

# [***ARTICLES: A SOCIAL FUNCTION OF WATER: HOW COLORADO'S DOCTRINE OF PRIOR APPROPRIATION CAN PREPARE FOR THE FUTURE BY RETURNING TO ITS HEADWATERS***](https://advance.lexis.com/api/document?collection=analytical-materials&id=urn:contentItem:69X2-N041-F0R8-C1S5-00000-00&context=1516831)

Fall, 2023

**Reporter**

26 U. Denv. Water L. Rev. 105 \*

**Length:** 18577 words

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**Highlight**

Recent years have seen an increase in private investment in water by large investment firms across ***Colorado***. This has led to a rise in speculation and a move towards privatization of ***Colorado***'s already scarce water resources, prompting many to express fears over the future considering the threat that Climate Change poses to water supply. In response, this paper looks back towards the origins of the Doctrine of Prior Appropriation for inspiration about its future. In order to combat the threat of speculation and monopolization, ***Colorado*** should adopt a constitutional requirement that water must observe its Social Function: a theory of progressive property that consistently and concisely maps onto the Doctrine of Prior Appropriation that would ensure a more secure future for all of ***Colorado***'s residents.

**Text**

**[\*106]**

**INTRODUCTION**

[[1]](#footnote-2)1

Though water is fundamentally an aspect of the natural world, ***Colorado***'s Doctrine of Prior Appropriation ("DPA") treats water as a property right.[[2]](#footnote-3)2 In the American legal system, the right to property ownership is no better expressed than through the right of exclusion: when you own property, you own it to the exclusion of all others who may benefit from it.[[3]](#footnote-4)3

This is largely true for natural resources. Mineral rights, oil rights, logging, and soil are all included within this paradigm of exclusion. However, water's place within this system is a unique exception to the rule of exclusion. Especially in the American West, the ownership of water as property comes with a plethora of restrictions on the right to exclude. Obligations to downstream users, beneficial use requirements, priority, and limitations on quantity all throw into question the paradigm of exclusive ownership of property.

This is precisely what the founders of Western water law had in mind. As David Schorr argued in *The* ***Colorado*** *Doctrine*, the miners who promulgated the Doctrine of Prior Appropriation cared little about exclusion or any other element within the bundle of sticks that makes up traditional American property law.[[4]](#footnote-5)4 Instead, they eschewed efficiency for a more populist, agrarian worldview that was widespread in the American West: that of widespread distribution and anti-monopolist ideology.[[5]](#footnote-6)5 Schorr writes that the central purpose of the creation of ***Colorado***'s DPA was the abolition of an injustice created by a small group of landowners using riparian rights to engage in resource capture.[[6]](#footnote-7)6 The earliest**[\*107]**appropriators replaced the "rule of capture" with a rule "that gave equal opportunity to all to share in the resource[]" the DPA thus represents this promise of access to property in the form of water rights.[[7]](#footnote-8)7

***Colorado*** is now facing severe drought, water shortage, and a constantly growing population. Every year the demand for water grows as more people move to ***Colorado*** and its Front Range.[[8]](#footnote-9)8 This is such a concern that some developers are using ownership of water rights as an advertising tactic to sell homes others are proposing massive transfers of water from the San Luis Valley to Douglas County, while simultaneously private investors are scrambling to buy water rights.[[9]](#footnote-10)9 Yet in the face of all these problems, ***Colorado***'s water industry has lost sight of its founders' goals. Rather than distributive justice, ***Colorado***'s concerns center on an increasing potential for speculation and commodification.[[10]](#footnote-11)10 As a result, we are less equipped to deal with the challenges climate change will bring to ***Colorado***'s water systems than ever before.

To better prepare for a rapidly changing water-climate, the Doctrine of Prior Appropriation must go back to its now-withered roots. This paper poses for discussion that the way forward is by returning to the Doctrine's origins: a concern for distributive justice and anti-monopolist ideology.[[11]](#footnote-12)11 However, this paper does not advocate for a strict regression to the past.[[12]](#footnote-13)12 Instead, it looks to modern progressive theories of property law and principles of Critical Environmental Justice that are consistent with the American West's conception of how water should be managed for guidance.

Part I walks through the Doctrine of Prior Appropriation, including its history, its ideological foundations, and important foundational principles to keep in mind. It also addresses alternative economic theories of water allocation and discusses emerging problems in water law and water allocation in ***Colorado***. Parts II and III establish a framework of two harmonious theories. Part II lays the foundations of the Social Function of Property as a framework for improving water allocation. Part III turns to environmental and water justice considerations as an analytical tool. Finally, Part IV discusses how ***Colorado* [\*108]**could implement these frameworks. In so doing, this article ultimately illustrates how the Social Function of Water would make tangible improvements to ***Colorado***'s water landscape.

**PART I.A. THE ORIGINS OF PRIOR APPROPRIATION**

The Doctrine of Prior Appropriation is hailed by many as a sterling example of property law that prioritizes the efficient use of a scarce and important natural resource.[[13]](#footnote-14)13 It is a doctrine largely misunderstood to express a "preference for private property, for privatization of the public domain, and facilitation of markets in natural resources…."[[14]](#footnote-15)14 However, as discussed in David Schorr's book, *The* ***Colorado*** *Doctrine*, this understanding largely ignores the doctrine's history of distributive priorities over efficiency and the anti-capitalist, anti-monopolist intentions of the doctrine's foundations "directed against the potential concentration of water wealth in the hands of those who could afford to buy up the riparian lands of the arid-country streams."[[15]](#footnote-16)15

Though many rightly point to *Coffin v. Left Hand Ditch* ***Co****.* as the origin of the doctrine, its ideological roots are found far earlier in ***Colorado*** history within the early miner's laws.[[16]](#footnote-17)16 For example, the mining regulations of Gregory Diggings in 1859 make clear that where two parties wish to use the same water, each party shall not use more than one half.[[17]](#footnote-18)17 Strategies such as limiting accumulation of wealth through appropriation, maximizing the number of people who could stake a claim, and implementing use requirements while penalizing waste all point to widespread distribution among miners as the doctrine's primary goal.[[18]](#footnote-19)18 Western water law's foundational thought lies in what Schorr describes as "Radical Lockeanism," an ideology dedicated to widespread distribution of water rights among actual users that locked water users in constant struggle against commodifying and speculative interests.[[19]](#footnote-20)19

Though priority is a key feature of the doctrine, it is arguably more defined by its beneficial use requirement.[[20]](#footnote-21)20 The beneficial use requirement ensures that water owned will be put to production-and, therefore, that no one can hold it for speculative resale later down the line.[[21]](#footnote-22)21 Early speculators discouraged commodification of water by exempting individually owned ditches from taxation, setting maximum prices, and preventing refusal of sale to willing buyers.[[22]](#footnote-23)22

**[\*109]**Legislators zealously agitated against commodifying forces at the ***Colorado*** Constitutional Convention, expressing fears that "[i]f the capitalists get a hold of the water, they will have the people by the throat."[[23]](#footnote-24)23 One leader of ***Colorado***'s then-existent Granger Party stated that the stream should be under the control of the sovereign people.[[24]](#footnote-25)24 The ***Colorado*** Constitution ultimately codified this ideal:

The water of every natural stream, not heretofore appropriated, within the state of ***Colorado***, is hereby declared to be the property of the public, and the same is dedicated to the use of the people of the state, subject to appropriation as hereinafter provided.[[25]](#footnote-26)25

Thus, in formulating the Constitution's approach to water rights, ***Colorado***'s original appropriators prioritized equitable distribution over any concerns of efficiency.[[26]](#footnote-27)26 Indeed, the Doctrine is notorious among its critics for encouraging inefficient uses for the sake of keeping a right under the beneficial use requirement.[[27]](#footnote-28)27 Its lack of free-market mechanisms and barriers to transfer are frequently criticized as holding the Doctrine back.[[28]](#footnote-29)28 Yet the Doctrine's inefficiencies were deliberate trade-offs for what the original appropriators valued: widespread distribution and the prevention of commodification or speculation by powerful actors such as corporations.[[29]](#footnote-30)29

**B. Market Theory and Economic Efficiency**

Before diving into the theory of how to return to the values of the original appropriators, it is important to address those criticisms of its lack of free market mechanics. Many believe that the shortages seen on the ***Colorado*** ***River*** can be solved through private water markets.[[30]](#footnote-31)30 Proponents of water markets believe that incentivizing private investment will discourage wasteful uses of water and abate the threat that climate change poses, all while allowing economic growth for the firms investing in the open market.[[31]](#footnote-32)31

More specifically, some proponents argue that water markets would correct the economic inefficiencies that the DPA presents.[[32]](#footnote-33)32 Defenders of water markets argue that the inefficiencies that are present in the DPA are the result of barriers present in ***Colorado***'s system of water administration.[[33]](#footnote-34)33 For instance, there are barriers to keeping transaction costs low, such as legal fees, litigation,**[\*110]**and the cost of evidentiary showings of historic consumptive use.[[34]](#footnote-35)34 Another identified barrier is a lack of sufficient market scope.[[35]](#footnote-36)35 In addition to identifying barriers to overcome, proponents also suggest steps towards actually creating markets, such as instituting auctions as a pricing mechanism.[[36]](#footnote-37)36 Auctions would lead to more accurate pricing, opening the door to investors to safely and efficiently allocate the resource.[[37]](#footnote-38)37 The anti-speculation doctrine is another barrier that theoretically prevents market efficiency and fair allocation: Charles C. Howe, in his article *Reconciling* ***Colorado*** *Water Law and Economic Efficiency*, argues that allowing for "repackaging" or "bundling" of water rights in a manner that would normally run afoul of the anti-speculation doctrine would more accurately match the need of larger users.[[38]](#footnote-39)38

More distant interests are hoping for this same approach, scaled up. Private investment firms hope to see futures-markets and trading similar to energy markets.[[39]](#footnote-40)39 The argument is that market-based approaches should discourage low-value water uses and promote conservation, that competition will allocate water efficiently, and that the current system is overly cumbersome and discourages commitment from otherwise willing buyers.[[40]](#footnote-41)40

However, market-based solutions are by no means a complete solution. The following quote illustrates one significant issue with establishing an open water market: "[t]o proponents of open markets, water is underpriced and consequently overused."[[41]](#footnote-42)41 Most appropriation rights were granted for free, creating a situation where a would-be seller did not pay for their water in the first place.[[42]](#footnote-43)42 Water isn't just underpriced: there is *no* base price for water.[[43]](#footnote-44)43 This scenario inevitably distorts any price valuation of water as a pure market commodity due to the "endowment effect," where one will normally ask higher prices than they otherwise would have been willing to pay to acquire the commodity in the first place.[[44]](#footnote-45)44

As Janet C. Neuman explains in *Beneficial Use, Waste, and Forfeiture*, this is not to say that water has no value.[[45]](#footnote-46)45 But it does mean that users will be reluctant to sell an asset worth far more in their hands than on the market. There are no base costs to recoup, and any costs associated with developing water infrastructure are more valuable when the water, the infrastructure, and the land are coupled.[[46]](#footnote-47)46 Land values are often tied to water rights, and thus water's value is reflected in real estate markets.[[47]](#footnote-48)47 Other externalities such as culture and social**[\*111]**pressures, like the formation of identity and community, keep water-right holders from selling water, despite the fact that sale may be significantly more profitable than anything the owner could get out of using the right themself.[[48]](#footnote-49)48 Relying purely on market solutions fails to account for those externalities, and thus again the price of water is further skewed from its effectiveness. Between an inability to accurately price water and externalities like culture and the environment, the result is that sellers won't sell, buyers can't buy, and the water stays exactly where it is.

Aside from the impracticability of creating an open market for water rights, there is a cost to such private investment. It turns what is a constitutionally recognized public resource into a commodity: exactly the conception that actual users have fought hard for generations to prevent.[[49]](#footnote-50)49 Profiteering off of a fundamental human need is an outcome out of the nightmares of the founders of the DPA.[[50]](#footnote-51)50 Thus, to remain consistent with the DPA's rejection of market-based solutions, another avenue is needed that can account for various externalities, value differentials, and the messy morality of human needs.

**C. The Years To Come**

***Colorado***'s trend towards commodification is important to discuss for a variety of reasons. Of course, there is the interest of fair and effective water distribution. Maintenance and investment in the Doctrine of Prior Appropriation require a commitment to its distributive roots. An interest in distributive justice and water justice requires critical discussion of these trends as well, and that on its own is worthy of study. Water justice is a major interest of this paper. Water justice and distribution hold a tangible urgency today, when climate change threatens ***Colorado***'s water supply and, therefore, people's access to this vital resource.

Over-appropriation has been in the discourse for decades: concern over shortages, less snowfall, faster snow melt, and overestimation of flow have all contributed to less water and more users drawing water in later months, which exacerbates the already-devastating effects of climate change.[[51]](#footnote-52)51 Climate change will not only affect the quality of life for every Coloradan, but will exacerbate already disproportionate and discriminatory impacts on ***Colorado***'s most vulnerable populations. For example, the state has already ordered San Luis Valley farming communities to reduce groundwater pumping to allow the state to meet its interstate obligations as a result of low flows in the Rio Grande ***River*** basin.[[52]](#footnote-53)52 Indigenous tribes in ***Colorado*** continue to receive less than their full**[\*112]**allotment of water, with the Ute Mountain Ute receiving only around 10% of the water owed to them in 2021 - despite having some of the oldest appropriation dates in the system.[[53]](#footnote-54)53 As drought continues and worsens, impacts on the Tribe will increase, and it will have to exert more money and effort to get its water rights in the first place. In total, issues such as low soil moisture, decreased groundwater recharge, warmer water temperatures, and exacerbated water quality issues will all have devastating impacts on low-income communities and communities of color.[[54]](#footnote-55)54

Climate change will challenge ***Colorado***'s system of prior appropriation in both predictable and unpredictable ways. It will require immense flexibility - breaking from the legal canon - and creativity on the part of water users and water lawyers alike. Climate change will demand much of the prior appropriation system, including uses that are not prescribed and uses not yet conceived of. This flexibility will require changes. Yet the Doctrine of Prior Appropriation does not need to be scrapped. It provides certainty and predictability, as well as a distributive paradigm that is well suited to fit environmental justice needs. Imputing the following framework of a Social Function of Water onto the existing prior appropriation framework would provide the flexibility necessary to adapt and overcome the challenges climate change will bring to ***Colorado***'s water users.

**PART II: A SOCIAL FUNCTION OF WATER**

"Property confers power. It allocates scarce resources that are necessary for human life, development, and dignity. Because of the equal value of each human being, property laws should promote the ability of each person to obtain the material resources necessary for full social and political participation."

- Gregory Alexander[[55]](#footnote-56)55

The Social Function of Water is a framework of water management derived from a theory of property first formulated by Leon Duguit in 1919, known as a "Social Function of Property."[[56]](#footnote-57)56 Adapted from this theory of property, the Social Function of Water holds that due to water's uniquely interconnected and interdependent nature, water users have an obligation to use their rights in ways**[\*113]**that contribute to the common good. As such, a Social Function of Water advocates for overlaying the DPA with community decision making. This section first reviews the history of its underlying theory, the Social Function of Property. It will then discuss the Doctrine of Prior Appropriation's compatibility with the Social Function framework.

**A. The Social Function of Property**

Leon Duguit's theory of the Social Function of Property rests on the argument that the state's authority is derived from the functions it performs, including providing for social needs.[[57]](#footnote-58)57 According to Duguit, a state's protection of private property is justified only in its protection of private property's ability to perform that function.[[58]](#footnote-59)58 What follows from this is that private ownership of property includes an obligation to use property in ways that contribute to the collective or common good.[[59]](#footnote-60)59 This is known as a social obligation norm.[[60]](#footnote-61)60 Traditionally, U.S. property jurisprudence has minimal obligation norms American legal scholars have been pushing back, however, explaining that property ownership does entail obligations to non-owners and to communities as whole entities.[[61]](#footnote-62)61

Today, the Social Function of Property has its home among progressive property theorists. One of progressive property's most notable scholars is Gregory Alexander, who summarized the theory as essentially a rejection of the notion that exclusion is the most important right in the bundle of sticks when compared to other rights such as use and alienation.[[62]](#footnote-63)62 Instead, property serves underlying human values, shaping and reflecting social relationships.[[63]](#footnote-64)63 Alexander cites uses and restrictions on property such as environmental stewardship, civic responsibility, and just distribution, as examples of how the law already limits property to serve social values and needs.[[64]](#footnote-65)64 Alexander further describes how choices about property entitlements are unavoidable, and how rational choice remains possible.[[65]](#footnote-66)65 He elaborates that because (1) property confers power (2) property allocates scarce resources (3) property enables and shapes community life, and (4) every human being has equal value, property laws should both allow each human the ability to obtain material resources needed for full social and political participation, and be established around a framework for social life.[[66]](#footnote-67)66 Hence, a Social Function of property.

Various Latin American legal institutions have implemented the idea of a**[\*114]**Social Function of Property.[[67]](#footnote-68)67 For example, the Mexican, Colombian, and Brazilian constitutions all include a clause enshrining a Social Function of property.[[68]](#footnote-69)68 The Brazilian Constitution, Title II Article 5 section XXIII, states that "[p]roperty shall observe its Social Function."[[69]](#footnote-70)69 The manner in which each respective State has implemented these clauses is instructive for the implementation of a Social Function of Water in ***Colorado***.

In a collection of essays entitled *Take Back the Land! A Social Function of Land and Housing, Resistance and Alternatives*,[[70]](#footnote-71)70 author Leticia Marques Osorio details her analysis of Latin American implementation of the Social Function standard.[[71]](#footnote-72)71 Osorio identifies three characteristics common to the implementations she studied: (1) protection of private property is conditioned on the fulfilment of social interests (2) a Social Function gives rise to positive obligations on states to regulate property rights and (3) local authorities at the state and municipal level are vested with the power to impose limitations and restrictions on private property.[[72]](#footnote-73)72 These conditions will remain important throughout this paper, serving both as a framework for implementation of a Social Function of Water as well as goals to aspire to. Osorio also considers these countries' failures to implement the constitutional Social Function of property.[[73]](#footnote-74)73 The following section will explore Osorio's analysis and values by applying the Social Function of Property theory to the Doctrine of Prior Appropriation, and by interrogating how the DPA can learn from Osorio's and Alexander's work.

**B. Application of the Social Function of Property to Prior Appropriation**

The Social Function of Water, as the framework that applies the Social Function of Property to the Doctrine of Prior Appropriation, must not only aspire towards the previously listed characteristics, but also learn from the failures of implementations of a Social Function of Property. For example, Osorio identifies that in Brazil, a major limitation of implementing a Social Function of Property is that the protection of private property and exclusive access is simply**[\*115]**stronger than any Social Function.[[74]](#footnote-75)74 This stems from a lack of clear statements of implementation in municipal master plans, silence on goals and timeframes, and importantly, a lack of social participation in decision making and urban planning.[[75]](#footnote-76)75 This paper now turns to these issues.

Implementing the Social Function of Water in alignment with these values is not only possible but consistent with the Doctrine of Prior Appropriation. Unlike traditional American property jurisprudence, the Doctrine of Prior Appropriation is subject to a variety of limitations that were set up to allow water to fulfill various Social Functions. An easy example is the no-injury rule, which states that "[w]henever one seeks to change the point of diversion, place, purpose, or time of using a water right, special protection against harm to other appropriators apply."[[76]](#footnote-77)76 This is compatible with Duguit's original conception of a Social Function: water, as a property right, cannot exist in the liberal conception of property as an isolated individualist right.[[77]](#footnote-78)77 Humans "are deeply interconnected beings that need each other……I]nterdependence is a key feature of social reality."[[78]](#footnote-79)78 All the more so with water, where hydrological systems create the perfect network of social responsibility. The no-injury rule recognizes this reality and seeks to prevent an individualist use of water from harming the interconnected and interdependent social network of water users.

The Doctrine of Prior Appropriation is also compatible with a Social Function of Water through the beneficial use requirement. Traditionally, the Doctrine requires three elements for a valid appropriation of water: (1) intent to divert the water, (2) actual diversion, and (3) application of the diversion to a beneficial use.[[79]](#footnote-80)79 Of the three, beneficial use - the "basis, the measure, and the limit" of a water right under the DPA - is widely viewed as the most vital.[[80]](#footnote-81)80 Initially, the range of what courts were willing to consider a beneficial use was rather small.[[81]](#footnote-82)81 However, courts now consider a range of uses to be beneficial, including anything from traditional domestic use (i.e., drinking water, cleaning) to industrial use in factories all the way to recreation and in-stream flow rights (though the latter two are limited to local governments and the ***Colorado*** Water Conservation Board respectively).[[82]](#footnote-83)82 This is consistent with Duguit's conception that property should explicitly serve its community.[[83]](#footnote-84)83

The original appropriators were heavily committed to what David Schorr**[\*116]**calls "Radical Lockeanism,"[[84]](#footnote-85)84 an ideology dedicated to wide distribution of private property "as a bulwark of liberty and human dignity."[[85]](#footnote-86)85 Though Radical Lockeanism was not explicitly opposed to collective or state ownership, its primary focus was on struggles against corporate capitalism and speculative investment: it was anti-monopolist more than anything else.[[86]](#footnote-87)86 Prior appropriation's beneficial use requirement and the Social Function of Property both derive from this emphasis on distribution to actual water users.[[87]](#footnote-88)87 By doing away with the East's riparian system, the original appropriators also sought to abolish exclusivity - a major barrier Osorio identified to the implementation of a Social Function doctrine.[[88]](#footnote-89)88 The original appropriators conceptualized exclusivity as a hallmark of riparianism that would have allowed for speculation through centralized ownership by those able to buy water rights en masse where others were unable.[[89]](#footnote-90)89

Through the DPA's compatibility with the Social Function Doctrine, larger patterns start to emerge. Whereas the Social Function doctrine aims to create equity within communities, the environmental justice movement centers issues of justice. While the problem is global in nature, it is within the localized contexts and dynamics of water justice that the Social Function doctrine can truly merge with the pursuit of justice to create better outcomes for Coloradans.[[90]](#footnote-91)90 The following section will tease out those inseparable connections between global environmental justice and localized issues of water justice. It will first establish the groundwork of environmental justice broadly. Section III.A will then apply environmental justice principles to issues of water justice. Section III.B will then engage in the work of merging water justice issues with the Social Function doctrine.

**PART III. ENVIRONMENTAL JUSTICE**

Though commonly conceived of as a property right, water is ultimately a fundamental aspect of both the natural world and the human environment. Implementing a Social Function of Water is, at its core, a proposal in response to the challenges climate change poses to the human environment. As such, a Social Function of Water necessarily implicates environmentalism. Environmentalism, in turn, implicates the need to consider and implement frameworks of environmental justice.

There are many ideas of what environmental justice is. Federal Executive Order 12898 ("EO") discusses EJ in the context of "disproportionately high and**[\*117]**adverse human health or environmental effects of [government] programs, policies, and activities on minority populations and low-income populations."[[91]](#footnote-92)91 Others conceive of environmental justice as a social movement led by those disproportionately impacted.[[92]](#footnote-93)92 Disproportionate impacts fall largely on people of color and low-income communities.[[93]](#footnote-94)93 Black and Latinx communities are often impacted through excessive and disproportionate toxic waste siting, indigenous peoples are impacted through genocide and land theft, and low-income communities are affected by all of the above.[[94]](#footnote-95)94 Furthermore, it is important to note that none of these identities exist in a vacuum and will often intersect with each other. Environmental justice, therefore, should also be defined and bound by those participating in its movement.[[95]](#footnote-96)95

Finally, "critical" environmental justice ("CEJ") seeks to fill in blanks which may have been left out by traditional EJ analyses. It adds a four-pillared analysis onto traditional EJ frameworks that are as follows: (1) intersectionality, or the degree to which scholars emphasize one or more social categories of difference (2) scale, including both scale of consequence as well as impact (3) entrenched power, or how the embeddedness of social inequalities affect the way that we confront power rather than embrace it and (4) the indispensability of human and nonhuman populations.[[96]](#footnote-97)96

Environmental injustice manifests in many ways, although it is traditionally thought of through the disproportionate impacts of facility siting.[[97]](#footnote-98)97 Whether the facilities are waste incinerators, refineries, or factories, people of color and low-income communities are often the primary target for siting those facilities.[[98]](#footnote-99)98 Thus, those communities also face the worst impacts of that site.[[99]](#footnote-100)99 This type of distributive injustice was identified early in the movement's history by the**[\*118]**United Church of Christ's study *Toxic Wastes and Race in the United States*.[[100]](#footnote-101)100 One of this study's key findings is that race was the most significant factor in predicting the likelihood of living within proximity of one of these facilities.[[101]](#footnote-102)101

However, there are a variety of environmental injustices that move beyond the distributive paradigm. Dina Gilio-Whitaker argues that collapsing diverse communities' experiences with distributional environmental injustice into a single experience could never account for all the ways in which environmental injustice impacts people, environments, and communities.[[102]](#footnote-103)102 Disruption of native foodways, military occupation of Hawai'i, and land theft are all examples in which the distributive paradigm fails to account for the diverse experiences of environmental injustices various communities of color have faced.[[103]](#footnote-104)103 Water injustice largely falls into this latter category, though there are distributive siting elements as well. Even within the context of water justice specifically, injustices surrounding water quality issues are widely understood, whereas the experience of injustice within the prior appropriation system may be more niche.[[104]](#footnote-105)104 The Social Function of Water seeks to address these non-traditional environmental injustices in harmony with principles of environmental justice.

The last piece of the environmental justice framework is the three models Luke Cole first proposed: the professional, participatory, and power models.[[105]](#footnote-106)105 The professional model is "the idea that the attorney is an expert and will best represent a group's interests."[[106]](#footnote-107)106 This often creates a power imbalance between the attorney and the community characterized by the community relying heavily on the attorney's judgment.[[107]](#footnote-108)107 In water law, this model often applies readily, as lawyers are involved in most transactions and adjudications.[[108]](#footnote-109)108 This remains true despite the fact that clients often know a significant amount about their own water rights, because navigating their right in a water court docket requires an entirely different realm of knowledge.[[109]](#footnote-110)109

Next is the participatory model, which seeks to maximize community involvement.[[110]](#footnote-111)110 This is the model under which a Social Function requirement**[\*119]**would interact with environmental and water justice. However, the key difference is in the type of participation that occurs. Traditionally, the participatory model involves participation in an agency setting,[[111]](#footnote-112)111 where notice and comment requirements, scoping meetings, and other sorts of agency participation avenues are often the main participatory venues.[[112]](#footnote-113)112

In ***Colorado*** water law, the participatory model is present, although complicated. Though ***Colorado*** has an agency in charge of administering water rights, there is little opportunity with that agency for participation via notice and comment in addition to limited administrative control.[[113]](#footnote-114)113 When a water right is in a ***Colorado*** water court, anyone is allowed to file opposition to whatever application is before that court.[[114]](#footnote-115)114 Thus, when analyzing ***Colorado*** water law through the lens of the participatory model, the vital question revolves around the water court system and, much like other environmental justice issues, there is serious doubt around the effectiveness of that opportunity to participate. Just because anyone can theoretically become an opposer does not mean that they can engage in meaningful participation in the water adjudication process - water court is complicated and very difficult to navigate without expertise.[[115]](#footnote-116)115

Finally, there is the power model.[[116]](#footnote-117)116 The power model recognizes the systemic issues stacked against affected communities and asserts that no participation within the system itself will provide a solution.[[117]](#footnote-118)117 Often, groups participating under the power model try to actively influence the decision from the moment they learn of the process.[[118]](#footnote-119)118 Implementing this model involves methods such as protest and education to achieve its goals.[[119]](#footnote-120)119 In the world of water law, and in the fight against the commodification of water, affected communities regularly employ this process. For example, Protect San Luis Valley Water, which is a coalition of community members and organizations fighting against Renewable Water Resources' attempt to purchase 22,000 acre-feet of water out of the San Luis Valley.[[120]](#footnote-121)120 Protect San Luis Valley Water is a prime example of issues in the specific field of water justice.

**[\*120] A. Water Justice Issues**

One can best understand issues of water justice within the doctrine of prior appropriation through the lens of environmental justice. Water justice is simply understood as a more specific denomination of environmental justice. It concerns not only issues of water quality, but also inequitable distribution of water resources in a manner that intersects with other categories of discrimination. Though there may be no toxic waste site poisoning a community, nor the same kind of regulatory processes from which the government can exclude residents, many of the same patterns of injustice and exploitation exist within the DPA.

The Renewable Water Resources' ("RWR") recent attempt to purchase 22,000 acre-feet ("af") of groundwater out of the San Luis Valley's closed aquifer provides a perfect example of water injustice in ***Colorado***'s system.[[121]](#footnote-122)121 RWR is a private water developer that proposed to solve Douglas County's water demand issue.[[122]](#footnote-123)122 For years, Douglas County has been over-dependent on the Denver Aquifer and needs supplementary water supplies to keep up with its municipal growth.[[123]](#footnote-124)123 RWR proposed to purchase 22,000 af in the San Luis Valley confined aquifer to sell to Douglas County.[[124]](#footnote-125)124 The plan was widely criticized by advocates local to the Valley, activists throughout the state, and ***Colorado*** politicians.[[125]](#footnote-126)125 Many saw the proposal as a traditional "buy-and-dry" scheme that would dry up the San Luis Valley at a time when it was already struggling to meet its own water demand.[[126]](#footnote-127)126

At the time of writing, this project has seen great flux. In May 2022, Douglas County voted against the proposal.[[127]](#footnote-128)127 The following September, it seemed as if the project was again on the table.[[128]](#footnote-129)128 Whether the project ultimately succeeds or not, the facts of this case provide a useful illustration of water justice issues in ***Colorado***.

This situation is exemplary of traditional environmental justice issues, superimposed onto a water law context. The San Luis Valley is largely composed of agricultural workers, a traditionally low-income group.[[129]](#footnote-130)129 The San Luis Valley**[\*121]**is also home to a considerable Spanish-speaking population who participates in the valley's agricultural community.[[130]](#footnote-131)130 Then, you have the large outside group, RWR, which is attempting to take advantage of the community's relative lack of supposed power over the way its resources are used.[[131]](#footnote-132)131 This overall pattern is a hallmark of modern environmental injustice.[[132]](#footnote-133)132 The lack of agency a minority community has over itself links the San Luis Valley with communities across the country in similar positions.

The proposed RWR closed basin purchase also reflects the previously discussed critical approach to environmental justice, or CEJ.[[133]](#footnote-134)133 As discussed above, the importance of an intersectional understanding (one of the pillars of environmental justice) is readily applicable to this situation. In terms of measure, the size of the two actors reflects the inequal scales of power and the inequal scales of impact. The second two pillars are addressed below: it is first important to understand how RWR's proposal reflects broader trends of environmental injustice.

One way in which the RWR case mimics other cases of environmental injustice is through the company's rhetoric of economic assistance.[[134]](#footnote-135)134 RWR is offering the San Luis Valley farming community a one-time $50 million payment for the 22,000 acre-feet it seeks to purchase.[[135]](#footnote-136)135 RWR has said the money could be used for things like entrepreneurial loans, expanding internet access, and could ultimately "help impoverished valley residents..…"[[136]](#footnote-137)136 One of the most famous national examples of this same type of posturing is the case of Cancer Alley along the Mississippi ***River***.[[137]](#footnote-138)137 There, the predominantly African American community of Convent, Louisiana has one of the highest number of industrial facilities in the country - as well as one of the highest unemployment rates.[[138]](#footnote-139)138 When Shintech Corporation proposed to build another plant in the community, it promised community members that the plant would provide jobs**[\*122]**and foster economic development.[[139]](#footnote-140)139 However, this rarely pans out: the plant ultimately hired "few, if any, local residents" despite the fact that the Convent community would exclusively bear the impact of the facility.[[140]](#footnote-141)140 This pattern of powerful developers offering employment opportunities, money directed towards communities, and subsequent denial of those opportunities is called "environmental extortion."[[141]](#footnote-142)141

Residents within the San Luis Valley see directly through this.[[142]](#footnote-143)142 Residents and ranchers have pointed out that the water the Valley would need to retire to fulfill RWR's annual amount would amount to at least a $53 million loss *annually*.[[143]](#footnote-144)143 Protect San Luis Valley Water cites the economic contribution that agriculture provides to its residents as reason alone to reject the plan.[[144]](#footnote-145)144 The massive economic blow that the loss of water would bring to the agricultural community would far outweigh the small one-time payment.[[145]](#footnote-146)145

With this context, it is easier to understand how this case study fits within the second two pillars of CEJ. RWR's proposal is exemplary of entrenched power because it pits inter-basin transfers, large-scale water development, and corporate interests in the security of investments against the limited powers of a much smaller community. Entrenched power as a pillar of CEJ is also explored in the following few sections. Finally, RWR's proposal also highlights the perceived expendability of certain water-using communities. The proposal views the loss of the communities' water resources as expendable in order to fulfill the company's larger goals. The reality of human indispensability in conjunction with the rest of an environmental justice-oriented framework demonstrates precisely how unsustainable these patterns of injustice truly are.

It is not just the previously mentioned environmental extortion that mirrors traditional environmental justice issues. The problem of lack of community agency is prevalent in every major environmental justice issue as well.[[146]](#footnote-147)146 Though under the proposal, RWR would pump water from their own plot of land, the water would come from the San Luis Valley's deep, confined aquifer system. Contrary to RWR's claims, the aquifer is not renewable on human time scales, and tapping it to the proposed extent would compromise one of the Valley's few remaining water resources. While it is clear that Valley residents are fighting for agency over their own resources, issues of communication and participatory opportunities are regularly denied to residents of the Valley. Because there is no agency involvement, and given that RWR would be pumping the water from their own land, there is little opportunity for community input in any actual decision.[[147]](#footnote-148)147 Had the deal gone through, it would have been heard by a judge in**[\*123]**the Division 3 Water Court thus, there were no real pathways for the community to become involved outside of the Professional Model.[[148]](#footnote-149)148

**B. Social Function as Environmental Justice**

Implementing a Social Function into the Doctrine of Prior Appropriation, as discussed previously, is a way in which ***Colorado***'s system of water adjudication can better prepare for and manage rapidly changing conditions and ward off the threat of commodification. However, a Social Function of Water cannot be the solution if it does not implement an environmental and water justice-oriented framework. This section discusses how well the Social Function doctrine maps onto the principles of environmental justice and how ***Colorado*** can implement a Social Function requirement.

For this analysis, Gregory Alexander's Statement of Progressive Property is again relevant as the underlying foundation for the Social Function Theory.[[149]](#footnote-150)149 Progressive Property, and therefore the Social Function of Property, derives from a rejection of exclusion as the defining feature of property law.[[150]](#footnote-151)150 Alexander, Osorio, Duguit, and other progressive property thinkers assert that serving underlying human values and reflecting social relationships is the primary duty of property.[[151]](#footnote-152)151 Because (1) property confers power (2) property allocates scarce resources (3) property enables and shapes community life and (4) every human being has equal value, property laws should allow each human the ability to obtain material resources needed for full social and political participation and should be established around a framework for social life.[[152]](#footnote-153)152

There is no conflict between these values and the principles of environmental justice in fact, there is a considerable cross-over in the philosophical basis of both frameworks. As a clear example, Alexander's fourth foundational element listed above has nearly the same language as principle number 5 of the Principles of Environmental Justice.[[153]](#footnote-154)153 Both Alexander and the People of Color Environmental Leadership Summit ("EJ Summit") see a fundamental right to self-determination as core values in their respective philosophies.[[154]](#footnote-155)154 For Alexander, property should be allocated in a way that enables such self-determination.[[155]](#footnote-156)155 For the EJ Summit, self-determination is a step towards liberation.[[156]](#footnote-157)156 Thus, the two work in accord. A Social Function of Property, in creating such self-determination, promotes and enhances the liberation that Environmental Justice**[\*124]**seeks to attain.

Yet it is not a one-way street. Environmental Justice is also necessary for the Social Function to work properly. Leticia Marques Osorio, in her analysis of the failings of Brazilian implementation of a Social Function of Property, found that one major barrier is a complete lack of social participation in decision making and urban planning.[[157]](#footnote-158)157 Lack of participation is one of the most common and ubiquitous issues of environmental injustice.[[158]](#footnote-159)158 Communities identified for toxic facilities or other environmental harms are frequently not told of the decision that will affect their health and happiness until it is well underway.[[159]](#footnote-160)159 Environmental justice is partly the fight to change these processes: to get communities involved in their own fate from the beginning. As Pellow explains in *What is Critical Environmental Justice*, "the dream of deliberative democracy is made difficult by the realities of structural inequality that shape and limit ordinary people's access to the deliberative table."[[160]](#footnote-161)160 Agency over a community's fate is a core value of environmental justice, and achieving it would lay the foundation for the Social Function framework's success.

Protect San Luis Valley Water is continually relevant throughout every aspect of this framework.[[161]](#footnote-162)161 The community organization is a coalition of local farmers, community members, as well as affiliated organizations all concerned with the outcome of this decision that involves the very fundamentals of their constituents' lives.[[162]](#footnote-163)162 In most case studies of environmental justice, such a community organization will pop up as a response to the threat of stolen agency. As Protect San Luis Valley Water states it, "[t]he San Luis Valley community has a long history and proven track record of banding together to fight projects that would be detrimental to the community."[[163]](#footnote-164)163

Similarly, in Luke Cole and Sheila Foster's book *From the Ground Up*, the authors detail the story of a Chester, Pennsylvania community's fight against Chester Solid Waste Associates, when it attempted to site another toxic waste processing facility in the town.[[164]](#footnote-165)164 In response, residents of Chester "banded together to fight back," creating the community group Chester Residents Concerned about Quality of Life ("CRCQL").[[165]](#footnote-166)165 Protect San Luis Valley Water and CRCQL, though halfway across the country from each other and involved in very different environmental issues, are united in solidarity with each other. Both organizations were founded to fight environmental injustice, and both represent the hope and power that communities can form in the face of adversity.

This common environmental justice pattern of forming community power groups is also what the Social Function seeks to attain: agency and benefit for a**[\*125]**community. Where environmental justice aims to secure the human environment for the benefit of a community, the Social Function doctrine does the same with property: both seek to check and limit private interests for the sake of public health, wellness, and agency. This pattern also reflects the multi-scalar pillar of CEJ that can elevate the environmental justice analysis beyond the question of agency. Understanding community power groups as functioning on both a local, basin-wide, and statewide scale illustrates the importance of involving communities at every level of impact. The cases of Protect San Luis Valley Water and CRCQL illustrate how communities go about achieving this goal. They both reflect the two frameworks' similarities and are also instructive of how to move forward.

**PART IV: IMPLEMENTATION**

The specter of commodification and privatization of Coloradan water resources demands a solution. A Social Function of Water, an environmentally just and equitable framework that is consistent with the Doctrine of Prior Appropriation, could fill this need. Beyond the establishment of background and frameworks, there remain a few important but unanswered questions. *What* will a functioning definition of a Social Function look like, and who gets to define the parameters? *How* would a Social Function of Water prevent harm to communities using an increasingly commodified resource? This section seeks to answer these critical questions of implementation.

However, the first issue to resolve is *where* a Social Function will fit into ***Colorado***'s legal regime. Inspired by the previously cited Brazilian constitution, ***Colorado*** should consider instituting a constitutional requirement that "water must observe its social function," along with the already constitutional public ownership provision.[[166]](#footnote-167)166 A constitutional change such as this is no easy feat. Nonetheless, Article XVI of the current constitution is compatible with a Social Function mandate.[[167]](#footnote-168)167 Its provision dedicating the use of water to the public is already contributing to water's Social Function, and provides the flexibility needed to easily integrate a Social Function imperative.[[168]](#footnote-169)168

The following sections will first differentiate the Social Function of Water from the Public Trust Doctrine. It will then review ***Colorado***'s Roundtable structure as a method of implementation. This idea rests on appropriating the Basin Roundtable structure from its current form and decentralizing it to empower community control. It will then discuss how other water institutions in ***Colorado***, such as the ***Colorado*** Water Conservation Board and Water Conservancy Districts, could potentially interact with the Social Function of Water. Finally, this section will conclude with further questions about the Social Function of Water framework.

**A. The Public Trust Doctrine**

Before moving into issues of Environmental Justice, this section will briefly**[\*126]**distinguish the Social Function of Property from the public trust doctrine ("PTD"). The PTD, stemming from English Common Law, is the principle that the states retain title to the submerged lands underlying navigable waters.[[169]](#footnote-170)169 There has long been conflict in ***Colorado*** between advocates for the PTD and the Doctrine of Prior Appropriation because ***Colorado***'s constitutional guarantee that all waters are open to appropriation conflicts with the PTD's reservation of navigable waters for the state.[[170]](#footnote-171)170 Though advocates of the PTD argue that the PTD already limits ***Colorado***'s constitutional guarantee, the PTD has never been fully implemented in the state.[[171]](#footnote-172)171 When addressing an initiative that would have implemented a public trust doctrine in ***Colorado***, Justice Hobbs described the PTD as "a nuclear bomb on ***Colorado*** water rights."[[172]](#footnote-173)172 Justice Hobbs elaborated, stating that implementation of the PTD in ***Colorado*** would "subordinate all existing water rights in ***Colorado***… to a newly created dominant water estate," vest public possessory rights to beds and streams, and "vest a recreational easement… [to] all private property in ***Colorado***" with water on it.[[173]](#footnote-174)173

As such, the distinction between a Social Function of Water and the PTD is vitally important. The Public Trust Doctrine, in advocating for public *ownership* of navigable stream beds, is distinguishable from the Social Function of Water by virtue of the principle of ownership itself. Implementing a Social Function of Water in ***Colorado*** does not mean giving ownership of water rights to each water-using community. Instead, it advocates for the maintenance of water rights as they currently exist. Where the public comes in under a Social Function is by allowing communities to control the restrictions placed on private water rights owners. In fact, these restrictions that a Social Function would impose on appropriators already exist[[174]](#footnote-175)174 It is merely the scope of those restrictions that each local community would deliberate and decide together. There is no public ownership involved: merely the localization of use regulations.

**B. Roundtables**

Implementing a Social Function of Water in ***Colorado*** will require a great degree of defining terms, enforcement strategies, and community organization. After all, the purpose of the Social Function doctrine is to ensure that property is fulfilling its ultimate purpose: providing each person in a community with the full means of social and political participation.[[175]](#footnote-176)175 In other words, it seeks to grant agency to communities of water users. To be clear, though water users are important and primary members of water-using communities, they are not the only**[\*127]**community members affected by water law. Water is integral to life itself, and the majority of Americans in the West feel strongly about water as a topic.[[176]](#footnote-177)176 For example, in ***Colorado***, 80% of polled respondents believe that water conservation should come from current supplies, as opposed to only 11% that believe water should be diverted from less populated areas.[[177]](#footnote-178)177 This is the type of decision-making that should be conducted as full communities. As such, a Social Function of Water should be defined by the social communities that both use and are affected by the water.

Proposals of how to better improve water administration in the West have been circling in discourse for decades. The standard line is that greater agency involvement, proactive enforcement of beneficial use and no-waste principles, and a judicial public interest standard is the most sure-fire way to improve water administration and create greater efficiency in the West's use of water.[[178]](#footnote-179)178 However, these approaches ultimately require a degree of separation between the user and the administrator, who "might feel that in order to make" appropriate decisions concerning that user's water, they must "become expert in whatever the water user's business [is] and then tell the user how to run the operation."[[179]](#footnote-180)179 Instead, the communities that benefit from the resource should have control over how a Social Function is implemented. There is already a framework for this, albeit on a larger scale.

In 2005, ***Colorado*** instituted a mechanism known as Basin Roundtables.[[180]](#footnote-181)180 These organizations represent each of ***Colorado***'s eight water basin regions (plus the Denver Metro) and are designed to handle both intra-basin and inter-basin relations and water management issues.[[181]](#footnote-182)181 As an example, the Draft Supplemental Basin Implementation Plan Guidance listed conservation strategies as a goal for Roundtables and established measurable outcomes, like publicly available conservation information.[[182]](#footnote-183)182 Education is a major theme and overarching goal of the Roundtable process, and the most recent (although now outdated) Basin Roundtable Education Survey seemed to indicate that the program is having some success.[[183]](#footnote-184)183 Issues such as ***Colorado***'s future water needs reported**[\*128]**high levels of knowledge among those surveyed.[[184]](#footnote-185)184 The Roundtable organizations aim to broaden the range of stakeholders who are actively participating in ***Colorado***'s water decisions.[[185]](#footnote-186)185 The roundtables also try to create community and citizen involvement.[[186]](#footnote-187)186 They were created ultimately to ensure that the ***Colorado*** Water Plan ("CWP") is developed in conjunction with each basin's projected municipal, agricultural, recreational, and environmental needs.[[187]](#footnote-188)187

As they currently stand, Basin Roundtables are exemplary of the traditional participatory model of environmental justice.[[188]](#footnote-189)188 The Roundtables explicitly rely on outreach to inform the decision-making process without actually permitting direct participation, much like any notice-and comment requirement would.[[189]](#footnote-190)189 In fact, most respondents to the Basin Roundtable Education Survey reported that the most-used method of public participation is public comments, followed closely by distribution of electronic information.[[190]](#footnote-191)190 From an environmental justice perspective, this is a large step in the right direction. It *does* allow for community input, it engages affected parties, and it otherwise checks all the boxes for a participatory, pluralist approach. However, neither the Roundtables nor the CWP, as they currently stand, allow water to abide by its Social Function: the majority of respondents found that Roundtables were not sufficiently effective at promoting public participation, while a significant number of respondents identified public participation, equal involvement of all stakeholders, and progress towards solutions as pieces of the Roundtable process not working well in their own Roundtable.[[191]](#footnote-192)191

If property enables and shapes community life, a Roundtable representing a group of property-holders (appropriators) made up of representatives hand-picked by state-wide boards, cities, counties, and other political entities may only reflect a portion of the community of water users they claim to represent.[[192]](#footnote-193)192 That is not to say that the Roundtables are not enabling some Social Functions: for instance, they explicitly look to habitat restoration, wildfire protection, and instream flows.[[193]](#footnote-194)193 These are certainly functions of water that enable fulfilment**[\*129]**of social interests and community life.[[194]](#footnote-195)194 What Roundtables lack that would make them a true Social Function-observing entity is the positive obligation of the state to regulate the private right and the ability of local authorities to impose limitations and restrictions on that right.[[195]](#footnote-196)195

One possible implementation of a social-function requirement is to utilize the structure of the Basin Roundtable, but in a decentralized form pursuant to [***Colo.*** *Rev. Stat. §37-75-104(2)(a)(II)(e)*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:61P5-WY01-DYDC-J355-00000-00&context=1516831): establishment of Roundtable subcommittees.[[196]](#footnote-197)196 Subcommittees, with volunteer representatives of various social communities of water users (e.g., Protect San Luis Valley Water), would take the role of Roundtable for each community of users. The Roundtable subcommittees would be responsible for defining the uses of water rights that would enable full social and political participation in the communities' own water resources.[[197]](#footnote-198)197

**1. Roundtables and the Courts**

Such Roundtable subcommittees would still be subject to state common law and water jurisprudence. For instance, no-waste and forfeiture rules, beneficial use requirements, and all other aspects of ***Colorado***'s Doctrine of Prior Appropriation would remain in place. There would be no need to overhaul the current system. Instead, the fundamental decision-making about *how* to apply those laws would be given to the communities themselves. It is a proactive rather than reactive approach.[[198]](#footnote-199)198

The Social Function of Water, with localized Roundtables as a means of participatory governance, are frameworks to layer with the Doctrine of Prior Appropriation. Water adjudications could happen under this system just as they do now. Applicants will still need to demonstrate they meet all the requirements, including beneficial use.[[199]](#footnote-200)199 The main shift under a Social Function framework would be the standard by which courts make findings. For instance, the Court would no longer make findings of beneficial use based on case law, but rather on the beneficial uses decided by the community of which the applicant is a part of (with case law and precedent as a guiding force for those communities). Additionally, the no-injury rule would also remain a constricting force, as it constitutes its own piece of a Social Function of Water.

This would be in line with the original approach of the founders of the Doctrine.[[200]](#footnote-201)200 Ideologically, the original appropriators of water in ***Colorado*** were concerned with *widespread distribution* of water as a property right to protect**[\*130]**against monopolization and speculation.[[201]](#footnote-202)201 The more water users, no matter how small, the better off ***Colorado***'s water adjudication system would be insomuch as having more water users enhances public control.[[202]](#footnote-203)202 It was a movement not concerned with efficiency, but with fairness.[[203]](#footnote-204)203 Local Roundtables would bring the Doctrine back to its roots. Though the question of widespread distribution of ownership is no longer relevant, Roundtables would enable widespread input and consideration in the use of local resources.

**2. The Public Interest Standard**

An easy way to conceptualize the change that a Social Function of Water constitutional requirement would bring is through analogy to the public interest standard. Not to be confused with the Public Trust Doctrine, as detailed above, the Public Interest Standard differentiates itself not as a body of law, but rather as a specific factor courts assess in any decision the court would otherwise make under the current water law regime.[[204]](#footnote-205)204 For example, Wyoming affirms the duty of the state engineer to reject applications that would threaten the public interest.[[205]](#footnote-206)205 A Social Function of Water standard embedded in ***Colorado***'s constitution would function similarly. However, rather than drawing upon statewide public interest norms, courts would draw upon norms derived from communal decision-making with support from state-wide guidance, and the proposed Roundtables would facilitate this process. A similar clause exists in Chapter 2 (Appropriation of Water) of Idaho's Title 42: "`Local public interest' is defined as the interests that the people in the area directly affected by the proposed water use have in the effects of such use on the public water resource."[[206]](#footnote-207)206

Implementing a Social Function of Water would impose a similar standard on ***Colorado*** courts for all water court cases. Under a Social Function of Water, the communities themselves would define their "local public interest." For example, in the previously discussed RWR example, it would be up to the water-using communities within the San Luis Valley to decide what Social Functions apply within the Valley. Furthermore, allowing communities to create their own standards for use in courts bypasses the environmental justice issues present in the professional model of participation: the community is engaged in its own legal interests without the need for professional intervention.[[207]](#footnote-208)207

Importantly, a Social Function is *not* necessarily for the broader public interest. The San Luis Valley community could collectively decide that it *is* beneficial for RWR to follow through on a deal with Douglas County. Yet whatever communities decide falls under the label of Social Function likely has much overlap with uses under the Public Interest standard. What is good for an individual community trends towards being good for the public. Yet under a Social Function of Water, it is still up to each individual water-using community to define that for themselves.

**[\*131] 3. The Division of Water Resources and Enforcement Mechanisms**

The other important piece in enabling Roundtable implementation of a Social Function of Water is enforcement abilities. Indeed, Osorio's third requirement for a Social Function is the local authority to impose limitations and restrictions.[[208]](#footnote-209)208 Within the Doctrine of Prior Appropriation, state statutes generally charge the State and Division Engineers with the enforcement of limits on rights.[[209]](#footnote-210)209 Courts are also involved in enforcing and applying limits through adjudication, during which courts determine, for example, if a given use falls under an accepted beneficial use before issuing a decree for a water right.[[210]](#footnote-211)210 As previously discussed, under a local Roundtable authority structure, the standards that courts would use to make these determinations would stem from the communities themselves. For full implementation of community control over their own water resources, community Roundtables (or some other form of localized control) must also have the ability to enforce their own rules, in line with Osorio's third requirement.[[211]](#footnote-212)211

As such, a similar form of decentralization is found within the Division of Water Resources' ("DWR") enabling statute: "[t]he state engineer has authority to delegate to any other person the obligation to discharge one or more portions of the duties imposed upon him, but no such delegation shall relieve the state engineer of ultimate responsibility for proper and efficient conduct of his office or the duties devolving upon him."[[212]](#footnote-213)212

Most of the duties of the State Engineer's position are both relevant and necessary under a Social Function of Water framework. Yet enforcement of rules and regulations, especially those rules created locally through deliberative and communal decision-making processes, should also be enforced in line with the ethic of a Social Function.[[213]](#footnote-214)213 The State Engineer's supervisory, adjudicative, and other related statutory duties need not dissipate.[[214]](#footnote-215)214 Rather, to promote localized control over localized resources, a Social Function of Water framework would delegate the State Engineer's enforcement duties to a body, such as the local Roundtables, with the ability to engage in rulemaking. Any sort of `local engineer' could even fit within the local Roundtable system.

**4. Definitions**

One problem with a pure Social Function of Property framework is the potential for conflict among the plethora of uses that facilitate community life. In the same way that Alexander and Osorio's progressive property theory serves to update Duguit's ideas for a modern time, so too should implementation of**[\*132]**statewide standards update the Social Function framework by restricting communities' choice of use.[[215]](#footnote-216)215

Other aspects of a Social Function also require guidance. One could argue that a hydraulic fracturing operation, famous for the pollution it causes and its massive water use,[[216]](#footnote-217)216 serves communities by providing cheap energy and creating jobs. However, a Social Function should provide for the full social and political life of everyone.[[217]](#footnote-218)217 This includes future irrigators, future anglers, future kayakers, and future consumers of water. Thus, in determining whether a use allows the water to observe its Social Function, a user should be required to consider the impact such a use will have on water conservation and global climate change. Furthermore, state guidance for water communities should come directly from scientific recommendations.[[218]](#footnote-219)218

Implementing a Social Function locally while providing statewide guidance to communities through minimum standards also creates an opportunity for the state to finally recognize varying cultural values as beneficial uses.[[219]](#footnote-220)219 Water not only holds a place of utility for indigenous peoples, but near universally has some sacred function that neither state nor federal water regimes have ever recognized.[[220]](#footnote-221)220 For instance, even where indigenous tribes specifically hold authority over on-reservation water under the Clean Water Act, such authority does not extend to cultural or religious functions off-reservation.[[221]](#footnote-222)221 In *Valuing Sacred Tribal Waters Within Prior Appropriation*, Michelle Bryan points out that the U.S. government has already expressed a willingness to prioritize *other* cultural values in water use, such as public enjoyment, yet this never extends to sacred Tribal uses.[[222]](#footnote-223)222 This willingness to protect what is fundamentally a use that fits within the Social Function doctrine should extend to state guidance when implementing a Social Function of Water. The Social Function doctrine provides the perfect opportunity for ***Colorado*** to address the colonial mindset that has, in the past, prevented the state from recognizing anything beyond water's pure economic use.

There is plenty of room for further scholarship seeking to define the Social Function of Water and to support the creation of statewide guidelines for such a definition. Yet Indigenous communities themselves, the scientific community,**[\*133]**and other scholars should build and refine the definition of a Social Function of Water. Proponents of the doctrine intend for communities to use and reuse it, and its initial conception should follow that trend as well.

**C. State Water Management Agencies**

Aside from Roundtables, a Social Function of Water may either integrate or disassemble other existing structures. Implementers should examine these possible consequences in a similar manner as Roundtables. The following sections will briefly describe the statutory functions of the ***Colorado*** Water Conservation Board and the Water Conservation Districts as two examples of how the Social Function of Water may interact with state water institutions.

**1. The *Colorado* Water Conservation Board**

One of the most ubiquitous actors within ***Colorado***'s water allocation system is the ***Colorado*** Water Conservation Board ("CWCB"). Established in 1937 and now codified under [***Colorado*** *Revised Statutes §37-60-102*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:65SB-0303-GXF6-80P2-00000-00&context=1516831), the CWCB plays many roles in ***Colorado*** water management.[[223]](#footnote-224)223 The CWCB works with other western states on interstate compacts, works on the ***Colorado*** Water Plan (which will be discussed in depth below), and administers the Basin Roundtables as they currently exist.[[224]](#footnote-225)224 The CWCB therefore would remain vital were ***Colorado*** to implement a Social Function of Water requirement. Implementation of a Social Function of Water does not mean getting rid of state water management regimes as they currently stand, especially due to their vital roles as administrators of Roundtables and leaders of cooperation with compact regulations.[[225]](#footnote-226)225 However, the CWCB's other primary role as the sole entity permitted to hold water rights for instream flows (ISFs) also relates to implementing a Social Function requirement.[[226]](#footnote-227)226

Tasked as the only entity capable of holding ISFs, the CWCB performs an important function for water conservation and ecosystem health in ***Colorado***.[[227]](#footnote-228)227 The CWCB's role as the sole holder of ISFs is compatible with a Social Function of Water doctrine. Because the implementation of a Social Function of Water seeks only to give water-using communities control over how their water resources are used, private owners are still private owners. Thus, the CWCB's framework would remain largely unchanged. In fact, much of the CWCB's statutory directives not only are compatible with a Social Function of Water framework but could be read to encourage it.[[228]](#footnote-229)228

CWCB's governing statutes make clear that it is the duty of the board to**[\*134]**"promote the conservation of the waters of the state of ***Colorado*** in order to secure the greatest utilization of such waters…."[[229]](#footnote-230)229 Conservation of ***Colorado***'s waters, and the greatest utilization thereof, are both uses of water that easily fit within a Social Function framework. ISFs contribute greatly to ***Colorado***'s communities, supporting the recreation industry and the economies of surrounding support communities, providing vital habitat for wildlife, preventing flooding and erosion, and defraying the cost of water treatment.[[230]](#footnote-231)230

The local water-using communities would determine if an ISF is truly one of water's Social Functions. If the community determines that ISFs are not a Social Function of Water, then the CWCB would lose out on the potential ISFs it otherwise could have acquired from the water-right holders in that community. If the community determines that ISFs are a Social Function, then the CWCB would proceed to acquire rights as it does now. Furthermore, statewide standards and guidance would still be available as a backstop.

**2. Water Conservancy Districts**

Many similarities exist between the analysis of the Water Conservancy Districts ("WCD") and the CWCB. WCDs are akin to special use districts, with bonds, known as "water conservancy bonds," that are issued to further their purposes.[[231]](#footnote-232)231 ***Colorado*** law empowers WCDs to act as appropriators to carry out public purposes of both water conservation and irrigation projects.[[232]](#footnote-233)232 Specific conservancy districts may have more specific powers, such as the ***Colorado*** ***River*** Water Conservation District, which is one of the only other entities permitted to hold un-diverted water rights for the specific purpose of fish preservation.[[233]](#footnote-234)233

Generally, the powers of a WCD as the owner of water rights are very broad.[[234]](#footnote-235)234 Nonetheless, as an appropriator who is by-and-large bound by the same beneficial use requirements as other appropriators, a WCD's place within ***Colorado***'s water regime would depend on the Social Functions identified by the communities it is currently a part of.[[235]](#footnote-236)235 Because the Social Function of Water is meant to act as a framework, its applicability will look similar to institutions like CWCBs.

However, WCDs have one unique element: unlike the CWCB, WCDs have the power to exercise eminent domain.[[236]](#footnote-237)236 The statute is unclear as to whether WCDs can acquire water rights by eminent domain, however. ***Colorado*** law grants WCDs the power "[t]o have and to exercise the power of eminent domain… for the condemnation of private property for public use…**[\*135]**necessary to the exercise of the powers granted in this article…."[[237]](#footnote-238)237 This power clearly enables a WCD to exercise eminent domain over property when, for example, building public works projects, like irrigation.[[238]](#footnote-239)238 The language "for the condemnation of private property" seems to point specifically to traditional property rights, not usufructuary water rights. However, the following sentence provides that WCDs may not exercise eminent domain over vested water rights *for transmountain diversions* specifically.[[239]](#footnote-240)239 This explicit prohibition seemingly validates all other exercises of eminent domain over water rights, as long as they are not for transmountain diversions. ***Colorado*** courts have not reached the issue of condemnation of water rights by WCDs specifically, but have ruled that home rule municipalities have the capacity to condemn water rights as a necessity inherent in exercising their authority to condemn water works projects.[[240]](#footnote-241)240 Because WCDs also have the ability to condemn water works, it is reasonable that a court would grant WCDs the same power of eminent domain over water rights necessary for those condemned works.

This unique power of eminent domain over water rights presents interesting questions for the implementation of a Social Function of Water. WCDs may be another avenue for implementation because of their potential for resolving conflicts between uses considered to have Social Functions, or they could constitute a threat to communities with differing Social Functions.

WCDs' legislative declarations provide that the purpose of establishing a WCD is to achieve public benefits, such as providing adequate supplies of water for domestic uses and stabilizing stream flows (separate from the CWCB).[[241]](#footnote-242)241 Many public works projects that WCDs may be involved in extend far beyond a single water-using community.[[242]](#footnote-243)242

WCDs' ability to condemn local water rights for those larger projects has the potential to stand in the way of full community control. Either way, a WCD's power as an appropriator would still be constrained by the communities it is located in. WCDs' power as special districts capable of exercising eminent domain over water rights for public works projects that extend outside of those communities could have sweeping implications, both positive and negative, for local water-using communities.

**3. The *Colorado* Water Plan**

The ***Colorado*** Water Plan said it best: "***Colorado***'s Water Plan focuses on collaboration.… It's undeniable: our water challenges necessitate that we pull together as one, innovate, and become more agile."[[243]](#footnote-244)243 Governor John Hickenlooper formulated the ***Colorado*** Water Plan ("CWP" or "Plan") in 2015 to**[\*136]**serve as a framework for solutions to the State's water challenges.[[244]](#footnote-245)244 The current updated version was released in January 2023.[[245]](#footnote-246)245 As the CWCB has thus far updated the CWP with differing rounds of Notice and Comment (once in 2015, and again in 2022), and as the CWP is meant to serve as a framework solutions to state water challenges, this section will explore the Social Function of Water as it relates to the CWP and discusses potential changes or improvements based in a Social Function for the next planned CWP update.[[246]](#footnote-247)246

The Social Function of Water's purpose is to prepare ***Colorado*** for the coming changes associated with climate change, water shortages, and population growth. The CWP is the most current real-time iteration of what this preparation looks like. For the Social Function of Water to have relevancy, it must not only exist as a framework on its own, but as one that works with the State's current efforts.

The following section will seek to use relevant examples from the CWP to illustrate the relevance of the Social Function of Water Theory beyond mere theorization. The first few chapters of the CWP are absent, as chapters 1-5 establish background knowledge, methodology of the CWP, and other essential context to understand its studies and proposals. Thus, this section will start at CWP Chapter 6 for a specific glance at the role of the Social Function of Water in ***Colorado***'s planning strategies. Then, this section will examine CWP Chapter 7, discussing the broader compatibility of the philosophical foundations of the ***Colorado*** Water Plan with the Social Function of Water. This section will finish with a brief mention of the final few chapters of the CWP.

Chapter 6, titled "Water Supply Management,"[[247]](#footnote-248)247 provides essential illustration of the role that the Social Function of Water can play in achieving the State's water goals. The CWP is, in essence, a call for adaptive planning, increases in flexibility at local and state levels, and resiliency in the face of uncertainty.[[248]](#footnote-249)248 For example, the CWP's adaptive water management strategy[[249]](#footnote-250)249 is one method by which the CWP proposes ***Colorado*** tap into its water users to begin working toward preventing future water crises within the state.[[250]](#footnote-251)250 Specifically, the CWP uses the nine existing Roundtables as a grassroots means of identifying water needs within communities in each basin.[[251]](#footnote-252)251 The CWP's adaptive management strategy seeks to implement "low-and-no regret actions," which are actions that won't lead to future shortages.[[252]](#footnote-253)252 The adaptive strategy identifies some of these low-and-no regret action items:

Minimize the transfer of statewide agricultural acres and implement agricultural sharing projects

**[\*137]**Establish low to medium conservation strategies.… to support approximately 1 million people and their jobs in the near future

Implement projects and methods that support environmental and recreational uses.[[253]](#footnote-254)253

Throughout the entire Adaptive Management Section of Chapter 6, there are opportunities for a Social Function of Water to further the State's goals in a just, effective, and meaningful way. The Social Function of Water's essential goal of community control is already reflected in the CWP's use of existing Basin Roundtables to provide access to communities for problem solving. Local Roundtables, through a Social Function of Water framework, would assist in making the process more reflective of the needs of each community, while involving those most affected in more meaningful ways.

For example, the Social Function framework can readily achieve the first cited goal of minimizing the transfer and drying of agricultural acres.[[254]](#footnote-255)254 The CWP could minimize the transfer of agricultural acres if an agricultural community could oversee its own resources and hold water courts to standards set by each water-using community. The CWP wants to prevent drying up of agricultural acres to protect those dry agricultural communities from harm.[[255]](#footnote-256)255 Like this no-regret action, most of the CWP is directed at preventing harm to water using communities. Chapter 6 of the CWP is filled with examples of action items that benefit small, water-using communities.[[256]](#footnote-257)256 The Social Function of Water is meant to serve as a specific framework that is applicable to a wide variety of scenarios. Thus, rather than going through Chapter 6's many action-items and applying the Social Function of Water, this section seeks instead to serve as a guide.

Moving up in scale beyond localized and specific goals, Chapter 7 of the CWP provides insight into watershed science and the ways that ***Colorado*** is maintaining watershed health.[[257]](#footnote-258)257 While the CWP deserves deference to its scientific analysis, this is another opportunity to demonstrate the philosophical underpinnings of the Social Function of Water and its compatibility with the CWP. The CWP stresses stakeholder engagement and coalition-building, and the CWP invites the possibility of other groups, yet unknown, to discuss watershed protection and ecosystem health.[[258]](#footnote-259)258 The CWP identifies non-traditional watershed management stakeholders, including educators, citizens, recreators, etc.[[259]](#footnote-260)259 Claiming that this broad group of stakeholders, rather than just immediate owners of water rights, is worthy of engagement is an idea fundamentally allied with a Social Function of Water in the fight for ***Colorado***'s future. It further demonstrates how the Social Function framework would assist the state in the goals of the CWP. In fact, the CWP's understanding of a watershed coalition**[\*138]**is similar to the localized Roundtable structures suggested above.[[260]](#footnote-261)260

Chapters 9 and 10 of the CWP reiterate its most fundamental points: that the Doctrine of Prior Appropriation will be preserved, and that the Plan reflects ***Colorado***'s water values.[[261]](#footnote-262)261 While the Social Function of Water is compatible with these chapters, discussing its compatibility would only reiterate past arguments. Instead, citing John Wesley Powell's definition of a watershed, the ***Colorado*** Water Plan itself identifies that which ties the Social Function of Water to ***Colorado***'s water future: "that area of land, a bounded hydrologic system, within which all living things are inextricably linked by their common water course and where, as humans settled, simple logic demanded they become a part of a community."[[262]](#footnote-263)262 The CWP and the Social Function of Water stem from the same place: that water is a communal resource, and that water should abide by its Social Function.

**PART V: FURTHER QUESTIONS**

The Social Function of Water is a framework designed for broad applicability, meaning that many implications of the framework require further discussion. One problem that deserves further attention is how transfer mechanisms, water banking, field fallowing, and other water-saving measures would interact with the broader communities where they operate. If a water-using community collectively collaborates on its own local water uses, should that mean that the community also has some say over when the water is *not* used? And if so, what mechanisms could act as checks and balances for the decisions that the community makes for itself?

Importantly, the Social Function of Water seeks to provide access to resources to whole communities. Such a task inevitably surfaces questions about a "human right" to water. Further research is needed to understand previous attempts at establishing a human right to water, if this right has any relevance to the implementation of the Social Function of Water in ***Colorado***, and how a human right to water may inform conversations about water allocation without necessarily implementing it.

The role of local governments and their 1041 powers is another topic worthy of consideration when designing a Social Function of Water in ***Colorado***. Others have already suggested that the process through which the Department of Local Affairs enables local governments to regulate activities of state interest through local permitting is a means of achieving water equity.[[263]](#footnote-264)263 Though the purpose is to give local governments control over projects with specifically**[\*139]**statewide impacts, its applicability to questions of local control may provide further solutions to implementing the Social Function of Water.[[264]](#footnote-265)264

The interaction between inter-basin relationships is another area that is ripe for further consideration. Many disagree with the way that RWR is attempting to provide water to Douglas County. Yet it presents the very real issue of insufficient supply. Under a Social Function of Water, providing water to municipalities *is* a Social Function of Water. That tension of how different communities interact leaves plenty to explore.

There are also further questions about the role that measurement should take in the future of the Doctrine of Prior Appropriation. Though beneficial use rests on quantity, it is difficult to quantify intangible community and cultural values, like sacred tribal values. Further, the Social Function of Water framework requires theorizing about the place of measurement in defining a beneficial use to a certain community. Acequias, a system of water management which rests on communal resource philosophies that are similar to the Social Function of Water, is another potentially instructive example that offers another way to understand quantification of values.[[265]](#footnote-266)265 Both acequias and tribal valuations of water are potential models for a more detailed and thorough integration of a Social Function of Water.

**PART VI: CONCLUSION**

Impending problems with ***Colorado***'s water supply are well-known and well-discussed. Drought, over-appropriation, shortage, and ecosystem harm are all issues that ***Colorado***'s water sector is eager to address. Despite these issues, there is also an increasing pattern of commodification, consolidation, and speculation that is exacerbating these issues. Looming over these problems is the all-encompassing Doctrine of Prior Appropriation. This paper has sought to address this complex landscape by introducing a framework for problem solving, starting with a constitutional provision that water must observe its Social Function.

A Social Function of Water could represent a decentralized, communal management system, which puts the power of this vital resource into the hands of those that use it directly. Water, like all property, shapes the ability of citizens to fully participate in society while also being a vital component of existence. Community roundtables, derived from the current Basin Roundtable structure, would serve as localized venues of decision-making and water management without disrupting the current seniority system. State guidance on which fundamental and local Social Functions roundtables should decide, combined with the enforcement power that the state currently possesses, would put water to greater, more community-based beneficial uses. This idea is also rooted in the original appropriator's vision that water should be a resource of widespread use, protected against monopolizing power. Distributing control over how private owners use water is true to this vision.

When communities decide together what private uses and mechanisms of**[\*140]**uses are good for the community, a Social Function of Water becomes a bulwark against loss and hardship. A Social Function of Water creates the type of resilience that Coloradans will need as we continue to confront dynamic and ever-changing sources of uncertainty in our water supplies.

University of Denver Water Law Review

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1. 1I owe the hard work and dedication that went into this paper to the guidance and mentorship of Professor Tom Romero. I also want to thank Professor Wyatt Sassman for guidance in my understanding of Environmental Justice, and for helping integrate such concepts into this article. Finally, I owe thanks to Alyson Gould, Lindsey Ratcliff, and Josh Boissevain for their dedication as readers and editors. [↑](#footnote-ref-2)
2. 2Justice Gregory J. Hobbs, Jr., ***Colorado****'s 1969 Adjudication and Administration Act: Settling In*, 3 Univ. Denv. Water L. Rev. 1, 4, 8 (1999). [↑](#footnote-ref-3)
3. 3Lee Anne Fennell, *Property Beyond Exclusion*, [*61 Wm. & Mary L. Rev. 521, 524 (2019)*](https://advance.lexis.com/api/document?collection=analytical-materials&id=urn:contentItem:5Y6F-H5F1-DYFH-X3NK-00000-00&context=1516831). [↑](#footnote-ref-4)
4. 4David Schorr, The ***Colorado*** Doctrine 16 (1st ed. 2012). [↑](#footnote-ref-5)
5. 5*Id.* at 25, 31. [↑](#footnote-ref-6)
6. 6*Id.* at 47-48. [↑](#footnote-ref-7)
7. 7*Id.* at 48. [↑](#footnote-ref-8)
8. 8*See* Drew Beckwith et. al., Filling the Gap: Commonsense Solutions for Meeting Front Range Water Needs xi (2011), [*https://westernresourceadvocates.org/wp-content/uploads/dlm&#95;uploads/2015/07/fillingthegap.pdf*](https://westernresourceadvocates.org/wp-content/uploads/dlm&#95). [↑](#footnote-ref-9)
9. 9*See, e.g.,* Pure Cycle Corporation, *Water and Wastewater Operations*, Pure Cycle Water *(*2023), [*https://www.purecyclewater.com*](https://www.purecyclewater.com)/ Renewable Water Resources, Proposal Response: American Rescue Plan Act, Douglas County's Future is Dependent on Securing a New Renewable Water Source for our Residents 2 (2022), [*https://www.douglas.****co****.us/documents/rwr-proposal.pdf/#:~:text=The%20Renewable%20Water%20Resources%20(%E2%80%9CRWR,replenished%20by%20the%20hydrologic%20cycle*](https://www.douglas.co.us/documents/rwr-proposal.pdf/#) Ben Ryder Howe, *Wall Street Eyes Billions in the* ***Colorado****'s Water*, The N.Y. Times (Jan. 3, 2021), [*https://www.nytimes.com/2021/01/03/business/****colorado****-****river****-water-rights.html*](https://www.nytimes.com/2021/01/03/business/colorado-river-water-rights.html). [↑](#footnote-ref-10)
10. 10*See, e.g.,* S.B. 22-029, 73d Gen. Ass., Reg. Sess. (***Colo.*** 2022) *(*prohibiting investment water speculation). [↑](#footnote-ref-11)
11. 11*See* Schorr, *supra* note 4, at 31. [↑](#footnote-ref-12)
12. 12To solely regress would be to also return to the age of colonization and genocide: those farmers and miners were not the first here, and they benefited from or directly committed violent acts of genocide against the Arapahoe, Cheyenne, Ute, and the Tribal nations that are historically tied to the lands that now comprise ***Colorado***. *SeeThe Indigenous People of* ***Colorado***, Museum of Boulder, [*https://museumofboulder.org/time/the-indigenous-period-of-****colorado****/*](https://museumofboulder.org/time/the-indigenous-period-of-colorado/) (last visited April 2, 2023). [↑](#footnote-ref-13)
13. 13Schorr, *supra* note 4, at 2. [↑](#footnote-ref-14)
14. 14*Id.see also* Michelle Ostrowski, *The Right to Property: Protecting Water Needed for Agriculture in a Changing Climate*, 19 Univ. Denv. Water L. Rev. 95, 101, 108-09 (2015) (explaining the private property aspects of the DPA). [↑](#footnote-ref-15)
15. 15Schorr, *supra* note 4, at 31. [↑](#footnote-ref-16)
16. 16*Id.* at 2, 25. [↑](#footnote-ref-17)
17. 17*Id.* at 13. [↑](#footnote-ref-18)
18. 18*Id.* at 13-18. [↑](#footnote-ref-19)
19. 19*Id.* at 27. [↑](#footnote-ref-20)
20. 20[*Santa Fe Trail Ranches Prop. Owners Ass'n v. Simpson, 990 P.2d 46, 53 (****Colo.*** *1999)*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3Y27-KN70-0039-40TN-00000-00&context=1516831) (noting that "a water right comes into existence only through application of the water to that appropriator's beneficial use that beneficial use then becomes the basis, measure, and limit of the appropriation."). [↑](#footnote-ref-21)
21. 21Schorr, *supra* note 4, at 22. [↑](#footnote-ref-22)
22. 22*Id.* at 38. [↑](#footnote-ref-23)
23. 23*Id.* at 42 (citing *Constitutional Convention*, Denv. Daily Times, Feb. 18, 1876, at 4). [↑](#footnote-ref-24)
24. 24*Id.* [↑](#footnote-ref-25)
25. 25***Colo.*** Const. art. XVI §5. [↑](#footnote-ref-26)
26. 26*See id.* [↑](#footnote-ref-27)
27. 27*See* Janet C. Neuman*, Beneficial Use, Waste, and Forfeiture: The Inefficient Search for Efficiency in Western Water Use*, 28 Env't L. 919, 923 (1998). [↑](#footnote-ref-28)
28. 28*See* Schorr, *supra* note 4, at 105. [↑](#footnote-ref-29)
29. 29[*Id. at 135*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3Y27-KN70-0039-40TN-00000-00&context=1516831). [↑](#footnote-ref-30)
30. 30*See, e.g.,* [*id. at 105*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3Y27-KN70-0039-40TN-00000-00&context=1516831) (generally describing inefficiency associated with requiring a beneficial use in order to secure and maintain water rights) Steve Ruddell, *Opinion:* ***Colorado*** *Needs a Water Market to Reduce* ***Colorado******River*** *Water Use*, The ***Colo.*** Sun (Sept. 13, 2020, 3:00 AM), [*https://coloradosun.com/2020/09/13/****colorado****-****river****-compact-denver-water-opinion/*](https://coloradosun.com/2020/09/13/colorado-river-compact-denver-water-opinion/). [↑](#footnote-ref-31)
31. 31*Seeid.see also* Ostrowski, *supra* note 14, at 119. [↑](#footnote-ref-32)
32. 32*Seee.g.*, Charles W. Howe, *Reconciling Water Law and Economic Efficiency in* ***Colorado*** *Water Administration*, 16 Univ. Denv. Water L. Rev. 37, 38, 45 (2012). [↑](#footnote-ref-33)
33. 33*Seeid.see also* Neuman, *supra* note 27, at 991. [↑](#footnote-ref-34)
34. 34Charles W. Howe, *supra* note 32, at 38--39. [↑](#footnote-ref-35)
35. 35*Id.* at 38. [↑](#footnote-ref-36)
36. 36Ruddell, *supra* note 30. [↑](#footnote-ref-37)
37. 37*Id.* [↑](#footnote-ref-38)
38. 38Charles W. Howe, *supra* note 32, at 41. [↑](#footnote-ref-39)
39. 39*Id.* Ben Ryder Howe, *supra* note 9. [↑](#footnote-ref-40)
40. 40Neuman, *supra* note 27, at 991 Charles W. Howe, *supra* note 32, at 41. [↑](#footnote-ref-41)
41. 41Ben Ryder Howe, *supra* note 9. [↑](#footnote-ref-42)
42. 42Neuman, *supra* note 27, at 992. [↑](#footnote-ref-43)
43. 43*Id.* [↑](#footnote-ref-44)
44. 44*Id.* at 993. [↑](#footnote-ref-45)
45. 45*Id.* at 992 [↑](#footnote-ref-46)
46. 46*Cf. id*. at 992 (explaining that water rights render the underlying land more valuable when sold, with more senior rights resulting in commensurate increases in land value). [↑](#footnote-ref-47)
47. 47*Id.* [↑](#footnote-ref-48)
48. 48*Id.* at 993-94. This is an idea that will be explored later in the article: that there are intangible, unquantifiable values that prevent users from selling their rights. *See, e.g.,* discussion *infra* Part III.A (discussing water transfer project in the San Luis Valley). I want to also make a quick note of my use of *them* referring to a singular water-user. Though traditional legal academia dissuades the use of a singular third-person pronoun, recognition of non-binary identifying law students, lawyers, and clients is mandatory if the profession is to grow. I use this word intentionally to set expectations of acceptance in the future of the profession. [↑](#footnote-ref-49)
49. 49Schorr, *supra* note 4, at 2. [↑](#footnote-ref-50)
50. 50*Seeid.* [↑](#footnote-ref-51)
51. 51Kait Schilling, *Addressing the Prior Appropriation Doctrine in the Shadow of Climate Change and the Paris Climate Agreement*, 8 Seattle J. of Env't. L. 97, 105 (2018). [↑](#footnote-ref-52)
52. 52Jerd Smith, *Special Report: Climate Change is Sapping* ***Colorado****'s Water Supplies. Can its Hallmark Water Law Stave Off Crippling Shortages?*, Water Educ. ***Colorado*** (Dec. 21, 2021), [*https://www.watereducationcolorado.org/fresh-water-news/special-report-climate-change-is-sapping-colorados-water-supplies-can-its-hallmark-water-law-stave-off-crippling-shortages/*](https://www.watereducationcolorado.org/fresh-water-news/special-report-climate-change-is-sapping-colorados-water-supplies-can-its-hallmark-water-law-stave-off-crippling-shortages/). [↑](#footnote-ref-53)
53. 53Nick Bowlin, *The Feds Declined to Seriously Cut* ***Colorado******River*** *Water Use. Here's What That Means*, High Country News (Aug. 18, 2022), [*https://www.hcn.org/articles/south-****colorado****-****river****-the-feds-declined-to-seriously-cut-****colorado****-****river****-water-use-heres-what-that-means-going-forward*](https://www.hcn.org/articles/south-colorado-river-the-feds-declined-to-seriously-cut-colorado-river-water-use-heres-what-that-means-going-forward) Smith, *supra* note 52 *see* Michelle Bryan, [*Valuing Sacred Tribal Waters Within Prior Appropriation, 57 Nat. Res. J. 139, 140 (2017)*](https://advance.lexis.com/api/document?collection=analytical-materials&id=urn:contentItem:5N2X-7F60-01TH-N0T1-00000-00&context=1516831). [↑](#footnote-ref-54)
54. 54*See* Schilling, *supra* note 51, at 106. Each of these issues, despite affecting every Coloradan, will have disproportionate impacts on those communities identified above. This issue will be discussed in depth in Part III. [↑](#footnote-ref-55)
55. 55Gregory Alexander et. al., *A Statement of Progressive Property* 94 Cornell L. Fac. Publ'ns 743, 744 (2009). [↑](#footnote-ref-56)
56. 56Thomas T. Ankersen & Thomas Ruppert, Tierra y Libertad: *The Social Function Doctrine and Land Reform in Latin America*, 19 Tul. Env't L. J. 69, 95 (2006). [↑](#footnote-ref-57)
57. 57*Id.* [↑](#footnote-ref-58)
58. 58*Id.* [↑](#footnote-ref-59)
59. 59Sheila Foster & Daniel Bonilla, *The Social Function of Property: Comparative Law Perspective*, [*80 Fordham L. Rev. 101, 107 (2011)*](https://advance.lexis.com/api/document?collection=analytical-materials&id=urn:contentItem:542F-YFV0-02BN-0105-00000-00&context=1516831). [↑](#footnote-ref-60)
60. 60*Id.* at 106. [↑](#footnote-ref-61)
61. 61*Id.* [↑](#footnote-ref-62)
62. 62Alexander et. al., *supra* note 55, at 743. The bundle of sticks is a conception of property ownership which envisions ownership as a bundle, with each stick a different right. [↑](#footnote-ref-63)
63. 63*Id.* [↑](#footnote-ref-64)
64. 64*Id.* at 743-44. [↑](#footnote-ref-65)
65. 65*Id.* at 744. [↑](#footnote-ref-66)
66. 66*Id.* [↑](#footnote-ref-67)
67. 67Foster & Bonilla, *supra* note 59, at 1008. [↑](#footnote-ref-68)
68. 68*Id.* [↑](#footnote-ref-69)
69. 69Braz. Const. Title II Art. 5, §XXIII. [↑](#footnote-ref-70)
70. 70This work was published by the Coredem, an academic collective researching global democracy. *The Coredem*, Coredem, [*https://www.coredem.info/rubrique54.html*](https://www.coredem.info/rubrique54.html) (last visited Apr. 5, 2023). The work was part of Coredem's Passerelle Collection, a regular, collective publication of activists' work intended to provoke debate on current issues. *The Passerelle Collection*, Coredem, [*https://www.coredem.info/rubrique55.html*](https://www.coredem.info/rubrique55.html) (last visited Apr. 5, 2023). [↑](#footnote-ref-71)
71. 71Laticia Marques Osorio, *Les Fonctions Sociales de la Propriété en Amérique Latine*, *in* La terre est à nous! Pour la function sociale du logement et du foncier résistances et alternatives 161-69 (Coredem 2013) (this paper cites the French text, as the complete collection with page numbers appears to be available in French only. An English version is, however, available online: Laticia Marques Osorio, *The Social Function of Property in Latin America*, Cities Territories Governance (2014), [*http://www.citego.org/bdf*](http://www.citego.org/bdf)&#95;fiche-document-1356&#95;en.html#:~:text=Most%20Latin%20American%20Constitutions%20have,can%20be%20subordinated%20to%20the.). [↑](#footnote-ref-72)
72. 72*Id.* at 167. [↑](#footnote-ref-73)
73. 73*Id.* at 167-68. [↑](#footnote-ref-74)
74. 74*Id.* at 168. [↑](#footnote-ref-75)
75. 75*Id.* [↑](#footnote-ref-76)
76. 76Sandra B. Zellmer & Adell L. Amos, Water Law in a Nutshell 153-54 (6th ed. 2021). [↑](#footnote-ref-77)
77. 77*See* Foster & Bonilla, *supra* note 59, at 1004-07. [↑](#footnote-ref-78)
78. 78*Id.* at 1006-07. [↑](#footnote-ref-79)
79. 79Zellmer & Amos, *supra* note 76, at 78-91. [↑](#footnote-ref-80)
80. 80[*Santa Fe Trail Ranches Prop. Owners Ass'n v. Simpson, 990 P.2d 46, 53 (****Colo.*** *1999)*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3Y27-KN70-0039-40TN-00000-00&context=1516831). [↑](#footnote-ref-81)
81. 81Zellmer & Amos, *supra* note 76, at 90. [↑](#footnote-ref-82)
82. 82***Colo.*** Water Conservation Bd., ***Colorado*** Water Plan 2-5, 6-161 (2015) [hereinafter 2015 Water Plan] [***Colo.*** *Rev. Stat. §37-92-102(3)*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:61P5-WY01-DYDC-J3FN-00000-00&context=1516831) (2023), [*https://leg.****colorado****.gov/****colorado****-revised-statutes*](https://leg.colorado.gov/colorado-revised-statutes). [↑](#footnote-ref-83)
83. 83Foster & Bonilla, *supra* note 59, at 1007. [↑](#footnote-ref-84)
84. 84Schorr, *supra* note 4, at 27. [↑](#footnote-ref-85)
85. 85*Id.* [↑](#footnote-ref-86)
86. 86*Id.* at 25-27. [↑](#footnote-ref-87)
87. 87*Seeid.* [↑](#footnote-ref-88)
88. 88*See* Osorio, *supra* note 71, 167-68 (explaining, in the context of access to housing, that the accumulation of property among the wealthy operates to exclude others from property ownership) Schorr, *supra* note 4, at 24. [↑](#footnote-ref-89)
89. 89*See* Schorr, *supra* note 4, at 24. [↑](#footnote-ref-90)
90. 90*See* Tom Romero, II, [*The Color of Local Government: Observations of a Brown Buffalo on Racial Impact Statements in the Movement for Water Justice, 25 CUNY L. Rev. 241, 249 (2022)*](https://advance.lexis.com/api/document?collection=analytical-materials&id=urn:contentItem:67WB-P531-DYRW-V0GF-00000-00&context=1516831). [↑](#footnote-ref-91)
91. 91Exec. Order No. 12,898, [*32 C.F.R. 651.17*](https://advance.lexis.com/api/document?collection=administrative-codes&id=urn:contentItem:6065-GWC1-DYB7-W52J-00000-00&context=1516831), §1-103(a) (1994). However, note that the EO is commonly criticized as too top-down. Even where the EO is recognized as an effective means of bringing substantial improvements to communities disproportionately harmed by environmental impacts, it fails to address the root causes of such hazards. Robert Bullard, et. al., Environmental Justice Timeline and Milestones: 1964 - 2014 11 (Tex. S. Univ. 2014). [↑](#footnote-ref-92)
92. 92Renee Skelton & Vernice Miller, *The Environmental Justice Movement*, NRDC: Our Stories (Mar. 17, 2016), [*www.nrdc.org/stories/environmental-justice-movement*](http://www.nrdc.org/stories/environmental-justice-movement). [↑](#footnote-ref-93)
93. 93*Id.* [↑](#footnote-ref-94)
94. 94*See* Luke W. Cole & Sheila R. Foster, From the Ground Up 54-55 (2001) *see also* Dina Gilio-Whitaker, As Long as Grass Grows 35-36 (2019). [↑](#footnote-ref-95)
95. 95There are already longstanding and bedrock foundations for this process. At the People of Color Environmental Leadership Summit ("EJ Summit"), scholars and activists assembled the Principles of Environmental Justice, which serve as the founding principles for grassroots environmental justice initiatives led by the disproportionately impacted. The principles include recognition of the sacredness of Mother Earth, the interdependence of all species, ethical uses of land in the interest of sustaining the planet for human habitation, self-determination of all peoples, the right to participation in politics, economics, and culture, and a wide variety of other values. The First People of Color Environmental Leadership Summit, Principles of Environmental Justice (1991), [*https://www.ejnet.org/ej/principles.html*](https://www.ejnet.org/ej/principles.html) [hereinafter Principles of Environmental Justice]. [↑](#footnote-ref-96)
96. 96David Naguib Pellow, What is Critical Environmental Justice? 18-33 (2018). [↑](#footnote-ref-97)
97. 97Robert R. Kuehn, *A Taxonomy of Environmental Justice*, 30 Env't L. Rep. 10681, 10684 (2000). [↑](#footnote-ref-98)
98. 98*Seeid.* (citing international examples of citing hazardous facilities in low-income communities of people of color). [↑](#footnote-ref-99)
99. 99*See id.* [↑](#footnote-ref-100)
100. 100Robert D. Bullard, et. al., *Toxic Wastes and Race at Twenty: Why Race Still Matters After All of These Years*, 38 Env't L. 371, 373 (2008). [↑](#footnote-ref-101)
101. 101*Id.* [↑](#footnote-ref-102)
102. 102Gilio-Whitaker, *supra* note 94, at 17. [↑](#footnote-ref-103)
103. 103*Id.* at 17-18. [↑](#footnote-ref-104)
104. 104*See* discussion *infra* Section III.A. [↑](#footnote-ref-105)
105. 105Luke W. Cole, *Macho Law Brains, Public Citizens, and Grassroots Activists: Three Models of Environmental Advocacy*, 14 Va. Env't L.J. 687, 687-89 (1995) (discussing the need for environmental justice advocacy). [↑](#footnote-ref-106)
106. 106*Id.* at 693. [↑](#footnote-ref-107)
107. 107*See id.* at 693-94 (describing the attorney's and other experts' predominant roles under the professional model). [↑](#footnote-ref-108)
108. 108Water Ct. Comm. of the ***Colo.*** Sup. Ct., Non-Attorney's Guide to ***Colorado*** Water Courts 3 (2014), [*https://www.courts.state.****co****.us/userfiles/file/Court&#95;Probation/Water&#95;Courts/FINAL%20Non-Attorneys%20Guide%20to%20Colorado%20Water%20Courts%20(01&#95;14&#95;20%20fee%20update).pdf*](https://www.courts.state.co.us/userfiles/file/Court&#95). [↑](#footnote-ref-109)
109. 109*See generally* Gregory J. Hobbs, Jr. et al., *Pro Se Article Series:Understanding and Improving the Pro Se Litigant Experience in Water Court*, 22 Univ. Denv. Water L. Rev. 653, 653-701 (2019) (discussing how pro se litigants currently engage in the ***Colorado*** water court process and how their experience can be improved). [↑](#footnote-ref-110)
110. 110Cole, *supra* note 105, at 694. [↑](#footnote-ref-111)
111. 111*Id.* at 694-97. [↑](#footnote-ref-112)
112. 112*Id.* at 695-97. This model is frequently criticized. It oftentimes sees clashes between the lived experiences of community residents and "expert" knowledge, and it further requires the community members to have understanding of the agency decision making process and timeline, the time and access required to participate, and a receptive agency on the other side of the table. *Id.* [↑](#footnote-ref-113)
113. 113*See*, *e.g.*, 2 ***Colo.*** Code Regs. §402-17.5(B) (2023) (providing notice and comment procedures through the Office of the State Engineer specifically for determination of non-tributary groundwater determinations) *id.* §§408-2.5d, 2.5j (providing notice and comment for ***Colorado*** Water Conservation Board Instream Flow appropriations when the amount is being changed, and for contested Instream flow appropriations). These two examples help illustrate the extremely limited contexts in which ***Colorado***'s water institutions provide opportunities for notice and comment. [↑](#footnote-ref-114)
114. 114Water Ct. Comm. of the ***Colo.*** Sup. Ct., *supra* note 108, at 13. [↑](#footnote-ref-115)
115. 115*Id.* at 3. [↑](#footnote-ref-116)
116. 116Cole, *supra* note 105, at 697-703. [↑](#footnote-ref-117)
117. 117*Id.* at 697. [↑](#footnote-ref-118)
118. 118*Id.* at 698. [↑](#footnote-ref-119)
119. 119*See id.* at 699-700. [↑](#footnote-ref-120)
120. 120*Stop RWR*, Protect Our Water, [*https://www.protectsanluisvalleywater.com/stop-rwr*](https://www.protectsanluisvalleywater.com/stop-rwr) (last visited Mar. 9, 2023) [hereinafter *Stop RWR*]. [↑](#footnote-ref-121)
121. 121Renewable Water Resources, *supra* note 9, at 2. [↑](#footnote-ref-122)
122. 122*Id.* [↑](#footnote-ref-123)
123. 123*Id.* at 24. [↑](#footnote-ref-124)
124. 124*Id.* at 2. [↑](#footnote-ref-125)
125. 125*Stop RWR*, *supra* note 120 Water for ***Colorado***, Press Release: Water for ***Colorado*** Coalition Opposes Damaging Proposal to Export San Luis Valley Water (Feb. 17, 2022), [*https://waterforcolorado.org/whats-new/water-for-****colorado****-coalition-opposes-damaging-proposal-to-export-san-luis-valley-water/*](https://waterforcolorado.org/whats-new/water-for-colorado-coalition-opposes-damaging-proposal-to-export-san-luis-valley-water/) Marianne Goodland, ***Colorado*** *Sens. Bennet, Hickenlooper Notify Feds, Oppose Renewable Water Resources Project*, The Gazette (Feb. 21, 2022), [*https://gazette.com/premium/****colorado****-sens-bennet-hickenlooper-notify-feds-oppose-renewable-water-resources-project/article&#95;00ffc967-f412-59f2-a3de-c429155f0fbe.html*](https://gazette.com/premium/colorado-sens-bennet-hickenlooper-notify-feds-oppose-renewable-water-resources-project/article&#95). [↑](#footnote-ref-126)
126. 126Conrad Swanson, *San Luis Valley-to-Douglas County Water Pipeline Proposed. Critics Call it a "Buy and Dry" Scheme*, The Denv. Post (Feb. 24, 2022, 5:55 AM), [*https://www.denverpost.com/2022/02/24/san-luis-valley-douglas-county-water-pipeline/*](https://www.denverpost.com/2022/02/24/san-luis-valley-douglas-county-water-pipeline/). [↑](#footnote-ref-127)
127. 127Elliot Wenzler, *Douglas County Will Not Use COVID Funds on San Luis Valley Water Project*, Douglas Cnty. News Press (May 24, 2022, 11:15 AM), [*https://douglascountynewspress.net/stories/douglas-county-will-not-use-covid-funds-on-san-luis-valley-water-project,394739*](https://douglascountynewspress.net/stories/douglas-county-will-not-use-covid-funds-on-san-luis-valley-water-project). [↑](#footnote-ref-128)
128. 128Elliot Wenzler, *Douglas County Again Meets About San Luis Valley Water Project*, Douglas Cnty. News Press (Sept. 16, 2022, 3:23 PM), [*https://douglascountynewspress.net/stories/douglas-county-again-meets-about-san-luis-valley-water-project,400350*](https://douglascountynewspress.net/stories/douglas-county-again-meets-about-san-luis-valley-water-project). [↑](#footnote-ref-129)
129. 129San Luis Valley Dev. Res. Grp., San Luis Valley Statistical Profile 4 (2022). [↑](#footnote-ref-130)
130. 130*Id.* at 1 *The San Luis Valley Language Justice Cooperative*, Rocky Mountain Emp. Ownership Ctr., [*https://www.rmeoc.org/impact-stories/slv-language-justice-coop/#:~:text=Over%2030%25%20of%20the%20San,impoverished%20counties%20in%20the%20state*](https://www.rmeoc.org/impact-stories/slv-language-justice-coop/#) (last visited Nov. 28, 2022). [↑](#footnote-ref-131)
131. 131Briefly, it is worth noting that the agriculture industry is generally considered a powerful group in ***Colorado***. *See* Goodland, *supra* note 125 (explaining that two ***Colorado*** Senators are on the side of the agricultural users of the San Luis Valley). *See also Priorities*, Michael Bennet for U.S. Senate, [*https://www.bennet.senate.gov/public/index.cfm/priorities*](https://www.bennet.senate.gov/public/index.cfm/priorities) (last visited Mar. 20, 2023) (making agriculture a top priority). The power imbalance that should be drawn out is not cultural power, but rather economic power the ability of water investors to purchase these water rights in the San Luis Valley exists regardless of the cultural or political influence of the agricultural users. *See* Howe, *supra* note 7, at 1-2. [↑](#footnote-ref-132)
132. 132*See generally* Cole & Foster, *supra* note 94. [↑](#footnote-ref-133)
133. 133*See generally* Pellow, *supra* note 96. [↑](#footnote-ref-134)
134. 134*See* Cole & Foster, *supra* note 94, at 77 (describing "environmental extortion" as a phenomenon in which toxic site developers use rhetoric of economic assistance, i.e., creating jobs, as a justification for placing proposed facilities in underserved communities). [↑](#footnote-ref-135)
135. 135Swanson, *supra* note 126 *See also* Jerd Smith, *Denver Developer, Former Governor Make $118 Million Play for San Luis Valley Water*, Water Educ. ***Colo.*** Fresh Water News (Jun. 26, 2019), [*https://www.watereducationcolorado.org/fresh-water-news/denver-developer-former-governor-make-118m-play-for-san-luis-valley-water/*](https://www.watereducationcolorado.org/fresh-water-news/denver-developer-former-governor-make-118m-play-for-san-luis-valley-water/). [↑](#footnote-ref-136)
136. 136Swanson, *supra* note 126. [↑](#footnote-ref-137)
137. 137Cole & Foster, *supra* note 94, at 78. [↑](#footnote-ref-138)
138. 138*Id.* [↑](#footnote-ref-139)
139. 139*Id.* [↑](#footnote-ref-140)
140. 140*Id.* [↑](#footnote-ref-141)
141. 141[*Id. at 77*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3Y27-KN70-0039-40TN-00000-00&context=1516831). [↑](#footnote-ref-142)
142. 142*Correcting Misinformation*, Protect Our Water, [*https://www.protectsanluisvalleywater.com/correcting-misinformation*](https://www.protectsanluisvalleywater.com/correcting-misinformation) (last visited Mar. 27, 2023) [hereinafter, *Correcting Misinformation*]. [↑](#footnote-ref-143)
143. 143Swanson, *supra* note 126. [↑](#footnote-ref-144)
144. 144*Correcting Misinformation*, *supra* note 142. [↑](#footnote-ref-145)
145. 145*Id.* [↑](#footnote-ref-146)
146. 146*See* Cole & Foster, *supra* note 94, at 106 (describing the strong influence of applicable legal frameworks on communities' agency). [↑](#footnote-ref-147)
147. 147*See* Renewable Water Resources, *supra* note 9 (describing RWR's proposal). [↑](#footnote-ref-148)
148. 148*Id.* Kuehn, *supra* note 97, at 10684. [↑](#footnote-ref-149)
149. 149Alexander et. al., *supra* note 55, 743-44. [↑](#footnote-ref-150)
150. 150*Id.* at 743. [↑](#footnote-ref-151)
151. 151*Id.see* Osorio, *supra* note 71, at 167 (discussing Latin American constitutions' conditioning of the right to private property on the satisfaction of social interests) Ankersen & Ruppert, *supra* note 56, at 95. [↑](#footnote-ref-152)
152. 152Alexander et. al., *supra* note 55, at 744. [↑](#footnote-ref-153)
153. 153*Compare id.* ("[P]roperty laws should promote the ability of each person to obtain the material resources necessary for full social and political participation.") *with* Principles of Environmental Justice, *supra* note 95 ("Environmental Justice affirms the fundamental right to political, economic, cultural and environmental self-determination of all peoples."). [↑](#footnote-ref-154)
154. 154*See* Alexander et. al., *supra* note 55, at 744 Principles of Environmental Justice, *supra* note 95. [↑](#footnote-ref-155)
155. 155Alexander et. al., *supra* note 55, at 744. [↑](#footnote-ref-156)
156. 156Principles of Environmental Justice, *supra* note 95. [↑](#footnote-ref-157)
157. 157Osorio, *supra* note 71, 168. [↑](#footnote-ref-158)
158. 158*See, e.g.,* Cole & Foster, *supra* note 94, at 39-41, 82-84 (describing how the communities of Chester, Pennsylvania, and Buttonwillow, California, respectively, experienced this type of environmental injustice). [↑](#footnote-ref-159)
159. 159*Id.* at 37. [↑](#footnote-ref-160)
160. 160Pellow, *supra* note 96, at 13. [↑](#footnote-ref-161)
161. 161*Stop RWR*, *supra* note 120. [↑](#footnote-ref-162)
162. 162*Members*, Protect Our Water, [*https://www.protectsanluisvalleywater.com/members*](https://www.protectsanluisvalleywater.com/members) (last visited Mar. 9, 2023) [hereinafter *Members*]. [↑](#footnote-ref-163)
163. 163*Id.* [↑](#footnote-ref-164)
164. 164Cole & Foster, *supra* note 94, at 39. [↑](#footnote-ref-165)
165. 165*Id.* at 39-40. [↑](#footnote-ref-166)
166. 166Constituição Federal [Constitution] tit. II, art. 5, §XXIII (Braz.) ***Colo.*** Const. art. XVI, §5. [↑](#footnote-ref-167)
167. 167***Colo.*** Const. art. XVI, §5. [↑](#footnote-ref-168)
168. 168*Id.* [↑](#footnote-ref-169)
169. 169Stephen H. Leonhardt & Jessica J. Spuhler, *The Public Trust Doctrine: What It Is, Where It Came From, and Why* ***Colorado*** *Does Not (and Should Not) Have One*, 16 Univ. Denv. Water L. Rev. 47, 51 (2012). [↑](#footnote-ref-170)
170. 170*Id.* at 62-63. [↑](#footnote-ref-171)
171. 171*Id.* at 63-64. [↑](#footnote-ref-172)
172. 172*Id.* at 86. [↑](#footnote-ref-173)
173. 173*Id.* It is worth noting here that despite ***Colorado***'s rejection of the Public Trust Doctrine, it has found success in various western states throughout the country. *Id.* at 78-81. Indeed, Leonhardt and Sphuler note that it can be a malleable doctrine that can accomplish any number of environmental goals. *Id.* at 78. Thus, ***Colorado***'s rejection is not intended to denigrate the doctrine, but rather to reject its use for ***Colorado***'s specific needs. *See* [*id. at 78-81, 86*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3Y27-KN70-0039-40TN-00000-00&context=1516831). [↑](#footnote-ref-174)
174. 174*See* discussion *supra* Section II(B). [↑](#footnote-ref-175)
175. 175Alexander et. al., *supra* note 55, at 744. [↑](#footnote-ref-176)
176. 176Mitch Tobin, *Conservation in the West Poll: Findings on Water-related Public Opinion*, Water Polls (July 12, 2018), [*https://waterpolls.org/conservation-in-the-west-poll-2018*](https://waterpolls.org/conservation-in-the-west-poll-2018)/ (finding, *inter alia*, that Westerners polled ranked "low levels of water in ***rivers***" and "inadequate water supplies" as the top two environmental problems, with more than half of those polled viewing them as "extremely or very serious problems"). [↑](#footnote-ref-177)
177. 177*Id.* [↑](#footnote-ref-178)
178. 178*See, e.g.,* Janet C. Neuman, *supra* note 27, at 978-95 (proposing changes to the judicial, administrative, and legislative changes to improve water administration and efficiency in the West) Mark Squillace, *Restoring the Public Interest in Western Water Law*, [*2020 Utah L. Rev. 627, 675-83 (2020)*](https://advance.lexis.com/api/document?collection=analytical-materials&id=urn:contentItem:5YTX-TG41-FC6N-X2T5-00000-00&context=1516831) (proposing "a catalog of policies" designed to "restore the public interest to its rightful place as a limitation of private water rights"). [↑](#footnote-ref-179)
179. 179*See* Janet C. Neuman, *supra* note 27, at 980. [↑](#footnote-ref-180)
180. 180[***Colo.*** *Rev. Stat. §37-75-104(2)(a)(I)*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:61P5-WY01-DYDC-J355-00000-00&context=1516831) (2023), [*https://leg.****colorado****.gov/****colorado****-revised-statutes*](https://leg.colorado.gov/colorado-revised-statutes). [↑](#footnote-ref-181)
181. 181*Id.* at (3)(a)(I)-(IX). [↑](#footnote-ref-182)
182. 182***Colo.*** Water Conservation Bd., Draft Supplemental Basin Implementation Plan Guidance for - Section 1: Goals and Measurable Outcomes (2013), [*https://dnrweblink.state.****co****.us/cwcb/0/doc/173845/Electronic.aspx?searchid=ae4317ac-1bc0-4dbd-bbda-928d03a3e04d*](https://dnrweblink.state.co.us/cwcb/0/doc/173845/Electronic.aspx?searchid=ae4317ac-1bc0-4dbd-bbda-928d03a3e04d). [↑](#footnote-ref-183)
183. 183*See generally* ***Colo.*** Found. For Water Educ., Basin Roundtable Education Survey Final Report (2010). Indeed, the statewide survey concluded that overall, "Roundtable members are satisfied with the roundtable process in general and are now eager to make progress towards solutions." *Id.* at 19. [↑](#footnote-ref-184)
184. 184*Id.* at 13. [↑](#footnote-ref-185)
185. 185***Colo.*** Water Conservation Bd., *Basin Roundtables*, Dep't of Nat. Res. (2023), [*https://cwcb.****colorado****.gov/about-us/basin-roundtables*](https://cwcb.colorado.gov/about-us/basin-roundtables) [hereinafter ***Colo.*** Water Conservation Bd., *Basin Roundtables*]. [↑](#footnote-ref-186)
186. 186***Colo.*** Water Conservation Bd., *Basin Implementation Plan Draft Guidance*, Dep't of Nat. Res., [*https://dnrweblink.state.****co****.us/cwcb/0/doc/172522/Electronic.aspx?searchid=da8f2c6c-3efa-48d6-a43e-892b5c2bd750*](https://dnrweblink.state.co.us/cwcb/0/doc/172522/Electronic.aspx?searchid=da8f2c6c-3efa-48d6-a43e-892b5c2bd750) (last visited Nov. 28, 2022) [hereinafter ***Colo.*** Water Conservation Bd., *Basin Implementation Plan Draft Guidance*]. [↑](#footnote-ref-187)
187. 187*Id.* [↑](#footnote-ref-188)
188. 188Cole, *supra* note 105, at 705. [↑](#footnote-ref-189)
189. 189***Colo.*** Water Conservation Bd., *Basin Roundtables*, *supra* note 185, at 7 Cole, *supra* note 105, at 689-90. [↑](#footnote-ref-190)
190. 190***Colo.*** Found. For Water Educ., *supra* note 183, at 15. [↑](#footnote-ref-191)
191. 191*Id.* at 15-17. [↑](#footnote-ref-192)
192. 192*See* Alexander et. al., *supra* note 55, 744 (emphasizing the importance of ensuring that property laws promote "full social and political participation") [***Colo.*** *Rev. Stat. §37-75-104(2)(a)(I)*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:61P5-WY01-DYDC-J355-00000-00&context=1516831) (2023), [*https://leg.****colorado****.gov/****colorado****-revised-statutes*](https://leg.colorado.gov/colorado-revised-statutes). [↑](#footnote-ref-193)
193. 193***Colo.*** Water Conservation Bd., *Basin Implementation Plan Draft Guidance*, *supra* note 186, at 6. [↑](#footnote-ref-194)
194. 194*See* Alexander et. al., *supra* note 55, at 744 (suggesting that values underlying property, including "environmental integrity," should help to "enable and shape community life"). [↑](#footnote-ref-195)
195. 195Osorio, *supra* note 71, at 162. [↑](#footnote-ref-196)
196. 196[***Colo.*** *Rev. Stat. §37-75-104(2)(a)(II)(e)*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:61P5-WY01-DYDC-J355-00000-00&context=1516831) (2023), [*https://leg.****colorado****.gov/****colorado****-revised-statutes*](https://leg.colorado.gov/colorado-revised-statutes). [↑](#footnote-ref-197)
197. 197Alexander et. al., *supra* note 55, at 744. [↑](#footnote-ref-198)
198. 198*See* Neuman, *supra* note 27, at 957. Courts and administrative agencies both take reactive approaches to enforcement of state water laws, resulting in permission of inefficient and wasteful uses until another water user brings it to the state's attention. *E.g.,id.* at 960 (describing how agencies - or, in ***Colorado***'s case, courts - only review water uses to identify waste or forfeiture "reactive[ly]" during transfer proceedings, rather than assuming a "proactive posture"). [↑](#footnote-ref-199)
199. 199*See* Schorr, *supra* note 4, at 39-40. [↑](#footnote-ref-200)
200. 200*Id.* at 14. [↑](#footnote-ref-201)
201. 201*Id.* at 15. [↑](#footnote-ref-202)
202. 202*Id*. at 39-41. [↑](#footnote-ref-203)
203. 203*Id.* at 15-16. [↑](#footnote-ref-204)
204. 204Squillace, *supra* note 178, at 645. [↑](#footnote-ref-205)
205. 205*Id.* at 659. [↑](#footnote-ref-206)
206. 206[*Idaho Code §42-202(B)(3)*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:63F7-1PR1-DYB7-W236-00000-00&context=1516831) (2022). [↑](#footnote-ref-207)
207. 207*See supra* Part III. [↑](#footnote-ref-208)
208. 208Osorio, *supra* note 71, at 167. [↑](#footnote-ref-209)
209. 209*E.g.,* [***Colo.*** *Rev. Stat. §§37-80-102(k)*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:61P5-WY01-DYDC-J35F-00000-00&context=1516831), [*37-80-105*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:61P5-WY01-DYDC-J35J-00000-00&context=1516831) (2023), [*https://leg.****colorado****.gov/****colorado****-revised-statutes*](https://leg.colorado.gov/colorado-revised-statutes). [↑](#footnote-ref-210)
210. 210Schorr, *supra* note 4, at 116. [↑](#footnote-ref-211)
211. 211Osorio, *supra* note 71. [↑](#footnote-ref-212)
212. 212[***Colo.*** *Rev. Stat. §37-80-102(2)*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:61P5-WY01-DYDC-J35F-00000-00&context=1516831). [↑](#footnote-ref-213)
213. 213*See* Osorio, *supra* note 71, at 168 (discussing the third characteristic of Social Functions of Property as local authority to impose limitations and restrictions on private property). [↑](#footnote-ref-214)
214. 214*See* [***Colo.*** *Rev. Stat. §37-80-102*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:61P5-WY01-DYDC-J35F-00000-00&context=1516831). [↑](#footnote-ref-215)
215. 215*See generally* Alexander et. al, *supra* note 55, at 743-44. Progressive property is, in general, a modernized form of Duguit's original theory. *Id.* Though Alexander does not directly speak to modernization, the two are of the same school of thought, and it is only natural that later works build upon past works. *See also* discussion *supra* Part II.A. [↑](#footnote-ref-216)
216. 216Melissa Denchak, *Fracking 101*, Nat. Res. Def. Council (Apr. 19, 2019), [*https://www.nrdc.org/stories/fracking-101#:~:text=Fracking%20consumes%20a%20massive%20amount,of%20well%20and%20rock%20formation*](https://www.nrdc.org/stories/fracking-101#). [↑](#footnote-ref-217)
217. 217Alexander et. al., *supra* note 55, at 744. [↑](#footnote-ref-218)
218. 218*See, e.g.,* Intergovernmental Panel on Climate Change, Summary for Pol'y Makers 34 (2022) ("Demand-side mitigation encompasses changes in infrastructure use, end-use technology, adoption, and socio-cultural and behavioral change."). [↑](#footnote-ref-219)
219. 219*See, e.g.,* Bryan, *supra* note 53, at 151-52 (describing sacred uses of water among Native American Tribes and noting that no western state explicitly protects Tribes' interest in sacred water). [↑](#footnote-ref-220)
220. 220*Id.* at 154. [↑](#footnote-ref-221)
221. 221*Id.* at 158. [↑](#footnote-ref-222)
222. 222*Id.* at 160. [↑](#footnote-ref-223)
223. 223Bill McDonald & Tom Cech, Defend and Develop: Why the ***Colorado*** Water Conservation Board Was Created 1, 4-5 (2012), [*https://web.archive.org/web/20141022005945/http://cwcb.state.****co****.us/about-us/75thAnniversaryCelebration/Documents/WhyCWCBWasCreated.pdf*](http://cwcb.state.co.us/about-us/75thAnniversaryCelebration/Documents/WhyCWCBWasCreated.pdf) [***Colo.*** *Rev. Stat. §37-60-102*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:65SB-0303-GXF6-80P2-00000-00&context=1516831) (2022) (describing the purposes of the ***Colorado*** Water Conservation Board). [↑](#footnote-ref-224)
224. 224[***Colo.*** *Rev. Stat. §37-60-106*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:61P5-WY01-DYDC-J31V-00000-00&context=1516831) (2023), [*https://leg.****colorado****.gov/****colorado****-revised-statutes*](https://leg.colorado.gov/colorado-revised-statutes). [↑](#footnote-ref-225)
225. 225*See id. (*generally describing the duties of the ***Colorado*** Water Conservation Board). [↑](#footnote-ref-226)
226. 226*Id.* §37-92-102(3). [↑](#footnote-ref-227)
227. 227*Id.* [↑](#footnote-ref-228)
228. 228*See, e.g., id.* §37-60-106 (directing the CWCB to encourage greater utilization of water resources, the creation of mutual ditch companies and other agencies, and to promote the conservation of ***Colorado***'s waters). [↑](#footnote-ref-229)
229. 229*Id.* §37-60-106(1). [↑](#footnote-ref-230)
230. 230Linda Bassi et al., *ISF Law - Stories About the Origin and Evolution of* ***Colorado****'s Instream Flow Law in This Prior Appropriation State*, 22 Univ. Denv. L. Rev. 389, 396 (2019). [↑](#footnote-ref-231)
231. 231[***Colo.*** *Rev. Stat. §37-45-104*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:61P5-WY01-DYDC-J2MD-00000-00&context=1516831) (2023), [*https://leg.****colorado****.gov/****colorado****-revised-statutes*](https://leg.colorado.gov/colorado-revised-statutes). [↑](#footnote-ref-232)
232. 232*Id.* §37-45-118. [↑](#footnote-ref-233)
233. 233*Id.* §37-46-107(j). [↑](#footnote-ref-234)
234. 234*Id.* §37-45-118(1). [↑](#footnote-ref-235)
235. 235*Id.* [↑](#footnote-ref-236)
236. 236*Id.* §37-45-118(1)(c) ***Colo.*** Water Conservation Bd., *Instream Flow Water Acquisitions*, Dep't of Nat. Res., [*https://cwcb.****colorado****.gov/instream-flow-water-acquisitions*](https://cwcb.colorado.gov/instream-flow-water-acquisitions) (last visited Nov. 27, 2022). [↑](#footnote-ref-237)
237. 237[***Colo.*** *Rev. Stat. §37-45-118(1)(c)*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:630C-HT23-GXJ9-34D9-00000-00&context=1516831). [↑](#footnote-ref-238)
238. 238*See id.* §37-45-118(1)(b)(I)(A) (the power to build waterworks). [↑](#footnote-ref-239)
239. 239*Id.* §37-45-118(1)(c). [↑](#footnote-ref-240)
240. 240[*City of Thornton v. Farmers Reservoir & Irrigation* ***Co****., 575 P.2d 382, 389 (****Colo.*** *1978)*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3RX4-1H10-003D-92PN-00000-00&context=1516831). [↑](#footnote-ref-241)
241. 241[***Colo.*** *Rev. Stat. §37-45-102(1)*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:61P5-WY01-DYDC-J2MB-00000-00&context=1516831). [↑](#footnote-ref-242)
242. 242For example, Northern ***Colorado*** Water Conservancy District's Windy Gap Project will divert water from the ***Colorado*** ***River*** basin for storage in a new reservoir to be constructed on the eastern slope, where the water will serve communities throughout the northern Front Range. *Windy Gap Project*, N. ***Colo.*** Water Conservancy Dist., [*https://www.northernwater.org/what-we-do/deliver-water/windy-gap-project*](https://www.northernwater.org/what-we-do/deliver-water/windy-gap-project) (2023). [↑](#footnote-ref-243)
243. 243***Colo.*** Water Conservation Bd., ***Colorado*** Water Plan Executive Summary: The ***Colorado*** Way Forward xxvi (2015). [↑](#footnote-ref-244)
244. 244***Colo.*** Water Conservation Bd., *The* ***Colorado*** *Water Plan*, Dep't of Nat. Res., [*https://cwcb.****colorado****.gov/****colorado****-water-plan*](https://cwcb.colorado.gov/colorado-water-plan) (last visited Mar. 7, 2023). [↑](#footnote-ref-245)
245. 245*Id.* [↑](#footnote-ref-246)
246. 2462015 Water Plan, *supra* note 82, at 11-1 to 11-4. [↑](#footnote-ref-247)
247. 247*Id*. at 6-1. [↑](#footnote-ref-248)
248. 248*Id*. at 10-3. [↑](#footnote-ref-249)
249. 249*Id*. at 6-3. [↑](#footnote-ref-250)
250. 250*Seeid.* at 6-5. [↑](#footnote-ref-251)
251. 251*See* ***River*** *Basin Roundtables*, ***Colo.*** ***River*** Dist., [*https://www.coloradoriverdistrict.org/****river****-basin-roundtables*](https://www.coloradoriverdistrict.org/river-basin-roundtables)/ (last visited Mar. 7, 2023) ("The act created a "roundtable" grassroots process for stakeholders.…") 2015 Water PLAN, *supra* note 82, at 6-5. [↑](#footnote-ref-252)
252. 2522015 ***Colorado*** Water Plan, *supra* note 78, at 6-8 (2015). [↑](#footnote-ref-253)
253. 253*Id.* at 6-10. [↑](#footnote-ref-254)
254. 254*Id.* [↑](#footnote-ref-255)
255. 255*Id.* at 6-5, 6-10. [↑](#footnote-ref-256)
256. 256*See id.* at 6-1 (explaining how scenario planning will allow ***Colorado*** to "balance tradeoffs among meeting future municipal needs, agricultural viability, and the health of ***Colorado***'s ***rivers*** and streams"). [↑](#footnote-ref-257)
257. 257*Id*. at 7-3. [↑](#footnote-ref-258)
258. 258*Id.* at 7-5. [↑](#footnote-ref-259)
259. 259*Id*. at 7-6. [↑](#footnote-ref-260)
260. 260*Id.* [↑](#footnote-ref-261)
261. 261*Id.* at 9-3 *Id.* at 10-3. [↑](#footnote-ref-262)
262. 262*Id.* at 7-1, 7-3. [↑](#footnote-ref-263)
263. 263*1041 Regulations in* ***Colorado***, Dep't of Loc. Affs., [*https://cdola.****colorado****.gov/community-development-planning/1041-regulations-in-****colorado****#:~:text=These%201041%20powers%20allow%20local,through%20a%20local%20permitting%20process*](https://cdola.colorado.gov/community-development-planning/1041-regulations-in-colorado#) (last visited Mar. 7, 2023) [hereinafter, *1041 Regulations in* ***Colorado***] ***Colorado****'s 1041 Regulations: A Means to Water Equity?*, Innovative Care Solutions (Apr. 20, 2022), [*https://innovativeconservationsolutions.com/2022/04/20/colorados-1041-regulations-a-means-to-water-equity/#:~:text=Through%20their%201041%20powers%2C%20local,%2C%20pipelines%2C%20etc*](https://innovativeconservationsolutions.com/2022/04/20/colorados-1041-regulations-a-means-to-water-equity/#). [↑](#footnote-ref-264)
264. 264*1041 Regulations in* ***Colorado***, *supra* note 263. [↑](#footnote-ref-265)
265. 265*Acequia Assistance Project*, Getches-Wilkinson Ctr. for Nat. Res., Energy, and the Env't, https://www.getches-wilkinsoncenter.cu.law/curriculum/curriculum-and-student-info/acequia-assistance-project/#a (last visited Mar. 7, 2023). [↑](#footnote-ref-266)