their terms.¹⁸⁵

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.¹⁸⁶ 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.¹⁸⁷

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 antispeculation 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.¹⁸⁸

D. Pagosa I and Pagosa 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.¹⁸⁹ The case arose when two public water districts in southwestern Colorado filed a conditional water right application for municipal water from

132

^{185.} ISG, LLC, 120 P.3d at 733-34.

^{186.} COLO. REV. STAT. §§ 37-92-103(10.6), -305(3) (2011).

^{187.} Id.

^{188.} 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 view, the enforcement of state and federal water rights in accordance with their adjudicated priorities will always be the most relevant premise to protecting the values incorporated into water law.

^{189.} Pagosa Area Water & Sanitation Dist. v. Trout Unlimited (*Pagosa I*), 170 P.3d 307 (Colo. 2007); Pagosa Area Water & Sanitation Dist. v. Trout Unlimited (*Pagosa II*), 219 P.3d 774, 777 (Colo. 2009).

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.¹⁹⁰

These decisions involved two public entities—a water and sanitation district and a water conservancy district-that applied jointly for an one-hundred-year supply of water for consumptive use to address possible residential growth in their service areas.¹⁹¹ Unlike other parts of the state, there is unappropriated water in the San Juan River available for appropriation within Colorado.¹⁹² 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.¹⁹³ In fact, the large size of the conditional right sought appeared to be in reaction to the possibility that nonconsumptive 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.¹⁹⁴

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.¹⁹⁵ 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.¹⁹⁶

^{190.} On October 31, 2011, the Water Court for Water Division 7 in Case No. 2004CW085 entered a judgment and decree to this effect that incorporated a stipulation of the parties following remand from the *Pagosa II* decision.

^{191.} Pagosa I, 170 P.3d at 317-18.

^{192.} Id. at 315 (stating that appropriator must have a nonspeculative 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.

^{193.} Id. at 318 n.11.

^{194.} Id.

^{195.} Id. at 311-12.

^{196.} 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

Again citing Professor Schorr's work¹⁹⁷ and relying on an act of the Colorado General Assembly,¹⁹⁸ 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 unappropriated 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.¹⁹⁹

Pagosa II articulates:

four nonexclusive 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.²⁰⁰

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."²⁰¹ 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)

Planning, 82 U. COLO. L. REV. 639 (2011).

^{197.} 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).

^{198.} COLO. REV. STAT. § 37-92-103(3)(a)(I)-(II) (2011).

^{199.} Pagosa I, 170 P.3d at 309-10.

^{200.} Pagosa Area Water & Sanitation Dist. v. Trout Unlimited (*Pagosa II*), 219 P.3d 774, 780 (Colo. 2009).

^{201.} Pagosa I, 170 P.3d at 309-10.

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.²⁰²

As the Colorado Supreme Court explained, the applicable statute²⁰³ "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.²⁰⁴ "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."²⁰⁵

"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."²⁰⁶ "Only a reasonable planning period for the conditional appropriation is allowed."²⁰⁷ Based on prior cases, the court concluded that a planning period in excess of fifty years should be closely scrutinized.²⁰⁸ The conditional water right decree should include volumetric (acrefeet) 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.²⁰⁹

The Colorado 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."²¹⁰ The effect of a long-term conditional right, a placeholder in the

^{202.} Id. at 316.

^{203.} COLO. REV. STAT. § 37-92-103(3)(a)(I) (2011).

^{204.} Pagosa I, 170 P.3d at 315.

^{205.} Id.

^{206.} Id.

^{207.} Id. at 317.

^{208.} Id.

^{209.} Id. at 316.

^{210.} Id.

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."²¹¹ "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 in part.²¹² 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.²¹³

Pagosa II again returned the case to the water court for further findings.²¹⁴ 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 initiated by the Colorado planning process General Assembly.²¹⁵ The Colorado Supreme Court rejected the "speculative nature" of the local water districts' "claims for appropriation of water to counter hypothetical recreational inchannel diversion, instream flow, and/or bypass flows."²¹⁶ It refused to accept the position of the water supply districts and the amicus "municipal water suppliers that they act in a legislative capacity" 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.²¹⁷

^{211.} Id.

^{212.} Id.

^{213.} Id. at 316-17.

^{214.} Pagosa Area Water & Sanitation Dist. v. Trout Unlimited (*Pagosa II*), 219 P.3d 774, 777 (Colo. 2009).

^{215.} Id. at 786–87.

^{216.} Id. at 782.

^{217.} Id. at 788.

A significant aspect of Pagosa I and Pagosa II is the emergence of nonconsumptive 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 nonconsumptive appropriations. In particular, Trout Unlimited was interested in the CWCB initiating additional instream flow appropriations on the San Juan River to supplement its existing ones, as well as the City of Pagosa Springs making a new recreational in-channel appropriation. A successful effort by the two water districts to obtain a 100-year water supply conditional priority would have jeopardized the viability of either or both of these possible nonconsumptive 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.²¹⁸ 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 these rights 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.²¹⁹

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. It may not, however, use eminent domain or deprive the people of Colorado of their beneficial use allocations under interstate law and compact.²²⁰ Instream flow water rights must be protected against injury by changes of water rights and augmentation plans.²²¹ Despite its 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

^{218.} COLO. REV. STAT. § 37-92-102(3) (2011).

^{219.} Aspen Wilderness Workshop Ltd. v. Colo. Water Conservation Bd., 901 P.2d 1251, 1260 (Colo. 1995).

^{220.} COLO. REV. STAT. § 37-92-102(3) (2011).

^{221.} Colo. Water Conservation Bd. v. City of Central, 125 P.3d 424, 439-40 (Colo. 2005).

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.²²² 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 absence of adequate protective conditions in the change of water right or augmentation decree."²²³

The Colorado General Assembly has also enacted statutory provisions for the appropriation of recreational in-channel diversion water rights.²²⁴ 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."²²⁵

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.²²⁶ 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[st] to Labor Day of each year, unless the applicant can demonstrate that there will be demand for the reasonable recreational experience on additional days."²²⁷ They are also limited to a specified flow rate for each period claimed by the applicant.²²⁸ Within 35 days of initiating a filing for adjudication of such a water right, the applicant must submit a copy of it to the CWCB.²²⁹ After deliberation in a public meeting, the Board is obligated to consider a number of factors and make written findings as to each.²³⁰

Board findings regarding recreational in-channel diversion applications must include: (1) whether the adjudication and

^{222.} Empire Lodge Homeowners' Ass'n v. Moyer, 39 P.3d 1139, 1157 (Colo. 2001).

^{223.} City of Central, 125 P.3d at 439-40.

^{224.} 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).

^{225.} Empire Lodge Homeowners' Ass'n, 39 P.3d at 1148; COLO. REV. STAT. § 37-92-103(10.3) (2011).

^{226.} Upper Gunnison River Water Conservancy Dist., 109 P.3d at 591.

^{227.} COLO. REV. STAT. § 37-92-103(10.3) (2011).

^{228.} Id.

^{229.} Id. § 37-92-102(5).

^{230.} Id. § 37-92-102(6)(b).

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.²³¹

The water court must consider the Board's findings of fact, which are presumptive as to such facts, subject to rebuttal.²³² In addition, the water court must consider evidence and make certain affirmative findings.²³³ Water court affirmative findings must determine that the recreational in-channel diversion will:

- (I) Not materially impair the ability of Colorado to fully develop and place to consumptive beneficial use its compact entitlements;
- (II) Promote maximum utilization of waters of the state;
- (III) Include only that reach of stream that is appropriate for the intended use;
- (IV) Be accessible to the public for the recreational inchannel use proposed; and
- (V) Not cause material injury to the board's instream flow water rights²³⁴

The statute contains other criteria for determining the flow rate and for State Engineer enforcement.²³⁵ 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.²³⁶ 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

^{231.} Id. § 37-92-102(6)(I), (IV), (V).

^{232.} Id. § 37-92-305(13)(a).

^{233.} Id. § 37-92-305(13)(a)(I)-(V).

^{234.} Id.

^{235.} Id. § 37-92-305(13)(b)–(f).

^{236.} Id. § 37-92-305(15); see also Colo. Water Conservation Bd. v. Upper Gunnison River Water Conservancy Dist., 109 P.3d 585, 591 (Colo. 2005).

rights.²³⁷

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 unadjudicated until such time as a viable consumptive or nonconsumptive 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 antispeculation and beneficial use principles of Colorado's appropriation doctrine.

E. Burlington Ditch: Reinforcing Prohibitions Against Illegal Enlargements and Undecreed Changes of Water Rights

Burlington Ditch²³⁸ plays out the consequences of an illegal early twentieth century enlargement along the overappropriated 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."²³⁹ Eyeing FRICO shares as a source of water to fill municipal needs in the southern Denver metropolitan area, United Water and Sanitation District combined with the East Creek Valley Water and Sanitation District and FRICO filed a change of water rights application implementing a 2003 agreement they had made.²⁴⁰ The 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.²⁴¹

Burlington upheld the water court's anti-enlargement

^{237.} Pagosa Area Water & Sanitation Dist. v. Trout Unlimited (Pagosa II), 219 P.3d 774, 788 (Colo. 2009).

^{238.} Burlington Ditch Reservoir & Land Co. v. Metro Wastewater Reclamation Dist., 256 P.3d 645 (Colo. 2011).

^{239.} Id. at 657 (emphasis omitted).

^{240.} Id. at 654.

^{241.} Id.