
NOTE

COLORADO AT THE CROSSROADS:
CHOOSING THE PATH FORWARD TO
ADDRESS INVESTMENT WATER
SPECULATION

ALEX LIGUORI*

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INTRODUCTION

Colorado currently finds itself at the center of the long-running but recently reignited debate over how to manage water in the American West. On one hand, some believe that deregulating water management to create a free market for water rights represents the best way forward to address the increased threat of drought to the region.¹ On the other hand, some fear that changing the status quo will have far reaching, unpredictable, and potentially harmful impacts on the West as we know it, and advocate for either keeping the current management scheme in place or strengthening existing regulations.²

Climate change has raised the stakes of this ongoing debate. It is now clear that there is simply not enough water in the West to satisfy the growing demand driven by inexpensive real estate and expanding suburban development, especially as droughts become longer and more intense.³ Although all residents that live in the

¹ See Ben Ryder Howe, *Wall Street Eyes Billions in the Colorado's Water*, N.Y. TIMES (Jan. 3, 2021), <https://www.nytimes.com/2021/01/03/business/colorado-river-water-rights.html> (interviewing a proponent of continued intervention in water markets who believes “the last best hope against the drought is a market-based solution, one that allows private investors seeking a profit a significant hand in redrawing the map of water distribution in the West.”).

² See, e.g., *id.* (interviewing Bruce Babbitt, the former governor of Arizona and secretary of the interior who believes the “comprehensive, consensus-based public discussion” model has served the West well and should not be changed). See also Heather Sackett & Luke Runyon, *Western Colorado Water Purchases Stir Up Worries about the Future of Farming*, ASPEN JOURNALISM (May 29, 2020), <https://aspjournalism.org/western-colorado-water-purchases-stir-up-worries-about-the-future-of-farming> (interviewing now-former state senator Kerry Donovan, a rancher who sponsored a bill “to convene a workgroup to explore ways to strengthen [Colorado’s] anti-speculation law.”).

³ See Jake Bittle, *The Water Brokers*, GRIST (May 3, 2023), <https://grist.org/drought/vidler-water-company-housing-dr-horton-nevada-arizona/>. See also *Megadrought and aridification in the southwest United States*, USDA SW. CLIMATE HUB, <https://www.climatehubs.usda.gov/hubs/southwest/>

country's driest places feel these impacts, rural communities in particular are beginning to feel the stress of water scarcity as deep pocketed real estate developers vie for the opportunity to move water away from farms to growing suburban areas.⁴

Accordingly, the ongoing debate over whether to deregulate water management has started to loosely reflect an urban/rural divide. While developers eagerly lobby for the removal of restrictions on buying and using rural water for new suburban communities, some farmers and other rural stakeholders are attempting to prevent them from doing so by advocating for maintaining existing regulations or strengthening them.⁵ But simply characterizing the growing conflict as between urban and rural interests fails to capture the complex reality of the situation. For example, though rural stakeholders may collectively fear what will happen to their communities if their neighbors sell their water rights to developers, they simultaneously view their own land and water rights as "their 401(k) or their child's college fund," leading some to oppose regulations that would make it more difficult to sell these rights when it is time to retire.⁶ These tensions—urban versus rural, collective versus individual—reflect an ever-changing and delicate situation that policymakers must navigate.

Adding to the complexity and urgency of this ongoing discourse is the looming specter of water speculation for investment purposes. Traditional water speculation refers to the practice of buying water rights without any plan or intent to put the water to beneficial use.⁷ Instead, traditional speculators wait for the value of their

topic/megadrought-and-aridification-southwest-united-states (last visited Nov. 23, 2023).

⁴ See Luke Runyon & Matt Bloom, *Water Is Leaving Colorado Farmland For The City – But Will It Ever Return?*, K.U.N.C. (June 13, 2019), <https://www.kunc.org/environment/2018-06-13/water-is-leaving-colorado-farmland-for-the-city-but-will-it-ever-return>. See generally Joanna Allhands, Opinion, *Why is Queen Creek's Water Deal so Contentious? It Exposes Our Most Fundamental Problems*, AZCENTRAL (Sept. 12, 2020) (discussing how scarcity of water is reigniting conflict between rural and urban uses in Arizona).

⁵ See Ryder Howe, *supra* note 1.

⁶ Luke Runyon, *Colorado Is Examining Water Speculation, and Finding It's 'All The Problems' in One*, K.U.N.C. (May 5, 2021), <https://www.kunc.org/environment/2021-05-05/colorado-is-examining-water-speculation-and-finding-its-all-the-problems-in-one>.

⁷ See *id.*

water rights to appreciate and then sell them to others who have a beneficial use for the water.⁸ This form of speculation is specifically outlawed in many states by legal obligations to put water to beneficial use, which require landowners to use their water rights to meet an actual water need.⁹ The concept of beneficial use will be discussed further in Part I.

However, the recent arrival of a new type of stakeholder, high powered financial firms and investor groups headquartered on the coasts, has ignited fears of a new form of water speculation. Known as “investment water speculation,” this practice avoids the legal prohibition on traditional speculation by continuing to put water rights to beneficial use before later selling for a profit once the water has appreciated in value.¹⁰ For example, one investment firm, Water Asset Management (WAM), buys farmland with accompanying water rights and then leases the land back to farmers for agricultural use as it waits for the water rights to appreciate in value.¹¹ Spurred by growing scarcity caused by climate change, these firms see water rights as “a trillion-dollar market opportunity.”¹² This view can be summed up in a phrase that is oft-repeated when discussing the future of markets for natural resources: “[w]ater’s the next oil.”¹³

Colorado is ground zero for fear of investment water speculation. Located in the Upper Basin of the Colorado River watershed, the state typically receives plenty of water via melting of Rocky Mountain snowpack. This means that, for Colorado, water supply is less of an issue than for the Lower Basin states (California, Nevada and Arizona), which have recently been forced to negotiate their

⁸ *See id.*

⁹ *See* T.C. Richmond et al., *The Purposeful Tension Within the Doctrine of Beneficial Use*, 58 ROCKY MOUNTAIN MIN. L. FOUND. J. 33, 35 (2021).

¹⁰ SB 20-048 WORK GROUP, REPORT OF THE WORK GROUP TO EXPLORE WAYS TO STRENGTHEN CURRENT WATER ANTI-SPECULATION LAW 30 (2021), <https://watercenter.colostate.edu/wp-content/uploads/sites/33/2021/09/SB20-048-Final-Report.pdf> [hereinafter WORK GROUP REPORT].

¹¹ *See* Sackett & Runyon, *supra* note 2.

¹² Ryder Howe, *supra* note 1.

¹³ *Id.* (noting T. Boone Pickens, a famous oilman, had invested in water rights years before his death in 2019).

own cuts in water usage to avoid catastrophic shortages.¹⁴ While Colorado owes obligations to these Lower Basin states via the Colorado River Compact, its future water use will likely be defined by conflict between internal stakeholders.¹⁵ The state's cities are concentrated on the Front Range, where the Rocky Mountains meet the Great Plains, while most of the state's water is located in rural farming communities on the Western Slope of the Rockies.¹⁶ Everyone—from farmers to government officials to investors—can see the upshot of this physical arrangement. As cities continue to grow and water becomes harder to find, whoever owns the rural land on the Western Slope, with its historical rights to Colorado's water, will reap the rewards. With increased investment by outside sources, rural communities fear these groups will eventually sell off the water connected with the land when water supplies are already scarce and prices are highest.¹⁷ This practice, known as “buy and dry,”

¹⁴ See Christopher Flavelle, *A Breakthrough Deal to Keep the Colorado River from Going Dry, for now*, N.Y. TIMES (May 22, 2023), <https://www.nytimes.com/2023/05/22/climate/colorado-river-deal.html>.

¹⁵ See Heather Sackett, *Report: Estimates of Future Upper Colorado River Basin Water Use Confound Previous Planning*, SKY-HI NEWS (Mar. 1, 2021), <https://www.skyhinews.com/news/report-estimates-of-future-upper-colorado-river-basin-water-use-confound-previous-planning/>. The Colorado River Compact is a 1922 agreement between four Upper Basin states (Colorado, New Mexico, Utah, and Wyoming) and three Lower Basin states (Arizona, California, and Nevada) to divide the waters of the river evenly, giving each basin an entitlement of 7.5 million acre-feet per year. Each entitlement is further divided among the states in each Basin. For example, under the Compact, Colorado receives 3.86 million acre-feet per year, over half of the Upper Basin's total allocation. Conversely, Nevada receives 300,000 acre-feet per year, only 4% of the Lower Basin's total allocation. Recent drought, combined with population booms in Nevada and Arizona, has threatened the feasibility of adhering to the original Compact agreement. Further discussion of this crisis, however, is beyond the scope of this Note.

¹⁶ See Larry Myers, *To Have our Water and Use It Too: Why Colorado Water Law Needs a Public Interest Standard*, 87 U. COLO. L. REV. 1041, 1052 n.53 (2016) (describing the process of transbasin diversion, whereby cities on the Front Range import approximately 500,000 acre-feet of water from Headwater Counties on the Western Slope each year).

¹⁷ See Lucy Kafanov, *Wall Street Is Thirsty for Its Next Big Investment Opportunity: The West's Vanishing Water*, CNN (Mar. 22, 2023), <https://www.cnn.com/2023/03/22/business/southwest-water-colorado-river-wall-street-climate/index.html>.

fundamentally changes the character of communities, threatens Colorado's diverse economy, and degrades its environment.¹⁸

Investor groups, for their part, have not made their ultimate intentions regarding potential sales of water rights clear.¹⁹ But the state government, along with stakeholders from both Western Slope farming communities and Front Range cities, is not ignoring the potential threat of future buy and dry.²⁰ To that end, in 2020, the Colorado General Assembly passed Senate Bill 20-048, directing the state Department of Natural Resources to convene a multidisciplinary work group to “explore ways to strengthen current water anti-speculation law” in order to combat the emerging threat of investment speculation.²¹ The work group brought together lawyers, government officials, water managers, and farmers, demonstrating that the threat of investment water speculation in Colorado is strong enough to bring together groups that do not always see eye to eye when it comes to deciding how Colorado should use its water resources.²²

However, reflecting the debate discussed above over how best to allocate the West's water, questions still abound over whether the threat of investment water speculation is real or merely perceived, and whether the state really needs to strengthen its anti-speculation laws given that it already has an anti-speculation doctrine that has successfully prevented investors from buying water rights without a beneficial use in the past.²³ Critics of the state's approach say that,

¹⁸ Runyon & Bloom, *supra* note 4. See also Ryder Howe, *supra* note 1; Robert Sanchez, *High + Dry*, 5280 (Dec. 2014), <https://www.5280.com/high-dry/> (describing in detail the bleak conditions in Crowley County, Colorado, where farmers sold off the majority of water to developers in the 1970s and 1980s).

¹⁹ See Kafanov, *supra* note 17.

²⁰ See *id.*

²¹ COLO. REV. STAT. ANN. § 37-98-103(8)(a) (West 2020).

²² See Jason Blevins, *Colorado's Ornerly, Independent Water Guardians Finally Agree on One Thing: Wall Street Can Look Elsewhere*, COLO. SUN (Jan. 28, 2021), <https://coloradosun.com/2021/01/28/colorado-wall-street-water-buyers/>. See also *Department of Natural Resources Releases Membership of Anti-Speculation Law Work Group*, COLO. DEP'T OF NAT. RES. (Sept. 9, 2020), <https://dnr.colorado.gov/press-release/department-of-natural-resources-releases-membership-of-anti-speculation-law-work>.

²³ See generally *High Plains A & M, LLC v. Se. Water Conservancy Dist.*, 120 P.3d 710 (Colo. 2005).

instead, water should be allocated according to a market-based solution, which would discourage “wasteful low-value water uses, especially in agriculture” and create incentives for the private sector to invest in water infrastructure.²⁴

But the state work group did not agree with this assessment. On August 13, 2021, it issued its final report, finding that the enforcement of the state’s existing anti-speculation standards can be inconsistent, and identifying five potential negative outcomes from both traditional and investment water speculation.²⁵ This Note will argue that, based on the work group’s findings and lessons learned from Australia, which deregulated an important watershed, Colorado must take action to strengthen, rather than weaken, its anti-speculation doctrine if it wishes to preserve sustainable water use for its citizens.

In Part I, I begin by exploring the history and development of the prior appropriation doctrine, the current system of water management in the American West. I then describe how Colorado adopted the prior appropriation system as law and explain the importance of the anti-speculation doctrine, a central pillar of prior appropriation. Part I concludes by tracing the evolution of the anti-speculation doctrine’s legal framework to the present day, providing an overview of current Colorado water law and examining the existing tools decisionmakers can use to fight water speculation. In Part II, I explain how the anti-speculation doctrine’s perceived shortcomings have led to renewed debate over how to sustainably manage Colorado’s water resources in the future. This debate asks whether the state should deregulate, strengthen existing regulations, or stand idle in response to the threat of investment water speculation. Part III provides a case against deregulation, using the problems faced by communities in Australia’s Murray-Darling Basin, which implemented a market-based solution to water management, as a cautionary tale for Colorado. In Part IV, I make the case for strengthening Colorado’s anti-speculation doctrine and analyze

²⁴ Ryder Howe, *supra* note 1.

²⁵ See WORK GROUP REPORT, *supra* note 10, at 31–36. The negative outcomes identified by the report include (1) “increased uncertainty regarding water availability;” (2) concentration of a “substantial amount of water rights in” the hands of one investor; (3) increased water prices for consumers; (4) diversion of water from areas that were historically irrigated; and (5) increase in consumptive water use by investors, limiting water use by others.

potential solutions based on the state work group's recommendations. This analysis will consider the challenges that have arisen in Colorado since the work group issued its report, namely the fear that strengthening the anti-speculation doctrine will prevent farmers from being able to sell their water rights. Finally, I conclude by recommending a course of action to protect Colorado's residents from outside speculators and explain why curbing investment water speculation is crucial for setting a just, equitable, and sustainable example for other western states' management of water in the future.

I. COLORADO IS THE HISTORICAL HOME OF WESTERN WATER LAW—AND SPECULATION

A. *Origins of Western Water Law: The Prior Appropriation Doctrine*

Clashes over access to water and the right to use it have defined the American West since settlers first arrived. When John Wesley Powell, the Civil War veteran, explorer and later director of the U.S. Geological Survey, first explored the Colorado River watershed, he noted that the arid lands would never produce the agricultural bounty of the "Green America" of the East.²⁶ Therefore, Powell wrote in his *Report on the Lands of the Arid Region*, successfully managing water in the West would require very different principles than the riparian water rights system developed under English common law and then transferred to the eastern United States.²⁷

Riparian water rights allow landowners to control any water resources within their landed property, as long as they do not diminish downstream users' access.²⁸ While this system worked well in the East, where water was plentiful, the policy failed spectacularly as the first settlers arrived in the West.²⁹ After purchasing a 160 acre tract of land through the Homestead Act, would-be cultivators often

²⁶ See Howard Berkes, *The Vision of John Wesley Powell Explorer: Foresaw Water Issues that Would Plague the West*, NPR (Aug. 26, 2003), <https://legacy.npr.org/programs/atc/features/2003/aug/water/part1.html>.

²⁷ See James M. Aton, *John Wesley Powell*, in 114 BOISE ST. UNIV. W. WRITERS SERIES 5, 23 (James H. Maguire ed., 1994), <https://scholarworks.boisestate.edu/cgi/viewcontent.cgi?article=1008&context=wws>.

²⁸ See *id.* at 45.

²⁹ See *id.*

arrived to find “only a tiny fraction of Western land actually had enough water on it to support a family farm.”³⁰ This led many settlers to abandon their tracts and return east, or attempt to acquire more land to find water, often through deceit and fraud.³¹

To fix these issues, Powell recommended a radical new regime for western water rights “based in part on the cooperative model,” which Mormon settlers had successfully used in Utah to irrigate dry land and produce food for their communities.³² He advocated for a water rights system that was tied to land ownership,³³ as a riparian system would be. However, his proposal called for the formation of irrigation districts to manage limited water supplies.³⁴ Each district would be comprised of a nine-farmer collective, and each farmer would be responsible for eighty irrigated acres of land.³⁵ Tying water rights to the land would restrict the ability of farmers to sell their water rights to urban centers or outsiders.³⁶ Ultimately, Powell believed that ensuring mutual dependence on fellow district members for survival would counteract the possibility that any one water user would monopolize supply.³⁷

In practice, this collective pseudo-riparian system was too radical for Congress, which was primarily concerned with growing the young country’s economy.³⁸ Out of this single-minded pursuit came a new system of water management, known as the prior appropriation doctrine, which “stood in bold contrast” to the riparian schemes in England and the eastern United States but was “particularly suited to the arid climate of the new western territories and states.”³⁹

In contrast to the riparian system of private water rights, the prior appropriation doctrine takes its cues from the traditional

³⁰ *Id.* at 44.

³¹ *See id.*

³² Berkes, *supra* note 26.

³³ *See id.*

³⁴ *See Aton, supra* note 27, at 44.

³⁵ *See id.*

³⁶ *See Berkes, supra* note 26.

³⁷ *See Aton, supra* note 27, at 44.

³⁸ *See id.* at 45.

³⁹ David B. Schorr, *Appropriation as Agrarianism: Distributive Justice in the Creation of Property Rights*, 32 *ECOLOGY L.Q.* 3, 8 (2005).

miner's rule of "first in time, first in right," meaning that, while all water belongs to the public, whoever controls a water resource first gains a priority right of use.⁴⁰ This "became the guiding principle of water-rights law in the western United States."⁴¹ Today, eighteen states use either the prior appropriation system or a dual appropriation-riparian system to manage water resources.⁴²

Complementing the rule of first in time, first in right is the beneficial use requirement, another principle that has defined western water law since miners first arrived to settle the land.⁴³ The beneficial use requirement mandates that the right to take water from a public waterway only be granted on the condition that the water is applied to a beneficial use.⁴⁴ While the definition of what constitutes a beneficial use of water has changed over time, the original goals behind the requirement—"1) avoiding speculation and monopoly; 2) maximizing the use of a scarce resource for all; and 3) providing flexibility to the water user"—have remained important for the continued development of the western United States.⁴⁵ In addition to demonstrating beneficial use before they are allowed to appropriate water, water users have continual, ongoing obligations to comply with the beneficial use requirement.⁴⁶ Therefore, failure to put water rights to beneficial use can lead to their forfeiture, resulting in the water being made available to other stakeholders for new beneficial uses.⁴⁷ Nearly all western states implement this "use it or lose it" approach, which is crucial to preventing speculation.⁴⁸

Together, the public ownership of water and the beneficial use requirement form the backbone of the prior appropriation doctrine, a system of management that has persisted even as a growing

⁴⁰ *Id.* at 7–8.

⁴¹ *Id.* at 8.

⁴² *See* Richmond et al., *supra* note 9, at 36.

⁴³ *See id.* at 35–36.

⁴⁴ *See id.* at 35.

⁴⁵ Janet C. Neuman, *Beneficial Use, Waste, and Forfeiture: The Inefficient Search for Efficiency in Western Water Use*, 28 ENV'T L. 919, 962, 978 (1998).

⁴⁶ *See* Richmond et al., *supra* note 9, at 36.

⁴⁷ *See id.* at 37.

⁴⁸ *See id.* at 36.

western population puts increasing pressure on water supplies.⁴⁹ While this system has successfully enabled settlement of the harsh western landscape, the prior appropriation doctrine and its underlying legal framework has also sustained its share of criticism. For example, the beneficial use requirement has been criticized as discouraging efforts to conserve water, since using less water, and therefore putting less water to beneficial use, might result in the forfeiture of the right to use that water in the future.⁵⁰ Ultimately though, the prior appropriation doctrine has thus far successfully sustained the West and its growing population. The following subsection will trace the history of the prior appropriation doctrine as applied in Colorado and highlight the evolution of the state's legal framework in response to concerns about traditional speculation. Now, the threat of investment speculation requires more changes to how the state implements the prior appropriation doctrine, as I explore in Part IV of this Note.

B. *Colorado Water Law and the Anti-Speculation Doctrine*

Colorado became the first western state to officially do away with riparian rights and adopt the prior appropriation doctrine.⁵¹ Though territorial law and policy had already introduced the idea of leaving the riparian system behind,⁵² Article XVI of the state Constitution enshrined “three central principles of the Colorado [prior] appropriation doctrine: public ownership of the state's surface waters, the beneficial use requirement and the complete abolishment of riparian privileges.”⁵³ These principles were later affirmed by the Colorado Supreme Court in the landmark case *Coffin v. Left Hand Ditch Co.*,⁵⁴ which declared, “the common law doctrine giving the riparian owner a right to the flow of water in its natural channel upon and over his lands, even though he makes no beneficial use thereof, is inapplicable to Colorado.”⁵⁵

⁴⁹ See Neuman, *supra* note 45, at 920–21.

⁵⁰ See Richmond et al., *supra* note 9, at 35.

⁵¹ See Schorr, *supra* note 39, at 4 n.2.

⁵² See *id.* at 34.

⁵³ *Id.* at 41.

⁵⁴ 6 Colo. 443 (Colo. 1882).

⁵⁵ *Id.* at 447.

Shortly after officially adopting the prior appropriation system, Colorado's territorial legislature codified what has come to be known as the anti-speculation doctrine. In 1876, the legislature passed a law making it unlawful "for any person or persons to run through his or their irrigating ditch any greater quantity of water than is absolutely necessary for irrigating his or their said land."⁵⁶ In addition to ensuring the productive use of water resources, the statute "reflected a desire to stop speculative hoarding of water rights for the purpose of turning a profit."⁵⁷ Following statehood, the Colorado Supreme Court affirmed this reading of the law in *Combs v. Agricultural Ditch Co.*, holding, "the privilege of diversion is granted only for uses truly beneficial, and not for the purposes of speculation."⁵⁸ In addition to legitimizing the anti-speculation doctrine, the *Combs* decision spawned a legal framework to combat speculation that Colorado courts have continually affirmed and adapted as the state has grown into the present day.⁵⁹

C. *The Anti-Speculation Framework in Practice*

As the state's population grew, so too did litigation involving the anti-speculation doctrine. This gave the Colorado Supreme Court new opportunities to apply the doctrine and adapt it to meet the needs of the growing state. One such opportunity was *Colorado River Water Conservation District v. Vidler Water Company*, a 1979 case which involved an irrigation company seeking to build a reservoir to store approximately 156,000 acre-feet of water to sell to

⁵⁶ Act of Feb. 11, 1876 § 2, 1876 Colo. Sess. Laws 78.

⁵⁷ Schorr, *supra* note 39, at 40.

⁵⁸ *Combs v. Agricultural Ditch Co.*, 28 P. 966, 968 (Colo. 1892).

⁵⁹ *See, e.g.*, *Colo. River Water Conservation Dist. v. Vidler Tunnel Water Co.*, 594 P.2d 566, 568 (Colo. 1979) (finding "the right to appropriate is for use, not merely for profit."); *City of Thornton v. Bijou Irrigation Co.*, 926 P.2d 1, 51 (Colo. 1996) (finding the purpose of the state's anti-speculation doctrine is to "preserv[e] unappropriated water for users with legitimate, documentable needs."); *High Plains A & M, LLC v. Se. Water Conservancy Dist.*, 120 P.3d 710, 714 (Colo. 2005) (affirming that "the anti-speculation doctrine is rooted in the requirement that an appropriation of Colorado's water resource must be for an actual beneficial use."); *United Water & Sanitation Dist. v. Burlington Ditch Reservoir & Land Co.*, 476 P.3d 341, 346 (Colo. 2020) (quoting *Vidler*, 594 P.2d at 568) (reaffirming that the state Constitution "guarantees only 'a right to appropriate, not a right to speculate.'").

nearby municipalities.⁶⁰ In *Vidler*, the court applied a two-part test to determine whether a user has complied with the beneficial use requirement.⁶¹ First, a conditional water right holder⁶² seeking to appropriate water must “have an intent to take the water and put it to beneficial use.”⁶³ Second, the water right holder must “demonstrate this intent by an open physical Act sufficient to constitute notice to third parties.”⁶⁴ Using this test, the court in *Vidler* held that the irrigation company seeking to perfect its water right failed to satisfy the first requirement because it did not secure a “firm contractual commitment” from any of the municipalities to which it planned to sell water.⁶⁵ Without a “contract or agency relationship justifying its claim to represent those whose future needs are asserted,” the court reversed Vidler’s claim to the water.⁶⁶ *Vidler* strengthened the anti-speculation doctrine by requiring concrete proof that water would be put to a beneficial use before courts will approve an application for appropriation.

As prolonged drought has reduced the state’s water supply, the Colorado Supreme Court has further expanded the anti-speculation doctrine. For example, after overturning claims that failed to demonstrate beneficial use in *Vidler*, the court held that the hexennial applications that conditional water rights holders must complete to continue to hold their water rights are subject to the anti-speculation doctrine.⁶⁷

Significantly, the court also determined that the anti-speculation doctrine applies to applications to change absolute water

⁶⁰ See *Vidler*, 594 P.2d at 566–67.

⁶¹ See *id.* at 568.

⁶² See *id.* at 567 (citing COLO. REV. STAT. ANN. § 37-92-103(6) (1969)) (“A conditional water right is the ‘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.’”).

⁶³ *Id.* at 568.

⁶⁴ *Id.*

⁶⁵ *Id.*

⁶⁶ *Id.* at 569.

⁶⁷ See *N. Colo. Water Conservancy Dist. v. OXY USA, Inc.*, 990 P.2d 701, 708 (Colo. 1999). See also *id.* at 709 (“If a water right initially clears the anti-speculation hurdle, yet later becomes speculative, then the project is not moving toward completion and beneficial use[,]” and therefore the right cannot be maintained.).

rights.⁶⁸ In Colorado, “all water rights, both absolute and conditional, must be appropriated for beneficial use, rather than speculative investments.”⁶⁹ If the owner of the right wants to change that previously approved use, for example, from agricultural to municipal, the new use must be approved by a water court.⁷⁰ In *High Plains A & M, LLC v. Southeastern Water Conservancy District*, the plaintiffs purchased an agricultural water right and attempted to change the use to municipal in order to sell water to cities on the Front Range.⁷¹ However, like the irrigation company in *Vidler*, the plaintiffs lacked actual contracts with municipalities to demonstrate that the water would be put to beneficial use.⁷² Citing the *Combs* decision from 1892, the court dismissed the plaintiffs’ application, quoting “a stockholder in an irrigating company ‘can only transfer his priority to someone who will continue to use the water.’”⁷³

High Plains is the latest decision in a line of anti-speculation cases stretching back to the court’s decision in *Vidler*. These cases represent a renewed interest in the anti-speculation doctrine spurred by increasing scarcity of water and the growing demands of a more populous and developed Colorado. While the Colorado Supreme Court has effectively updated the centuries-old legal framework of the anti-speculation doctrine through this piecemeal approach, the arrival of water investors in Colorado has called into question whether relying on incremental judicial reform is enough to ensure the availability of water as the state continues to grow. It has also

⁶⁸ When a conditional right is perfected by appropriating water for beneficial use, it becomes an “absolute water right” when confirmed by a water court. See *Dall. Creek Water Co. v. Huey*, 933 P.2d 27, 34 n.3 (Colo. 1997) (“An absolute decree confirms that amount of depletion from the stream that can be taken in priority as a property right.”).

⁶⁹ Aaron Pettis, *Conditional Water Rights and the Problem of Speculation*, 18 U. DENVER WATER L. REV. 312, 314 (2015) (citing COLO. REV. STAT. § 37-92-103(3)(a) (2014)).

⁷⁰ See Anna Elgqvist, *Change of Use in Colorado: Making Municipal Water Supplies Available from Irrigation Rights*, LYTLE WATER SOLUTIONS BLOG (July 14, 2023), <https://www.lytlewater.com/blog/change-of-use-in-colorado-making-municipal-water-supplies-available-from-irrigation-rights>.

⁷¹ See *High Plains A & M, LLC v. Se. Water Conservancy Dist.*, 120 P.3d 710, 721 (Colo. 2005).

⁷² See *id.* at 716.

⁷³ *Id.* at 724 (quoting *Combs v. Agric. Ditch Co.*, 17 Colo. 146, 152 (Colo. 1892)).

sparked renewed criticism of the anti-speculation doctrine as a whole by those who argue that less, not more, regulation provides the best path forward for Colorado.

II. THE FREE MARKET CRITIQUE OF PRIOR APPROPRIATION: IS THERE A BETTER WAY TO MANAGE WATER?

Commentators have consistently criticized the prior appropriation doctrine's beneficial use requirement as inefficient.⁷⁴ The critique centers on government intervention in what these commentators see as a potentially pure market for water rights, allowing users to buy and sell rights according to who values them the most.⁷⁵ A pure market for water rights would do away with legal restrictions on appropriations such as the beneficial use requirement, which, as previously discussed, prevents prospective water users from buying water rights without first establishing that they will be utilized in a way that benefits others. These groups argue that an unregulated market for water rights would result in a flexible system that can allocate water quickly to those who need such a valuable asset in times of scarcity.⁷⁶

While this critique has historically been limited to academics like lawyers and economists,⁷⁷ powerful financial actors have recently begun to join in.⁷⁸ One of the most prominent voices in this renewed debate is the New York-based firm WAM, which has "become one of the largest landholders" in the water rich Western Slope communities of Colorado.⁷⁹ To WAM, an open market for water

⁷⁴ See Schorr, *supra* note 39, at 9–10.

⁷⁵ See Stephen F. Williams, *The Requirement of Beneficial Use as a Cause of Waste in Water Resource Development*, 23 NAT. RES. J. 7, 13–14 (1983) (making the market case *in favor of* speculation in water rights).

⁷⁶ See Felicity Barringer, *Divvying up the Water Down Under*, N.Y. TIMES (Mar. 21, 2011), <https://green.blogs.nytimes.com/2011/03/21/divvying-up-the-water-down-under/> (comparing Australia's market-based system of water management to California's prior appropriation scheme and finding that regulatory constraints in California's system make it far less flexible than Australia's). See also Ryder Howe, *supra* note 1 (interviewing a professor of economics who believes any movement of water "necessarily generates a public good.").

⁷⁷ See, e.g., *supra* notes 75–76.

⁷⁸ See Vanessa Casado Perez, *Liquid Business*, 47 FLA. ST. U. L. REV. 201, 203 (2019).

⁷⁹ Ryder Howe, *supra* note 1.

represents the best solution to the growing problem of scarcity, and a key tool in the fight to achieve sustainable water use in the age of climate change.⁸⁰ But to farmers and other rural landholders, the traditional stewards of water in Colorado, the coincidence of firms buying water rights and advocating for an open market upon which to sell them is too close for comfort.⁸¹ Indeed, WAM's president has explained that one of his firm's strategies is to profit from water in part by making the farms it buys more efficient and then selling parts of its water rights to other farmers and cities increasingly desperate for the natural resource.⁸²

To be sure, none of these groups have openly called for changes to Colorado's anti-speculation doctrine. In fact, one Denver-based investment firm, Renewable Water Resources, has praised the anti-speculation doctrine, saying the firm is "all for" strengthening it.⁸³ According to the beneficial use limits discussed above, investment groups may currently buy rural water rights as long as they pledge to continue to use them for agricultural or other beneficial purposes. And, to their credit, many have continued to do so. For example, WAM has leased the land it buys back to farmers and even invests in farming infrastructure to conserve water resources.⁸⁴

However, a bipartisan group of state lawmakers is unconvinced that current practices reflect the investment groups' long-term outlook for the water industry.⁸⁵ This vision, complete with stock-exchange style "futures markets and trading that occurs in milliseconds,"⁸⁶ is inherently incompatible with the anti-speculation doctrine's requirement that water courts carefully consider each

⁸⁰ See *id.*

⁸¹ See Kafanov, *supra* note 17.

⁸² See FINTECHTV Editorial Team, *Matt Diserio, President of Water Asset Management*, FINTECHTV (Jan. 6, 2020), <https://www.fintech.tv/news/detail/5080-matt-diserio-president-of-water-asset-management>.

⁸³ See Jerd Smith, *As Water Prices Soar, Colorado Lawmakers Consider Rules to Stop Profiteering*, WATER EDUC. COLO. (Oct. 16, 2019), <https://www.watereducationcolorado.org/fresh-water-news/as-water-prices-soar-colorado-lawmakers-consider-rules-to-stop-profiteering>.

⁸⁴ See Sackett & Runyon, *supra* note 2. See also Michael Booth, *Attempt to Stop Colorado Water Speculation Is Circling the Drain*, COLO. SUN (Apr. 26, 2022), <https://coloradosun.com/2022/04/26/water-speculation-colorado-bill/>.

⁸⁵ See Smith, *supra* note 83.

⁸⁶ Ryder Howe, *supra* note 1.

transaction to ensure beneficial use.⁸⁷ Evidence from the companies points in this direction as well. For example, WAM’s website outlines a “clear investment strategy that includes acquiring Western farm water and holding onto it until it appreciates in value, at which point it could be leased or sold for a profit.”⁸⁸ Despite the anti-speculation doctrine’s long history of preventing water sales inconsistent with the state Constitution’s beneficial use requirement, it has not stopped outside investors from seeing dollar signs in Western Slope communities and purchasing land to control water rights.

As investor interest in Colorado water rights reaches a crescendo, state authorities face a three-way split in the road forward. One option, keeping things the same and leaving the anti-speculation doctrine unchanged, involves perhaps the least political cost but would seemingly do little to prevent continued outside investment into rural communities. Instead of demonstrating the soundness of the anti-speculation doctrine, the recent land grab on the Western Slope has shown the doctrine contains many loopholes, leaving outside firms undeterred. Another option would involve rolling back some or all of the state’s anti-speculation provisions and moving towards the free, unencumbered market that investors, and some farmers hopeful to sell their land for a large profit, yearn for. This option would hypothetically unlock efficiency and flexibility benefits that investors claim could help ameliorate extended dry spells brought on by climate change. But the majority of Coloradans would likely oppose this option for the same reason investors favor it. A market system would remove legal and regulatory controls such as the beneficial use requirement that currently keep the price of water low, making water much more expensive to use.⁸⁹ Finally, authorities could choose to maintain the prior appropriation doctrine but strengthen its anti-speculation framework so that it effectively deters predatory investment. As this Note will argue, this last option represents the most reasonable, responsible, and just option for the state’s residents.

⁸⁷ See Vanessa Casado Perez, *Specialization Trend: Water Courts*, 49 ENV’T L. 587, 621 (2019) (noting that, on average, “from the moment where the application for a change in water rights is filed [in Colorado Water Court] to the moment where the decision is reached, takes an average twenty-nine months . . .”).

⁸⁸ Smith, *supra* note 83.

⁸⁹ See Ryder Howe, *supra* note 1.

Encouragingly, Colorado looked to be moving in this third direction. As mentioned above, the state legislature voted to convene a work group to study the anti-speculation doctrine and recommend ways of strengthening it.⁹⁰ However, as of the publication of this Note, legislative efforts to strengthen the anti-speculation doctrine have stalled due to lawmakers' concerns over farmers' ability to freely sell their water rights.⁹¹ But the need to take action is more pressing than ever, highlighted by recent efforts by Renewable Water Resources, the Denver-based investment firm discussed above, to elect pro-development members to county water boards in order to push through lucrative deals to pipe rural water to growing suburban developments.⁹²

Notwithstanding potential issues with restricting the rights of farmers to sell their assets, concerned stakeholders are correct to worry about speculation and the threat it poses to the state's future. The following sections will demonstrate that strengthening anti-speculation law in Colorado represents the best way forward at this juncture, and will suggest and analyze different ideas for how stakeholders across the state can accomplish this goal.

III. AUSTRALIA'S MURRAY-DARLING BASIN PROVIDES A CAUTIONARY TALE AGAINST DEREGULATION

Proponents of a free market for trading water rights need only examine the experience of Australia's Murray-Darling Basin to see the risks presented by rolling back protections like the anti-speculation doctrine. However, before exploring current issues, it is important to briefly discuss the history of water management in Australia's Murray-Darling Basin. The Basin is a large watershed in southeastern Australia that provides water to 2.4 million people

⁹⁰ See Sarah Kuta, *Anti-Speculation Working Group Digs in, as Concern Over Profiteering Continues*, WATER EDUC. COLO. (Nov. 18, 2020), <https://www.watereducationcolorado.org/fresh-water-news/anti-speculation-working-group-digs-in-as-concern-over-profiteering-continues/>.

⁹¹ See Booth, *supra* note 84.

⁹² See Jennifer Oldham, *Farming in Dry Places: Investors Continue to Speculate on Colorado Water*, CIVIL EATS (Sept. 13, 2023), <https://civileats.com/2023/09/13/farming-in-dry-places-investors-continue-to-speculate-on-colorado-water/>.

across five states and territories.⁹³ Though there are twenty-three rivers in the Basin, it takes its name from its two main rivers—the River Murray and the Darling River.⁹⁴ The Basin also contains around forty percent of Australia’s agriculture.⁹⁵ In addition to the agricultural industry, the Basin supports important natural resources such as biodiversity and successfully managing its water resources is of the utmost importance to Australia itself.⁹⁶

Australian water management systems and their underlying legal framework developed differently than those in the United States. Instead of adopting a riparian scheme tied to land ownership or a prior appropriation system tied to first-time beneficial use, Australian states used to issue water rights “virtually on demand.”⁹⁷ This system began to change in the 1970s and ‘80s, as overuse of water resources led to deteriorating water quality and the loss of native aquatic plants and animal species.⁹⁸ In response, authorities in the Murray-Darling Basin began implementing a new permitting scheme that would allow existing users to continue extracting water but cap their use at prevailing levels.⁹⁹ New users without permits could access water by buying rights from other users to appropriate water from the total available pool in a given water district, a process known as trading.¹⁰⁰ Today, water can be traded among market participants for any use as long as the participants are in connected water resource systems, even if the users are in different states.¹⁰¹ However, this initial attempt at trading was hindered by the lack of

⁹³ See *Basin location*, AUSTL. MURRAY-DARLING BASIN AUTH., <https://www.mdba.gov.au/basin/basin-location> (last visited Dec. 11, 2023).

⁹⁴ See *The Basin*, AUSTL. MURRAY-DARLING BASIN AUTH., <https://www.mdba.gov.au/basin> (last visited Sept. 20, 2023).

⁹⁵ See *id.*

⁹⁶ See *Why the Murray-Darling Basin matters*, AUSTL. MURRAY-DARLING BASIN AUTH., <https://www.mdba.gov.au/basin/why-murray-darling-basin-matters> (last visited Sept. 20, 2023).

⁹⁷ Peter Debaere & Tianshu Li, *Water Markets’ Promise: The Murray-Darling Basin*, 17 ENV’T RSCH. LETTERS, Dec. 5, 2022, at 1, 4.

⁹⁸ See *id.*

⁹⁹ See *id.* at 5.

¹⁰⁰ See *id.*

¹⁰¹ See *About water markets*, AUSTL. BUREAU OF METEOROLOGY, <http://www.bom.gov.au/water/market/about.shtml> (last visited Sept. 20, 2023).

coordination among the Basin states and only occurred in limited, local circumstances.¹⁰²

In 1994, the Council of Australian Governments enacted a new framework to expand the country's nascent water markets and move towards a system that took into account the need to conserve water and protect the environment.¹⁰³ Most importantly, this reform established the formal categories of entitlements and allocations.¹⁰⁴ Entitlements represent permanent rights to use a given amount of water, while allocations represent the temporary right to use a certain amount of water over a given season.¹⁰⁵ The framework was followed by further reform in 2004, which aimed to promote trading of water rights by improving access to information and introducing regulatory measures to minimize transaction costs.¹⁰⁶

Although the 1994 framework accomplished its goal of expanding water markets,¹⁰⁷ the hardship imposed by the Millennium Drought forced decision-makers to make further efforts to reform the Basin's management system. The Millennium Drought lasted from 1997 to 2009 and resulted in record low inflows into the Murray River system, seriously threatening agriculture and natural ecosystems in the Basin.¹⁰⁸ In response, the Australian government adopted further reforms to "address the 'over-allocation' of water in the Basin, and to put the management of the Basin's scarce water resources on a more sustainable footing."¹⁰⁹ The new reforms aimed to

¹⁰² See AUSTL. NAT'L WATER COMM'N, WATER MARKETS IN AUSTRALIA: A SHORT HISTORY 43 (2011), <https://apo.org.au/sites/default/files/resource-files/2011-12/apo-nid27438.pdf>.

¹⁰³ See *id.* at 48–49.

¹⁰⁴ See Debaere & Li, *supra* note 97, at 5.

¹⁰⁵ See *id.* See also AUSTL. NAT'L WATER COMM'N, *supra* note 102, at 12.

¹⁰⁶ See AUSTL. NAT'L WATER COMM'N, *supra* note 102, at 51.

¹⁰⁷ See *id.* at 69.

¹⁰⁸ See *Previous droughts*, AUSTL. BUREAU OF METEOROLOGY, <http://www.bom.gov.au/climate/drought/knowledge-centre/previous-droughts.shtml> (last visited Sept. 20, 2023). See also *Why the Murray Darling Basin matters*, *supra* note 96.

¹⁰⁹ AUSTL. COMPETITION & CONSUMER COMM'N, MURRAY-DARLING BASIN WATER MARKETS INQUIRY FINAL REPORT 12 (2021), https://www.accc.gov.au/system/files/Murray-Darling%20Basin%20-%20water%20markets%20inquiry%20-%20Final%20report_0.pdf [hereinafter AUSTRALIAN COMMISSION REPORT].

conserve water without compromising agricultural production through three main elements: (1) setting scientifically based limits on how much Basin water could be used at one time; (2) buying back water rights using government funds and returning this water to the environment; and (3) investing in more efficient irrigation systems.¹¹⁰ The reforms to the free-market system were initially praised as a flexible solution to the problem of allocating water during droughts.¹¹¹ For example, enhanced water trading allowed farmers of drought-resistant permanent crops such as nut trees or grapes to keep those crops alive during dry years.¹¹²

It turns out, however, that even these well-intentioned reforms could not solve Australia's water scarcity issues. By 2019, after more years of drought, the Australian government was forced to buy \$80 million in water from a private company based in the Cayman Islands in order to ensure its citizens had access to water.¹¹³ Now, as drought persists and devastating wildfires become the norm, many farming families and Indigenous communities, including those who have cared for the land for generations, may be forced to relocate entirely.¹¹⁴ Urban and suburban populations in Australia have not been spared from hardship, either. As reservoirs run dry, some towns turned to using wells to extract groundwater but, in some cases, found that their groundwater was contaminated and unsafe to drink.¹¹⁵ Sydney, the country's largest city, resorted to employing "water officers" to educate citizens and enforce restrictions" on water usage.¹¹⁶ And in Melbourne, government officials have ruled out building more dams to provide water to the surrounding rural areas

¹¹⁰ See AUSTL. NAT'L WATER COMM'N, *supra* note 102, at 75.

¹¹¹ See Barringer, *supra* note 76.

¹¹² See *id.*

¹¹³ See Kath Sullivan, *Labor Demands Answers on \$80 Million Murray-Darling Basin Water Buyback Deal as Joyce Fires Back*, ABC NEWS (Apr. 22, 2019), <https://www.abc.net.au/news/2019-04-22/labor-demands-answers-on-murray-darling-water-buyback-deal/11035652>.

¹¹⁴ See Livia Albeck-Ripka, *As Water Runs Low, Can Life in the Outback Go On?*, N.Y. TIMES (Dec. 8, 2019), <https://www.nytimes.com/2019/12/08/world/australia/water-drought-climate.html>.

¹¹⁵ See *id.*

¹¹⁶ *Id.*

since river flow serving the city is “expected to drop by half by 2065.”¹¹⁷

Despite the initial promise of water markets to efficiently allocate water among users, flaws in the design of the Murray-Darling Basin water markets left many water users, especially farmers and Indigenous communities, struggling to navigate an opaque and uncertain system. Instead, the benefits from the new system mostly accrued to “the larger, well-informed irrigators” and investors who could utilize financial might and technical acumen to profit off the newly found market opportunity.¹¹⁸ After over a decade of observing these impacts in practice, the Australian government directed its antitrust commission in 2019 to conduct a full-scale investigation of water markets in the Murray-Darling Basin.¹¹⁹ The authority issued a final report in March 2021—the Australian Commission Report—providing deep analysis of the problems and trends discussed above and recommending a total of twenty-nine reforms in four key areas: (1) “governance of the Basin water markets;” (2) “market integrity and conduct;” (3) “trade processing and water market information;” and (4) “market architecture.”¹²⁰

Notably, the Commission found that “the Basin’s water rights markets have serious problems” and that the “markets’ rules are deficient, enforcement of them is inconsistent and limited, and the overall governance of the Basin’s water trade is problematic.”¹²¹ To that end, the Australian Commission Report called for comprehensive reforms to the existing system that “will allow the full benefits and opportunities of water trading to be harnessed, and address the negative impacts of unfettered and poorly designed markets.”¹²²

¹¹⁷ *Id.*

¹¹⁸ Anthony S. Kiem, *Drought and Water Policy in Australia: Challenges for the Future Illustrated by the Issues Associated with Water Trading and Climate Change Adaptation in the Murray-Darling Basin*, 23 *GLOB. ENV’T CHANGE* 1615, 1624 (2013).

¹¹⁹ See *Murray-Darling Basin Water Markets Inquiry 2019-21: Project Overview*, AUSTRALIAN COMPETITION AND CONSUMER COMM’N, <https://www.accc.gov.au/focus-areas/inquiries-ongoing/murray-darling-basin-water-markets-inquiry> (last visited Jan. 10, 2024).

¹²⁰ AUSTRALIAN COMMISSION REPORT, *supra* 109, at 3, 24.

¹²¹ *Id.* at 24.

¹²² *Id.*

Following the publishing of the Australian Commission Report, the Australian government issued its own “Roadmap” report which discusses the feasibility of implementing the recommendations set forth in the Commission’s report.¹²³ The Roadmap recommended adopting most, but not all, of the Commission’s recommendations. Commendably, the Australian government recently announced its intention to implement all of the recommendations contained in the Roadmap. However, it should be noted that the Roadmap cautioned that many of the data and system reforms needed are complex and may take three to four years to implement. The Roadmap also explained that the majority of the integrity and transparency reforms are dependent on data and systems reforms, leaving the Roadmap without a concrete timeline for full implementation.¹²⁴ Additionally, while Australia’s recently elected left-leaning Labor government has committed to adopting the reforms, there remains the possibility that a more conservative administration will roll back the reform efforts in the future, demonstrating the fragility of the reform process and Australia’s water markets as a whole.

The following subsections will explain the problems identified by the Commission, their proposed solutions, and whether the proposed solutions were included in the government’s Roadmap to reform. Given the persistent problems identified in the Commission’s report, their harsh impacts on Australian citizens and the great cost anticipated to fix them, Colorado state legislators are right to move away from free market solutions and towards strengthening the anti-speculation doctrine. While, hypothetically, a perfectly designed free market system might be able to achieve the efficiency gains discussed above without negatively impacting vulnerable users, the Australian experience demonstrates that the political and economic barriers to implementing such a system are extremely high and that attempting to do so in the Murray-Darling Basin was a mistake. Given the similarities in climate, governance, and water resources

¹²³ See *ACCC Welcomes New Role Regulating Water Market Conduct*, AUSTRALIAN COMPETITION AND CONSUMER COMMISSION, <https://www.accc.gov.au/media-release/accc-welcomes-new-role-regulating-water-market-conduct> (last visited Dec. 11, 2023).

¹²⁴ See DARYL QUINLIVAN, AUSTRALIAN COMPETITION & CONSUMER COMMISSION, *WATER MARKET REFORM: FINAL ROADMAP REPORT 93* (2022), <https://www.dceew.gov.au/sites/default/files/documents/water-market-reform-final-roadmap-report.pdf> [hereinafter ROADMAP].

between Australia and the American West, decision-makers in Colorado and other U.S. states should view Australia's example as a cautionary tale, rather than a model to implement.

A. *Governance of the Basin Water Markets*

The Australian Commission Report concluded that the current system suffers because governance responsibilities are too widely dispersed among various federal, state, and local agencies, which "are themselves governed by an array of Australian and state government laws and inter-governmental agreements."¹²⁵ The differences in rulemaking processes and lack of transparency between agencies¹²⁶ has led to a bevy of mishaps, including a failed effort to rebuild and integrate market computer systems resulting in a loss of over \$30 million.¹²⁷

To remedy these governance problems, the Australian Commission Report recommended establishing control in a centralized "Water Markets Agency."¹²⁸ The new agency would serve a broad variety of functions to ensure smooth facilitation of the Basin's water markets, including market regulation and surveillance, creating and maintaining a database for accessing market information, and advocating for the Basin's water markets before state and federal government regulators.¹²⁹ The Commission's report proposed establishing such an agency "through a cooperative legislative scheme between the Australian and Basin State governments."¹³⁰

However, the Roadmap did not adopt this suggestion. While the Roadmap noted that the creation of a centralized agency was a "key recommendation," it found that there was a lack of support for the proposal among stakeholders "because of the potential that it would add to an already very complex set of organisational arrangements

¹²⁵ AUSTL. COMPETITION AND CONSUMER COMM'N, MURRAY-DARLING BASIN WATER MARKETS INQUIRY INTERIM REPORT 17 (2020), <https://www.accc.gov.au/system/files/Murray-Darling%20Basin%20inquiry%20-%20interim%20report.pdf> [hereinafter INTERIM REPORT].

¹²⁶ See AUSTRALIAN COMMISSION REPORT, *supra* note 109, at 13.

¹²⁷ See INTERIM REPORT, *supra* note 125, at 17.

¹²⁸ See AUSTRALIAN COMMISSION REPORT, *supra* note 109, at 14.

¹²⁹ See *id.* at 14.

¹³⁰ *Id.*

and systems.”¹³¹ It is likely that the creation of such a centralized agency would also lack support in the United States, which suffers from political gridlock due to hyper-polarization, not to mention vast political differences between the states. For example, the Colorado River Compact states recently engaged in fraught negotiations to avoid the catastrophic scenario of the river drying up downstream of the West’s two largest reservoirs, Lake Powell and Lake Mead.¹³² Although pressure from the federal government eventually forced the states into an agreement to reduce water usage equally, the states will again have to negotiate further cuts in 2026, with no clear solution in sight.¹³³ With regards to a potential free market for water rights, the unlikely ability of Colorado and other western states to gather the financial, political, and logistical resources to establish a centralized agency counsels against pushing toward market-based solutions to water management.

B. *Market Integrity and Conduct*

The Commission also identified serious issues stemming from the lack of regulation of water brokers.¹³⁴ As defined by the Australian Commission Report, water brokers are intermediaries who collect a fee for trading water rights on behalf of another person.¹³⁵ In other words, water brokers function just like real estate brokers or stockbrokers. Unlike these other sectors where brokerage services play a key role, the Water Act did not include any regulatory safeguards for clients in their interactions with water brokers.¹³⁶ In Australia, brokers acting as sophisticated repeat players exploited the lack of regulation to artificially increase water prices. The Australian Commission Report found that this undermined overall confidence in the market and likely prevented vulnerable, underinformed parties like small farmers from participating as equals.¹³⁷

¹³¹ ROADMAP, *supra* note 124, at 83.

¹³² *See* Flavelle, *supra* note 14.

¹³³ *See id.*

¹³⁴ *See* AUSTRALIAN COMMISSION REPORT, *supra* note 109, at 16.

¹³⁵ *See id.* at 228.

¹³⁶ *See* INTERIM REPORT, *supra* note 125, at 18.

¹³⁷ *See* AUSTRALIAN COMMISSION REPORT, *supra* note 109, at 16, 19.

To solve the problem, the Australian Commission Report proposed adopting a mandatory code for brokers and other intermediaries as part of Basin-wide legislative efforts.¹³⁸ This code would establish rules and regulations that apply in similar contexts, such as price reporting requirements and prohibitions on market manipulation and insider trading.¹³⁹ It would also delegate enforcement powers to the Water Markets Agency discussed above.¹⁴⁰ This approach would allow the government to set standards for professional conduct and integrity and provide authorities with an enforcement mechanism against brokers who violate those standards.¹⁴¹ Ideally, increased government oversight of market participants would root out corruption and thus restore confidence in the system. For markets that have suffered because many would-be participants cannot trade efficiently or make informed investment decisions due to the lack of security, these suggested changes are incredibly important.

Although an interim report released in 2020—the Interim Australian Commission Report—admitted this option is “likely to be the most expensive [proposed reform] to implement and administer,”¹⁴² the Roadmap found widespread support for the measure even among brokers and other intermediaries.¹⁴³ Specifically, the Roadmap noted that “water market intermediaries have expressed support for measures that would promote the professionalization of their industry and more trust and confidence in their conduct.”¹⁴⁴ However, when it comes to the question of how to enforce the new code, the Roadmap departs from the Commission’s original recommendation. As discussed above, the Roadmap did not endorse the creation of an independent water markets agency, which is the administrative body that the Commission had envisioned overseeing the implementation of the new code. Instead, the Roadmap recommended that the Commission itself take on the role of regulator.¹⁴⁵ The Roadmap

¹³⁸ *See id.* at 16.

¹³⁹ *See id.* at 26.

¹⁴⁰ *See id.*

¹⁴¹ *See id.* at 265.

¹⁴² INTERIM REPORT, *supra* note 125, at 256.

¹⁴³ *See* ROADMAP, *supra* note 124, at 40.

¹⁴⁴ *Id.*

¹⁴⁵ *See id.* at 83.

acknowledged the potential issues with this approach, stating, “although the [Commission] does have relevant expertise, it does not generally regulate market integrity and conduct provisions and would therefore need to develop further expertise.”¹⁴⁶ It is unclear whether the Commission will agree to step into this governance role and how it will develop the expertise needed to successfully monitor compliance if the intermediaries code is ultimately adopted.

Though the nascent market for water rights in Colorado has not demonstrated vulnerability to the problems of unregulated intermediaries discussed in this section, one can easily imagine these issues taking root if regulatory restrictions on sales of water rights are rolled back. For example, Vidler Water Company, the same company that was the defendant in the landmark 1979 Colorado Supreme Court case discussed above, has continued to look for opportunities to exploit water rights in the West. Vidler functions as a water broker by “finding untapped water in rural communities and marketing it to developers and corporations in fast-growing cities and suburbs.”¹⁴⁷ Even after the Colorado Supreme Court rebuked the company in the 1979 case, Vidler still “tr[ies] to find ways around the beneficial use doctrine” to maximize profits, a practice that “has sometimes landed the company in hot water.”¹⁴⁸ In one such attempt, Vidler offered to sell a New Mexico developer the rights to seven hundred acre-feet of water from a local aquifer, despite its “own models show[ing] that water use from the new development would cause water levels in the aquifer to drop, endangering residential wells.”¹⁴⁹ When local residents sued in 2017, Vidler executives admitted that they had no idea what the ultimate scope of the development would be. In 2019, Vidler’s application to appropriate the water was denied after a court ruled that the project “would conflict with New Mexico’s statewide goals for water conservation.”¹⁵⁰

The continued attempts by Vidler to “stretch[] the truth about the ‘beneficial use’” it plans for its sales of water rights demonstrates the danger of implementing a free market for water rights in

¹⁴⁶ *Id.* at 87.

¹⁴⁷ Bittle, *supra* note 3.

¹⁴⁸ *Id.*

¹⁴⁹ *Id.*

¹⁵⁰ *Id.*

Colorado.¹⁵¹ To preempt efforts by companies like Vidler to manipulate markets, state regulators would have to invest significant time, money, and political capital in drafting a regulatory code and empowering an agency to enforce it. While hypothetically possible, reaching the necessary compromise on these issues and finding the funds required to finance such a project is a substantial barrier to successfully regulating a free market system. The state is better served by enhancing the existing anti-speculation doctrine, which has already successfully foiled traditional water speculation by Vidler and other water brokers seeking to take advantage of residents for their own profit.

C. Trade Processing and Water Market Information

The Australian Commission Report identified the lack of access to quality market information and outdated transaction systems as major issues that further disadvantage farmers and other water users.¹⁵² Currently, there is no record-keeping or data provision requirement that applies to all brokers and exchanges in the Basin.¹⁵³ This means some parties interested in trading their water have an incomplete picture of what their assets are worth, allowing repeat players like sophisticated water investors and large agricultural conglomerates the upper hand.¹⁵⁴

To counter these difficulties, the Australian Commission Report recommended that the Australian federal and state governments “collaboratively invest in developing and implementing digital infrastructure and data standards.”¹⁵⁵ The digital platform would allow market participants to access data in real time and circumvent procedural hurdles by streamlining trade approvals through a centralized authority.¹⁵⁶ The Roadmap adopted many of the Commission’s recommendations to improve digital infrastructure and access to data, including building a centralized National Water Data Hub.¹⁵⁷

¹⁵¹ *Id.*

¹⁵² See AUSTRALIAN COMMISSION REPORT, *supra* note 109, at 19–20.

¹⁵³ See INTERIM REPORT, *supra* note 125, at 22.

¹⁵⁴ See *id.* at 28.

¹⁵⁵ AUSTRALIAN COMMISSION REPORT, *supra* 109, at 20.

¹⁵⁶ See *id.*

¹⁵⁷ See ROADMAP, *supra* note 124, at 57.

However, the Roadmap cautions that “[d]eveloping and implementing water market data standards will take 2 to 3 years” and “require effort from a number of key market participants.”¹⁵⁸

Based on the Roadmap’s support for almost all of the Commission’s recommendations regarding this issue, there may not be as many obstacles to implementing a similar system in Colorado or the rest of the American West. While implementing such a platform would entail large overhead costs, modernizing access to data would likely involve the least number of stakeholders, increasing the likelihood that such a system could be created to track the trading of water rights. Still, it is unclear whether the benefits of this crucial system would outweigh the overhead costs involved with such an effort.¹⁵⁹

D. Market Architecture

This section focuses on reforming the Basin’s water markets to better reflect the realities of trading and transferring water as a resource. Unlike in the American West, water allocations in Australia can usually be traded and held independent of permanent entitlements.¹⁶⁰ This means that “a person who does hold an entitlement can independently sell any allocation they have been issued . . . while retaining their entitlement long term.”¹⁶¹ One of the ways allocations are sold is via inter-valley trades, which involve a seller in one watershed (called a zone) transferring water to a buyer in a different watershed.¹⁶² While these inter-valley trades do not involve the immediate physical transfer of water from one zone to another, they represent a crediting and debiting of water that reflects an overall balance of water physically owed to each watershed.¹⁶³

With regards to these transfers, the Interim Australian Commission Report noted that “some of the policies and rules that are essential to the operation of the market—such as arrangements to manage inter-valley trade/transfers, delivery and storage capacity—may not

¹⁵⁸ *Id.* at 60.

¹⁵⁹ *See id.*

¹⁶⁰ *See* AUSTRALIAN COMMISSION REPORT, *supra* 109, at 63.

¹⁶¹ *Id.*

¹⁶² *See id.*

¹⁶³ *See Murrumbidgee Inter-Valley Trade Account*, NSW DEP’T OF INDUSTRY, https://www.industry.nsw.gov.au/_data/assets/pdf_file/0018/209412/murrumbidgee-ivt-fact-sheet.pdf (last visited Jan. 11, 2024).

efficiently and, in some cases, fairly manage the underlying physical constraints of the water supply.”¹⁶⁴ In other words, the poor design of the Murray-Darling water trading market undermines the stated purpose of deregulating the water sector in the first place: efficiency.

The Australian Commission Report notes the general need for “reassessing some foundational assumptions” of water markets but also makes specific recommendations for reforms.¹⁶⁵ These generally fall into two categories: (1) physical changes to conveyance systems and (2) revisions to the market’s underlying methodology. Both categories aim to more accurately reflect the amount of water that is being traded. Physical changes could include developing “more timely and responsive tools” to better allocate access to limited capacity water supplies and reduce leakage during transfer, known as “conveyance losses.”¹⁶⁶ The Australian Commission Report also proposes accounting for these losses by revising underlying methodologies, a strategy termed “apply[ing] conveyance loss factors to deliveries or trades downstream.”¹⁶⁷ Regardless of whether regulators decide to implement one or both of these proposed reforms, the report stresses the need to do so in a centralized, coordinated manner, to avoid a piecemeal approach that imposes the same problems on other parts of the system.¹⁶⁸

In response, the Roadmap specifically highlights the inequity of access to inter-valley water trade between Australia’s two most populous states, New South Wales and Victoria, as a problem preventing the Murray-Darling markets from functioning efficiently.¹⁶⁹ The Roadmap identifies the “differences in [the] states’ digital systems for trade processing, with traders in Victoria able to trade water allocation more quickly due to electronic [] facilities, compared to a more manual process used in New South Wales.”¹⁷⁰ Therefore, the Roadmap recommends that the states work together to consider options for resolving this issue, including building a new programming

¹⁶⁴ INTERIM REPORT, *supra* note 125, at 31.

¹⁶⁵ AUSTRALIAN COMMISSION REPORT, *supra* note 109, at 23.

¹⁶⁶ *Id.*

¹⁶⁷ *Id.*

¹⁶⁸ *See id.* at 24.

¹⁶⁹ *See* ROADMAP, *supra* note 124, at 73.

¹⁷⁰ *Id.*

interface that would automatically approve trades in New South Wales. This would harmonize inter-valley trading between the two states.¹⁷¹

While free market advocates in the United States picture a future where water rights can be traded instantly,¹⁷² the initial failure of cooperation among states in the Murray-Darling Basin proves that achieving this vision in the United States is unrealistic. As previously discussed, the states that share water from the Colorado River have struggled to reach agreement on basic cuts to avoid catastrophic water shortages.¹⁷³ Additionally, the infrastructure necessary to facilitate water trades does not exist in the United States. It is unlikely that state governments would be willing to fund such a large-scale project given the historical reluctance of governments to spend money on developing new water supplies.¹⁷⁴

Furthermore, a major expansion of water trading infrastructure would undoubtedly face fierce resistance from residents who oppose development on their land. For example, in 1985, a Denver suburb called Thornton purchased seventeen thousand acres of farmland and its associated water rights, anticipating increased demand for water as the suburb grew.¹⁷⁵ Sure enough, by 2010, Thornton's population had grown by nearly fifty percent and existing water supplies began to dwindle. However, when the time came to build a pipeline to access the additional water rights purchased in 1985, Thornton ran into staunch opposition from landowners who pressured their own municipalities to deny Thornton a permit to build their pipeline.¹⁷⁶ Now, nearly forty years after purchasing its water supply of the future, the costs of Thornton's pipeline project have skyrocketed, planned developments are being cancelled, and the city still cannot access the water it purchased.¹⁷⁷ Thornton's experience demonstrates that creating the infrastructure necessary to facilitate water trades is likely to

¹⁷¹ *See id.*

¹⁷² *See* Ryder Howe, *supra* note 1.

¹⁷³ *See* Flavelle, *supra* note 14.

¹⁷⁴ *See* Bittle, *supra* note 3.

¹⁷⁵ *See* David Gelles, *A Colorado City Has Been Battling for Decades to Use Its Own Water*, N.Y. TIMES (Sept. 5, 2023), <https://www.nytimes.com/interactive/2023/09/05/climate/colorado-water-climate-change.html>.

¹⁷⁶ *See id.*

¹⁷⁷ *See id.*

run up against staunch opposition from landowners, even if state governments can be convinced to fund such a project and work together to make it a reality.

Despite decades of reform, comprehensive and difficult changes are still needed to fix the Murray-Darling Basin's water markets. And while these changes may be on the way, operating a flawed system for over ten years may have already caused irreversible damage.¹⁷⁸ At a minimum, any nation or state thinking about allowing water rights to be traded on an open market should seriously consider the problems discussed above and the heavy costs of fixing them. Of course, Australia's experience tells one story. Geographic diversity and climate variability ensures that no two environmental resource management scenarios are completely alike. However, Australia bears much in common with the American West, and its nearly decade and a half long experiment indicates such goals of efficiency and security are indeed lofty and difficult to achieve.

While it is encouraging that Australia's recently elected Labor government has committed to implementing all of the Roadmap's recommendations, it remains to be seen whether these fixes will permanently address the problems outlined in the Australian Commission Report. The Roadmap notes that full adoption of these reforms will take years and require the strong cooperation of various government actors and other stakeholders. By then, it is possible that a new administration might attempt to roll back these reforms or modify them, further complicating efforts to make the free-market system work in the Murray-Darling Basin. It is not hard to imagine such a scenario occurring, especially when the Australian National Water Commission, the central agency created in 2004 and tasked with implementing the country's free market water market reforms, was abolished by the conservative Liberal Party in their 2014 budget cuts.¹⁷⁹ Given that the Australian Commission Report identified the lack of a central governance agency as a key issue with the Murray-Darling basin's water markets, it is clear that political upheaval and the administrative changes that occur along with it can derail even the most well-intentioned reforms.

¹⁷⁸ See Albeck-Ripka, *supra* note 114.

¹⁷⁹ See Codi Kozacek, *Australia Disbands National Water Commission*, CIRCLE OF BLUE (May 16, 2014), <https://www.circleofblue.org/2014/world/australia-disbands-national-water-commission/>.

Therefore, Colorado officials are right to move in the opposite direction if their primary goal is to both ensure access to water for farming communities on the Western Slope and responsibly and gradually transfer resources to municipal use when needed. Relying on an open market to allocate water resources will further marginalize rural communities that are already facing the perils of dealing with extended drought and pressure to sell farmland as the United States transitions away from rural economies.¹⁸⁰ Indeed, in Colorado's rural San Luis Valley, private investors are already trying to use well water rights they have bought up to sell water to budding developments in the Denver suburbs.¹⁸¹ For state officials charged with protecting their constituents and their access to water, urgently closing the anti-speculation doctrine's loopholes represents the best way to accomplish this goal.

IV. STRENGTHENING THE ANTI-SPECULATION DOCTRINE

Though Colorado's anti-speculation doctrine may be alive and well in the courts, in practice it has still allowed outside investors to buy up rural farmland without much resistance. This is because current law only requires courts to examine "water matters," which include "cases of diligence for conditional water rights, changes of water rights, exchanges, augmentation plans, and appeals from state or division engineer enforcement orders."¹⁸² Courts do not therefore review purchases of water rights for compliance with the anti-speculation doctrine.¹⁸³

Outside investors can purchase farmland, continue to use the corresponding water rights for agricultural purposes, and still sell the rights to real estate developers once they have appreciated in value. Because municipal use qualifies as a beneficial use, these

¹⁸⁰ See Runyon & Bloom, *supra* note 4.

¹⁸¹ See Michael Booth, *Attempt to Stop Colorado Water Speculation is Circling the Drain*, COLO. SUN (Apr. 26, 2022), <https://coloradosun.com/2022/04/26/water-speculation-colorado-bill/>.

¹⁸² Casado Perez, *supra* note 87, at 618 (quoting GEORGE VRANESH ET AL., VRANESH'S COLORADO WATER LAW, REVISED EDITION 162 (1999)).

¹⁸³ See *Allen v. Colorado*, 433 P.3d 581, 584–85 (Colo. 2019) (dismissing case grounded in conveyance, not use because it was not a water matter within the exclusive jurisdiction of the water court).

future transactions would be legal.¹⁸⁴ Accordingly, Colorado's anti-speculation doctrine does not effectively prevent speculators from buying up water rights for investment purposes. This loophole needs closing if state authorities want to protect residents from being priced out of access to water like rural communities in the Murray-Darling Basin.

As noted, state legislators in Colorado began the process of strengthening the anti-speculation doctrine by establishing a work group to study and recommend possible solutions.¹⁸⁵ The work group's final report analyzed nineteen concepts and ultimately identified eight that, if implemented, would change the law to "effectively reduce Investment Water Speculation on a large scale."¹⁸⁶ These concepts are: 1) "[p]rohibit or penalize compensated non-diversion" of water; 2) "[f]und and/or create a right of first refusal for the purchase of water rights for long-term irrigation use" that benefits the public; 3) "[e]liminate or reduce the agricultural tax benefit for lands from which water is removed;" 4) require water rights to be tied to already-irrigated land unless the land is changed to a new land use; 5) "[c]reate a statewide process to identify and prohibit Investment Water Speculation;" 6) "[e]ncourage local governments to police Investment Water Speculation through their" local powers to regulate water projects; 7) "[t]ax the profit derived from sale or lease of water rights previously purchased for Investment Water Speculation purposes;" and 8) establish a "maximum rate of water right price increase and impose higher taxes when the rate is exceeded."¹⁸⁷ However, the report did not recommend any of the concepts for implementation, citing drawbacks to each approach.¹⁸⁸ Instead, the work group recommended that the General Assembly "gather feedback from multiple and diverse stakeholders within Colorado for any change in law considered."¹⁸⁹

¹⁸⁴ See *What are Beneficial Uses?*, COLO. SCH. OF MINES ADVANCED WATER TECH. CTR., http://aqwatec.mines.edu/produced_water/intro/what/index.htm#table1 (last visited Jan. 11, 2024).

¹⁸⁵ See Kuta, *supra* note 90.

¹⁸⁶ WORK GROUP REPORT, *supra* note 10, at 8–9, 38–40.

¹⁸⁷ *Id.* at 8–9.

¹⁸⁸ See *id.* at 66.

¹⁸⁹ *Id.*

Even though the work group did not ultimately recommend the implementation of any solutions, a bipartisan group of state senators moved forward with an attempt to curb investment speculation. The group introduced a bill that “aim[ed] to prevent a buyer of agricultural water rights from profiting on the increased value of the water in a future sale by giving the state engineer at the Department of Water Resources the ability to investigate speculation claims and levy fines.”¹⁹⁰ This plan seemingly built off the work group’s fifth recommendation to create a statewide process to identify and prohibit investment water speculation. However, this version of the bill was unpopular with farmers who were concerned that it would intrude on their ability to sell the rights to their water.¹⁹¹

In response, another stakeholder, the Colorado River Water Conservation District, presented an amendment to the bill which would have addressed situations where a water user is being paid to not use their water by another downstream user.¹⁹² For example, a real estate developer in Arizona might attempt to pay farmers in Colorado to refrain from using their water rights, therefore preserving more water for users in Arizona.¹⁹³ This scheme resembles the first recommendation put forth by the work group: prohibit or penalize compensated non-diversion of water. Unfortunately, this plan also stalled amid concerns over potentially restricting the ability of farmers to sell their water rights, and legislative efforts to strengthen the anti-speculation doctrine currently remain in limbo.¹⁹⁴

As two of the work group’s proposed recommendations have already failed to advance in the state legislature, this section will investigate the remaining six concepts identified by the work group and analyze their feasibility for strengthening the anti-speculation doctrine in light of the stated concerns about restricting the ability of farmers to sell their water rights. The six remaining concepts are: (1) tax the profit derived from the sale or lease of water rights previously purchased for investment water speculation purposes; (2)

¹⁹⁰ Heather Sackett, *River District Addresses Controversial Water Speculation Bill*, VAILDAILY (Feb. 3, 2022), <https://www.vaildaily.com/news/eagle-valley/river-district-addresses-controversial-water-speculation-bill/>.

¹⁹¹ *See id.*

¹⁹² *See id.*

¹⁹³ *See id.*

¹⁹⁴ *See Booth, supra* note 181.

eliminate or reduce the agricultural tax benefit for lands from which water is removed; (3) establish a maximum rate of water right price increase and impose higher taxes when the rate is exceeded; (4) fund or create a right of first refusal for the purchase of water rights that benefit the public; (5) require water rights to be tied to already-irrigated land unless the land is changed to a new land use; and (6) encourage local governments to police investment water speculation through their local powers to regulate water projects.

To the extent possible, this Note evaluates the proposals using analogous or similar policies from other western states. Furthermore, this Note recognizes that these proposals do not have to be mutually exclusive and can potentially be enacted together in order to find the best solution to Colorado's investment speculation problem. While this Note will ultimately make a recommendation for how to proceed, the purpose of this section is to comprehensively evaluate each proposal so decision-makers can make informed choices going forward.

A. Tax the Profit Derived from the Sale or Lease of Water Rights Previously Purchased for Investment Water Speculation Purposes

Imposing a tax on investors who sell their water rights would flip speculation on its head by making water a less attractive investment. However, lawmakers would have to take care in designing a tax that withstands judicial scrutiny and deters speculation without impacting the ability of farmers to sell their water rights freely. As an initial matter, the dormant commerce clause prevents imposing a tax that applies only to out of state purchasers.¹⁹⁵ Therefore, lawmakers could not simply impose a tax on out of state investors. Instead, the work group's proposal involves creating "new tools and processes to determine whether a water right purchase is Investment Water Speculation."¹⁹⁶ Then, if the transaction is determined to be speculative, authorities could tax all profits "that the purchasing entity receives based on future transactions involving the water right."¹⁹⁷ The work group would vest taxing authority in the state

¹⁹⁵ See *The Dormant Commerce Clause*, LAWSHELF, <https://lawshelf.com/coursewarecontentview/the-dormant-commerce-clause/> (last visited Jan. 11, 2024).

¹⁹⁶ WORK GROUP REPORT, *supra* note 10, at 48–50, 53.

¹⁹⁷ *Id.* at 53.

Department of Regulatory Affairs, which already has expertise in regulation and taxing of real estate transactions, along with the Department of Natural Resources.¹⁹⁸

Although the report endorses this concept as a relatively simple way to deter investment speculation on a large scale, it also mentions significant drawbacks that come with this approach. For example, lawmakers would face the challenge of actually defining investment speculation and empowering a body to ultimately decide which transactions are speculative.¹⁹⁹ Then, there is the possibility that the taxes might be passed along to buyers or sellers that are not planning to engage in speculation, reducing the deterrent effect of the tax on the investors.²⁰⁰ This concern is therefore likely to implicate the above-mentioned fears that this concept would infringe upon the rights of farmers to sell their water rights.

B. Eliminate or Reduce the Agricultural Tax Benefit for Lands from Which Water Is Removed

Instead of imposing a tax on speculators, Colorado authorities could leverage existing tax benefits that encourage agricultural land use. For example, qualifying farm equipment and other property used for agricultural purposes are exempt from state sales and use taxes.²⁰¹ An anti-speculation tax provision, then, could simply revoke this tax exemption if the owner sells their water rights to a municipality or other non-agricultural user. Such a provision would make the purchase less attractive for speculative buyers who have no intention of using the land after they transfer the water right.

However, this concept assumes speculators plan to keep the land after they have sold the water rights. In a clear buy and dry scenario, it seems more likely that such a market participant would have no use for the land after profiting off the water rights. The reduced tax benefit would then have no impact on the speculator if they sell the land soon after selling the water right. As the report notes, “[c]hanging the tax rate may be too minor of a penalty to

¹⁹⁸ See *id.* at 53.

¹⁹⁹ See *id.* at 48–50, 53.

²⁰⁰ See *id.*

²⁰¹ See COLO. DEP’T OF REVENUE, SALES & USE TAX TOPICS: AGRICULTURE 2 (2021), <https://tax.colorado.gov/sites/tax/files/documents/SUTT%20Agriculture%20-%20March%202021.pdf>.

discourage Investment Water Speculation.”²⁰² Another potential problem with this scheme is its potential to harm farmers who do have a use for unirrigated land. For example, if a farmer decides to sell their water rights to a city and use their land for tourism rather than farming, they could also see their tax benefit revoked.

However, through the lens of preserving farmers’ rights to sell their water, this concept is a promising solution. As the report mentions, it can be tailored to provide exceptions that could ameliorate the concerns identified by farmers. These exceptions would “continue the agricultural tax rate when the payment for non-use was made pursuant to a state-approved plan such as a water conservation program, a temporary transfer for municipal use, or an instream flow loan.”²⁰³ As current tax benefits are determined on the county level, each county could provide a list of exceptions that suits the needs of farmers in that specific area. To address the example raised above, a county that values tourism might include that use as an approved exception so that a farmer may continue to receive the agricultural tax benefit even after selling their water. Although the report cautions that such a scheme might not provide a strong enough penalty to deter speculation, the ability to provide exceptions to minimize the impact on farmers indicates that it might have a greater chance of successful implementation.

C. Establish a Maximum Rate of Water Right Price Increase and Impose Higher Taxes When the Rate Is Exceeded

Another tax scheme recommended by the report would set a “ceiling for the amount of profit from the sale of a water right in a given time period and any profits in excess of that allowed price increase would be taxed at a higher rate.”²⁰⁴ The report compares this to a short-term capital gains rate. Another example of how this tax might function is New York City’s “mansion tax,” which imposes an additional tax on all property purchases above \$1 million.²⁰⁵ Including a high threshold amount might help ease the concern that imposing a tax would harm farmers looking to sell their

²⁰² WORK GROUP REPORT, *supra* note 10, at 47.

²⁰³ *Id.*

²⁰⁴ *Id.* at 57.

²⁰⁵ See *NYC Mansion Tax – Buyer’s Guide for 2024*, PREVU (Jan. 1, 2024), <https://www.prevu.com/blog/nyc-mansion-tax-what-you-need-to-know>.

water rights as it would only sweep in large transactions that are the product of speculative accumulation of land and water rights. If this concern persists, legislators could tailor the tax to exclude transactions where a landowner is selling water rights that they have held for a certain amount of time (say ten years). Thus, the tax could apply to a hedge fund that buys and flips water rights in the next decade but would not apply to a farmer selling water rights attached to land that has been in the family for forty years. While this solution would not guarantee speculators stay away from Colorado, it would force them to invest in communities for a minimum amount of time before selling their water rights if they want to avoid the tax. This way, communities can gain some of the benefits of outside investment, like irrigation improvements, without immediately suffering a buy and dry situation.

D. Fund or Create a Right of First Refusal for the Purchase of Water Rights that Benefit the Public

If a tax does not provide sufficient deterrence to speculators, it could be replaced or accompanied by a right of first refusal for governments and non-profits interested in protecting water rights. This policy, proposed by a Washington state working group focused in part on deterring speculation, would give government entities and certain nonprofit groups “the opportunity to buy local water rights before a downstream, out-of-basin water right transfer can be approved.”²⁰⁶ This would “increase the possibility for water rights to remain in the basin of origin.”²⁰⁷ Importantly, this would create a voluntary outlet for policymakers to manage speculation concerns, a less heavy handed approach than imposing a tax penalty.

To enhance this approach, the Washington state working group also suggested establishing a “revolving loan fund” to help finance land purchases by the public sector.²⁰⁸ However, it is unclear where the funds for this program would come from in Washington, and Colorado would likely face a similar problem. One option to fund these purchases could be to combine a right of first refusal with the

²⁰⁶ DAVE CHRISTENSEN & CARRIE SESSIONS, WASH. ST. DEP’T ECOLOGY, WATER TRUST, BANKING AND TRANSFERS IN WASHINGTON STATE 24 (2020), <https://apps.ecology.wa.gov/publications/documents/2011091.pdf>.

²⁰⁷ *Id.*

²⁰⁸ *Id.*

revocation of the agricultural tax benefit discussed above. The state government could then use the revenue gained from the revocation of these benefits to fund future purchases of water rights that would otherwise be sold to outside investors. Another option would be to pair the right of first refusal with a traditional tax and use the penalties paid by speculators to purchase water rights in the future. Of course, both options would first require allowing speculative transactions to occur in order to prevent future transactions from taking place. Ideally, alternative sources of funding, such as from private donors, could be used to preempt any speculative transactions.

Regardless, this proposal could be attractive to politicians who want to project a less restrictive view of efforts to deter speculation. Importantly, it would not restrict the ability of farmers to sell their water rights or their land. Purchasers of the land, either government or non-profits, could then choose a productive use for the land that would benefit the community while keeping water rights in the basin.

E. Require Water Rights to Be Tied to Already-Irrigated Land Unless the Land Is Changed to a New Land Use

This concept would “limit the future place of use of a water right to the historically irrigated land or a location nearby.”²⁰⁹ While this proposal would drastically restrict the ability of individuals to sell their water rights, it would potentially have the greatest impact in reducing speculation, as it could devalue water rights to the point where investors would no longer have interest in purchasing them.²¹⁰ However, this approach would severely depress the value of water rights that farmers expect to sell on an open market.²¹¹ It would also make certain rights “unavailable for different beneficial uses at different locations in the future.”²¹² As legislators have already demonstrated that they are unwilling to consider a policy that restricts the ability of farmers to sell their water rights, this concept likely has no real prospects of ever being implemented in Colorado.

²⁰⁹ WORK GROUP REPORT, *supra* note 10, at 48.

²¹⁰ *See id.*

²¹¹ *See id.*

²¹² *Id.*

F. *Encourage Local Governments to Police Investment Water Speculation Through Their Local Powers to Regulate Water Projects*

In 1974, the Colorado General Assembly passed HB 74-1041, empowering county “governments to regulate certain aspects of planning” by issuing permits for water projects such as reservoirs, pipelines and canals.²¹³ These are now known as “1041” powers.²¹⁴ The Colorado work group’s report advises that 1041 powers can be used to address concerns about speculation in water projects removing water from agricultural land, for example, by requiring any future project to demonstrate that “it will not significantly degrade any current or foreseeable future sector of the local economy.”²¹⁵ The report argues that 1041 powers are underutilized by many local authorities and counsels that one way to change this would be to simply “inform counties about their authority and encourage its use against speculation.”²¹⁶ The report also explains that, as a stronger alternative, the state government could pass legislation that explicitly authorizes county governments to review water right sales and leases for speculative intent.²¹⁷ Adopting this approach might also be attractive because it would allow each county to adopt different postures toward speculation in line with the views of their constituents.

One of the drawbacks to this approach is that county governments would have to establish criteria for determining whether a given transaction has speculative intent and certain counties would require funding sources in order to enforce the use of their 1041 powers against investment water speculation. This concept is also likely to spark opposition from farming interests, whose prospects for selling their water rights would be limited if county governments threaten to deny permits for developers who would pay the most for the farmers’ water rights. State legislators might support this concept because it does not directly implicate the state government in limiting farmers’ rights to sell their water. In practice, however,

²¹³ *Id.* at 24.

²¹⁴ *See id.*

²¹⁵ *Id.* at 51 (citing PUEBLO CNTY., COLO., CODE ch. 17.172.130(10)).

²¹⁶ *Id.*

²¹⁷ *See id.* at 52.

leaving the fight against speculation to county governments might not result in effective action because rural counties where farmers are well represented would oppose efforts to combat investment speculation because it would depress the potential value of their water rights on an open market.

CONCLUSION

The three paths forward—maintaining the status quo, rolling back the anti-speculation doctrine, or strengthening it—present a complex and multi-layered problem for Colorado decision-makers. Leaders must evaluate whether the tradition of prior appropriation is worth maintaining while persistent voices call for deregulating the system. That said, peeling back the layers shows that the promises of free market deregulation are ultimately empty ones. While an ideal implementation of this approach might achieve some of the goals outlined by economists and their advocates in the short term, Australia's experiences show that the decision to deregulate the Murray-Darling Basin's water markets was a mistake. Indeed, after over ten years, Australian authorities are now calling for, ironically, more regulation to make the markets actually function like they are supposed to. The immense costs—economic, political, and most importantly, social—associated with fixing Australia's water markets demonstrate that the deregulation is not the efficient, cost-effective solution espoused by free market advocates.

The cost of building the infrastructure necessary to facilitate a functioning free market system and the great potential for corruption and abuse to occur within those markets counsel against moving forward in this direction. Meanwhile, current trends suggest that staying the course and leaving the anti-speculation doctrine unchanged will do nothing to prevent outside investors from buying up water rights in Colorado's rural communities. The only option that will truly and feasibly help balance the state's diverse interests—from the Western Slope to the Front Range—is to strengthen the anti-speculation doctrine so that decisions about Colorado's water remain in the hands of Coloradans themselves.

The state legislature was therefore correct to convene the anti-speculation work group to study options for strengthening the anti-speculation doctrine. Unfortunately, despite the plethora of solutions that the work group generated and analyzed, there is currently no traction on enacting any concepts that achieve consensus on the

path forward. Ultimately, decision-makers must prioritize a solution that balances the tension between protecting Colorado's access to water and preserving individuals' rights to freely sell their property to whomever they choose.

The solution that best addresses this tension is establishing a right of first refusal for the purchase of water rights that benefit the public. Importantly, this solution would not infringe on the rights of farmers to sell their water, a requirement given the political failures of recent efforts to address anti-speculation due to these concerns. While establishing a consistent funding source to feasibly purchase water rights remains an issue, combining a right of first refusal with a tax to raise funds for water rights purchases could provide a foundation to build upon. Of course, lawmakers must also continue outreach to determine whether concerns surrounding sales of water rights are subsiding. If fears of speculation begin to outweigh these concerns, other options advanced by the work group and discussed in this Note may become politically viable and should be considered as options to combat investment speculation in the future.

The problems presented by water management in the American West and beyond have the potential to become one of the defining issues of the twenty-first century. While Australia has presented one path forward, Colorado still has the opportunity to move in another direction that balances the nuances of the state's history and culture more sustainably, consciously, and effectively. Regardless of how the state legislature ultimately addresses this problem, the responsible choice to strengthen the anti-speculation doctrine offers hope that the West will continue to offer the same promise to all stakeholders for the foreseeable future.

