DOCTRINAL ANACHRONISM?: REVISITING THE PRACTICABLY IRRIGABLE ACREAGE STANDARD IN LIGHT OF INTERNATIONAL LAW FOR THE RIGHTS OF INDIGENOUS PEOPLES

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"If one may mark the turn of the 20th century by the massive expropriation of Indian lands, then the turn of the 21st century is the era when the Indian tribes risk the same fate for their water resources."[1]

I. INTRODUCTION

The year 2008 will mark the 100th anniversary of the *Winters v. United States*[2] decision and its implicit promise to protect the water resource needs of Native Americans infinitely into the future. While *Winters* reserved sufficient water to fulfill the current and future needs of Indians, since 1908 precious little water has actually reached tribes.[3] Instead, the federal government has invested billions of dollars in water resource projects that benefit non-Indians and essentially use water that was reserved for Native Americans.[4] For Indian reserved water rights, the problem of water scarcity is exacerbated by the water allocation system used in the western United States, which awards a high priority date to those who first put the water to use.[5] Because the priority date for Indian reserved water rights is the date the reservation was created, and most reservations were established before non-Indian settlers began using water, Indians tend to have superior water rights to most users under the prior appropriation system.[6]

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1. *In re* the Gen. Adjudication of All Rights to Use Water in the Big Horn River Sys., 835 P.2d 273, 303-04 (Wyo. 1992) (Golden, J., dissenting) (quoting Joseph R. Membrino, *Indian Reserved Water Rights, Federalism and the Trust Responsibility*, 27 LAND & WATER L. REV. 1, 14 (1992)).

2. 207 U.S. 564 (1908).

3. *See* Lee Harold Storey, *Leasing Indian Water off the Reservation: A Use Consistent With the Reservation's Purpose*, 76 CAL. L. REV. 179, 181 (1988); DAVID H. GETCHES, WATER LAW IN A NUTSHELL 310 (3d ed. 1997).

4. Storey, *supra* note 3, at 181; GETCHES, *supra* note 3, at 310.

5. GETCHES, *supra* note 3, at 7-8.

6. *Id.* at 316.

Thus, on paper, Indian water rights are very strong, but in practice many tribes have found that the road to getting actual "wet" water to the reservation is long.[7]

While *Winters* established that Indians have a right to water, it was not until 1963 that the United States Supreme Court approved of a standard to measure the exact amount of water to which Indians were entitled.[8] The Supreme Court held that Indian reserved water rights were to be quantified based on the number of acres of land on the reservation that are capable of being irrigated.[9] In 1983, the Supreme Court modified the practicably irrigable acreage (PIA) standard by requiring not only that the irrigation of reservation land be technically feasible, but economically feasible as well.[10] In 1989, the Supreme Court once again had the occasion to consider the PIA standard in *Wyoming v. United States*.[11] After Justice O'Connor's recusal, the Court upheld the PIA standard in a four to four memorandum opinion. It was later revealed that Justice O'Connor had written the draft majority opinion that would have radically altered the PIA standard.[12] In 2001, the Arizona Supreme Court became the first court in the United States to formally reject the PIA standard when it instead created a homeland standard to be used in quantifying Indian water rights.[13]

To practitioners and students of modern federal Indian law who are unfamiliar with the historic development of Indian law in the United States, the use of the PIA standard may not seem particularly objectionable.[14] However, a closer look at the assumptions underlying the creation of the PIA standard reveals

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7. *See* Susan D. Brienza, *Wet Water vs. Paper Rights: Indian and Non-Indian Negotiated Settlements and Their Effects*, 11 STAN. ENVTL. L.J. 151, 160 (1992).

8. Arizona v. California, 373 U.S. 546 (1963) (adopting the practicably irrigable acreage standard for quantifying Indian water rights).

9. *Id.* at 600.

10. Arizona v. California, 460 U.S. 605, 641 (1983) (accepting the Special Master's calculation of practicably irrigable acreage); Walter Rusinek, *A Preview of Coming Attractions?* Wyoming v. United States *and the Reserved Rights Doctrine*, 17 ECOLOGY L.Q. 355, 371 (1999) (noting that the Special Master's final step in calculating practicably irrigable acreage was to determine economic feasibility).

11. 492 U.S. 406 (per curiam).

12. Justice O'Connor's draft majority opinion, which was written before she recused herself, is reprinted in the appendix to Andrew C. Mergen & Sylvia F. Liu, *A Misplaced Sensitivity: The Draft Opinions in* Wyoming v. United States, 68 U. COLO. L. REV. 683, 725-40 (1997).

13. *In re* Gen. Adjudication of All Rights to Use Water in the Gila River Sys. & Source, 35 P. 3d 68, 76 (Ariz. 2001).

14. *See* Robert A. Williams, Jr., *Columbus's Legacy: Law as an Instrument of Racial Discrimination Against Indigenous Peoples' Rights of Self-Determination*, 8 ARIZ. J. INT'L & COMP. L. 51, 67-68 (1991) [hereinafter Williams, *Columbus's Legacy*] (noting that practitioners and students who are not familiar with the racist origins of the core doctrines of modern federal Indian law do not realize that citing to decisions incorporating these doctrines perpetuates cultural racism).

an acceptance of assimilationist policies[15] based on the doctrine of discovery. Historically, the doctrine of discovery was considered to be a principle of international law and was used to legitimize conquest based on the idea that indigenous religion and culture were inferior to Christianity.[16] The doctrine of discovery was incorporated into United States law through Justice John Marshall's opinion in *Johnson v. McIntosh*, 21 U.S. (8 Wheat.) 543 (1823)[17] and was also the implicit rationale for recognizing reserved Indian water rights in *Winters v. United States*, 207 U.S. 564 (1908). The PIA standard incorporates doctrine of discovery principles by suggesting that Indians have water rights only to the extent that they use them for agricultural purposes.[18] Essentially, the PIA standard enforces doctrine of discovery principles by awarding water to Indians because the use of water for irrigation purposes would further the assimilationist goal of changing nomadic Indian tribes into "civilized" farmers. Because the PIA standard incorporates anachronistic doctrine of discovery principles to quantify Indian water rights, it perpetuates the assimilationist ideas of the past.[19]

It is the position of this Note that the PIA standard should be revisited not only because the split Supreme Court opinion in *Wyoming v. United States* signals that its acceptance by the Court is coming to an end,[20] but also because principles of modern international human rights law suggest that indigenous peoples' rights to control their natural resources should be guided by principles of self-determination. Tribes may favor the PIA standard because it gives them a powerful bargaining position.[21] However, the purpose of this Note is not to argue that Indian tribes deserve more or less water, but to highlight the assimilationist policies the PIA standard was designed to promote and to call for a new standard based on principles of modern international human rights law.

Part II of this Note examines the development of Indian water rights in the United States and underlines the conflicts inherent with federally reserved Indian water rights in the prior appropriation system used by many western states. It also examines the development of the PIA quantification method. Part III looks at the way the PIA standard is treated in the courts. Part IV provides an overview of the organization of international and regional human rights systems and how

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15. *See* Gina McGovern, Note, *Settlement or Adjudication: Resolving Indian Reserved Rights*, 36 ARIZ. L. REV. 195, 212-13 (1994).

16. DAVID H. GETCHES ET AL., FEDERAL INDIAN LAW 45 (4th ed. 1998) [hereinafter FEDERAL INDIAN LAW].

17. Robert Williams, *Encounters on the Frontiers of International Human Rights Law: Redefining the Terms of Indigenous Peoples' Survival in the World*, 1990 DUKE L.J. 660, 672-73 (1990) [hereinafter Williams, *Encounters*].

18. *See* Winters v. United States, 207 U.S. 564, 576 (1908) (finding that Indian reserved water rights were necessary in order for Indians to learn "agriculture and the arts of civilization").

19. *See* Williams, *Columbus's Legacy*, *supra* note 14, at 67-68.

20. McGovern, *supra* note 15, at 206.

21. *Id*.

instruments like treaties, international declarations, and customary international law can work to protect indigenous peoples' human rights. Part V traces the incorporation of doctrine of discovery principles into United States federal Indian law and argues that instead of doctrine of discovery principles, the right of indigenous peoples to self-determination should guide the quantification of Indian water rights in the United States. This Note concludes with a call to re-examine the PIA standard in light of the right of indigenous peoples to self-determination under international law.

II. HISTORY OF RESERVED INDIAN WATER RIGHTS IN THE UNITED STATES[22]

A. Water Law in the Western United States

While water rights in many eastern states are based on the riparian system,[23] rights to surface water in western states are administered according to the prior appropriation system, or some hybrid thereof.[24] The system is based on the "first in time, first in right" idea borrowed from the system used to settle mining disputes on public land.[25] The priority date is the date the water was first appropriated for a beneficial use.[26] Prior appropriation awards the most senior water rights with the earliest priority date to those who were the first to beneficially use the water.[27] In times of shortage, those with the most senior

22. This Note will focus on Indian water rights to surface water in the western United States. The question of whether Indian water rights encompass both groundwater and surface water is beyond the scope of this Note. Because Indian water rights are quantified as part of a state's general adjudication process for surface water rights, the extent to which Indian rights to groundwater are addressed may depend on that particular state's laws regarding hydrologically connected groundwater. McGovern, *supra* note 15, at 202. Many states have separate systems for quantifying rights to surface water and groundwater, despite the important connection between the two sources. *See generally* ROBERT GLENNON, WATER FOLLIES: GROUNDWATER PUMPING AND THE FATE OF AMERICA'S FRESH WATERS (2002) (noting the danger of excessive groundwater pumping to surface water flows). However, some states have moved to a unified system for groundwater and surface water. McGovern, *supra* note 15, at 199. For a discussion of whether Indian reserved water rights encompass groundwater, see *id*. at 202-04.

23. GETCHES, *supra* note 3, at 4. The riparian system awards water rights based on ownership of land adjacent to a waterway.

24. *Id.* at 7-8 (listing states which use a system based on prior appropriation); *see, e.g.*, ARIZ. REV. STAT. ANN. § 45-151(A) (establishing the prior appropriation doctrine in Arizona law).

25. GETCHES, *supra* note 3, at 6.

26. *Id.* at 74; *see, e.g.*, ARIZ. REV. STAT. ANN. § 45-151(B)-(C) (defining "beneficial use" in Arizona).

27. GETCHES, *supra* note 3, at 74.

rights receive all of their water allotment, while junior users may receive less, or none, of their usual entitlement.[28] No consideration is given to whether the junior use is more socially important or economically valuable; the only relevant consideration is the priority date.[29]

In order to secure a permit, new surface water appropriators must make known the point of their diversions, the amount and purpose of the appropriation, and must give notice to other appropriators who may be affected by their use.[30] Permits under state law are awarded for specific quantities of water and must be used only for the purpose for which the permit was granted.[31] If a permit holder wants to change the way he or she uses their water, the holder must request permission from the permitting authority.[32] A change of use will generally be allowed only if no harm to other users is caused by the change in use.[33]

In addition, water users in a prior appropriation system must be careful to continually put their water to beneficial use because water rights may be lost due to non-use.[34] State statutes usually provide for loss of water rights through abandonment or forfeiture.[35] Abandonment statutes require both non-use and intent to abandon,[36] while forfeiture statutes provide for involuntary loss of water rights through non-use for a period of time set by statute.[37]

B. Federally Reserved Indian Water Rights

Indian reserved water rights conflict in many ways with the prior appropriation system discussed above.[38] The priority date for Indian reserved water rights is the date the reservation of land for Indian use was made, which is usually the date the treaty or executive order creating the reservation was signed.[39] Because most Indian reservations were created before non-Indians began putting water to beneficial use, Indian reserved rights have higher priority dates according to the prior appropriation system.[40] Unlike permit holders in the state system,

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28. *Id.* at 75.
29. *Id.* at 99.
30. McGovern, *supra* note 15, at 200; GETCHES, *supra* note 3, at 142.
31. McGovern, *supra* note 15, at 200; GETCHES, *supra* note 3, at 161.
32. GETCHES, *supra* note 3, at 119.
33. *Id.* at 162.
34. *Id.* at 176.
35. *Id.*
36. *Id.*
37. *Id.* at 178.
38. McGovern, *supra* note 15, at 199; *see also* Brienza, *supra* note 7, at 155 (listing seven ways Indian water rights may trump water rights held under a prior appropriation system).
39. McGovern, *supra* note 15, at 199; GETCHES, *supra* note 3, at 308.
40. McGovern, *supra* note 15, at 199; GETCHES, *supra* note 3, at 316-17.

Indian tribes do not lose their right to water through non-use.[41] Tribes also are not subjected to the state permitting requirements, so their water rights are not restricted to definite quantities put to a specific use.[42] Indian reserved rights are thus inherently at odds with the prior appropriation system, and the existence of unquantified Indian water rights creates uncertainty for all water users.[43]

In studying reserved Indian water rights, it is helpful to keep in mind the dual meaning of the word "reservation." The term reservation has a legal meaning broader than the typical use of the term to describe the area of land set aside for Indians.[44] In the context of Indian reserved rights, a reservation can be understood as a right already in existence that the tribe retained when it ceded lands to the United States government by treaty.[45] The idea that tribes retain reserved rights at the time of making a treaty is also helpful in conceptualizing Indian water rights in the prior appropriation framework discussed above because the date the reservation of water rights was made is the date the Indian reservation was created.[46]

Although many commentators begin their discussion of Indian water rights with the landmark 1908 *Winters v. United States*[47] case, the real origin of the reserved rights doctrine as applied to Indian treaties is the 1905 *United States v. Winans*[48] case, which was cited by the *Winters* court.[49] *Winans* involved the interpretation of an 1859 treaty between the Yakima Nation and the United States in which the Yakima tribe ceded their interest in a specified parcel of land, while reserving the right to fish "at all usual and accustomed places," even off of their new reservation land.[50] The United States brought the action on behalf of the Yakima Nation to enjoin non-Indians from obstructing the Yakima's off-reservation fishing rights.[51] In holding that the State of Washington had no authority to regulate Indian fishing rights, the Court relied heavily on the canon of construction applied to Indian treaties that treaties are to be construed as the Indians would have understood them.[52] Since the right to fish was one "not much

41. McGovern, *supra* note 15, at 199.

42. *Id. But see In re* the Gen. Adjudication of All Rights to Use Water in the Big Horn River Sys., 835 P.2d 273, 284 (Wyo. 1992) (finding that the Wyoming state engineer had the authority to administer the water rights permitting system on the Wind River Indian Reservation).

43. McGovern, *supra* note 15, at 199; GETCHES, *supra* note 3, at 316-17.

44. *See* FEDERAL INDIAN LAW, *supra* note 16, at 136.

45. *Id.*

46. *See supra* Part IIA.

47. 207 U.S. 564.

48. 198 U.S. 371.

49. 207 U.S. at 577.

50. 198 U.S. at 378.

51. *Id.* at 377.

52. *See id.* at 380 ("And we have said we will construe a treaty with the Indians as 'that unlettered people' understood it.").

less necessary to the existence of the Indians than the atmosphere they breathed,"[53] the treaty could not have been understood by the Indians as limiting their right to fish. Instead, the treaty was to be interpreted "not [as] a grant of rights to the Indians, but a grant of rights from them–a reservation of those not granted."[54] The treaty was not a grant of the right to fish, it was a reservation of the Indians' pre-existing fishing rights.[55] It is important to keep this idea in mind when analyzing problems involving Indian water rights: tribes have a right to water not because it was given to them when they were put on reservations, but because the tribes kept their right to use water when they ceded parts of their land.[56]

Thus, *Winans* established a baseline for the interpretation of rights reserved by Indians in the making of treaties. Once *Winans* established the reserved rights doctrine, *Winters v. United States* applied the doctrine to water rights.[57] *Winters* cited the *Winans* case for the proposition that "[t]he power of the government to reserve the waters and exempt them from appropriation under the state laws is not denied."[58]

In *Winters*, the United States brought suit on behalf of the Indians of the Fort Belknap Reservation in Montana to enjoin non-Indian settlers from using dams or other devices to diminish the flow of the Milk River on the Fort Belknap reservation.[59] However, unlike the express language regarding fishing rights used in the treaty signed by the Yakima Nation in *Winans*, the treaty establishing the Fort Belknap reservation contained no provision clearly reserving the Indians' right to use the Milk River.[60] The issue was whether a right to use water from the Milk River could be implied from the circumstances surrounding the making of the treaty.[61] In dealing with this issue, the Supreme Court first addressed the non-Indians' prior appropriation claims.[62]

The settlers claimed that by diverting water from the Milk River and putting it to beneficial use through irrigation, they not only established water rights under the laws of Montana, but they also acted according to the wishes of the United States government by settling on the former Indian land and cultivating it.[63] The settlers claimed that by putting the Indians on a smaller tract of reserved land, the government's purpose for the ceded land was to have it "thrown open to settlement, to the end that the same might be settled upon, inhabited, reclaimed,

53. *Id.* at 381.
54. *Id.* at 381.
55. *See id*.
56. *See* Winters v. United States, 207 U.S. 564, 576 (1908).
57. 207 U.S. 564.
58. *Id*. at 577.
59. *Id.* at 565.
60. *Id.* at 576.
61. *Id*.
62. *Id*. at 566.
63. Winters v. United States, 207 U.S. 564, 568 (1908).

cultivated, and communities of civilized persons be established thereon."[64] The settlers began diverting and using water from the Milk River shortly after Congress ratified the treaty creating the Fort Belknap reservation on May 1, 1888, but before the Indians began using water on their reservation.[65] Since the settlers had the earlier priority date under state law, they claimed that the Indians, as the junior user, could not enjoin the settlers from building dams on the Milk River.[66]

However, instead of focusing on the settlers' priority date, the Court found that the case turned on the agreement of May 1, 1888, which created the smaller Fort Belknap Reservation.[67] The Court looked to the circumstances surrounding the making of the treaty to answer the question of whose water rights were superior.[68] At the time the Fort Belknap Reservation was created, the government's policy was to change the Indians into a "pastoral and civilized people," by putting them on smaller tracts of land suitable for cultivation by irrigation, if necessary.[69] Yet in the 1888 treaty, the Indians ceded a large part of irrigable land to the government without expressly reserving use of the water of the Milk River for their new smaller reservation.[70] The Court asked the question whether the Indians could reduce the area they were to occupy, and yet knowingly give up access to the waters which were the only way to make the land valuable or adequate.[71]

In answering this question, Justice McKenna relied on contract analysis.[72] The Indians could not have been expected to "exclude by formal words every inference which might militate against . . . the declared purpose of themselves and the government, . . . even if it could be supposed that they had the intelligence to foresee [that the words might be used against them]."[73] Since the Indians did not have the "intelligence" to reserve water rights for themselves when they agreed to the Fort Belknap treaty, the Court had to infer the existence of their water rights in order to fulfill the purpose of the treaty.[74] The only way to assure the Indians would become a "pastoral and civilized people" was to ensure they had enough water to irrigate their land; otherwise, their new reservation would be "valueless."[75] Congress would not take from the Indians the means of continuing their old habits, i.e. the vast tract of land on which the Indians used to hunt, without leaving them the means to change to new habits, i.e. water with which to

64. *Id.* at 568.
65. *Id.*
66. *Id.* at 570.
67. *Id.* at 575.
68. *Id.* at 576-77.
69. Winters v. United States, 207 U.S. 564, 576 (1908).
70. *Id.* at 576.
71. *Id.*
72. *See id.*
73. *Id.* at 577.
74. *See id.*
75. *See* Winters v. United States, 207 U.S. 564, 576 (1908).

farm.[76] Additionally, because Congress intended to change Indians into perpetual farmers, the Indians' water rights were reserved "for a use which would be necessarily continued through the years."[77]

In *Winters*, the Court held that even though the settlers had established water rights under state law and began using water before the Indians had done so, the Indians had the prior water right.[78] Because Indian water rights are implied from circumstances surrounding treaty negotiations, the Indians' water rights were created at the time the Fort Belknap Reservation was created, on May 1, 1888.[79]

That the *Winters* decision came out of a *Lochner*-era Court[80] not known for its views on minority rights is ironic.[81] Justice McKenna, who wrote for the eight to one majority, ignored social considerations and framed the reserved water rights issue in simple contract terms.[82] Justice McKenna noted that the tribe previously had "command of the lands and the waters–command of all their beneficial use" and rejected the idea that the tribes had "deliberately" given up their claims to this water.[83] He also rejected the idea that the government "deliberately accepted" relinquishment of the tribes' only "means of irrigation."[84] Because it would have been illogical to think that either party to the treaty contract would have done such a thing, Justice McKenna held that the right to water had been reserved by implication.[85]

Besides being the foundation for the reserved water rights doctrine, *Winters* also serves as an illustration of the inherent conflict between water rights created under state laws of prior appropriation and implied federally reserved Indian water rights. Most Indian reservations were created before many holders of appropriative water rights began their use.[86] Thus, anyone who established their water rights after the date of the reservation's establishment is subject to uncertainty.[87] The federal government, on behalf of the Indians, can come in at any time and assert the tribe's senior water rights.[88] If the river or other water source has already been fully appropriated, the fulfillment of all junior rights would be uncertain as the senior, federally reserved, rights must be fulfilled first.[89]

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76. *Id.* at 577.
77. *See id.*
78. *Id.*
79. *Id.*
80. *See generally* LAURENCE H. TRIBE, AMERICAN CONSTITUTIONAL LAW §8-2 (3d ed. 2000) (discussing the Court's conservative ideology during the *Lochner*-era).
81. Rusinek, *supra* note 10, at 363.
82. *Id.*
83. Winters v. United States, 207 U.S. 564, 576 (1908).
84. *Id.*
85. *Id.*
86. GETCHES, *supra* note 3, at 316.
87. *Id.*
88. *Id.*
89. *Id.*

C. The McCarran Amendment

Given the tensions between state water law and federally reserved Indian water rights,[90] tribes were concerned about litigating their water rights in state court. A traditional feeling of hostility exists between tribes and states, and state forums are generally regarded as "inhospitable" to Indians.[91] Indeed, one justification for the trust relationship between the federal government and tribes is the tribes' need for protection by the federal government from state interference.[92] These concerns tend to mitigate in favor of quantifying Indian water rights in federal court.[93] However, the federal government historically defers to state law in the allocation of water.[94] In addition, there was a strong feeling among the states that they should be allowed to quantify Indian water rights and integrate them into their existing prior appropriation system through general stream adjudications.[95]

But before Indian water rights could be adjudicated in state courts one more issue needed to be addressed: the sovereign immunity of the United States.[96] The United States cannot be sued without its consent.[97] This posed a problem for states trying to adjudicate the water rights of all users in a particular stream system.[98] If private parties went to state court to adjudicate their water rights,

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90. *See supra* Part IIB for a discussion of the inherent conflicts between the state law-based prior appropriation system and federally reserved Indian water rights.

91. Joseph R. Membrino, *Indian Reserved Water Rights, Federalism and the Trust Responsibility*, 27 LAND & WATER L. REV. 1, 3 (1992).

92. *Id.*; s*ee generally* Mescalero Apache Tribe v. Jones, 411 U.S. 145, 152 (1973) (noting that tribes and their reservation lands are insulated in some respects by a "historic immunity from state and local control.").

93. *See* Membrino, *supra* note 91, at 3.

94. GETCHES, *supra* note 3, at 315.

95. Membrino, *supra* note 91, at 3-4.

96. GETCHES, *supra* note 3, at 334.

97. Tribes may not be sued without their consent because of tribal sovereign immunity. *Id.* at 335. Indian lands, as well as tribal water rights, are held in trust by the United States. *See generally* Sylvia F. Liu, *American Indian Reserved Water Rights: The Federal Obligation to Protect Tribal Water Resources and Tribal Autonomy*, 25 ENVTL. L. 425, 457 (1995) (arguing that the federal government's trust responsibility implies a federal duty to protect the ability of Indian tribes to exercise autonomy through tribal control over use and regulation of their water).

98. When all the water rights to a stream are adjudicated completely, a "general stream adjudication" has occurred. The purpose of a general stream adjudication is to decide, once and for all, the water rights of everyone who claims an interest in a particular stream. All persons claiming water rights in the stream must be joined in order for the general stream adjudication to be complete. GETCHES, *supra* note 3, at 149. In order to promote effective water management and planning, many western states have statutes that

they would be unable to join the United States or the tribes because of their sovereign immunity.[99] The inability to join the United States or the tribes made the outcome of general stream adjudications in state court uncertain and incomplete because any reserved Indian water rights in the stream would remain unquantified.[100]

To address this problem, Congress passed the McCarran Amendment in 1952.[101] The statute specifically permits joinder of the United States as a defendant to any suit for adjudication of water rights of a "river system" or for the administration of water rights owned by the United States where the United States is a necessary party to such suit.[102] The McCarran Amendment only authorizes joinder of the United States in a proceeding that is comprehensive.[103] The state court is granted procedural jurisdiction only, and Indian water rights are to be quantified using principles of federal law.[104] The Supreme Court makes clear that any state court decision that is "alleged to abridge Indian water rights protected by federal law can expect to receive, if brought for review before this Court, a particularized and exacting scrutiny commensurate with the powerful federal interest in safeguarding those rights from state encroachment."[105] While the McCarran Amendment specifically addresses quantification of Indian water rights through litigation, the option of a negotiated out-of-court settlement always remains a viable and often preferred method for quantifying tribal water rights.[106]

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mandate the use of general stream adjudications. Thomas H. Pacheco, *How Big is Big? The Scope of Water Rights Suits Under the McCarran Amendment*, 15 ECOLOGY L.Q. 627, 635 (1988).

99. GETCHES, *supra* note 3, at 335.

100. *Id*.

101. 43 U.S.C § 666.

102. *Id*.

103. GETCHES, *supra* note 3, at 335. For example, the United States' sovereign immunity would not be waived in a suit to decide the water rights of the United States as against a private claimant. Dugan v. Rank, 372 U.S. 609, 618 (1963).

104. United States v. Superior Court, 697 P.2d 658, 670 (Ariz. 1985) (stating that "Indian rights are conferred by federal law, and it is the federal substantive law which our courts must apply to measure those rights in the state adjudication."). For example, the state court could not reject the reservation's establishment date as the priority date for the tribe's water rights, and instead substitute a priority date based on state prior appropriative law.

105. Arizona v. San Carlos Apache Tribe, 463 U.S. 545, 571 (1983).

106. Negotiated settlement agreements reached between a tribe and other water users must be approved by Congress if they limit or allow others to use Indian reserved water rights. *See* Indian Non-Intercourse Act, 25 U.S.C § 177 (making any conveyance of property by an Indian tribe to a non-Indian invalid unless approved by the federal government); GETCHES, *supra* note 3, at 338; McGovern, *supra* note 15, at 215. For a comprehensive overview of all the Indian water rights settlements that have been approved by Congress to date, see BONNIE G. COLBY ET AL., NEGOTIATING TRIBAL WATER RIGHTS: FULFILLING PROMISES IN THE ARID WEST 171 (2005). Quantifying Indian water rights

D. Quantification of Indian Water Rights

Though *Winters* was decided in 1908, the amount of water to which Indians were entitled remained unclear until 1963, when the Supreme Court issued an opinion in *Arizona v. California*.[107] *Arizona v. California* was a case filed under the original jurisdiction of the Supreme Court.[108] The State of Arizona filed a complaint against the State of California seeking a determination of how much water each state had a legal right to use out of the Colorado River.[109] Nevada, New Mexico, Utah, and the United States[110] were added as parties.[111] The Supreme Court appointed a Special Master, who conducted a two-year trial, and then reported his findings and recommended a decree to the Court.[112] The question of each state's share of water from the Colorado River turned on the meaning and scope of the Boulder Canyon Project Act passed by Congress in 1928.[113] The states involved in the litigation worried about the interstate application of the prior appropriation doctrine,[114] which would give the fast-growing state of California senior rights to water from the Colorado River in times of shortage.[115] After several unsuccessful attempts at settling the dispute through negotiations,[116] Congress passed the Boulder Canyon Project Act in 1928.[117] The Act authorized the Secretary of the Interior to construct, operate, and maintain dams to control floods and store and distribute water for reclamation and other

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through negotiated settlement agreements is often preferable because the settlements typically not only quantify water rights, but also provide funding or access to other water sources that make it easier for tribes to convert their "paper" water rights to water they can actually use. GETCHES, *supra* note 3, at 338; McGovern, *supra* note 15, at 215.

107. 373 U.S. 546 (1963).

108. U.S. CONST. art. III, § 2 gives the Supreme Court original jurisdiction over "all cases in which a State shall be a Party."

109. 373 U.S. at 550-51.

110. The United States asserted claims to waters for use on Indian Reservations, National Forests, Wildlife Areas, and other government lands, but the Court discussed only the claims made by the United States on behalf of the Chemehuevi, Cocopah, Yuma, Colorado River, and Fort Mohave Indian tribes. *Id.* at 595.

111. *Id.* at 551.

112. *Id.*

113. *Id.*

114. The 1922 *Wyoming v. Colorado* decision held that the prior appropriation doctrine could be given interstate effect. 259 U.S. 419, 470-71.

115. Arizona v. California, 373 U.S. 546, 555-56 (1963).

116. The Colorado River Compact, 70 Cong. Rec. 324 (1928), was the product of these negotiations.

117. 373 U.S. at 559; for an entertaining description of the political background of the interstate rivalries, see MARC REISNER, CADILLAC DESERT: THE AMERICAN WEST AND ITS DISAPPEARING WATER 246-316 (1986).

beneficial uses.[118] The Act also contained a method to apportion water between the states of the Lower Colorado Basin.[119] In *Arizona v. California*, the Court found that the method contained in the Boulder Canyon Project Act was the "complete statutory apportionment" to be used in the Colorado River controversy. The Court found that the previous Colorado River Compact, the doctrine of prior appropriation, and the doctrine of equitable apportionment did not control the issue of apportionment in the Colorado River.[120]

After the Court discussed the interstate claims, it turned its attention to the claims made by the United States on behalf of five Indian reservations asserting rights to water in the Colorado River.[121] The Court relied heavily upon the reasoning used in *Winters*[122] to establish the doctrine of Indian reserved water rights.[123] Indians were put on reservations that were not located in the most desirable areas of the nation.[124] Since Congress was no doubt aware that "water from the river would be essential to the life of the Indian people . . . and to the crops they raised," Congress had impliedly reserved water for their use.[125] The government, intending to deal fairly with Indians, had reserved for them "the waters without which their lands would have been useless."[126] Since the Indians' reserved water rights were effective as of the date their reservation was created, their water rights were already perfected at the time the Boulder Canyon Project Act became effective, and as such the Indians' water rights were entitled to priority under the Act.[127]

Although *Arizona v. California* is notable for its acceptance of the *Winters* reserved rights doctrine, the case is more well known for its adoption of the practicably irrigable acreage standard.[128] The Court relied heavily on the conclusion of its Special Master, who found that the quantity of water intended to be reserved for Indian use was that quantity that was enough to "satisfy the future

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118. 373 U.S. at 560.

119. *Id.* at 569.

120. *Id.* at 565.

121. *Id.* at 595.

122. Winters v. United States, 207 U.S. 564 (1908). See also the discussion of the *Winters* case *supra* Part IIB.

123. *See* Arizona v. California, 373 U.S. 546, 599-600 (1963).

124. *Id.* at 598.

125. *Id.* at 599; the Court also expanded the reserved water rights doctrine to include not only reservations created by treaty, but also reservations created by Executive Order. *Id.* at 598.

126. *Id.* at 600.

127. *Id.*; *see* REISNER, *supra* note 117, at 271 (noting that Indians were the only winners from the Court's decision because their water rights were held to be superior to everyone else's).

128. Interestingly, the Court set out the new standard to be used in quantifying Indian reserved water rights in only one paragraph, with very little reasoning or analysis. *See* Arizona v. California, 373 U.S. at 600-01.

as well as the present needs of the Indian Reservations."[129] The amount of water reserved was enough "to irrigate all the practicably irrigable acreage on the reservation."[130] In adopting the PIA standard, the Court expressly rejected Arizona's argument that the quantity of water reserved should be measured by the Indians' "reasonably foreseeable needs," because that standard would in fact mean that reserved water would be based on the number of Indians on the reservation.[131] The Court rejected the "reasonably foreseeable needs" test because the number of Indians and their future needs were too uncertain.[132] Using the PIA standard was the only "feasible and fair way" by which reserved water rights could be measured.[133]

III. TREATMENT BY SUBSEQUENT COURTS OF THE PIA STANDARD

A. *Arizona II*

The Supreme Court did not address the PIA standard again until 1983, in *Arizona II*.[134] In that case, the Supreme Court upheld the use of the PIA standard but modified the analysis by adopting the Special Master's report which included an "economic feasibility" inquiry.[135] In *Arizona II*, the tribes that had been represented by the United States in the first *Arizona v. California* case (*Arizona I*) argued that the Court should allow them to intervene and should grant them additional water for irrigable land not claimed during *Arizona I*.[136] The Court rejected the tribes' arguments and instead held that it adopted the PIA standard as a means to get a fixed determination of future needs for water and that reopening the decree in *Arizona I* would defeat the certainty of its holding.[137] The Court warned that reopening the *Arizona I* decree would subject the PIA standard itself to challenge under the Court's post *Arizona I* cases.[138] However, the Court did award the tribes water for the practically irrigable acres added to the reservation

129. *Id.* at 600.
130. *Id.*
131. *Id.* at 600-01.
132. *Id.*
133. *Id.* at 601.
134. Arizona v. California, 460 U.S. 605 (1983).
135. Rusinek, *supra* note 10, at 370-71.
136. 460 U.S. at 613.
137. *Id.* at 625.
138. *Id.* (noting that the PIA standard could be challenged in light of *United States v. New Mexico*, 438 U.S. 696 (1978) and *Washington v. Wash. Commercial Passenger Fishing Vessel Ass'n*, 443 U.S. 658 (1979)).

after *Arizona I* was decided.[139] The Court accepted the Special Master's quantification for this additional reservation land.[140]

The Special Master's report details the steps he took in applying the PIA standard. First, it must be determined if irrigation of the reservation land is feasible from an engineering and technological standpoint.[141] Next, it must be shown not only that crops can be grown on the reservation land, but also that they can be grown there economically, that is, that the economic benefits of irrigation exceed the costs.[142] Economic feasibility (positive cost-benefit ratio) is distinguished from financial feasibility (ability to pay), as the Special Master refused to consider the ability of the tribes to pay for the proposed irrigation projects.[143] If it is economically feasible to irrigate the reservation land, the land is practicably irrigable and water will be awarded.[144]

B. The Big Horn River Cases

The first Indian water rights quantification to be completed after *Arizona v. California* was a general stream adjudication for the Big Horn River in Wyoming.[145] Wyoming was also the first state to use the jurisdiction conferred by the McCarran Amendment to adjudicate Indian water rights in the context of a state court's general stream adjudication.[146] The Big Horn River general adjudication process began in 1977.[147] In 1988, the Wyoming Supreme Court in *Big Horn I* upheld the rights of the Shoshone and Northern Arapaho tribes living on the Wind River Reservation to divert water for agricultural purposes on reservation land.[148] Key to the court's decision was their finding that the Wind

139. 460 U.S. at 641.

140. *Id.*

141. Rusinek, *supra* note 10, at 371.

142. *Id.*

143. *Id.* at 371-72.

144. Martha C. Franks, *The Uses of the Practicably Irrigable Acreage Standard in the Quantification of Reserved Water Rights*, 31 NAT. RESOURCES J. 549, 553 (1991). The Franks article also provides a detailed and persuasive argument that the economic feasibility test is far from objective because it disguises essentially social questions such as the value of Indian self-sufficiency and culture in terms of the proper discount rate to use in evaluating potential irrigation projects.

145. Lynnette J. Boomgaarden, Casenote, *Water Law–Quantification of Federal Reserved Indian Water Rights–"Practicably Irrigable Acreage" Under Fire: The Search for a Better Legal Standard*, 25 LAND & WATER L. REV. 417, 426 (1990); *In re* the Gen. Adjudication of All Rights to Use Water in the Big Horn River Sys., 753 P.2d 76 (Wyo. 1988), [hereinafter Big Horn I] *cert. granted in part*, 488 U.S. 1040 (1989), *cert. denied in part*, 492 U.S. 926 (1989), *aff'd mem. sub nom* Wyoming v. U.S., 492 U.S. 406 (1989).

146. GETCHES, *supra* note 3, at 337.

147. Big Horn I, *supra* note 145, at 84.

148. *Id.* at 96-98.

River Indian Reservation was created solely for "agricultural purposes."[149] The Wyoming Supreme Court also upheld the tribes' rights to divert water for future reservation uses.[150] Tribes were allowed to divert water for agricultural, livestock, municipal, domestic, and commercial purposes.[151] However, the court rejected the tribes' request for an instream flow right for use in tribal fisheries.[152] The instream flow right was essential for keeping enough water flowing in the Big Horn River to support the tribes' attempt at developing a game fishing enterprise on the reservation.[153] The tribes also wanted instream flows protected to recharge the groundwater basin and to benefit all downstream irrigators.[154]

Both Wyoming and the tribes filed cross-petitions for a writ of certiorari to the United States Supreme Court.[155] Wyoming sought review of whether reserved water rights even existed at all under the 1905 treaty, what their priority date should be, and whether the PIA standard should be used to measure those rights.[156] Though the tribes appealed many issues to the Supreme Court, the Court granted certiorari only on Wyoming's request to review the issue of whether the PIA standard was the proper standard to use in quantifying tribal water rights.[157] In a four to four decision,[158] without a written opinion, the Supreme Court affirmed the Wyoming Supreme Court's use of the PIA standard in quantifying the tribes' water rights.[159]

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149. *Id.* at 96.

150. *Id.* at 101-04.

151. *Id.* at 98-99.

152. *Id.* at 98. Instream flow refers to the quantity of water flowing down a river. Instream water flow, which is necessary for fish habitat, is threatened when water from a river is diverted for irrigation, turning a river into a trickle. In Wyoming, an instream flow right can be held only by the state, and an instream flow right will only be recognized if it does not harm the rights of any other water user. Cynthia F. Covell, *A Survey of State Instream Flow Programs in the Western United States*, 1 U. DENV. WATER L. REV. 177, 185 (1998) (*citing* WYO. STAT. ANN. § 41-3-1001(b), 1002(e) (Michie 2005)).

153. Julia Prodis, *Wind River Indians Lose Water Suit*, L.A. TIMES, Sept. 13, 1992, at B6, *available at* 1992 WL 2864926.

154. Wes Williams, Jr., Note, *Changing Water Use for Federally Reserved Indian Water Rights: Wind River Indian Reservation*, 27 U.C. DAVIS L. REV. 501, 516 (1994).

155. Petition for A Writ of Certiorari, Wyoming v. United States, 492 U.S. 406 (1989) [hereinafter Wyoming Petition]; Cross-Petition for A Writ of Certiorari, Shoshone Tribe and Northern Arapaho Tribe of the Wind River Indian Reservation v. Wyoming, 109 S.Ct. 3265 (1989).

156. Wyoming Petition, *supra* note 154, at i.

157. Wyoming v. United States, 492 U.S. 406, *reh'g denied*, 110 S. Ct. 28 (1989) [hereinafter Big Horn II]; Shoshone Tribe and Northern Arapaho Tribe of the Wind River Indian Reservation v. Wyoming, *cert denied* 109 S. Ct. 3265 (1989).

158. Justice O'Connor did not participate in the decision. Big Horn II, *supra* note 157.

159. *Id. See infra* Part IIID for a discussion of what the divided Supreme Court opinion signals for the future use of the PIA standard.

Even though the Supreme Court did not address the instream flow issue, the tribes did not give up their fight to use a portion of their reserved water rights to protect instream flows in the Big Horn River. Shortly after the United States Supreme Court's decision, the tribes adopted the Wind River Water Code, created the Wind River Water Resources Control Board, and granted themselves an instream flow permit that authorized the dedication of water in the Big Horn River for "fisheries restoration and enhancement, recreational uses, ground water recharge[, and] downstream benefits to irrigators and other water users."[160] The water for instream protection was to come from the amount of water the tribes were awarded for "future projects" in *Big Horn I*.[161] The tribes then complained to the State Engineer that the diversion of water by other users caused the flows in the Big Horn River to be less than the amount the tribes needed under their instream permit.[162] The State Engineer responded that the tribes' permit was unenforceable because, in *Big Horn I*, tribes only had the right to divert water for agricultural purposes. The State Engineer argued that any change in use of the water awarded for future projects must be made only after their present agricultural diversion rights were put to use.[163] The State Engineer refused to curtail the rights of other users in the Big Horn River in order to protect the tribes' instream flow rights.[164]

The tribes filed a motion with the Wyoming district court for "an order to show cause why the [S]tate [E]ngineer should not be held in contempt . . . and why a [S]pecial [M]aster should not be appointed to enforce the [t]ribes' reserved water right."[165] The district court referred the motion to a Special Master for a report on whether the tribes were permitted to convert the water right reserved for future agricultural projects to an instream flow right, and whether the State Engineer had the authority to administer the tribes' reserved water rights on the reservation.[166] After hearing oral arguments on exceptions to the Special Master's report, the district court declared that the tribes could use their reserved water right on the reservation as they wished, including for instream flows, without regard to Wyoming water law.[167] The district court also held that the tribes, and

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160. *In re* the Gen. Adjudication of All Rights to Use Water in the Big Horn River Sys., 835 P.2d 273, 275-76 (Wyo. 1992) [hereinafter Big Horn III].

161. *Id.* at 275.

162. *Id.* at 276.

163. *Id.*

164. *Id.*

165. *Id.*

166. Big Horn III, *supra* note 160, at 276.

167. *Id.*; Recall from *supra* Part IIA, that under state prior appropriation laws, once a water permit is granted for a specific use, users must follow rules for changing the way in which they use their water right. Usually, an appropriator who seeks to change the purpose for which they use water must apply for approval. The new use will not be approved if it causes harm to other appropriators. *See* GETCHES, *supra* note 3, at 161-62. *See supra* note 152 for a discussion of Wyoming instream water rights law.

not the State Engineer, would administer the water rights within the Wind River Reservation.[168]

In a three to two decision, in which each of the three justices in the majority wrote a different opinion, the Wyoming Supreme Court reversed the district court.[169] Justice Macy concluded that *Big Horn I*'s reliance on the agricultural purpose of the reservation foreclosed any change in water use by the tribe that was not for an agricultural purpose. Justice Macy cited language in *Big Horn I*, which expressly held that since "it was the intent at the time to create a reservation with a sole agricultural purpose," insufficient evidence existed to imply a "fishery flow right" in the absence of a treaty provision expressly granting it.[170] Justice Macy flatly refused to consider the tribes' contention that principles of federal law do not limit the ways they may use their water, saying simply that due to *Big Horn I*'s affirmation by the United States Supreme Court, that decision controlled.[171] Interestingly, Justice Macy limited the decision to the issue of whether tribes must comply with Wyoming law to change the use of their reserved *future* project water. Justice Macy left for another day the question of whether the tribes may dedicate their *historically* used water to instream flows.[172]

Justice Thomas joined Justice Macy's opinion and wrote separately on the issue of who was to regulate the water rights on the reservation–the State Engineer or the tribes.[173] Justice Thomas argued that the battle of who was to administer water rights on the reservation was really "over sovereignty, not over water."[174] Justice Thomas found that because part of the Wind River Indian Reservation was "disestablished," the constitution and laws of Wyoming must be followed within that portion of the reservation.[175] Though the sovereignty of the tribes would be recognized on the other portion of the reservation, pragmatism

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168. Big Horn III, *supra* note 160, at 276.

169. *Id.* at 275.

170. *Id.* at 277-78.

171. Justice Macy did not address the fact that the Supreme Court granted certiorari for *Big Horn I* only on the issue of whether PIA was the proper quantification standard, and thus the change-of-use issue was not considered by the Supreme Court. *See* Big Horn II, *supra* note 157.

172. Big Horn III, *supra* note 160, at 279. The water the tribes wanted to use to protect instream flows was to come from the water reserved to them for *future* projects in *Big Horn I*. *Id.* at 276.

173. *Id.* at 284.

174. *Id.* at 283.

175. *Id.* In Indian law, the doctrine of disestablishment refers to the idea that under Congress' plenary power over Indian reservations, Congress may "disestablish" a reservation at any time. Courts usually require express Congressional intent to disestablish a reservation. *See* Solem v. Bartlett, 465 U.S. 463 (1984). If a reservation has been disestablished or diminished, state laws usually may be enforced on that reservation. *See generally* Robert N. Clinton, *Criminal Jurisdiction Over Indian Lands: A Journey Through a Jurisdictional Maze*, 18 ARIZ. L. REV. 503, 508-13 (1976).

counseled that only one entity should administer water on the entire reservation.[176] Justice Thomas then argued that the State Engineer should assume that function.[177] Justice Thomas did not foreclose the possibility that the tribes could use their water for instream flows, but instead held that if the tribes change their use, they must follow Wyoming law in order to do so.[178]

Finally, Justice Cardine wrote a separate opinion concurring in part and dissenting in part.[179] Justice Cardine started his analysis by recognizing that the scarcity of water in the arid west requires that principles of "accommodation, mutual respect and reasonableness" be used in assuring that water is being put to the "highest and best use by all."[180] Justice Cardine would hold that the tribes could not devote their future project water rights to protect instream flows without first putting their present water rights to beneficial use.[181] He argued that state law concepts of beneficial use require that the tribes' previously unused reserved water rights must first be put to use for agricultural purposes before allowing them to "interfere with the rights of state appropriators."[182] Implicit in Justice Cardine's opinion was the idea that the tribes would "waste water at [the non-Indian's] expense" by protecting instream flows, because protecting instream flows is not considered a "beneficial use."[183] Interestingly, after implying that protecting instream flows is a waste of water, Justice Cardine then went on to say that once tribes put their water rights "to beneficial use by actually being applied to the practicably irrigable acreage, I would allow the [t]ribes to apply to change their use of water."[184] Justice Cardine also did not agree with the majority opinion that the State Engineer should be the one to administer water on the reservation.[185] Instead, Justice Cardine would have water jointly administered, with the court serving as a last resort in the event of a dispute.[186] He argued that the solution advocated in the concurring and dissenting opinions "charts a reasonable middle ground rather than the win-all and lose-all extremes advocated by the parties" and that these solutions would stop the "wasteful, expensive[, and] useless litigation" between the parties.[187]

C. The Gila River Cases

176. Big Horn III, *supra* note 160, at 284.
177. *Id.*
178. *Id.*
179. *Id.* at 285.
180. *Id.*
181. *Id.*
182. Big Horn III, *supra* note 160, at 286.
183. *Id.*; *see also supra* note 152.
184. Big Horn III, *supra* note 160, at 287.
185. *Id.* at 288.
186. *Id.*
187. *Id.*

Unlike Wyoming, not all states have enthusiastically adopted the PIA standard. The Arizona Supreme Court, for example, rejected the PIA standard as part of the Gila River general adjudication.[188] The Gila River adjudication started in 1974 as a petition by the Salt River Valley Water Users Association to determine rights in the Salt, Verde, and San Pedro Rivers.[189] The case expanded to include the Gila, Santa Cruz, and Agua Fria Rivers.[190] The 1974 petition has resulted in five major decisions by the Arizona Supreme Court.[191] The 1992 decision (*Gila River I*) involved a question of acceptable methods of service for notifying the 849,000 people who had potential claims in the Gila River water rights adjudication.[192] A 1993 decision by the court (*Gila River II*) dealt with whether "subflow"[193] was to be considered surface water or groundwater. The third major decision by the court, in 1999, was the first one to deal directly with Indian reserved water rights.[194] In *Gila River III*, the court addressed the question of whether Indian reserved water rights included rights not only to surface water, but to groundwater as well.[195] The court reasoned that because the reservation of water itself was not source-specific, but need-specific, the reservation of water rights applies to all the waters necessary to accomplish the needs of the reservation.[196] However, the reserved right to groundwater was only to be used where other waters were inadequate to accomplish the purpose of the reservation.[197] In *Gila River IV*, the court re-examined the definition for "subflow" it crafted in *Gila River II*.[198]

In 2001, the court turned to the question of what standard should be applied for quantifying the federal reserved water rights for Indian land.[199] The court noted that the purpose of the federal reservation of land defines the scope

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188. *In re* the Gen. Adjudication of All Rights to Use Water in the Gila River Sys. & Source, 35 P.3d 68, 79 (Ariz. 2001) [hereinafter Gila River V].

189. Lindsay Murphy, Note, *Death of a Monster: Laws May Finally Kill Gila River Adjudication*, 28 AM. INDIAN L. REV. 173, 178 (2003).

190. *Id.*

191. *Id.*

192. *In re* Rights to Use of Gila River, 830 P.2d 442, 444 (Ariz. 1992) [hereinafter Gila River I].

193. Subflow was defined by the court as "those waters which slowly find their way through the bed of the stream, or the lands under or immediately adjacent to the stream." *In re* the Gen. Adjudication of All Rights to Use Water in the Gila River Sys. & Source, 857 P.2d 1236, 1245 (Ariz. 1993) [hereinafter Gila River II].

194. Murphy, *supra* note 189, at 178.

195. *In re* the Gen. Adjudication of All Rights to Use Water in the Gila River Sys. & Source, 989 P.2d 739, 741 (Ariz. 1999) [hereinafter Gila River III].

196. *Id.* at 747.

197. *Id.* at 748.

198. *In re* the Gen. Adjudication of All Rights to Use Water in the Gila River Sys. & Source, 9 P.3d 1069 (Ariz. 2000) [hereinafter Gila River IV].

199. Gila River V, *supra* note 188, at 72.

and nature of the water rights impliedly reserved when the land reservation was created.[200] For example, if the land was reserved for the purpose of conserving natural and historical resources, groundwater pumping which threatened the amount of water available to the protected resources could be curtailed.[201] In quantifying the federally reserved water right associated with a reservation of land for a national forest, the United States Supreme Court held that the amount of water reserved depended on whether the water was to be used for the primary or secondary purpose of the reservation.[202] Water rights used for the primary purpose of the reservation were narrowly quantified to meet that purpose, while water for secondary purposes had to be acquired under state law.[203] In *Gila River V*, the Arizona court had to decide whether water rights reserved for Indian land were to be quantified using the primary/secondary purpose test used for other federal land reservations.[204]

Although the state litigants argued that trial courts must analyze the documentation establishing each tribe's reservation in order to discern the purpose for the tribe's reservation, the Arizona court found that the United States Supreme Court had already conclusively established that the purpose for every Indian reservation was to provide the tribe with a permanent homeland.[205] The court declined to adopt the primary/secondary purpose test for Indian land,[206] holding that the significant differences between Indian and non-Indian reservations precluded its application.[207] Indian reserved rights were to be given broad interpretation in order to further the goal of Indian self-sufficiency.[208] The court found no need to examine historical documents to determine the purpose of Indian reservations, most tellingly because these documents "do not accurately represent the true reasons for which Indian reservations were created."[209] Not only would a historical search focus on hard-to-discern Congressional motives, it would often leave out tribal intent.[210] Indeed, Congressional intent to reserve water for tribal land is not express, but implied by the courts and imputed to Congress and Indian

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200. *Id.* at 73.

201. *Id.* (citing Cappaert v. United States, 426 U.S. 128, 141 (1976)).

202. *Id.* at 73, (citing United States v. New Mexico, 438 U.S. 696, 702 (1978)).

203. *Id.* at 74 (citing United States v. New Mexico, 438 U.S. 696, 702 (1978)).

204. *Id.* at 73.

205. Gila River V, *supra* note 188, at 74.

206. However, the court also observed that "even if the [primary/secondary test] were to apply, tribes would be entitled to the full measure of their reserved rights because water use necessary to the establishment of a permanent homeland is a primary, not secondary, purpose." *Id.* at 77.

207. *Id.*

208. *Id.* at 74 (citing State of Montana *ex rel* Greely v. Confederated Salish & Kootenai Tribes, 712 P.2d 754, 768 (Mont. 1985)).

209. *Id.* at 75.

210. *Id.*

treaty negotiators.[211] The Arizona court was not blind to the major reason why Indians were forced onto reservations: "Despite what may be set forth in official documents, the fact is that Indians were forced onto reservations so that white settlement of the West could occur unimpeded."[212] Though the trial court failed to recognize any particular purpose for Indian reservations because it was "leery of being 'drawn into a potential racial controversy' based on historical documentation," the Arizona Supreme Court held that the purpose of federal Indian reservations is "to serve as a 'permanent home and abiding place' to the Native American people living there."[213]

Next, the court turned to the proper quantification measure for reserved water rights on Indian lands.[214] Though the court recognized that many courts accept the PIA standard, it noted that the United States Supreme Court has not necessarily adopted this standard as the universal measure of Indian water rights.[215] Though the PIA standard appears to be a simple and objective method[216] for measuring water rights, the court recognized the existence of many problems with the standard.[217]

The first problem with the PIA standard identified by the court was that applying this standard to all tribes may result in an inequitable treatment of tribes based solely on the geographical location of the tribal land.[218] For example, the Mescalero Apache Tribe was denied water rights for failing to prove the economic feasibility of irrigation projects. However, the tribe's reservation is located in a mountainous region of southern New Mexico, a geographic location not well-suited for irrigation.[219] Another problem with the PIA standard is that it forces tribes to pretend to be farmers, which is especially counterproductive in an era where large agricultural projects are risky, and according to some, no longer economically feasible in the West.[220] Additionally, "a permanent homeland

211. Gila River V, *supra* note 188, at 75.

212. *Id.*

213. *Id.* at 76.

214. *Id.* at 77.

215. *Id.* at 78.

216. Determining water rights under the PIA standard is a two step process. First, it must be shown that crops can be grown on the land. Second, the economic feasibility of irrigation must be demonstrated by showing that the costs of the project are not likely to outweigh the financial returns. *Id.* (citing Arizona v. California, 460 U.S. 605 (1983)); *see also supra* Part IIIA.

217. Gila River V, *supra* note 188, at 78.

218. *Id.*

219. State *ex rel.* Martinez v. Lewis, 861 P.2d 235, 246-51 (N.M. Ct. App. 1993); Franks, *supra* note 144, at 560-61 (noting that the "court's complete rejection of the PIA claims is an intolerable result for the United States and the tribe").

220. Gila River V, *supra* note 188, at 78. According to one commentator, from 1981 to 1991 no federal project planned in accordance with the principles and guidelines adopted by the Water Resources Council of the federal government has been able to show a positive benefit/cost ratio. Franks, *supra* note 144, at 578.

requires water for multiple uses, which may or may not include agriculture."[221] The PIA standard encourages tribes to create unrealistic irrigation projects and deters consideration of the actual water needs of the reservation.[222] Taking these shortcomings into account, the Arizona court rejected the use of the PIA standard as the exclusive quantification measure.[223]

Instead of PIA, the court found that a multi-factored approach tailored to allocate water necessary to achieve a permanent homeland is the best-suited method for quantification.[224] According to the Arizona Supreme Court, when quantifying Indian water rights, the trial court should consider the actual and proposed uses for water, along with the parties' recommendations regarding feasibility and the amount of water necessary to accomplish the homeland purpose.[225] The factors to be considered while viewing the evidence are the tribe's history of using water and the cultural importance of water to the tribe.[226] The court should also consider the geography, topography, and natural resources, including groundwater availability, of the tribe's land.[227] The tribe's economic infrastructure and plans for economic development are factors to be considered, along with past water use on the reservation.[228] The present and projected future population of the tribe should be considered, but never as the sole factor.[229] The court's function is to determine the amount of water necessary to effectuate the land as a permanent homeland, tailored to the reservation's minimal need.[230] Although the foregoing factors are not exclusive, the court required that the proposed uses of water must be reasonably feasible.[231] The determination of feasibility is a two-part analysis: (1) the developments have to be achievable from a practical standpoint, and (2) the projects must be economically sound.[232]

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221. Gila River V, *supra* note 188, at 78.

222. *Id*.

223. *Id.* at 79.

224. *Id.*

225. *Id*.

226. *Id.* at 79-80.

227. Gila River V, *supra* note 188, at 80.

228. *Id.* Commentators have criticized including any consideration of a tribe's past water use in determining its present or future water rights. Since a tribe's past water use and present economic viability are a consequence of historical biases against Native Americans and the lack of federal funding for water projects benefiting Indians, including these factors in the water rights calculus facilitates continued discrimination against tribes. Debbie Shosteck, *In Brief: Arizona Supreme Court Designates Reservations as Permanent Homelands and Adopts a Balancing Approach to Quantifying Reserved Rights*, 29 ECOLOGY L.Q. 449, 454 (2002).

229. Gila River V, *supra* note 188, at 80.

230. *Id*. at 81.

231. *Id*.

232. *Id*. One commentator argues that the court's definition of economic feasibility really refers to financial feasibility (the ability of the tribe to obtain financing) and thus runs contrary to the Supreme Court's rejection of the use of financial feasibility. Galen Lemei,

D. Instability of the PIA Standard

Gila River V marked the first time a court abandoned the PIA standard.[233] However, as the Arizona Supreme Court pointed out in *Gila River V*, the United States Supreme Court has never explicitly held that the PIA standard is the only standard that may be used to quantify Indian water rights.[234] This fact alone was enough to create uncertainty, but the United States Supreme Court's divided memorandum opinion in *Wyoming v. United States*,[235] following Justice O'Connor's recusal only added to that uncertainty.[236] After the death of Justice Thurgood Marshall and the opening of his files, a draft majority opinion authored by Justice O'Connor was released which indicated that the Court was poised to radically alter the PIA standard and merge it with a "sensitivity" analysis.[237] According to the draft opinion, Justice O'Connor would require "sensitivity" to the impact any tribal water award would have on other non-Indian water users.[238] The draft opinion shows that the Court was ready to adopt a major change to the PIA standard.[239] The uncertain future of the PIA standard harms one of its primary strengths: the incentive to settle Indian water rights disputes.[240] Before the future of PIA became uncertain, tribes were able to secure large quantities of water through litigation, but given the makeup of the current United States Supreme Court, this cannot be guaranteed.[241]

From the foregoing discussion, it is clear that the PIA standard is no longer universally accepted in the United States.[242] Indeed, after *Big Horn II*, its future as the preferred standard of the United States Supreme Court has become cloudy.[243] The inherent tension between an anachronistic legal doctrine and the modern reality of tribal life necessitates a fresh look at the PIA standard.

Note, *Abandoning the PIA Standard: A Comment on* Gila V, 9 MICH. J. RACE & L. 235, 259-60 (2003).

233. Lemei, *supra* note 232, at 238.

234. Gila River V, *supra* note 188, at 78; Barbara A. Cosens, *The Measure of Indian Water Rights: The Arizona Homeland Standard, Gila River Adjudication*, 42 NAT. RESOURCES J. 835, 842 (2002).

235. *See* Big Horn II, *supra* note 157.

236. *See generally* Rusinek, *supra* note 10.

237. Mergen & Liu, *supra* note 12, at 706.

238. *Id.* at 707.

239. *Id*.

240. *Id.* at 695.

241. *Id*.

242. *See, e.g.*, Gila River V, *supra* note 188 (rejecting PIA and adopting a homeland standard).

243. McGovern, *supra* note 15, at 206 (noting that PIA's future is doubtful because of the Supreme Court's divided opinion in *Big Horn II*).

Although many commentators criticize PIA, few have looked at the ways modern international human rights law can inform the inquiry into the standard's appropriateness. In the United States, an assessment of indigenous peoples' rights over land and natural resources, such as water, should be considered in light of customary international law.[244]

The first part of this Note laid out the historic development of Indian water rights and the way they are quantified in the United States. What follows is an analysis of how international human rights laws for the rights of indigenous peoples can inform the search for a new quantification standard for Indian water rights in the United States. Part IV is an introduction to the organization of international and regional human rights systems that serve as standard-setting bodies for the human rights of indigenous peoples. Part V traces the history of the doctrine of discovery in United States Indian law and suggests that instead of incorporating doctrine of discovery principles, the method of quantification of Indian water rights in the United States should incorporate the right of indigenous peoples to self-determination.

IV. ORGANIZATION AND FRAMEWORK OF INTERNATIONAL INSTRUMENTS FOR PROTECTING INDIGENOUS PEOPLES' HUMAN RIGHTS

This section provides a basic overview of the organization of international and regional human rights systems. It lays out how instruments like treaties, declarations, and customary international law can work to protect indigenous peoples' human rights.[245]

A. Multinational Instruments

Traditionally, a state's treatment of its nationals and the indigenous peoples living within its borders was a matter of state sovereignty, and external interference into a state's domestic affairs was not favored.[246] After World War II and the horrified reaction of the world to human rights abuses perpetrated by the Nazis against their own citizens, the international belief in non-intervention began to change.[247] Nations became more willing to intervene into the affairs of other

244. *See generally* S. James Anaya & Robert Williams, *The Protection of Indigenous Peoples' Rights Over Lands and Natural Resources Under the Inter-American Human Rights System*, 14 HARV. HUM. RTS. J. 33, 36 (2001).

245. *See generally id.* at 33.

246. Jo M. Pasqualucci, *The Inter-American Human Rights System: Establishing Precedents and Procedure in Human Rights Law*, 26 U. MIAMI INTER-AM. L. REV. 297, 302 (1994-1995).

247. *Id.* at 302-03.

states, and the movement to establish a universal human rights standard applicable to all states grew.[248]

While the United Nations (UN) 1948 Charter attempted to develop human rights protections, it did not live up to some expectations.[249] The Universal Declaration of Human Rights endeavored to remedy this situation. Though it did not mention indigenous peoples specifically, the Universal Declaration of Human Rights, enacted in 1948, was the first declaration to recognize human rights and self-determination.[250] Two international treaties were drafted to incorporate the principles of the Universal Declaration on Human Rights[251]–the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social, and Cultural Rights–but these treaties were not opened for signature until 1966.[252] The International Covenant on Civil and Political Rights entered into force on January 2, 1976,[253] but the ratification of the Covenant by the United States did not come until 1992.[254] The United States has categorically refused to ratify the International Covenant on Economic, Social, and Cultural Rights due to its provisions enshrining the right to work, unionization, social security, and maternity leave.[255]

In 1957, the International Labor Organization (ILO)[256] adopted the first multilateral treaty specially devoted to recognizing and defending indigenous peoples' human rights: International Labor Organization Convention No. 107.[257] In 1989, the ILO discarded the assimilationist bias[258] of Convention No. 107 and established a new multinational treaty, ILO Convention No. 169, which several

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248. *Id.* at 303.

249. *Id.*

250. Patrick Cleveland, Comment, *Apposition of Recent U.S. Supreme Court Decisions Regarding Tribal Sovereignty and International Indigenous Rights Declarations*, 12 PACE INT'L L. REV. 397, 408 (2000).

251. *Id.*

252. Pasqualucci, *supra* note 246, at 303.

253. *Id.* at n.21.

254. DAVID J. BEDERMAN, INTERNATIONAL LAW FRAMEWORKS, 97 (2001).

255. *Id.* at 98.

256. The ILO was formed as part of the League of Nations in 1919, and was established as an agency under the United Nations after the UN was created in 1945. Kirsten M. Hetzel, Comment, *Reaching Regional Consensus: Examining United States Native American Property Rights in Light of Recent International Developments*, 10 TUL. J. INT'L & COMP. L. 307, 313 (2002).

257. Anaya & Williams, *supra* note 244, at 33-34 (citing Convention Concerning the Protection and Integration of Indigenous Populations and Other Tribal and Semi-Tribal Populations in the Independent Countries, Jun. 2, 1959, 107 I.L.O. 1957).

258. *See* S. James Anaya, *Indigenous Rights Norms in Contemporary International Law*, 8 ARIZ. J. INT'L & COMP. L. 1, 7 (1991).

states ratified, both in the Americas and elsewhere.[259] However, conventions adopted by the ILO only bind the states that ratify them.[260]

The United Nations itself also has recognized the importance of protecting indigenous human rights as part of its mandate to develop international human rights norms. Articles 55 and 56 of the UN Charter are considered enabling provisions that authorize the UN to develop human rights norms.[261] In 1948, the UN produced the Universal Declaration of Human Rights, which was understood not as a binding legal instrument, but as a "common standard of achievement."[262] In 1982, the United Nations Economic and Social Council (ESCOR) established the United Nations Working Group on Indigenous Populations (Working Group).[263] The five members of the Working Group are drawn from international law experts sitting on the United Nations Sub-Commission on the Prevention of Discrimination and Protection of Minorities.[264] The Working Group devotes itself exclusively to the survival of indigenous peoples, and its main responsibility is to draft international legal standards for the protection of the human rights of indigenous peoples.[265] The Working Group completed a Draft Declaration in 1993 (Draft Declaration).[266] The Working Group's Draft Declaration resembles the ILO Convention No. 169, as both recognize the collective nature of indigenous peoples' land rights and specify that indigenous peoples' cultural identities depend on their security within their territories.[267] Article 3 of the Draft Declaration states that "indigenous peoples have the right of self-determination [and] by virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development."[268] However, this aspect of the Draft Declaration is controversial and may cause delays getting approval from the UN General Assembly because several nations, including the United States, do not agree with the concept of collective indigenous rights.[269]

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259. Cleveland, *supra* note 250, at 408-09.

260. Hetzel, *supra* note 256, at 313.

261. BEDERMAN, *supra* note 254, at 95.

262. *Id.* at 95-96 (noting that Eleanor Roosevelt was on the drafting committee).

263. Williams, *Encounters*, *supra* note 17, at 676.

264. *Id.* at 677.

265. *Id.*

266. Hetzel, *supra* note 256, at 314 (citing Draft United Nations Declaration on the Rights of Indigenous Peoples, Report of the Sub-Commission on Prevention of Discrimination and Protection of Minorities, U.N. ESCOR, 46th Sess., U.N. Doc. E/CN.4/Sub.2/1994/56 (1994), *reprinted in* 34 I.L.M. 541 [hereinafter Draft United Nations Declaration]).

267. Hetzel, *supra* note 256, at 315.

268. Draft United Nations Declaration, *supra* note 266, at art. 3.

269. Hetzel, *supra* note 256, at 315.

B. Regional Instruments

During the same timeframe as the multinational International Covenants were being developed, two regional organizations, the Council of Europe and the Organization of American States, also drafted human rights treaties that were to apply to the nations of Europe and the nations of the Western Hemisphere respectively.[270] As the United States is a member of the Organization of American States, this Note focuses on the human rights declarations promulgated by it.

The international recognition of indigenous peoples' rights embodied in the ILO Convention Nos. 107 and 169 was preceded by regional recognition of indigenous rights through the Organization of American States (OAS).[271] In 1948, the OAS General Assembly, in Article 39 of the Inter-American Charter of Social Guarantees, required states in the Inter-American system to protect indigenous peoples' lives and property.[272]

The Inter-American system of human rights, applicable to OAS states, is founded on a regional treaty, the American Convention on Human Rights.[273] The American Convention establishes a two-tiered system to enforce human rights: the Inter-American Commission on Human Rights[274] and the Inter-American Court of Human Rights.[275] The Inter-American Commission monitors human rights violations in member states[276] and processes petitions on cases of alleged human rights violations, deciding whether the petitions meet the admissibility requirements of the Inter-American Court.[277] Only after the procedures of the Commission have been exhausted can a petition be referred to the Inter-American Court, but only those states that have recognized the Court's jurisdiction can be brought before it.[278] It is important to note that although the Inter-American system of human rights provides for a formal system to enforce human rights, it is also effective informally when used to push for compliance with progressive norms and values.

Because the United States is not a party to the American Convention on Human Rights,[279] the principal document for determining substantive rights

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270. Pasqualucci, *supra* note 246, at 304.

271. Anaya & Williams, *supra* note 244, at 33-34.

272. *Id.* at 33.

273. Pasqualucci, *supra* note 246, at 305 (citing American Convention on Human Rights, adopted Nov. 22, 1969, OEA/ser.K/XVI/I.1, doc. 65 rev. 1 corr. 1 (1970) (entered into force July 18, 1978), *reprinted in* 9 I.L.M. 673 [hereinafter American Convention]).

274. *See* http://www.iachr.org/DefaultE.htm.

275. Hetzel, *supra* note 256, at 310.

276. *Id.*

277. Pasqualucci, *supra* note 246, at 306.

278. *Id.* at 307.

279. Anaya & Williams, *supra* note 244, at 41 (citing American Convention, *supra* note 273, at art. 21).

enforceable against the United States in proceedings before the Inter-American Commission is the American Declaration on the Rights and Duties of Man (American Declaration).[280] Though it does not mention indigenous peoples specifically, the Inter-American Court considers the American Declaration as containing the general human rights obligations for all OAS member states.[281] The American Declaration carries the force of law based on provisions in the OAS Charter that bind member states.[282] The Inter-American Commission has also interpreted the human rights obligations of OAS member states by reference to obligations arising from other international instruments, such as the United Nations' International Covenant on Civil and Political Rights.[283]

In contemporary international human rights discourse, the rights of indigenous peoples have come to the forefront as indigenous peoples have been recognized as subjects of special concern.[284] While the OAS General Assembly first took steps toward recognition of indigenous peoples as special subjects of international concern in 1948 in Article 39 of the Inter-American Charter of Social Guarantees,[285] modern steps at protecting the human rights of indigenous peoples have recognized indigenous peoples' rights over land and natural resources.[286] Initially, human rights declarations, such as the American Declaration, affirmed the right of every person to own private property, but these declarations did not specifically mention indigenous peoples' rights to property.[287] However, the OAS' Inter-American Commission on Human Rights has drafted a Proposed American Declaration on the Rights of Indigenous Peoples (Proposed American Declaration), which affirms the property rights of indigenous peoples.[288]

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280. *Id.* (citing American Declaration of the Rights and Duties of Man, adopted 1948, Ninth International Conference of American States, art. XXIII, O.A.S. Res. XXX, *available at* http://www.cidh.org/basicos/basic2.htm [hereinafter American Declaration]).

281. *Id.*

282. *Id.*

283. *Id.* at 42. The International Covenant on Civil and Political Rights was signed by the U.S. in 1992. BEDERMAN, *supra* note 254, at 97.

284. Anaya & Williams, *supra* note 244, at 33.

285. *Id*.

286. *See, e.g.*, Proposed American Declaration on the Rights of Indigenous Peoples, art. XVIII, approved by the Inter-American Commission on Human Rights at its 95th session on February 26, 1997, in OEA/Ser.L/V/II.110, Doc. 22, 1 March 2001 ("Indigenous peoples have the right to an effective legal framework for the protection of their rights with respect to the natural resources on their lands . . . ."), *available at* http://www.cidh.org/indigenas/indigenas.en.01/index.htm [hereinafter Proposed American Declaration].

287. *See, e.g.*, American Declaration, *supra* note 280, at art. XXIII (affirming the right of every person to "own such private property as meets the essential needs of decent living and helps to maintain the dignity of the individual and the home"); Anaya & Williams, *supra* note 244, at 42.

288. Proposed American Declaration, *supra* note 286, at art. XVIII ("Indigenous peoples have the right to the recognition of their property and ownership rights . . . . ").

C. Customary International Law

An essential principle of international law and treaty interpretation is that treaties do not create obligations or rights for non-signatories.[289] However, an exception to this rule occurs when the terms of treaties become part of the customary international law.[290] For example, the International Court of Justice has a two part test for whether a rule has become part of customary international law: 1) whether the rule has been followed as a general practice, and 2) whether the rule has been accepted as law.[291] When state practice reflects a common understanding that behavior must conform to norms reflected in non-binding treaties, it is said that the treaty provisions have become part of customary international law and therefore may become binding.[292]

Several commentators note that, at least in reference to OAS member states, a sufficient pattern of common practice of respecting indigenous peoples' rights has been established to create a regional customary law.[293] Even though some instruments may be non-binding, OAS declarations have combined with other multi-national instruments to form a climate in which human rights violations have become less acceptable.[294] This informal regime that respects human rights may compensate for the weakness of formal enforcement mechanisms.[295] For example, though its declaration is non-binding, the United Nations General Assembly declared the decade from 1994 to 2004 as the International Decade of the World's Indigenous People, clearly indicating an international focus on the rights of indigenous peoples.[296] This environment of respecting indigenous peoples' human rights "fosters the incorporation of international human rights norms . . . into national laws . . . ."[297]

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289. Hetzel, *supra* note 256, at 315.

290. *Id*.

291. BEDERMAN, *supra* note 254, at 15.

292. Hetzel, *supra* note 256, at 315.

293. *Id.* at 317 (citing Anaya & Williams, *supra* note 244, at 35; Douglass Cassel, *Inter-American Human Rights Law, Soft and Hard*, *in* COMMITMENT AND COMPLIANCE 395 (Dina Shelton, ed. 2000)).

294. Cassel, *supra* note 293, at 395.

295. *Id*.

296. Kristin Ann Mattiske, Note and Comment, *Recognition of Indigenous Heritage in the Modern World: U.S. Legal Protection in Light of International Custom*, 27 BROOKLYN J. INT'L L. 1105, 1105 (2002) (citing G.A. Res. 163, U.N. GAOR, 48th Sess., U.N. Doc. A/RES/48/163 (1993)).

297. Cassel, *supra* note 293, at 395.

V. APPLICATION OF INTERNATIONAL HUMAN RIGHTS LAWS TO THE QUANTIFICATION OF INDIAN WATER RIGHTS IN THE UNITED STATES

This Part lays out how international human rights laws for the rights of indigenous peoples can be applied to the way Indian water rights are quantified in the United States. This Note does not suggest that customary international law should somehow "prevail" over the laws and Constitution of the United States.[298] However, this Note does advocate the position that international laws relating to indigenous peoples' human rights should be weaved into the United States' quantification system for Indian water rights. Section A is a brief history of how the international law principle known as the "doctrine of discovery" was incorporated into United States federal Indian law. Section B examines how the doctrine of discovery and its assimilationist ideas were incorporated into the *Winters* doctrine and the PIA standard. Sections C and D argue that the indigenous peoples' right to self-determination should be incorporated into the way Indian water rights are quantified in the United States.

A. The Doctrine of Discovery

While it may seem inappropriate to look to international law principles to modify domestic federal Indian law, the first United States Supreme Court case to address Native Americans[299] relied on the international law principle known as the doctrine of discovery.[300] The doctrine of discovery has its origins in medieval-era legal traditions legitimizing the Crusades and the Pope's "universal authority" over non-Christian peoples outside Europe.[301] Because this was the first time Europeans had confronted the question of the rights and status of non-Christian peoples, the Crusades generated many legal opinions and theories that could later be applied to indigenous peoples upon their first contact with Europeans.[302] The doctrine of discovery began to develop as the Pope issued legal edicts binding on all Christian monarchs.[303] These edicts gave the Pope's approval to certain countries to colonize different parts of the New World.[304] The papal edicts gave

298. For an analysis of how customary international law may fit into domestic state, federal, and constitutional law, see BEDERMAN, *supra* note 254, at 151-57.

299. *See* Johnson v. McIntosh, 21 U.S. (8 Wheat) 543 (1823).

300. *See* Williams, *Encounters*, *supra* note 17, at 672-73 (stating that the most famous and influential elaboration of the doctrine of discovery in international law is Chief Justice John Marshall's opinion in *Johnson v. McIntosh*).

301. FEDERAL INDIAN LAW, *supra* note 16, at 43.

302. *Id.* at 42-43.

303. *Id.* at 45.

304. *Id.* (noting that the Pope gave Portugal a "monopoly" over Africa, so Europe's other Catholic sovereigns had to look elsewhere to build colonies).

explorers the exclusive right, as against explorers from other countries, to colonize the land of indigenous peoples in order to "obtain salvation for their souls."[305] Even the royal agreement between Christopher Columbus and Spain that provided Columbus with royal authority to discover and make conquests in the New World was based on these Crusades-era legal principles.[306] The legal theory underpinning the exploration, discovery, and conquest of the New World thus rested on the idea that explorers could lawfully claim territories inhabited by indigenous peoples, as long as the people inhabiting the territories were infidels and not Christians.[307] In the nineteenth century, writers on international law regarded the customary practice of colonization based on doctrine of discovery principles as demonstrating that the doctrine had become part of the world's law of nations.[308]

In *Johnson v. McIntosh*, Chief Justice John Marshall formally incorporated the international law principle of the doctrine of discovery into the domestic law of the United States.[309] In *Johnson*, the United States Supreme Court held that, under principles derived from the law of nations, discovery gave title of lands occupied by Indians to the government by whose authority the discovery was made.[310] Discovery of land occupied by "fierce savages" gave the Christian explorers an exclusive right to extinguish the Indian title of occupancy, and this "title by conquest" could not be denied by the courts of the conqueror. [311] In other words, title by conquest could not be denied by the United States Supreme Court. Justice Marshall not only incorporated the title by conquest principle into United States law, he also incorporated the implicit rationale for the doctrine of discovery rule: the inferiorly-regarded "character and religion" of the Indians justified "considering them as a people over whom the superior genius of Europe might claim an ascendancy."[312]

B. Doctrine of Discovery Principles and Indian Water Rights

In 1908, these doctrine of discovery principles, supported by the idea that the Indians needed to be forcibly "civilized," were incorporated into the determination of Indian water rights in *Winters v. United States*.[313] In *Winters*, the Supreme Court found an impliedly reserved water right for Native Americans who

305. *Id*.
306. *Id*.
307. FEDERAL INDIAN LAW, *supra* note 16, at 43.
308. Williams, *Encounters*, *supra* note 17, at 667.
309. *Id.* at 673.
310. Johnson v. McIntosh, 21 U.S. (8 Wheat.) 543, 573 (1823).
311. *Id.* at 588.
312. *Id.* at 573.
313. 207 U.S. 564; *see also supra* Part IIB for a discussion of the *Winters* decision.

had been forced onto reservations.[314] Although in *Winters* Justice McKenna did not explicitly rely on the doctrine of discovery as a basis for the opinion, he did hold that Indian water rights are recognized in the United States because they further the goal of changing the "habits and wants of a nomadic and uncivilized people."[315] Much like the Christian explorers taking title by conquest because of the inferior "character and religion" of the natives, the policy of the United States government was to change the Indians into a "pastoral and civilized people" by forcing them onto small reservations suitable only for agriculture.[316] Yet, as Justice McKenna recognized, the lands given to the Indians for reservations were arid, and without irrigation, were "practically valueless."[317] If the Indians were to learn "agriculture and the arts of civilization," they needed water with which to irrigate.[318] In finding a reserved water right, Justice McKenna adopted the idea that the Indians' "uncivilized" nomadic lifestyle was inferior to an agriculture-based lifestyle.[319]

Rather than simply declaring the existence of water rights appurtenant to reservation land, Justice McKenna used contract analysis to determine the existence of an impliedly reserved water right.[320] Implicit in Justice McKenna's contract analysis were the same assumptions that legitimized the doctrine of discovery. Indians, as nomadic infidels, needed to be civilized by their conquerors, and because they lacked the "intelligence" to demand water rights in treaty negotiations, a water right would be implied for them.[321] As Justice McKenna wrote, reserved water rights for Indians exist because it would be "extreme" to believe that Congress would take from the Indians the "means of continuing their old habits," i.e. vast tracts of land on which to hunt, without leaving them the power to change to new habits, i.e. water with which to irrigate.[322]

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314. 207 U.S. at 577.

315. *Id.* at 576.

316. *See id.*; *see, e.g.*, Dawes Act, 25 U.S.C. §348 (dividing Indian reservations into individual Indian allotments and authorizing the sale of surplus land to non-Indians); Monique C. Shay, *Promises of a Viable Homeland, Reality of Selective Reclamation: A Study of the Relationship Between the* Winters *Doctrine and Federal Water Development in the United States*, 19 ECOLOGY L.Q. 547, 556 (1992); *see also* Lemei, *supra* note 232, at 241 (noting that *Winters* became a "key component of federal Indian policy at a time when the objective of the federal government was to give Indians land where they could become farmers").

317. *Winters*, 207 U.S. at 576.

318. *Id.*

319. *Id.*

320. *Id.* at 576-77.

321. *Id.* at 577 (noting that the rule of interpreting treaties with Indians is that ambiguities will be resolved from the standpoint of the Indians, who would not have foreseen the need to include water rights in treaty negotiations).

322. *Id.*

Winters made it clear that the rationale for finding reserved Indian water rights was to further the policy of turning nomadic Indians into farmers. However, it was not until 1963, with the *Arizona v. California* decision, that Indian water rights were quantified using irrigable acreage as their basis.[323] In *Arizona v. California*, the Court found that the only feasible and fair way to measure Indian reserved water rights was to measure the practicably irrigable acreage of the reservation.[324] In tying Indian water rights to the number of reservation acres capable of irrigation, the Supreme Court once again implicitly incorporated doctrine of discovery principles into United States law. While the language of the 1963 *Arizona v. California* opinion does not explicitly acknowledge the assumption that Indians had to be civilized through reliance on agriculture, by tying Indian water rights to irrigation the court implicitly approved of that assumption.

The foregoing history of the incorporation of the doctrine of discovery in *Johnson v. McIntosh*, through the inclusion of those same principles into the present-day standard for quantifying Indian water rights in *Arizona v. California*, makes clear that the same principles that justified conquest and colonization on the basis of racial inferiority are still with us today. However, to those unfamiliar with the doctrine of discovery and its role in denying rights to Indians based on their inferiorly-regarded "character and religion," using the practicably irrigable acreage standard may not seem objectionable.[325] The doctrine of Indian reserved rights was created at a time when United States government policies encouraged the assimilation of Indians into American society through farming.[326] However, current United States policies emphasize the recognition of tribal governments and Indian self-determination.[327] Because the practicably irrigable acreage standard incorporates anachronistic doctrine of discovery principles to quantify Indian water rights, it perpetuates unacceptable ideas from the past.[328] Determining water rights based on the amount of land that can be irrigated may seem completely natural, but the underlying assumption that irrigation of reservation land is necessary to "civilize" Native Americans cannot be ignored in today's society.

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323. *See* 373 U.S. 546; *see also supra* Part IID.

324. 373 U.S. at 601.

325. *See* Williams, *Columbus's Legacy*, *supra* note 14, at 67-68 (noting that practitioners and students who are not familiar with the racist origins of the core doctrines of modern federal Indian law do not realize that citing to decisions incorporating these doctrines perpetuates cultural racism).

326. McGovern, *supra* note 15, at 212-13; Lemei, *supra* note 232, at 241.

327. McGovern, *supra* note 15, at 212-13; *see also* Indian Self-Determination and Education Assistance Act of 1975, 25 U.S.C. § 450 *et seq*.

328. *See* Williams, *Columbus's Legacy*, *supra* note 14, at 67-68.

C. The Rights to Property, Self-Determination, and Cultural Integrity under International Law

Though doctrine of discovery principles formed the historic basis, both internationally and domestically, for laws dealing with indigenous peoples, in the modern international human rights arena, the focus has moved to indigenous peoples' rights to property, self-determination, and cultural integrity.[329] The right of indigenous peoples to self-determination is a norm of customary international law and is specifically mentioned in the Draft United Nations Declaration on the Rights of Indigenous Peoples.[330] Recent cases before the Inter-American Commission on Human Rights have focused on indigenous peoples' rights to self-determination through tribal control over their property, land, and natural resources.[331] The right to self-determination has been defined as the idea that "human beings, individually and as groups, should be in control of their own destiny and that structures of government should be devised accordingly."[332] The idea of self-determination supports reforms of political institutions that "impede the capacities of indigenous peoples to develop freely."[333]

One of the most important rights for indigenous peoples is to be able to govern the allocation, use, and protection of their natural resources, including water.[334] Indigenous control over the waters in their territories ensures that tribes can make decisions that meet their needs.[335] Self-determination requires that the dignity of indigenous institutions that control water resources be respected. Recognizing these indigenous institutions can strengthen indigenous culture.[336] The right of indigenous peoples to control their land and other natural resources is essential to maintaining their traditional way of life.[337] As such, because indigenous peoples' way of life and existence depends on their relationship with their land and natural resources, their human rights are intertwined with their environmental rights.[338]

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329. *See, e.g.*, Proposed American Declaration, *supra* note 286.

330. Anaya, *supra* note 258, at 29; Draft United Nations Declaration, *supra* note 266, at Art. 3.

331. *See* Anaya & Williams, *supra* note 244, at 35 (noting four cases before the Inter-American human rights system addressing the issue of indigenous peoples' rights over land and resources).

332. Anaya, *supra* note 258, at 30.

333. *Id.*

334. David H. Getches, *Indigenous Peoples' Rights to Water under International Norms*, 16 COLO. J. INT'L ENVTL. L. & POL'Y 259, 289 (2005).

335. *Id.*

336. *Id.*

337. John Alan Cohan, *Environmental Rights of Indigenous Peoples under the Alien Tort Claims Act, the Public Trust Doctrine and Corporate Ethics, and Environmental Dispute Resolution*, 20 UCLA J. ENVTL. L. & POL'Y 133, 154 (2001/2002).

338. *Id.*

The right to self-determination is closely linked to another right of indigenous peoples that has come to the forefront of international human rights law: the right to cultural integrity.[339] Article 27 of the Covenant on Civil and Political Rights specifically mentions the right to cultural integrity, which protects the rights of persons in minority groups to "enjoy their own culture, to profess and practice their own religion[, and] to use their own language."[340] The United Nations in particular has also recognized the close link that binds indigenous cultural integrity to indigenous peoples' land use patterns.[341]

The land and resource rights of indigenous peoples are crucial to the "existence, continuity, and culture" of indigenous peoples.[342] The OAS Proposed American Declaration on the Rights of Indigenous Peoples also expressly connects property rights and customs to the survival of indigenous cultures in Article VII.[343] Most significantly, the Draft United Nations Declaration singles out protection for indigenous control over their water resources.[344] The Draft United Nations Declaration represents that, as a matter of international customary law,[345] and as a matter of respecting the right to self-determination and cultural integrity, states should promote indigenous control over their water resources. Perhaps unknowingly citing to a principle of international human rights law, the Arizona Supreme Court in *Gila River V* has also specifically recognized the importance of preservation of culture and its link to water rights.[346]

D. The Right to Self-Determination and the Quantification of Indian Water Rights in the United States

In the United States, one only need look to the Big Horn River cases to see how the right to self-determination is linked to indigenous control over water resources. When the Wyoming Supreme Court announced the decision in *Big*

339. *See* Anaya & Williams, *supra* note 243, at 50 (citing International Covenant on Civil and Political Rights, December 16, 1966, G.A. Res. 2200(XXI), 999 U.N.T.S. 171 (entered into force Mar. 23, 1976), Art. 27 [hereinafter Covenant on Civil and Political Rights]).

340. Covenant on Civil and Political Rights, *supra* note 339, at art. 27.

341. *See* Anaya & Williams, *supra* note 244, at 49 (noting that the U.N. Sub-commission on Promotion and Protection of Human Rights is conducting a study on indigenous peoples and their relationship to land).

342. *Id.*; Liu, *supra* note 97, at 449.

343. Anaya & Williams, *supra* note 244, at 50-51 (citing Proposed American Declaration, *supra* note 286, at art. VII).

344. Draft United Nations Declaration, *supra* note 266, at Art. 26.

345. *See* Mattiske, *supra* note 296, at 1120 (noting that the Draft United Nations Declaration is not a binding legal document, but has considerable moral force and is significant evidence of international custom).

346. Gila River V, *supra* note 188, at 79-80.

Horn III, Shoshone and Northern Arapaho tribal leaders criticized the decision as limiting the tribes' inherent right to manage tribal resources.[347] The *Big Horn III* decision essentially substituted the authority of the tribes with that of the State Engineer. In *Big Horn III*, the Wyoming Supreme Court did not change the amount of water the tribes were entitled to, but it did find that the Wyoming State Engineer possessed the authority to determine how that water was to be used on the Wind River Reservation.[348] The tribes wanted to use their water rights to build trout fisheries that would provide economic development opportunities by attracting anglers to the reservation.[349] The *Big Horn III* decision provided that the tribes must use their water rights according to the preferences defined by Wyoming law: the tribes must use their water for agricultural projects before fisheries, "whether the tribes like it or not."[350] The problem, says Gary Collins, co-chairman of the Wind River Water Users Resources Control Board,[351] is not "agriculture vs. fish. It's the inherent right of managing the water . . . . No one else manages our timber, our land, our people."[352] In losing the battle to control the water that "represents not only economic profit but sacred ritual, tribal leaders say their lack of self-determination hurts when they're looking for a better future."[353] Because the *Big Horn III* decision requires tribes to comply with state law to change the way they use their water, the decision "runs counter to current Federal policies favoring Indian self-determination."[354]

Some commentators argue that water quantified using the PIA standard is not limited to agricultural use only.[355] However, the Wyoming Supreme Court's reasoning in *Big Horn III* makes clear that the agricultural use requirement is certainly being applied and upheld in practice.[356] When the PIA standard is used to enforce the idea that tribes have the right to water only to the extent that it is used for on-reservation agriculture, tribal sovereignty and self-determination suffer.[357] The Mescalero Apache tribe knows this all too well, as it saw its water

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347. Prodis, *supra* note 152.

348. *Id.*; *see also supra* Part IIIB for a discussion of the *Big Horn III* decision.

349. Prodis, *supra* note 152.

350. *Id.*

351. The Wind River Water Users Resources Control Board was established by the tribes of the Wind River Reservation as the tribal administrative agency in charge of the water resources on the reservation. Big Horn III, *supra* note 160, at 275-76.

352. Prodis, *supra* note 152.

353. *Id.*

354. McGovern, *supra* note 15, at 213.

355. *See, e.g.* Lemei, *supra* note 232, at 258.

356. *See* Big Horn III, *supra* note 160, at 277-78.

357. *See* Liu, *supra* note 97, at 450. Liu also notes that tribal sovereignty suffers when tribes are unable to sell or lease their water to off-reservation users. *Id.* It should be noted that the idea that Indian water may not be transferred to off-reservation uses is tied to the assimilationist policy origins of the *Winters* doctrine. According to these ideas, Indians have water rights only because they needed to be "civilized" through farming. Allowing

rights award shrink when the New Mexico Court of Appeals affirmed the trial court's decision that the tribe's agricultural projects were not "economically feasible."[358] One way to support tribal self-determination and tribal sovereignty is to encourage the development of tribal water codes and other tribal regulatory programs for water administration on the reservation.[359] This is precisely what the tribes on the Wind River Reservation tried to do before the Wyoming Supreme Court stepped in to enforce state law in place of tribal discretion.

VI. CONCLUSION

Customary international law, through the doctrine of discovery, had a disastrous effect on Native Americans in the United States. Now, the opportunity is upon the courts to use customary international law protections for the rights of indigenous peoples to change the way Indian water rights are quantified in the United States.[360] The assimilationist ideas incorporated in the PIA standard should be discarded in favor of a quantification standard that supports the internationally-recognized right to self-determination for Native Americans. It is the obligation of the courts to fulfill the implicit promise of *Winters v. United States* and ensure that Indian water rights are quantified in a way that does not promote an anachronistic legal doctrine, but instead supports tribal self-determination.

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off-reservation use of water would seem to run contrary to this outdated policy because the water would not be used for on-reservation farming.

358. State *ex rel* Reynolds v. Lewis, 861 P.2d 235, 247-48 (1993); *see also* Franks, *supra* note 144, at 560-62.

359. Liu, *supra* note 97, at 450. One recent tribal water rights settlement in Arizona requires the tribe to develop its own water code as a provision of the settlement agreement. Zuni Indian Tribe Water Rights Settlement Act of 2003, § 8(b)(1)(F)(i), Pub. L 108-34, 117 Stat. 782.

360. *See* Anaya, *supra* note 258, at 39 (noting that the origins of United States legal doctrine concerning Native peoples is in international law and that it would be appropriate for the United States doctrine to "again cross paths with the relevant international law").