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WINTERS IN THE EAST: TRIBAL RESERVED RIGHTS TO WATER IN RIPARIAN STATES

JUDITH V. ROYSTER*

I. INTRODUCTION

In the eastern United States, the riparian system of state water rights developed on the predicate of sufficient water to go around. Whatever the truth of that predicate in the past, an adequate supply of water for all uses may now be more myth than reality. Population pressures, industrial and residential expansion, years of severe drought, and an increased understanding of the necessity of preserving minimum instream flows have all served to restrict the water available for riparian use at the same time as demand for that water grows. Eastern states are responding to the potential for water shortage in various ways, with one of the most common responses being the adoption of some sort of permitting system for the assertion of riparian rights.¹ In their attempts to address the issue of riparian water rights in an era of limited water, however, eastern states have so far ignored one of the most important issues in fashioning an integrated system of water allocation: the rights of the Indian tribes to water as a matter of federal law.

With one partial exception,² Indian reserved rights to water have been litigated only for reservations located in states following the prior appropriation system of state water law rights.³ Similarly, with one

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¹ See A. DAN TARLOCK, LAW OF WATER RIGHTS AND RESOURCES § 3:90 (2000).

² In *Arizona v. California* (Arizona I), 373 U.S. 546, 600 (1963), *decree entered*, 376 U.S. 340 (1964), the Court awarded reserved water rights to five Indian reservations, one of which (Chemehuevi) is located in the dual-system state of California and two of which (Colorado River and Fort Mohave) are located partially in California.

³ Prior appropriation is the water law system used in Alaska and all states west of and along the 100th meridian, which runs from the Dakotas south through Texas. Robert E. Beck, *Prevalence and Definition*, in 2 WATERS AND WATER RIGHTS § 12.01 (Robert E. Beck ed., 1991). Fifteen of these states use the prior appropriation system only, while three

significant exception, tribal water rights settlements and compacts have been concluded only in the context of appropriation states.⁴ With the exception of the Seminole Tribe in Florida, no Indian tribe has ever filed suit in a riparian jurisdiction asserting its federal reserved rights to water. In short, despite the tightening of the eastern water supply, the issue of Indian water rights in riparian states has barely surfaced for either tribal governments or state water managers.

In consequence, tribes and states in the eastern United States are in danger of repeating one of the major mistakes made in the West. With the United States Supreme Court's 1908 decision in *Winters v. United States*,⁵ western states were aware, or at least surely should have been aware,⁶ that reservations of land for Indian tribes carried with them implied rights to water that could and usually did predate most non-Indian water rights. Yet those states generally ignored the teaching of *Winters*, acting with respect to the allocation of water to non-Indians as if the Court had never spoken. Little existed to nudge the states into taking account of tribal rights. The federal government, the nominal trustee for Indian lands and water rights, seldom pursued Indian water rights,⁷ either in litigation or on the ground. The tribes themselves, struggling for their survival against devastating federal policies,⁸

(California, Nebraska, and Oklahoma) employ a dual system incorporating both appropriative and riparian rights. *Id.* (1991 & 1999 cum. supp.).

⁴ See *infra* text accompanying notes 137 to 142 (discussing the Seminole Water Rights Compact).

⁵ 207 U.S. 564 (1908).

⁶ See Michael C. Blumm, *Reserved Water Rights*, in 4 WATERS AND WATER RIGHTS § 37.01(b)(2) (Robert E. Beck ed. 1991) (citing J.L. Shurts, *The Winters Doctrine: Origin and Development of the Indian Reserved Water Rights Doctrine in Its Social and Legal Context, 1880s-1930s* (Ph.D. Dissertation, Univ. of Oregon, 1997) for the thesis that tribal water rights "were not a forgotten element of Western water law.").

⁷ Following passage of the Reclamation Act of 1902, 43 U.S.C. § 372 *et seq.*, federal monies poured into reclamation projects for the benefit of non-Indian lands. See Blumm, *supra* note 6, § 41.02 (1996) (noting that the Bureau of Reclamation "built over 600 dams with over 50,000 miles of main and lateral canals to deliver water to almost 10 million acres and over 30 million people in the western United States."). By contrast, virtually no funds were available for projects benefiting or protecting Indian lands. See NATIONAL WATER COMMISSION, WATER POLICIES FOR THE FUTURE: FINAL REPORT 474-75 (1973); LLOYD BURTON, AMERICAN INDIAN WATER RIGHTS AND THE LIMITS OF LAW 21-23 (1991). Had the federal government made a reasonable effort to bring water to Indian lands commensurate with its efforts to reclaim non-Indian lands, tribes would have had access to "wet" water rather than paper rights decades ago.

⁸ The *Winters* case was decided in the middle of the allotment and assimilation era of federal Indian policy, when United States law and policy were devoted to the break-up of the tribes,

had neither the resources nor, often, the legal right to pursue their water claims in federal court.⁹

Not until the 1970s did Indian tribes in western states began asserting their rights to water in substantial numbers. By that time, state law allocation systems were well-established and long-standing. Non-Indian rights to water, property rights under state law, had often been vested for decades, and non-Indians had made significant investments of time and money in the expectation that their state appropriation rights were secure.¹⁰ The introduction of tribal water rights upset those expectations. Tribes asserted, and won, rights to considerable quantities of water with very early priority dates, raising the very real possibility that some established state law rights would be curtailed.¹¹ Not surprisingly, the resulting hostility from non-Indian water users and state officials has often been intense.¹²

the imposition of private property, the assimilation of Indians into the majoritarian society, and the replacement of tribal law with federal law and administrative regulations. See generally SIDNEY L. HARRING, *CROW DOG'S CASE: AMERICAN INDIAN SOVEREIGNTY, TRIBAL LAW, AND UNITED STATES LAW IN THE NINETEENTH CENTURY* (1994); Judith V. Royster, *The Legacy of Allotment*, 27 ARIZ. ST. L.J. 1 (1995). The federal government supported the *Winters* decision as a means of promoting the break-up of reservation lands into irrigable allotments. See Blumm, *supra* note 6, § 37.01(b)(2) (citing Shurts, *supra* note 6).

Although the Indian Reorganization Act of 1934, 48 Stat. 984, codified at 25 U.S.C. §§ 461-479, ushered in a brief era of federal encouragement of traditional tribal culture and government, by the 1940s federal Indian policy turned once again to assimilation, accomplished this time through the "termination" of the federal-tribal relationship and the imposition of state law within Indian reservations. Not until the mid- to late-1960s did the United States enter into a sustained period of promoting tribal governmental independence and control over reservation matters. The historical shifts of federal Indian policy are explored in ROBERT N. CLINTON, ET AL., *AMERICAN INDIAN LAW: CASES AND MATERIALS* 137-164 (Michie Co., 3d ed. 1991); WILLIAM C. CANBY, JR., *AMERICAN INDIAN LAW IN A NUTSHELL* 10-32 (West Publishing Co., 3d ed. 1998).

⁹ Indian tribes did not have the right to pursue federal question cases in federal district court on their own behalf until 1966. Pub. L. No. 89-635, § 1, 80 Stat. 880 (1966) (codified at 28 U.S.C. § 1362).

¹⁰ Certainty is one of the hallmarks of the western system of prior appropriation. As designed, the appropriation system rests on a rank order of priority dates and a clear quantification of the amount of water each appropriator is entitled to. See *infra* Part III.

¹¹ See WESTERN WATER POLICY REVIEW ADVISORY COMMISSION, *FINAL REPORT-WATER IN THE WEST: CHALLENGES FOR THE NEXT CENTURY* 5-3 (1998), at <http://www.den.doi.gov/wwwprac/reports/final.htm> (last visited October 27, 2000). See also, e.g., *Arizona I*, 373 U.S. 546, 596, 600-01 (1963) (affirming the Special Master's decision to award five Indian tribes about one million acre feet of water based on about 135,000 irrigable acres of land); Susan Williams, *Indian Winters Water Rights Administration: Averting New War*, 11 PUBLIC LAND

It may already be too late to avoid the same sort of disruption and hostility in the eastern states. But it is certain that the longer it takes for the Indian tribes and the riparian states to recognize tribal reserved rights to water in the East and to accommodate those rights in the context of riparian systems, the more difficult the transition will be. The issue of tribal rights to water in eastern states will surface at some point. If tribes and states can start to address the issue now, perhaps much of the litigation and acrimony that have plagued Indian water rights in the West can be avoided.

This article examines the question of tribal reserved rights to water in riparian jurisdictions.¹³ It begins by describing the fundamental principles of the tribal reserved rights doctrine, principles that transcend the specifics of the state law systems with which the reserved rights must be coordinated. Next, the article looks at how those fundamental principles of Indian reserved rights have been put into practice in prior appropriation states: that is, how those principles have been interpreted within the context of intertwining both reserved rights and appropriation rights into a workable whole. The third section of the article moves to the East, briefly delineating the basic differences between appropriation rights and riparian rights. This section also compares common law riparian rights to the rise of regulated riparian rights in many of the eastern states. Finally, the article considers Indian reserved rights in riparian jurisdictions. This involves both the basic question of whether tribal reserved rights to water exist outside appropriation states, as well as an exploration of some of the issues raised by trying to coordinate the principles of Indian reserved rights and the state law system of riparian rights. The article concludes that tribal reserved rights to water are as viable in the eastern United States as in the West, but that implementing those rights in the context of riparianism may involve some distinctions in the specific rules that govern the reserved rights doctrine in the West.

L. REV. 53, 54 (1990) (noting that the Wyoming Supreme Court affirmed an award of 189,000 acre feet to the Shoshoné and Arapaho Tribes of the Wind River Reservation).

¹² See Reid Peyton Chambers and John E. Echohawk, *Implementing the Winters Doctrine of Indian Reserved Rights: Producing Indian Water and Economic Development without Injuring Non-Indian Water Users?*, 27 GONZ. L. REV. 447, 448 (1991-92); Williams, *supra* note 12, at 53, 75, 76-77.

¹³ One article has addressed issues involved in the application of reserved rights in riparian jurisdictions, but it focused primarily on federal reserved water rights for lands set aside for federal use such as national parks, national forests, and national monuments. Anita Porte Robb, *Applying the Reserved Rights Doctrine in Riparian States*, 14 N.C. CENT. L.J. 98 (1983). Ms. Robb did not purport to address the special issues involved in applying the tribal reserved water rights doctrine in riparian states.

II. FUNDAMENTALS OF THE RESERVED RIGHTS DOCTRINE

The doctrine of Indian reserved rights to water has developed against the backdrop of the state prior appropriation system with which tribal rights must be integrated in western states. With one partial exception, tribal water rights have been litigated only in appropriation states, and all water rights settlements except the Seminole Compact have occurred in western states as well. As a result, the leading treatise in the field asserts that tribal water rights "cannot be understood apart from the prior appropriation system."¹⁴

Nonetheless, there is a distinction between the fundamental principles of the Indian reserved rights doctrine, which transcend the state law water rights systems, and the specifics of how Indian water rights are to be coordinated with state law water rights in the same body of water. The fundamental principles arise from the federal policies and purposes in creating reservations, the tribes' preservation of certain crucial and often expressly bargained-for aboriginal practices, and the federal trust responsibility to the Indian tribes. The specifics, on the other hand, arise from the practical necessity of creating a workable integrated system of federal and state-law water rights.

The fundamental principles of the Indian reserved rights doctrine are few and fairly easily stated.¹⁵ For the most part, these foundation principles are embedded in the two early twentieth century Supreme Court cases addressing the concepts of reserved rights to resources: *United States v. Winans*¹⁶ in 1905 and *Winters v. United States*¹⁷ three years later.

¹⁴ FELIX S. COHEN'S HANDBOOK OF FEDERAL INDIAN LAW 576 (Rennard Strickland et al., eds., 1982) [hereinafter COHEN'S HANDBOOK]. It is certainly true that the *implementation* of tribal reserved rights, which to date has taken place almost exclusively in western states, can be understood only in conjunction with the prior appropriation system.

¹⁵ This article, as the first discussion of Indian reserved rights in riparian jurisdictions, is confined to a consideration of the rights reserved to and by the tribes themselves. Issues involved in the use of water on allotments and former allotments now in fee are left to a future exploration. Nonetheless, the same general approach that this article advocates for tribal water rights has merit as applied to allotment water rights: that is, that there are certain fundamental principles that should apply regardless of the state law system, but that the implementation details as developed within the context of prior appropriation may require some modification in the context of riparianism.

¹⁶ 198 U.S. 371 (1905).

¹⁷ 207 U.S. 564 (1908).

A. *Water for Reservation Purposes*

The first fundamental principle of tribal reserved water rights is that when Indian country¹⁸ is established,¹⁹ that act implicitly reserves for the use of the tribe that amount of water which is needed to fulfill the purposes for which the land was set aside.²⁰ These *Winters* rights exist as of the date of the creation of the Indian country.²¹

The basis of this principle is simple: neither the tribes nor the federal government would have intended to settle Indian societies on confined tracts of land—too small to support the largely nomadic hunting way of life

¹⁸ Indian country is defined both by common law and by statute. The statutory definition is found at 18 U.S.C. § 1151:

(a) all land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation, (b) all dependent Indian communities . . . and (c) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same.

The Court has concluded that the statutory categories are not to be interpreted narrowly, but rather in light of the pre-existing common law definition of Indian country as lands set aside for the use of Indians under the superintendence of the federal government. Thus, reading the statute against the backdrop of the common law, the Court held that an “informal” reservation—tribal land held in trust by the United States, but not part of a formally declared Indian reservation—was Indian country. *Oklahoma Tax Comm'n v. Sac and Fox Nation*, 508 U.S. 114, 123, 128 (1993).

Because of the definition of Indian country as land under the superintendence of the United States, those tribes that are not “recognized” by the federal government do not have Indian country as a matter of federal law. Thus, state-recognized tribes such as the Mattaponi Tribe of Virginia cannot have reserved rights to water as a matter of federal law. However, where the state acts in the capacity of trustee for state-recognized tribes, in much the same manner as the federal government acts as trustee for federally recognized tribes, there is no reason that state-recognized tribes would not have reserved rights to water as a matter of state law.

¹⁹ Reservations may be set aside by treaty, by statute (which often served to ratify a tribal-federal agreement), or by executive order. Prior to 1871, treaties were the primary method of creating reservations. In 1871, however, Congress ended treaty-making with the Indian tribes, 25 U.S.C. § 71, although it continued to ratify negotiated agreements. See COHEN'S HANDBOOK, *supra* note 14, at 127. Executive order reservations were created between 1855 and 1919. *Id.* at 127-28. All tribal reservations carry the same water rights regardless of how the reservation was created. See, e.g., *Arizona I*, 373 U.S. 546, 598 (1963) (executive order reservations); *Winters*, 207 U.S. at 571 (reservation created by statute ratifying agreement with tribes).

²⁰ See *Winters*, 207 U.S. at 576-77; *Arizona I*, 373 U.S. at 600.

²¹ See *Arizona I*, 373 U.S. at 600; see also *Winters*, 207 U.S. at 577.

practiced by most tribes—without providing sufficient water to sustain the communities in their new life.²² The proposition is so fundamental that it is implicit in the reservation of the land itself. No statement of an intent to reserve water is necessary; in fact, an express disclaimer of water rights would probably be required to defeat the reservation of water that accompanies the reservation of land.²³

There has been considerable litigation in western states regarding the purposes for which reservations were established.²⁴ Every court that has decided the issue has agreed on one purpose for all reservations: the creation of an agrarian and settled society.²⁵ The federal reservation policy was designed both to separate potentially hostile tribes and settlers, and to provide a laboratory setting where the tribes could learn the virtues of civilization, including agriculture, English, Christianity, and private property.²⁶ Based on this generalized but clear intent on the part of the government that Indian reservations were created in part to “agrarianize” tribal communities, agriculture is universally recognized as a purpose for which reservations were set aside.

Beyond agriculture, there is far less judicial agreement on the purposes of Indian reservations. Some courts broadly interpret the federal purposes in creating reservations, finding an intent to create not merely an agrarian society, but a homeland²⁷ where the tribes are guaranteed a

²² See *Winters*, 207 U.S. at 576.

²³ This proposition derives in part from application of the canons of construction for Indian treaties and agreements. The canons provide that treaties and agreements should be liberally construed in favor of the tribes, that ambiguities should be resolved in favor of the tribes, and that the documents should be interpreted as the Indians would have understood them. See, e.g., *Minnesota v. Mille Lacs Band of Chippewa Indians*, 526 U.S. 172, 196, 200 (1999); see generally COHEN'S HANDBOOK, *supra* note 14, at 222. Thus, in *Winters* for example, the Court found that the tribes would not have agreed to settle on a reservation too small to support their prior nomadic life while agreeing to give up the water that would render the territory remaining to them capable of supporting the tribal community. 207 U.S. at 576.

²⁴ See generally Blumm, *supra* note 6, § 37.02(c) (1996); Judith V. Royster, *A Primer on Indian Water Rights: More Questions Than Answers*, 30 TULSA L.J. 61, 71-74 (1994).

²⁵ See, e.g., *Winters v. United States*, 207 U.S. at 576; *Arizona I*, 373 U.S. at 600.

²⁶ See 1 FRANCIS PAUL PRUCHA, *THE GREAT FATHER: THE UNITED STATES GOVERNMENT AND THE AMERICAN INDIANS* 317 (1984).

²⁷ *Colville Confederated Tribes v. Walton*, 647 F.2d 42, 47, 49 (9th Cir.), *cert. denied*, 454 U.S. 1092 (1981). Encompassed within that general purpose, the court ruled, were the primary purposes of both agriculture and fisheries preservation. *Id.* at 47-48.

“measured separatism”²⁸ from the majoritarian society. Other courts reject the homeland concept, finding that the sole purpose for a reservation is agricultural.²⁹ Where agriculture is deemed the sole purpose of a reservation, however, the courts have conceded that water for domestic and other uses is encompassed within the agricultural purpose,³⁰ implicitly recognizing that reservations exist not merely to provide fields and pastures, but also to provide a place for tribal communities to live.

Regardless of the particular court’s approach to interpreting the purposes of a given reservation, the general principle that sufficient water is reserved to fulfill those purposes remains undisturbed. The judicial disagreements arise over the construction of the purposes, and not the basic concept that water is impliedly reserved for those purposes.

B. *Water for Aboriginal Practices*

The second fundamental principle is that when Indian tribes reserve for themselves the right to continue pre-existing or aboriginal practices such as fishing, hunting, gathering, and historical agriculture, whether inside their Indian country or off-reservation, that act implicitly reserves as well sufficient water to support that tribally reserved activity.³¹ These rights exist as of time immemorial.³²

The basic idea of the second principle is as simple as that of the first principle: tribes would not have bargained to continue pre-existing or aboriginal food practices without an understanding that the water necessary to allow those practices would be available.³³ Tribes would not, for example, have ensured their perpetual right to fish at their usual and accustomed fishing grounds if they believed that non-Indians could de-water the rivers.

²⁸ CHARLES F. WILKINSON, *AMERICAN INDIANS, TIME, AND THE LAW: NATIVE SOCIETIES IN A MODERN CONSTITUTIONAL DEMOCRACY* 16 (1987).

²⁹ *In re General Adjudication of All Rights to Use Water in the Big Horn River System (Big Horn I)*, 753 P.2d 76, 97 (Wyo. 1988), *aff’d by an equally divided Court sub nom. Wyoming v. United States*, 492 U.S. 406 (1989).

³⁰ *Id.* at 99 (water for livestock, municipal, domestic, and commercial uses “subsumed” within the agricultural purpose).

³¹ *United States v. Adair*, 723 F.2d 1394, 1414 (9th Cir. 1983), *cert. denied*, 467 U.S. 1252 (1984).

³² *Id.*; *see also State ex rel. Greely v. Confederated Salish & Kootenai Tribes*, 712 P.2d 754, 764 (Mont. 1985).

³³ *See Adair*, 723 F.2d at 1414.

These aboriginal-practice rights differ from rights reserved by implication of a land reservation in their date of creation.³⁴ When land was set aside for Indian tribes, sufficient water was impliedly reserved to fulfill the purposes for which the federal government created the reservation.³⁵ Because those federal purposes came into existence at the creation of the land-reservation, so too did the water rights.³⁶ But when tribes reserved the right to continue aboriginal practices, and impliedly reserved as well sufficient water, the purpose for which the water was reserved was not created with the land-reservation, but rather was a pre-existing practice of the particular tribe. The water rights that accompany aboriginal practices thus exist, as does the practice that the water is supporting, as of time immemorial.³⁷

There is some disagreement about whether these aboriginal-practice water rights are more directly traceable to the 1908 *Winters* decision,³⁸ which held that water rights implicitly accompany the reservation of land,³⁹ or to the 1905 *Winans* case,⁴⁰ which held that the reservation of aboriginal practices implicitly reserves as well those rights necessary to the accomplishment of

³⁴ They differ in other ways as well, including in the measure of how the water rights are quantified in appropriation states. See *infra* section III.B.

The two types of rights also arguably differ in who reserved the water. When Indian tribes reserved the right to continue existing practices, it should be clear that the tribes themselves impliedly reserved the water as well. See *United States v. Winans*, 198 U.S. 371, 381 (1905) (holding that treaties are “not a grant of rights to the Indians, but a grant of rights from them—a reservation of those not granted.”). It is not clear, however, whether the tribes or the United States (or both, as mutual parties to the agreements) reserved the water at the time the Indian reservations were set aside. There is language in the 1908 *Winters* decision supporting both views. See 207 U.S. 564, 576-77. Most modern courts appear to believe that the rights were reserved for the Indians by the federal government. See *Arizona I*, 373 U.S. at 600 (stating that the U.S. “did reserve the water rights for the Indians” when the reservations were created). Resolution of the issue may ultimately be irrelevant because the water rights are either federally created or federally protected and guaranteed. In either case, tribal reserved rights to water are questions of federal law. See *Arizona v. San Carlos Apache Tribe of Arizona*, 463 U.S. 545, 671 (1983) (noting that both state and federal courts “have a solemn obligation to follow federal law” in adjudicating tribal water rights).

³⁵ See *Winters v. United States*, 207 U.S. at 576.

³⁶ See *United States v. Adair*, 723 F.2d 1394, 1414 (9th Cir. 1983).

³⁷ *Id.* (“Such water rights necessarily carry a priority date of time immemorial. The rights were not created by the 1864 Treaty, rather, the treaty confirmed the continued existence of these rights.”).

³⁸ 207 U.S. 564 (1908).

³⁹ See *id.* at 576.

⁴⁰ 198 U.S. 371 (1905).

the practices.⁴¹ Professor Michael Blumm, in the leading water law treatise, advocates the second position,⁴² and finds some substantial support in the Ninth Circuit's *Adair* decision.⁴³ Other Ninth Circuit opinions, however, have seemed to assume that a continuation of aboriginal practices is one purpose for which some reservations were created, an approach more consistent with the *Winters* decision.⁴⁴ Regardless of the precise basis of aboriginal-practice water rights, however, a tribal reservation of the right to continue pre-existing practices implicitly reserves sufficient water to ensure that the practices in fact continue.

Nonetheless, and in direct contradiction to the *Adair* decision,⁴⁵ the Idaho state judge in charge of the Snake River Basin Adjudication (SRBA)⁴⁶

⁴¹ See *id.* at 381. *Winans* was not a water rights case, but an interpretation of the treaty right to fish at off-reservation locations "in common with" non-Indians. *Id.* Non-Indian property owners claimed that the Indians had no right to trespass on private property to reach and use their fishing locations, but the Court held that the reserved right to continue the aboriginal practice of fishing "imposed a servitude upon every piece of land" subject to the tribal rights. *Id.* Although the servitude was implied from the express reservation of the fishing right, the Court determined that the implied right was necessary "to give effect to the treaty." *Id.*

⁴² Blumm, *supra* note 6, § 37.02(a)(2). Although I have questioned this position in the past, see Royster, *supra* note 24, at 63 n.5, I am increasingly persuaded of its value.

⁴³ 723 F.2d at 1413-14 (relying on *Winans* to find that the Klamath treaty of 1864 recognized the tribe's "aboriginal water rights").

⁴⁴ See *Colville Confederated Tribes v. Walton*, 647 F.2d 42, 47-49 (9th Cir. 1981), *cert. denied*, 454 U.S. 1092 (1981) (discussing the continuation of aboriginal practices as one of several reasons for the creation of reservations). See also *In re Determination of the Rights to the Use of the Surface Waters of the Yakima River Drainage Basin*, 850 P.2d 1306, 1316-17 (Wash. 1993) (en banc) (noting that water for fishing rights would be reserved "if fishing was a primary purpose of the reservation").

⁴⁵ In *Adair*, the federal court ruled that the Klamath Tribe held reserved water rights to support its treaty reserved right to fish, even though the land-reservation on which those rights had existed had been terminated. 723 F.2d at 1411-14. The court thus necessarily determined that the tribe's aboriginal-practices water right existed independently of any land reservation and that those water rights continued even though they were now off-reservation rights.

⁴⁶ 764 P.2d 78 (Idaho 1988). Despite the federal nature of tribal reserved rights to water, those rights may be adjudicated in state court as part of a general stream adjudication to determine all rights in a given stream system. Congress authorized the joinder of the federal government in the McCarran Amendment of 1952, 43 U.S.C. § 666, and the Supreme Court subsequently interpreted the legislation to permit state adjudication of tribal reserved rights to water. See *Colo. River Water Conservation Dist. v. United States*, 424 U.S. 800 (1976). Although the McCarran Amendment does not waive tribal sovereign immunity and thus tribes cannot be made parties to state general stream adjudication without their consent, the federal government, as trustee for tribal property rights, can be joined to represent tribal

recently ruled that the Nez Perce Tribe did not hold any water rights in connection with its treaty-reserved rights to fish outside its reservation borders.⁴⁷ Improperly distinguishing between on-reservation and off-reservation pre-existing uses of water, the court refused to extend the implied-reservation-of-water doctrine to aboriginal practices reserved in aboriginal territory not made part of any reservation.⁴⁸

C. *Paramount Nature of Tribal Reserved Rights*

The third fundamental principle of Indian water rights is that tribal reserved rights to water are, as a matter of federal law, protected against interference by subsequent non-Indian uses of water.⁴⁹ This principle is simply necessary to give effect to the first two.

First, the federal government has the constitutional power to set aside water for tribal use. This power arises primarily from the federal commerce power, which authorizes Congress to act both with respect to the waters and

interests. *See Arizona v. San Carlos Apache Tribe*, 463 U.S. 545, 566 n.17 (1983) (stating that “the McCarran Amendment did not waive the sovereign immunity of Indians as parties to state comprehensive water adjudications,” but that “any judgment against the United States, as trustee for the Indians, would ordinarily be binding on the Indians.”). State courts adjudicating tribal reserved rights are obligated to apply federal law to the determination of those rights, *see id.* at 571, although some state court judges have declared their belief that state law should govern the exercise of tribal reserved rights. *See, e.g., In re General Adjudication of All Rights to Use Water in the Big Horn River System*, 835 P.2d 273, 278 (Wyo. 1992) (holding that tribes must comply with state law to change the use of their reserved water rights), 284 (Thomas, J., concurring) (stating that tribal water rights should be administered by the State Engineer).

⁴⁷ *In re SRBA*, No. 39576, Subcase No. 03-10022 (Idaho Dist. Ct., Nov. 10, 1999).

⁴⁸ *See generally* Michael C. Blumm, et al., *Judicial Termination of Treaty Water Rights: The Snake River Case*, 36 IDAHO L. REV. 449 (2000) (providing a fuller explanation of this and other criticisms of the SRBA court’s decision).

The Tribe asked that the judgment be vacated and the issues determined in federal court on the ground that the SRBA judge failed to disclose, and the Tribe did not discover until after the judgment issued, that the judge and his family have direct interests in the SRBA litigation that are adverse to the interests of the Nez Perce. The judge, however, refused to vacate his decision on the ground that his and his family’s claims were too “inconsequential” to support any finding of a conflict of interest sufficient for disqualification. *In re SRBA*, No. 39576, Subcase No. 03-10022 at 37 (Mar. 23, 2000).

⁴⁹ *See, e.g., Winters v. United States*, 207 U.S. at 576-77.

the Indian tribes, supplemented by the property clause.⁵⁰ Under the interstate commerce clause,⁵¹ Congress retains authority over the navigable waters⁵² even when the beds of those waters pass to the states upon their admission to the Union.⁵³ Moreover, the Indian commerce clause accords full authority over Indian affairs to the federal government,⁵⁴ limiting state power over Indians, Indian lands, and Indian tribes to those situations where Congress has authorized the states to act or a state can show "exceptional circumstances" that mandate state action.⁵⁵ In instances where Indian

⁵⁰ See *Arizona I*, 373 U.S. 546, 597-98 (1963); see also *Cappaert v. United States*, 426 U.S. 128, 138 (1976). See generally Amy K. Kelley, *Constitutional Foundations of Federal Water Law*, in 4 WATERS AND WATER RIGHTS § 35.02-.03 (Robert E. Beck ed., 1991).

⁵¹ U.S. CONST. art. I, § 8, cl. 3 ("The Congress shall have Power . . . to regulate Commerce . . . among the several States . . .").

⁵² See, e.g., *Gibbons v. Ogden*, 22 U.S. (9 Wheat.) 1 (1824); see generally Kelley, *supra* note 50, § 35.02.

⁵³ In federal territories, the federal government holds the lands submerged beneath navigable waters in trust for future states. See *Shively v. Bowlby*, 152 U.S. 1, 57 (1894). Once states are admitted to the Union, the "equal footing" doctrine generally provides that ownership of the bedlands passes to the state, see *Montana v. United States*, 450 U.S. 544, 551 (1981), although, as noted, the federal government retains its constitutional powers over those waters, *Arizona I*, 373 U.S. at 597-98. Indian tribes have frequently asserted title to bedlands in Indian country pursuant to their treaties, although tribal success in bedlands claims has been mixed. Compare *Choctaw Nation v. Oklahoma*, 397 U.S. 620 (1970) (holding the Choctaw Nation owns the bed of the Arkansas River pursuant to treaty) with *Montana*, 450 U.S. at 553-57 (holding the Crow treaties did not overcome the presumption in favor of state bedlands ownership).

⁵⁴ U.S. Const. art. I, § 8, cl. 3 ("The Congress shall have Power . . . to regulate Commerce . . . with the Indian tribes . . ."). In one of the foundation cases of federal Indian law, Chief Justice John Marshall declared that relations between the Indian nations and the United States vested in the federal government, not the states. *Worcester v. Georgia*, 31 U.S. (6 Pet.) 515, 561 (1832).

The exclusive federal power recognized in *Worcester* was subsequently expanded into "plenary" power over the Indian tribes themselves. See generally Nell Jessup Newton, *Federal Power Over Indians: Its Sources, Scope, and Limitations*, 132 U. PA. L. REV. 195 (1984). Although the Supreme Court initially rejected the Indian commerce clause as the source of congressional authority to legislate for Indian tribes, see *United States v. Kagama*, 118 U.S. 375, 378-79 (1886), by the late twentieth century the Court grounded federal power over tribes firmly in that clause. See, e.g., *McClanahan v. Ariz. State Tax Comm'n*, 411 U.S. 164, 172 n.7 (1973) (citing the Indian commerce clause as the source of federal power over "Indian matters").

⁵⁵ See *Worcester*, 31 U.S. (6 Pet.) at 561 (state law "can have no force" in Indian country unless "in conformity with treaties, and with the acts of congress"); *California v. Cabazon Band of Mission Indians*, 480 U.S. 202, 207 (1987) ("[S]tate laws may be applied to tribal Indians on their reservations if Congress has expressly so provided."). The "exceptional

reservations are created from the public domain, the federal power to regulate those lands pursuant to the property clause also supports the implied reservation of water rights.⁵⁶

Second, the rights reserved to or by tribes were reserved in perpetuity. Reservations were set aside as permanent homelands for the tribes, offering the protection of a "measured separatism" from the surrounding American culture.⁵⁷ Only Congress can create an Indian reservation, and only Congress can diminish or disestablish an Indian reservation.⁵⁸ The purpose-of-reservation water rights that attach to an Indian reservation thus exist unless

circumstances" exception to the lack of state power arises from the Court's grant of authority to states to regulate Indian treaty fishing rights for the limited purpose of preserving the species. *See Puyallup Tribe, Inc. v. Washington Game Dep't*, 433 U.S. 165, 176-77 (1977). *But see New Mexico v. Mescalero Apache Tribe*, 462 U.S. 324, 331-32 & n.15 (1983). To date, that is the only circumstance in which the Court has permitted states to regulate Indians and Indian property rights within Indian country without express congressional authorization.

⁵⁶ Professor Joseph Dellapenna argues that no tribal reserved rights to water can exist in the original thirteen states because those states never contained federal public lands. *See Joseph W. Dellapenna, Regulated Riparianism*, in 1 *WATERS AND WATER RIGHTS* § 9.06(b)(2) (Robert E. Beck ed., 1991). But the authority to reserve water, or protect tribal reserved water rights, does not depend upon the public status of the lands prior to their reservation. *See Blumm, supra* note 6, § 37.01(c)(2) ("Reserved water rights are the product of a preemptive federal intent to use water for federal purposes, not a consequence of federal ownership of water as proprietor of the public domain."). Although no federal public lands may have existed in the original states, Indian country most certainly did (and does). The foundation cases of federal Indian law, for example, established the "domestic dependent sovereign" status of the Cherokee Nation, *Cherokee Nation v. Georgia*, 30 U.S. (5 Pet.) 1, 17 (1831), in which the laws of Georgia (an original state) "can have no force." *Worcester v. Georgia*, 31 U.S. (6 Pet.) 515, 561 (1832). Numerous federally recognized Indian tribes continue today to govern their Indian country in the original thirteen states. *See* 65 Fed. Reg. 13,298 (Mar. 13, 2000) (listing federally recognized Indian tribes, including, *inter alia*, the Cayuga, Oneida, and Seneca Nations of New York). It is the creation and existence of this Indian country that gives rise to new-use reserved water rights and confirms aboriginal-practice reserved water rights.

⁵⁷ WILKINSON, *supra* note 28, at 16.

⁵⁸ *See, e.g., Alaska v. Native Village of Venetie Tribal Government*, 522 U.S. 520, 530-31 (1998) (holding that creation of Indian country requires land to be set aside by Congress under federal superintendence); *South Dakota v. Yankton Sioux Tribe*, 522 U.S. 329, 330 (1998) (asserting that reservation diminishment is a matter of congressional intent).

From 1855, when the practice began, to 1919, Indian country could be created and terminated by executive order. *See COHEN'S HANDBOOK, supra* note 14, at 493. Although congressional acquiescence supported the presidential practice, Congress declared in 1919 that thereafter only it could establish Indian country. Act of June 30, 1919, ch. 4, § 27, 41 Stat. 34 (codified at 43 U.S.C. § 150).

and until Congress chooses to terminate the land reservation. Similarly, existing uses reserved in treaties and agreements were generally reserved forever.⁵⁹ Only Congress can abrogate treaties and agreements with the Indian tribes and extinguish the pre-existing tribal uses that those documents reserved to the tribes.⁶⁰ Moreover, although Congress has the power to terminate reservations and abrogate treaties, congressional intent to do so must be clearly expressed.⁶¹

It follows, then, as a matter of federal Indian law, that until or unless Congress acts unmistakably to extinguish tribal water rights, those rights persist. It also follows that, as a matter of basic federalism, nothing in state law can operate to the derogation of those federal-law tribal rights. Tribal water rights are, therefore, paramount over subsequent state-law water rights.⁶²

⁵⁹ In some cases, the rights were reserved until the occurrence of a specified event. For example, several of the Chippewa bands of the western Great Lakes reserved hunting, fishing, and gathering rights "during the pleasure of the President." See *Minnesota v. Mille Lacs Band of Chippewa Indians*, 526 U.S. 172, 177 (1999) (quoting 1837 Treaty with the Chippewa, 7 Stat. 537). Although that treaty language gives the President of the United States the authority to terminate the usufructuary rights, the rights survive until such time as the President may act. See *id.* at 194-95.

⁶⁰ See *Lone Wolf v. Hitchcock*, 187 U.S. 553, 566 (1903) (discussing Congress' "power to abrogate" treaties with the Indian tribes).

⁶¹ See, e.g., *Yankton Sioux Tribe*, 522 U.S. at 330 (stating congressional intent for reservation diminishment "must be 'clear and plain'") (quoting *United States v. Dion*, 476 U.S. 734, 738-39 (1986)); *Mille Lacs*, 526 U.S. at 202 ("A congressional determination to terminate [a treaty with the Indians] must be expressed on the face of the Act or be clear from the surrounding circumstances . . ."); *United States v. Dion*, 476 U.S. 734, 739-40 (1986) ("clear and plain" intention from Congress is required "to abrogate Indian treaty rights."); *Washington v. Wash. State Com. Passenger Fishing Vessel Ass'n*, 443 U.S. 658, 690 (1979) (requiring "explicit statutory language" for "abrogation of [Indian] treaty rights."); *Mattz v. Arnett*, 412 U.S. 481, 505 (1973) (declining to infer an intent to terminate a reservation in the absence of clear statutory language); *Menominee Tribe v. United States*, 391 U.S. 404, 413 (1968) (holding that a treaty with the Menominee Tribe was not abrogated because there was no "explicit statement" from Congress).

⁶² At the same time, reserved water rights cannot interfere with prior state-law water rights. The water available for reserved rights does not include that water which is already in use pursuant to state law at the time the reserved rights came into existence. See Blumm, *supra* note 6, § 37.02(d); Royster, *supra* note 24, at 67. For time-immemorial rights, of course, by definition, no other rights existed prior to them. For water rights that came into existence when a land reservation was created, however, there may be some state-law water rights that pre-date its creation; those state-law rights would be protected against interference by the exercise of tribal reserved rights to water.

D. *Tribal Rights Survive Non-use*

The fourth fundamental principle is that tribal reserved rights to water are not forfeited or abandoned by non-use.⁶³ The necessity for this principle arises in part from the conditions of most Indian reservations in the decades after they were created. Tribes themselves were struggling to maintain their cultural and political integrity in the face of federal policies geared toward assimilation of Indians and the eventual disintegration of the tribes.⁶⁴ No tribal funds existed for water projects, and federal money primarily funded non-Indian irrigation projects, often to the detriment of Indian lands.⁶⁵ If tribal water rights were dependent upon putting the reserved water to use within a given period of time, those rights would have had little meaning.

III. IMPLEMENTING TRIBAL RESERVED RIGHTS IN APPROPRIATION STATES

Congress, federal and state courts, state water agencies, and Indian tribes themselves have addressed the issues surrounding tribal water rights almost exclusively against the backdrop of the prior appropriation system of western state water law. The Supreme Court has succinctly described the basic attributes of the prior appropriation system:

Under that doctrine, one acquires a right to water by diverting it from its natural source and applying it to some beneficial use. Continued beneficial use of the water is required in order to maintain the right. In periods of shortage, priority among confirmed rights is determined according to the date of initial diversion.⁶⁶

⁶³ This principle is implicit in the Court's decision in *Winters*, 207 U.S. 564. Although the federal government did not begin an irrigation project for reservation lands until a decade after the reservation was established, *id.* at 566, the time at which actual use of the water began was considered irrelevant. The tribal reserved right comes into existence at the creation of the reservation or at time-immemorial, depending upon the type of water right reserved, and the right continues unless and until it is terminated by Congress.

⁶⁴ See *supra* note 8 and accompanying text.

⁶⁵ See *supra* note 6-8 and accompanying text.

⁶⁶ *Colo. River Water Conservation Dist. v. United States*, 424 U.S. 800, 805 (1976). There is some variation in specific detail among the various western states, but the Court's statement captures the basic doctrine.

Because the prior-appropriation system developed in arid climates where water is at a premium, it values certainty and predictability. All appropriators have a right to a certain quantity of water with a priority date of use.⁶⁷ Under the "first in time, first in right" principle, junior appropriators must forego their water rights in favor of senior appropriators in times of shortage.⁶⁸

When tribal reserved rights to water are determined for Indian country in prior appropriation states, those reserved rights must be meshed with the state-law appropriation rights into a workable integrated whole. As a result, the fundamental principles of the reserved rights doctrine are applied in particular ways in western states to create that integrated system. More specifically, tribal reserved rights to water in appropriation states are quantified and assigned priority dates.⁶⁹ With those two applications, water managers can ensure that non-Indian state-law rights do not interfere with prior tribal rights and vice versa.

A. *Priority Dates*

For a state-law appropriator, the priority date is the date on which water is diverted and put to a beneficial use as defined by state law.⁷⁰ For tribal reserved rights, the priority date is the date on which the water right came into being. Thus, for water reserved to fulfill the purposes for which the land reservation was set aside, the tribal priority date is the date of the creation of the reservation.⁷¹ For water reserved to preserve existing aboriginal uses and practices, the tribal priority date is time immemorial.⁷²

⁶⁷ See Beck, *supra* note 3, § 12.02.

⁶⁸ *Id.*

⁶⁹ See *infra* text accompanying notes 70-77.

⁷⁰ See generally Beck, *supra* note 3, § 12.03; TARLOCK, *supra* note 1, at § 5:30.

⁷¹ See, e.g., *Winters v. United States*, 207 U.S. 564, 577 (1908) (using the date the reservation was created, where the Court found the water was reserved to fulfill the purposes of the reservation); *Arizona I*, 373 U.S. 546, 600 (1963) (finding Indian water rights created on the date the reservation was created). Tribal water rights will generally pre-date most non-Indian appropriations because most tribal reservations were established before significant non-Indian appropriations were perfected. In one case, in fact, a state court refused to determine whether a tribe had a time-immemorial priority date, on the ground that even a priority date of creation of the reservation would accord the tribe the senior water right in the area. See *New Mexico ex rel. Martinez v. Lewis*, 861 P.2d 235, 238 (N.M. App. 1993), *cert. denied*, 858 P.2d 85 (N.M. 1993).

⁷² See e.g., *United States v. Adair*, 723 F.2d 1394, 1414 (9th Cir. 1983), *cert. denied*, 467 U.S. 1252 (1984) (holding that a tribe's aboriginal water rights "necessarily carry a priority

Assigning these priority dates to tribal rights allows Indian water rights to be slotted in to the rank order system of prior appropriation states.

B. Quantification

Because the appropriation system depends upon certainty in amount as well as priority in time, quantification of tribal reserved rights is necessary for Indian country in western states. The method of quantifying tribal water rights depends upon the type of reserved right at issue.

For water needed to fulfill the agricultural purposes for which reservations were created, the primary quantification measure for reserved rights is also an agricultural measure. Tribes are entitled to sufficient water to irrigate all of the practicably irrigable acreage (PIA) of the reservation,⁷³ a determination that involves soil science, engineering, and economics.⁷⁴

For water reserved to continue aboriginal uses, the quantification measure varies with the circumstances. Where the aboriginal practice of the tribe was agriculture, the quantification of reserved water is that amount of water historically used for irrigation.⁷⁵ Where the aboriginal use is a food-gathering practice such as fishing, the quantification standard is the amount of water "necessary to maintain" the conditions that support the practice.⁷⁶ In the case of fishing rights, for example, the reserved water right is the quantity needed to maintain the fisheries, whether that amount is based on minimum stream flow or water temperature or some other factor.⁷⁷

date of time immemorial"); *State ex rel. Greely v. Confederated Salish & Kootenai Tribes*, 712 P.2d 754, 764 (Mont. 1985) (asserting that a priority date of time immemorial applies where the Indians' use of the water "existed before creation of the reservation.").

⁷³ The Supreme Court adopted the PIA standard based on the recommendation of a special master. *See Arizona I*, 373 U.S. at 600-01.

⁷⁴ *See In re General Adjudication of All Rights to Use Water in the Big Horn River System*, 753 P.2d 76, 101-05 (Wyo. 1988), *aff'd by an equally divided Court sub nom. Wyoming v. United States*, 492 U.S. 406 (1989).

⁷⁵ *See Gila River Pima-Maricopa Indian Community v. United States*, 695 F.2d 559, 561 (Fed. Cir. 1982); *Gila River Pima-Maricopa Indian Community v. United States*, 684 F.2d 852, 864-65 (Ct. Cl. 1982).

⁷⁶ *See Colville Confederated Tribes v. Walton (Walton I)*, 647 F.2d 42, 48 (9th Cir. 1981), *cert. denied*, 454 U.S. 1092 (1981).

⁷⁷ *See Colville Confederated Tribes v. Walton (Walton II)*, 752 F.2d 397, 405 (9th Cir. 1985), *cert. denied*, 475 U.S. 1010 (1986) (upholding an instream flow right of 350 acre feet per year); *United States v. Anderson*, 6 Indian L. Rep. F-129, F-130 (E.D. Wash. 1979) (finding that maintenance of trout fishery is related to maximum temperature as well as minimum flow).

IV. DIFFERENCES IN RIPARIAN LAW

States east and one tier west of the Mississippi River, those in the humid areas of the country, use some form of riparian rights rather than the prior appropriation system of the west.⁷⁸ The primary focus of common-law riparian rights is reasonable use:⁷⁹ all riparian owners⁸⁰ have the right to make a reasonable use of the water, and no riparian may unreasonably interfere with the rights of any other riparian.⁸¹ These common-law correlative rights, however, are gradually being replaced by regulated riparianism, with about half the eastern states now exercising some form of state regulation of riparian rights.⁸² This section will look first at common-law correlative rights and how they differ from prior appropriation doctrine, and then turn to the more recent development of regulated riparianism.

⁷⁸ A number of states with both humid and arid climates developed dual systems of riparian and appropriation rights. Most of these states—located on the west coast and along the line from the Dakotas south to Texas—eventually moved to pure appropriative rights. *See generally* Dellapenna, *supra* note 56, § 8 (discussing appropriative rights and dual systems). A few, however, retain a dual approach. *Id.* § 8.02. For an analysis of tribal water rights in dual-system states, and particularly the unique circumstances posed by the status of the Five Civilized Tribes in Oklahoma, *see* Taiawagi Helton, *Comment, Indian Reserved Water Rights in the Dual-System State of Oklahoma*, 33 TULSA L.J. 979 (1998).

⁷⁹ The natural flow theory of riparian rights—that riparian owners were entitled to the natural flow of the stream undiluted in quantity or quality—has been replaced in virtually all instances by the reasonable use theory. *See* TARLOCK, *supra* note 1, § 3:12 (asserting that reasonable use is now the standard in most states, and discussing case law that attempts to define “reasonable”). Because natural flow has essentially been abandoned in riparian state law, *see id.*, this article will not address it.

⁸⁰ At common law, riparian rights attach only to riparian land, and a riparian owner is anyone who owns land abutting a watercourse. *See generally* TARLOCK, *supra* note 1, § 3:8 (defining a riparian right). Prior appropriation rights, by contrast, do not depend upon ownership of land riparian to a water source. *See id.* § 5.1 (discussing prior appropriation rights as “a theory of water rights separate from land ownership”) Similarly, the Regulated Riparian Model Water Code eliminates the common-law requirement of riparian ownership. THE REGULATED RIPARIAN MODEL WATER CODE § 2R-1-02 (American Society of Civil Engineers, Water Laws Committee, Joseph W. Dellapenna, ed., 1997) [hereinafter MODEL CODE].

⁸¹ *See Harris v. Brooks*, 283 S.W.2d 129, 134 (Ark. 1955) (holding that when one lawful use of water interferes with another, the court must determine whether the interfering use is unreasonable). *See generally* TARLOCK, *supra* note 1, § 3:12 (discussing riparian rights of surface waters); *see also* Dellapenna, *supra* note 56, § 7.02(d) (discussing basic concepts of reasonable use theory of riparian water rights).

⁸² *See* Dellapenna, *supra* note 56, § 9.03.

A. *Common-Law Riparian Rights*

Common-law riparianism differs from prior appropriation in at least three aspects that may affect the specific implementation of tribal reserved water rights. Two of these distinctions arise from the correlative nature of riparian rights, and the third from the way in which riparian rights are implemented and enforced.

First, riparianism does not include the feature of temporal priority of rights. Riparian rights are not ordered by the date of first use, but by the correlative right of reasonable use.⁸³ A central feature of riparianism is the right of the riparian owner to initiate a reasonable use of the water at any time.⁸⁴ Scholars disagree about the extent to which pre-existing exercises of riparian rights are in fact judicially protected against later exercises,⁸⁵ but temporal priority is technically not a principle of common law riparian rights.

Second, riparian rights are generally not quantified. The doctrine of correlative rights—that every riparian owner has a right to make a reasonable use of the water at any time, so long as that use does not interfere with the rights of other riparians⁸⁶—necessarily introduces uncertainty and a lack of predictability into the riparian system. A riparian owner has a right to use not a specific quantity of water, but that amount of water that is reasonable under the circumstances, taking account of the correlative reasonable use rights of all other riparians on the watercourse.⁸⁷ What constitutes a reasonable use

⁸³ See Dellapenna, *supra* note 56, § 7.03(d) (“[T]emporal priority is at best only marginally relevant . . .”).

⁸⁴ See Tarlock, *supra* note 1, § 3:12 (asserting most states allow changes in water use under the reasonable use standard).

⁸⁵ Professor Dan Tarlock asserts that in cases of conflicting riparian rights, courts often take account of which use began first. TARLOCK, *supra* note 1, § 3:11. Similarly, the Restatement (Second) of Torts § 850A(h) (1977) considers first use controlling in determining the comparative “reasonableness” of two or more competing uses. Professor Joseph W. Dellapenna, on the other hand, contends that in practice, first-in-time has essentially no impact on judicial decisions. See Dellapenna, *supra* note 56, § 7.03(d).

⁸⁶ See Dellapenna, *supra* note 56, § 7.01 (“The basic concept of riparian rights is that an owner of land abutting a waterbody has the right to have the water continue to flow across or stand upon the land, subject to the equal rights of each owner.”).

⁸⁷ See *id.* at § 7.02(d) (“The only real restriction on use by any one riparian, then, is that a use cannot inflict a ‘substantial harm’ . . . on any other riparian user.” (citing as one example *Dumont v. Kellogg*, 29 Mich. 420 (1874))).

quantity is thus potentially subject to change in light of subsequently initiated riparian uses.⁸⁸

Third, riparianism has no system of administrative oversight. In the western appropriation states, water rights are administered by state agencies.⁸⁹ Rights must be perfected, in part by registering the right with the appropriate state agency.⁹⁰ The agency records water rights, monitors water use, and takes action where necessary to protect users with earlier priority dates. In eastern riparian systems, under the common law, there is no administrative oversight of or involvement in water rights.⁹¹ Instead, implementation and enforcement of riparian rights are accomplished through private lawsuits.⁹² Any claim of an interference with riparian rights is addressed in the courts through a lawsuit filed by an injured riparian owner.⁹³

B. *Regulated Riparianism*

Increasingly, common-law riparianism is giving way to a system of regulated riparianism. Some form of state regulation of riparian rights now exists in about half the riparian states,⁹⁴ and the American Society of Civil Engineers has developed *The Regulated Riparian Model Water Code*.⁹⁵ Although existing regulatory systems differ widely, and thus any generalizations are necessarily overbroad, some general trends can be noted

⁸⁸ See, e.g., Harris, 283 S.W.2d at 134:

When one lawful use of water interferes with or detracts from another lawful use, then a question arises as to whether, under all the facts and circumstances of that particular case, the interfering use shall be declared unreasonable and as such enjoined, or whether a reasonable and equitable adjustment should be made, having due regard to the reasonable rights of each.

⁸⁹ See generally Beck, *supra* note 3, § 14 (discussing in detail the permit and regulatory process). The exception is Colorado, which administers state water rights through a system of specialized water courts. See *id.* at § 14.04.

⁹⁰ See *id.* at § 14.03 (discussing the different methods of registration and noting most state registration procedures involve filing an application).

⁹¹ But see Dellapenna, *supra* note 56, at § 9.03 (discussing the recent rise of regulation and administrative oversight of riparian rights in eastern states).

⁹² See *id.* at § 7.03 (discussing the resolution of conflicts among riparian users).

⁹³ See *id.*

⁹⁴ See *id.* at § 9.01.

⁹⁵ See generally MODEL CODE, *supra* note 80. For an analysis of the Model Code, see generally Robert E. Beck, 25 WM. & MARY ENVTL. L. & POL'Y REV. 113 (2000).

by examining common features of state regulatory schemes and the *Model Code*.

Of particular interest to the eventual coordination of tribal reserved rights, regulated riparian systems often institute a permit system for the exercise of riparian rights.⁹⁶ A riparian owner wishing to make use of the water, especially a consumptive use, petitions a state agency for a permit to use a specified quantity of water.⁹⁷ The agency will grant the permit based on a number of state-law factors, including whether the proposed use is "reasonable" (an incorporation of the common-law standard).⁹⁸ If the agency grants a permit, the use right is not perpetual but for a term of years, although the number of years varies from state to state.⁹⁹

Regulated riparianism thus introduces into eastern state water law two of the central features of prior appropriation: quantification¹⁰⁰ and some measure of temporal priority. Although temporal priority is not a stated feature of regulated riparianism, some degree of it is inherent in the system. First, existing uses may be exempt from the permit requirement,¹⁰¹ essentially

⁹⁶ See Dellapenna, *supra* note 56, § 9.03 (describing the general process of obtaining a permit); MODEL CODE, *supra* note 95, §§ 6R-1-01, 6R-1-04.

⁹⁷ See Dellapenna, *supra* note 56, § 9.03(a); see also MODEL CODE, *supra* note 95, §§ 6R-2-01, 7R-1-01 (listing requirements of a permit application and permit terms and conditions, respectively).

⁹⁸ See Dellapenna, *supra* note 56, § 9.03(b) ("[M]ost regulated riparian statutes provide as a sole standard a command that the use be reasonable."); MODEL CODE, *supra* note 95, § 6R-3-01(1)(a).

⁹⁹ See Dellapenna, *supra* note 56, § 9.03(a)(4) (asserting most states have "opted for the concept of periodically renewable water permits."); MODEL CODE, *supra* note 95, § 7R-1-02(1) (providing for "a period of time representing the economic life of any necessary investments not to exceed 20 years," although it allows permits "not to exceed 50 years" for governmental and public bodies as reasonable to retire debt accrued for the construction of related facilities). Nonetheless, five regulated riparian states apparently issue permits in perpetuity. See Dellapenna, *supra* note 56, § 9.03(a)(4) n.396 (referencing Delaware, Indiana, Kentucky, New York, and Virginia).

¹⁰⁰ See MODEL CODE, *supra* note 95, § 7R-1-01(b) (codifying that the permit shall contain "the authorized amount of the withdrawal and the level of consumptive use, if any."); Dellapenna, *supra* note 56, § 9.03(a)(5)(A) n.447 (listing nine states that include the quantity of water consumed or diverted as a condition of the permit, and three others that require quantity information in the permit application).

¹⁰¹ The grandfathering in of existing uses is often a feature of existing regulated riparian systems. See Dellapenna, *supra* note 56, § 9.03(a)(3). The *Model Code* requires existing riparian users to apply for a permit within one year, MODEL CODE, *supra* note 95, § 6R-1003(1), unless the existing use is an exempt use. Exempted uses are so-called small

granting those uses a permanent priority over new uses. Second, the agency must determine that a proposed use is not only reasonable, but that any withdrawal "in combination with other relevant withdrawals, will not exceed the safe yield of the water source."¹⁰² If the water available in a particular watercourse over and above the safe yield is adequate for all proposed withdrawals, then no temporal priority is involved. But if a sufficient amount of water is not available, then later-proposed withdrawals may be denied or curtailed because the permits already granted have left insufficient water to safely allow the newly proposed uses.¹⁰³ In cases of an inadequate water supply for all proposed uses, then, regulated riparianism necessarily introduces a measure of first-in-time.

Nonetheless, the temporal priority of regulated riparianism differs in material respects from that of prior appropriation. Most importantly, the right is usually temporary, running only for the term of years of the permit.¹⁰⁴ There is no right of automatic permit renewal; a subsequent permit to continue a use requires a redetermination of the relevant factors, including whether the use is reasonable in light of other withdrawals, although renewal of a permit for an existing use can be favored over competing proposals "if the public interest is served equally" by both uses.¹⁰⁵ In addition, in times of

withdrawals, those less than 100,000 gallons per day. *Id.* § 6R-1-02(1). The state agency may nonetheless require registration of exempt uses. *Id.* § 6R-1-06.

¹⁰² MODEL CODE, *supra* note 95, § 6R-3-01(1)(a)-(b). Safe yield is defined as "the amount of water available for withdrawal without impairing the long-term social utility of the water source, including the maintenance of the protected biological, chemical, and physical integrity of the source." *Id.* § 2R-2-21(1). In addition, the agency is to determine the reasonableness of the proposed use, and the definition of "reasonable" includes consideration of other uses of the watercourse and "the probable severity and duration of any injury" foreseeable to other uses. *Id.* at § 6R-3-02. *See also* Dellapenna, *supra* note 56, § 9.03(b)(1) (noting that most of the existing riparian regulatory schemes adopt the reasonableness standard either expressly or implicitly and that probable injury to other users is a permit criterion in several of the regulated riparian states).

¹⁰³ *See* MODEL CODE, *supra* note 95, § 6R-3-02 commentary. *See also id.* § 6R-2-03 (providing that subject to certain exceptions such as routine applications, public health and welfare, and joint consideration of pending applications for withdrawals from the same source, permit applications are to be processed in the order they are received).

¹⁰⁴ MODEL CODE, *supra* note 95, §§ 7R-1-01(j), 7R-1-02(1); Dellapenna, *supra* note 56, § 9.03(a)(4) (explaining that most states set a time limit through the use of permits). A few states, however, apparently grant regulated riparian permits in perpetuity. *See id.* at n.396.

¹⁰⁵ *See* MODEL CODE, *supra* note 95, § 6R-3-04(4); *see also id.* § 7R-1-02(2). In evaluating whether the public interest is equally served by both the renewal use and the new proposed use, the agency is to "giv[e] consideration" to the investment in facilities made by the existing permit holder. *Id.* at § 6R-3-04(4).

water shortage, permit holders do not have priority of right based on first-in-time with respect to other permit holders. Instead, the state agency is empowered to restrict the terms and conditions of any permit in light of state drought management strategies and in accordance with the preferences for water use.¹⁰⁶ The temporal priority of regulated riparianism is thus far from the strict first-in-time, first-in-right doctrine of the western states, but regulated riparianism does nonetheless impose some form of the temporal priority concept so foreign to common-law riparian rights.

V. TRIBAL RESERVED RIGHTS IN RIPARIAN STATES

The final consideration, undertaken in light of the distinctions between western and eastern state water law, is the question of tribal reserved rights to water in riparian jurisdictions. That consideration, in turn, involves two issues: first, whether the fundamental principles of tribal reserved rights apply in riparian states; and second, if they do, how tribal reserved rights and riparian rights can be integrated into a workable water law system.

A. *The Fundamental Principles*

The first issue is the application of the fundamental principles governing tribal reserved rights to water or, more simply, whether tribes have those rights in riparian states. The answer is an equally simple yes.

Reserved rights to water for Indian tribes exist for two purposes: to allow tribes to continue pre-existing or aboriginal practices, particularly those food-gathering practices essential to the tribe, and to allow the purposes for which the reservation was created to be accomplished.¹⁰⁷ Neither purpose is confined to a line west of the 100th meridian. The Chippewa of the western Great Lakes reserved to themselves the right to continue to hunt and gather the wild rice, even in their ceded territory,¹⁰⁸ as surely as the tribes of the Pacific Northwest reserved to themselves the right to continue to fish at their

¹⁰⁶ MODEL CODE, *supra* note 95, § 7R-3-01; *see also* Dellapenna, *supra* note 56, § 9.03(d). The *Model Code* determines preferences among water rights in cases of insufficient water to grant all permits on a watercourse. MODEL CODE, *supra*, § 6R-3-04. As with common-law riparianism, domestic use has the top priority. *Id.*

¹⁰⁷ *See supra* note 95, sections II.A-B.

¹⁰⁸ *See Minnesota v. Mille Lacs Band of Chippewa Indians*, 526 U.S. 172, 177 (1999) (referencing the 1837 Treaty with the Chippewa, 7 Stat. 537, and the 1842 Treaty with the Chippewa, 7 Stat. 591).

usual and accustomed places.¹⁰⁹ The federal government, doggedly pursuing a policy of turning Indians into yeoman farmers, intended one purpose of the Chippewa reservations in Michigan¹¹⁰ to be agriculture as surely as it intended that purpose for the Wind River Reservation in Wyoming.¹¹¹ Eastern reservations were intended to be homelands for the tribes that occupied them no less than western reservations.¹¹²

Professor Joseph Dellapenna has suggested that Indian tribes in riparian states should have only the same riparian rights as any state-law user.¹¹³ The gravamen of his argument appears to be the notion that tribal reserved rights to water as litigated thus far are appropriative rights, and that appropriation rights do not work in a riparian system.¹¹⁴ His initial premise, however, fundamentally misperceives the foundation of tribal reserved rights to water. Tribal reserved water rights are not appropriation rights,¹¹⁵

¹⁰⁹ See *Washington v. Wash. State Com. Passenger Fishing Vessel Ass'n*, 443 U.S. 658, 662 & n.2 (1979) (gathering treaties with tribes in what is now Washington State that contain the tribal reservation of the "right of taking fish").

Justice Thomas argued recently that the Court should distinguish between reserved rights, such as the "right of taking fish" found in most Pacific Northwest treaties, and reserved privileges, such as the "privilege of hunting, fishing, and gathering the wild rice" found in the Chippewa treaties. *Mille Lacs*, 526 U.S. at 226 (citing 1837 Treaty with the Chippewa, 17 Stat. 537). The Court, however, rejected that notion and refused to adopt the proposed distinction on the grounds that the Chippewa would not have understood any such fine legal distinction in the treaty language and that the distinction would make the treaty "essentially an empty promise because it gave the Chippewa nothing that they did not already have." *Id.* at 205-06.

¹¹⁰ See Treaty with the Chippewa of Saginaw, Swan Creek, and Black River, 1864, Arts. 4-5, 14 Stat. 637, reprinted in II CHARLES J. KAPPLER, INDIAN AFFAIRS: LAWS AND TREATIES 868, 870-71 (1904).

¹¹¹ See *In re Big Horn I*, 753 P.2d 76, 95-97 (Wyo. 1988), *aff'd by an equally divided Court sub nom.* *Wyoming v. United States*, 492 U.S. 406 (1989) (finding the primary purpose of the Wind River Reservation to be agriculture, based on the extensive agricultural provisions of the 1868 Treaty with the Shoshones and Bannacks).

¹¹² See, e.g., the Treaty of Wolf River setting aside a reservation for the Menominee Tribe, Treaty with the Menominee, May 12, 1854, 10 Stat. 1064, 1065 ("[T]he United States agree to give [the lands specified] . . . to said Indians for a home."); *Colville Confederated Tribes v. Walton*, 647 F.2d 42, 47 (9th Cir. 1981), *cert. denied*, 454 U.S. 1092 (1981) (noting that the "general purpose" of an Indian reservation is "to provide a home for the Indians.").

¹¹³ See Dellapenna, *supra* note 56, § 9.06(b)(2).

¹¹⁴ *Id.*

¹¹⁵ In fact, tribal reserved water rights differ in material ways from state-law appropriation rights. For example, tribal rights arise from the reservation of land or the preservation of aboriginal uses. Prior appropriation rights, on the other hand, do not vest until the

appropriative rights are the *state* law system used throughout the West. Instead, tribal reserved rights are neither appropriative nor riparian, but a third, distinct type of water right reserved as a matter of *federal* law.¹¹⁶

Moreover, there are a number of other problems with Professor Dellapenna's approach. First, it would mean that tribal rights, as guaranteed by federal law, depend upon annual rainfall. Indian country in the east would carry fewer tribal rights than Indian country in the west.¹¹⁷ Second, it would accord Indian tribes in riparian jurisdictions only those rights that they would have under state law. But the Court has stated definitively that federal law, not state law, determines tribal water rights.¹¹⁸ And third, it would accord tribes only those rights the tribe would have if it were nothing more than a property owner.¹¹⁹ Indian tribes, however, are not merely property owners

appropriator diverts the water and puts it to an actual beneficial use. See *Colo. River Water Conservation Dist. v. United States*, 424 U.S. 800, 805 (1976). In addition, tribal rights cannot be lost through non-use, but appropriative rights can be abandoned or forfeited if the appropriator does not maintain continued beneficial use of the water. See *id.*

¹¹⁶ See, e.g., *Winters*, 207 U.S. 564 (1908); *Arizona I*, 373 U.S. 546, 595-601 (1963).

¹¹⁷ Absent acts of Congress or treaties applicable to specific tribes, the Court has never distinguished among Indian tribes in the application of principles of federal Indian law. Moreover, as Professor Michael Blumm notes, subjecting tribal rights to pro rata reductions in times of water shortages, a feature of riparianism, "could impermissibly defeat the federal purpose of the reservation." Blumm, *supra* note 6, § 37.01(c)(2).

¹¹⁸ See *Arizona v. San Carlos Apache Tribe*, 463 U.S. 545, 571 (1983) (imposing on state and federal courts adjudicating tribal water rights "a solemn obligation to follow federal law."). See also *United States v. Adair*, 723 F.2d 1394, 1411 n.19 (9th Cir. 1983), *cert. denied*, 467 U.S. 1252 (1984) ("The fact that water rights of the type reserved for the Klamath Tribe are not generally recognized under state prior appropriations law is not controlling as federal law provides an unequivocal source of such rights."); *State ex rel. Greely v. Confederated Salish & Kootenai Tribes*, 712 P.2d 754, 765-66 (Mont. 1985) ("state courts are required to follow federal law with regard to [tribal] water rights.").

¹¹⁹ This is not to deny that Indian tribes, as property owners, may be able to assert riparian rights to fulfill needs for water over and above their reserved rights. In the context of federal reserved water rights for reservations other than those for Indians (e.g., national parks and national forests), the Supreme Court has distinguished between the primary and the secondary purposes of the federal reservation. See *United States v. New Mexico*, 438 U.S. 696, 700 (1978) (determining federal reserved water rights for the Gila National Forest). The Court held that water is impliedly reserved for the primary purposes of these federal reservations, but that water for secondary purposes must be obtained pursuant to state law. See *id.* at 702.

Subsequently, the California Supreme Court recognized the federal government's right to riparian water rights to fulfill the secondary purposes of federal reservations. See *In re Water of Hallett Creek Stream System*, 749 P.2d 324 (Cal. 1988), *cert. denied*, 488 U.S. 824 (1988). In *New Mexico*, the Court held that the primary purposes of national

within their reservations, but governments that entered into relations with the United States. Tribal reserved rights to water arise from the resulting treaties and treaty-substitutes. And the Court has been very clear that if an Indian tribe has nothing under a treaty that it would not have without the treaty, then the treaty is a nullity.¹²⁰ The Court will not assume that a tribe bargained for

forests, for which water rights are reserved implicitly as a matter of federal law, were timber management and conservation of water flows only. 438 U.S. at 707-08. In *Hallett Creek*, the federal government sought recognition of riparian water rights for the secondary purpose of wildlife enhancement within a national forest. The California Supreme Court held that as the proprietor of the lands, the United States retained its riparian rights for such purposes. See 749 P.2d at 329-30, 335-36.

Similarly, the federal government's right to seek prior appropriation water rights has been recognized in Nevada. See *Nevada v. Morros*, 766 P.2d 263 (Nev. 1988) (providing an appropriative right to the Bureau of Land Management for stock and wildlife watering purposes). For a fuller analysis of the *Hallett Creek* and *Morros* decisions, see Amy K. Kelley, *Federal-State Relations in Water*, 4 WATERS AND WATER RIGHTS § 36.04(a) (Robert E. Beck ed., 1991).

The Supreme Court has not applied the *New Mexico* primary-versus-secondary-purpose principle to Indian reservations, and its relevance to *tribal* water rights is in question. See COHEN'S HANDBOOK, *supra* note 14, at 583-84. Moreover, the state and lower federal courts have taken varied approaches to its application. For example, the Ninth Circuit determined that the "general purpose" of the Colville Reservation was a homeland for the tribes, encompassing primary purposes of both agriculture and fisheries preservation. See *Colville Confederated Tribes v. Walton*, 647 F.2d 42, 47-48 (9th Cir. 1981), *cert. denied*, 454 U.S. 1092 (1981). The Wyoming Supreme Court, by contrast, held that the sole "primary purpose" of the Wind River Reservation was agriculture. See *In re Big Horn I*, 753 P.2d 76, 97 (Wyo. 1988), *aff'd by an equally divided Court sub nom. Wyoming v. United States*, 492 U.S. 406 (1989). Nonetheless, the California court's ruling in *Hallett Creek* should be applicable to Indian reservations, and tribes should be entitled to seek state-law riparian (or in the west, appropriation) rights for water for reservation purposes beyond those for which the reservation was created. See *Royster*, *supra* note 24, at 103. Thus, for example, the Wind River Tribes should be able to seek state-law prior appropriation rights for water for "industrial" purposes, which the state court expressly rejected as a purpose for which the reservation had been established. See *Big Horn*, 753 P.2d at 98.

¹²⁰ See *United States v. Winans*, 198 U.S. 371 (1905); *Washington v. Wash. State Com. Passenger Fishing Vessel Ass'n*, 443 U.S. 658 (1979); *Minnesota v. Mille Lacs Band of Chippewa Indians*, 526 U.S. 172, 205-206 (1999).

The issue arose with respect to the language in treaties with the tribes of the Pacific Northwest reserving the right to fish "in common with" non-Indians at the tribes' usual fishing places, including those places located outside reservation borders. See *Fishing Vessel*, 443 U.S. at 662 n.2. In *Winans*, the Winans brothers owned land surrounding a traditional Yakama fishing place on the Columbia River. See 198 U.S. at 371-72. The Winans argued that because their property ownership barred access to non-Indians under state trespass law, and because tribal rights were held "in common with" non-Indians, tribal members should also be subject to state trespass restrictions. *Id.* at 376. The Court,

only those rights it would have had anyway, and it will not read treaties and treaty-substitutes as guaranteeing only those rights that tribes would have had under state law.

The fundamental principles of the federal reserved rights doctrine of tribal water rights thus should apply in the eastern United States as well as in the West.¹²¹ Those principles ensure that tribes east of Kansas City¹²² are guaranteed the same treaty and treaty-substitute rights, as a matter of federal law, as Indian tribes west of that point.

however, held that although the fishing right was in common, “the Indians were secured in its enjoyment by a special provision of means for its exercise.” *Id.* at 381. Their right of taking fish, the Court determined, necessarily included the right to cross private land to reach their fishing places and the right to occupy it for the purposes of the treaty right. “No other conclusion would give effect to the treaty.” *Id.*

In *Fishing Vessel*, 74 years after *Winans*, the State of Washington reiterated the *Winans*’ argument, with the same result. The State argued that the treaty provision reserved only access to the fishing places and an “equal opportunity” with non-Indians once there to attempt to catch fish. 443 U.S. at 675-76. The Court again rejected the contention that the treaty provisions guaranteed to the tribes only the rights the tribes would have had without the treaties, holding that the tribes reserved a right to take a share of the fish. *See id.* at 679. The Court reasoned that the tribes bargained for the provisions in order to continue their aboriginal fishing practices, and “they would be unlikely to perceive a ‘reservation’ of that right as merely the chance, shared with millions of other citizens, occasionally to dip their nets into the territorial waters.” *Id.*

Moreover, the Court drew an express analogy to reserved water rights. After discussing a half-dozen of its prior cases that rejected the “equal opportunity” with non-Indians view of treaty reservations, the Court noted that “[a] like interpretation . . . has been followed by the Court with respect to . . . water rights that were merely implicitly secured to the Indians by treaties reserving land—treaties that the Court enforced by ordering an apportionment to the Indians of enough water to meet their subsistence and cultivation needs.” *Id.* at 684 (citations omitted). This analogy helps clarify that the Court, in fashioning the tribal reserved water rights doctrine, did not intend tribal water rights to be determined by state law principles.

¹²¹ As Professor Dellapenna notes, Montana at the time of the 1908 *Winters* decision was thought to be a riparian jurisdiction. *See Dellapenna, supra* note 56, § 9.06(b)(2). On that basis, the doctrine of tribal reserved rights to water was first announced within the context of riparianism, and only subsequently developed the specific details necessary to coordinate those reserved rights with state-law appropriative rights. *See supra* Part III. Read against a riparian backdrop, *Winters* stands for the proposition that in times of water shortage, Indian tribes do not share in any *pro rata* reduction of water. Rather, tribal reserved rights are protected as a matter of federal law against the subsequent exercise of riparian rights.

¹²² Professor Dellapenna uses Kansas City as a useful shorthand for the dividing line between eastern riparian jurisdictions and western appropriation states. *See Dellapenna, supra* note 56, § 6.01.

B. *Implementing Tribal Reserved Rights in Riparian Systems*

Although the fundamental principles of tribal reserved water rights apply in eastern states the same as they apply in western states, the specific details of how to integrate tribal reserved rights with the state-law rights so that a workable system emerges may differ between appropriation and riparian jurisdictions. More particularly, the issues in riparian jurisdictions revolve around quantification of tribal reserved rights, and the administration and enforcement of a coordinated system.

The quantification of tribal reserved water rights in riparian states will depend upon the purpose for which water was reserved. Where a reservation was set aside to create an agrarian society, the measure of the water right will likely be the same as it is in the western states: practicably irrigable acreage, the shorthand measure for that amount of water needed to make the land productive for agricultural purposes. The Supreme Court has rejected a more indeterminate standard of "reasonably foreseeable needs," holding that "the only feasible and fair way by which reserved water for the reservations can be measured is irrigable acreage."¹²³ Where a reservation was set aside to preserve traditional agriculture, the western standard of historical water use may prove appropriate. And where a reservation was set aside to preserve other aboriginal practices, the measure of the water right will likely, again as in the West, be determined by the specific circumstances of the practice and the watercourse.

Nonetheless, the quantification of tribal rights allows for innovative approaches. In the prior appropriation jurisdictions, tribal reserved rights are nearly always quantified as a set amount: a specific number of acre feet or a flow of a specific number of cubic feet per second.¹²⁴ That kind of definite-amount quantification is generally necessary in prior appropriation jurisdictions in order to provide predictability and protection of junior users against arbitrary curtailment. Although set-amount quantification may prove to be advantageous in the East as well, other approaches are possible in systems where the states do not prize certainty as highly as western states do. For example, the Seminole Tribe of Florida negotiated a compact that provides for a tribal water right of fifteen percent of the available water from

¹²³ *Arizona I*, 373 U.S. 546, 600-01 (1963).

¹²⁴ One exception was the quantification of a fisheries right as that amount of water necessary to keep the stream at 68 degrees or less, with a minimum flow of 20 cubic feet per second. See *United States v. Anderson*, 6 Indian L. Rep. F-129, F-130 (E.D. Wash. 1979).

specified sources, rather than a set amount.¹²⁵ The flexibility offered by apportionment as a percentage of available water, or as a percentage subject to a fixed minimum amount, may in some cases better serve both tribes and states.

Once the tribal water right is determined—whether as a determinate or indeterminate amount, or some combination—that right must then be coordinated with state-law riparian rights to establish a workable integrated system. That coordination presents different issues in regulated riparian and in common-law riparian jurisdictions.

Certainly integrating tribal reserved rights in a regulated riparian jurisdiction poses fewer administrative headaches than doing so in a common-law riparian state. Regulated riparianism necessarily introduces into riparian jurisdictions concepts of quantification and temporal right.¹²⁶ Water use permits specify a quantity of water that the riparian owner may use for a specified term of years, with an upper limit on the combined riparian uses of a watercourse in order to protect the safe yield or minimum water levels of the source.¹²⁷ Once the amount of the tribal reserved right is determined, it may simply be possible to add that amount to the minimum flow that is beyond riparian use.¹²⁸ In other words, the water available for riparian use permits would be the available water in a source over and above the safe yield plus tribal reserved rights. That approach would guarantee the paramount and perpetual nature of tribal water rights and, at the same time, minimize the burden of administering a coordinated system.

Integrating tribal reserved rights into a workable system in a common-law riparian jurisdiction will undoubtedly prove more difficult. Much of the difficulty arises from the attempt to coordinate a set of quantified rights for tribes with a set of correlative rights for riparian owners. Tribal reserved rights cannot be subject to correlative use, however, without destroying the paramount nature of those rights and allowing state law to trump federal rights. The issue then becomes how to integrate the two types of rights.

One possibility is to incorporate into state riparian law the doctrine that a riparian use that interferes with a paramount tribal reserved right is unreasonable per se. Reasonableness of use among state-law riparian users

¹²⁵ The Seminole Compact is discussed *infra* at text accompanying notes 137–142.

¹²⁶ See *supra* section IV(B).

¹²⁷ See *supra* notes 102–103 and accompanying text.

¹²⁸ As noted earlier, however, any riparian use that began prior to the existence of the tribal reserved right would be paramount to the tribal right.

would continue to be determined according to common-law principles,¹²⁹ but a kind of strict liability would apply to interference with paramount tribal rights.

Another, related approach is to satisfy the tribal water right before any riparian rights arising subsequent to the tribal right.¹³⁰ In case of water shortage, the burden would be allocated among the riparian users.¹³¹ Professor Michael Blumm suggests that this approach is consistent with the reserved rights doctrine because it protects the paramount nature of the tribal rights.¹³² It is also consistent with the correlative nature of common-law riparian rights, which has traditionally allocated the burden of any water shortage among the riparian owners. Under this approach, riparian owners maintain the same relationship to one another that they presently have under the common law, while protecting tribal reserved rights from state-law interference.

Either approach has enforcement difficulties. Because common-law riparianism does not depend upon an administrative structure, it is enforced

¹²⁹ See Dellapenna, *supra* note 56, §§ 7.02(d)(2)-(3).

¹³⁰ Professor Dellapenna worries that this would create a problem of circular priorities: riparian A can show priority over tribe B which has priority over riparian C, but a court concludes that C's use is more reasonable than A's. See Dellapenna, *supra* note 56, § 9.06(b)(2). He then asserts that the court could protect C's use only to the extent of A's quantity. It is true that if there is insufficient water for both B and C, the tribal right is paramount over C. But the paramount nature of the tribe's right does not affect the relations between A and C as a matter of state riparian law. If A's use is determined to be a permissible reasonable use under the state's law, then it is protected against interference from the exercise of the tribal right. If A's use is determined not to be a permissible reasonable use in light of C's more reasonable use, then state law will enjoin A and A will cease to use the water. Nothing in that injunction, however, alters the relations between riparian A and tribe B: if A is using a water right that was in existence prior to the existence of the tribal right, the tribe cannot interfere with it. Similarly, if C's use is held more reasonable by the state court, then C is manifestly entitled to use the water as a matter of state law. But C's use cannot interfere with the paramount federal-law rights of the tribe. Regardless of whether C's use replaces A's as the more reasonable or supplements A's on the ground that both together are reasonable, C's use is subject to the tribal reserved rights. There is thus no circle of priorities to cause concern. C's rights with respect to the federal-law tribal rights do not change regardless of whether or not A's use is allowed to continue as a matter of state law.

¹³¹ See Blumm, *supra* note 6, § 37.01(c)(2) (referencing Eva Hanna Hanks, *Peace West of the 98th Meridian—Solution to Federal-State Conflicts over Western Waters*, 23 RUTGERS L. REV. 33, 39-40 n.25 (1968)).

¹³² See *id.*

through private lawsuits in state court.¹³³ Without a state administrative agency to turn to, any tribe contending that a riparian use is interfering with a paramount tribal right must, if negotiations fail, bring suit in federal or state court.¹³⁴ The expense and delay involved in pursuing litigation could severely deplete tribal resources, perhaps forcing tribes to choose between allocating often-limited funds to litigation or foregoing a challenge to riparian uses that interfere with the tribal reserved rights.

In addition, either approach arguably involves the issue of temporal priority for paramount tribal rights. Although it appears difficult to both protect the federal-law tribal rights and avoid some temporal principle, it is not impossible. The Court itself has suggested a way to conceptualize tribal reserved water rights as an apportionment of water.¹³⁵ Viewed in that light, the question is not which user (tribe or riparian) is first in time, but how much water is apportioned to each. The tribal apportionment, however quantified, is available for tribal use. All remaining water is available for riparian use. Neither has “priority” over the other; rather, each has a right to use its portion of the water source according to the appropriate law: federal law for tribal reserved rights and state law for riparian rights.

If the difficulties in coordinating tribal and riparian rights highlight anything, it is that this is an issue that cries out for negotiated solutions. Water rights settlements, increasingly common in the western states, offer the considerable advantage of catering to the specific needs and conditions of the parties.¹³⁶ In fact, the only lawsuit filed to date to determine tribal water rights in a riparian state resulted in a settlement act. The Seminole Water Rights Compact,¹³⁷ incorporated as a matter of federal law into the Seminole

¹³³ Riparian rights are thus more in the nature of tort actions than property rights. See Dellapenna, *The Right to Consume Water Under “Pure” Riparian Rights*, 1 WATERS AND WATER RIGHTS § 7.02(d)(1) (Robert E. Beck ed., 1991).

¹³⁴ Given the mixed reception of tribal claims to reserved water rights in western state courts, most tribes would likely choose to file suit in federal district court.

¹³⁵ See *Fishing Vessel*, 443 U.S. at 684 (“an apportionment to the Indians of enough water to meet their subsistence and cultivation needs.”).

¹³⁶ See generally Blumm, *supra* note 6, § 37.04(c)(1) (1999); JON C. HARE, INDIAN WATER RIGHTS: AN ANALYSIS OF CURRENT AND PENDING INDIAN WATER RIGHTS SETTLEMENTS (1996); PETER W. SLY, RESERVED WATER RIGHTS SETTLEMENT MANUAL (1988); INDIAN WATER IN THE NEW WEST (Thomas R. McGuire, et al., 1993).

¹³⁷ 25 U.S.C. § 1772e. The Compact is reprinted in *Seminole Indian Land Claims Settlement Act of 1987: Hearing on S. 1684 Before the Senate Select Comm’n on Indian Affairs*, 100th Cong., 1st Sess., 83-122 (1987); the text of the Compact is also available at <http://www.seminoletribe.com/services/water/compact.doc> (last visited October 10, 2000) [hereinafter

Indian Land Claims Settlement Act of 1987,¹³⁸ represents a unique agreement tailored to the specific circumstances of the parties.

Nonetheless, the Seminole Compact may serve as a template for tribes and states elsewhere in the East. It protects the Seminole Tribe's rights by guaranteeing a perpetual right to a specified amount of water, free from state regulation.¹³⁹ At the same time the Seminole Compact does not quantify the tribal right as an absolute amount, but rather expresses the right as a percentage of the water available from specified sources.¹⁴⁰ To ease the administrative burdens on the state, the Tribe agreed to file an annual plan with the state water management district¹⁴¹ and to comply with most of the non-procedural "terms and principles" of the state water system.¹⁴² The Seminole Compact thus preserves the paramount nature of tribal reserved rights, but with an eye to the indeterminacy of riparian rights and the difficulties of administering a coordinated system. It may, therefore, prove a valuable model in other riparian jurisdictions.

VI. CONCLUSION

Although the doctrine of tribal reserved rights to water has developed within the context of western prior appropriation law, tribal water rights remain a distinct body of federal-law rights that transcend the particulars of the state-law system. The fundamental principles of those federal-law rights, designed to ensure that Indian tribes retain the benefits of their reservations and the rights they bargained for in treaties and agreements, govern tribal

Seminole Hearing]. See generally Jim Shore & Jerry C. Straus, *The Seminole Water Rights Compact and the Seminole Indian Land Claims Settlement Act of 1987*, 6 J. LAND USE & ENVTL L. 1 (1990); Barbara S. Monahan, *Note, Florida's Seminole Indian Land Claims Agreement: Vehicle for an Innovative Water Rights Compact*, 15 AM. INDIAN L. REV. 341 (1991).

¹³⁸ Seminole Indian Land Claims Settlement Act of 1987, Pub. L. No. 100-228, 101 Stat. 1556 (codified as amended in 25 U.S.C. § 1772).

¹³⁹ *Seminole Hearing*, *supra* note 137, at 41-44.

¹⁴⁰ Seminole Compact at 25-27, reprinted in *Seminole Hearing*, *supra* note 137, at 111-13. The percentage of the tribal right is generally fifteen percent. In this sense, the Seminole Compact appears to apportion the water between the Tribe and the state riparian users. See *supra* note 135 and accompanying text (discussing the idea of viewing tribal reserved rights in riparian states as an apportionment rather than a priority).

¹⁴¹ Florida practices a form of regulated riparianism, requiring a state permit for riparian uses. Water use is administered not by a central state agency, but by regional water management districts. See FLA. STAT. ANN. §§ 373.203-249.

¹⁴² *Seminole Hearing*, *supra* note 137, at 41-44.

water rights nationwide, regardless of the water law system employed by the states. Tribes in eastern riparian states, no less than those in western appropriation states, hold paramount rights to water to support both the purposes for which their reservations were set aside and their reserved rights to continue aboriginal practices.

Nonetheless, the distinctions between the state law systems of prior appropriation and riparianism suggest that the tribal right to water might need to be implemented differently in eastern states. In the West, inadequate water supplies give rise to a system that prizes certainty and predictability in water rights. The definite quantification of and priority dates assigned to tribal water rights in western states allow the Indian rights to be coordinated with state-law appropriation rights in a workable integrated system. In eastern jurisdictions, however, the law of riparian rights rests on correlative rights to the use of water, a system that is inherently uncertain and relatively unpredictable. Although the modern move to regulated riparianism introduces aspects of quantification and temporal priority, water rights even in regulated riparian states generally do not have the absolute perpetual characteristics of prior appropriation rights.

Those differences may render the details of implementing tribal water rights in western states—definite quantification and assignment of a priority date—less useful in eastern jurisdictions. Coordinating Indian reserved rights to water with riparian state-law systems may be better accomplished through some type of apportionment. Tribal water rights can be quantified, whether as a definite amount or a percentage of available water or some other approach negotiated by the tribe and the state, with the tribal “share” in the watercourse apportioned to tribal use. All water not reserved to tribal rights would be apportioned to the state-law users, to be allocated among those users as the law of the particular state provides.

Coordinating tribal reserved rights and state-law riparian rights is not without difficulty, but this article suggests ways to minimize the problems associated with integrating the two types of water rights. The approaches outlined here preserve for Indian tribes the fundamental principles of their federal-law rights, while offering feasible means of accommodating the particular needs of two disparate systems of water rights. Whether Indian tribes and eastern states adopt these strategies, or arrive at alternative negotiated agreements tailored to their specific needs, it is imperative that tribes and states in the East begin to work together to recognize tribal water rights and integrate them with state-law riparian rights into a coordinated and workable system.