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Appropriation as Agrarianism: Distributive Justice in the Creation of Property Rights

by

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Appropriation as Agrarianism: Distributive Justice in the Creation of Property Rights

David B. Schorr*

The water-law doctrine of prior appropriation, developed in Colorado in the late 1800s, has received much scholarly attention, due to the claimed efficiency advantages of the system of private property rights it is supposed to have instituted. Supporters and critics alike have associated the doctrine with values such as the preference for private over common property, the privatization of the public domain, and the facilitation of markets in natural resources.

This article relies on analysis of previously unexamined historical sources to demonstrate that the appropriation doctrine actually was intended to express contemporary radical, agrarian ideals of broadly distributed property and antimonopolism. The unofficial codes of the Colorado mining districts, conventionally thought to be the source of the doctrine's "first in time, first in right" principle, focused primarily on rules designed to ensure wide distribution of property. Similarly, the statutes of the Colorado Territory, the water-rights provisions of the state constitution of 1876, and early judicial decisions culminating in the leading case of Coffin v. Left Hand Ditch Co., were mainly concerned to prevent control of water by capitalists, and did so by breaking the common-law monopoly of riparian owners and opening access to the resource to all bona fide users.

This historical analysis raises the broader question of whether distributive justice has been adequately considered, alongside efficiency and public choice, as a factor in explaining the evolution of property-rights regimes.

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INTRODUCTION

One of the most prominent cases in American property law is Coffin v. Left Hand Ditch Co., handed down by the Colorado Supreme Court in 1882. This opinion, which entirely abrogated the system of riparian rights inherited from the common law and so laid out the "Colorado doctrine" of "pure appropriation" for property in water, was widely influential in the adoption of the appropriation doctrine by other western jurisdictions

^{1. 6} Colo. 443 (1882).

^{2.} Colorado was the first state to do away entirely with riparian rights, applying the doctrine of appropriation to all surface water in the state, including that found on private land – hence "pure appropriation." The Pacific coast states and those on the semi-arid eastern fringe of the prior appropriation region have retained some mixture of riparian and appropriative rights for surface water, while the law of the drier states lying in between these two groups followed the lead of the "Colorado doctrine," abolishing riparian rights completely. See JOSEPH L. SAX ET AL., LEGAL CONTROL OF WATER RESOURCES 294-306 (3d ed. 2000); John T. Ganoe, The Beginnings of Irrigation in the United States, 25 MISS. VALLEY HIST. REV. 59, 65-70 (1938).

in the years that followed.³ It has remained a leading case in practically all modern discussions of water law.⁴

For all its salience, Coffin, along with the appropriation doctrine for which it has come to stand, is today widely misunderstood, largely due to ignorance of the social and legal context in which it arose. Both decision and doctrine have become associated with a set of values – the preference for private over common property, the privatization of the public domain, the facilitation of markets in natural resources – that have little to do with the ideology behind the decision or how contemporaries saw it. Analysis of the available historical evidence makes it quite clear not only that the doctrine of appropriation as developed in nineteenth-century Colorado was viewed at the time as striking a blow at private property in order to advance distributive justice, but that it had that very effect as its central goal.

While the primary purpose of this article is to challenge the received wisdom regarding the ideology of western water law, relying primarily on an examination of contemporary sources, the significance of the argument goes beyond revision of the historical record for its own sake. Historians and theoreticians of property rights have tended to agree that the primary concern driving the rejection of riparian doctrine in favor of appropriation in the western United States was economic growth, part of that nineteenth-century "release of individual creative energy" by American law, to use Willard Hurst's phrase,⁵ or the common law's characteristic tendency toward efficiency, as some economic analysts of the law would have it.6 The claims advanced in this article, stressing considerations of widespread distribution of property as the primary motivating factor in the adoption of appropriation law, challenge these consensus views regarding property law and American legal history in general. In doing so, they raise the question as to whether considerations of distributive justice have been given their due in study of these fields. Given the value American legal culture places on arguments from past

^{3.} See 1 REPORT OF THE SPECIAL COMM. OF THE U.S. SEN. ON THE IRRIGATION AND RECLAMATION OF ARID LANDS, Sen. Rep. 928, 51st Cong., 1st Sess. 74 (1890); Tom I. Romero II, Uncertain Waters and Contested Lands: Excavating the Layers of Colorado's Legal Past, 73 U. COLO. L. REV. 521, 540 (2002).

^{4.} See, e.g., BARLOW BURKE, NATURAL RESOURCES CASES AND MATERIALS 280 (1998); Dean Lueck, First Possession, in 2 NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW 132, 133-36 (1998); SAX ET AL., supra note 2, at 290.

^{5.} James Willard Hurst, Law and the Conditions of Freedom in the Nineteenth-Century United States 6 (1956); see also Donald J. Pisani, Promotion and Regulation: Constitutionalism and the American Economy, 74 J. Am. Hist. 740, 750 (1987).

^{6.} See, e.g., Richard A. Posner, A Theory of Negligence, 1 J. LEGAL STUD. 29 (1972); George L. Priest, The Common Law Process and the Selection of Efficient Rules, 6 J. LEGAL STUD. 65 (1977).

practice and precedent, they also challenge current paradigms of natural-resource law.

The argument proceeds as follows: Part I of this article sets the stage for the historical analysis which follows by summarizing the general approaches found in the scholarship on appropriation, especially of water rights. Part II is a discussion of the norms of Colorado's mining district laws, generally considered to be the source of the state's appropriation doctrine, particularly as they relate to water law. Before proceeding to an analysis of the official water law of the territory and state, Part III explores the ideological background of and precedents for both the miners' codes and the appropriation doctrine, demonstrating that the Colorado rules were created as part of a broader nineteenth-century agrarian reform movement in American law and politics. Part IV analyzes the genesis of the appropriation doctrine itself, as laid down in territorial statutes, the Colorado state constitution, and early judicial decisions, with Coffin v. Left Hand Ditch as their climax. Finally, Part V demonstrates the consonance of the view of the Colorado Doctrine set out in the previous sections with contemporary scholarship on the topic, and concludes with some thoughts on broader implications of the "agrarian" view of the appropriation doctrine advanced in the article.

I. BACKGROUND

Why does society create rights of private property, particularly in natural resources? In the last few decades, the accepted answer has stressed the advantages of private property over common property in terms of efficiency or wealth-maximization. In contrast with what some have termed this "optimistic" or "happy" view, other scholars have described a "darker" or "pessimistic" story of the creation of private-property rights, one in which interest groups manipulate the law to effect a redistribution of valuable resources in their favor.

^{7.} The seminal article for this point of view is Harold Demsetz, Toward a Theory of Property Rights, 57 Am. ECON. REV. (papers & proc.) 347 (1967) (arguing that private-property rights emerge when gains in allocative efficiency from the creation of property rights more than compensate for the costs of creating and enforcing those rights). See also, e.g., Robert C. Ellickson, Property in Land, 102 YALE L.J. 1315 (1993); RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 32-33 (6th ed. 2003).

^{8.} Stuart Banner, Transitions Between Property Regimes, 31 J. LEGAL STUD. S359, S360 (2002); Saul Levmore, Two Stories about the Evolution of Property Rights, 31 J. LEGAL STUD. S421, S428, S432 (2002). Others have pointed out that considerations of efficiency may actually militate in favor of transitions from private-property to common-property regimes in some circumstances. See CAROL ROSE, Energy and Efficiency in the Realignment of Common-Law Water Rights, in PROPERTY AND PERSUASION 163 (1994); Henry E. Smith, Exclusion Versus Governance: Two Strategies for Delineating Property Rights, 31 J. LEGAL STUD. S453 (2002).

^{9.} See, e.g., MORTON J. HORWITZ, THE TRANSFORMATION OF AMERICAN LAW, 1780-1860 (1977); GARY D. LIBECAP, CONTRACTING FOR PROPERTY RIGHTS 1-28 passim (1989); Banner, supra note 8, at S360; Levmore, supra note 8, at S432.

Generally left unexplored is a third possibility, an account of the evolution of property rights that, while "optimistic," focuses on the distributive aspects of property law, and not on considerations of efficiency. On this view, property in natural resources may develop in a way that allocates rights primarily according to considerations of distributive justice, that is to say, consistent with norms of fairness in distribution, and not necessarily in a way that advances allocative efficiency. While most scholarship has tended to view distributive considerations in the creation and development of property rights as insidious, this alternative account of property law is an "optimistic" one, in the sense that it describes the evolution of property rights as guided by principles of justice.

This article explores this third approach to the development of property rights, arguing for the explanatory power of distributive justice in understanding the origins and evolution of the prior appropriation doctrine of water law in the western United States. This episode in legal history may seem a surprising one to illustrate the role of distributive justice in property rights; for not only is the history of prior appropriation a well-worn topic in the historical, property-theory, and natural-resources-law literature, but the consensus view of that history would seem to make any distributive-justice basis for the doctrine unlikely.¹⁰

The outline of the standard story is well known, having achieved mythical status in the property-theory and natural-resources-law literature. The first whites to arrive in most of the territories of the Pacific and Rocky Mountain in any sort of numbers were prospectors and miners of precious metals. They were generally a coarse bunch, interested in getting rich quick, and lacking concern for the niceties of legal doctrine or communal values. The regnant principle in the gold diggings in regard to property in mining claims was "first in time, first in right," an expression of the frontier ethics of individualism, initiative, and exploitation. When it came to resolving disputes over water use, the

^{10.} But see Lon. L. Fuller, Irrigation and Tyranny, 17 STAN. L. REV. 1021, 1037-42 (1965) (distributive justice the central issue of irrigation law).

^{11.} See Dale D. Goble, Prior Appropriation and the Property Clause: A Dialogue of Accommodation, 71 OR. L. REV. 381, 382 (1992) (water plays key role in founding myth of West); Charles F. Wilkinson, In Memoriam: Prior Appropriation, 1848-1991, 21 ENVTL. L. No. 3, at v (1991) (story of prior appropriation's birth "has been told so often that it has become part of the bedrock of western history").

^{12.} See Wilkinson, supra note 11, at viii. Wilkinson, in a fictional personification of Prior Appropriation and the General Mining Law, stated it thus: "Prior and the General knew every bar from Columbia to the Klondike and from Virginia City to Cripple Creek and they caroused and cursed and drank and whored and fought in them all. They were men's men—broadshouldered, barrel-chested, and square-jawed. Prior, who not only read Mark Twain but knew him, was fond of summing it all up by quoting Twain's comment upon his first visit to Nevada in the 1860's: 'This is no place for a God-fearing Methodist and I did not long remain one.'" Id. See also NORRIS HUNDLEY, JR., WATER AND THE WEST: THE COLORADO RIVER COMPACT AND

miners, finding the eastern law of riparian rights unsuited to the exigencies of their environment, applied the rules they had created for mining claims to surface water claims and created a new system of property rights based on the priority of appropriation of the water. Applying the miners' rules to water rights provided security of title to those displaying the entrepreneurial initiative necessary to make the earliest claims on the water, thereby facilitating economic expansion. This new doctrine, with its exclusive private-property rights, stood in bold contrast to the common-property regime of correlative rights under the English and eastern U.S. riparian doctrine. Nonetheless, it was particularly suited to the arid climate of the new western territories and states, and so the miners' rule of prior appropriation became the guiding principle of water-rights law in the western United States, symbolized most clearly in the Colorado court's complete rejection of riparianism in Coffin.¹³

Despite this broad agreement on the circumstances surrounding prior appropriation's creation, lawyers and scholars have sharply disagreed over the meaning of this mythical episode in legal history, again roughly dividing into "optimistic" and "pessimistic" camps. To some, the rule of prior appropriation represents the possibility and promise of efficiency in natural resources law, with the extension of this model to other resources devoutly wished. On this view, the certainty and

THE POLITICS OF WATER IN THE AMERICAN WEST 67 (1975); PATRICIA NELSON LIMERICK, THE LEGACY OF CONQUEST 66-67 (1987); Joseph W. Dellapenna, Adapting Riparian Rights to the Twenty-First Century, 106 W. VA. L. REV. 539, 567-68 (2004); Goble, supra note 11, at 381-82; J. Byron McCormick, The Adequacy of the Prior Appropriation Doctrine Today, in WATER RESOURCES AND THE LAW 33, 34 (1958); A. Dan Tarlock, Prior Appropriation: Rule, Principle, or Rhetoric?, 76 N.D.L. REV. 881, 890 (2000).

13. 6 Colo. 443 (1882). For an overview of the origins of the prior appropriation doctrine in miners' practice and its adoption by the law, see United States v. Gerlach Live Stock Co., 339 U.S. 725, 745-48 (1950); SAMUEL C. WIEL, WATER RIGHTS IN THE WESTERN STATES 65-117 (3d ed. 1911); ROBERT G. DUNBAR, FORGING NEW RIGHTS IN WESTERN WATERS 59-85 (1983) [hereinafter DUNBAR, NEW RIGHTS]. The view that the law of prior appropriation was a necessary response to the aridity of the West is associated most strongly with WALTER PRESCOTT WEBB, THE GREAT PLAINS 431-52 (1931). See also YORAM BARZEL, ECONOMIC ANALYSIS OF PROPERTY RIGHTS 118-19 (2d ed. 1997); Gordon M. Bakken, The English Common Law in the Rocky Mountain West, 11 ARIZ. & THE WEST 109, 121-28 (1969); Robert G. Dunbar, The Adaptability of Water Law to the Aridity of the West, 24 J. WEST 57, 57 (1985) [hereinafter Dunbar, Adaptability]. The element of secure title as encouraging commoditization and economic expansion is developed in GORDON MORRIS BAKKEN, THE DEVELOPMENT OF LAW ON THE ROCKY MOUNTAIN FRONTIER: CIVIL LAW AND SOCIETY 71-72 (1983) [hereinafter BAKKEN, DEVELOPMENT OF LAW]; Norris Hundley, Jr., The Great American Desert Transformed: Aridity, Exploitation, and Imperialism in the Making of the Modern American West, in WATER AND ARID LANDS OF THE WESTERN UNITED STATES 21, 34 (Mohamed T. El-Ashry & Diana C. Gibbons eds., 1988); see also HORWITZ, supra note 9, at 33-34, 43 (emphasizing the dimension of monopoly in the stimulation of development by the recognition of priority as the basis for property rights). A useful bibliographic essay is Peter L. Reich, Studies in Western Water Law: Historiographical Trends, 9 W. LEGAL HIST. 1 (1996).

transferability associated with the creation of private-property rights in a resource benefit society by enhancing efficiency, particularly comparison with the common-property-like riparian rights doctrine. 14 For this group, Demsetzian efficiency provides the key to understanding the creation of the prior appropriation doctrine in the west: the high value of water induced by its scarcity in this region, argues an influential article, outweighed the definition and enforcement costs associated with the creation of private property rights in water, and thus made the prior appropriation doctrine possible. 15 Criticisms of the western law from this quarter tend to focus on certain efficiency-impairing aspects of the law, depicting such elements of western water law as public ownership of waters, the requirement of beneficial use and the rules of forfeiture and abandonment as foreign impurities that have seeped into the law.¹⁶ On the other hand many see in prior appropriation a symbol of everything that is wrong about private-property regimes in natural resources: environmental degradation; inequality; nonsustainability; giveaways of public property. Like their opponents, this group also views the doctrine as a creature of the individualistic frontier, but for them the abandonment of the riparian doctrine's equitable sharing in favor of exclusive rights by appropriation was a tragedy, with the greater good of the community being sacrificed to greed.¹⁷

^{14.} See, e.g., TERRY L. ANDERSON & DONALD R. LEAL, FREE MARKET ENVIRONMENTALISM 33-35 (rev. ed. 2001); JACK HIRSHLEIFER ET AL., WATER SUPPLY: ECONOMICS, TECHNOLOGY, AND POLICY 231-34 (1960); Dunbar, Adaptability, supra note 13, at 64; Dean Lueck, The Rule of First Possession and the Design of the Law, 38 J.L. & ECON. 393, 427-430 (1995); J.W. Milliman, Water Law and Private Decision-making: A Critique, 2 J.L. & ECON. 41 (1959); Timothy D. Tregarthen, The Market for Property Rights in Water, in WATER NEEDS FOR THE FUTURE 139, 142-43 (Ved P. Nanda ed., 1977). See also WATER RIGHTS: SCARCE RESOURCE ALLOCATION, BUREAUCRACY, AND THE ENVIRONMENT passim (Terry L. Anderson ed., 1983) [hereinafter WATER RIGHTS], described by a reviewer as "a hymn of praise to the doctrine of prior appropriation and to the ideal of water rights as exclusively private property." Paul Herrington, Book Notes, 94 ECON. J. 1013, 1043 (1984).

^{15.} Terry L. Anderson & P.J. Hill, The Evolution of Property Rights: A Study of the American West, 18 J.L. & ECON. 163, 176-178 (1975); see also DUNBAR, NEW RIGHTS, supra note 13, at 60.

^{16.} See, e.g., TERRY L. ANDERSON & PAMELA SNYDER, WATER MARKETS: PRIMING THE INVISIBLE PUMP 33-34 (1997); Timothy D. Tregarthen, Water in Colorado: Fear and Loathing of the Marketplace, in WATER RIGHTS, supra note 14, at 119-36.

^{17.} See SARAH F. BATES ET AL., SEARCHING OUT THE HEADWATERS: CHANGE AND REDISCOVERY IN WESTERN WATER POLICY 136-37 (1993); MARK FIEGE, IRRIGATED EDEN: THE MAKING OF AN AGRICULTURAL LANDSCAPE IN THE AMERICAN WEST (1999); MARC REISNER & SARAH BATES, OVERTAPPED OASIS: REFORM OR REVOLUTION FOR WESTERN WATER 62-65 (1990); VANDANA SHIVA, WATER WARS: PRIVATIZATION, POLLUTION AND PROFIT 20-23 (2002); DONALD WORSTER, RIVERS OF EMPIRE 88-92 (1985); Robert Glennon, Bottling a Birthright?, in WHOSE WATER IS IT?: THE UNQUENCHABLE THIRST OF A WATER-HUNGRY WORLD 9, 15 (Bernadette MacDonald & Douglas Jehl eds., 2003); William Lilley III & Lewis L. Gould, The Western Irrigation Movement, 1878-1902: A Reappraisal, in THE AMERICAN WEST: A REORIENTATION 57, 63 (Gene M. Gressley ed., 1966); Donald J. Pisani, Enterprise and Equity: A Critique of Western Water Law in the Nineteenth Century, 18 W. HIST.

While advocates on either side of the debate over private property and natural resources thus sharply dispute the *meaning* of the myth of prior appropriation, they tend to agree with the consensus of most historians of western water law about at least two important features of the story: first, that the law of prior appropriation originated in the practices of the miners in the Sierra Nevada Mountains and their successors in the Rockies; and second, that the primary concern of the appropriation doctrine was wealth creation, accomplished through the efficiency advantages of private-property rights in water.¹⁸

However, this consensus view, which stresses the wealth-maximizing focus of prior appropriation, seems unlikely, as it fails to explain – other than as foreign implants in the pure capture doctrine – the many aspects of the law generally agreed to be inefficient, such as the beneficial use requirement and forfeiture for non-use.¹⁹ It also falls short in accounting for such features of western law as the constitutional or statutory declarations of public or state ownership of waters found in all appropriation states.²⁰

It is, moreover, contradicted by the historical evidence. The sources examined here may be divided into four categories. First, the unofficial codes of Colorado's mining districts in the early years of white settlement in the area are usually identified as the source of the state's doctrine of prior appropriation. Contrary to the standard view, these rules generally

Q. 15, 19 (1987); Frank J. Trelease, Alternatives to Appropriation Law, in WATER NEEDS FOR THE FUTURE, supra note 14, at 59-60.

^{18.} See, e.g., DUNBAR, NEW RIGHTS, supra note 13; BAKKEN, DEVELOPMENT OF LAW, supra note 13; Hundley, supra note 13; Donald J. Pisani, Natural Resources and Economic Liberty in American History, in THE STATE AND FREEDOM OF CONTRACT 236, 245 (Harry N. Scheiber ed., 1998). But see Gregory J. Hobbs, Jr., Colorado Water Law: An Historical Overview, 1 U. DENV. WATER L. REV. 1 (1997) (noting anti-speculation aspects of Colorado water law); Sam S. Kepfield, Great Plains Legal Culture and Irrigation Development: The Minitare (Mutual) Irrigation Ditch Company, 1887-1896, 19 ENVTL. HIST. REV. No. 4, at 49, 51 (1995) (Colorado laws aimed against corporations); Donald J. Pisani, "I am resolved not to interfere, but permit all to work freely": The Gold Rush and American Resource Law, in A GOLDEN STATE: MINING AND ECONOMIC DEVELOPMENT IN GOLD RUSH CALIFORNIA 123, 125 (James J. Rawls & Richard J. Orsi eds., 1999) [hereinafter Pisani, Gold Rush] (prior appropriation encouraged equal access as well as monopoly).

^{19.} On the inefficiency of these rules, see Terry L. Anderson & P.J. Hill, The Race for Property Rights, 33 J.L. & ECON. 177 (1990); Lueck, supra note 4, at 133-36; Tregarthen, supra note 16, at 123-24, 132-33; Stephen F. Williams, The Requirement of Beneficial Use as a Cause of Waste in Water Resource Development, 23 NAT. RESOURCES J. 7 (1983). On their supposed origins outside of the pure appropriation rule, see, e.g., Mohamed T. El-Ashry & Diana C. Gibbons, The West in Profile, in WATER AND ARID LANDS OF THE WESTERN UNITED STATES 1, supra note 13, at 4; BATES ET AL., supra note 17, at 140; ANDERSON & SNYDER, supra note 16, at 34, 79.

^{20.} See Frank J. Trelease, Government Ownership and Trusteeship of Water, 45 CAL. L. REV. 638, 642 (1957). It also fails to explain the diversity of water rights regimes in arid environments outside the western United States. See, e.g., D.A. CAPONERA, WATER LAWS IN MOSLEM COUNTRIES (1973); ARTHUR MAASS & RAYMOND L. ANDERSON, ...AND THE DESERT SHALL REJOICE (1978).

expressed a concern for broad and equitable distribution of resources, and included the roots of those supposedly eastern imports which some have bemoaned for contaminating western water law.²¹ The miners' ideology and analogs to their rules are clearly discernable in Colorado's early official water law, as found in the next two groups of sources, the water-law statutes of Colorado's legislature in the pre-Coffin era and the relevant sections of the state's 1876 Constitution. These statutes exhibit a concern with equitable distribution of water, a value not usually thought to be part of the prior appropriation milieu. Also, the decisions of Colorado's Supreme Court in its first decades, including the Coffin decision itself, advanced a like commitment to equal access and the prevention of concentration of wealth in the form of water. Throughout, the ideological assumptions behind the law created by Colorado's pioneers are illustrated by the fourth group of sources - contemporary primary sources and published works.

II. THE LAWS OF THE COLORADO MINERS' DISTRICTS – SOURCES OF THE COLORADO DOCTRINE

This Part presents a new analysis of the Colorado mining district laws, ²² focusing on their rules for water rights. First examined is the role of priority in the miners' rules. Though scholars have seen this element of the law as most strongly associated with the themes of individualism and private property, a careful reading of the mining rules shows that it was part of a larger scheme of limiting the extent of mining claims. Next, the use requirement, sometimes derided as an inefficient and exotic graft on the pure-property western system of water law, is shown to have been an integral part of the larger scheme of limiting property rights from the inception of the system. Finally, viewing the miners' laws in the light of doctrinal elements already present in the eastern system of riparian rights reveals that the real break with riparian rights was not in the transition from absolute sharing to a system of priority, but in the breaking of the rule that water be used on the land of riparian owners, a requirement that would have given riparian owners real monopoly power in the arid West.

A. A Matter of Priorities

On May 6, 1859, John Gregory made the first major discovery of gold in the mountains of what was to become Colorado. The members of

^{21.} See, e.g., ANDERSON & SNYDER, supra note 16, at 53-56, 61.

^{22.} To the best of the author's knowledge, the survey of Colorado mining district laws for purposes of this article is the most comprehensive carried out to date, including all extant published and unpublished sources, covering 91 distinct mining codes (10 of them hitherto unmentioned in print sources) from 78 districts, as well as numerous amendments to codes not rising to the level of a new code.

his party were able to work on the claim undisturbed until about the twenty-third of the month, but word of the strike quickly spread, so that by the first of June it was estimated that there were 5,000 people in the Gregory Diggings camp, northwest of Denver.²³

The June 8, 1859 regulations of the Diggings, consisting of only ten sections, were one of the earliest examples of miners' laws from the lands later to be incorporated in the Colorado Territory.²⁴ It was the first such surviving code to mention water rights, and influenced many of the later miners' codes adopted in the territory. The Diggings regulations were cited in historian Robert Dunbar's standard account of the miners' rules regarding prior appropriation:

Sometimes [the laws] indicated that priority of claim gave the better right; more often they omitted reference to priority, leaving that to the unwritten law of the gulches. Some of the Colorado miners, however, were explicit in their declarations of prior rights in water. When the organizers of the Downeyville Mining District met on July 29, 1859, to write their code, they included an article that read: "In all gulches or ravines where water may be scarce the oldest claimants shall have preferance [sic] and priority of right to water." Two months later, on September 26, 1859, the miners who formed the Illinois Mining District gave those using water on their claims "priority of right." Similarly in Gregory Gulch the rules provided that in case of scarcity of water, "priority of claim" would prevail.²⁵

Dunbar's statement regarding the Gregory district's rules apparently is a reference to section 8 of its regulations, which reads:

Eighth – resolved that in all cases priority of claims, when honestly carried out, shall be respected.²⁶

This provision, which appears (often with slight modifications) in many later codes,²⁷ indeed seems to award legal force to priority of appropriation (for all claims, not just water.) However, the meaning of the section in this case cannot be that water rights will be governed by the prior appropriation system, as can be seen from the very next section, which limits the amount of water a miner could divert, irrespective of priority:

 $^{23.\;}$ Ovando J. Hollister, The Mines of Colorado 75-76 (Springfield, Mass., Samuel Bowles & Co. 1867).

^{24.} The code adopted in Jackson Diggings, May 9, 1859, consisting of three sections, is the only code on record with an earlier date, and appears to have had little influence. *Id.* at 70.

^{25.} DUNBAR, NEW RIGHTS, supra note 13, at 74.

^{26.} Gregory District Resolutions of June 8, 1859, in LAWS AND REGULATIONS OF THE MINERS OF THE GREGORY DIGGINGS DISTRICT (Denver, n.d.), Yale Collection of Western Americana, Beinecke Rare Book and Manuscript Library [hereinafter Yale Collection], reprinted in HOLLISTER, supra note 23, at 78.

^{27.} It appears in substantially the same form in, e.g., Russell District Laws of June 18, 1859, rule 8, in EARLY RECORDS OF GILPIN COUNTY, COLORADO, 1859-1861, 48, 49 (Thomas Maitland Marshall ed., 1920). For variant forms, see *infra* note 29.

Ninth – resolved that when two parties wish to use water on the same stream or ravine, for quartz mining purposes, no person shall use more than one half of the water.²⁸

Section 8 was thus clearly not intended to institute a system of prior appropriation for water claims. The language of a later, more developed code of the same Gregory Diggings may better indicate its true meaning:

In all cases when parties shall have complied with the law as far as possible priority of claim when honestly carried out shall be respected.²⁹

The purpose of this provision was nothing more than stating the unremarkable principle that in a case of two bona fide claims to the same mining site, the earlier claimant should prevail. This is simply an instance of the equitable rule of *qui prior est tempore potior est jure* ("he who is first in time is first in right"), which applies to two claimants to the same entitlement.³⁰ Such a rule is practically an inevitable adjunct to any system under which competing claims might arise.³¹

This highlights the point that the original Gregory code, like the codes of the other districts, did not have as its main concern the distribution of water. In fact, many codes made no mention at all of how water was to be allocated in the "diggings." Virtually every Colorado miners code did have, however, limitations on the size and number of mining claims that might be staked by any one miner. For example, the original Gregory code limited mountain claims to a patch of ground 100 feet long and 50 wide in which the miner could dig, and gulch claims to 100 feet along the length of the gulch for panning for surface gold,

^{28.} Gregory Dist. Resolutions of 1859, supra note 26. In HOLLISTER, supra note 23, at 78, the text is slightly different: "...when two parties wish to use water on the same stream or ravine for quartz-washing, it shall be equally divided between them." Quartz mining (i.e., mining of gold-bearing quartz veins) involved the use of water to power quartz-crushing machinery to extract the gold.

^{29.} An Act Defining Claims and Regulating the Title Thereto § 10, in LAWS OF GREGORY DISTRICT, ENACTED FEBRUARY 18 & 20, 1860 at 3 (Denver City, Wm. N. Byers & Co. 1860), Yale Collection, reprinted in United States Mining Laws and Regulations Thereunder, and State and Territorial Mining Laws 360 (14 Tenth Census of the United States, Clarence King ed., Washington, G.P.O. 1885) [hereinafter United States Mining Laws]. This language appears in the codes of other districts, as well; for example Griffith Mining Dist. laws, Mar. 9, 1861 ch. 18, § 11, Id. at 381.

^{30.} See Ralph W. Aigler, The Operation of the Recording Acts, 22 MICH. L. REV. 405, 406 (1924).

^{31.} See William E. Colby, The Freedom of the Miner and Its Influence on Water Law, in LEGAL ESSAYS IN TRIBUTE TO ORRIN KIP MCMURRAY 67, 70 (Max Radin & A.M. Kidd eds., 1935).

^{32.} Cf. Andrea G. McDowell, From Commons To Claims: Property Rights In The California Gold Rush, 14 YALE J.L. & HUMAN. 1, 34-39 (2002) (highlighting theme in the California context); see also Richard O. Zerbe Jr. & Leigh Anderson, Culture and Fairness in the Development of Institutions in the California Gold Fields, 61 J. ECON. HIST. 114, 128 (2001).

significantly smaller than the Spanish code's 600-foot claim size.³³ As in most jurisdictions, miners could only hold one claim of each type by "preemption" (that is, appropriation of an unowned claim)³⁴ though a bonus claim was typically allowed for the discoverer of the lode,³⁵ and there was generally no limit on the accumulation of claims by purchase.³⁶ A further limit on the concentration of claims was the general requirement that claims be worked; claims left unworked beyond a prescribed period (usually a matter of days) were forfeit and could be claimed by another.³⁷

These limitations are important to understanding the rationale behind the various provisions regarding water in the mining district laws, a theme to be more fully developed later. For now, it is important to note that they effectively limited the amount of wealth in the form of mining claims that any miner could legitimately acquire from the public "commons" to that amount which he could reasonably work.³⁸ Beyond that level, accumulation of wealth by "appropriation" was not allowed.

Returning to the direct treatment of water rights in the miners' laws, a remarkable characteristic of the seventy-odd codes that explicitly dealt with water rights is the seeming multiplicity of approaches to the subject. This diversity belies the standard account of the birth of a revolutionary western water law in the crucible of the mining camps.³⁹ While some laws made some reference to priority,⁴⁰ others (sometimes the same ones)

^{33.} Gregory Dist. Resolutions 1859 § 4, *supra* note 26; Donald Wayne Hensel, A History of the Colorado Constitution in the Nineteenth Century 10 (unpublished Ph.D. thesis, U. Colo. 1957).

^{34.} Gregory Dist. Resolutions 1859 § 2, supra note 26.

^{35.} See, e.g., Russell Dist. Laws 1859, Rule 1, supra note 27, at 48.

^{36.} See, e.g., Gregory Dist. Resolutions 1859 § 2, supra note 26. A few codes, however, did attempt to limit accumulation of claims through fraudulent conveyances, by requiring good faith and fair compensation. See, e.g., Russell Dist. Resolutions of July 28, 1860 § 61. in UNITED STATES MINING LAWS, supra note 29, at 392. At least one did limit the number of claims that a person could purchase to two. Wisconsin District, Laws Enacted Feb. 13, 1860, Art. 5, in Marshall, supra note 27, at 147.

^{37.} See, e.g., Gregory Dist. Resolutions 1859 § 5, supra note 26 (work required within ten days of claim); Russell Dist. Laws 1859, Rule 5, supra note 27, at 49 (work required within six days); Downeyville Dist. Laws, July 29, 1859, art. 6 [herinafter Downeyville Dist. Laws], in UNITED STATES MINING LAWS, supra note 29, at 352 (at least of two weeks of work required, plus one day in ten if claim unrecorded).

^{38.} Cf. Zerbe & Anderson, supra note 32, at 128 (California mining-claim sizes limited to amount one man could work).

^{39.} A point made in the California context by DONALD J. PISANI, TO RECLAIM A DIVIDED WEST 12, 20 (1992); Pisani, *Gold Rush*, *supra* note 18, at 136-38. For the standard account, see, e.g., DUNBAR, NEW RIGHTS, *supra* note 13.

^{40.} Out of the 91 codes examined, eleven codes made some reference to priority in connection with water rights. See, e.g., Russell Dist. Laws 1859, Rule 3, supra note 27, at 48. One, without using the word, established a system for registering water claims, with the preference for earlier appropriations implied. Report of Committee on Credentials, Erie Mining Dist., Apr. 21, 1861 [hereinafter Erie Dist. Laws] §§ 2-8, in UNITED STATES MINING LAWS, supra note 29, at 407. Another thirteen established priority as a principle for resolving conflicting claims in

declared that water should be divided proportionately between the users. 41 Still others, as well as some in the former groups, imposed strict limits on the amount of water that might be claimed. 42 A necessary corollary to limiting the size of a water right was the restriction of each miner to one claim only by appropriation, a limitation made explicit in most codes 43 and implicit in all. 44 While several codes seem to have remained within the common-law tradition of limiting the locus of use to riparian lands, whether by limiting the right to take water to those whose mining claims were adjacent to the stream, 45 by giving priority to riparians, 46 or by forbidding interference with the natural flow, 47 many explicitly granted easements for ditches to non-riparians 48 or to "bring water into the mines."

Although at first blush a chaotic array of discordant and competing norms and values, mining codes in fact express a single, overarching principle: not efficiency, as represented by some,⁵⁰ but rather broad distribution of water rights. The distributive ethic is evident, first of all, in the rules establishing a certain, uniform size for water claims (along with the corollary limitation of one water claim per miner).⁵¹ While a few codes defined the maximum claim amount in terms of flow or quantity of water,⁵² limits were most often by length along the stream (to be used for

general, without specific mention of water. See, e.g., Gregory Dist. Resolutions 1859 § 8, supra note 26.

- 41. Out of the twelve codes that did so explicitly, six numbered among the group also mentioning priority in connection with water. See, e.g., Gregory Dist. Act 1860 §§ 16, 17, supra note 29, at 4. Another three were of the group mentioning priority only in regard to claims in general. See, e.g., Gregory Dist. Resolutions 1859 § 9, supra note 26. In addition to these twelve, another eight codes mandated that water users return their water to the stream or prohibited obstruction of flow, in effect instituting sharing among diverters of water through a noconsumption rule. See, e.g., Eureka Mining Dist. Laws, Aug. 17, 1873, art. 8, in UNITED STATES MINING LAWS, supra note 29, at 478. Another possibly instituted a system of rotation among water claims. Griffith Mining Dist. Laws § 7, Jan. 12, 1861, in UNITED STATES MINING LAWS, supra note 29, at 376.
 - 42. See infra, notes 51-61 and surrounding text.
 - 43. E.g., Gregory Dist. Act 1860 § 4, supra note 29, at 3.
 - 44. See McDowell, supra note 32, at 34.
- 45. E.g., Griffith Mining Dist. Laws, Mar. 9, 1861, chap. 17, § 1, in UNITED STATES MINING LAWS, supra note 29, at 381.
- 46. E.g., Ohio Mining Dist. Laws, April 12, 1860 § 22, in UNITED STATES MINING LAWS, supra note 29, at 365.
- 47. E.g., Constitution & By-Laws of Carpenter's Dist., American Gulch, Utah Terr., June 16, 1860, art. 25, in UNITED STATES MINING LAWS, supra note 29 [hereinafter Carpenter's Dist. Laws] at 371.
- 48. E.g., Laws of Bay State Mining Dist. § 23, in United States Mining Laws, supra note 29, at 347.
 - 49. E.g., Gregory Dist. Act 1860 § 18, supra note 29, at 4.
 - 50. See supra notes 14-16.
 - 51. See supra text accompanying notes 43-44.
- 52. Russell Dist. Laws 1859, Rule 3, *supra* note 27, at 48 (limit of "one sluice or tom head"); Carpenter's Dist. Laws, art. 19, *supra* note 47, at 371 (limit of "one usual sluice head")

washing gold from the dirt or for powering quartz-crushing mills): "33 feet in length up & down the stream;"53 "300 ft on the creek or gulch;"54 "not exceeding in distance two hundred and fifty feet measured in a straight line and touching the centre of the stream at each end."55 These rules were similar to those setting out the size of the various types of mining claims. 56 Other laws gave each claimant a certain measure of head, or fall, on the stream:57 "No [quartz or lumber] mill site claim... shall occupy more of the stream in length than will be sufficient to raise the water by a dam to the height of fourteen feet;"58 "a sufficient distance on such stream to secure a fall of thirty feet from the dam to the mill;"59 "a sufficient distance along any stream to give a head twenty feet and sufficient fall for a ditch to convey said water;"60 and even simply "sufficient head... to run a mill."61

The guiding principle here was equality (of opportunity, since only some claims would turn out to be valuable),⁶² modified by a guarantee of

per claim); Erie Dist. Laws, supra note 40 (water claim limited to 12 "miners' inches" flow for twelve hours per day).

- 53. Resolutions of Gold Hill Mountain Dist. No. 1, July 30th 1859, res. 2, in UNITED STATES MINING LAWS, supra note 29, at 348.
 - 54. Griffith Mining Dist. Laws, ch. 17, § 1, supra note 29, at 381.
- 55. Wisconsin Mining Dist. Laws, Dec. 13, 1860, Art. 10, in UNITED STATES MINING LAWS, supra note 29, at 417. All told, thirty-four codes from thirty-two districts had length restrictions on water claims. A further three codes limited water mill claims by area. See, e.g., Revised Laws of S. Boulder Dist., Mar. 30, 1861, ch. 7, § 2, in UNITED STATES MINING LAWS, supra note 29, at 442 (water claim limited to 300 square feet).
 - 56. See supra text accompanying notes 32-33.
- 57. Sixteen codes did so, one of them offering an alternative length limit as well (Laws as Amended Aug 25, 1860, Bull Run Indep. Mining Dist., Art. 3, in UNITED STATES MINING LAWS, supra note 29, at 394). The notion of hydraulic "head" is a measurement of the relationship of velocity, pressure and elevation in a fluid, and is constant along a streamline (assuming no friction). See GEORGE M. HORNBERGER ET AL., ELEMENTS OF PHYSICAL HYDROLOGY 55-56 (1998). In the miners' laws, "head" seems to stand for "fall" of the water (in technical terms, a change in elevation head) so that, for example, "a sufficient distance along any stream to give a head twenty feet," infra text accompanying note 60, would mean a sufficient distance along the stream to give an elevation differential of 20 feet. Since hydraulic head is a constant, a drop in elevation would entail an increase in velocity or pressure (or both), which could be used to turn a water wheel. This article's use of the term "head" conforms to the colloquial usage of the miners.
- 58. Gold Hill Mining Dist., Bill passed Nov. 5, 1859 [hereinafter Gold Hill Dist. Laws], Art. 3, in United States Mining Laws, supra note 29, at 348.
- 59. Constitution and By Laws, Sugar Loaf Mining Dist., Organized and Established Nov. 9, 1860, Art. 7 (Water Claims), in UNITED STATES MINING LAWS, supra note 29, at 409.
- 60. Laws of Clear Creek Mining Dist., May 7, 1864 § 5, in UNITED STATES MINING LAWS, supra note 29, at 466; Laws of Granite Mining Dist., May 7, 1864 § 5, in UNITED STATES MINING LAWS, supra note 29, at 467.
- 61. Laws of Central Dist., Sep. 4, 1860, § 2 (manuscript), Denver Public Library Western History Collection.
- 62. See John Phillip Reid, The Layers of Western Legal History, in LAW FOR THE ELEPHANT, LAW FOR THE BEAVER 23, 33 (John McLaren et al. eds., 1992); McDowell, supra note 32, at 57.

sufficiency. Strict adherence to a rule of equality would have led to constantly decreasing claim sizes; with each newcomer to the mining camp, the claims would have had to be reapportioned. Beyond the prohibitive administrative costs of such as system, it would have been impractical (and unfair) for another reason: claim sizes would have decreased past the point where they were too small to be of any real value.⁶³ (It bears keeping in mind that the population of Gregory Gulch is said to have increased from two prospectors to four or five thousand in the month following Gregory's discovery on May 6, 1859, and to ten or fifteen thousand a month later.)⁶⁴ The approach adopted in most of the codes, laying out standard claim sizes and limiting them to one per person, avoided this pitfall while preserving a relatively high level of equality. The claim size, measured in the square feet of placer diggings, length along a stream, or feet of head, represented the best judgment of the miners as to the amount of the resource that could be worked by one person.⁶⁵ On the one hand, it was a minimum, ensuring that each miner received enough space or water for a workable claim. On the other hand, it was also a maximum, limiting the accumulation of wealth by any one person, and thereby maximizing the number of people that could stake claims in the district, or "divid[ing] wealth among a large number of people," as a nineteenth-century guide observed.66

The element of sufficiency is also thrown into relief by the different methods of calculating the claim size for water. Those codes allowing a certain length or area along the stream must have reflected an assumption that the chosen figure approximated a reasonable amount of water or water pressure for the use of a miner; yet rules of this type retained an element of arbitrariness that was absent from those directing a maximum claim size in terms of length "sufficient" to produce a given head. In the former, the mandated figure might miss the mark, leaving the claimant with more or less than was really necessary for his purposes;

^{63.} See Zerbe & Anderson, supra note 32, at 130; cf. RESTATEMENT (SECOND) OF TORTS, § 850A, Comment j (making this point with regard to riparian doctrine). This was essentially the point made by Justice Stephen Field, himself a former miner, in an oft-quoted passage on the California miners' codes: "And they were so framed as to secure to all comers, within practicable limits, absolute equality of right and privilege in working the mines." Jennison v. Kirk, 98 U.S. 453, 457 (1878) (emphasis added). On the fairness issue, see HARRY G. FRANKFURT, Equality as a Moral Ideal, in THE IMPORTANCE OF WHAT WE CARE ABOUT 134, 144 (1988); JOSEPH RAZ, THE MORALITY OF FREEDOM, 238-41 (1986).

^{64.} HOLLISTER, *supra* note 23, at 63, 76; CARL ABBOTT ET AL., COLORADO: A HISTORY OF THE CENTENNIAL STATE 59 (3d ed. 1994).

^{65.} PERCY STANLEY FRITZ, COLORADO: THE CENTENNIAL STATE 128 (1941).

^{66.} FRANK FOSSETT, COLORADO: ITS GOLD AND SILVER MINES, FARMS AND STOCK RANGES, AND HEALTH AND PLEASURE RESORTS 122-23 (New York, C.G. Crawford 1879). Cf. Edith James, Claims' Law and Miners' Courts of the Montana Gold Camps, 1862-1870, at 85 (unpublished M.A. dissertation, U. of Chicago, 1949).

in the latter, the length of the claim would vary with the topography of the site, but would always represent the head sufficient to run a mill.

The equality principle is, of course, most obviously apparent in the rules calling for equal apportionment of the water in a stream. One instance is section 9 of the original Gregory Diggings laws quoted above.⁶⁷ The reference to "two parties" in that law probably reflects the reality that a miner, after using water, would return to the stream substantially the same quantity as he withdrew, so that the question of division would generally only arise among miners working on opposite banks. This seems to be the assumption in other codes as well, such as this one from the Nevada District:

Resolved, That miners working lode claims shall be entitled to one half the water from the gulch...; but those so using it shall return it to the gulch by a ditch unless it be needed for use by parties below, in which case those last using it shall conduct it in a ditch as prescribed above.⁶⁸

This rule tracks riparian law not only in forbidding non-riparian use of the water, but in ensuring every claim holder an equal right to use the water of the stream for mining activities. Other codes stipulated that if a miner were unable to return his diverted water immediately below his claim, he would be required to divide it equally with the miners whose claims were being bypassed by his ditch.⁶⁹ These laws, apparently legislating for a situation in which water was used without substantial consumption, basically retained a rule that looked a lot like the eastern riparian rule of equality.⁷⁰

On the other hand, in circumstances where water would be consumed with use, a rule of strict equality would have been unworkable and unfair, as argued above.⁷¹ Indeed we find that other codes, perhaps reflecting different mining practices, addressed this concern. In these the equal-sharing rule was subject to the caveat that in case of insufficient

^{67.} Supra text accompanying note 28.

^{68.} Miners' Laws of Nevada Dist.: Jefferson Territory, 1860, Nov. 10, 1860 [hereinafter Nevada Dist. Act], § 8, Nevada Mining Dist. Records, 1860-1861, Yale Collection. The assumption behind the "one half" rule seems to have been that at any point along the stream there would be one claim holder on each bank; each could divert up to a half of the water, and would have to return it to the stream after use (or after others on his side of the stream had used it too) so that the next set of claim holders downstream would have an opportunity to use the water.

^{69.} Laws and Regulations of Arkansas River Mining Dist., Dec. 10, 1864 § 13, in UNITED STATES MINING LAWS, supra note 29, at 472; By-Laws of California Mining Dist. California Gulch, Arkansas River, Jan. 22, 1866, Art. 6, in UNITED STATES MINING LAWS, supra note 29, at 369.

^{70.} The connection between non-consumptive uses and common-property-like regimes of equality and correlative rights has been made by ROSE, *supra* note 8.

^{71.} Supra text accompanying note 63.

water for all, priority in time would give some a better right than others. Such a rule was section 17 of the 1860 Gregory Diggings laws:

Be it further enacted, That if two or more parties wish to use water on the same stream or ravine for quartz mining purposes, no person shall be entitled to use more than his proportionate share of water, but in case there shall not be water sufficient for all, priority of claim shall determine the right to such water.⁷²

Priority was not the primary rule of decision for water rights here or elsewhere; the codes did not allow the pioneer to claim as much water as he wanted, or could physically divert. The primary rule was that each party was entitled to a proportional share of the water. The element of priority acted as a supplementary principle, having legal effect only in cases when there was not enough water for all the parties wishing to use the water to realistically do so.⁷³

A schematic, hypothetical example will illustrate how the above rule would have worked: A stream has a flow of 60 cubic feet per second (c.f.s.,) in an area where a flow of 15 c.f.s. is normally required to power a quartz mill. A and B are the first to arrive in the area, and erect mills. Each of them has the right to insist that the other refrain from using more than 30 c.f.s. When C arrives and builds a mill, he can insist that A and B restrict their use to no more than 20 c.f.s.; even if one or both had been using more than that before he got there, they must reduce their use in order to accommodate him. D then arrives on the scene and demands his proportional share. A, B and C must further reduce their use to 15 c.f.s. The egalitarian principle of proportional use is controlling, and the newcomer's right is no weaker than that of those first on the scene. When E appears, however, the rule of priority comes into play. He cannot demand that A, B, C and D reduce their use below the 15 c.f.s. mark, the flow necessary to power a mill. Equality can reduce the property rights of the mill owners only to a threshold level of basic sufficiency.

Though not always made explicit, this notion of priority was seemingly at work as well in the more numerous codes in which water use was limited by length or head.⁷⁴ In these laws, the egalitarian impulse limited the amount that could be claimed by any person, while priority determined whose claims were valid when there were not enough to go around (as well as the identity of the owner of each specific, geographically-delimited claim).

^{72.} Gregory Dist. Act 1860, *supra* note 29, at 4. As noted earlier, *supra* notes 40-41, many codes invoking the priority principle did so alongside provisions for equal sharing (six of the twelve codes awarding water rights by priority also mandated sharing.)

^{73.} Why specifically temporal priority should have been chosen as the mediating principle in case of insufficient water for all will be explored *infra* at notes 218-246.

^{74.} See supra notes 51-61 and accompanying text.

Some such miners' laws did, however, explicitly mention the secondary rule of priority. This is the normative context of article 8 of the Downeyville district laws,⁷⁵ cited by Dunbar in the selection quoted above:⁷⁶ Article 5 of the code had already limited the size of a river claim (200 feet in length and from stream bank to the base of the adjacent mountain);⁷⁷ priority was thus but a secondary rule of decision, effective only when the number of claimants exceeded the number of viable claims. In fact, this is the context of all the priority preferences for water claims in Colorado's mining district laws: Every code with such a rule also explicitly limited the size of a water claim in one way or another.⁷⁸

Priority as a tenet of water allocation appeared, then, only in a small minority of the Colorado miners' laws, and then primarily in two contexts: 1) situations governed by a proportionate sharing rule, for cases when there would not have been sufficient water for any if all comers were allowed in with an equal share; and 2) codes in which limits were placed on claim size, for cases when there were not enough claims to go around. It also was an implicit, background principle in the other codes which placed limits on claim size. In all three cases its role was decidedly second-fiddle.

The ideal of equality, on the other hand, though not taken to its logical extreme, dominated the water-rights regulations of the miners' laws, finding expression in some codes in equal-sharing rules for water, and in others in the limitation of claim sizes. The limits set on the amount of water that could be claimed encouraged equality both by limiting the size of the water right that any one person could acquire by appropriation, and by maximizing the number of people with rights in the resource. The egalitarian principle retreated only when necessary to ensure sufficiency of claim size.

B. The Use Requirement

A related aspect of the miners' laws (briefly mentioned earlier)⁷⁹ was the requirement that mining claims be worked, a condition both of

^{75.} Downeyville Dist. Laws, supra note 37, at 352.

^{76.} Supra text accompanying note 25.

^{77.} Downeyville Dist. Laws art. 5, supra note 37, at 352.

^{78.} See, e.g., An Act Defining Claims and Regulating the Title Thereto §§ 2, 9, LAWS OF LINCOLN DIST. 2 (Denver, News Print. Co. 1860), Yale Collection (reprinted in UNITED STATES MINING LAWS, supra note 29, at 436) (water claim not to exceed 250 feet, and oldest claimant to have priority of right to use of water when insufficient for general use). Of the twelve codes with priority rules for water claims, ten set a maximum length and two limited the size of water claims by flow. See supra note 40. Of the thirteen codes lacking priority preferences for water claims but with general rules of priority, two had no specific water-claim rules, six set a maximum length for water claims, and three established a maximum area. Id. The remaining two put no absolute limit on water claim sizes, but both required sharing in case of insufficient water. Id.

^{79.} See supra text accompanying note 37.

acquiring and of maintaining the right. This requirement bears discussion, as we find it resurfacing in Colorado water law proper. This condition applied to water claims as well, as a water claim was considered one of the types of claims (placer, gulch, and so on) that could be acquired by preemption, and therefore was subject to the same work or use requirement. Some codes treated the work requirement for water claims explicitly, often in some detail:

All mill companies shall have 20 feet head on stream, large enough to run mills, and shall hold the same so long as they use said water power. If not used in fifteen days after taken, shall be forfeited [sic], unless a statement is filed, under oath, with the recorder, that the party holds said water power while he goes to the States, or any other such place, for proper machinery &c. When such statement has been filed, specifying the time that the party will be absent, said claim must be considered sacred until said statement expires.⁸⁰

Here the water claim was valid only as long as used and, in a further instance of the sufficiency principle, an exception was made only for the proprietor who was taking active steps toward construction of his mill, and only for as long as necessary to procure the necessary equipment.

The suggestion made by some⁸¹ that the beneficial use requirement for water claims may have been justified in efficiency terms as a way of defining and publicizing rights without the need for complicated recordation is contradicted by the evidence. Most mining district codes made provision for the recording of claims, which seems to have been a simple procedure;⁸² in many, recordation was mandatory.⁸³ Also, many explicitly required a minimum quantum of work, even with recordation, as a condition of a claim's validity.⁸⁴ In these, at least, the work requirement evidently served a purpose beyond the publicity or notice function.

The function of the work or use requirement was, rather, to prevent speculative appropriations; in other words, appropriations intended not for immediate use but for resale at a profit, especially by absentee

^{80.} By-Laws for the Government of Central Mining Dist., Nov. 21, 1859, Art. 9, LAWS AND REGULATIONS OF THE CENTRAL MINING DISTRICT (Denver, n.d.), Yale Collection. All told, seventeen codes imposed some sort of use or improvement requirement on water claims specifically, while four provided that recorded water claims would be held as real estate or vested rights, probably intending to negate any work requirement for water claims. Of codes with water-claim rules not establishing water-claim-specific work requirements, twenty-one had general work requirements possibly applying to water claims, while nine provided that claims in general were to be considered real estate or vested rights.

^{81.} ANDERSON & SNYDER, supra note 16, at 80.

^{82.} See Percy Stanley Fritz, The Constitutions and Laws of Early Mining Districts in Boulder County, Colorado, 21 UNIV. COLO. STUD. 127, 132 (1934); James Grafton Rogers, The Beginnings of Law in Colorado, 36 DICTA 111, 116 (1959).

^{83.} See, e.g., Gold Hill Dist. Laws, art. 2, supra note 58, at 348.

^{84.} See, e.g., Downeyville Dist. Laws, art. 6, supra note 37, at 352.

owners.85 Moreover, it was not an arbitrary limitation, but expressed the contemporary "producer ethic," which found particular virtue in the labor of the individual.86 The anti-speculation goal was also at the root of the specific limitations on claim sizes, including for water rights, found in many of the miners' codes.87 In these codes, with their unambiguous, predetermined claim sizes, the legislated maximum claim dimensions limited appropriations to the amount a miner could reasonably work or use. The use requirement primarily played a role in reclaiming speculative claims from private ownership and returning them to the pool of unowned property, making them available for new, bona fide claimants. Logically, however, the element of use was itself a measure of legitimate right; if any unused portion of the claim automatically became res nullius. available anew for appropriation, then claim sizes were ipso facto limited to the amount that could be used. In the context of Colorado water law. both functions ultimately found expression in the doctrine of beneficial use.

C. The Real Demise of Riparian Rights

To the extent that the traditional common-law riparian-rights doctrine reflected an ideal of equality, 88 the laws enacted by the popular assemblies of the Colorado miners' districts were not truly revolutionary. While the mechanics of the water allocation system may have changed in many instances, with claim sizes and use requirements replacing the correlative rights derived from notions of reasonable use, the underlying principle of equality remained dominant.

Even the dimension of sufficiency, reflected in the rules which allowed each appropriator to have the minimum amount of water necessary for mining or running a mill, was not as great a departure from riparian doctrine as might at first be thought. Though, generally speaking, the common law held that water in a stream was to be shared equitably, as common property, by all the owners of riparian land, there was an exception to this rule. As explained in the 1842 Illinois case of *Evans v*.

^{85.} Absentee ownership was also sharply curtailed in many district laws by allowing service of lawsuits by posting on the defendant's claim and allowing very short periods for answer, in effect divesting all absentees of ownership; RICHARD HOGAN, CLASS AND COMMUNITY IN FRONTIER COLORADO 51 (1990). See, e.g., Gregory Dist. Act 1860 § 1, supra note 29, at 2 (three days to answer).

^{86.} See discussion infra at notes 103-104. The influence of this ideology was evident, as well, in the mechanic's lien, a feature of several mining district codes, which was created to favor productive labor at the expense of what were seen as parasitic lenders. See LAWRENCE M FRIEDMAN, A HISTORY OF AMERICAN LAW 243-45 (2d ed. 1985); William Trimble, The Social Philosophy of the Loco-Foco Democracy, 26 Am. J. Soc. 705, 712 (1921); See, e.g., Laws of Iowa Mining Dist., Nov. 17, 1860 § 32, in UNITED STATES MINING LAWS, supra note 29, at 416.

^{87.} See text following note 66, supra.

^{88.} See, e.g., DUNBAR, NEW RIGHTS, supra note 13, at 60; SHIVA, supra note 17, at 20-21.

Merriweather, when it came to domestic, or "natural," uses (drinking, household uses, and watering livestock), a riparian owner might take as much as needed from the stream, without regard to the wants of the other riparian owners below him, even exhausting the entire flow of the stream, if necessary.⁸⁹ The court had also speculated on a possible extension of this principle to irrigation, under circumstances other than those prevailing in Illinois:

The supply of man's artificial wants is not essential to his existence; it is not indispensable; he could live if water was not employed in irrigating lands... In countries differently situated from ours, [however,] with a hot and arid climate, water doubtless is absolutely indispensable to the cultivation of the soil, and in them, water for irrigation would be a natural want. Here it might increase the products of the soil, but it is by no means essential, and can not, therefore, be considered a natural want of man.⁹⁰

The way was thus open under traditional riparian law to prevent the principle of equality from diluting the water right available to each owner beyond the point of usefulness. The miners' codes' adoption of the priority principle to prevent the excessive shrinking of rights was thus not a radical break with eastern, riparian law, but a logical extension of the rationale of the "domestic-use exception." It was fairer, too. While the Illinois rule allowed the upstream owner in times of scarcity to empty the stream to satisfy his "natural wants," thereby attaching priority of right to a morally arbitrary criterion (position on the stream,) the miners' rule adopted a more ethically satisfying test, recognizing the equity of work performed by granting priority to the first to begin using the water.

Where the laws of the mining districts truly diverged from the model of riparian rights is in another respect, related to *Evans*'s privileging of the upstream owner: the miners' laws began to reject the law's reservation of the privilege of acquiring water rights to only those lands situated adjacent to the body of water. Some codes, it is true, remained within the riparian tradition in this regard, either forbidding the use of water far from the gulch,⁹¹ or, while apparently allowing use on non-riparian lands, giving priority of right to the riparian owners.⁹² (Some laws also established a residual rule that riparian law should apply in cases of

^{89.} Evans v. Merriweather, 4 Ill. 491, 495 (1842).

^{90.} Id. at 495.

^{91.} See, e.g., Carpenter's Dist. Laws Art. 17, supra note 47, at 371.

^{92.} See, e.g., Constitution and By Laws of Long Island Mining Dist., July 27, 1861, in UNITED STATES MINING LAWS, supra note 29, at 458. Ironically, the Illinois District law cited by Dunbar as a source for the prior appropriation doctrine, supra text at note 25, likely belonged to this category of preference for riparian users: "Each miner having the use of water on his or their claims shall have the priority of right." Illinois Mining Dist. Laws, Sep. 26, 1859, Art. 11, in UNITED STATES MINING LAWS, supra note 29, at 355.

lacunae in the code;⁹³ in practice this would mean that riparian-law rules would govern the regulation of external effects caused by water use, as opposed to questions of the validity of the appropriation itself.) The overwhelming majority, however, not only gave no preference in water rights to those holding mining claims on the stream's banks, but went one step further. Riparian owners, even in the absence of a rule forbidding non-riparian use, might have succeeded in monopolizing the water in a stream by refusing stream access to non-riparians. To avoid this outcome, many miners' laws granted non-riparian miners easements for water ditches across other claims, usually on condition that they not cause damage to the servient claim.⁹⁴ Many codes also made specific provision for rights of way over mining claims for companies or individuals supplying water to the mines.⁹⁵

Here, then, was the true departure of the miners' codes from the law of riparian rights. Owners of riparian land would not be members of an exclusive club, privileged vis-à-vis all others in owning rights to the water. Nor would they be able to exercise effective control over the waters (and lands) adjoining their plot by denying outsiders a right of way to carry the water to their lands, or by charging for the privilege. This abolition of the exclusive privileges of the riparian club dovetailed with the widening of the circle of potential appropriators by limiting claim sizes. The opportunity to own a water right in a stream was now open to all who could use it, regardless of where they had managed to stake their mining claim.

D. The Principles of the Miners' Laws Restated

The common themes of the Colorado miners' laws' water rules express, I believe, two major principles or policy goals, which are really two sides of the same coin: the limitation of appropriation by each individual to the amount he could use, and the maximization of the number of owners able to stake claims to the water. The law gave practical effect to these principles through a number of rules: limitations on the size of an appropriation, whether by setting maximum amounts or by the use requirement, and the abolition of the riparian owners' exclusive hold on surface water sources, by recognizing the right of non-riparians to divert water and granting them rights of access to the water sources across riparian lands. The role of the priority principle in these codes was strictly supplementary, to prevent appropriations from the water source that would leave some without a viable share of water.

^{93.} See, e.g., Gregory Dist. Act 1860 § 19, supra note 29, at 4.

^{94.} See, e.g., Laws of Bay State Mining Dist. § 23, supra note 48.

^{95.} See, e.g., Gregory Dist. Act 1860 § 18, supra note 49.

As we shall see, Colorado's water law in its first decades drew heavily upon the principles of the miners' laws, though, as has hopefully become apparent, not in the way that is usually assumed.

III. ORIGINS OF THE MINERS' CODES AND THE APPROPRIATION DOCTRINE

Key to understanding the distributive norms of the Colorado miners' laws and water law is the realization that they did not materialize out of thin air as a spontaneous response to geographic conditions in the arid west.⁹⁶ They were, rather, expressions of an agrarian,⁹⁷ populist world view widespread in the western United States in the nineteenth century, an ideology locked in a secular struggle with corporate capitalism and speculative investment, particularly in western lands. Moreover, both the miners' codes and the Colorado appropriation doctrine were of a piece with certain laws and customs that had arisen in connection with the issue of acquisition of property on the public domain, a particularly important bone of contention between the opposing camps. Put simply, the issue was this: Would the lands of the public domain be disposed of to absentee speculators and corporations controlled by eastern and European investors, or to the archetypal "actual settler," a mainstay of agrarian political rhetoric and law?98 Colorado law came down largely in favor of the latter, as well as his relatives, the "actual miner," and later, the "actual user" of water.100

The miners' codes reflected a world view with roots in republican ideology of the seventeenth and eighteenth centuries and the later Jacksonian Democracy, and identified in the mid- and late nineteenth century with land reform and agrarian movements such as National Reform, the Farmers Alliances, and the People's Party. Mid-nineteenth-century reform elements built on the Jeffersonian ideology favoring

^{96.} See supra notes 12-13.

^{97. &}quot;Agrarian" is used in this article in the term's classical sense, referring to land policies redistributive in nature, particularly in the direction of wider distribution. See PAUL K. CONKIN, PROPHETS OF PROSPERITY 224-25 (1980).

^{98.} On the "actual settler," see Henry Tatter, The Preferential Treatment of the Actual Settler in the Primary Disposition of the Vacant Lands in the United States to 1841 (unpublished Ph.D. dissertation, Northwestern Univ., 1933); Daniel Feller, The Public Lands in Jacksonian Politics 29 (1984). See, e.g., Rep. Van Allen, Ann. Cong., 4th Cong., 1st Sess. 865 (1796); A Bill to arrest monopolies of the public lands, and purchases thereof, for speculation, and substitute sales to actual settlers only, June 15, 1836, S. 295, 24 Cong. 1 Sess.; Sen. Walker, Cong. Globe, 24th Cong., 2d Sess. 420 (1837); Rep. Cable, Cong. Globe, 32nd Cong., 1st Sess. App. 298 (1852); Rep. Smith, Cong. Globe, 33rd Cong., 1st Sess. App. 208 (1854); Henry George, Our Land and Land Policy 69 (1999) (1871); George Henry Evans, Working Man's Advocate, Mar. 16, 1844, in Fred A. Shannon, American Farmers' Movements 132 (1957); George W. Julian, Our Land Policy, 43 Atlantic Monthly 325, 327 (1879); Edward T. Peters, Evils of Our Public Land Policy, 25 Century 599, 600 (1883).

^{99.} John Evans, Governor's Message, ROCKY MTN. NEWS, Jul. 24, 1862, at 1.

^{100.} See infra text accompanying notes 209-217.

small, family-sized farms, arguing that every person should hold some land, both as a matter of right and in order to preserve the individual self-sufficiency and independence necessary for democracy to function. These beliefs were at their pinnacle of popularity and influence in the mid-nineteenth century, when Colorado's miners' laws were being worked out, finding a particularly receptive audience in the west, which was viewed as the natural arena for making land available on such a widespread basis. 102

Bound up in this view of land tenure was a "producerist" bias, a belief that "since the occupancy and use of the land are the true criteria of valid ownership, [only] labor expended in cultivating the earth confers title to it." This idea had its roots in Locke's labor theory of private

See THOMAS JEFFERSON, NOTES ON THE STATE OF VIRGINIA 164 (William Peden ed., 1954) (1787); THEODORE SEDGWICK, PUBLIC AND PRIVATE ECONOMY, PART I 43 (New York, Harper & Bros. 1836); Rep. Payne, CONG. GLOBE, 29th Cong., 1st Sess. App. 806 (1846); GEORGE, supra note 98, at 59; Julian, supra note 98, at 336. See also DOUGLAS G. ADAIR, THE INTELLECTUAL ORIGINS OF JEFFERSONIAN DEMOCRACY 160-61 (Mark E. Yellin ed., 2000); GREGORY S. ALEXANDER, COMMODITY & PROPRIETY 1-34 (1997); LANCE BANNING, THE JEFFERSONIAN PERSUASION 204 (1978); Chester E. Eisinger, The Influence of Natural Rights and Physiocratic Doctrines on American Agrarian Thought During the Revolutionary Period, 21 AGR. HIST. 13 (1947); NATHAN FINE, LABOR AND FARM PARTIES IN THE UNITED STATES 1828-1928 21 (1961); A. Whitney Griswold, The Agrarian Democracy of Thomas Jefferson, 40 AM. POL. SCI. REV. 657, 672 (1946); Stanley N. Katz, Thomas Jefferson and the Right to Property in Revolutionary America, 19 J.L. & ECON. 467 (1976); LEO MARX, THE MACHINE IN THE GARDEN: TECHNOLOGY AND THE PASTORAL IDEAL IN AMERICA 124-30 (1964); JOHN OPIE, THE LAW OF THE LAND 28-29 (1987); Carol M. Rose, Property as the Keystone Right?, 71 NOTRE DAME L. REV. 329, 340-48 (1996); WILLIAM B. SCOTT, IN PURSUIT OF HAPPINESS 41-54, 58-59 (1977); JOHN L. THOMAS, ALTERNATIVE AMERICA 1-5 (1983).

102. See Paul W. Gates, History of Public Land Law Development 454-55 (1968); Gene M. Gressley, West by East: The American West in the Gilded Age 6 (1972); W. Kirkland, The West, Paradise of the Poor, 15 U.S. Dem. Rev. 182 (1844); Roy M. Robbins, Our Landed Heritage 92-116 (2d ed. 1976); Henry Nash Smith, Virgin Land: The American West as Symbol and Myth 140-43, 170 (1950); Rush Welter, The Mind of America, 1820-1860, at 299-304 (1975); Richard White, It's Your Misfortune and None of My Own: A New History of the American West 620 (1991); Mary E. Young, Congress Looks West: Liberal Ideology and Public Land Policy in the Nineteenth Century, in The Frontier in American Development 74 (David M. Ellis ed., 1969).

103. RICHARD HOFSTADTER, THE AGE OF REFORM: FROM BRYAN TO F.D.R. 27-28 (5th ed. 1963). See JOHN TAYLOR, AN INQUIRY INTO THE PRINCIPLES AND POLICY OF THE GOVERNMENT OF THE UNITED STATES 124 (W. Stark ed., Yale Univ. Press 1950) (1814); SEDGWICK, supra note 101, at 133, 148-51; JOHN PICKERING, THE WORKING MAN'S POLITICAL ECONOMY 46-50 (Cincinnati, Thomas Varney 1847); HORACE GREELEY, HINTS TOWARD REFORMS 18 (New York, Harper & Bros. 1850). See generally SMITH, supra note 102, at 169-70; SCOTT, supra note 101, at 54-55; Stephen A. Siegel, Understanding the Nineteenth Century Contract Clause: The Role of the Property-Privilege Distinction and "Takings" Clause Jurisprudence, 60 S. CAL. L. REV. 1, 57-66 (1986); ROBERT C. MCMATH, JR., AMERICAN POPULISM: A SOCIAL HISTORY 1877-1898, at 51 (1993); James L. Huston, The American Revolutionaries, the Political Economy of Aristocracy, and the American Concept of the Distribution of Wealth, 1765-1900, 98 AM. HIST. REV. 1079, 1080-83, 1095-96 (1993); TONY A. FREYER, PRODUCERS VERSUS CAPITALISTS 3-40 (1994); MICHAEL KAZIN, THE POPULIST PERSUASION 13-14 (1995).

property,¹⁰⁴ and its corollary, both in Locke and in republican ideology, was that no one could acquire more than he could make use of: "As much as any one can make use of to any advantage of life before it spoils, so much he may by his labor fix a property in; whatever is beyond this is more than his share and belongs to others." Proposals for reform thus stressed the ideals of equality of landholdings, limitations on the maximum amount any individual might own, and limiting acquisition of public lands to actual settlers while forbidding purchase by absentee owners.¹⁰⁶

The reverse face of this philosophy was the fear and loathing of monopoly, to the point where "monopoly" became something of an epithet for all the institutions agrarian reformers disliked or feared. ¹⁰⁷ It also had a more specific sense, referring to the accumulation of property on a scale beyond what was practical for personal use, particularly for purposes of speculation or deriving income from tenants. This was viewed as a violation of the natural-law, Lockean labor theory of property. ¹⁰⁸ Anti-monopolism went hand-in-hand with a desire for limits to the

^{104.} JOHN LOCKE, THE SECOND TREATISE OF GOVERNMENT § 27, at 17 (Thomas P. Peardon ed., 1952) (1690).

^{105.} Id. § 31, at 19; see Eisinger, supra note 101, at 14; A. WHITNEY GRISWOLD, FARMING AND DEMOCRACY 39-40 (1948); SCOTT, supra note 101, at 15-21, 65-68; Richard J. Ellis, Radical Lockeanism in American Political Culture, 45 W. POL. Q. 825, 827 (1992).

^{106.} See, e.g., LANGTON BYLLESBY, OBSERVATIONS ON THE SOURCES AND EFFECTS OF UNEQUAL WEALTH 41-42 (New York, Russell & Russell 1961) (1826); Thomas Jefferson, Draft Constitution for Virginia, in II WORKS OF THOMAS JEFFERSON 179 (Paul Leicester Ford ed., 1904) (1776); GEORGE, supra note 98; Evans, supra note 98; GREELEY, supra note 103, at 18-23, 312-15. See generally John R. Commons, Horace Greeley and the Working Class Origins of the Republican Party, 24 POL. Sci. Q. 468 (1909); Conkin, supra note 97, at 222-55; Eisinger, supra note 101, at 18-19; SMITH, supra note 102, at 170; PAUL W. GATES, THE JEFFERSONIAN DREAM 100-05 (1996); Irving Mark, The Homestead Ideal and Conservation of the Public Domain, 22 Am. J. Econ. & Soc. 263 (1963); SMITH, supra note 102, at 170; Richard White, Contested Terrain: The Business of Land in the American West, in LAND IN THE AMERICAN WEST: PRIVATE CLAIMS AND THE COMMON GOOD 190, 198-99 (William G. Robbins & James C. Foster eds., 2000); HELENE SARA ZAHLER, EASTERN WORKINGMEN AND NATIONAL LAND POLICY, 1829-1862, at 29-35 (1941).

^{107.} See, e.g., SEDGWICK, supra note 101, at 15, 25; F. BYRDSALL, THE HISTORY OF THE LOCO-FOCO OR EQUAL RIGHTS PARTY (New York, Burt Franklin 1842); Julian, supra note 98, at 336. See also Chester McArthur Destler, Western Radicalism, 1865-1901: Concepts and Origins, 31 Miss. Valley Hist. Rev. 335 (1944); Gates, supra note 102, at 454; James, supra note 66, at 40; Robert W. Larson, Populism in the Mountain West 13 (1986); Lawrence Frederick Kohl, The Politics of Individualism 31 (1989); Kazin, supra note 103, at 31-33; James L. Huston, Securing the Fruits of Labor 40-42 (1998). For the origins of antimonopoly ideology, see Arthur P. Dudden, Antimonopolism, 1865-1890: The Historical Background and Intellectual Origins of the Antitrust Movement in the United States 4-49 (Ph.D. diss. U. Mich. 1950); Charles R. Geisst, Monopolies in America 11-13 (2000); Steven L. Piott, The Anti-Monopoly Persuasion 5-6 (1985).

^{108.} See W. SCOTT MORGAN, HISTORY OF THE WHEEL AND ALLIANCE 677 (St. Louis, C.B. Woodward 1891); ZAHLER, supra note 106, at 190-91; Destler, supra note 107, at 361-62; SMITH, supra note 103, at 170; KOHL, supra note 107, at 193.

private accumulation of land and the yeoman ideal of wide distribution to actual settlers. 109

It is important to note that this set of ideas, while egalitarian in nature, did not include socialism; rather, private property, widely distributed, was perceived as a bulwark of liberty and human dignity. Most reformers did not oppose private ownership of property, only what they saw as undue concentration of ownership due to unequal distribution of the opportunity to acquire property. Their ideology was part of the intellectual tradition of egalitarianism that has been termed "radical Lockeanism." 112

Probably the best-known example of the nineteenth-century Jeffersonian ideal enacted into law is the famous Homestead Act of 1862, which contained all the core elements of radical Lockean thought: widespread distribution, use requirements, and limits on holdings. 113 Less well known today are the many other nineteenth-century American legal regimes, both official and informal, that provided precedents for the Colorado mining district laws, having as their primary concern the wide distribution of property rights to those actually working the resource in question and corresponding restriction of the ability of absentee capitalists to amass such property. These include the federal Preemption Act of 1841, which legalized squatting on the public domain, making permanent the hitherto sporadic policy of making up to 160 acres (a quarter-section) of public land available to actual inhabitants at a minimum price.¹¹⁴ Like the later doctrine of prior appropriation, this statute provided that in cases of two or more settlers claiming the same land, the right would belong to the party who had settled first. 115 It also required the settler to improve the land and swear that the appropriation

^{109.} See ZAHLER, supra note 106, at 33-35; Ellis, supra note 105, at 840-41; MCMATH, supra note 103, at 52-53; HUSTON, supra note 107, at 208. James Fenimore Cooper gave voice to this attitude in the following exchange between a trapper and a squatter, THE PRAIRIE 64 (1827), quoted in THE GOLDEN AGE OF AMERICAN LAW 453 (Charles M. Haar ed., 1965):

[&]quot;He who ventures far into the prairie, must abide by the ways of its owners."

[&]quot;Owners!" echoed the squatter, "I am as rightful an owner of the land I stand on, as any governor of the States! Can you tell me, stranger, where the law or the reason is to be found, which says that one man shall have a section, or a town, or perhaps a county to his use, and another have to beg for earth to make his grave in? This is not nature, and I deny that it is law. That is, your legal law."

[&]quot;I cannot say that you are wrong," returned the trapper...

^{110.} See Destler, supra note 107, at 356; Worth Robert Miller, The Republican Tradition, in AMERICAN POPULISM 209, 210-11 (William F. Holmes ed., 1994).

^{111.} See, e.g., NATHANIEL CHIPMAN, SKETCHES OF THE PRINCIPLES OF GOVERNMENT 172-78 (Rutland, Vt., J. Lyon 1793); see also Trimble, supra note 86; MCMATH, supra note 103, at 52.

^{112.} See Ellis, supra note 105.

^{113.} See Homestead Act of 1862 §§ 1, 2, 5 & 6, 37 Cong. Ch. 75, 12 STAT. 392-93.

^{114.} Preemption Act of 1841 §10, 27 Cong. Ch. 16, 5 STAT. 455.

^{115. § 11, 27} Cong. Ch. 16, 5 STAT. 456.

was not being made for speculative purposes.¹¹⁶ The purpose of the Act was clear:

It is by pre-emption policy that we secure these occupants, who have incorporated their labor with the soil, in their possessions, against the more wealthy who buy on speculation; and against whom they could not be expected successfully to compete, at public auction; and place the lands in the proper hands of those whose occupation is to cultivate them."¹¹⁷

Federal law actually reflected what already had become practice on the mid-century frontier, where settlers on the public domain had been forming clubs to enforce their claims against the paper titles of those who bought the same land from the government. These claim clubs, particularly prevalent in the territories of the Upper Mississippi Valley, generally set a maximum amount of land that could be claimed, and specified the value of improvements required to retain possession of the land. Haw received some official sanction even before the Preemption Act, such as the decision of the Supreme Court of Iowa Territory affirming the validity of squatters titles in derogation of federal statute. Miners on public land in this period also adopted codes foreshadowing the later miners rules of the Sierra Nevadas and Rockies, such as the regulations of the lead miners of Dubuque, Iowa, which set maximum claim sizes and minimum work requirements. Later the settlements are maximum claim sizes and minimum work requirements.

^{116. §§ 10 &}amp; 13, 27 Cong. Ch. 16, 5 STAT. 455-56.

^{117.} Sen. Young, CONG. GLOBE, 26th Cong., 2d Sess. App. 99 (1841); see also Sen. Hubbard, CONG. GLOBE, 26th Cong., 2d Sess. App. 41 (1841); Julian, supra note 98, at 327; John Ashworth, The Jacksonian as Leveller, 14 J. Am. STUD. 407, 416 (1980).

^{118.} Tatter, supra note 98, at 273-303.

^{119.} See Jacob Ferris, States and Territories of the Great West 270, 319 (New York, Miller, Orton & Mulligan 1856); Jesse Macy, Institutional Beginnings in a Western State 11-12 (Baltimore, Johns Hopkins University 1884); Constitution and Records of the Claim Association of Johnson County, Iowa 17 (Benjamin F. Shambaugh ed., Iowa City, St. Hist. Soc. of Iowa 1894); Benj. F. Shambaugh, Frontier Land Clubs or Claim Associations, 1900 Ann. Rep. Am. Hist. Assn., Vol. 1, at 69; Everett Dick, Some Aspects of Private Use of Public Lands, 9 J. Of the West 24 (1970).

^{120.} Hill v. Smith, 1 Morris 70 (Iowa 1840).

^{121.} Dubuque Mining Regulations of June 17, 1830, Art. 1, in MACY, supra note 119, at 6. These regulations followed precedents from Galena, Illinois. Id. at 6; Tatter, supra note 98, at 290. The pedigree of the typical mining district rules actually dated back to Spanish Civil Law and even medieval Germany and England, a fact recognized by early scholars of western mining law, but overlooked by some local boosters, as well as later scholars possibly influenced by the Turner school's emphasis on the local origins of American institutions. Cf. GREGORY YALE, LEGAL TITLES TO MINING CLAIMS AND WATER RIGHTS IN CALIFORNIA 58, 66, 71 (San Francisco, A. Roman & Co. 1867); HENRY GEORGE, PROGRESS AND POVERTY 384-86 (1905) (1880); CHARLES HOWARD SHINN, LAND LAWS OF MINING DISTRICTS 6-8 (Baltimore, N. Murray 1884); CHARLES HOWARD SHINN, MINING CAMPS: A STUDY IN AMERICAN FRONTIER GOVERNMENT 8, 20-30 (New York, Alfred A. Knopf 1948) (1885) [hereinafter SHINN, MINING CAMPS]; Arthur S. Aiton, The First American Mining Code, 23 MICH. L. REV. 105 (1924) (all tracing the origins of mining camp law to early precedents) with Sen. Stewart, CONG. GLOBE,

The miners' codes of the California Forty-Niners, influential for the Colorado rules a decade later, ¹²² are properly seen as part of this prosettler trend in law, ensuring equal opportunity and preventing monopolization by speculators. ¹²³ That they were seen in their own time as advancing these values is evidenced by the testimony of contemporaries. Miner-turned-U.S. Senator William Stewart, in an influential speech, boasted that:

These regulations were thoroughly democratic in their character, guarding against every form of monopoly, and requiring continued work and occupation in good faith to constitute a valid possession...

[The miners] look with jealous eyes upon every proposition for the sale of the mines which they have discovered and made valuable....The reason for this is obvious. It is their all, secured through long years of incessant toil and privation, and they associate any sale with a sale at auction, where capital is to compete with poverty, fraud and intrigue with truth and honesty. It is not because they do not desire a fee-simple title, for this they would prize above all else; but most of them are poor, and unable to purchase in competition with capitalists and speculators, which the adoption of any plan heretofore proposed would compel them to do; and for these reasons the opposition to the sale of the mineral lands has been unanimous in the mining States and Territories.¹²⁴

Another former miner, Justice Stephen Field of the U.S. Supreme Court, wrote that the miners' laws "were so framed as to secure to all comers, within practicable limits, absolute equality of right and privilege in working the mines. Nothing but such equality would have been tolerated by the miners..." John Wesley Powell, reporting to Congress on the mining district laws, emphasized that "the association of a number of people prevents single individuals from having undue control of natural privileges, and secures an equitable division of mineral lands." The radical land reformer Henry George described the California mining codes in his influential *Progress and Poverty* thus:

The miners in each district fixed the amount of ground an individual could take and the amount of work that must be done to constitute

³⁹th Cong., 1st Sess. 3226 (1866); JOHN R. UMBECK, A THEORY OF PROPERTY RIGHTS (1981); Zerbe & Anderson, *supra* note 32 (treating miners' laws as spontaneous creations).

¹²². RODMAN WILSON PAUL, MINING FRONTIERS OF THE FAR WEST, 1848-1880, at 42, 169 (rev. ed. 2001)

^{123.} Contra McDowell, supra note 32, at 7 (egalitarian and anti-capitalist norms of California mines did not conform to standard American views on property).

^{124.} CONG. GLOBE, 39th Cong., 1st Sess. 3226 (1866), reprinted in 70 (3 Wall.) U.S. 777 (1867). The remarks of the Senator are said by the reporter, John William Wallace, to have attracted general notice. Sparrow v. Strong, 70 U.S. 97, 100 n.5 (1865).

^{125.} Jennison v. Kirk, 98 U.S. 453, 457 (1878).

^{126.} JOHN WESLEY POWELL, REPORT ON THE LANDS OF THE ARID REGION OF THE UNITED STATES 41 (Wallace Stegner ed., 1962) (1878).

use. If this work were not done, any one could relocate the ground. Thus, no one was allowed to forestall or to lock up natural resources. Labor was acknowledged as the creator of wealth, was given a free field, and secured in its reward... all had an equal chance. No one was allowed to play the dog in the manger with the bounty of the Creator. The essential idea of the mining regulations was to prevent forestalling and monopoly.¹²⁷

Colorado settlers, many of them from the Mississippi Valley states and territories where claim club law was widespread, ¹²⁸ and influenced as much by the principles of the Preemption Act as by California mining practice, early on established not only mining districts embodying the egalitarian and anti-speculation principles of preemption law, but also claim clubs for agricultural land in the valleys. These had many of the same general features as the mining codes, including limits on claim size (the iconic 160 acres for agricultural land) and work requirements. ¹²⁹ Similar provisions for agricultural claims were also frequently a part of mining district codes, ¹³⁰ and were also enacted into law by Colorado's first territorial legislature, ¹³¹ "by which," opined an observer, "millions of dollars [were] saved to actual settlers from the grasp of speculators." ¹³² Water claims were also part of agricultural claim club practice, with at

^{127.} GEORGE, supra note 121, at 384. See also SHINN, MINING CAMPS, supra note 121, at 223-24.

^{128.} HOWARD ROBERTS LAMAR, THE FAR SOUTHWEST, 1846-1912, at 185 (rev. ed. 2000); PAUL, supra note 122, at 39.

^{129.} ANSEL WATROUS, HISTORY OF LARIMER COUNTY, COLORADO 46 (1911); Joseph Lyman Kingsbury, The Development of Colorado Territory 1858-1865 121-22 (unpublished Ph.D. dissertation, U. Chicago 1922); ALVIN T. STEINEL, HISTORY OF AGRICULTURE IN COLORADO 39-42 (1926); Marjorie E. Large, Appropriation to Private Use of Land and Water in the St. Vrain Valley Before the Founding of the Chicago-Colorado Colony (unpublished M.A. thesis, U. Colo. 1932); The Middle Park Claim Club, 1861, 10 Colo. MAG. 189, 191 (1933); George L. Anderson, The El Paso Claim Club, 1859-1862, 13 COLO. MAG. 41, 41-44 (1936); George L. Anderson, The Canon City or Arkansas Valley Claim Club, 1860-1862, 16 COLO. MAG. 201, 203 (1939) [hereinafter Anderson, Canon City]. The revisionist view advanced by Allan G. Bogue, The Iowa Claim Clubs: Symbol and Substance, 45 Miss. VALL. Hist. REV. 231 (1958) (arguing that Iowa claim clubs were themselves used to facilitate speculation by settlers) is of limited import here, as the speculation he refers to was of a minor sort, used by settlers to raise money for the eventual purchase of their lands. In any case, the limited evidence available suggests that speculation may not have been a major factor in Colorado claim clubs. See Anderson, Canon City, supra, at 207 (transactions recorded for only 30 of 260 recorded claims, with average price of \$1.25 per acre).

^{130.} At least sixteen extant codes allowed farm or ranch claims of 160 acres (e.g., Gregory Dist. Act 1860 §2, supra note 29) and one limited such claims to 100 acres; Fairfield Mining Dist. Laws, July 2, 1860, §2, in Marshall, supra note 27, at 198.

^{131.} See An Act Concerning Actions by Persons Holding Lots, Lands or mining claims, except as against the United States, 1861 COLO. SESS. LAWS 249; An Act Declaratory of the Rights of Occupants of the Public Domain except as against the United States, 1861 COLO. SESS. LAWS 168.

^{132.} Chief Justice Hall, (DENVER) WEEKLY COMMONWEALTH, Aug. 20, 1863, p. 2.

least one setting limits measured in feet of fall similar to those found in the miners' codes. 133

Therefore, rather than seeing Colorado water law as originating no farther back than the mining camps, with the appropriation doctrine springing fully-grown, Athena-like, from the heads of the miners;134 viewing it as a spontaneous response to the arid conditions of the Colorado plains;¹³⁵ or describing it as a natural outgrowth of the Spanish and Mexican law formerly in force in the region, 136 it would be more accurate to describe miners' laws, claim club regulations and the appropriation doctrine as part of a complex of pro-settler and antispeculator laws and rules prevalent in mid-nineteenth century America, particularly in the West. 137 Viewed this way, the appropriation doctrine can be seen for the land-reform legislation it was: a sort of extension of the Homestead Act to water, aimed at preventing "monopoly" control of water supplies by allowing "actual settlers" to trespass on riparian lands and divest them of their common-law water rights. Aridity was important, of course, for whereas land retained its preeminence in the concerns of reformers in the well-watered east, where surface water was neither scarce nor particularly critical for agriculture, the value of water for agriculture in arid regions elevated its value to a level even beyond that of land in the west, making it a prime focus of agrarian agitation and lawmaking. As put by a contemporary commentator:

Unlike the Eastern States, we have large areas threaded by a single stream of water... If the local laws should permit these arteries of wealth and health to be monopolized by the few who chance to control their banks, to the entire exclusion of all other and adjacent land owners, they would be doing a great wrong under the shadow and protection of law.¹³⁸

The rules of the appropriation doctrine, as it developed in its pure, Colorado form, were thus shaped by the same ideology that favored the

^{133.} Middle Park Claim Club Laws, May 23, 1861 §6, in The Middle Park Claim Club, supra note 129, at 191 (water claim not to exceed 12 feet fall).

^{134.} See, e.g., JOHN NORTON POMEROY, TREATISE ON THE LAW OF WATER RIGHTS 18-20 (St. Paul, West Pub. Co., Henry Campbell Black ed., 1893).

^{135.} See WEBB, supra note 13, at 442-44; WALTER PRESCOTT WEBB, THE GREAT FRONTIER 254-59 (Heather Barnet ed., 1964).

^{136.} See 1 WELLS A. HUTCHINS, WATER RIGHTS LAWS IN THE NINETEEN WESTERN STATES 159-62 (1971); Romero, supra note 3, 535-36.

^{137.} Two leading histories of Colorado seem to take this tack; FRITZ, supra note 65, at 130-47 (1941); CARL UBBELOHDE, A COLORADO HISTORY 90-92 (1965). See also LIBECAP, supra note 9, at 33-36 (ideology regarding federal lands influenced adoption of miners' rules); Reid, supra note 62, at 43-44 (emphasizing continuity between miners' rules and eastern norms); Robert W. Swenson, Legal Aspects of Mineral Resources Exploitation, in HISTORY OF PUBLIC LAND LAW DEVELOPMENT, supra note 102, at 699, 709 (priority principle of mining laws related to preemption principle).

^{138.} George W. Haight, Riparian Rights, 5 OVERLAND MONTHLY 561, 566 (1885).

claims of settlers over speculators in the general debate over disposition of the public domain. The Lockean and Jeffersonian view of acquisition from the public domain, requiring work as a condition of acquisition and limiting the scope of rights to the amount a person could directly use, led directly to the use requirement for water claims, both in its direct form and indirectly through the miners' laws' limits on appropriations calibrated to the amount one person could reasonably use; and the abrogation of riparian ownership of surface waters was a manifestation of anti-monopolism and anti-speculation ideology, 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.

IV. EARLY OFFICIAL WATER LAW – CRYSTALLIZATION OF THE COLORADO DOCTRINE

A. Background

Coincident with the organization of the first mining districts at the Gregory Diggings and elsewhere in the "Pike's Peak" region, residents of the region were attempting to organize a territory which would gain federal recognition. The short-lived Territory of Jefferson, which held a legislative assembly in the winter of 1859-1860, failed in this respect, and was effectively terminated in 1860. Recognition of the Colorado Territory came in 1861, and with it the beginning of regular legislative sessions and territorial courts.¹³⁹

As settlement of the territory intensified, agriculture began to replace mining as the sector principally concerned with and responsible for the use of water. It was at this point that the territorial legislature began to give shape to the Colorado Doctrine¹⁴⁰ as a body of official law, moving beyond the view of water as a special sort of mining claim. Nearly every legislative session of the territorial and early statehood period added to the body of statutory law dealing with water rights and irrigation. The legislative acts, as well as the state Constitutional Convention in 1876, strove to regulate water use across multiple dimensions: property rights in the resource, provisions for access to water sources, the manner of use, and corporate regulation. Though water litigation in this period (from the territory's inception to the *Coffin* case in 1882) seems to have been relatively infrequent, the few reported cases help illuminate how Colorado water law was viewed by the judges who shaped it.

^{139.} ABBOTT ET AL, *supra* note 64, at 63-66.

^{140.} See supra note 2.

B. Territorial Legislation

The Jefferson Territory's first (and only) General Assembly met at Denver from November 1859 to January 1860. In a short "Act Concerning Irrigation," the legislature set out the law of water rights for irrigation, drawing upon all of the basic rules that characterized the mining laws. Non-riparian irrigators were explicitly given the right to divert water to their fields, ¹⁴² as well as the necessary rights of way for entering riparian lands and building dams and ditches on them (with liability for damage thereby caused). ¹⁴³ Appropriation amounts were limited, in an indirect fashion, by a requirement that the water actually be used for irrigation and by limiting irrigated farm sizes to 160 acres. ¹⁴⁴ As in the mining codes, potential conflicts among irrigators were to be resolved by reference to the priority of appropriation. ¹⁴⁵

A year later, the new Colorado Territory also passed an irrigation statute at its first legislative session.¹⁴⁶ This enactment for the most part remained the basic statute regulating the appropriation of water in Colorado during the territorial period and well into statehood.¹⁴⁷ The common-law riparian monopoly on stream waters was abolished, though the location of the irrigated land still seemed to retain some relevance:

SECTION 1. That all persons who claim, own or hold a possessory right or title to any land or parcel of land within the boundary of Colorado Territory,... when those claims are on the bank, margin or neighborhood of any stream of water, creek or river, shall be entitled to the use of the water of said stream, creek or river, for the purposes of irrigation, and making said claims available, to the full extent of the soil, for agricultural purposes.¹⁴⁸

The circumscribing of the class of eligible claimants to those in the "neighborhood" of the watercourse may have reflected lingering riparian-law sentiment in favor of local use of the resource.¹⁴⁹ Nevertheless, the thrust of the section was the entitlement of all irrigators

^{141.} Act Concerning Irrigation, Dec. 7, 1859, PROVISIONAL LAWS AND JOINT RESOLUTIONS PASSED AT THE FIRST AND CALLED SESSIONS OF THE GENERAL ASSEMBLY OF JEFFERSON TERRITORY 214 (Omaha, N.T., Robertson & Clark, 1860).

^{142.} *Id.* § 3, at 214.

^{143.} Id. §§ 3, 4, at 214.

^{144.} Id. § 1, at 214.

^{145.} *Id.* § 2, at 214.

^{146.} An Act to Protect and Regulate the Irrigation of Lands, 1861 COLO. SESS. LAWS 67 [hereinafter 1861 Irrigation Act].

^{147.} Codified at 1877 COLO. GEN. LAWS § 1372 et seq.; 1883 COLO. GEN. STATS. § 1714 et seq.

^{148. 1861} Irrigation Act, 1861 COLO. SESS. LAWS at 67.

^{149.} It has also been suggested that the law was intended to encourage development of stream-valley lands before the technically more difficult to irrigate uplands. Gregory A. Hicks & Devon G. Peña, Community Acequias In Colorado's Rio Culebra Watershed: A Customary Commons In the Domain of Prior Appropriation, 74 U. COLO. L. REV. 387, 423 (2003).

in the relevant region to divert water for irrigation, regardless of whether they possessed land directly adjacent to the stream, and regardless of their legal title to the land – nothing less than a direct (and uncompensated) attack on the vested rights of riparian owners. Other sections of the act reinforced this policy by legalizing trespass on riparian land, ensuring not only that those not situated directly adjacent to the stream or with too little waterfront along their claim would have a theoretical right to divert water, but that they would not be disadvantaged by their location in the construction of diversion works:

SEC. 2. That when any person, owning claims in such locality, has not sufficient length of area exposed to said stream in order to obtain a sufficient fall of water necessary to irrigate his land, or that his farm or land, used by him for agricultural purposes, is too far removed from said stream and that he has no water facilities on those lands, he shall be entitled to a right of way through the farms or tracts of land which lie between him and said stream, or the farms or tracts of land which lie above and below him on said stream, for the purposes as hereinbefore stated.

SEC. 3. That such right of way shall extend only to a ditch, dyke or cutting, sufficient for the purpose required. 150

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SEC. 8. That all persons on the margin, brink, neighborhood or precinct of any stream of water, shall have the right and power to place upon the bank of said stream a wheel, or other machine for the purpose of raising water to the level required for the purpose of irrigation, and that the right of way shall not be refused by the owner of any tract of land upon which it is required, subject, of course, to the like regulations as required for ditches, and laid down in sections hereinbefore enumerated.¹⁵¹

Here, as in the miners' codes,¹⁵² the law subjected riparian lands to easements of access and for construction of waterworks that non-riparians would require in order to realize their rights to the stream water. (Provision was also made for compensating the servient owners for damage caused by ditches running through their land.)¹⁵³ Here, too, the leitmotiv of sufficiency was evident: rights of way were created when an irrigator had insufficient riparian frontage to obtain the necessary fall or when his non-riparian lands had no other water source, and easements were to be only as extensive as necessary.

^{150. 1861} Irrigation Act, 1861 COLO. SESS. LAWS at 67 (now at COLO. REV. STAT. §§ 37-86-102 – 37-86-103 (2002)).

^{151. 1861} Irrigation Act, 1861 COLO. SESS. LAWS at 68-69.

^{152.} See supra notes 48-49.

^{153.} See 1861 Irrigation Act §§ 5-7, 1861 COLO. SESS. LAWS at 68.

Perhaps most surprising in light of the conventional wisdom regarding Colorado water law is the section of the statute dealing with apportionment in times of scarcity:

SEC. 4. That in case the volume of water in said stream or river shall not be sufficient to supply the continual wants of the entire country through which it passes, then the nearest justice of the peace shall appoint three commissioners as hereinafter provided, whose duty it shall be to apportion, in a just and equitable proportion, a certain amount of said water upon certain or alternate weekly days to different localities, as they may, in their judgment, think best for the interests of all parties concerned, and with a due regard to the legal rights of all...¹⁵⁴

No hard and fast property rights according to priority or otherwise here; rather, division of the resource "in a just and equitable proportion," a standard that while possibly adopted from the riparian law of the humid east, ¹⁵⁵ more likely originated in the traditional Hispanic community ditches of southern Colorado, given the references to commissioners and alternation of days. ¹⁵⁶

The remainder of this section is also worthy of note:

Provided, That this section shall not apply to persons occupying land on what is known as Hardscrabble Creek, a tributary of the Arkansas River; but upon said stream each occupant shall be allowed sufficient water to irrigate one hundred and sixty acres of land, if there shall be sufficient for that purpose; and if insufficient, then the occupant nearest the source of said stream shall be first supplied.¹⁵⁷

Illumination of the historical reasons for this exception made for the proprietors along Hardscrabble Creek awaits further historical research. Yet there were two aspects of this special arrangement relevant to our larger discussion, both related to the ideal of sufficiency. First, the limitation of appropriation is again evident; as in the Jefferson Territory code, 158 the amount necessary to irrigate a 160-acre homestead was a

^{154. 1861} Irrigation Act, 1861 COLO. SESS. LAWS at 68 (superseded by An Act To regulate the use of Water for Irrigation and providing for settling the Priority of Right thereto, etc. § 18, 1879 COLO. SESS. LAWS 99).

^{155.} See Dale D. Goble, Making the West Safe for the Prior Appropriation Doctrine, in LAW IN THE WESTERN UNITED STATES 153, 155 (Gordon Morris Bakken ed., 2000). At least one western judge construed the section as requiring equal distribution. Thorp v. Freed, 1 Mont. 651, 668-69 (1872) (Wade, C.J., concurring) (construing § 4 of Montana's irrigation statute of Jan. 11, 1865, copied from Colorado's 1861 Irrigation Act).

^{156.} Hicks & Peña, supra note 149, at 421-22. In the traditional acequias of Mexico and some portions of Spain, water is apportioned by giving each irrigator turns at taking water from the main ditch, with the frequency of the turns varying with the amount of water available for all. See THOMAS F. GLICK, IRRIGATION AND SOCIETY IN MEDIEVAL VALENCIA 207-08 (1970); MAASS & ANDERSON, supra note 20, at 11-52.

^{157. 1861} Irrigation Act § 4, 1861 COLO. SESS. LAWS 68.

^{158.} Supra note 144.

maximum. Second, in times of scarcity, water was to be rationed according to a system of priority, so that at least everyone receiving water would receive the minimum amount necessary to irrigate. The apportionment, however, was based not on priority in time of initial appropriation, but on priority for the upstream landowner. This rule is worth keeping in mind as an alternative to the doctrine of prior appropriation, one that did not catch on.¹⁵⁹

In the years leading up to and immediately following Colorado's statehood, the legislation dealing with water rights continued along the channels that had been carved out by the miners' laws and deepened by this foundational territorial statute: it both weakened the link between ownership of riparian lands and the ability to acquire water rights and limited of rights to the amount that could be beneficially used by an appropriator.

One apparent resurgence of riparianism begs examination. A statute enacted in 1870 declared liability for damage caused by return flow of water after its use to be "in the same manner as riparian owners along natural water-courses." This apparent revival of the preference for riparian owners was not, however, what it seemed; applying rather to all water users, it mandated only that liability be determined "in the same manner as" in riparian law, thus importing riparianism's principle of decision, but cut off from the context of exclusivity for riparian owners. Put another way, while Colorado rejected the eastern law's exclusive grant to riparian landowners of the privilege to own water, it limited the general applicability of priority by retaining the doctrine of reasonable use for disputes arising from damage to property caused by water use.

Much of the early regulation of water rights in Colorado arose in the context of corporate law. Lands lying adjacent to or near watercourses could be irrigated by an individual farmer, but those at a greater distance required larger and more heavily engineered projects, which in turn required investments of capital generally beyond the means of any individual farmer. To that end, ditch or canal corporations were formed, sometimes of the "mutual" or cooperative sort, in which the irrigators themselves were the shareholders and investors, sometimes as creatures of eastern or European capital, aiming to profit by selling water to farmers.¹⁶¹

Colorado's general incorporation statute of 1862 contained specific provisions dealing with ditch companies. The diversion of water to non-

^{159.} See infra text accompanying notes 229-239.

^{160.} An Act Defining rights and liabilities of miners and millmen in certain cases § 2, 1870 COLO. SESS. LAWS 81. See the similar provisions in the miners' codes, *supra* note 93.

^{161.} See RICHARD MOSS ALSTON, COMMERCIAL IRRIGATION ENTERPRISE, THE FEAR OF WATER MONOPOLY, AND THE GENESIS OF MARKET DISTORTION IN THE NINETEENTH CENTURY AMERICAN WEST 74-106 (1978).

riparian lands was permitted, but the statute displayed a degree of retrenchment in this area, providing

Nor shall the water of any stream be directed from its original channel to the detriment of any miner, millman or others along the line of said stream, and there shall be at all times left, sufficient water in said stream for the use of miners and farmers along said stream.¹⁶²

The sentiment in this law in favor of riparian owners appears to have been stronger than in the irrigation statute of the previous year (still in force),163 which gave no priority of right to riparian landowners over nonriparians in the "neighborhood." The change likely reflected a heightened concern regarding speculative and monopolistic behavior on the part of corporations diverting the water away from the stream. An 1864 amendment to the statute changed its language so that it forbade only a diversion to the detriment of those "who may have a priority of right," but the retention of the final clause, reserving "sufficient water in said stream for the use of miners and farmers along said stream"164 created an ambiguous situation. Only in 1877 was the riparian priority vis-à-vis corporate diversions abolished, with the statute providing, "nor shall the water of any stream be diverted from its original channel to the detriment of any person or persons who may have priority of right"165 apparently subordinating the ditch company's rights only to earlier appropriations. Still, it is worth noting that even in the earlier versions of the statute the riparian rights extended only as far as would be "sufficient" for mining or farming operations. The law gave riparian owners a degree of preference, but, in keeping with the ethic of the miners' codes, they would not be allowed to "monopolize" the water by claiming more than necessary for their own use; the surplus would be available, for free, to other claimants.

The territorial legislature took a similar approach to the issue of preferences for riparian owners in the private acts by which it chartered a number of ditch companies. Some of the early charters, while allowing the corporations to divert water to non-riparian lands, reserved a superior right to riparians if they needed the water for mining or irrigation. ¹⁶⁶ In others, the company's right to divert was subordinated to those of prior

^{162.} An Act to Enable Road, Ditch, Manufacturing and Other Companies to Become Bodies Corporate § 13, 1862 COLO. SESS. LAWS 48 [hereinafter General Incorporation Act].

^{163. 1861} Irrigation Act § 1, 1861 COLO. SESS. LAWS 67, quoted supra at note 148.

^{164.} An Act to Amend "An Act to Enable Road, Ditch, Manufacturing and Other Companies to Become Bodies Corporate" § 32, 1864 COLO. SESS. LAWS 58.

^{165.} An Act to Provide for the Formation of Corporations § 85, 1877 CoLo. GEN. LAWS § 275.

^{166.} See, for example, An Act to Incorporate the Blue River and Buffalo Flats Ditch Company § 17, 1861 COLO. SESS. LAWS 443 (mining); An Act to Incorporate the South Platte and Fontaine qui Bouille Irrigating and Ditch Company § 12, 1862 COLO. SESS. LAWS 134 (irrigation).

appropriators, but prior claims were valid only when on lands with gold "in paying quantities." The common denominator was that speculative holdings, whether by virtue of ownership of riparian land or of priority of appropriation, were not recognized; only water put to productive use supported a valid claim. The widespread provision of the miners' laws allowing persons bringing water into the mines a right of way over others' claims was also enacted into law, for further emphasizing the neutralization of location of land holdings as a factor in the control of surface-water resources.

Corporation law also treated the issue of speculation in water. Here the legislature found itself in something of a bind. On the one hand, the developing ethic of water rights in Colorado was a commitment to spreading the use and ownership of the resource as widely as possible. On the other, as the very rationale of the ditch company was to divert and convey more water than a single farmer could use, using economies of scale to lower the average cost to the individual, a rule limiting the amount of water that could be diverted would have frustrated these cooperative ventures. The law adapted to the exigencies of the situation without sacrificing its anti-monopoly principles by imposing two restrictions on the corporations: One was the establishment of maximum prices for water, whether by including such restrictions in the chartering acts of companies created in this way, 170 or by delegating price control authority to county governments over companies incorporated under the general statute.¹⁷¹ The other was a requirement, the rationale and need for which might not at first glance be wholly apparent, that companies not refuse to sell at these terms to a willing buyer. This was an attempt to prevent corporations from deriving rent from their control of the water by other means, for instance by selling it only to settlers who would also buy land (a resource and market with no price controls) from the company. Commoditization of water was further discouraged exempting from taxation ditches owned by individual or mutual companies, but not those owned by corporations selling water for profit.173

^{167.} See, for example, An Act to Incorporate the Snowy Range Ditch Co. \S 9, 1862 COLO. SESS. LAWS 145.

^{168.} See supra note 49.

^{169.} An Act Concerning Lode Claims § 2, 1861 COLO. SESS. LAWS 166; 1868 REV. STAT. COLO. ch. 62, § 2.

^{170.} See, e.g., An Act to Incorporate the South Platte and Fontaine qui Bouille Irrigating and Ditch Company § 7, 1862 COLO. SESS. LAWS 133-34.

^{171.} General Incorporation Act § 14, 1862 COLO. SESS. LAWS at 48, quoted *supra* at note 162.

^{172.} See id. For chartered corporations, see, for example, An Act to Incorporate the Blue River and Buffalo Flats Ditch Company § 16, 1861 COLO. SESS. LAWS at 443.

^{173.} See An Act to exempt Irrigating Ditches from Taxation, 1872 COLO. SESS. LAWS 143.

The anti-speculation and anti-hoarding aspects of Colorado water law were further reinforced at the hands of the territorial legislature through laws prohibiting waste and unnecessary diversions. An act of 1876 (still in force today) expanding an earlier law that had applied to only certain counties, ¹⁷⁴ required ditch owners to prevent in general the water in their ditches from going to waste, ¹⁷⁵ also ordering specifically:

During the summer season, it shall not be lawful for any person or persons to run through his or their irrigating ditch any greater quantity of water than is absolutely necessary for irrigating his or their said land, and for domestic and stock purposes: it being the intent and meaning of this section to prevent the wasting and useless discharge and running away of water.¹⁷⁶

This regulation, violation of which was a criminal offense punishable by fine, ¹⁷⁷ is striking for its unequivocal shackling of the measure of the water right to the owner's needs. In effect, it reinforced and clarified the language of the irrigation statute of 1861 describing a water claim as entitling the holder to "the use of the water... for the purposes of irrigation." ¹⁷⁸ It was now clear that what would come to be known as "beneficial use" was not only a condition specifying the types of uses for water that were included in the legal right (that is, irrigation), but also a measure of that right, limiting it to the amount necessary for essential uses. This limitation was notably described in terms consistent with the *Evans v. Merriweather* dictum on the possible application of the domestic-use right in arid regions. ¹⁷⁹ More than frustration at seeing good water go to waste in an arid environment, the statute reflected a desire to stop speculative hoarding of water rights for the purpose of turning a profit.

The law of water rights as laid down in the legislation of the Colorado Territory thus carried forward the main principles originating in the Colorado miners' laws: access to surface water for non-riparians and limitation of claim size. The constitution of the new state reiterated and developed these themes.

^{174.} An Act To amend Chapter forty-five (45) of the Revised Statutes of Colorado, 1872 COLO. SESS. LAWS 144.

^{175.} An Act To prevent the Waste of Water during the Irrigating Season \S 1, 1876 COLO. SESS. LAWS 78.

^{176.} Id. § 2, at 78.

^{177.} Fine not less than \$100. Id. § 3, at 78. This sum has not been updated. COLO. REV. STAT. § 37-84-109 (2002).

^{178. 1861} Irrigation Act § 1, 1861 COLO. SESS. LAWS 67, quoted supra at note 148.

^{179.} Supra text accompanying note 90.

C. The Colorado Constitution

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

1. Public Property

In general, the constitution enshrined the principles of Colorado water law that had been developed in the miners' codes and territorial legislation. The opening section, though, began with an innovation, declaring the waters of streams to be public property:¹⁸²

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.¹⁸³

As noted by a U.S. Senate committee, this was the keystone of the whole edifice of Colorado water law: "Embedded deeply in constitution and statute, Colorado has recognized as fundamental the principle... [of] the public nature and property of all natural waters." ¹⁸⁴

^{180.} All sections remain in force today, unamended. COLO. CONST. art. XVI, §§ 5-8.

^{181.} See Curt Arthur Poulton, A Historical Geographic Approach to the Study of the Institutionalization of the Doctrine of Prior Appropriation: The Emergence of Appropriative Water Rights in Colorado Springs, Colorado 21-26 (unpublished Ph.D. dissertation, U. of Minn., 1989).

^{182.} Territorial legislation had left open the question of ownership of water, dealing only with the right to its use. See 1861 Irrigation Act § 1, 1861 COLO. SESS. LAWS 67, quoted supra at note 148. Avoidance of the ownership issue seems to have been due to deference to the federal government, which was the owner of most riparian lands in Colorado (and hence, at common law, owner of the water rights as well) and had veto power over territorial legislation. However, with the enactment of a federal law recognizing as valid water rights acquired on federal lands in accordance with local customs and laws, An Act granting the Right of Way to Ditch and Canal Owners over the Public Lands, and for other Purposes § 9, ch. 262, 14 STAT. 251, 253 (1866) [hereinafter Mineral Lands Act], paramount federal title to water on federal lands no longer needed to be recognized. The only American precedent for such a declaration of public ownership was an Arizona territorial statute. See Trelease, supra note 20, at 641.

^{183.} COLO. CONST. art. XVI, § 5.

^{184. 1} REPORT OF THE SPECIAL COMM., supra note 3, at 74.

In one respect the approach taken here is familiar. If the waters are the property of the public, they are, of course, not owned by riparian land owners. Riparian rights were thus invalidated by implication, a clear invasion of private property rights. As one delegate argued in opposition, the section "gave a man in Gilpin county the same right to the water of a stream in Weld county, as was possessed by those through whose lands it ran. This was an interference with the contract undertaken by the United States with individuals when they pre-empted land." But why not suffice with replacing riparian title with ownership by appropriators? Why the communitarian, public-property rhetoric, so at odds with the supposed frontier ethic of individualism and private property?

The conceptual punch of the section lies precisely in this public-property theory as the basis for the right of appropriation. Opening up the opportunity to acquire a water right to all members of the public was not, as one might have expected, based on a theory of the water being *res nullius*, unowned, and therefore freely available to all. It was, rather, as in riparian doctrine, the property of the public, *publici juris*. ¹⁸⁶ Only the right to use could be acquired, ¹⁸⁷ and then only under conditions stipulated by the owner (through its agent, the state). ¹⁸⁸ The recognition of public ownership, lobbied for by the territorial Grange, ¹⁸⁹ was important for providing the theoretical and legal underpinnings for the limitations on appropriation that would be applied by the state to prevent the replacement of monopoly by riparian owners with monopoly by speculating appropriators. As explained by the economist Richard T. Ely:

[The] distinction between property in water itself and a private rights to the use of public water....seems like a refinement, but experience shows it has important consequences, inasmuch as the treatment of water as public property to be appropriated by individuals for their beneficial use strengthens public control, making such control easier

^{185.} Alvin Marsh, in DENVER DAILY TRIB., Feb. 19, 1876.

^{186.} See Embrey v. Owen, 6 Exch 353, 155 ER 579 (1851). The state Supreme Court later ruled that water had been publici juris in Colorado even before the adoption of the state Constitution. Derry v. Ross, 5 Colo. 295, 301 (1880). For publici juris in American law, see Harry N. Scheiber, The Road to Munn: Eminent Domain and the Concept of Public Purpose in the State Courts, in LAW IN AMERICAN HISTORY 329-402 (Donald Fleming & Bernard Bailyn eds., 1971).

^{187.} City of Denver v. Bayer, 2 P. 6, 7 (Colo. 1883); Wheeler v. N. Colo. Irrigation Co., 17 P. 487, 489-90 (Colo. 1888).

^{188. 1} WIEL, supra note 13, at 197; Wheeler, 17 P. at 490; Suffolk Gold Mining & Milling Co. v. San Miguel Consol. Mining & Milling Co., 48 P. 828, 830 (Colo. App. 1897); Stockman v. Leddy, 129 P. 220, 222 (Colo. 1912).

^{189.} The Grangers, ROCKY MTN. NEWS, Dec. 18, 1875, at 4. The Grange was part of a larger post-Civil-War agrarian movement, often referred to as "the Granger movement," whose goals included strengthening the independence of yeoman farmers and combating the power of the corporations. See generally SOLON JUSTUS BUCK, THE GRANGER MOVEMENT (1913); CARL C. TAYLOR, THE FARMERS' MOVEMENT, 1620-1920, at 139 (1953).

under American constitutional government than it is when the water itself is regarded as private property.¹⁹⁰

The theoretical innovation of this section went yet one step further. The assertion of public ownership, as distinguished from state ownership, was significant for the framers, who evidently had something like the public trust doctrine, with its limits on legislative power to dispose of a public resource, in mind for Colorado's water.¹⁹¹ A proposal to have the constitution declare that "The primary right of ownership in the waters of all the streams in this State is and shall be at all times in the State"¹⁹² was met with opposition from H.P.H. Bromwell, whose experience as a U.S. Congressman and member of the radical 1870 Illinois Constitutional Convention lent him particular influence in the debates:¹⁹³

Bromwell was not in favor of giving an opportunity for pools to be formed to speculate in water, and did not want the Legislature to be surrounded by such crowds of monopolists. If the capitalists get hold of all the water, they will have the people by the throat. [He] did not want to see the Legislature free to do as they wanted to with all the water of the State.¹⁹⁴

His fellow leader of the agrarian "Granger" faction¹⁹⁵ and chair of the committee on irrigation, S.J. Plumb, agreed, saying "that the General Assembly could not be relied upon, and he wanted to get the matter as far from them as possible;" "Mr. Plumb urged that the stream should be under the control of the sovereign people, and not subject to the management and manipulations of the Legislature." The radicals' arguments carried the day. ¹⁹⁸

^{190.} R.T. Ely, Economics of Irrigation, unpublished manuscript, in HENRY C. TAYLOR & ANNE DEWEES TAYLOR, THE STORY OF AGRICULTURAL ECONOMICS IN THE UNITED STATES, 1840-1932, at 833 (1952) (1905); see also Samuel C. Wiel, Public Control of Irrigation, 10 COLUM. L. REV. 506, 511-15 (1910); Trelease, supra note 20, at 640-41.

^{191.} Trelease, supra note 20, at 646. See also Michael C. Blumm et al., Renouncing the Public Trust Doctrine: An Assessment of the Validity of Idaho House Bill 794, 24 ECOLOGY L.Q. 461, 502-03 (1997). See generally Joseph L. Sax, The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention, 68 MICH. L. REV. 471 (1970).

^{192.} PROCEEDINGS OF THE CONSTITUTIONAL CONVENTION HELD IN DENVER, DECEMBER 20, 1875, at 44 (1907).

^{193.} By contemporary account, Bromwell was styled the "Orthodox Blackstone of the convention." Our Constitution Makers, Who and What They Are, DENVER TRIB. SUPP., Feb. 14, 1876. For his anti-corporate activity in the Illinois convention, see DEBATES AND PROCEEDINGS OF THE CONSTITUTIONAL CONVENTION OF THE STATE OF ILLINOIS 84, 330-31, 418, 487 (Springfield, E.L. Merritt 1870). See also Colin B. Goodykoontz, Some Controversial Questions Before the Colorado Constitutional Convention of 1876, 17 COLO. MAG. 1, 11 (1940).

^{194.} Constitutional Convention, DENVER DAILY TIMES, Feb. 18, 1876, at 4.

^{195.} The Grangers, ROCKY MTN. NEWS, Dec. 17, 1875, at 4.

^{196.} Constitutional Convention, supra note 194, at 4.

^{197.} DENVER DAILY TRIB., Feb. 19, 1876.

^{198.} See Platte Water Co. v. N. Colorado Irrigation Co., 21 P. 711 (Colo. 1889) (grant to water company of exclusive rights in section of river held beyond power of legislature).

2. "Shall Never Be Denied"

Once the question of ownership had been settled, the constitution proceeded to set the terms of acquisition of rights to use the water:

The right to divert the unappropriated waters of any natural stream to beneficial uses shall never be denied. Priority of appropriation shall give the better right as between those using the water for the same purpose; but when the waters of any natural stream are not sufficient for the service of all those desiring the use of the same, those using the water for domestic purposes shall have the preference over those claiming for any other purpose, and those using the water for agricultural purposes shall have preference over those using the same for manufacturing purposes.¹⁹⁹

The first sentence of this section, often ignored by commentators, appears as something of a puzzle. Is the directive that the right to divert water "shall never be denied" a manifestation of unbridled possessive individualism, an order that the individual's right to appropriate water never be subordinated to other societal values or principles? Such an interpretation would mark this section of the constitution as a radical break with Colorado's (albeit young) legal traditions, which, we have seen, were concerned more with widening the distribution of the water resource than with facilitating private aggrandizement of wealth.

While law certainly has known revolution, evolution is a more likely course of historical development. The initial sentence of Section 6 represented not the opening salvo of a capitalist manifesto of private ownership of natural resources, but a crystallization of one of the egalitarian principles that had been developing in the earlier miners' laws and territorial legislation: the power of any person to acquire water rights irrespective of the location of his land. The convention rejected as too friendly to speculators a proposal that the provision of the territorial legislation allowing appropriations by non-riparians, but preserving some preference for settlers within the valley, be made part of the new constitution:

Mr. Plumb said it was just this sort of thing that the committee desired to prevent. Many men had taken up lands along the streams, and done nothing with them, but were holding them in expectancy; were waiting to see if the Territory was to be a success, allowing their neighbors to do the work to insure that success. But they claimed the right to the water in the stream for the irrigation of all their lands. And the committee proposed to compel them to actually make their

^{199.} COLO. CONST. art. XVI, § 6.

^{200.} See text, supra notes 91-95, 148-153, 162-169.

appropriations and go to work to help develop the resources of the Territory. 201

Or, as a Colorado lawyer explained a few years later:

We contend that it is but natural right and justice, that the man, who in Colorado settled along the banks of a stream, and took no steps to divert the precious water to a beneficial use, *should* be subordinated to his neighbor who put his time, labor and money into ditches and reservoirs for the purpose of subduing and cultivating the arid plain; even though that neighbor may not have owned land directly on the banks of, or anywhere near the stream. That it is not right to encourage the 'dog in the manger' spirit of the speculator on the banks of the stream, who will not make beneficial use of the water himself, and is not willing to allow the settler further back to get at one of the most precious gifts of the Creator – water. That it *is* right that the man further back should have the right of way given him by the law of the land to the water which he must have in order to cultivate his fields.²⁰²

Accordingly, the law's earlier hesitancy about totally abolishing the preference for riparian owners was now laid finally to rest, with the unequivocal declaration of the constitution that "the right to divert the unappropriated waters of any natural stream to beneficial uses shall never be denied" – even to the non-riparian proprietor. Equal opportunity was the guiding principle: "Mr. Plumb said the committee desired to do away with the old doctrine of riparian ownership, so that those who should come here to settle would have equal rights in the unappropriated waters." 204

3. Beneficial Use

The opening sentence of Section 6,²⁰⁵ limiting the right of diversion to "beneficial uses," apparently marks the original use of this term in connection with western appropriation doctrine, but in this matter, too, the novelty was in the language, not in the underlying theory. Though in recent years some have focused on the requirement's potential as a doctrinal vehicle for invalidating uses seen to be wasteful,²⁰⁶ it originally had little to do with this issue; practically all uses qualified as beneficial

^{201.} DENVER DAILY TRIB., Feb. 19, 1876.

^{202.} HARVEY HUSTON, THE RIGHT OF APPROPRIATION AND THE COLORADO SYSTEM OF LAWS IN REGARD TO IRRIGATION 41 (Denver, Chain & Hardy 1893) (italics in original).

^{203.} COLO. CONST. art. XVI, § 6. See R.H. Hess, Arid-Land Water Rights in the United States, 16 COLUM. L. REV. 480, 488-89 (1916).

^{204.} DENVER DAILY TRIB., Feb. 24, 1876.

^{205.} See supra at note 199.

^{206.} See, e.g., Eric T. Freyfogle, Water Rights and the Common Wealth, 26 ENVTL. L. 27 (1996) (advocating using doctrine to ban ecologically harmful uses); Tregarthen, supra note 16, at 123-24 (criticizing the doctrine for not letting the market determine which uses are desirable).

under the law, economical or not.²⁰⁷ Rather, consistent with the distributive ideologies running through miners' and territorial law, the doctrine was a way of limiting speculation and concentration of wealth in water and encouraging its wide distribution: first, by preventing legislative giveaways of water rights;²⁰⁸ and second, by limiting the amount that could be acquired by any one irrigator to the amount actually needed to water his or her crops at the time of appropriation, as opposed to the amount his ditch was capable of carrying or the amount needed for all lands that could be watered by his ditch.²⁰⁹ As the prominent California scholar John Norton Pomeroy explained:

The system places an obstacle in the way of a prior appropriator's obtaining an exclusive control of the entire stream, no matter how large; and secures the rights of subsequent appropriators of the same stream; by requiring that a valid appropriation shall be made for some beneficial purpose, presently existing or contemplated; and by restricting the amount of water appropriated to the quantity needed for such purpose; and by forbidding any change or enlargement of the purpose, which should increase the quantity of the water diverted under the prior appropriation, to the injury of subsequent claimants; and by subjecting the prior appropriation to the effects of an abandonment, by which all prior and exclusive rights once obtained would be lost. By these means, a party is, in theory at least, prohibited from acquiring exclusive control of a stream or any part thereof, not for present and actual use, but for future, expected, and speculative profit or advantage; in other words, a party cannot obtain the monopoly of a stream, in anticipation of its future use and value to miners, farmers and manufacturers.²¹⁰

As we have seen, earlier Colorado law had pushed hard on this front, with varying degrees of directness, through a variety of doctrines: not only the use requirement, but limits on claim sizes, prohibitions on waste,

^{207.} See G.G. Anderson, Some Aspects of Irrigation Development in Colorado, 1 Transactions of the Denver Society of Civil Engineers and Architects 52, 54-55 (1890).

^{208.} See Platte Water Co. v. N. Colo. Irrigation Co., 21 P. 711 (Colo. 1889).

^{209.} It also effectively provided a floor for the size of a water right, since a diversion of less than the amount necessary for beneficial use would not ripen into a water right. My thanks to Prof. Carol Rose for this insight.

^{210.} John Norton Pomeroy, Riparian Rights – The West Coast Doctrine (Part 13), 2 W. Coast Rep. 297, 300 (1884). See also id. (Part 7), 1 W. Coast Rep. 641, 646 (1884); John E. Ethell, Irrigation – the Continually Growing Importance of the Conservation and the Equitable Distribution and Use of Water in the Arid and Semi-Arid States and Territories, 74 Cent. L.J. 244 (1912); Richard J. Hinton, Water Laws, Past and Future, IRRIGATION AGE, Nov. 1, 1891, at 269; Elwood Mead, Rise and Future of Irrigation in the United States, 1899 YEARBOOK OF THE U.S.D.A. 591, 607 (1900); 1 WIEL, supra note 13, at 313; Gordon R Miller, Shaping California Water Law, 1781 to 1928, 55 S. CAL. Q. 9, 15 (1973).

and the like.²¹¹ The beneficial use rule attempted to serve the same ends as these earlier doctrines through adoption of a flexible standard. In the absence of the use requirement, the first to arrive in a watershed could have monopolized all the river's water by diverting its entire flow;²¹² the rule, as enforced by Colorado courts, prevented this by insisting upon the use requirement as an essential component of appropriation, ruling that diversion alone, without necessity and use, could not create or maintain a water right.²¹³

Viewed in this light, beneficial use is a necessary derivative of the doctrine of appropriation. The right of any landowner to appropriate water, based as it was on the policy of preventing monopoly by riparian owners, could only arise if the appropriator meant to use the water, not hoard it for later resale; otherwise the new regime of rights would just replace one monopoly with another. Beneficial use was not, as has been argued, an exotic graft of eastern origin, but an organic part of western appropriation law from its inception. It was a condition imposed by the owner of the water, the people. Though some commentators, it should be noted, saw beneficial use as beginning to approximate the eastern law of reasonable use, they saw this similarity as a convergence, rather than as one doctrine deriving from another. Moreover, their view is another indication that the innovation of the Colorado Doctrine was seen as having little to do with the banishing of uncertainty in water rights from the law of the West.

4. Priority

The next clause of Section 6, the one on which attention is generally focused, enacted the principle of priority of appropriation into Colorado's supreme law. As noted above, temporal priority was a feature of the distribution of water rights in many miners' codes and in territorial law, though in a supplementary capacity. Here, too, the auxiliary nature

^{211.} See supra Part III.B, and text accompanying notes 37, 129-133, 144, 158, 166-167, 174-179.

^{212.} A specter raised by Montana's chief justice in Thorp v. Freed, 1 Mont. 651, 676-78, 686 (1872) (Wade, C.J. concurring).

^{213.} See, e.g., Burnham v. Freeman, 19 P. 761 (Colo. 1888); Greer v. Heiser, 26 P. 770 (Colo. 1891); Combs v. Agric. Ditch Co., 28 P. 966, 968 (Colo. 1892); Nichols v. McIntosh, 34 P. 278 (Colo. 1893).

²¹⁴. See 3 Henry Philip Farnham, The Law of Waters and Water Rights 2063, 2076 (1904).

^{215.} See, e.g., ANDERSON & SNYDER, supra note 16.

^{216.} JOHN E. FIELD, IRRIGATION FROM BIG THOMPSON RIVER 56 (U.S.D.A. Office of Experiment Stations, Bulletin No. 188, 1902).

^{217. 1} WIEL, supra note 13, at 169-70; 1 REPORT OF THE SPECIAL COMM., supra note 3, at 74.

^{218.} Supra text accompanying notes 72-78, 145.

of priority in time as an element of water law is apparent on the face of the constitutional text, where it is relegated to half a sentence in the middle of the second of four sections dealing with water rights. Nonetheless, this element of the water law of Colorado has been given great prominence in subsequent writing – indeed, "prior appropriation" is today shorthand for the entire system of water law in the western United States – an anachronism when treating the legal history of the region.²¹⁹

To place the rule of priority in proper context, consider the alternatives available to the creators of a system of property rights in water. The doctrine of prior appropriation has been characterized as a rule of "capture," and so it is, if by "capture" we mean that the first to take possession of an asset with no owner (or from the public domain) thereby becomes its owner (in this case of the usufructuary right to the water flow). The story usually told is that in privileging claims based on capture, western law opted to privatize public rights, as opposed to the eastern system of riparian law which preserved communal ownership of the water resource.

The focus on capture, however, obscures the true nature of the choice faced by Colorado's lawmakers, a choice between several versions of the capture rule. As Richard Epstein has pointed out, riparian doctrine, no less than western water law, also represents a regime of first possession, since under it a claim to water rights rests on ownership of riparian land, which in turn is acquired by first possession.²²¹ If Professor Epstein's argument seems inapposite when the imagined setting is a well-watered and long-settled area of New England or the Home Counties, it nevertheless faithfully highlights the reality of settlement in the western United States. California law, for example, recognized riparian rights, but within a framework of priority: appropriative rights were acquired by use,

^{219.} The salience of this one element of water law in historical consciousness may have its roots in two related causes. One is the lawyer's imperative to describe property rights in terms of their jural-opposite duties, a conceptual framework that highlights the legal relationships between and among appropriators rather than the conditions of initial appropriation from the public domain. The other, related, source of the phenomenon is the fact that law-making and litigation have naturally focused on the same issue: the relative rights of the appropriators from a given stream. A justified focus for practicing lawyers, however, may become a myopic handicap to understanding the origins of the doctrine.

^{220.} See, e.g., Lueck, supra note 14.

^{221.} Richard A. Epstein, Possession as the Root of Title, 13 GA. L. REV. 1221, 1234 (1979); see also Lawrence Berger, An Analysis of the Doctrine that "First in Time is First in Right," 64 NEB. L. REV. 349, 372 (1985). Similarly, both the riparian and the prior appropriation doctrines may be fairly characterized as giving equal rights to users of water, the former the right to use the water itself, and the latter the right to acquire a right of use. See James Gordley, The Origin of Riparian Rights, in THEMES IN COMPARATIVE LAW 107 (Peter Birks & Arianna Pretto eds., 2002). A related issue is whether the reasonable-use doctrine as applied by American courts in practice uses priority as the prime criterion for determining the reasonableness of uses. See RESTATEMENT (SECOND) OF TORTS § 850A(h) and Comment k.

riparian rights by settlement, but both were ranked by temporal priority.²²²

Given the widespread fear of wealthy capitalists and corporations monopolizing western water resources by laying claims to as much waterfront land as possible, capture by riparians seemed like the more insidious of the two forms of first possession. Explorer and scientist John Wesley Powell warned in his survey of the western United States that a farmer obtaining title to land through which a brook ran "could practically occupy all the country adjacent by owning the water necessary to its use,"²²³ and later exhorted the framers of another western state's constitution, "Think of a condition of affairs in which your agriculture... depending on irrigation, is at the mercy of twenty companies, who own all the water. They would laugh at ownership of land. What is ownership of land when the value is in the water?"²²⁴ Instances abounded of ranchers and land companies controlling hundreds of thousands of acres by acquiring title to a few choice riverfront parcels.²²⁵ A Colorado rancher, for example, testified to a federal commission:

Wherever there is any water, there is a ranch. On my own ranch [320 acres] I have 2 miles of running water; that accounts for my ranch being where it is. The next water from me in one direction is 23 miles; now no man can have a ranch between these two places. I have control of the grass, the same as though I owned it.²²⁶

Contemporaries thus saw riparian rights as the tool of monopoly and oppression. One critic complained: "When we permit a foreign rule of law to be applied to land tenure... that fosters greed, favors monopolies, gives to the few what nature intended for, and the law should give, to all, we permit an injustice to our people...."227 And another:

^{222.} See 1 WIEL, supra note 13, at 255. See also Hammond v. Rose, 19 P. 466 (Colo. 1888) (rejecting similar rule for Colorado).

^{223.} POWELL, supra note 126, at 33. See also GATES, supra note 102, at 467; Lilley & Gould, supra note 17, at 61; WEBB, supra note 13, at 451; Stowell v. Johnson, 26 P. 290 (Utah 1891).

^{224.} John Wesley Powell, Address at North Dakota Constitutional Convention, Aug. 5, 1889, 36 N. DAK. HIST. 373, 375 (1969).

^{225.} John T. Ganoe, *The Desert Land Act in Operation, 1877-1891*, 11 AGRIC. HISTORY 142 (1937); A.A. Hayes, Jr., *The Cattle Ranchers of Colorado*, 59 HARPERS MONTHLY 877, 883, 886 (Issue 354, November 1879); HOGAN, *supra* note 85, at 175; ERNEST STAPLES OSGOOD, DAY OF THE CATTLEMAN 183-84 (1929); Veeder B. Paine, *Our Public Land Policy*, 71 HARPERS NEW MONTHLY MAG. 741, 742 (Issue 425, October 1885); ORA BROOKS PEAKE, THE COLORADO RANGE CATTLE INDUSTRY 65 (1937).

^{226.} Testimony of Henry H. Metcalf, in REPORT OF THE PUBLIC LANDS COMMISSION 297, H. Ex. Doc. No. 46, 46th Cong. 2d Sess. (1880), cited in OSGOOD, supra note 225, at 184.

^{227.} Haight, supra note 138, at 569 (on riparian law in California); see also M.M. Estee, Address to Cal. St. Agric. Society, Sep. 1874, in EZRA S. CARR, PATRONS OF HUSBANDRY ON THE PACIFIC COAST 319, 324 (San Francisco, A.L. Bancroft 1875); C.E. Grunsky, Water Appropriations from Kings River, in REPORT OF IRRIGATION INVESTIGATIONS IN CALIFORNIA 259, 273 (U.S.D.A. Office of Experiment Stations, Bulletin No. 100, 1901); Elwood Mead, The Agricultural Situation in California, in REPORT OF IRRIGATION INVESTIGATIONS IN

The English law... has been justly denounced as "an infamous law in an arid land." There water is as gold.... The man who "owns" or controls it by virtue of his ownership of riparian lands practically owns all the land within reach of the stream which might be made productive by the diversion of its waters. Through the power he derives from the English common law he may put an absolute veto upon the progress of the country, or, by permitting progress on terms of his own naming, may levy tribute upon his neighbors and unborn generations for himself and his heirs forever.²²⁸

The central thrust of Colorado water law was the abolition of this injustice, replacing the rule of capture of the resource by a limited group of landowners with a rule that gave equal opportunity to all to share in the resource.

Abolishment of the riparian privilege, however, opened the way for a different sort of monopolization by capture, the effective control of a watercourse by upstream owners, the form of priority one writer later called "higher-ority."²²⁹ Some early northeastern cases had held the irrigation right of an upper riparian proprietor to be superior to that of his downstream neighbor, even if the downstream use had preceded the upstream by decades.²³⁰ Though courts mainly rejected this view in favor of the reasonable-use doctrine by mid-century,²³¹ mainstream riparian law, as reflected in *Evans v. Merriweather*,²³² continued to give absolute preference to the upstream owner as far as "domestic" uses were concerned.²³³ A decade before *Coffin*, at least one western court had held that the common law of riparianism had been abrogated in favor of the right of upstream proprietors to divert water at the expense of lower users, regardless of temporal priority.²³⁴ In Colorado itself, the special

CALIFORNIA, supra, at 17, 49; William E. Smythe, The Irrigation Problems of Honey Lake Basin, Cal., in REPORT OF IRRIGATION INVESTIGATIONS IN CALIFORNIA, supra, at 71, 106-07. In modern times, only resource economist Mason Gaffney seems to have understood this point. See Mason Gaffney, Economic Aspects of Water Resource Policy, 28 Am. J. Econ. & Soc. 131, 139 (1969).

^{228.} William E. Smythe, *The Struggle for Water in the West*, 86 ATLANTIC MONTHLY 646, 647 (Issue 517, Nov. 1900).

^{229.} Philip A. Danielson, Water Administration in Colorado – Higher-ority or Priority?, 30 ROCKY MTN. L. REV. 293, 298 (1958).

^{230.} Perkins v. Dow, 1 Root 535 (Conn. Super. Ct. 1793); Weston v. Alden, 8 Mass. 136 (1811).

^{231.} See JOSEPH K. ANGELL, TREATISE ON THE LAW OF WATERCOURSES 208-10 (Boston, Little, Brown & Co., 7th ed. 1877).

^{232. 4} Ill. 491, 495 (1842), discussed supra at notes 89-90.

^{233.} See, e.g., Wadsworth v. Tillotson, 15 Conn. 366 (1843).

^{234.} Thorp v. Freed, 1 Mont. 651, 654-55 (1872) (rejecting lower court's position in favor of upstream users). Colorado courts were rejecting similar claims as late as 1896. See Strickler v. City of Colorado Springs, 26 P. 313, 315 (Colo. 1891) (diversion from tributary subject to earlier appropriation from main stream); McClellan v. Hurdle, 33 P. 280, 282 (Colo. Ct. App. 1893) (appropriation of subterranean water subject to prior right of diverter from surface, otherwise

provision for Hardscrabble Creek in Colorado's irrigation statute of 1861 had similarly favored upstream users.²³⁵ If the primary impetus for the adoption of the criterion of priority in time of initial appropriation was the desire to prevent monopoly by riparian landowners, a secondary concern was extracting streams from the grip of the upstream owners on whose lands the sources of the stream were located, who would be vested with de facto control of the entire stream were no new system to replace the abolished riparian rules.²³⁶ As one early study noted, "Without some sort of general regulation and control the ditches farthest up the stream would take what they need, those lower down would take what was left...."237 This generally submerged current of concern rose to the surface in the Jefferson Territory irrigation statute, which recognized the rights of prior appropriators specifically as against a "person or persons making subsequent claims above said first claimant."238 It was also recognized by contemporaries as the motivating force behind the push for government supervision of water rights (as when conflicts broke out between upstream and downstream irrigators on the Cache La Poudre River in the 1870's).²³⁹ Priority was seen as a way of preventing upstream owners from gaining control of Colorado's surface water.²⁴⁰

Having avoided the pitfalls of monopolization by riparian or upstream owners, why, it might be asked, did Colorado law adopt a rule of capture at all? Why not recognize the right of all citizens to share in the valuable surface-water resources of the state? The answer lies in the particular form of the egalitarian ideology expressed in Colorado water law. As in the miners' laws,²⁴¹ equality of opportunity to claim water rights was the rule so long as enough water remained to satisfy the needs of all claimants, but not when it would dilute the water rights to the point

upstream owners location would trump temporal priority); Bruening v. Dorr, 47 P. 290 (Colo. 1896) (right of owner of land on which stream rises inferior to prior appropriations from stream).

^{235. 1861} Irrigation Act § 4, 1861 Colo. Sess. Laws 68, quoted supra at note 157. 236. See Elwood Mead, The Growth of Property Rights in Water, 6 INT'L. Q. 1, 4 (1902);

FREDERICK HAYNES NEWELL. IRRIGATION IN THE UNITED STATES 333 (New York, T.Y. Crowell 1902); STEINEL, supra note 129, at 198; ELINOR OSTROM, CRAFTING INSTITUTIONS FOR SELF-GOVERNING IRRIGATION SYSTEMS 6 (1992).

^{237.} J.C. ULRICH, IRRIGATION IN THE ROCKY MOUNTAIN STATES 43 (U.S.D.A. Office of Experiment Stations, Bulletin No. 73, 1899). See also id., at 44; MICHAEL HOLLERAN, ANDERSON DITCH: A HISTORY AND GUIDE 12-13 (2000).

^{238.} An Act Concerning Irrigation § 2, supra note 141, at 214 (emphasis added.)

^{239.} See David Boyd, Appendix, in E.S. NETTLETON, REPORT OF THE STATE ENGINEER TO THE GOVERNOR OF COLORADO FOR THE YEARS 1883 AND 1884 116 (Denver, Times Co. 1885); DAVID BOYD, IRRIGATION NEAR GREELEY, COLORADO 61 (U.S. Geological Survey Water Supply and Irrigation Paper No. 9) (Washington, Government Printing Office, 1897).

^{240.} See Joseph O. Van Hook, Development of Irrigation in the Arkansas Valley, 10 COLO. MAG. 3, 7 (1933).

^{241.} See supra text accompanying notes 62-73.

where they were too small to be sufficient for reasonable use.²⁴² This point was made clearly by Nathan Meeker, the influential journalist who led the settlement of the cooperative Union Colony, the first large-scale irrigation undertaking in Colorado:

The Larimer *Express* does not like the principle that is proposed for the new constitution that "priority of appropriation" gives priority of right to water for irrigation.... Now, to divide the water among all who ask for it, is as all know who are used to irrigation, to reduce the supply so that no one will have sufficient to do any good, and this, in effect, destroys farming.... Thus, it would appear that there is no way in which the question can be settled so well as acknowledging the doctrine of priority of appropriation.²⁴³

A farmer's letter to the editor a few years later, opposing equal distribution of water, made a similar point:

Do you propose to destroy a section of natural farming and grass lands that is already improved, by directing the streams into the plains, in hopes of benefiting and making another farming section?...

To say it is unjust does not fit the bill – it's first-class thievery. You had just as well follow the Platte and other streams down and burn everything in the form of improvements, for they will most assuredly be worthless to the owners if people and companies are encouraged to take out ditches with the assurance that there is to be a division of water to all ditches, no matter how much or little may be the supply.²⁴⁴

Eastern common law avoided the necessity for seniority-based rationing only by restricting water-right ownership to those owning riparian land.²⁴⁵ The price of abolishing qualifications for entry to this club, thereby opening to all the opportunity to acquire a water right, though, was the imposition of an effective limit on the number of members through a different criterion.²⁴⁶ "First in time" represented not a choice in favor of any ethos of capture particular to the western pioneers;

^{242.} Cf. RESTATEMENT (SECOND) OF TORTS § 850A, Comment j (regarding common-law reasonable use, "the courts will not carry the requirement of sharing to an extreme if the share of each riparian would be reduced to a quantity that is sufficient for none").

^{243.} The Water Question, GREELEY TRIB., Feb. 2, 1876, at 2. See also Armstrong v. Larimer County Ditch Co., 27 P. 235, 237 (Colo. Ct. App. 1891); Drake v. Earhart, 23 P. 541 (Idaho 1890); ULRICH, supra note 237, at 43; ELWOOD MEAD, IRRIGATION INSTITUTIONS 63-65 (1903).

^{244.} William H. Grafflin, ROCKY MTN. NEWS, Feb. 2, 1881, at 4.

^{245.} A point made by Theodore E. Lauer, *The Riparian Right as Property, in WATER RESOURCES AND THE LAW 133, 161-63 (1958); MAASS & ANDERSON, supra note 20.* In the humid environments of England and the eastern U.S., this did not create significant inequalities, since surface water was both widely dispersed and not typically used for farming.

^{246.} See Schilling v. Rominger, 4 Colo. 100 (1878) (the first judicial statement of the priority rule in Colorado, upholding the rights of the earlier settler against the threat of dilution by newcomers to the area); WEBB, supra note 13, at 439-40. Cf. Robert G. Dunbar, The Search for a Stable Water Right in Montana, 28 AGR. HIST. 138, 139 (1954).

it was rather, as in the miners' codes,²⁴⁷ an application of the traditional principle of equity favoring an earlier claimant over a later one in cases of conflicting property claims.²⁴⁸ Though all had the right to use water, it was incumbent upon each to desist if his diversion conflicted with that of an earlier appropriator.²⁴⁹

The principle of priority, then, was not the cornerstone of Colorado water law at its foundation; though in practice it may have become dominant in later years. As late as 1892, the state Supreme Court could survey the differences between the Colorado doctrine and riparian law and, while emphasizing public ownership of water in Colorado, fail to mention the rule of temporal priority.²⁵⁰

Nor was priority an absolute rule. The second half of the irrigation article's Section 6 further subordinated the principle of priority to that of necessity in the allocation of property rights in water, with more essential uses taking preference over those less so (domestic over agricultural, agricultural over industrial); priority of appropriation is the rule only "as between those using the water for the same purpose." Here was a particularly vivid expression of the law's concern for necessary uses, previously encountered in the miners' codes and in the territorial legislation²⁵² (as well as in riparian law). ²⁵³

^{247.} See supra text accompanying note 30.

^{248.} Cf. Berger, supra note 221, at 350 (distinguishing between application of temporal priority between first occupant and society and its application between the first occupant and subsequent claimants).

^{249.} This line of reasoning is evident in the opinion of Knowles J. in *Thorp v. Freed*, 1 Mont. 651, 657 (1872), construing the Montana irrigation statute, which had been copied from the Colorado Irrigation Act of 1861, *supra* note 146.

[&]quot;If it is claimed that this statute does not recognize the doctrine of 'prior in time, prior in right,' the answer to this is, that when the law gives a man the right to divert water from a stream to irrigate his land to the full extent of the soil thereof, and in pursuance of this law he goes and digs a ditch, or constructs machinery for the purpose of taking water from a stream for this purpose at great expense, the principles of equity come in and say that no other man can come in and divert this water away from him. That he is prior in time in availing himself of the benefits of such a statute, and his rights are prior to any subsequent appropriator." *Id.*

^{250.} Oppenlander v. Left Hand Ditch Co., 31 P. 854, 856 (Colo. 1892); see also Charles E. Gast, The Colorado Doctrine of Riparian Rights, and Some Unsettled Questions, 8 YALE L.J. 71, 71-72 (1898).

^{251.} COLO. CONST. art. XVI, § 6.

^{252.} See supra text accompanying notes 62-66, 72-73 (miners' codes) and 162-167, 174-179 (territorial legislation).

^{253.} See supra text accompanying note 89. Though this provision was later interpreted as applying only to "such use as the riparian owner has at common law to take water for himself, his family or his stock, and the like," with municipalities required to acquire the water of an inferior use by condemnation and compensation (Montrose Canal Co. v. Loutsenhizer Ditch Co., 48 P. 532, 534 (Colo. 1896); see also An Act in Relation to Municipal Corporations §14(73), 1877 GENERAL LAWS COLO. 874, 890 (compensation required for condemnation of water rights by municipality)), it is clear that the framers intended to violate the rule of priority and recognize a better property right in domestic users. Frank J. Trelease, Preferences to the Use of Water, 27 ROCKY MTN. L. REV. 133, 134, 145 (1955).

As indicated by its place in the constitutional text, priority was an auxiliary principle, meant to ensure that the abolition of riparian and upstream privileges and concomitant opening to all of the opportunity to acquire water rights would not result in a tragic dilution of the resource to the point where no individual irrigator would be able to appropriate a right sufficient to irrigate his crops. Nor was it viewed as facilitating privatization of the resource. Rather, it was seen as an expression of public ownership, as indicated by Governor Elbert's message regarding desirable irrigation legislation to the Territorial Legislature two years before the Convention:

First. – That to the State should belong the water of its streams and the control of its distribution among canal owners. From this it would follow that no one would be allowed to divert the water from the natural bed of the stream to the injury of those having previously acquired and vested rights.²⁵⁴

Significantly, priority's most vocal supporters were the radical farmers, who would come to demand its enforcement as part of an agrarian program of government ownership of railroads and telegraphs, inflationary monetary policy, and the like.²⁵⁵

5. Rights of Access

In yet another example of the tendency to distill the rich brew of Colorado's water law into the simple proposition of priority, discussions of the state's constitutional appropriation doctrine usually refer only to the aforementioned Sections 5 and 6 of Article XVI (or Section 6 alone,)²⁵⁶ while neglecting the following two sections. This narrow view flies in the face of the structure of the constitutional text, in which these four sections are grouped together under the common heading of "Irrigation," and is lacking on the substantive plane as well. As previously discussed, territorial legislation, following in the footsteps of some of the miners' codes, had bundled the formal abolishment of the riparian monopoly on water rights together with the recognition of easements in favor of non-riparian claimants.²⁵⁷ The new state constitution followed suit, declaring:

All persons and corporations shall have the right-of-way across public, private and corporate lands for the construction of ditches, canals and flumes for the purpose of conveying water for domestic

^{254.} Colorado Legislature, COLO. SPRINGS GAZETTE, Jan. 10, 1874, at 6.

^{255.} See Leonard Peter Fox, Origins and Early Development of Populism in Colorado, chap. 4 (unpublished Ph.D. thesis, U. Penn. 1916).

^{256.} See, e.g., Dunbar, Adaptability, supra note 13, at 60; JAMES N. CORBRIDGE JR. & TERESA A. RICE, VRANESH'S COLORADO WATER LAW 7 (rev. ed. 1999).

^{257.} See supra text accompanying notes 94-95 (miners' codes), and 142-143, 150-153 (territorial legislation).

purposes, for the irrigation of agricultural lands, and for mining and manufacturing purposes, and for drainage, upon payment of just compensation.²⁵⁸

As in the territorial water legislation, the right of way for ditches was a critical piece in the constitutional program of effecting a wide distribution of rights in surface water.²⁵⁹ The exhortation that the right to divert unappropriated water to beneficial uses "shall never be denied,"²⁶⁰ aimed at breaking the monopoly of riparian ownership under the traditional common law, would have been a dead letter if those owners had retained the right to exclude other potential water users from their land.²⁶¹ The threat was real, as indicated by a contemporary historian's description of the "water-grabbers" of Colorado, who "fenced off the rivers from the common use of the people."²⁶² Hence the constitution further invaded private property rights by granting easements for the construction of water works to the general public, thereby guaranteeing that the policy of equal access to water for all would not be hobbled by impediments thrown up by recalcitrant riparian landowners.²⁶³

6. Control of Corporations

Though the Convention failed to fully meet the Colorado Grange's demand that the legislature be prohibited from granting charters to water corporations other than those controlled by "actual settlers," 264 it did enact a provision allowing the legislature to revoke or annul charters injurious to the citizens of the state, 265 one of several "Granger" provisions limiting the power of corporations in general. 266 It was yet more aggressive on other issues.

Section 8 of Article XIV, the final section of the chapter on irrigation, endorsed another element of territorial legislation, ²⁶⁷ granting

^{258.} COLO. CONST. art. XVI, § 7.

^{259.} At least one legal historian has at least tentatively recognized the anti-monopoly function of the ditch easement. Harry N. Scheiber, *Property Law, Expropriation, and Resource Allocation by Government: The United States, 1789-1910, 33 J. ECON. HIST. 232, 247-48 (1973).*

^{260.} COLO. CONST. art. XVI, § 6. See supra text accompanying notes 199-204.

^{261.} The connection between these two constitutional provisions was noted in an annotation to an important water-law treatise. JOHN NORTON POMEROY, TREATISE ON THE LAW OF RIPARIAN RIGHTS 160 n.1 (Henry Campbell Black, ed., St. Paul, West Pub. Co. 1887).

^{262. 25} HUBERT HOWE BANCROFT, THE WORKS OF HUBERT HOWE BANCROFT 643 (San Francisco, The History Co. 1890).

^{263.} This ditch easement, originally considered an easement of necessity arising automatically and not requiring compensation (see Yunker v. Nichols, 1 Colo. 551 (1872)) was eventually held to require condemnation and compensation, in keeping with the law of eminent domain. Stewart v. Stevens, 15 P. 786 (Colo. 1887).

^{264.} The Grangers, ROCKY MTN. NEWS, Dec. 18, 1875, at 4.

^{265.} COLO. CONST. Art. XV, § 3.

^{266.} See Goodykoontz, supra note 193, at 12-13; BUCK, supra note 189, at 198.

^{267.} See supra notes 170-171.

county commissioners the authority "to establish reasonable maximum rates to be charged for the use of water, whether furnished by individuals or corporations" The elevation to constitutional status of maximum prices for water, like that of the preceding section, reflected an understanding that the abolition of monopoly control of surface waters required not only a formal statement of public ownership and the right of all to divert water to beneficial uses, but concrete regulatory steps that would prevent the concentration of control over the resource in the hands of a powerful few. The interests of settlers were also given preference over those of investors in the constitution's article on revenue, which constitutionalized the statutory exemption from taxation for only those ditches owned by individual irrigators or consumer-owned mutual corporations. 269

With the rise in the early decades of statehood of increasingly ambitious irrigation schemes developed through corporate vehicles, issues connected with irrigation companies were litigated often before the state's Supreme Court. Though this topic is beyond the scope of this article, it is significant that the court's jurisprudence in this area recognized the conceptual connection between the doctrine of appropriation and the regulation of corporate control over water, thereby affirming that the water-law subdivision of the Colorado Constitution was an integral whole, a unified reflection of a vision of egalitarian distribution of property in water. Let us turn now to an examination of the early water-law decisions of that court, including the leading case of Coffin v. Left-Hand Ditch Co.

D. Case Law before Coffin

The first reported Colorado case dealing with the question of water rights was *Yunker v. Nichols*, decided in 1872 by the territorial Supreme Court.²⁷¹ At issue was neither the right to divert water nor the ranking of rights in terms of priority of appropriation, but the right of an irrigator to an easement for a ditch bringing water to his fields over the intervening lands of another. The immediate question presented to the court was whether a landowner's parol grant of a ditch right of way was invalid under the statute of frauds. The Supreme Court held it was not, with each of the three justices resting their decision upon slightly different grounds.

^{268.} COLO. CONST. art. XVI, § 8.

^{269.} COLO. CONST. art. X, § 3. For the statutory exemption, see An Act to exempt Irrigating Ditches from Taxation, 1872 COLO. SESS. LAWS 143; see also supra note 173; Murray v. Bd. of County Comm'rs, 65 P. 26, 27 (Colo. 1901).

^{270.} See, e.g., Wheeler v. N. Colo. Irrigation Co., 17 P. 487 (1888); Combs v. Agric. Ditch Co., 28 P. 966 (Colo. 1892). See also 2 WIEL, supra note 13, at 1149.

^{271. 1} Colo. 551.

As the judicial pronouncements revealed much about the principles and purposes of Colorado's water law, I will quote from the opinions at some length.

The lead opinion was written by the respected Chief Justice Hallett, who had left his Chicago law practice for an unsuccessful stint as a Colorado miner before establishing himself as one of Denver's first lawyers.²⁷² He based his decision on the territorial irrigation statute of 1861, which, as mentioned above, provided for private rights of way for the construction of water ditches.²⁷³ Responding, it seems, to counsel's argument that the statute's imposition of rights of way amounted to an unconstitutional taking of the servient owners' property rights,²⁷⁴ the Chief Justice argued that the rights of way were, in effect, easements of necessity, to which all lands are inherently subject by law.²⁷⁵ Though not mentioning *Evans v. Merriweather*, his reasoning in support of this contention was similar to the Illinois court's speculation on the possible extension of the domestic-use exception in arid lands:²⁷⁶

In a dry and thirsty land it is necessary to divert the waters of streams from their natural channels, in order to obtain the fruits of the soil, and this necessity is so universal and imperious that it claims recognition of the law. The value and usefulness of agricultural lands, in this territory, depend upon the supply of water for irrigation, and this can only be obtained by constructing artificial channels through which it may flow over adjacent lands... In other lands, where the rain falls upon the just and the unjust, this necessity is unknown, and is not recognized by the law. But here the law [the 1861 statute] has made provision for this necessity, by withholding from the land-owner the absolute dominion of his estate, which would enable him to deny the right of others to enter upon it for the purpose of obtaining needed supplies of water...

It may be said, that all lands are held in subordination to the dominant right of others, who must necessarily pass over them to obtain a supply of water to irrigate their own lands, and this servitude arises, not by grant, but by operation of law.²⁷⁷

This earliest judicial exposition of the Colorado doctrine thus focused not on the private-property right of exclusion, but on the

^{272.} Wilbur F. Stone, Colorado's Judiciary Department, in 1 JEROME C. SMILEY, SEMI-CENTENNIAL HISTORY OF THE STATE OF COLORADO 649, 653 (1913); John D.W. Guice, Moses Hallett, Chief Justice, 47 COLO. MAG. 136, 137-38 (1970).

^{273. 1861} Irrigation Act §§ 2-3, 1861 Colo. Sess. Laws 67, quoted *supra* at note 150.

^{274.} See 1 Colo. at 566 (Justice Belford's statement regarding an attack on the constitutionality of the statute).

^{275.} Id. at 555.

^{276. 4} Ill. 491, 495 (1842), quoted supra at note 90.

^{277.} Yunker, 1 Colo. at 553-55 (citations omitted).

limitations the law imposed upon private property (in land), subordinating it to the necessities of others.

Justice Belford's opinion also explored the element of necessity. Analogizing the irrigation-ditch easement to the traditional way of necessity over the land of another, he found that the two institutions rested on a common moral foundation: "the good and salutary principle that the right of a man in the use of his property is restricted by a due regard to the equal rights of others." Just as the way of necessity was necessary to ensure that all had access to their lands, this "due regard to the equal rights of others" dictated that privately-held land be subject to an easement for a water ditch in order to secure to "all persons" in the neighborhood the use of water from a certain stream. With the institution of private property harnessed to the goal of diffusion of the water resource among as many people as possible, the exclusionary aspect of property must give way.

The third justice, Wells, also justified the result in terms of necessity, and yet more decisively: "It seems to me... that the right springs out of the necessity, and existed before the statute was enacted, and would still survive though the statute were repealed. If we say that the statute confers the right, then the statute may take it away, which cannot be admitted." The quasi-constitutional status he would have given the right of access to water is an indication of the seriousness with which Colorado jurists of the time took the goal of a broad distribution of property entitlements in water.

This was a radical decision, as noted by the great water scholar Samuel Wiel:

It is a rather socialistic doctrine, forgetting that we have constitutions guaranteeing private property rights, to say that if you want another man's property badly enough you have only to take it, or that a court will listen to an argument that you have a greater desire or necessity to possess my property than I have.²⁸¹

It is worthwhile noting that while today the Colorado Doctrine of water rights is generally traced to the *Coffin* decision, ²⁸² this was not always so; early commentators, as well as the author of *Coffin*, found its earliest expression in *Yunker*. ²⁸³ The issue is not one of mere pride of

^{278.} Id. at 569 (citing Snyder v. Warford, 11 Mo. 513, 516 (1848) (way of necessity constitutional, citing Jefferson on this point)).

^{279.} Id. at 566-69.

^{280.} Id. at 570.

^{281. 1} WIEL, supra note 13, at 252-53.

^{282.} Coffin v. Left Hand Ditch Co., 6 Colo. 443 (1882).

^{283.} Statement of Jos. C. Helm, 3 REPORT OF THE SPECIAL COMM., *supra* note 3, at 328. For commentators, see, for example, Samuel C. Wiel, *Public Policy in Western Water Decisions*, 1 CAL. L. REV. 11, 21-22 (1912); Ralph Henry Hess, *The Colorado Water Right*, 16 COLUM. L. REV. 649, 649-52 (1916). *See also* Stowell v. Johnson, 26 P. 290, 291 (Utah 1891).

place, for on it depends our conception of what the Colorado Doctrine embraces. The convention that *Coffin*, decided ten years after *Yunker*, marks the beginning of the doctrine, reflects a narrow conception of Colorado water law, focusing on appropriation. The older (and, it is submitted, sounder) view, recognizing *Yunker* as the foundational decision, gives the variety of rules embraced under the Colorado Doctrine their due, and recognizes that the primary aim of the law was to effect equal access to water resources, to which the earlier decision contributed by forcing riparian landowners to allow access over their lands to streams.

The foundational nature of the element of necessity in the Colorado water right was evident again a few years later in *Schilling v. Rominger*,²⁸⁴ a case noted for featuring the first reported judicial endorsement of the temporal priority principle in Colorado appropriation law (though the Supreme Court ruled against the prior appropriator, imputing to him a waiver of his rights.) Commentators, however, have not remarked upon the fact that the plaintiff saw it necessary to include in his complaint, and the Court in its statement of the facts, the detail that the creek in dispute was the sole source of water for the parties, highlighting the assumption of Colorado's irrigation pioneers that appropriation alone, without need, could not establish a water right.

The case of *Crisman v. Heiderer*, ²⁸⁵ decided a year before *Coffin*, is remarkable for its display of the staying power of riparian-law principles in the prior-appropriation environment. ²⁸⁶ Indeed, the facts were reminiscent of those typical of cases in the northeastern states a half-century before, in which disputes often centered around flooding and other damage caused by dams built by riparian owners. ²⁸⁷ Crisman, the owner of a flour-mill, had erected obstructions in the South Platte, some way upstream from his land, in order to channel more water towards his mill-race. As the changed flow of the river threatened to flood Heiderer's lands upstream, he himself built a dam in order to redirect the water away from his land. Each party sued to have the other's obstructions removed.

The state Supreme Court could have resolved the dispute in accordance with the norm of "first in time, first in right," supposedly the dominant ethic of western water law, wholly vindicating Crisman, who had been first to use the water as well as the first to place his obstructions in the stream. Such an approach had, in fact, been applied by English and

^{284. 4} Colo. 103 (1878).

^{285. 5} Colo. 589 (1881).

^{286.} See also Mason v. Cotton, 4 F. 792 (C.C.D.Colo. 1880) (applying riparian law to dispute between mills). Note that the opinion in *Mason* was authored by Hallett J., the Chief Justice in *Yunker*, 1 Colo. 551 (1872), discussed *supra* at notes 271-283.

^{287.} See Rose, supra note 8.

American courts in similar cases before their adoption of the reasonableuse doctrine.²⁸⁸ The Colorado court, however, held that while the appellant, Crisman, having appropriated a right to divert water to his mill ditch, had been justified in taking steps to ensure a steady supply of water to his ditch, he had gone too far:

The most reasonable mode of effecting the object must be adopted, and it must be done in such a manner as to occasion as little damage as possible to the owner of the adjoining premises... [T]he great maxim of the law 'sic utero tuo ut alienum non loedas,' applies with as much force to the enjoyment of water rights as to rights of any other description.²⁸⁹

The argument here, limiting the rights bundled into a water right to those strictly necessary to its enjoyment, is consistent with Colorado's "appropriation doctrine," harking back to the territorial irrigation statute's limitation of appropriators' ditch easements to the extent "sufficient for the purpose required" 290 and even the miners' codes definition of water rights in terms of the length necessary to get a certain measure of head.²⁹¹ In its attempt to harmonize the water use of the parties, and rejection of absolute priority for the earliest water user, it is also tellingly reminiscent of the reasonable-use doctrine which today's conventional wisdom teaches the Colorado doctrine had abolished. This "eastern" approach was evident as well in the court's overturning of the lower court's injunction ordering Crisman to remove all obstructions from the river: "Such a rule," said the court, "is inequitable and would work hardship;"292 Crisman was allowed instead to divert the flow of water in a manner that would cause minimum damage to Heiderer. Furthermore, the elements of necessity and reasonableness are blended seamlessly in the opinion, an indication that for the Colorado Supreme Court a year before its seminal decision in Coffin²⁹³ there was no tension between the western water right and the norm of reasonable use.²⁹⁴ In fact, by 1881 the reasonable-use rule had a venerable Colorado pedigree for situations of this sort, with laws as far back as those of the Gregory

^{288.} See, e.g., Bealey v. Shaw, 102 Eng. Rep. 1266 (K.B. 1805); Hatch v. Dwight, 17 Mass. 289 (1821); Rose, supra note 8, at 173-79.

^{289.} Crisman, 5 Colo.at 596 ("sic utero tuo ut alienum non loedas" translates as "so use your own as not to injure another's property").

^{290. 1861} Irrigation Act § 3, 1861 Colo. Sess. Laws 67, quoted supra at note 150.

^{291.} See supra text accompanying notes 57-61.

^{292.} Crisman, 5 Colo. at 597.

^{293.} Coffin v. Left Hand Ditch Co., 6 Colo. 443 (1882).

^{294.} Contra, e.g., ANDERSON & SNYDER, supra note 16.

Diggings calling for the application of riparian law to disputes over damage from water.²⁹⁵

E. Coffin v. Left Hand Ditch Co.

Coffin v. Left Hand Ditch Co.²⁹⁶ is generally held to mark the full statement of the Colorado doctrine of "pure" appropriation. As with some other examples of early Colorado law previously discussed, though, the modern focus on the judicial endorsement of priority of appropriation in this decision has obscured other facets of the judgment more important at the time.

Moreover, the efficiency school of property rights' view of *Coffin* as signaling a scarcity-driven shift from common to private property is based, it seems, on a misunderstanding, particularly of the following language in the decision:

The climate is dry, and the soil, when moistened only by the usual rainfall, is arid and unproductive; except in a few favored sections, artificial irrigation for agriculture is an absolute necessity. Water in the various streams thus acquires a value unknown in moister climates. Instead of being a mere incident to the soil, it rises, when appropriated, to the dignity of a distinct usufructuary estate, or right of property.²⁹⁷

These lines have been cited as evidencing the connection between the increased value of water in Colorado's dry climate and the need for well-specified and thus marketable property rights.²⁹⁸ What at first glance seems to be an argument by the court that the increased value of water in Colorado must lead to the creation of private property rights, though, cannot be so, for the contemporary riparian doctrine of the east already viewed water as the object of private, usufructary property – of riparian owners. As the leading contemporary treatise on riparian law explained,

The right of private property in a watercourse is derived, as a corporeal right or hereditament, from, or is embraced by, the ownership of the soil over which it naturally passes. The well-known maxim, cujus est solum, ejus est usque ad coelum, inculcates, that land, in its legal signification, has an indefinite extent upwards;... a stream of water is, therefore, as much the property of the owner of the soil over which it passes, as the stones scattered over it.²⁹⁹

^{295.} See supra text accompanying notes 93 (miners' codes applying riparian-law rules in cases not covered by code) and 160 (territorial statute applying riparian-law rules for liability from return flow).

^{296. 6} Colo. 443 (1882).

^{297.} Id. at 446.

^{298.} Tregarthen, supra note 16, at 122.

^{299.} ANGELL, supra note 231, at 7-8 (italics in original). See also id. at 97 (property in water usufructuary); 3 BLACKSTONE'S COMMENTARIES, ch. 25 (St. George Tucker ed., Philadelphia,

The claim in *Coffin* is, rather, that water's special value in the west elevates it to a "distinct" estate, i.e. one not related to the rights of riparian landowners, not "a mere incident to the soil." This, the right of non-riparians to acquire water rights, was, we shall see, the real issue at hand.

Briefly stated, the case involved a conflict between the appellants, irrigators in the "neighborhood" of St. Vrain Creek (a tributary of the South Platte, on the eastern slope of the Continental Divide),³⁰⁰ and another group of irrigators who in 1863 had built a short ditch to divert water from the main branch of the creek to their lands near Left Hand Creek (itself a tributary of the St. Vrain, giving color to their claim to be in compliance with the statutory "bank, margin or neighborhood" requirement).³⁰¹

In upholding the rights of the ditch company representing the earlier users, the court gave its approval to the rule of prior appropriation, arguing that it had always been the law in Colorado, by force of necessity, and prior to any legislation on the subject. This statement of the priority rule, though, was neither enough to decide the case³⁰² nor the crux of the decision. The question on which the judgment turned was a variation on the one of whether one could divert water from a stream to non-riparian lands. Here, some of the appellants apparently were themselves nonriparians, 303 but farmed lands within the watershed of the source creek, so the issue was presented in terms of the permissibility of diversion out of the watershed. Appellants argued, based on a plausible reading of Colorado's territorial water legislation, 304 that the statutes had modified the common law of riparian rights only in extending the right to appropriate water to non-riparians within the watershed, but no further.³⁰⁵ In its decision, however, the Colorado court rejected any role at all for riparian or local use as a factor in water rights, making Coffin the seminal decision for the "pure appropriation" or "Colorado" doctrine.

The motivation for this radical approach is illuminated by developments in western water law in the years immediately preceding

William Young Birch 1803); 3 JAMES KENT, COMMENTARIES ON AMERICAN LAW 427 (New York, O. Halsted 1832) (riparian right incident to ownership of land); JOHN M. GOULD, TREATISE ON THE LAW OF WATERS 360 (Chicago, Callaghan & Co. 1883) (riparian right "parcel of the land").

^{300.} Contra Richard A. Epstein, The Allocation of the Commons: Parking on Public Roads, 31 J. LEGAL STUD. 515, 520, n.14 (2002).

^{301. 1861} Irrigation Act § 1, 1861 Colo. Sess. Laws 67, quoted *supra* at note 148. *See* Abstract R. 3-4, 8-9, Coffin v. Left Hand Ditch Co. (No. 885), Colo. St. Archives.

^{302.} Coffin, 6 Colo. at 449.

^{303.} Id. at 444, 449.

^{304.} See supra at notes 148, 162-164.

^{305.} Appellants' Br. 9-13, Coffin v. Left Hand Ditch Co. (No. 885), Colo. St. Archives.

the case and the arguments made by appellants. Though appropriative rights on public land had been recognized throughout the west for some time, 306 including by a federal statute of 1866, 307 their validity with respect to privately-held riparian lands was still unclear. State and federal courts in Nevada had held that appropriative rights could only be valid as against other squatters on the public domain, whereas lands that had passed from public to private ownership before the 1866 statute would include any riparian rights incident to them, regardless of any use previously established by non-riparians.308 Put another way, the sale or grant by the federal government of riparian land would revoke all prior appropriations from streams passing through it (at least if the land passed into prior ownership prior to 1866.)³⁰⁹ These decisions, much-discussed in the 1870s, were highly unpopular, 310 yet the St. Vrain irrigators relied on this line of authority and took it one step further. They argued that since Colorado had not abolished the preference for local users until the 1876 Constitution, the 1866 law recognizing appropriative rights would have effect in Colorado only from that date, and all lands patented before 1876 would carry water rights superior to any based on appropriation - even if the appropriation had been made years before the riparian owner arrived on the scene.311

The implications of this claim were far-reaching. Not only would speculators and corporations be able to reserve water rights prospectively by gaining control of riparian lands before water had been appropriated from them, they would have the power to oust settlers retroactively from their prior water claims by buying up riparian lands even after the settlers had been irrigating for some time.

In the climate of fear over monopolization of public lands by railroad, ranching and irrigation companies,³¹² this was too much for the Colorado Court to bear.³¹³ Its rejection of this argument was emphatic:

^{306. 1} WIEL, supra note 13, at 139-43; see, e.g., Irwin v. Philips, 5 Cal. 140 (1855).

^{307.} Mineral Lands Act, 14 STAT. 251, 253.

^{308.} Vansickle v. Haines, 7 Nev. 249 (1872) (overruled Jones v. Adams, 6 P. 442 (Nev. 1885)); Union Mill & Mining Co. v. Ferris, 24 F. Cas. 594 (C.C.D.Nev. 1872). Cf. Gibson v. Chouteau, 80 U.S. 92 (1872) (possessor of land for over 10 years ousted in favor of patentee from federal government).

^{309. 1} WIEL, supra note 13, at 94-96. The California Supreme Court had gone even further in favor of land speculators, holding the rights of owners of riparian land patented in 1872 superior to those of non-riparians who had been diverting water since 1856. See Pope v. Kinman, 54 Cal. 3 (1879). The import of this decision has been missed by modern commentators. See Eric T. Freyfogle, Lux v. Haggin and the Common Law Burdens of Modern Water Law, 57 U. COLO. L. REV. 485, 503 (1986); Mark T. Kanazawa, Efficiency in Western Water Law: The Development of the California Doctrine, 1850-1911, 27 J. LEGAL STUD. 159, 169 (1998).

^{310.} Samuel C. Wiel, The Water Law of the Public Domain, 43 AM. L. REV. 481, 490-93 (1909).

^{311.} Abstract R. 13-15; Appellants' Br. 9, 13, 16-19, 23-24.

^{312.} See supra notes 107-108, 223-227.

The disastrous consequences of our adoption of the rule contended for, forbid our giving such a construction to the statutes as will concede the same, if they will properly bear a more reasonable and equitable one....It might be utterly impossible, owing to the topography of the country, to get water upon [the irrigator's] farm from the adjacent stream; or if possible, it might be impracticable on account of the distance from the point where the diversion must take place and the attendant expense; or the quantity of water in such stream might be entirely insufficient to supply his wants. It sometimes happens that the most fertile soil is found along the margin or in the neighborhood of the small rivulet, and sandy and barren land beside the larger stream. To apply the rule contended for would prevent the useful and profitable cultivation of the productive soil, and sanction the waste of water upon the more sterile lands. It would have enabled a party to locate upon a stream in 1875, and destroy the value of thousands of acres, and the improvements thereon, in adjoining valleys, possessed and cultivated for the preceding decade. Under the principle contended for, a party owning land ten miles from the stream, but in the valley thereof, might deprive a prior appropriator of the water diverted therefrom whose lands are within a thousand yards, but just beyond an intervening divide.314

The Colorado rule was clear: riparian lands would have no water right incidental to them; all landowners could acquire water rights only by use, regardless of their land's location.

The appellants had rested their claim on an alternative, contractual, basis as well, claiming that at the time of the ditch's construction, they had refrained from legal action against the Left Hand irrigators only upon the latter agreeing (orally) that in case of insufficient water for all the riparian farmers would have priority. Strangely enough, though this claim was stricken by the trial court as insufficient under the Statute of Frauds, and the Supreme Court seems to have been skeptical as to whether any such agreement had really been made, archival evidence available today indicates that the riparian party could have made a related, seemingly stronger claim. The handwritten minutes of the Board of Boulder County Commissioners from 1863, contain the following entry:

Then the Left hand Ditch Co's Certificate was taken up. Said ditch Co proposes to build or take a ditch to start at a point opposite the head of the west Branch of James Creek thence down said James

^{313.} The connection between *Coffin* and the Nevada cases was made by Wiel, *supra* note 310, at 490-94.

^{314.} Coffin v. Left Hand Ditch Co., 6 Colo. 443, 449-50 (1882).

^{315.} Abstract R. 9-11.

^{316.} Abstract R. 22-24; Appellants' Br. 5.

^{317.} Coffin, 6 Colo. at 445.

Creek to Left hand Creek thence down said Left Hand Creek to St Vrains Creek, water to be used for mining milling and agricultural purposes...

Certificate approved with the following conditions That no water shall be taken out of St Vrains Creek when it is needed in its natural channel for milling mining or irrigating purposes above where it is conveyed back to its natural channel again.³¹⁸

Given the probable state of county-government record-keeping in the Colorado Territory, it is not unlikely that this documentation of this condition attached to the construction of Left Hand Ditch was overlooked by the parties. Nonetheless, the Supreme Court probably would have ignored it anyway. After all, the language of the Board's stipulation makes it clear that it was merely reiterating the rule of the territory's general incorporation statute,³¹⁹ a provision which the Court had easily brushed aside in its rejection of any preference for inwatershed appropriators.³²⁰ It would no doubt have done the same for the ruling by the County Commissioners, had it been confronted with the issue.

Once the decision was made to open up the right of diversion to all irrigators, regardless of location, the adoption of the rule of prior appropriation was relatively trivial, for what were the alternatives? Equality for all comers would have lead to the dilution of water rights beyond the point of usability. Failure to recognize any legal rights in future flows would have led to a disastrous race among irrigators going further and further upstream in an effort to capture the flows of the stream and the abandonment of any possibility of reliance on future rights. Prior appropriation at least had the virtue of rewarding investment in ditch building and land cultivation.³²¹

Lest anyone misread its decision and think that the Colorado court had sanctioned an all-out rule of capture for the state's surface water resources, the court followed up *Coffin* four months later with another water-rights case, *Thomas v. Guiraud*,³²² in which some limitations on appropriation were spelled out. Here the justices pointed out that prior appropriation alone was not enough to give the better right:

We concede that [the prior appropriator] could not appropriate more water than was necessary to irrigate his land; that he could not divert

^{318.} Minutes for Oct. 19, 1863, Carnegie Branch Library for Local History, Boulder, Colo. It is unclear if the Board had authority to attach conditions to the incorporation of the company or the building of the ditch, as the General Incorporation Act, *supra* note 162, 1862 COLO. SESS. LAWS 48, seems to have given the County Commissioners no role in incorporation.

^{319.} General Incorporation Act § 13, 1862 COLO. SESS. LAWS 48, quoted supra at note 162.

^{320.} See Coffin, 6 Colo. at 450-51.

^{321.} See supra notes 220-255.

^{322. 6} Colo. 530 (1883).

the same for the purpose of irrigating lands which he did not cultivate or own, or hold by possessory right or title, to the exclusion of a subsequent *bona fide* appropriator."323

These restrictions were of a kind with the anti-speculation ideology that had earlier been expressed in the miners' codes, territorial legislation, the constitution,³²⁴ and, as can now be seen, with *Coffin* itself.

CONCLUSION

As intimated earlier,³²⁵ there is a dominant, narrow view of Colorado water law, in which its varied and interconnected doctrines and rules have come to be obscured (and to some degree replaced) by one particular rule, the rule of prior appropriation.³²⁶ This synecdochic view of the law is unfortunately more than a simplification – it is misleading.³²⁷ Standing in for the whole is not just one rule among many, but an auxiliary, unrepresentative one at that. In light of the above, it should be clear that the rule of priority was but a small piece in a larger puzzle of rules, principles and policies concerned primarily to effect a broad distribution of surface-water rights.

Early Colorado law attempted to spread the ownership of this scarce and valuable resource as widely as possible through a variety of rules, including limiting appropriations to the amount that could be beneficially used, abolishing the common-law disqualification of non-riparian lands from water use, and subjecting riparian lands to easements in favor of other water users. Temporal priority was a secondary principle, meant to ensure that these egalitarian-minded rules did not lead to a situation where rights were so small as to be worthless. Even the culminating moment of *Coffin*, in which the Colorado doctrine of prior appropriation was most clearly annunciated, mostly involved the law's opening the opportunity to appropriate water to all comers, not just a narrow class of landowners near the stream.

^{323.} Id. at 532 (italics in original).

^{324.} See *supra* Part III.B. (use requirement in miners' codes), text at notes 170-179 (antispeculation measures in territorial statutes), 209-214 (constitutional requirement of beneficial use). In the instant case, the court found that Guiraud's appropriations "were not greater in quantity than was reasonably necessary" for irrigating his own lands, and so concluded that its qualifications of the priority principle were not applicable. *Thomas*, 6 Colo. at 532-33.

^{325.} See supra text accompanying note 219.

^{326.} See, e.g., James N. Corbridge, Jr., Historical Water Use and the Protection of Vested Rights: A Challenge for Colorado Water Law, 69 U. Colo. L. Rev. 503, 505 (1998); Dellapenna, supra note 12, at 566; Chennat Gopalakrishnan, The Doctrine of Prior Appropriation and Its Impact on Water Development: A Critical Survey, 32 Am. J. Econ. & Soc. 61, 63 (1973); Tarlock, supra note 12, at 881; Michael D. White, Legal Restraints and Responses to the Allocation and Distribution of Water, in WATER NEEDS FOR THE FUTURE 117, supra note 14.

^{327.} That is to say, misleading as a historical account. Whether the narrow view of appropriation law accurately represents modern law, on the books or in action, is a separate issue.

This broad view of Colorado water law is evidenced in much of the early secondary literature on the subject. A perusal of water-law material published in the early decades of statehood reveals that scholars viewed as the main thrust of the appropriation doctrine not the issue of temporal priority, but the abolishment of the former monopoly of riparian owners by taking away their private property rights. As one Colorado water lawyer wrote in the Yale Law Journal, "The Colorado doctrine of riparian rights may be summed up in the statement that riparian proprietors, as such, have no rights; that is to say, they have no usufruct of the waters flowing in the natural streams, not enjoyed by others whose estates are non-riparian."328 Similarly, and in contrast to the modern view of prior appropriation as a paradigm of private property rights,³²⁹ nineteenthand early-twentieth-century writers identified appropriation as an instance of the law's denial of private property claims (of the riparian owners).330 It should thus not be surprising that courts in several states held statutes attempting Colorado-style abolition of riparian rights to be unconstitutional takings of property.³³¹

These and other commentators recognized that Colorado water law's revolutionary aspect did not lie in its instituting a system of private property in place of common property.³³² In fact, the appropriation doctrine was viewed as stemming from the view of water as the common property of the people.³³³ One lawyer went so far as to state that "it is declared by the constitution and enforced by repeated decisions that the water is the common property of the people of the State, and that therefore it is incapable of private appropriation..."³³⁴ The doctrine's

^{328.} Gast, supra note 250, at 71; see also id., 72. See also John Norton Pomeroy, Riparian Rights – The West Coast Doctrine (Part 16), 2 W. COAST REP. 593, 594 (1884); S.W. CARPENTER, THE LAW OF WATER FOR IRRIGATION IN COLORADO 8 (Denver, W.H. Lawrence & Co. 1886); HUSTON, supra note 202, at 34; 3 FARNHAM, supra note 214, at 2076 ("The doctrine was originated for the purpose of avoiding the narrow and exclusive use which it was thought would result from the adoption of the doctrine of riparian rights."); Wiel, supra note 283, at 21-22.

^{329.} See, e.g., Romero, supra note 3, at 538; Mark W. Tader, Note: Reallocating Western Water: Beneficial Use, Property, and Politics, 1986 U. ILL. L. REV. 277, 284 (Coffin "recognized property rights in water that surpassed any interest protected at common law").

^{330.} See CARPENTER, supra note 328, at 11; Ralph H. Hess, An Illustration of Legal Development—The Passing of the Doctrine of Riparian Rights, 2 AM. POL. SCI. REV. 15, 25 (1907); POMEROY, supra note 134, at 221-22; 1 WIEL, supra note 13, at 202-05, 212-13, 227. It seems, however, that the element of priority may have come to the fore by the early twentieth century. See C.W. BEACH & P.J. PRESTON, IRRIGATION IN COLORADO 35 (U.S.D.A. Office of Experiment Stations, Bulletin No. 218 (1910)) (describing Colorado water law with focus on priority).

^{331.} JOSEPH R. LONG, TREATISE ON THE LAW OF IRRIGATION 143 (2d ed. 1916); see, e.g., Clark v. Cambridge & Arapahoe Irrigation & Improvement Co., 64 N.W. 239 (Neb. 1895). See also Thorp v. Freed, 1 Mont. 651, 687 (1872) (Wade, C.J. concurring) (arguing that acceptance of the prior appropriation doctrine would impair the vested rights of railroads in their land grants).

^{332.} Contra, e.g., POSNER, supra note 7, at 35.

^{333.} NEWELL, supra note 236, at 288.

^{334.} Platt Rodgers, in 1 REPORT OF THE SPECIAL COMM., supra note 3, at 76-77.

novelty was rather in its breaking the concentration of water wealth in the hands of the few and spreading that wealth among as many users as possible. One treatise emphasized the themes of equality, necessity and prevention of monopoly in its discussion of the "physical cause of the doctrine of appropriation":

Thus it happens that when the water reaches the valleys in the arid region on its way to the ocean, instead of being precipitated nearly equally upon the earth, as is the case in what is known as the "humid region" or "rain belt," it is gathered in natural channels, which only touch a very small proportion of the land within the arid region. Under a strict construction of the rules of the common law... a very few riparian owners would control all of the water in that part of the country to the exclusion of all others. Nature clearly designed, in spite of the facts set forth above as to the inequality of precipitation, that the rain should still be permitted to shed its blessings on all, and that a nonriparian land owner should not be prevented from securing his iust proportion of the water, simply because of the topographical features of the country thereabouts, which are entirely beyond his control. The water which he should receive drains from its storage source in the mountains into streams which flow only by his neighbor's land, who, as an incident of his ownership of the soil adjoining the stream, controls all of its waters, although the same may be far in excess of what he and all other riparian owners may need.³³⁵

Whether the appropriation doctrine lived up to its promise as an egalitarian doctrine is another story, beyond the scope of this article. The story of the early years of Colorado water law, however, is of continuing relevance today, particularly when claims regarding desirable water policies are supported by appeals to what is supposed to be the true essence of the Colorado Doctrine. Whatever Colorado water law has become, its origins as a radical, anti-monopoly law are instructive.

Beyond its historical interest, the significance of the early years of the appropriation doctrine extends to the realm of property-law theory as well. Property regimes, in their ideal forms, are often viewed as lying along a bipolar continuum, with private property on one end and common property on the other. These two poles tend to be seen as corresponding with distributional patterns, concentration of wealth and the right to exclude on the one hand and egalitarian distribution and inclusion on the other.³³⁶ The view of Colorado appropriation doctrine presented in this article calls into question the validity of the private property-inequality/ commons-equality antithesis. Of course a commons

^{335. 1} CLESSON S. KINNEY, A TREATISE ON THE LAW OF IRRIGATION § 588, at 1011-12 (2d ed. 1912). See also POMEROY, supra note 134, at 31-33.

^{336.} See, e.g., Ellickson, supra note 7; Carol Rose, The Comedy of the Commons: Custom, Commerce, and Inherently Public Property, 53 U. CHI. L. REV. 711 (1986).

has an exclusionary aspect as well: while ensuring access to all the owners, it simultaneously excludes those outside the privileged group. The adoption of the appropriation doctrine, and the contemporary criticisms leveled at riparian law, demonstrate that in the context of nineteenth-century Colorado, this exclusionary feature of the riparian-rights commons³³⁷ was viewed as dominating its inclusive and egalitarian side, leading to a sort of polarity reversal: The common-property regime of riparian law was rejected as too exclusionary and tending to the concentration of the resource in the hands of an undeserving few, and replaced by a regime of private rights, designed to ensure distribution of water rights to as wide a population as possible. This highlights the idea that the law's adoption of private property, or any other property regime, may be used to effect a variety of distributive and allocative goals beyond the ones usually associated with each type.

The final point I hope to extract from this episode in legal history concerns the place of distributive-justice concerns in the theory of property rights in natural resources. The last few decades have seen the growth of a voluminous literature presuming to explain the historical origins and development of property in natural resources in terms of economic efficiency (that is, wealth maximization).³³⁸ These studies often reflect a Panglossian outlook, according to which we live in the most efficient of all possible natural-resource regimes (or at least we used to, until government tampering got in the way). More recently, public-choice analysis has focused attention on the deleterious influence of interest groups on the creation of property rights.³³⁹ On the other hand, deferential references to Locke in property-law casebooks aside, little work seems to have been done on attempting to relate the theoretical discussions of the very large literature on distributive justice in property rights to actual historical norms for distribution of those rights.³⁴⁰ As I hope this article has shown, this is unfortunate because our understanding of various historical instances of property-law regimes may be enriched by paying attention to motivating concerns of distributive justice. It seems that some may have the impression that distributive justice consists of nothing more than theoretically thin notions like "fairness" and simplistic norms like "allocate the right to the poorer party;" yet, as the Colorado water-law experience demonstrates, norms such as equality and sufficiency have, from a historical standpoint, guided lawmakers and are robust enough to serve as criteria for normative critique of existing law.

^{337.} For riparian law as a common-property regime see Rose, supra note 8.

^{338.} Seminal articles in this genre are Demsetz, *supra* note 7, and Anderson & Hill, *supra* note 15.

^{339.} See, e.g., LIBECAP, supra note 9.

^{340.} For examples of two recent works which do devote some attention to these issues, see Zerbe & Anderson, *supra* note 32, and McDowell, *supra* note 32.

This lack of attention to distributive justice in the property-theory literature may be attributable, at least in part, to what seems to be the view that issues regarding the initial distribution of property rights are of little or no contemporary importance in a modern, developed society. It is notable, for instance, that Demsetz's article on the economics of the creation of private property analyzes an archaic historical episode,³⁴¹ and that a prominent philosophical defense of contemporary distributional inequalities treats the initial distribution of property as practically a one-time event, with attention focused on subsequent dispositions of rights.³⁴² Attention tends to focus, instead, on the workings of the system of property rights already in being. It seems that most would agree with Locke that "in the beginning all the world was America,"³⁴³ but assume that with America now safely settled, situations of initial distribution of rights are of minor importance, reserved for exotic settings like outer space and the deep-sea floor.

This assumption regarding the contemporary rarity of situations involving an initial distribution of property rights is, however, both mistaken and pernicious. The truth is that initial distributions are of continuing and vital relevance. Perhaps the most obvious example concerns public lands, where the continued vast extent of the public domain in the United States, and conflicts over its disposition and use, leave distributive questions with as important a role to play as ever. In these areas, America is still very much Locke's America.

Perhaps less obvious, but even more significant for our daily welfare, are new rights formed when society realizes the importance of a resource previously unrecognized, or one previously thought to be abundant but now seen as scarce. These resources, which heretofore may have been understood poorly, if at all, and (therefore) crudely delineated and assigned, typically more by inattention than design, rise to newfound prominence with changes in our understanding of the world and our increasing pressure on it.

One particular form of this dynamic occurs with pollution, which can be seen as a form of resource consumption. As society becomes aware of the hazards of a new pollutant, it legislates for its control, perforce distributing private property rights in what had been until then an openaccess commons. Sometimes attention is called to the distributive aspects of this process; this may be so particularly when transferable rights, which

^{341.} Demsetz, *supra* note 7 (analyzing property rights in fur-bearing animals among aboriginal North American peoples).

^{342.} See ROBERT NOZICK, ANARCHY, STATE, AND UTOPIA 149-231 (1974), especially at 177 (assuming little contemporary opportunity for initial acquisition of property).

^{343.} LOCKE § 49, supra note 104, at 29.

look like more familiar forms of property, are at issue.³⁴⁴ However, all pollution-control regimes, as well as their absence, effectively assign property rights, with attendant distributive consequences. To take but one contemporary example, the lack of any controls on greenhouse-gas emissions in the United States has associated with it both benefits and costs, which are unlikely to be borne evenly by all. To the extent we follow the creators of the prior appropriation doctrine in caring about distributive justice, we will take seriously the incidence of costs and benefits created by these property regimes.

^{344.} See, e.g., the tradable sulfur-dioxide emissions allowances of the Clean Air Act, 42 U.S.C. §§ 7651-76510 (2004). For discussion of the equity issues involved in initial distribution of pollution allowances, see WILLIAM J. BAUMOL & WALLACE E. OATES, THE THEORY OF ENVIRONMENTAL POLICY 181 (2d ed. 1988); Paul L. Joskow & Richard Schmalensee, The Political Economy of Market-Based Environmental Policy: The U.S. Acid Rain Program, 41 J.L. & ECON. 37 (1998); Jonathan Remy Nash, Too Much Market? Conflict between Tradable Pollution Allowances and the "Polluter Pays" Principle, 24 HARV. ENVIL. L. REV. 465, 505-08 (2000).