

UNIVERSITIES COUNCIL ON WATER RESOURCES
 JOURNAL OF CONTEMPORARY WATER RESEARCH & EDUCATION
 ISSUE 133, PAGES 10-16, MAY 2006

Quantifying Water Rights in General Stream Adjudications

Sidney Ottem

Yakima County Superior Court

“How many days have I learned not to stare at the back of my hand when I could look out at the creek? Come on, I say to the creek, surprise me; and it does, with each new drop.”

Annie Dillard, *Pilgrim at Tinker Creek*

Throughout the West, a number of administrative, state and federal tribunals are immersed in massive property disputes, known as general stream adjudications, to determine rights to use water from a given source. These cases are often contentious and lengthy. Particularly difficult adjudications or those with a vast number of claimants can take decades. Adjudications are important to many western communities as water underlies economic development, bears cultural importance and also impacts ecosystems.

As a judicial officer presiding over Washington state’s Yakima River basin adjudication, people often ask me what a stream adjudication is and why they last so long. Adjudications serve to quantify all rights to use water from a specific source. Each entity claiming a right must present evidence in support. Valid rights are quantified and invalid rights eliminated. As a result, stream adjudications provide an overall inventory of how much water is used and the relative seniority of those rights. This article examines the process, goal, and concomitant issues that arise in performing this inventory.

Purpose of Quantifying Water Rights

Water disputes often occur when demand on a source exceeds supply. This conflict escalates during a drought and creates tension among water

users as to who can use limited supplies. Further, state (and sometimes federal) resource agencies must maintain water use records to make decisions on applications for new rights, requests for transfers of existing rights and distribution of available water to valid right holders. Adjudications are often commenced by these agencies (either at the behest of users or their own initiative) to obtain information to address supply problems or improve record keeping. For example, the Yakima Basin Adjudication was filed in 1977 in response to at least three events: (1) 1977 was then the worst drought year on record and junior users were forecast to receive no water, (2) the Yakama Nation had unquantified claims to potentially large water rights, and (3) the state resource agency had little information on the vast majority of claims, as few records were kept prior to 1917.

Whether its purpose is recreation, domestic supply, economic utility, cultural functions, fish needs or ecological preservation, water in a dry place is always on the agenda. Water use information obtained from a court process ideally assists decision makers in accurately resolving water use conflicts among these disparate groups.

Rights Based on State Law

Water generally belongs to the states and those governments determine the rules under which water rights are created and exercised. A water user then obtains a usufructuary right or the right to use water subject to state rules. To establish a right, a claimant must usually show a legal basis for the right, that the right has not been lost and the essential components of a water right are in place.

Legal Basis

In an adjudication, each claimant must demonstrate compliance with the pertinent legal doctrine as the basis to use water. States have adopted either the appropriation and/or riparian doctrines. Which doctrine applies dictates how the historic water use is analyzed. The impact of those doctrines has decreased somewhat in regard to issuance of new rights. Prospective water users must now file an application with an agency, which determines whether a permit to use water will be issued. However, quantifying existing claims requires an understanding of riparian and prior appropriation law.

Riparian Rights

In the western United States, water rights are primarily created under the prior appropriation doctrine. However, states east of the 100th Meridian primarily follow the riparian doctrine. That doctrine has roots in French civil law and English common law, but took shape in the early development of the U. S. (Getches 1997). Riparian rights are both property-based and self-defining as they attach only to lands that border or are bisected by a natural water course. In its original form, a riparian landowner could make no use of water that diminished the natural flow available to a downstream riparian. That was changed in the 1820s to allow industrial growth and irrigation away from stream banks (*Tyler v. Wilkinson* 1827). A riparian owner can now make a reasonable use of the water abutting or flowing through his/her property, but may not diminish the right of a downstream riparian from making a similar use.

Prior Appropriation

In the mid-1800s, federal statutes facilitated western expansion by promoting mining and then agriculture. Riparian law did not support these efforts as only lands adjacent to water had rights. Users needed a legal mechanism to divert water to distant lands and minerals and assure a reliable water supply. As a result, prior appropriation developed in mining camps and then adapted to agriculture (Getches 1997). Appropriative rights are established by forming the intent to divert water to a beneficial use followed by the diligent installation of a diversion and applying the water to beneficial use (*Thompson v. Short* 1940). If completed in a

reasonable time, the priority usually relates back to the date the intent was formed.

Both federal and state law in the West provides that “beneficial use is the basis, the measure and the limit of the water right.”¹ These terms have distinctive, if somewhat imprecise meanings (*Ecology v. Grimes* 1993). The basis of a right refers to types of uses considered beneficial. Many states specify beneficial uses (Getches 1997), although nearly all non-frivolous uses are considered beneficial. Some states give preference to certain uses, see e.g. Oregon Revised Statutes § 540.150, although courts in some states have determined the priority system supercedes statutory preferences (*Phillips v. Gardner* 1970). The limit of a right prevents a user from obtaining a right to more water than is necessary for the purpose to which the water is put – the excess is considered waste. The measure of a historic use is perhaps the most important factor in quantifying a water right as it establishes the amount of water used. Measuring use is critical in quantifying claims based on the custom of intent, diversion and beneficial use, since such claims predate state statutes and concomitant knowledge of water use. A claimant asserting a common law right must supply proof dating back to formation of the intent and actual use.

Hybrid

The plains states bisected by the 100th Meridian and the west coast states are known as hybrid states. They began statehood recognizing riparian right, but later switched to appropriation yet provided for the retention of recognizing riparian rights. Incorporating riparian rights into an appropriation scheme necessitates quantification of historic use and assignment of a priority. However, since a riparian right need not be used to be valid, the date of commencing the use does not set the priority. Rather, a riparian priority dates from the first step taken to secure title from the federal government.

In Washington State, prior appropriation was established as the sole method for creating a water right (through the permit/certificate system) after June 1917. However, state statutes mandated preservation of existing rights (RCW § 90.03.010). Thus, if steps were taken to sever title of riparian land prior to 1917, such lands would retain a theoretical right even if water was not used. This caused uncertainty as to the potential demand on

water sources and the impact on existing rights from the development of unperfected riparian uses. The Washington Supreme Court resolved this by finding riparian rights had to be used within a reasonable time (15 years) after the establishment of the Water Code in 1917. Any riparian right not exercised by December 31, 1932 was considered abandoned (*Ecology v. Abbott* 1985). Similar actions were taken by legislatures or courts in most other hybrid states to integrate riparian rights into a dominant prior appropriation scheme (Getches 1997).

Most western states now have a permit/certificate process that requires one who desires to use water to obtain a permit from the state resource agency. If a permit is issued and requirements complied with, the permit ripens into a certificate of water right. In an adjudication, a certificate holder need only show continued beneficial use from the time the certificate was issued. Further, state-issued certificates provide information as to the essential elements of a water right discussed below. (*In Re Alpowa Creek* 1924).

Loss of Water Rights

The Washington Supreme Court stated, “When, in a general water adjudication, a court determines a water claimant’s water right based upon evidence of historic beneficial use, the question will often arise whether the claimant has continued to use the same quantity of water up to the present day” (*Ecology v. Acquavella* 1997). Thus, once a right is established based on early water use, it must then be determined if it was lost through abandonment or forfeiture.

Under the common law, water rights could be lost through abandonment, which requires a challenger to prove extended nonuse plus the intent to abandon the right. However, in many states, showing the right went unused for an unreasonable period of time switches the burden to the rightholder to show there was no intent to abandon the right (*Okanogan Wilderness League v. Twisp* 1997). Intent to abandon is a question of fact to be decided by the trier of fact (*Jenkins v. Department of Water Resources* 1982).

Many western states have a statutory process for losing water rights known as forfeiture or relinquishment. A right can be forfeited without proof of intent; a challenger need only establish the requisite period of nonuse. Some states have different provisions to ameliorate the “black and white” inquiry of a forfeiture analysis. Washington

law preserves a right even when unused for five consecutive years if any of 19 “sufficient causes” apply (RCW § 90.14.140). In other states, the right continues to exist even if unused for the statutory period so long as no action to foreclose the right has been instituted. That allows a water right holder to “cure” the forfeiture by using it before it is declared forfeited (*Town of Eureka v. Office of State Engineer* 1992).

Another limitation on the extent of a water right is waste. Strictly speaking, waste is not the loss of a water right; rather, the diverter never acquired a right to the wasted portion. Historically, community custom (the application method and efficiencies in the area) established the standard for legal waste. However, “custom can fix the manner of use of water for irrigation only when it is founded on necessity” (Grimes 1997, *Shafford v. White Bluffs Land & Irrig. Co.* 1911). An adjudication tribunal may reduce the quantity to be consistent with a reasonable use (*Shafford v. White Bluffs Land & Irrig. Co.* 1911).

Essential Elements of a Water Right

Along with eliminating bogus claims, quantifying water rights may provide the following information: priority date, ownership, quantity of water used, point of diversion, place of use, season of use, purpose of use, water source, any special limitations on the use of the right and the legal basis.² A state resource agency summarizes this information in a water right certificate and enters it in its database. Any of these criteria can be the genesis of a dispute and are very important in regulating water use during times of inadequate supply. Further, that database contains much of the information necessary to process requests for new rights and transfers of existing rights.

Priority date creates the hierarchy to be applied during periods of inadequate supply – “first in time is first in right.” A priority date based on prior appropriation reflects the date steps were taken to establish the right and/or when water was first put to beneficial use. A riparian right will likely receive a priority date based on actions taken to sever the property from federal ownership (*Lone Tree Ditch Co. v. Cyclone Ditch Co* 1902, *Wasserburger v. Coffee* 1966). Quantity of use encompasses both an instantaneous use (measured in cubic feet per second or gallons per minute) as well as an annual

amount (measured in acre-feet per year). The amount of water used at any given time is critical to management during times of drought because that, along with priority date, determines which entity must cut back or shut off. Annual quantities are usually tied to the purpose of water use, such as crop type, number of domestic units, or instream demands (such as fishery or recreation) in those states that recognize such uses.

Ownership determines who can use water pursuant to the right. Ownership information tends to be fluid and becomes out of date as land is transferred. However, a right remains appurtenant to specific property (unless transferred) and who owns land is often less important than a legal description where the right is appurtenant (and the number of acres irrigated if pertinent) referred to as place of use. Purpose of use describes what the water can be used for, i.e. irrigation, domestic supply and the number of units that can be served. Point of diversion provides a geographic location for the withdrawal of water, unless the right encompasses an instream use. Season of use details the period that water can be used – the growing season for irrigation rights or perhaps annually for stock water, domestic and municipal uses. Finally, circumstances may require inclusion of special limitations on the use of water such as when water users have more than one right for a parcel, use water from multiple sources or receive water from an irrigation entity in addition to their own right.

The 2005 drought in the Yakima basin illustrates the significance of this information. To make allocation decisions, authorities must know how much water is used in a stream system, as well as the priority for each right. In the Yakima basin, “junior” water users were limited to 40% of their rights, while post-1905 rights were shut off after the spring runoff. Because our case is nearing completion, the state readily obtained this information while the court served as a forum for users to enforce these rights. Further, users who were shut off or reduced used this information to identify, for potential lease or purchase, more senior rights that were allowed to continue operating.

Rights Based on Federal Law

In addition to state-based rights, in some instances a water right may be created pursuant to federal law. Such rights derive from federal

case law beginning with *Winters v. United States*, 207 U.S. 564 (1908). There, the Supreme Court held “when the Federal Government withdraws its land from the public domain and reserves it for a federal purpose, the Government, by implication, reserves appurtenant water then unappropriated to the extent needed to accomplish the purpose of the reservation.” Federal rights arise in two scenarios – creation of a reservation for native communities and those implicated in other federal activities (*Cappaert v. United States* 1976). Determining the purpose of the reservation usually requires a court to analyze documents that established the reservation. For non-Indian-reserved rights, such documents usually include federal statutes or rules, while Indian-reserved rights require an analysis of the treaty between the tribe and United States. Courts may also look to legislative history, surrounding circumstances and subsequent history (*Solem v. Bartlett* 1984).

Although the Supreme Court clarified that implied rights exist only for the primary purposes of a non-Indian federal reservation (see *U.S. v. New Mexico* infra) the “purpose” test for Indian-reserved rights is less clear. In analyzing the treaty between the U.S. and the Yakama Nation, the Washington Supreme Court utilized the same standard to find reserved rights for “the primary purposes of the reservation and no more” (*Ecology v. Yakima Reservation Irrig. Dist.* 1993). The Arizona Supreme Court reached a different conclusion, noting that the purpose examination for Indian reservations differs from that for non-Indian federal reservations (*United States v. New Mexico* 1978). Looking to (1) the fiduciary relationship between the federal government and tribes, (2) the requirement that treaties, statutes, and executive orders be construed liberally in the Indians’ favor, and (3) that Indian-reserved rights be broadly interpreted to further the federal goal of Indian self-sufficiency, the Arizona Supreme Court bypassed a primary/secondary analysis. Instead, it held “the essential purpose of Indian reservations is to provide Native American people with a ‘permanent home and abiding place’ . . . that is, a ‘livable’ environment.”

After identifying a purpose, a tribunal then quantifies the amount of water needed for that purpose. Prior to the Gila River court’s discussion, adjudication courts had often examined treaties between tribes and the federal government and

found the purpose was to create an agricultural society. In *Arizona v. California*, 373 U.S. 546 (1963), (ironically another case brought by Arizona) the U.S. Supreme Court special master established the practicably irrigable acreage (PIA) standard, whereby an agricultural right is quantified by way of a two-part test. First, the U.S. or tribe must present evidence to show crops can be grown and water practically brought to the land for which a right is sought. Next, the economic feasibility of irrigation must be proven. If the returns of the proposed project outweigh the costs, the land is deemed “practicably irrigable.” For instance, assume 10,000 acres are irrigable cost effectively and 4 acre-feet per acre is needed to successfully irrigate the land, then a right for 40,000 acre-feet per irrigation season is confirmed. PIA has been used to quantify water rights for many native communities and continues to be viable after a 4-4 vote by the U.S. Supreme Court sustaining its use in the Big Horn River adjudication.

However, the Arizona Supreme Court rejected the trial court’s use of PIA for the quantification of federal reserved right for Indian tribes involved in the Gila River Adjudication. Consistent with its finding, the purpose of the treaty was to create “a permanent home and abiding place,” the Gila River court cited several flaws in an “across-the-board” application of PIA. First, the court noted an inherent inequity based solely on geographical location. Tribes inhabiting flat, arable ground proximate to water have a ready-made advantage over tribes located in areas a great distance from the water source. The court noted PIA forces tribes to be farmers in an era when such enterprises are risky and not otherwise approved by the federal government. Using PIA may tempt tribes to develop inflated claims based on unrealistic irrigation projects rather than basing water need on realistic economic choices. Finally, PIA potentially frustrates the idea that reserved rights be tailored to minimal need. Ultimately the Gila River court concluded PIA remains viable simply because “no satisfactory substitute has emerged.”³

How will tribal reserved rights be quantified in Arizona and perhaps elsewhere in the future? The Arizona high court instructed its trial courts as follows. First, there must be “actual and proposed uses” together with recommendations regarding feasibility and the amount of water necessary to

accomplish the homeland purpose. Trial courts should also consider the following factors: a tribe’s history, culture, geography, topography and natural resources, economic base, past water use and present and projected future populations. Quantification of Indian-reserved rights has occurred by negotiated agreement. Such settlements, which require Congressional approval, often provide a level of federal funding for various purposes including construction of new projects to access water or the development of other tribal programs.

Federal-reserved Indian and non-Indian rights can also be non-diversionary if such uses are a purpose of the reservation. The government’s right to an underground pool of water to preserve an endangered species of desert fish was confirmed as a part of the Devil’s Hole reservation in the Death Valley National Monument (*Cappaert v. United States* 1976). Reserved rights have also been found for northwest tribes where the treaties reserved to them the right of taking fish at all the usual and accustomed fishing stations.⁴ In the Devil’s Hole case and in the fishery right decisions, courts found that nondiversionary rights are to be minimally tailored to accomplish the purpose.⁵

Federal rights also present unique priority date issues. For example, the priority date is usually established on the date of the reservation, not when water is put to beneficial use (*Arizona v. California* 1963). A federal right “remains subordinate to rights acquired under state law prior to creation of the reservation, [but] senior to the claims of all future state appropriators, even those who use the water before the federal holders” (See Gila River System, supra, 35 P.3d at 71-72). Federal rights are not lost through nonuse and retain the date of reservation priority if not used.⁶ Indian-reserved fishery rights are the senior right in a basin with a priority date of “time immemorial.” Water adequate to meet such rights must be left instream. These issues can cause uncertainty and the need to quantify federal rights has been recognized by the Supreme Court (*Arizona v. California* 1963).

Special Issues

Although every issue that arises in the many-year process of quantifying water rights cannot be addressed, a few matters common to adjudications can be discussed.

Prior Decrees, Agreements and Governmental Actions

Adjudications are often criticized because the water right analysis is only current to the date a final decree is entered. Some states addressed this problem by establishing water courts and a rolling adjudication process. However, most states have no such on-going process. Further, rights to water can be impacted by decisions of non-adjudication courts analyzing disputes to water. Therefore, the underlying facts giving rise to a water right claim may have been analyzed in a prior proceeding and requires the decision maker in an adjudication to determine the effect it will accord a previous decision. This notion is encapsulated in the concept of *res judicata*.

Res judicata bars relitigation of claims already decided by a prior court if the cause of action, subject matter and parties (or their predecessors) are the same. In Washington, RCW § 90.03.220 codified *res judicata* for stream adjudications and states failure to appear after proper notice bars that individual or their successor from appearing in a later action to assert a right to the use of the water adjudicated (*Ecology v. Acquavella* 2002). State law also provides that a final decree entered before the adjudication statute was enacted is conclusive among the parties to that proceeding and the extent of use established is prima facie evidence against any person not a party to that decree (RCW § 90.03.170). As a result, the Yakima adjudication court has generally adhered to prior court decisions.

In addition, agreements or arrangements are often made between parties as to how water will be used. Courts may honor these agreements if they are not inconsistent with state or federal law. This issue can arise when an irrigation district or the federal government enters into agreements whereby users limit their water use in return for the right to take from the larger pool of rights held or managed by those delivery institutions.

Ownership

Another frequent problem is the complicated history of water right ownership. Ownership issues can occur within a single historic tenure, multiple farm ownerships, within irrigation districts or even with government institutions.

Private Ownership

Water right ownership can be complicated even within what was a single farm unit. This results from narrowing the land parcel upon which a right was used. With better technology, obtaining a precise place of use is now fairly easy, but not so historically nor was it perceived as necessary. A vague description can cause problems as farms are subdivided. For example, assume a right was recognized in a prior proceeding to irrigate 40 acres within an 80-acre farm, but the place of use described the entire 80-acre farm. In a subsequent adjudication, the facts show the farm was split into eight, 10-acre parcels. Unless the claimants produce evidence (which might be stale), it can be difficult to ascertain which lands had the right.

Ownership issues can result from users forming irrigation districts and whether a district can represent an individual water user in the quantification of an overall right, or if nonuse by the district serves to effect a forfeiture or abandonment of the individual's rights. The law in most states allows irrigation districts to represent the interests of their users (*Ecology v. Acquavella* 1983).

Government Ownership

Ownership also becomes an issue in regard to the multi-dimensional actions of the various governments, especially the federal sovereign.⁷ As western water use expanded in the 20th century, the Bureau of Reclamation and other federal agencies constructed large dams and storage facilities to even out available flows. Reclamation entered into contracts with the irrigation districts and through those entities the water users who put the project water to beneficial use. Water made available by federal projects took on slightly different legal characteristics from natural flow water and it has been consistently held (albeit on a case-by-case basis) the U. S. retains some authority over how project water is used (*Israel v. Morton* 1977, *Ecology v. Reclamation* 1992).

Ownership of project rights is often referred to as a "bundle of sticks" whereby each stickholder plays a part in using and maintaining the right. The federal government diverts, stores and delivers the water to the headgates of irrigation districts, which then deliver water to the users who apply it to a beneficial use. The relationship between the

“stickholders” is defined by applicable federal laws, contracts between Reclamation and the irrigation districts and/or water users, historical practices, and any relevant state law.

As irrigation practices developed, consistent with an increased water supply, other Interior interests such as native communities, wildlife refuges and (since the early 1970s) endangered or threatened species occasionally experience negative impacts. Meeting these and diversionary obligations (which also may compete) may require Reclamation to assert control over storage, delivery and reuse of water. Adjudications may assist by inventorying water uses and specifically quantifying any federal reserved rights.

Fact-gathering

Another common problem stems from the challenges in gathering evidence to establish the initial use. Irrigation in the West began mostly before 1900 or soon thereafter. Finding people today familiar with water use practices commencing a century or more ago is obviously quite difficult. Additionally, record keeping was sparse and what few records were kept did not always survive.

Conclusion

A stream adjudication is a very unusual kind of lawsuit. Like a river itself, the fascinating issues that arise in quantifying rights to the resource are both endless and relentless. Over the adjudication’s lengthy course, we become connected as lawyers, participants and decision makers, grappling with hard cases, making new law and hearing the history of our place. We, the court, must focus to keep the case between the banks. One eye must concentrate on the details that provide important information to those who manage the resource while the other takes in the big picture, recognizing that all members of the community have some interest and stake in the outcome.

Author Bio and Contact Information

SIDNEY OTTEM is a judicial officer presiding over the Yakima River stream adjudication for Yakima County Superior Court. He served on a task force to consider creation of a Washington water court and Sid represented the U.S. Department of the Interior on water issues in western Nevada. He also directed a watershed council in Yakima and served as an instructor at Washington State University and Yakima Valley Community College. Commissioner received his law degree from the University of Oregon School of Law and undergraduate degree from Brown University. He was raised in Ogallala, Nebraska and lived on the Wind River Reservation while attending high school. He is a participant in *Dividing the Waters*, a project for Judges and other decision makers involved in stream adjudications. He can be reached at sidney.ottem@co.yakima.wa.us

Notes

1. Federal reserved rights are treated somewhat differently in regard to beneficial use to be analyzed below.
2. The basis of a water right may not be an issue in inter-mountain states that did not recognize riparian rights. The basis in those states would be prior appropriation and through the permit/certificate system.
3. See Dan A. Tarlock, *One River, Three Sovereigns: Indian and Intersate Water Rights*, 22 *Land & Water L.Rev.* 631, 659 (1987).
4. See e.g., treaty between United States and Confederated Band of Yakima Indians dated June 9, 1855.
5. See e.g. *United States v. Adair*, 723 F.2d 1394, 1414-15 (9th Cir. 1983) where the Klamath Tribe was confirmed a fishery right consistent with a “moderate living” standard and not a standard based on the exclusive use and exploitation of a natural resource that the tribe enjoyed at the time of the treaty’s making.
6. But so-called “Walton rights” wherein rights are established pursuant to federal law and for the benefit of an Indian tribe, but are ultimately distributed to individuals pursuant to the General Allotment Act.
7. For a comprehensive analysis of this issue see Reed Benson, *Whose Water Is It? Private Rights and Public Authority Over Reclamation Project Water*, 16 *Va. Envtl. L.J.* 363 (1997).