 2004 Colo. Sess. Laws 777; COLO. REV. STAT. § 37-92-501(4) (2011).

[277] *Subdistrict No. 1*, 270 P.3d at 944–45.

[278] COLO. REV. STAT. § 37-48-123 (2011).

[279] *Id.* § 37-48-126(2).

[280] *Id.* §§ 37-48-126(3)(b), -92-501.

[281] *Subdistrict No. 1*, 270 P.3d at 931.

[282] *Id.* at 944–45.

> a cooperative plan for the utilization of water and water diversion, storage, and use facilities in any lawful manner, so as to assure the protection of existing water rights and promote the optimum and sustainable beneficial use of the water resources available for use within a district or a subdistrict, and may include development and implementation of plans of augmentation and exchanges of water and ground water management plans under section 37-92-501(4)(c).[283]

Thus, a plan may, but need not, include a plan for augmentation. In order to fund such plans of water management and other improvements contained in the official plan, the Subdistrict – a political subdivision of the state – is empowered to fix and collect rents, rates, fees, and tolls from any owner or occupant of real property that is connected with, served by, or benefitted by the improvements or water management plan.[284]

The State Engineer has jurisdiction to administer, distribute, and regulate Colorado's waters and may also promulgate rules and regulations to assist in these duties.[285] The authorizing statute lays out several principles to guide the Engineer in the adoption of such rules, including:

> Recognition that each water basin is a separate entity . . . [c]onsideration of all the particular qualities and conditions of the aquifer . . . [c]onsideration of relative priorities and quantities of all water rights . . . [and] [t]hat all rules and regulations shall have as their objective the optimum use of water consistent with the preservation of the priority system of water rights . . . [286]

In *Subdistrict No. 1*, the Colorado supreme court ruled that the General Assembly's 2004 act, specific to the State Engineer's administration of groundwater use in Water Division 3,[287] provides for the conjunctive use of groundwater and surface water. The statute takes into account the unique geologic conditions underlying the Rio Grande watershed, Colorado's annual delivery obligations under the Rio Grande Compact, and the consequent need for greater flexibility in water management.[288]

Under these new provisions, the General Assembly gave the State Engineer "wide discretion to permit the continued use of underground water consistent with preventing material injury to senior surface water rights."[289] When regulating the aquifers of Water Division No. 3, the statute requires that the State Engineer consider the following principles:

> (1) the aquifer systems are to be maintained at sustainable levels;
> (2) unconfined aquifers serve as valuable underground storage reservoirs;

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[283] COLO. REV. STAT. § 37-48-108(4) (2011) (emphasis added).
[284] *Id.* § 37-48-189(1)(a)-(b).
[285] *Id.* § 37-92-501.
[286] *Id.* § 37-92-501(2)(a)-(e).
[287] 2004 Colo. Sess. Laws 777–79.
[288] COLO. REV. STAT. § 37-92-501(4) (2011).
[289] *Id.* § 37-92-501(4)(a).

(3) fluctuations in the artesian pressure in the confined aquifer occur and shall be allowed to continue;
(4) the preceding shall not be construed to relieve wells from the obligation to replace injurious depletions to surface flows; and
(5) the division's groundwater use shall not unreasonably interfere with the Rio Grande Compact.[290]

The statute further requires that, when adopting rules pursuant to the power to regulate underground water, the State Engineer shall:

> (I) recognize contractual arrangements among water users, water user associations, water conservancy districts, ground water management subdistricts, and the Rio Grande water conservation district;
> (II) establish criteria for the beginning and end of the division 3 irrigation season;
> (III) not recognize the reduction of water consumption by phreatophytes as a source of replacement water for new water uses or to replace existing depletions, or as a means to prevent injury from new water uses; and
> (IV) not require senior surface water right holders with reasonable means of surface diversions to rely on underground water to satisfy their appropriative water right.[291]

So long as the ground water management plan meets the applicable statutory criteria and the water court approves it, the State Engineer may not curtail underground water withdrawals made pursuant to the plan.[292] Upon entry of a final decree approving the plan, the statute requires the water judge to retain jurisdiction over the water management plan "for the purpose of ensuring that the plan is operated, and injury is prevented, in conformity with the terms of the court's decree approving the water management plan."[293]

Adoption of the plan through a public process is quasi-legislative in nature. Propounding a plan of water management requires the subdistrict and district – and the State Engineer when a ground water management plan component is included – to exercise their policy judgment, considering and balancing a number of policy goals.[294] These include provisions to "assure the protection of existing water rights and promote the optimum and sustainable beneficial use of the water resources."[295]

Rejecting the opposers' primary contention in *Subdistrict No. 1,* the Colorado Supreme Court distinguished an approved water management plan from an augmentation plan.[296] The opposers invoked the requirements for augmentation plan review and

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[290] *Id.* § 37-92-501(4)(a)(I)-(V).
[291] *Id.* § 37-92-501(4)(b).
[292] *Id.* § 37-92-501(4)(c).
[293] *Id.*
[294] San Antonio, Los Pinos and Conejos River Acequia Preservation Ass'n v. Special Improvement Dist. No. 1 of the Rio Grande Water Conservation Dist. (*Subdistrict No. 1*), 270 P.3d 927, 939–40 (Colo. 2011) (en banc).
[295] COLO. REV. STAT. § 37-48-108(4) (2011).
[296] *Subdistrict No. 1*, 270 P.3d at 945–46.

approval that necessitate a judicial finding of no material injury to adjudicated senior water rights prior to approval of the application.[297] The supreme court countered that the no-injury finding and other requirements of the augmentation plan statute applied in the case law decisions did not apply to approval and review of a subdistrict plan, unless the plan includes application to the water court for adjudication of an augmentation plan.[298]

Despite their differences, the augmentation statutes and subdistrict plan statutes aim to accomplish a similar ultimate goal: integration of tributary groundwater and surface water into the priority system of water rights in a manner that protects against injury to decreed senior rights from out-of-priority diversions. Augmentation plans are initiated by application to a water court under the 1969 Act.[299] In contrast, the Subdistrict's plan proceeded through an extensive approval process involving the Subdistrict, the Rio Grande Water Conservation District, the State Engineer, the Alamosa County District Court and the Water Court for Water Division No. 3.[300]

The supreme court held that the Subdistrict's Plan and the water court's decree complied with all the applicable statutes.[301] The approved Plan as decreed with conditions requires annual replacement of injurious depletions to senior adjudicated surface rights.[302] The supreme court concluded that the General Assembly had enacted a new procedure designed to protect senior uses and the aquifers in the San Luis Valley, in light of its historical conjunctive water use practices and its unique hydrogeology.[303] The statute upholds the no-injury principle, an essential part of Colorado's prior appropriation system.[304] In doing so, the overall design of the subdistrict plan approval statutes provide an alternate means for protecting adjudicated senior surface rights in Water Division No. 3 against material injury:

> The General Assembly fashioned section 37-92-501(4)(a) and (b) to promote aquifer sustainability, protect senior rights, and avoid unnecessary curtailment of well pumping in Water Division No. 3. Section 37-92-501(4)(a) limits curtailment of groundwater use within that division to "the minimum necessary to meet the standards of this subsection." It directs pursuit of the goal of a sustainable water supply in each aquifer system, recognizes that the unconfined aquifers serve as valuable underground water storage reservoirs, and provides that the unconfined and confined aquifers may fluctuate with due regard for the daily, seasonal, and long-term demand for underground water . . .[305]

The trial court found that the accuracy of the RGDSS model and response functions for predicting injurious depletions at present is within a margin of error of fifty acre-feet.[306] Based on the evidence, the trial court found this margin of error to be within

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[297] COLO. REV. STAT. § 37-92-305(3)(a), (5), (8) (2011).
[298] *Id.* §§ 37-48-123(2)(g), -48-126(1), -92-305(6)(c).
[299] *Id.* §§ 37-48-123(2)(g), -48-126(1), -92-305(6)(c).
[300] *Subdistrict No. 1*, 270 P.3d at 934–35.
[301] *Id.* at 932.
[302] *Id.* at 945.
[303] *Id.* at 947.
[304] *Id* .at 947–48.
[305] *Id.* at 946.
[306] *Id.* at 943–44.

the present state of the art and its continued refinement will likely produce closer accuracy in the future.[307] The supreme court upheld use of the model and its response functions as an acceptable tool for determining the annual replacement requirements. The trial court found that total average stream depletions for the 1996 through 2005 study period were 6,101 acre-feet annually.[308]

Under the statutes and the water court's decree, the burden of showing that the annual replacement plan operates to protect adjudicated senior surface water users against material injury remains with the Subdistrict.[309] When a surface water right holder properly alleges material injury under the Plan as decreed, the Subdistrict bears the burden under retained jurisdiction of going forward with evidence, as well as sustaining its burden of proof, to demonstrate non-injury.[310]

The penultimate import of *Subdistrict No. 1* is that the Colorado General Assembly may fashion and cultivate new tools for surface water and tributary groundwater management consistent with the Colorado Constitution's prior appropriation provisions. Sustainability joins optimum use and protection against injury as goals of the water law.

Conclusion

Innovation is a product of living together in community; the history of Colorado water law change and management methods chronicles this proposition amply. The resiliency of Colorado's prior appropriation law is demonstrable. Its continued suitability requires faithful performance by State officials of their responsibilities in constant service to the people's existing and changing need. The decade commencing with *Empire Lodge* in 2001 circling through *Subdistrict No. 1* in 2011 leads us into this new century of challenge and change.

Empire Lodge illustrates enforcement of Colorado's prior appropriation doctrine in an over-appropriated stream system. It teaches that augmentation plans are a legislatively created device engineered to provide replacement water for senior water rights and thereby allow junior appropriators to divert water when they otherwise would be curtailed under strict prior appropriation administration.

Park County Sportsmen's Ranch establishes that the public, not the overlying landowner, owns the water bearing capacity of aquifers as well as streams throughout the state as part of the public's water resource, and this capacity may be used to store and convey water appropriated by public agencies and private persons.

High Plains applies the anti-speculation doctrine to water transfer cases. In order to change a senior agricultural priority and retain it for use elsewhere, the application to the water court must identify where the water will be actually used. *ISG* announced the same day as *High Plains* discusses new legislation the General Assembly has enacted providing an alternative to permanent changes of water rights.

Pagosa I and *II* demonstrate that conditional water right decrees will be increasingly difficult to obtain, and maintain through subsequent diligence periods, as

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[307] *Id.*
[308] *Id.* at 947–48.
[309] *Id.*
[310] *Id.*

Colorado's remaining unappropriated water shrinks and competition for a share in the public's water resource intensifies. Public water supply agencies will have to justify their future projections of water need.

Burlington Ditch disallows undecreed enlargement of water use, no matter how long they have occurred.

Subdistrict No. 1 recognizes that sustainability joins optimum use and protection against injury as goals of the water law resulting from General Assembly legislation. Groundwater management plans are now an alternative or a supplement to augmentation and substitute supply plans allowing groundwater pumping while protecting adjudicated surface water rights.

As these case decisions illustrate, Colorado water law is based on conservation of the public's water resource and its use by private persons, public entities, federal agencies and Indian Tribes. Colorado's prior appropriation doctrine started off recognizing only agricultural uses of water. Now it embraces environmental and recreational use, in addition to serving over five million persons, most of who live in urban and suburban areas.

Colorado's population is expected to double over the next fifty years. Serving that population will require more not less adherence to the principles of prior appropriation, public ownership of the water resource, non-speculative creation and preservation of private and public beneficial water use rights, enforcement of the priority system, and statutory mechanisms for water sharing through leases, crop rotational fallowing plans, exchanges, augmentation, substitute supply, and management plans.

Actual not speculative need must be the basis for new water appropriations and water transfers. Sharing the risks of water shortage in times of drought between urban and rural areas, while sustaining stream habitats, will likely become a goal of water law and policy through collaborative agreements spurred by executive and legislative action. Development and use of whatever unappropriated water remains to Colorado under its interstate apportionments will likely occur. Increased water conservation at all levels will be a necessity. Erratic flood and drought affecting snowpack runoff dictate the need for interconnected infrastructure construction and operation. Our capacities for adaptation due to climate will be plumbed.

I undertook this article as part of the David Getches symposium. He dedicated his life to education, the environment, equity in our relationships with each other, and protection of the under-protected environment and Native American peoples. He accomplished much for a work in progress. He wore a big pair of boots and broke them in well. But we can't really walk in his. We need some wiggle room and a good fit in our own shoes as we stride for a homeland we can proudly share and inhabit.

WIGGLE ROOM

You can't really walk in another person's boots or moccasins,
but you can borrow their sinew and give thanks.

If you put their shoes on and try any trailhead straight off,
your ache will blister and fester.

To shape a good piece of leather into your own, you'll need some wiggle room breathing space for the long haul.

A few minutes a day of shaping your own sinew in their image gardening your own back yard may help.

Greg Hobbs