USING STATE WATER LAW FOR EFFICIENT WATER USE IN THE WEST

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ABSTRACT

The prior appropriation doctrine, as adopted by water codes throughout the western states, creates water rights based on the time of appropriation. Under the prior appropriation system, water users must put water to beneficial use without waste, and may not sit on their rights without actually using the water they are allotted.

Despite the superficial efficiency that the prior appropriation system espouses, the system is in fact highly inefficient. Water users are locked into antiquated practices without incentives to modernize their operations. The administrative process for changing water rights to more efficient uses acts as a roadblock to such action.

Western states have begun evolving their water codes to provide for more opportunities in water conservation and efficiency. This paper explains the background of the prior appropriation system, analyzes how the “pure” prior appropriation system creates water use inefficiency, and explores how certain states are bringing their water codes into the 21st Century.

INTRODUCTION AND BACKGROUND

A Brief History of Prior Appropriation

Irrigation is an essential element for living in the western United States. Archeological studies have shown evidence of early Indian irrigation projects in the West.3 Spanish colonists utilized irrigation ditches in what are now Arizona and New Mexico during the 16th Century.4 Along with the civilization of the western frontier came the water needs of those early populations, and harnessing the waters of the West through irrigation was the only way to support life in the arid climate.

Modern irrigation practices were developed as pioneers populated the West. First, Mormon settlers constructed community irrigation systems to support domestic uses, stock watering, irrigation, manufacturing and mining beginning in 1847.5 Additionally, the California Gold Rush of 1849 brought miners out west, who diverted water while

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4 Id.
5 Id. at § 11.02(b).
seeking their fortunes.\textsuperscript{6} These larger populations developed customary local rules to govern water use, based on priority in time of use and actual use of the water.\textsuperscript{7}

Most early settlement took place on federal lands without the express permission of the government. In order to support the settlement of the West, the federal government ratified the pioneers’ actions through the Homestead Act,\textsuperscript{8} the Mining Act,\textsuperscript{9} the Desert Land Act,\textsuperscript{10} and the Carey Act.\textsuperscript{11} Through these federal acts, the federal government granted lands and water to citizens in order to provide incentives for easterners to move west and defend the new country.\textsuperscript{12}

As western states joined the Union they adopted the water customs which were already present in the territories. Eighteen states currently follow the prior appropriation doctrine,\textsuperscript{13} all of which adopted that system before the beginning of the 20\textsuperscript{th} Century.\textsuperscript{14} Although it was believed at the time of settlement that federal land patents included water rights,\textsuperscript{15} the United States Supreme Court made it clear that settlers had to look to the states for the right to appropriate water.\textsuperscript{16}

At first the prior appropriation system was a tenet of common law, enforced through the courts.\textsuperscript{17} But quickly, western states adopted statutes that codified the prior appropriation system.\textsuperscript{18} Now every western state has a water code that outlines the specificities of the prior appropriation system in the jurisdiction.

The “Pure” Prior Appropriation Doctrine

Water law is state law. Variations exist from jurisdiction to jurisdiction. However, the prior appropriation system has core elements which create a platform, upon which modern variations exist.

\textsuperscript{6} \textit{Id.} at § 11.02(c).
\textsuperscript{7} \textit{Id.}
\textsuperscript{8} 12 Stat. 392, Ch. 75 (1862).
\textsuperscript{9} 14 Stat. 251, Ch. 262 (1866).
\textsuperscript{10} 19 Stat. 377, Ch. 107 (1877).
\textsuperscript{11} 28 Stat. 422, Ch. 301 (1894).
\textsuperscript{12} \textit{Waters and Water Rights, supra} note 3, at § 11.03(a).
\textsuperscript{13} The eighteen prior appropriation states are: Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, Wyoming, and Alaska.
\textsuperscript{14} \textit{Waters and Water Rights, supra} note 3, at § 11.03(a). Note that riparian rights, the eastern system creating the right to use water based on proximity to the water source, existed in western states before the prior appropriation system. Some western states rejected the riparian system, and others found a way for both systems to coexist.
\textsuperscript{15} \textit{Id.}
\textsuperscript{17} \textit{Waters and Water Rights, supra} note 3, at § 11.04(b).
\textsuperscript{18} \textit{Id.} Not all states follow the prior appropriation doctrine for the use of groundwater; some use the rule of capture, and some follow riparian principles of reasonable use. \textit{See generally, Waters and Water Rights, supra} note 3, at § 11.01.
The first core principle of the prior appropriation system is that the “first in time is first in right.”¹⁹ This principle creates a hierarchal system of junior and senior rights holders. Senior water users have rights to use water that are superior to the rights of junior users. The priority of water rights becomes exceedingly important in times of drought because juniors may not take water from a watercourse if there is insufficient supply to fulfill the seniors’ rights.²⁰ Priority is established through application to the appropriate state agency for water appropriation.²¹

An applicant must show intent, diversion, and beneficial use to be eligible to appropriate the waters of a state. First, physical diversion of water from the source was originally required because actual diversion provides subsequent users with notice of a senior use.²² Additionally, diversion requires funds and labor, which tends to show a serious investment to put water to actual use rather than speculate water resources.²³

Second, the diverted water must be put to beneficial use. Most western states have nearly identical statutes that state: “beneficial use, without waste, is the basis, measure, and limit of a water right.”²⁴ Traditionally, states only recognized 19th and early 20th century uses such as mining, irrigation, stock watering, municipal use, power creation, and industrial uses as beneficial.²⁵ Some western states have gone beyond the traditional scope of the doctrine to recognize additional beneficial uses, such as fish propagation, wildlife habitat, and recreation.²⁶ In order for a use to qualify as beneficial, the “type of use” must be socially recognized, and the “amount of use” must be that actually required by the use.²⁷ This principle was imposed to prevent speculation of resources, and ensure that precious resources were not wasted.²⁸

Third, intent to divert the water and put it to beneficial use had to be shown. Intent may be inferred from diversion and application of waters to beneficial use.²⁹ Once intent is established through these actions, it relates back to the initial date of application.³⁰ Again,

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²⁰ MARC REISNER & SARAH BATES, OVERTAPPED OASIS: REFORM OR REVOLUTION FOR WESTERN WATER 63 (Island Press 1990).
²¹ WATERS AND WATER RIGHTS, supra note 3, at § 12.02(a). As states adopted water codes, prior uses of water were recognized with priority dates correlating to historic use periods. Id.
²² WATERS AND WATER RIGHTS, supra note 3, at § 12.02(c)(1).
²³ Id.
²⁵ Id. at 927-8; Western Water Policy Review Advisory Commission, supra note 19, at § 5-4; REISNER & BATES, supra note 20, at 63.
²⁶ Neuman, supra note 24, at 927-8; Western Water Policy Review Advisory Commission, supra note 19, at § 5-4.
²⁷ Id.
²⁸ WATERS AND WATER RIGHTS, supra note 3, at § 12.02(c)(2).
²⁹ Id. at § 12.02(b).
³⁰ Id.
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this requirement’s purpose was to prevent speculation.\textsuperscript{31} To appropriate water, the applicant must intend to use the water for a beneficial purpose.

An important innovation of western water law, as compared to riparian law in the East, is that water use is not limited to use on strictly riparian lands.\textsuperscript{32} Water may be transported in ditches to distant lands and used for any beneficial purpose.\textsuperscript{33} But despite this flexibility, water rights are narrowly tailored. A water right creates the right to use a fixed amount of water, at a specific time of year, on a particular parcel of land, for a definite use; no more and no less. The rights become appurtenant to the land on which they are put to beneficial use.\textsuperscript{34}

Finally, water rights are subject to the “use it or lose it” principle.\textsuperscript{35} If water is not continuously put to beneficial use, then the user risks loss of their right to appropriate. Loss may occur by common law or statute. The common law doctrine of abandonment requires both the “intent to abandon” and “actual relinquishment” of the right.\textsuperscript{36} Statutory forfeiture of a right takes place when the appropriator fails to put the water to a beneficial use for a statutorily determined amount of time.\textsuperscript{37}

\textbf{INEFFICIENCIES CREATED BY THE PRIOR APPROPRIATION SYSTEM}

\textbf{Inefficient Principles Underlying Prior Appropriation}

The core principles of the prior appropriation doctrine appear as if they would promote efficiency. The system creates a clear order of priorities for defined rights to water, and users must put water to a beneficial use, without waste. Those who fail to follow the rules lose their rights. However, the prior appropriation system arose from old mining customs, and from a time when water supply was larger than water demand. The prior appropriation system, in many ways, creates inefficiencies in modern water allocation.

The beneficial use requirement is not an efficiency-forcing standard.\textsuperscript{38} Rather than requiring a certain level of efficiency in water use, the beneficial use doctrine takes a “customary approach.”\textsuperscript{39} The amount of water that was traditionally needed to satisfy a particular use, based on customary methods employed by the local community, will continue to satisfy the doctrine in the future.\textsuperscript{40} The doctrine does not demand higher

\textsuperscript{31} Id.
\textsuperscript{32} Id., at § 12.02(f).
\textsuperscript{33} Id. Note that many states have limitations on taking water outside of watershed or water basin boundaries. Id. Additionally, states have restrictions on using state water on lands outside the state borders. Id.
\textsuperscript{34} Id.
\textsuperscript{35} Id.
\textsuperscript{36} REISNER $\&$ BATES, supra note 20, at 63.
\textsuperscript{38} Neuman, supra note 24, at 960.
\textsuperscript{39} Id.
\textsuperscript{40} Id.
efficiency standards based on new innovations; it allows large amounts of water to be wasted through seepage and application, yet does not proclaim this “waste.” The beneficial use doctrine creates inefficiency because it allows archaic practices to persist.

The “first in time, first in right” principle allows inefficient uses of water to carry on in perpetuity. Additionally, abandonment and forfeiture can sweep in to divest a user of his rights if he does not put all the water he has a right to use to work continuously. Combined, these two facets of western water law create disincentive to conserve water. If a user increases his efficiency he gains nothing. In fact, he is out the cost of his investment and additionally loses his rights to use the water he saved. This system is inefficient because it forces users to continue wasteful practices, or lose a portion of their rights.

Roadblocks to Efficiency

The Coase Theorem, an economic theory, states that the market will create an efficient resource allocation if property rights are clearly defined and transaction costs are low. When these prerequisites are met, efficiency will transpire, even if the initial allocation of rights was inefficient. However, Coase equilibrium may not be possible in the current water system due to high transaction costs and ill-defined property rights.

Transaction costs for water transfers can be extremely high. This is due, in large part, to the slow-moving wheels of the administrative process. In the West, state agencies control the water appropriation process. The agencies must approve new appropriations as well as changes to existing water rights. This typically involves application to the state agency, notice to other rights holders and the public, opportunity for comment, objection, and possibly a hearing, examination of the application by the agency in light of statutory requirements, and acceptance, rejection, or modification of the application. This process can take many years to complete. Additionally, the states impose fees for submitting and

42 See, supra notes 35-37, and accompanying text.
43 MACDONNELL, supra note 41, at 132.
45 Id.
47 Id. at 175-80; Lawrence J. MacDonnell, Transferring Water Uses in the West, 43 OKLA. L. REV. 119, 121-122 (1990).
48 Water is controlled by state agencies in all western states except for Colorado. Colorado uses a water court in place of an agency, but the water court performs the same functions as the agencies in other states. WATERS AND WATER RIGHTS, supra note 3, at § 11.04(b).
49 Ruml, supra note 45, at 176-177.
reviewing applications, providing notice, and conducting hearings. The time and expenses involved in appropriating water and changing water permits can be enormous.

Further, the prior appropriation system restricts the ability of water users to freely transfer and change water rights. No transfer or changed right may “injure” existing water rights. Although this promotes clarity in private property rights, delayed or unforeseen injury may raise problems for a water user attempting to transfer or change a right. Further, water rights may be transferred to a new place of use, but state statutes restrict transfers outside of the water basin of origin, outside of state boundaries, and outside of special districts.

In addition, water rights are not clearly defined property rights. First, water rights may be subject to public rights in water through the Public Trust Doctrine. This doctrine, which is part of the common law passed down from England, imposes on the states a fiduciary duty to protect public interests in water such as navigation, commerce, fishing, and bathing. In a very progressive case, the California Supreme Court held that state water appropriations were void because they were issued without consideration of public trust interests. The scope of the public trust is a very controversial issue, and its intricacies are too great to cover in this paper, but it suffices to say that public rights in water interfere with private rights in water.

Second, water rights may be subject to federal rights through the doctrine of federally reserved water rights. Under the Property Clause of the United States Constitution, the federal government makes rules and regulations with respect to property belonging to the United States. The United States Supreme Court decided that when the federal government creates an Indian reservation, the creation impliedly includes the reservation of as much water as is necessary to support the land. In *Winters v. United States*, although state residents had duly appropriated water under state law before an Indian reservation began to take water, those appropriations were held to be junior to the federal

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50 See, e.g., Oregon Revised Statutes (“ORS”) § 536.050.
51 A. DAN TARLOCK, JAMES N. CORBRIDGE, JR., & DAVID H. GETCHES, WATER RESOURCE MANAGEMENT 232-233 (Foundation Press, 2002). See also, WATERS AND WATER RIGHTS, supra note 3, at § 11.07.
52 WATERS AND WATER RIGHTS, supra note 3, at § 12.02(f).
53 Id.
56 National Audubon Society, 658 P.2d at 728-729.
58 United States Constitution, Art. IV sec. 3 cl. 2.
59 Id.
reserved water rights.\textsuperscript{61} This doctrine has been extended to all federal land reservations, such as national forests, recreational areas, and wildlife areas.\textsuperscript{62} Therefore, water appropriations may be subject to federal reservations without any notice of this fact from the onset.

Finally, water users may be hesitant to attempt to transfer or change a water right due to the risk of losing a portion of their right through abandonment. The historical use doctrine states that a transfer or change is limited to the amount of water that was historically used, regardless of whether the right holder has a “paper right” to divert a larger quantity.\textsuperscript{63} Historical use and abandonment arguments may be raised whenever a water user seeks to transfer or change his water rights.\textsuperscript{64} Thus, the doctrine deters water rights changes and transfers.

\textbf{THE EVOLUTION OF THE PRIOR APPROPRIATION SYSTEM}

\textbf{Sources for New Standards}

The prior appropriation system began in the courts as a common law regime.\textsuperscript{65} As states joined the Union, state legislatures codified the common law and created permitting systems.\textsuperscript{66} State agencies were given the authority by the legislatures to run the permitting systems and to create regulations to aid permitting and enforcement.\textsuperscript{67} As a result, all three institutions, the courts, the legislature, and the agencies, have the ability to set new standards in western water law.

Judges have the ability to interpret statutory law and common law issues that come before the courts. Thus courts have the ability to forge new ground within the prior appropriation system. For instance, courts have the ability to determine what constitutes a beneficial use, and what practices cause prohibited waste. Interpretation of the laws and application to individual cases is an important power in bringing about new standards in the law.

State legislatures have the ability to change the laws by passing new statutes. For example, they can change forfeiture standards or appurtenance requirements. Additionally, legislatures have the power to set aside funds to aid conservation. They may raise money to provide incentives to users for saving water. These powers are instrumental in bringing about change in western water law. Finally, state agencies have been delegated the authority to make regulations that set standards for water users. Agencies may define the intricacies of state statutes. As an
illustration, an agency may define “waste,” if left undefined by the legislature, and may even set metering or construction requirements to prevent waste. These sorts of requirements may be written into user permits, thus promoting conservation and efficiency one user at a time.

Evolving State Laws that Provide for Conservation and Efficiency

All western states have gone beyond the bare bones requirements of the “pure” appropriation doctrine. As demand for water resources grew, water uses began to compete with one another, and states had to provide means for settling conflicts and reallocating existing water rights. In the modern era, because of growing demand, and over-appropriated water resources, many states have implemented policies that allow for better conservation and efficiency. This section provides examples of ways in which the “pure” prior appropriation doctrine has evolved in certain states to accommodate modern water allocation challenges.

Appurtenance Requirements

Typically, appropriated water must be put to beneficial use on a specific parcel of land, to which the right to use water becomes appurtenant. This requirement can lock water rights holders into inefficient uses of their water. Thus, some states have changed appurtenance requirements, allowing users additional flexibility to determine on which lands to put water to beneficial use.

In Oregon, the state allows water permit and water certificate holders to change the place of use without lengthy administrative processes under certain circumstances. Permit holders may change their place of use to contingent lands, which they own or control, so long as there is no injury to other rights holders, and the permittee gives notice to the Water Resources Department 60 days before the change is made. Most water right certificates may only be changed by detailed application to the Water Resources Department, notice by publication, and opportunity for objection and hearing. Certificate holders who put water to use for irrigation, however, do not need to go through the application process if “the owner of the water right uses the water for incidental agricultural, stock watering and other uses related to irrigation use, so long as there is no increase in the rate, duty, total acreage benefited or season of use.”

Nevada has also changed traditional appurtenance requirements. Initially, waters put to beneficial use are “deemed to remain appurtenant to the place of use.” However, the

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68 See generally, WATERS AND WATER RIGHTS, supra note 3, at § 11.07.
69 See footnotes 32-34 and accompanying text.
70 In Oregon, a water permit is issued after initial review of the appropriation application. The permit allows a user to divert water and put it to beneficial use. A water right certificate is then issued after the user perfects his water right by completing any needed construction and putting the water to beneficial use. ORS § 537.230.
71 ORS § 537.211(4).
72 ORS § 540.520(1)-(7).
73 ORS § 540.520(8).
74 Nevada Revised Statutes (“NRS”) § 533.040(1).
state legislature has carved out an exception that is applicable to surface water users who receive water from federal reclamation projects. The exception allows such users to classify all lands under the same ownership, which are used primarily for agricultural purposes, as a single “farm.” Then, the user can apply to the state engineer to change his place of use to the “farm” rather than individual parcels of land. In this way, a water user may alternate water use on different parcels of land, so long as the total amount used does not exceed the quantity laid out in the user’s permit. Although the initial classification as a “farm” requires an application to change the place of use, thereafter the water user can enjoy great flexibility regarding where to apply his water.

Washington, like Nevada and Oregon, requires water users to apply to the Department of Ecology before making changes to the place of use of water. However, the state allows seasonal or temporary changes in place of use with only the prior permission of a water master, rather than requiring users to undertake full change in place of use procedure. This can save a water user both time and money. Additionally, Washington allows water users who own lands and water rights to rotate the use of water to which the group of users is collectively entitled. This way, larger amounts of water may be put to use on different parcels in different years or during different seasons.

In Idaho, although changes in place of use usually require a water rights holder to apply to the Department of Water Resources, when an irrigation district holds water rights, the place of use specified in the permit can encompass the entire irrigation district. As a result, water may be used on any parcel of land within the district, and changes in place of use may be made without having to comply with change in place of use requirements. This type of system is utilized in many western states.

Conservation and Salvaged Water Under the “pure” prior appropriation doctrine, if a user implements conservation practices, and as a result uses less water, that user loses the right to use the saved water through abandonment or forfeiture. This creates a disincentive for conservation. To cure this problem, some states have declared that conservation will not constitute abandonment or forfeiture.

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75 NRS § 533.040(7).
76 NRS § 533.040(4).
77 Id.
78 NRS §§ 533.325 and 533.345.
79 Revised Code of Washington (“RCW”) § 90.03.380.
80 RCW § 90.03.390.
81 Id.
82 Idaho Code (“IC”) § 42-222.
83 IC § 42-219(5).
84 IC § 42-219(7).
85 See, e.g., ORS §§ 540.570 and 540.580; RCW § 90.03.380.
86 See footnotes 41-43 and accompanying text.
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The Oregon legislature has declared that “conservation and efficient utilization of water benefits all water users, provides water to satisfy current and future needs through reduction of consumptive waste, improves water quality by reducing contaminated return flow, prevents erosion and allows increased in-stream flow.”87 In order to implement this policy, the state has established a voluntary program88 under which “any person” holding a water right certificate may apply to the Water Resources Department for an allocation of “conserved water.”89 Conserved water results only from “conservation,” which is defined as “the reduction of the amount of water diverted to satisfy an existing beneficial use achieved either by improving the technology or method for diverting, transporting, applying or recovering the water or by implementing other approved conservation measures.”90 Conserved water is the difference between the smaller of the quantity of water which is stated in the water right or that which was actually diverted through existing facilities,91 and the quantity of water needed after implementation of conservation practices to satisfy the beneficial use.92 The water user must apply within five years of implementing the conservation measure.93 If approved, the water user is allocated 75 percent of the conserved water, and only 25 percent reverts back to the state for in-stream purposes or appropriation to new users. The water user may then sell the conserved water, or keep the water for his personal beneficial use.94

Likewise, Montana has declared it the policy of the state to “encourage the conservation and full use of water.”95 Therefore, the state has provided for those who “salvage” water to maintain full rights to such water for beneficial use.96 To “salvage” means “to make water available for beneficial use from an existing valid appropriation through application of water-saving methods.”97 Holders of rights to salvaged water may make short-term leases of the water without prior approval from the Department of Natural Resources and Conservation.98 All other uses of the right to salvaged water must be approved as a change to the water right.99 The rights to salvaged water may also be sold or leased.100

87 ORS § 537.460(1). See also, Oregon Administrative Rules (“OAR”) § 690-018-0010.
88 ORS § 537.463.
89 ORS § 537.465.
90 ORS § 537.455(1).
91 Note that this requirement is an application of the historical use doctrine. See footnotes 64-65 and accompanying text.
92 ORS § 537.455(2).
93 ORS § 537.470(2).
94 ORS § 547.490.
96 Id.
97 MCA § 85-2-102(20).
98 MCA § 85-2-419.
99 Id. Changes to water rights must be approved through the procedures imposed by MCA §§ 85-2-402 and 85-2-436.
Washington also allows water users to conserve water without losing their rights in the water saved. Washington implemented its program due to water shortages and the ability of voluntary water transfers to alleviate those shortages, meet presently unmet needs, and provide for future water needs in the state.\textsuperscript{101} Unlike Oregon and Montana, Washington’s legislation provides authority to state to enter into contracts with water users to supply money to assist the funding of water conservation projects in return for conveyance of the net water savings to the state “trust water rights program.”\textsuperscript{102} The conveyance may take the form of a temporary transfer, permanent transfer, or lease.\textsuperscript{103} Under the state trust water rights program, conveyed water is delegated for in-stream, irrigation, municipal, or other beneficial uses.\textsuperscript{104} The water user may contract for how the water is delegated.\textsuperscript{105} Additionally, the state may, with the consent of the water right holder, transfer rights to the water-banking program to provide water to third parties on a temporary or permanent basis.\textsuperscript{106}

**In-Stream Water Rights** Traditionally, water had to be diverted from its source for a water user to claim a right to it.\textsuperscript{107} Demands on water sources have continued to increase in every western state.\textsuperscript{108} Therefore, states have begun to recognize in-stream water rights as beneficial.\textsuperscript{109} Water users can take advantage of these programs to maintain their rights during periods of non-use.

In Oregon, any person can purchase or lease or accept a gift of an existing water right, or portion thereof, for in-stream use.\textsuperscript{110} In order to accomplish this result, the state has declared that “using” a water right for in-stream purposes is a beneficial use.\textsuperscript{111} Water rights holders may split their use of water by leasing a portion of their water rights, so long as the uses are not concurrent during the year.\textsuperscript{112} A savvy water rights holder may wish to lease an unused portion of his rights for in-stream purposes in order to avoid loss of his rights to the water through abandonment or forfeiture proceedings.

In Utah, only the government\textsuperscript{113} may purchase, lease, or accept as a gift a water right to be used for in-stream purposes.\textsuperscript{114} Fishing groups, however, may file a fixed time change

\begin{itemize}
\item \textsuperscript{101} RCW § 90.42.005.
\item \textsuperscript{102} RCW § 90.42.030.
\item \textsuperscript{103} \textit{Id}.
\item \textsuperscript{104} RCW § 90.42.040.
\item \textsuperscript{105} RCW § 90.42.040(9).
\item \textsuperscript{106} RCW §§ 90.42.100 through 90.42.130.
\item \textsuperscript{107} See footnotes 22-23 and accompanying text.
\item \textsuperscript{108} Western Water Policy Review Advisory Commission, \textit{supra} note 19, at § 5-5.
\item \textsuperscript{109} WATERS AND WATER RIGHTS, \textit{supra} note 3, at § 13.05(a).
\item \textsuperscript{110} ORS § 537.348.
\item \textsuperscript{111} ORS § 537.348(2).
\item \textsuperscript{112} ORS § 537.348(3). \textit{See also}, OAR § 690-077-0079 for split season in-stream leasing requirements.
\item \textsuperscript{113} “The government” includes the Division of Wildlife Resources or Division of Parks and Recreation.
\item \textsuperscript{114} Utah Code (“UC”) § 73-3-30(1)(a).
\end{itemize}
application in order to protect certain species of native trout. Like Oregon, Utah has declared in-stream uses of water to be beneficial. This departure from traditional western water law promotes conservation of water sources, and allows water rights holders to protect their rights from abandonment and forfeiture during periods of non-use.

**Beneficial Use Requirements** Beneficial use is typically determined on customary grounds. If a certain amount of water for a certain use has traditionally been used in a local area, then that use is most likely considered a beneficial use by the relevant jurisdiction. However, following a customary approach can lead to inefficiency because new technologies and changed circumstances may make the amount of water previously used wasteful. For these reasons, states have begun to change how they determine whether a particular use is indeed beneficial, or just wasteful.

In Idaho, the legislature has determined the amount of water that is beneficial for irrigation. Users cannot divert more than one cubic foot of water per second for each 50 acres of land to be irrigated. Additionally, users cannot store more than five acre-feet of water per year for each acre of land to be irrigated. However, the legislature has merely created a presumption that water above the stated amount is wasteful. The presumption can be rebutted with evidence showing that a greater quantity of water is necessary for specific irrigation projects. Although the state has strayed from the traditional conception of what constitutes beneficial use, courts must still look to local and community customary uses, rules and regulations, adopted by the majority of users from a common water source, to determine whether a larger quantity of water is in fact necessary.

The Nevada state legislature has prescribed additional factors to be considered in beneficial use analysis beyond the traditional customary approach. For instance, the quantity of water must be limited to the amount with “reasonably required” for the particular use. To determine what amount of water is reasonable, the state engineer must consider the climate of the area, the duty of the water as established by decree or experimental work, the length of the growing season, the type of crop to be grown, reasonable transportation losses and evaporation losses, and any other information and data available. Through this process, the state can reduce waste and increase efficient allocation of water resources.

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115 UC § 73-3-30(3).
116 UC § 73-3-30(7).
117 See footnotes 38-40 and accompanying text.
118 IC § 42-202.
119 Id.
120 Id.
121 IC § 42-220.
122 NRS § 533.070.
123 Id.
CONCLUSIONS

Water in the western United States is a scarce, yet essential resource. The prior appropriation doctrine developed during a time when water supply surpassed water demand. Therefore, many of the tenets of the “pure” prior appropriation doctrine are out of touch with the realities of modern water needs in the West.

Although an evolution in western water law is desperately needed to bring forth efficiency in water allocations, the states have been slow to waiver from the basic principles espoused by the prior appropriation doctrine. These principles are enshrined in both the laws of the western states and in western culture.

Despite the long precedence of the “pure” prior appropriation doctrine, states have begun, one by one, to make small departures from that system. These changes to the traditional doctrine have been driven by necessity. Only through conservation and efficient water use practices can the West sustain its current growth patterns and be plentiful in the future.

REFERENCES


Carey Act, 28 Stat. 422 (1894).

Desert Land Act, 19 Stat. 377 (1877).

Homestead Act, 12 Stat. 392 (1862).


Idaho Code § 42.


Mining Act, 14 Stat. 251 (1866).

Montana Code, Annotated § 85.


Nevada Revised Statutes § 533.

Oregon Revised Statutes §§ 536, 537, 540.

Oregon Administrative Code § 690.


Revised Code of Washington § 90.


Tarlock, A. Dan, Corbridge, James N., & Getches, David H., Water Resources Management (Foundation Press 2002).

United States Constitution, Art. IV sec. 3 cl. 2.

Utah Code § 73.

