

# All Homelands Need *Agua Caliente*: Analyzing the Impact of Arizona's *Gila III* Via the Hopi Tribe's Recommended Decree

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## INTRODUCTION

“It has been said that to be a Hopi is to be a steward of the earth, a caretaker of the land and the water . . . . It has also been said that in Hopi culture, everything is about water. Water is life. Water is the beginning and end of the cycle of life. Our connection to water is very sacred and intimate.”<sup>1</sup> But, despite this sanctity, and despite the Hopi Tribe's efforts, there has historically been great uncertainty regarding the Hopi Tribe's legal water rights.<sup>2</sup>

For nearly forty years, the Hopi have participated in water rights negotiations and Arizona's General Stream Adjudication (“GSA”) for the Little Colorado River.<sup>3</sup> Hopi Chairman Timothy Nuvangyaoma recently declared the Hopi Tribe's water rights adjudication as “the fight of our

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1. Ian James, *'We Need Water To Survive': Hopi Tribe Pushes for Solutions in Long Struggle for Water*, AZ CENT. (Dec. 14, 2020, 8:46 AM), <https://www.azcentral.com/in-depth/news/local/arizona-environment/2020/12/14/hopi-tribe-pushes-solutions-many-without-clean-drinking-water/3731341001/> [https://perma.cc/QQ4H-Z3XG] (quoting Hopi Tribe Chairman Timothy Nuvangyaoma).

2. *See id.* (discussing other water-related issues that the Hopi people face, such as water quality, proximity of water to villages, lack of water infrastructure, etc.).

3. *See id.* (noting the Hopi Tribe joined the GSA in 1985, along with the Navajo Nation). For general information on general stream adjudications in Arizona, see *Overview of General Stream Adjudications*, JUD. BRANCH ARIZ. MARICOPA CNTY., <http://www.superiorcourt.maricopa.gov/SuperiorCourt/GeneralStreamAdjudication/faq.asp#5> [https://perma.cc/T6YU-923L].

lives.”<sup>4</sup> In May 2022, Special Master Harris<sup>5</sup> published her recommended final report on the Hopi Tribe’s “claims for federal reserved water rights from sources that are appurtenant to the Hopi Reservation.”<sup>6</sup> The Special Master’s report is only a “recommended final decree.”<sup>7</sup> Arizona Superior Court Judge Brain will receive the report, resolve any objections, and then issue the official final decree.<sup>8</sup>

Besides the importance of formally quantifying the Hopi Tribe’s water rights, its adjudication is the first to directly apply Arizona’s *Gila III* and *Gila V* standards to a federally-recognized Tribe.<sup>9</sup> Thus, beyond Hopi-specific takeaways, the decree provides unique insight to better understand and predict future Arizona GSAs involving Tribes.<sup>10</sup> On a national scale, the Hopi Tribe’s decree has the potential to test Arizona’s *Gila III* and *Gila V* governing standards against the long-standing practicably irrigable acreage

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4. Umar Farooq, *In Arizona Water Ruling, the Hopi Tribe Sees Limits on Its Future*, PROPUBLICA (July 7, 2023, 5:00 AM), <https://www.propublica.org/article/arizona-water-ruling-hopi-tribe-limits-future> [<https://perma.cc/Z2XN-66WK>].

5. *See generally Adjudications: Gila River and Little Colorado River General Stream Adjudications*, ARIZ. DEP’T WATER RES., <https://new.azwater.gov/adjudications/gila-river-and-little-colorado-river-general-stream-adjudications> [<https://perma.cc/7F6D-9EXP>].

The Special Master is a judicial officer appointed by the Arizona Superior Court to hear cases arising out of the adjudications and report on legal and factual issues designated by the Superior Court. After resolving all the objections to the hydrographic survey reports, the Special Master will present a report and recommended final decree to the Superior Court judge assigned to each adjudication. After hearing and resolving any objections to the Special Master’s report, the judges will issue the final decree for each watershed.

*Id.*

6. Final Report at 7, *In re the General Adjudication of All Rights to Use Water in the Little Colorado River System and Source*, CV 6417-203 (Ariz. Super. Ct. May 25, 2022), <http://www.superiorcourt.maricopa.gov/SuperiorCourt/GeneralStreamAdjudication/docs/Final-Report-6417-203-05-25-2022.pdf> [<https://perma.cc/LDY8-VW6E>].

7. *Overview of General Stream Adjudications*, *supra* note 3 (discussed under the “What is the position of Special Master?” FAQ).

8. *Adjudications: Gila River and Little Colorado River General Stream Adjudications*, *supra* note 5. Judge Blaney is scheduled to take over Judge Brain’s position overseeing the adjudications. *See* Minute Entry, W-1, W-2, W-3, and W-4 (Consolidated) CV 6417 (Ariz. Super. Ct. Jan. 20, 2023), <http://www.superiorcourt.maricopa.gov/SuperiorCourt/GeneralStreamAdjudication/docs/W-1-W-2-W-3-and-W-4-and-CV-6417-filed-1-20-2023.pdf> [<https://perma.cc/F94H-EG77>].

9. The Gila River Indian Community’s water rights would have been adjudicated under the *Gila III* and *Gila V* standards; however, the Tribe ended up agreeing to a settlement with numerous other parties to resolve its water rights. *See In re Gen. Adjudication of All Rts. to Use Water in the Gila River Sys. & Source*, 224 P.3d 178, 182–83 (Ariz. 2010).

10. Such as the Navajo Nation, which is currently adjudicating its water rights before the Special Master. *See generally Arizona v. Navajo Nation*, 143 S. Ct. 1804 (2023).

(“PIA”) standard and the Ninth Circuit’s newly-minted *Agua Caliente* standard.<sup>11</sup> This would require the Hopi Tribe or Navajo Nation to appeal their water rights decree to the United States Supreme Court. Of course, such action would require appealing a decree through the entire Arizona court system—likely taking years, if it were to occur at all.

This Comment argues that the Hopi Tribe’s situation demonstrates the shortsighted and unfair nature of applying Arizona’s *Gila III* rule to federally-recognized Tribes located within Arizona’s borders. Arizona law, under *Gila III*, “only permits a federal reserved water right to appurtenant groundwater for use on a reservation when other waters are inadequate to accomplish the purpose of a reservation.”<sup>12</sup> This piece argues that adhering to such a rule will ultimately be damaging and costly to all parties—especially Tribes—particularly with accelerating water security and climate change concerns.<sup>13</sup>

Further, due to the Ninth Circuit’s decision in *Agua Caliente*, *Gila III* now directly contradicts federal law.<sup>14</sup> Arizona should scrap *Gila III* and apply an *Agua Caliente*-like rule. The swiftest manner of doing so would likely require involvement of the Arizona legislature.

However, ostensibly, the most feasible option is an overturning of *Gila III* by the Arizona Supreme Court. This option would require a Tribe to spend large amounts of time and resources on appealing its decreed water rights to the Arizona Supreme Court. The Arizona Supreme Court would then need to overrule its own *Gila III* precedent and replace it with an *Agua Caliente*-like rule.<sup>15</sup> Because state courts are only bound by their own higher court

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11. See generally *Practicably Irrigable Acreage*, ERA ECONOMICS, <https://eraeconomics.com/portfolio/practicably-irrigable-acreage/> [<https://perma.cc/37HQ-8G5V>]; *Agua Caliente Water Rights*, NATIVE AMERICAN RIGHTS FUND, <https://narf.org/cases/agua-caliente-v-coachella/> [<https://perma.cc/7XPT-PVJV>].

12. Final Report, *supra* note 6, at 194–95.

13. See Rebecca Tsosie, *Indigenous People and Environmental Justice: The Impact of Climate Change*, 78 U. COLO. L. REV. 1625, 1628 (2007). See generally Kyle Powys Whyte, *The Recognition Dimensions of Environmental Justice in Indian Country*, 4 ENV’T JUST. 199 (2011).

14. *Compare Agua Caliente Band v. Coachella Valley Water Dist.*, 849 F.3d 1262, 1270 (9th Cir. 2017) (“We must now determine whether the *Winters* doctrine, and the Tribe’s reserved water right, extends to the groundwater underlying the reservation. And while we are unable to find controlling federal appellate authority explicitly holding that the *Winters* doctrine applies to groundwater, we now expressly hold that it does.”), with *In re Gen. Adjudication of All Rts. to Use Water in the Gila River Sys. & Source (Gila III)*, 989 P.2d 739, 748 (Ariz. 1999) (“We do not, however, decide that any particular federal reservation, Indian or otherwise, has a reserved right to groundwater. A reserved right to groundwater may only be found where other waters are inadequate to accomplish the purpose of a reservation.”).

15. Arizona’s *Gila III* was decided nearly two decades before the Ninth Circuit’s *Agua Caliente* decision. See *Gila III*, 989 P.2d at 739. Thus, it is somewhat understandable why the

precedents and the United States Supreme Court, technically the Ninth Circuit's *Agua Caliente* decision would be persuasive authority to the Arizona Supreme Court if the above situation occurred.<sup>16</sup> Still, Arizona should follow suit because an *Agua Caliente*-like rule would (1) provide Tribes with increased long-term water security; (2) better align with Arizona's *Gila V* and federal law; (3) reduce the likelihood of costly litigation and uncertainty over groundwater in the future for all parties; and (4) better protect Tribes' sovereignty over their land and resources.

Part II provides a brief overview of water law, specially highlighting the differences for states in the Western United States, such as Arizona. This Part then discusses the *Winters* Doctrine and its progeny—crucial elements to understand any federally-recognized Tribe's fight for legal water rights. Part III dives into Arizona's departure from federal law, and the nuances that Tribes face in Arizona courts. Part IV highlights the Hopi Tribe's journey through Arizona's GSA of the Little Colorado River, noting important points from Special Master Harris's recommended decree. Part V analyzes why a rule similar to the Ninth Circuit's *Agua Caliente* should supplant *Gila III* in Arizona GSAs involving federally-recognized Tribes. Part VI concludes.

## I. CONTEXTUALIZING THE *WINTERS* DOCTRINE<sup>17</sup> WITHIN WATER LAW

Water law is complex. For example, one could spend a lifetime solely studying or practicing law pertaining to the Colorado River—also known as

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Arizona Supreme Court decision now conflicts with federal law—there was little to no federal guidance when *Gila III* was decided.

16. See U.S. CONST. art. VI, cl. 2 (The Supremacy Clause: “This Constitution, and the Laws of the United States which shall be made in Pursuance thereof; and all Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land; and the Judges in every State shall be bound thereby, any Thing in the Constitution or Laws of any State to the contrary notwithstanding.”).

17. There are also *Winans* rights to water for many Tribes. *Winans* rights are associated with reserved rights to traditional practices, such as accessing traditional fishing and hunting areas. Depending on the specific traditional practice, these rights may be connected to water rights if the practice requires water. These rights tend to hold time immemorial priority dates but are usually quantified at a lesser amount than *Winters* rights. See *United States v. Winans*, 198 U.S. 371, 381 (1905) (“In other words, the treaty was not a grant of rights to the Indians, but a grant of rights from them—a reservation of those not granted.”); see also 1 COHEN’S HANDBOOK OF FEDERAL INDIAN LAW § 19.02 (Nell Jessup Newton et al. eds., Matthew Bender & Co. 2023) [hereinafter COHEN’S HANDBOOK] (“The *Winans* decision may serve as the source of some tribal reserved rights to water. . . . *Winans* may be the origin of tribal rights to water implied by a reservation of aboriginal ways of life, such as fishing or traditional agriculture.”).

the “Law of the River.”<sup>18</sup> Shedding light on its breadth, water law encompasses the Clean Water Act, water rights to use water (including both groundwater and surface water), dams and water storage, water leasing, international and interstate water disputes, and so much more. One of the most important—and complex—aspects of this fascinating body of law is determining who owns a water right. Ownership of a water right provides the owner with the right to use a specific amount of water per year from a specific water source.<sup>19</sup>

This Comment is about water rights. To be more specific, this Comment addresses federally-recognized Tribes’ water rights, with a particular emphasis on Tribes in Arizona. However, it is important to set the scene before diving into the nuances of federal Indian water law. To start, for the purposes of water law, the United States can effectively be split into two systems: (1) prior appropriation rights and (2) riparian rights.<sup>20</sup> Prior appropriation is primarily associated with the Western United States, including Arizona.<sup>21</sup> The riparian system primarily applies to the Eastern United States.<sup>22</sup>

Although there are many differences between the two systems, a key difference is land ownership is required for a water right under the riparian system.<sup>23</sup> Put another way, a party must own abutting land to the water source to establish it owns a water right of that source.<sup>24</sup> Contrarily, under prior appropriation, a party need not own abutting land to possess a water right.<sup>25</sup> Rather, the party needs to establish that it effectively diverted water from a water source at a particular point in time and then beneficially used the

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18. See *Law of the River*, BUREAU OF RECLAMATION, <https://www.usbr.gov/lc/region/pao/lawofrvr.html> [<https://perma.cc/H463-22UJ>].

19. See, e.g., ARIZ. REV. STAT. ANN. §§ 45-141, 151, 182 (2023).

20. See *Water Rights*, CAL. WATER BDS.: STATE WATER RES. CONTROL BD., [https://www.waterboards.ca.gov/waterrights/board\\_info/faqs.html#toc178761085](https://www.waterboards.ca.gov/waterrights/board_info/faqs.html#toc178761085) [<https://perma.cc/D8H2-UPNW>].

21. See *id.* (“All western states have enacted laws that require water users to get a permit from the state. In general, those laws provide the highest priority to the earliest water users. This is known as the ‘Doctrine of Prior Appropriation’ and is sometimes called ‘first in time, first in right.’”); see, e.g., ARIZ. CONST. art. 17, § 1 (“The common law doctrine of riparian water rights shall not obtain or be of any force or effect in the state.”).

22. See *Water Rights*, *supra* note 20 (“Most eastern states recognize riparian rights. Most western states either never recognized riparian rights or no longer do so.”).

23. *Id.* (“Riparian rights usually come with owning a parcel of land that is adjacent to a source of water, and the rights remain with the parcel when it changes hands.”).

24. *Id.*

25. WILLIAM C. CANBY, JR., *AMERICAN INDIAN LAW IN A NUTSHELL* 527–28 (7th ed. 2020).

water.<sup>26</sup> Another major difference between the two systems is that prior appropriation operates on a “first in time, first in right” notion.<sup>27</sup> In other words, the party that can prove to a court of law that it diverted water and beneficially used it before all other parties claiming a right has the strongest legal right.<sup>28</sup> Once officially decreed by a court of law, a party’s “priority date” dictates their place in line for a specific water source.<sup>29</sup> If the water source is over allocated, those with younger priority dates may receive no water if the older priority dates use all of the water—hence, the “first in time, first in right” rule.<sup>30</sup> Finally, quantification of a water right matters more under the prior appropriation system.<sup>31</sup> Unlike riparian rights, which theoretically allow unlimited water use for natural purposes and reasonable use for artificial purposes,<sup>32</sup> prior appropriation rights must be quantified to determine how much water a party can use from the water source.<sup>33</sup> Without quantification, the “first in time, first in right” rule would fail because there would be no legal water use limit on parties with older priority dates.<sup>34</sup>

Water rights for federally-recognized Tribes are different. In 1908, the Supreme Court decided *Winters v. United States*,<sup>35</sup> which “established that the creation of an Indian reservation impliedly reserves water rights to the tribe or tribes occupying the territory.”<sup>36</sup> Further, *Winters* held that the reserved water rights are necessary to fulfill the purpose of the reservation and “are paramount to water rights later perfected under state law.”<sup>37</sup> A Tribe’s priority date under the *Winters* doctrine is the date the reservation was

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26. See, e.g., ARIZ. REV. STAT. ANN. § 45-141 (2023) (discussing Arizona’s prior appropriation laws, specifically “beneficial use”).

27. See *Water Rights*, *supra* note 20 (noting that prior appropriation is often referred to as “first in time, first in right” because “[i]n general, those laws provide the highest priority to the earliest water users”).

28. *Id.*

29. *Id.* (“Water rights are based on a priority system that is used to determine who can continue taking water when there is not enough water to supply all needs. Those with high priority rights know that they are likely to receive water. Those with low priority rights know that they may not receive water in all years and can plan accordingly.”).

30. *Id.*

31. See RHETT LARSON, JUST ADD WATER: SOLVING THE WORLD’S PROBLEMS USING ITS MOST PRECIOUS RESOURCE 98–100 (2020).

32. See *id.* at 66.

33. See *Water Rights*, *supra* note 20 and accompanying text.

34. *Id.*

35. 207 U.S. 564, 577 (1908).

36. COHEN’S HANDBOOK, *supra* note 17, § 19.03.

37. *Id.*; see also CANBY, JR., *supra* note 25, at 532 (“Establishment of a reservation by treaty, statute or executive order includes an implied reservation of water rights in sources within or bordering the reservation.”).

established.<sup>38</sup> In a prior appropriation system, such as Arizona, the older the priority date, the more valuable the water right.<sup>39</sup> Thus, because many Tribes' reservations were established quite early in Western American history, those Tribes hold extremely valuable senior priority water rights under the *Winters* and prior appropriation doctrines.<sup>40</sup>

Although *Winters* rights fit nicely into prior appropriation regimes, these rights are not traditional prior appropriation rights nor riparian rights.<sup>41</sup> “Unlike appropriation rights, reserved rights are not based on diversion and actual beneficial use. Instead, sufficient water is reserved to fulfill the purposes for which a reservation was established.”<sup>42</sup> In addition, *Winters* rights are not “lost by non-use,”<sup>43</sup> unlike prior appropriation's forfeiture doctrine.<sup>44</sup> On the other hand, “[u]nlike riparian rights, Indian reserved rights are not reduced ratably in times of shortage.”<sup>45</sup> *Winters* rights, therefore, are clearly their own category—they “are creatures of federal law, which defines their extent.”<sup>46</sup>

This Part seeks to provide a thorough overview of the *Winters* Doctrine; *Winters* legal paper water rights<sup>47</sup> are just one piece of the puzzle. Section (a)

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38. See CANBY, JR., *supra* note 25, at 532 (“The water rights are reserved as of the date of creation of the applicable portion of the reservation. Competing users with prior appropriation dates under state law take precedence over the Indian rights, but those with later dates are subordinate.”).

39. *Id.*

40. For example, the Colorado River Indian Tribes' reservation was established in 1865 and “has the first priority decreed water right to divert 719,248 acre-feet per year to serve tribal lands in both Arizona and California.” See Press Release, Colo. River Indian Tribes, U.S. Senate Committee Considers CRIT Water Resiliency Act (Mar. 23, 2022), [https://www.critnsn.gov/Press%20Release%20CRIT%20Water%20Resiliency%20Act\\_03232022.pdf](https://www.critnsn.gov/Press%20Release%20CRIT%20Water%20Resiliency%20Act_03232022.pdf) [<https://perma.cc/B6KX-FSRV>].

41. See COHEN'S HANDBOOK, *supra* note 17, § 19.01.

42. *Id.*

43. CANBY, JR., *supra* note 25, at 533.

44. See, e.g., *Jenkins v. State, Dep't of Water Res.*, 647 P.2d 1256, 1260 (Idaho 1982) (“If a senior right has been abandoned or forfeited, the priority of the original appropriator is lost . . . and the junior appropriators move up the ladder of priority.” (citation omitted)); ARIZ. REV. STAT. ANN. § 45-141(C) (2023) (“Except as otherwise provided in this title or in title 48, when the owner of a right to the use of water ceases or fails to use the water appropriated for five successive years, the right to the use shall cease, and the water shall revert to the public and shall again be subject to appropriation.”).

45. COHEN'S HANDBOOK, *supra* note 17, § 19.01.

46. CANBY, JR., *supra* note 25, at 532.

47. See Galen Lemei, *Abandoning the PIA Standard: A Comment on Gila V*, 9 MICH. J. RACE & L. 235, 265 (2003) (citing Susan D. Brienza, *Wet Water vs. Paper Rights: Indian and Non-Indian Negotiated Settlements and Their Effects*, 11 STAN. ENV'T L.J. 151, 160 (1992); E. Brandan Shane, *Water Rights and Gila River III: The Winters Doctrine Goes Underground*, 4 U.

discusses the actual quantification process for *Winters* rights and the development of the practicably irrigable acreage (“PIA”) method. Section (b) touches on the McCarran Amendment and the non-Tribal push for Tribes to adjudicate their *Winters* water rights in state courts. Section (c) addresses whether federal or state law should be applied to Tribes adjudicating in state courts. Finally, Section (d) discusses *Winters* rights as applied to groundwater—an issue the United States Supreme Court has yet to directly opine on.<sup>48</sup>

### A. *Quantifying Federally Reserved Water Rights*

Although the *Winters* ruling firmly established that federally-recognized Tribes have reserved water rights, quantification of those rights was still up in the air.<sup>49</sup> The riddle was solved in the landmark case, *Arizona v. California* (“*Arizona I*”).<sup>50</sup> There, the Court established the PIA standard for quantifying federally reserved water rights.<sup>51</sup> First, the standard requires a court to determine the purpose of the reservation.<sup>52</sup> Due to false assumptions and the all-too-common treatment of Indian Tribes as a monolith,<sup>53</sup> *Winters* and the PIA standard assume that the purpose of most Indian reservations is to

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DENV. WATER L. REV. 397, 421 (2001)) (“Indians usually do not have the resources necessary to realize their ‘paper’ water rights, even after they are confirmed in court.”).

48. Judith M. Dworkin, *Courts Have Much To Resolve in Determining Indian Water Rights*, SACKS TIERNEY (Feb. 27, 2022), <https://www.sackstierney.com/blog/courts-have-much-to-resolve-in-determining-indian-water-rights/> [https://perma.cc/4L8Q-LV47] (“In addition to whether the source of supply is appurtenant, a growing concern is whether a tribe may establish the source of supply as groundwater. The U.S. Supreme Court has not directly addressed the issue.”).

49. *Compare* *Winters v. United States*, 207 U.S. 564, 566 (1908) (discussing quantification only in the abstract: “Other portions of the reservation are . . . of dry and arid character, and, in order to make them productive, require large quantities of water for the purpose of irrigating them”), with *Arizona v. California* (*Arizona I*), 373 U.S. 546, 601 (1963) (“We have concluded, as did the Master, that the only feasible and fair way by which reserved water for the reservations can be measured is irrigable acreage. The various acreages of irrigable land which the Master found to be on the different reservations we find to be reasonable.”).

50. *Arizona I*, 373 U.S. at 546.

51. *Id.* at 600–01; see *Arizona v. California* (*Arizona II*), 460 U.S. 605, 620–23 (1983) (providing more context regarding PIA, as well as its benefits in a prior appropriation regime).

52. CANBY, JR., *supra* note 25, at 532 (“The quantity of water reserved for Indian use is that amount sufficient to fulfill the purpose of the reservation.”).

53. ROXANNE DUNBAR-ORTIZ, AN INDIGENOUS PEOPLES’ HISTORY OF THE UNITED STATES 13 (2014) (“[T]here is no such thing as a collective Indigenous peoples’ perspective, just as there is no monolithic Asian or European or African peoples’ perspective.”).



encourage Tribes to adopt an agrarian lifestyle.<sup>54</sup> Accordingly, the purpose of a Tribe's reservation land is to grow crops and/or raise livestock.<sup>55</sup>

When using the PIA standard to actually quantify a Tribe's water rights, courts must assess (1) whether the soil is arable, (2) the engineering feasibility of growing and transporting crops, and (3) the economic feasibility of growing a reasonably productive crop.<sup>56</sup> Initially, these three elements may be quite difficult to determine, requiring many legal experts.<sup>57</sup> However, once the above questions are answered, the court applies a straightforward formula to determine the amount of water decreed.<sup>58</sup> Once formally quantified under the PIA standard, a Tribe is not required to use its water solely for agriculture.<sup>59</sup> In fact, a Tribe has full discretion over its water usage (if beneficial) once the right and quantity is decreed.<sup>60</sup>

### B. State Court General Stream Adjudications and the McCarran Amendment

To understand the McCarran Amendment's full effect on Tribes, a solid understanding of state general stream adjudications ("GSA") is necessary. "General stream adjudications are judicial proceedings to determine the extent and priority of all water rights in an entire river system."<sup>61</sup> Put simply, these adjudications attempt to resolve every party's water right claim for a

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54. *Winters*, 207 U.S. at 576 ("The reservation was a part of a very much larger tract which the Indians had the right to occupy and use and which was adequate for the habits and wants of a nomadic and uncivilized people. It was the policy of the Government, it was the desire of the Indians, to change those habits and to become a pastoral and civilized people.").

55. CANBY, JR., *supra* note 25, at 532–33 ("When that purpose is agriculture, enough water is reserved to irrigate all the practicably irrigable acreage of the reservation.").

56. See *In re Gen. Adjudication of All Rts. To Use Water in the Big Horn River Sys.*, 753 P.2d 76, 101–05 (Wyo. 1988), *aff'd sub nom. Wyoming v. United States*, 492 U.S. 406 (1989).

57. See Martha C. Franks, *The Uses of the Practicably Irrigable Acreage Standard in the Quantification of Reserved Water Rights*, 31 NAT. RES. J. 549, 570 (2020) ("A PIA case is ordinarily a matter of expert testimony, a fact which implies that the questions are objective and scientific.").

58. See *Arizona I*, 373 U.S. 546, 601 (1963) (noting the "only feasible and fair way by which reserved water for the reservations can be measured is irrigable acreage").

59. See *Colville Confederated Tribes v. Walton*, 647 F.2d 42, 48 (9th Cir. 1981).

60. See David H. Getches, *Indian Water Rights Conflicts in Perspective*, in *INDIAN WATER IN THE NEW WEST* 7, 13 (Thomas R. McGuire et al. eds., 1993) ("[M]ost tribes have few practical limitations on their ability to use water for almost any purpose.").

61. *Arizona's General Stream Adjudications*, JUD. BRANCH ARIZ. MARICOPA CNTY., <http://www.superiorcourt.maricopa.gov/SuperiorCourt/GeneralStreamAdjudication/Index.asp> [<https://perma.cc/UC4H-YDPP>].

given river system.<sup>62</sup> Because GSAs often involve thousands of parties, they can be incredibly complex and last decades.<sup>63</sup> For example, in the Arizona context, there are currently two adjudications: the Gila River and the Little Colorado River Adjudications.<sup>64</sup>

“Historically, the states lacked subject matter jurisdiction over Indian water rights, and federal and tribal governments could not be compelled to appear in state proceedings” due to sovereign immunity and tribal sovereign immunity.<sup>65</sup> However, in 1952 Congress passed the McCarran Amendment, which waived the federal government’s sovereign immunity as to state GSAs.<sup>66</sup> Thus, the United States could be joined as a defendant in state court adjudications involving water rights.<sup>67</sup> Despite Tribes not being mentioned in the McCarran Amendment,<sup>68</sup> subsequent Supreme Court decisions have forced them to adjudicate in state courts or sit on the sidelines and allow the United States, as trustee, to adjudicate on their behalf.<sup>69</sup>

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62. *Id.*

63. *See, e.g., id.* (“Thousands of claimants and water users participate in these cases before the Superior Court of Arizona in Maricopa County and in Apache County.”); *see also Overview of General Stream Adjudications, supra* note 3 (“As of June 30, 2015, 83,876 statements of claimant had been filed in the Gila River Adjudication and 14,654 claims in the Little Colorado River Adjudication.”).

64. *See Overview of General Stream Adjudications, supra* note 3 (discussing the origin and history of these two GSAs, under FAQ “How did these adjudications start?”).

65. COHEN’S HANDBOOK, *supra* note 17, § 19.05.

66. *See* 43 U.S.C. § 666(a).

67. *Id.*

68. *Id.*

Consent is given to join the United States as a defendant in any suit (1) for the adjudication of rights to the use of water of a river system or other source, or (2) for the administration of such rights, where it appears that the United States is the owner of or is in the process of acquiring water rights by appropriation under State law, by purchase, by exchange, or otherwise, and the United States is a necessary party to such suit. The United States, when a party to any such suit, shall (1) be deemed to have waived any right to plead that the State laws are inapplicable or that the United States is not amenable thereto by reason of its sovereignty, and (2) shall be subject to the judgments, orders, and decrees of the court having jurisdiction, and may obtain review thereof, in the same manner and to the same extent as a private individual under like circumstances: Provided, That no judgment for costs shall be entered against the United States in any such suit.

*Id.*

69. *See, e.g., Colo. River Water Conservation Dist. v. United States*, 424 U.S. 800, 813 (1976); *Arizona v. San Carlos Apache Tribe*, 463 U.S. 545, 565–71 (1983).

The judicial push to apply the McCarran Amendment to Tribes began with *Colorado River Water Conservation District v. United States*.<sup>70</sup> There, the Supreme Court held that both federal and state courts have jurisdiction to adjudicate Tribal water rights in a given state.<sup>71</sup> Moreover, the Court found that the McCarran Amendment also waived the United States' sovereign immunity pertaining to "Indian water rights held in trust by the United States."<sup>72</sup>

Next, highlighting the difference between the United States' sovereign immunity and a Tribe's sovereign immunity, several Tribes in *Arizona v. San Carlos Apache Tribe*<sup>73</sup> argued that Tribal sovereign immunity was not waived by the McCarran Amendment.<sup>74</sup> Despite agreeing with the Tribes on that point, the Supreme Court held that a Tribe's water rights being adjudicated were held in trust by the United States, and the United States' sovereign immunity was waived by the McCarran Amendment.<sup>75</sup> Accordingly, "Tribes may thus choose to rely on the federal government to assert and protect their water rights, or waive their sovereign immunity by intervening as party defendants in state-court general stream adjudications."<sup>76</sup>

Since the pivotal Supreme Court decisions in *Colorado River Water Conservation District* and *San Carlos Apache Tribe*, the Ninth Circuit has issued mixed decisions in this area.<sup>77</sup> However, it is safe to assume that federal courts will leave these issues to state courts if provided an avenue.<sup>78</sup> For example, in *United States v. Braren*,<sup>79</sup> the Ninth Circuit held that a federal court should not touch a state water adjudication until it is complete.<sup>80</sup> The Ninth Circuit also ruled against a Tribe attempting to prevent United States officials from adjudicating its water rights in state court without the Tribe's

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70. *Colo. River Water Conservation Dist.*, 424 U.S. at 800.

71. *Id.* at 806–13.

72. *Id.*; see also COHEN'S HANDBOOK, *supra* note 17, § 19.05(1) (noting the "abstention doctrine" in this case, generally favoring state court GSAs over federal intervention).

73. *San Carlos Apache Tribe*, 463 U.S. at 566.

74. *Id.*

75. *Id.* at 566–70.

76. COHEN'S HANDBOOK, *supra* note 17, § 19.05(1).

77. See *id.* (noting "federal courts should generally abstain in favor of state-court general stream adjudications;" however, "the McCarran Amendment does not divest federal courts of their jurisdiction to determine reserved water rights").

78. See *id.*; see also *Colo. River Water Conservation Dist. v. United States*, 424 U.S. 800, 817–20 (1976).

79. 338 F.3d 971 (9th Cir. 2003).

80. *Id.* at 975–76.

consent.<sup>81</sup> Further, in *State Engineer of Nevada v. South Fork Band*,<sup>82</sup> a federal district court made it clear that “[a]lthough the McCarran Amendment does not address the question of removal, the United States should not be able to accomplish indirectly, by way of removal, what it does not have the right to do directly, by asserting sovereign immunity in the state court proceeding.”<sup>83</sup>

Though limited, there are examples of federal courts intervening in state adjudications.<sup>84</sup> For example, in *United States v. Adair*,<sup>85</sup> the Ninth Circuit upheld a federal district court’s decision to adjudicate a Tribal water rights issue, rather than defer to the state courts.<sup>86</sup> Well-known Federal Indian Law scholar Judge William Canby, Jr., notes that “[o]n occasion a federal court is called upon to make a ruling concerning the existence or extent of Indian water rights in order to settle a collateral controversy.”<sup>87</sup>

### C. State General Stream Adjudications: State or Federal Law?

After Tribes were pushed into state courts to adjudicate their federally reserved water rights, the question turned to whether federal law or state law would control.<sup>88</sup> Supreme Court precedent—*San Carlos Apache Tribe*—seemed to provide a clear answer: “State courts, as much as federal courts, have a solemn obligation to follow federal law.”<sup>89</sup> Furthermore, the Supreme Court promised “a particularized and exacting scrutiny commensurate with the powerful federal interest in safeguarding those rights from state encroachment,” if “any state-court decision alleged to abridge Indian water

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81. See *United States v. White Mountain Apache*, 784 F.2d 917 (9th Cir. 1986); see also *United States v. Oregon*, 44 F.3d 758 (9th Cir. 1994).

82. *State Eng’r of Nev. v. S. Fork Band*, 114 F. Supp. 2d 1046 (D. Nev. 2000).

83. *Id.* at 1052.

84. See COHEN’S HANDBOOK, *supra* note 17, § 19.05(1) (“Nonetheless, the McCarran Amendment does not divest federal courts of their jurisdiction to determine reserved water rights.”).

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

86. *Id.* at 1404–07.

87. CANBY, JR., *supra* note 25, at 547.

88. See COHEN’S HANDBOOK, *supra* note 17, § 19.05(1) (“Moreover, state courts are obligated to use federal law to determine tribal reserved rights.”). *But see In re Gen. Adjudication of All Rts. To Use Water in Big Horn River Sys.*, 835 P.2d 273, 285 (Wyo. 1992) (Thomas, J., concurring) (recommending “that state law be invoked with respect to any change of use or the implementation of any right to instream flow” in litigation involving “use of water on the Wind River Indian Reservation”).

89. *Arizona v. San Carlos Apache Tribe*, 463 U.S. 545, 571 (1983); see also CANBY, JR., *supra* note 25, at 532 (“*Winters* rights are creatures of federal law, which defines their extent.”).

rights protected by federal law.”<sup>90</sup> Despite clear words from the *San Carlos Apache Tribe* Court, some states, such as Arizona, have decided to craft and apply their own state laws in GSAs involving Tribes.<sup>91</sup> Taking the Supreme Court at its word, though, “[s]tate courts, as much as federal courts, have a solemn obligation to follow federal law”<sup>92</sup> and “*Winters* rights are creatures of federal law, which defines their extent.”<sup>93</sup>

#### D. Federally Reserved Right to Groundwater

Although the *Winters* Doctrine is a particularly litigious topic in water law, its application to groundwater is currently nebulous.<sup>94</sup> As one scholar notes, “[t]he Supreme Court has not explicitly ruled that federal and Indian reserved water rights extend to groundwater itself.”<sup>95</sup> However, recently in *Arizona v. Navajo Nation*,<sup>96</sup> the U.S. Supreme Court did expressly include groundwater in a list discussing the scope of the *Winters* Doctrine:

Under this Court’s longstanding reserved water rights doctrine, sometimes referred to as the *Winters* doctrine, the Federal Government’s reservation of land for an Indian tribe also implicitly reserves the right to use needed water from various sources—such as groundwater, rivers, streams, lakes, and springs—that arise on, border, cross, underlie, or are encompassed within the reservation.<sup>97</sup>

Despite this inclusion by Justice Kavanaugh, the language seems to be dicta and provides little clear guidance on the Supreme Court’s views on *Agua Caliente*’s rule versus Arizona’s *Gila III*. However, as discussed below, some state and federal courts have provided clear opinions on the subject.

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90. *San Carlos Apache Tribe*, 463 U.S. at 571.

91. See *infra* Part II (discussing Arizona law).

92. *San Carlos Apache Tribe*, 463 U.S. at 571.

93. CANBY, JR., *supra* note 25, at 532.

94. See Samuel T. Ayres, *State Water Ownership and the Future of Groundwater Management*, 131 YALE L.J. 2213, 2313 (2022).

95. *Id.*

96. 143 S. Ct. 1804 (2023).

97. *Id.* at 1811 (citing *Winters v. United States*, 207 U.S. 564, 576–77 (1908); *Cappaert v. United States*, 426 U.S. 128, 138–39, 143 (1976); *Arizona v. California*, 373 U.S. 546, 598–600 (1963); COHEN’S HANDBOOK, *supra* note 17, § 19.03(2)(a)).

### 1. The Nebulous Period: Pre-*Agua Caliente* Decisions

The possibility of applying the *Winters* Doctrine to groundwater first appeared in *Cappaert v. United States*.<sup>98</sup> There, a federal reservation, Devil's Hole National Monument, was being depleted due to neighboring landowners' groundwater pumping.<sup>99</sup> The Ninth Circuit determined that the "implied-reservation-of-water doctrine applied to groundwater as well as to surface water."<sup>100</sup> However, on appeal, though affirming the Ninth Circuit ruling, the Supreme Court simply held "that the United States can protect its water from subsequent diversion, whether the diversion is of surface or groundwater."<sup>101</sup> The Supreme Court also held that Devil's Hole's water was surface water.<sup>102</sup> Thus, "[i]n *Cappaert*, as before, the Supreme Court left the question of a reserved right to groundwater unresolved."<sup>103</sup>

The first case involving a Tribe and federally reserved rights to groundwater arrived in the 1980s.<sup>104</sup> In a Wyoming adjudication, a special master attempted to apply the PIA standard—plus a more holistic look at the purpose of the reservation (similar to *Gila V*)<sup>105</sup>—but was overruled by the Wyoming Supreme Court.<sup>106</sup> Wyoming's highest court said a strict PIA standard was required, nothing more.<sup>107</sup>

Because the state of Wyoming was against the PIA standard, it appealed the case to the United States Supreme Court.<sup>108</sup> The Tribes also disagreed with various aspects of the Wyoming Supreme Court's opinion, including "that the court ambiguously indicated that they had no right to groundwater."<sup>109</sup> The Supreme Court granted certiorari only to Wyoming's

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98. 426 U.S. 128 (1976).

99. *Id.* at 133.

100. *Id.* at 137; *see also* *United States v. Cappaert*, 508 F.2d 313, 318 (9th Cir. 1974).

101. *Cappaert*, 426 U.S. at 143.

102. *Id.* at 142.

103. *Gila III*, 989 P.2d 739, 746 (Ariz. 1999).

104. *See In re Gen. Adjudication of All Rts. To Use Water in the Big Horn River Sys.*, 753 P.2d 76 (Wyo. 1988), *aff'd sub nom. Wyoming v. United States*, 492 U.S. 406 (1989).

105. *See infra* Section II.E.

106. *See In re Gen. Adjudication of All Rts. To Use Water in the Big Horn River Sys.*, 753 P.2d at 113.

107. *Id.*

108. *Id.*

109. *Getches, supra* note 60, at 17.

challenge of the PIA standard, which it ultimately upheld.<sup>110</sup> The groundwater issue, as pertaining to Tribes, would have to wait another decade.<sup>111</sup>

Next, Arizona's Supreme Court took on the issue and provided a clear rule of law.<sup>112</sup> In *Gila III*, the third interlocutory appeal coming out of the GSA of the Gila River,<sup>113</sup> the Arizona Supreme Court held:

[T]hat the federal reserved water rights doctrine applies not only to surface water but to groundwater. We decide this issue in the abstract at this time as a necessary step in determining the scope of interests to be encompassed by this adjudication. We do not, however, decide that any particular federal reservation, Indian or otherwise, has a reserved right to groundwater. *A reserved right to groundwater may only be found where other waters are inadequate to accomplish the purpose of a reservation.* To determine the purpose of a reservation and to determine the waters necessary to accomplish that purpose are inevitably fact-intensive inquiries that must be made on a reservation-by-reservation basis.<sup>114</sup>

Overall, Arizona's Supreme Court held that *Winters* applies to groundwater, but "may only be found where other waters are inadequate to accomplish the purpose of a reservation."<sup>115</sup> Some scholars have noted the remarkable nature of this ruling.<sup>116</sup> First, the Arizona Supreme Court expressly made a decision regarding federally reserved rights to groundwater,

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110. See *Wyoming v. United States*, 492 U.S. 406, 407 (1989) (affirming the lower court "by an equally divided Court" with Justice O'Connor not taking part in the decision).

111. Compare *id.* (the Supreme Court not granting certiorari regarding the Tribes' groundwater rights), with *Gila III*, 989 P.2d 739, 748 (Ariz. 1999) (establishing a rule pertaining to Tribes' groundwater rights, at least in Arizona).

112. See *Gila III*, 989 P.2d at 748.

113. In the context of the Gila River GSA, "[a]n interlocutory appeal asks an appellate court to decide an issue which cannot be resolved on the facts in the case, but whose resolution is essential to a final decision in the case." *Interlocutory Appeals*, JUD. BRANCH ARIZ. MARICOPA CNTY., <http://www.superiorcourt.maricopa.gov/SuperiorCourt/GeneralStreamAdjudication/interLocutoryAppeals.asp> [https://perma.cc/XPZ4-266J]. In the late 1980s, the Arizona Supreme Court issued an order "to establish a procedure for early review of substantial questions in the Gila River Adjudication." *Id.* This allowed any party to ask the Arizona Supreme Court "to review by interlocutory appeal any ruling of the [Arizona] Superior Court." *Id.* Also, the Arizona Superior Court has the ability to "certify to the Supreme Court questions deemed substantial for review." *Id.* Both *Gila III* and *Gila V*, cases discussed extensively in this paper, are interlocutory appeals stemming from this process. See *id.*

114. *Gila III*, 989 P.2d at 748 (emphasis added).

115. *Id.*; cf. COHEN'S HANDBOOK, *supra* note 17, § 19.03(2)(a) ("Reserved rights presumably attach to all water sources—groundwater, streams, lakes, and springs—that arise on, border, traverse, underlie, or are encompassed within Indian reservations.").

116. See Debbie Shosteck, *Beyond Reserved Rights: Tribal Control over Groundwater Resources in a Cold Winters Climate*, 28 COLUM. J. ENV'T L. 325, 333–36 (2003).

where the United States Supreme Court sidestepped.<sup>117</sup> Second, due to the abstract nature of the holding and the relegation of groundwater to an if-necessary source, the court left many unanswered questions.<sup>118</sup> Presumably most important for Tribes: Is *Gila III* helpful or harmful for their water right claims?<sup>119</sup>

Not long after *Gila III*, federal courts started to provide more explicit views on the issue.<sup>120</sup> For example, a district court in Washington “held that reserved rights extend to all groundwater resources of the reservation . . . without regard to whether surface water sources are inadequate to provide for tribal needs.”<sup>121</sup> But, the order was vacated after a settlement was reached following the decision.<sup>122</sup>

## 2. Clear Skies?: The *Agua Caliente* Decision

More recently, the Ninth Circuit provided its opinion in *Agua Caliente Band v. Coachella Valley Water District*.<sup>123</sup> There, the circuit court concisely phrased the question: “We must now determine whether the *Winters* doctrine, and the Tribe’s reserved water right, extends to the groundwater underlying the reservation.”<sup>124</sup> And then succinctly answered: “[W]hile we are unable to find controlling federal appellate authority explicitly holding that the *Winters* doctrine applies to groundwater, we now expressly hold that it does.”<sup>125</sup>

In explaining its reasoning, the Ninth Circuit looked to *Cappaert*’s holding that the United States could protect the waters of a federal reservation—“whether the diversion is of surface or groundwater.”<sup>126</sup> Therefore, “[i]f the United States can protect against groundwater diversions, it follows that the

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117. *See id.* at 326 (“In 1999, however, the Arizona Supreme Court, while overseeing the Gila River adjudication, was the first to take the bold step of concluding that federal reserved rights indeed apply to both surface and subsurface sources of water.”).

118. *Id.* at 337–38.

119. *See id.* at 337 (noting (1) “tribes may encounter difficulties in demonstrating that groundwater was an existing or foreseeable water use at the time the reservation was created” and (2) *Gila III* created “the subordination of groundwater reserved rights to surface water reserved rights”).

120. *See, e.g.,* United States v. Washington, 375 F. Supp. 2d 1050, 1058, 1068–70 (W.D. Wash. 2005).

121. COHEN’S HANDBOOK, *supra* note 17, § 19.03(2)(b) n.28 (citing *Washington*, 375 F. Supp. 2d at 1058, 1068–70).

122. *Id.*; *see also* United States v. Wash., Dep’t of Ecology, No. C01-0047Z, 2007 U.S. Dist. LEXIS 86162 (W.D. Wash. Nov. 20, 2007).

123. *Agua Caliente Band v. Coachella Valley Water Dist.*, 849 F.3d 1262 (9th Cir. 2017).

124. *Id.* at 1270.

125. *Id.*

126. *Id.* at 1271 (quoting *Cappaert v. United States*, 426 U.S. 128, 143 (1976)).



government can protect the groundwater itself.”<sup>127</sup> The Ninth Circuit emphasized that the *Winters* Doctrine requires that the “unappropriated water must be ‘appurtenant’ to the reservation,” which is not limited to surface water.<sup>128</sup> Finally, the Ninth Circuit highlighted the necessity of the *Winters* Doctrine to include all sources of water, particularly groundwater.<sup>129</sup> The court noted that groundwater often is the only source of water for many reservations in the Western United States—as is the situation for the Tribe in the case, the Agua Caliente Band of Cahuilla Indians.<sup>130</sup>

The final issue in *Agua Caliente* turned on the relationship between a Tribe’s federally reserved rights with “state water law and the Tribe’s existing water rights.”<sup>131</sup> The water agencies argued the Agua Caliente Band should not be awarded a federal reserved right to groundwater because it was superfluous and unnecessary.<sup>132</sup> Specifically, it was unnecessary because: “(1) the Tribe has a correlative right to groundwater under California law and (2) the Tribe has not drilled for groundwater on its reservation, and (3) because the Tribe is entitled to surface water from the Whitewater River Decree.”<sup>133</sup>

The Ninth Circuit rebutted the arguments by stating that: (1) federal reserved rights preempt state water rights; (2) historical use, or lack thereof, does not destroy a federal reserved right; and (3) federal law “does not ask if water is currently needed to sustain the reservation; it asks whether water was envisioned as necessary for the reservation’s purpose at the time the reservation was created.”<sup>134</sup> In addition, the Ninth Circuit wrote that “[reserved rights] are flexible and can change over time.”<sup>135</sup>

The opinion concludes by reiterating that “the *Winters* Doctrine does not distinguish between surface water and groundwater.”<sup>136</sup> Rather, the doctrine

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127. *Id.*

128. *Id.* (quoting *Cappaert*, 426 U.S. at 138).

129. *Id.* (“Thus, survival is conditioned on access to water—and a reservation without an adequate source of surface water must be able to access groundwater.”).

130. *Id.* (“More importantly, such reliance exists here, as surface water in the Coachella Valley is minimal or entirely lacking for most of the year.”).

131. *Id.* at 1272.

132. *Id.*

133. *Id.*

134. *Id.*; see also CANBY, JR., *supra* note 25, at 537 (“The federal reserved right is not diminished or otherwise affected by the fact that the reservation may have some state-law water rights.”).

135. *Agua Caliente*, 849 F.3d at 1272 (citing *Colville Confederated Tribes v. Walton*, 647 F.2d 42, 47–48 (9th Cir. 1981); *United States v. Ahtanum Irrigation Dist.*, 236 F.2d 321, 326 (9th Cir. 1956)).

136. *Agua Caliente*, 849 F.3d at 1272 (citing *Colville Confederated Tribes*, 647 F.2d at 47–48).

is only limited by the reservation's purpose and the location of the water—appurtenant to the reservation or not.<sup>137</sup> *Agua Caliente*, however, did not specify a bright-line test or provide concrete guidance for lower courts to carry out its holding.<sup>138</sup> Rather, there the lower court trifurcated the case into three phases, with the upcoming “final phase [to] determine the actual quantification of the Tribe's right to groundwater from the aquifer.”<sup>139</sup> One scholar writes: “Although the Ninth Circuit's decision in *Agua Caliente* was a win for tribal interests, climate change and reduced water supplies may lead some courts to narrowly construe the ruling.”<sup>140</sup> She even suggests that courts may take inspiration from Arizona's more limited *Gila III* decision.<sup>141</sup>

## II. ARIZONA'S APPROACH TO THE *WINTERS* DOCTRINE

Arizona's current application of the *Winters* Doctrine stems from a series of interlocutory appeals emerging from the GSA of the Gila River.<sup>142</sup> There are currently ten cases from the series,<sup>143</sup> with *Gila III* and *Gila V* arguably the most important for Tribes' federally reserved water rights.

### E. Arizona's Take on *Winters*—*Gila V*

In *Gila V*, the Arizona Supreme Court created a reservation-specific approach to Indian water rights that seeks to determine the minimum amount of water necessary for a “permanent home and abiding place” for the Tribe.<sup>144</sup> The Arizona Supreme Court highlighted several factors that lower Arizona courts should consider when adjudicating Tribes' water rights.<sup>145</sup> Though not exhaustive, these factors include the Tribe/reservation's (1) history, (2)

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137. *Id.*

138. *Id.* at 1273 (“[W]e express no opinion on how much water falls within the scope of the Tribe's federal groundwater right . . . . [T]o guide the district court in its later analysis, we hold that the creation of the Agua Caliente Reservation carried with it an implied right to use water from the Coachella Valley aquifer.”).

139. Catherine Schluter, *Indian Reserved Rights to Groundwater: Victory for Tribes, for Now*, 32 GEO. ENV'T L. REV. 729, 733–35 (2020).

140. *Id.* at 736.

141. *Id.*

142. These most prominently include *Gila III* and *Gila V*. See *Gila III*, 989 P.2d 739, 739 (Ariz. 1999); *In re Gen. Adjudication of All Rts. To Use Water in the Gila River Sys. & Source (Gila V)*, 35 P.3d 68, 79–81 (Ariz. 2001); see also *supra* note 94 and accompanying text.

143. The most recent case is from 2012, *In re Gen. Adjudication of All Rts. To Use Water in the Gila River Sys.*, 289 P.3d 936 (Ariz. 2012).

144. See *Gila V*, 35 P.3d at 76–77.

145. *Id.* at 79–80.

culture, (3) geography, (4) topography, (5) natural resources, (6) economic base, (7) employment needs, (8) past water use, (9) estimated future water use, and (10) present/future population.<sup>146</sup>

Notably, the Arizona Supreme Court decision in *Gila V* flies in the face of the United States Supreme Court's decision in *Arizona I* (establishing the PIA quantification standard).<sup>147</sup> *Gila V* is also contrary to the express words of *San Carlos Apache Tribe*, stipulating that federal law would continue to dictate Tribes' water rights even in state courts.<sup>148</sup> Arizona is currently the only state that has replaced *Arizona I*'s PIA quantification method, though other state courts attempted to do so before *Gila V*.<sup>149</sup>

Scholars seem to have mixed feelings regarding Arizona's *Gila V* standard. A full exhaustion of the *Gila V* debate is beyond the scope of this Comment; however, Senior Judge Canby, Jr. seems skeptical that Tribes will be better off under the *Gila V* "homeland" standard.<sup>150</sup> Other scholars seem to agree.<sup>151</sup> Contrarily, many scholars view the PIA standard as harmful to Tribes because it forces them in an agrarian box or has potential to create inequities between different Tribes due to the diversity of reservations' topography.<sup>152</sup> One scholar even suggests the full-on PIA standard would not be feasible in Arizona: "One estimate suggests that the application of the PIA standard to all reservations in Arizona would require eleven times the state's total dependable surface water supply."<sup>153</sup> Although the merit of this debate is no doubt important, this Comment seeks to understand whether *Gila III* or

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146. *Id.*

147. *See supra* Section I.A.

148. *See supra* Section I.B.

149. *See* CANBY, JR., *supra* note 25, at 533–34 (discussing a Wyoming special master conducting a *Gila V*-like analysis for the Wind River Reservation in the late 1980s but being overturned by the Wyoming Supreme Court); *see also In re* General Adjudication of All Rts. To Use Water in the Big Horn River Sys., 753 P.2d 76 (Wyo. 1988).

150. CANBY, JR., *supra* note 25, at 533–34 ("The fact that this [*Gila V*] formula is likely to lead to a lower award to the tribes is suggested by the fact that they and the United States urged adherence to the standard of practically irrigable acreage.").

151. *See, e.g.,* Lemei, *supra* note 47, at 266 ("The Arizona Supreme Court purported to reject the PIA standard because it is unfair to Indians, but in its place it offered a standard that gives tribes a shadow of what they had before. In the fight for western water, the tribes of *Gila V* are the losers.").

152. *See, e.g.,* Barbara A. Cosens, *The Measure of Indian Water Rights: The Arizona Homeland Standard, Gila River Adjudication*, 42 NAT. RES. J. 835, 836–37 (2002).

153. JUDITH ROYSTER ET AL., NATIVE AMERICAN NATURAL RESOURCES LAW: CASES AND MATERIALS 512 (4th ed. 2018) (quoting 2 WATERS AND WATER RIGHTS § 37.02(c)(2) (Amy K. Kelley ed., 3d ed. 2016)).

an *Agua Caliente*-like rule fits best with Arizona's current law of the land—*Gila V.*<sup>154</sup>

*F. Tribes' Groundwater in Arizona: Agua Caliente or Gila III*

As mentioned above, in *Agua Caliente* the Ninth Circuit determined that Tribes' *Winters* rights include both surface water and groundwater.<sup>155</sup> However, in Arizona, the law of the land is *Gila III*.<sup>156</sup> There, the Arizona Supreme Court decided that federally reserved rights to groundwater only come into play "when groundwater is *necessary* to accomplish the purpose of a . . . reservation."<sup>157</sup> Put simply, *Gila III* stipulates that surface water rights should be determined first.<sup>158</sup> Then, only if needed, rights to groundwater will be determined.<sup>159</sup> Though a seemingly small difference, there are significant implications for Tribes depending on whether *Gila III* or *Agua Caliente* is the controlling law.<sup>160</sup>

*Gila III* was decided nearly two decades before *Agua Caliente*, and lower state courts are bound by their state supreme court's rulings. So, until there is an appeal against *Gila III* taken up by the Arizona Supreme Court or the United States Supreme Court, Arizona lower courts must apply *Gila III* when resolving Tribal water rights in GSAs.<sup>161</sup>

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154. See *supra* notes 119–121 and accompanying text.

155. See *supra* Subsection I.D.2.

156. *Gila III*, 989 P.2d 739, 739 (Ariz. 1999).

157. *Id.* at 750 (emphasis added).

158. See Shosteck, *supra* note 116, at 337 ("Another interesting limitation the Arizona Supreme Court imposed on its holding . . . is the subordination of groundwater reserved rights to surface water reserved rights.").

159. *Id.* at 338 ("This conclusion . . . suggests that tribes will be entitled to groundwater only in limited circumstances.").

160. *Id.* at 337 ("[I]t will be difficult for a tribe to prove that the waters necessary to fulfill the needs of the reservation included groundwater.").

161. This situation demonstrates just one of the problems associated with applying the McCarran Amendment and state-specific laws to Tribes' *Winters* rights. The costs and resources required to appeal a state-specific law, like *Gila III*, through an entire state court system are presumably more than enough to deter most Tribes from taking on the fight.

## III. THE HOPI TRIBE'S GENERAL STREAM ADJUDICATION

The Hopi people have inhabited their lands since time immemorial,<sup>162</sup> with water being a sacred aspect of their culture and way of life.<sup>163</sup> Their reservation was established in 1882 by executive order and is located in what is now northeastern Arizona.<sup>164</sup> “The Reservation is made up of 12 villages on three mesas (known as First, Second, and Third Mesa) on more than 1.5 million acres.”<sup>165</sup>

The Hopi Tribe's participation in the GSA of the Little Colorado River began nearly forty years ago, in 1985.<sup>166</sup> Despite years of settlement negotiations between the major parties (Navajo Nation, City of Flagstaff, LCR Coalition, Salt River Project, etc.), no agreement has been reached.<sup>167</sup> Although many Arizona Tribes have resolved their water rights through settlements,<sup>168</sup> avoiding the need to fully litigate in a GSA, the Hopi Tribe's situation is unique. The Hopi Reservation is entirely located within the boundaries of the Navajo Nation's reservation, requiring both Tribes to be included in any water rights settlement.<sup>169</sup> Even though “Hopi and Navajo negotiators . . . made progress recently in talks on issues that have been ‘major stumbling blocks,’” an agreement has been evasive.<sup>170</sup> Thus, the parties moved towards litigation in the early 2000s.<sup>171</sup>

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162. See *Welcome to the Hopi Tribe*, THE HOPI TRIBE, <https://www.hopi-nsn.gov/> [<https://perma.cc/HN6M-BA7F>] (“Since time immemorial the Hopi people have lived in Hopitutskwa and have maintained our sacred covenant with Maasaw, the ancient caretaker of the earth, to live as peaceful and humble farmers respectful of the land and its resources. Over the centuries we have survived as a tribe, and to this day have managed to retain our culture, language and religion despite influences from the outside world.”).

163. See *supra* Introduction.

164. Sarah Bohl Gerke, *Hopi Reservation*, NATURE CULTURE AND HISTORY AT THE GRAND CANYON, <https://grcahistory.org/sites/beyond-park-boundaries/hopi-reservation/> [<https://perma.cc/J4T6-ZV7D>].

165. *Hopi Tribe Community Profile*, UNIV. OF ARIZ. NATIVE AM. ADVANCEMENT, INITIATIVES & RSCH., <https://naair.arizona.edu/hopi-tribe> [<https://perma.cc/WNM4-GNMC>].

166. Final Report, *supra* note 6, at 6, 9.

167. Final Report, *supra* note 6, at 9–10 (“Thereafter, state, federal, tribal, and non-tribal parties engaged in years of settlement negotiations. In 2002, when the parties had not resolved the claims and objections by negotiation, the Court directed the United States and the Hopi Tribe to file amended Statements of Claimant.”).

168. See CANBY, JR., *supra* note 25, at 539 (“Adjudications have not come easily . . . [f]or these reasons, tribes and other water users have sought quantification of Indian water rights by negotiation, administrative action, or legislation, and negotiated settlements are increasingly common.”).

169. See James, *supra* note 1.

170. *Id.* (discussing a 2012 proposed water settlement, with the involvement of then-Senators Jon Kyl and John McCain, that “encountered opposition and was scrapped”).

171. Final Report, *supra* note 6, at 10.

*G. Special Master’s Recommended Final Decree*

On May 25, 2022, Special Master Harris issued her recommended “Final Decree” for the Hopi Tribe’s federally reserved water rights.<sup>172</sup> Altogether, the final report is 408 pages long, includes 76 “Conclusions of Law,” and 341 “Findings of Fact.”<sup>173</sup> Below, in Figure 1, there is an overview of the Special Master’s decisions organized by type of water use.<sup>174</sup> Alongside those decisions, Figure 1 highlights the amounts of water claimed by the Hopi Tribe and the United States for each type of use, as well as the final difference (Special Master’s decision minus Hopi Claim) between Hopi-claimed water and court-decreed water.<sup>175</sup> Because the Recommended Decree would decree the Hopi Tribe “less than a third of the water sought,” Chairman Nuvangyaoma classified it “as modern-day genocide.”<sup>176</sup>

**Figure 1**<sup>177</sup>

Type of Water Use	Hopi Claim <sup>178</sup>	U.S. Claim	Special Master Decision	Difference (SM-Hopi)
Agriculture—crops and gardens	All-natural flow	18,897	18,898 (including allotments)	N/A
Alfalfa fields	12,008		0	-12,008
C&S Gardens	9,471		0	-9,471
Domestic, commercial, municipal, and light industrial uses	9,322	8,746	3,069.3	-6,252.7
Coal-fired electrical power generating plant	6,500	6,500	0	-6,500
Coal liquefaction/gasification Facility	20,600		0	-20,600
Coal mining	1,056.1 – 2,367	1,462	0	Between - 2,367 & -1,056.1

172. *See id.* at 1.

173. *Id.* at 282, 285.

174. *See infra* Figure 1.

175. *See infra* Figure 1.

176. Farooq, *supra* note 4.

177. Final Report, *supra* note 6, at 8, 289.

178. All claims and decisions are measured in acre-feet/year, unless otherwise indicated.

Hybrid coal-fired and solar electrical power generating plant	6,500		2,300 (including coal mining)	-4,200
Keams Canyon Recreational Area	26		26	0
Pasture Canyon	315.5	315.5	286.8	-28.7
Stockponds	3,576	3,572	3,572	-4
Cattle / Wildlife Watering <sup>179</sup>	824	824	824	0
White Ruins Canyon	12.39		12.39	0

### H. Major Concerns in the Adjudication

The recommended decree highlights the major disputes that took place in the Hopi adjudication. The parties disagreed as to the applicability of *Gila V*, with differing views on its consistency with federal law.<sup>180</sup> However, the Special Master stipulated that *Gila V* controlled because “[d]ecisions of the Arizona Supreme Court are binding on lower courts even as to issues of federal law, unless subsequent decisions by the United States Supreme Court have rendered the position of the Arizona Supreme Court untenable.”<sup>181</sup>

Due to *Gila V*'s non-exhaustive factor test,<sup>182</sup> major debates centered around the Tribe's past and present uses of water,<sup>183</sup> the projected future water demand,<sup>184</sup> and water rights for ceremonial and traditional uses.<sup>185</sup> Further, the economic feasibility of present and proposed commercial projects, requiring water, was especially contentious.<sup>186</sup> These projects, among others, included water for development of coal resources,<sup>187</sup> water for wildlife and livestock uses,<sup>188</sup> and agricultural irrigation.<sup>189</sup> A full assessment of these issues would likely require multiple articles.

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179. All parties stipulated to the 824 acre-feet/year amount for stock and wildlife watering, which was approved by the Special Master. Final Report, *supra* note 6, at 213.

180. Final Report, *supra* note 6, at 26.

181. *Id.*

182. *Id.* at 29.

183. *Id.* at 92.

184. *Id.* at 99.

185. *Id.* at 188.

186. *See, e.g., id.* at 232 (discussing water for coal resources development).

187. *Id.* at 232.

188. *Id.* at 200.

189. *Id.* at 147.

### I. Groundwater-Specific Rulings

The Special Master's Recommended Decree ruled on several groundwater issues that are particularly relevant to Tribes. First, the decree extends *Gila III*'s logic to aboriginal water rights.<sup>190</sup> In short, a Tribe may be decreed aboriginal rights to groundwater only when there is aboriginal title to the land above, and the Tribe lacks surface water sources.<sup>191</sup> This Conclusion of Law is particularly striking due to the lack of precedent on the issue.<sup>192</sup>

The Special Master noted neither the Navajo Nation nor United States cited authority on this point.<sup>193</sup> She then “extrapolat[ed] from the *Gila III* decision” to hold the limitations imposed by (1) “*Gila III* on the availability of federal reserved water rights to groundwater” and (2) “the federal courts to the scope of use of aboriginal rights” apply to the Hopi Tribe’s (along with the United States’) claim for aboriginal water rights.<sup>194</sup> Beyond the *Gila III* precedent, the only other authority cited by the Special Master in making this Conclusion of Law was the district court opinion from *Agua Caliente*.<sup>195</sup> In that opinion, as noted by the Special Master, “[t]he district court . . . held that the Tribe does not have an aboriginal right to the groundwater.”<sup>196</sup> However, the issue was not appealed to the Ninth Circuit and the circuit court expressly declined to opine on the issue.<sup>197</sup>

Second, the Special Master concluded the Hopi Tribe is “entitled to federal reserved rights to groundwater to provide water for perennial irrigation” when “[s]prings and impoundments” do not provide enough to irrigate 464 acres of land.<sup>198</sup> This ruling is true to the *Gila III* rule.<sup>199</sup>

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190. *Id.* at 24 (“Conclusion of Law No. 8. An aboriginal right to groundwater under land subject to aboriginal title may be found only where the surface waters subject to aboriginal water rights are hydrologically connected to the groundwater and inadequate to support the aboriginal uses or are so insufficient that the absence of an aboriginal right to the groundwater will result in the destruction of the aboriginal use.”).

191. *See id.*

192. *Id.* at 23–24.

193. *Id.* at 23.

194. *Id.* at 24.

195. *See Agua Caliente Band of Cahuilla Indians v. Coachella Valley Water Dist.*, No. EDCV 13-883-JGB, 2015 WL 13309103, at \*9 (C.D. Cal. Mar. 24, 2015), *aff’d per curiam*, 849 F.3d 1262 (9th Cir. 2017).

196. *Agua Caliente Band of Cahuilla Indians v. Coachella Valley Water Dist.*, 849 F.3d 1262, 1267 n.5 (9th Cir. 2017).

197. *Id.*

198. Final Report, *supra* note 6, at 187–88 (Findings of Fact Nos. 239–40 and Conclusion of Law No. 55).

199. *Gila III*, 989 P.2d 739, 748 (Ariz. 1999) (“A reserved right to groundwater may only be found where other waters are inadequate to accomplish the purpose of a reservation.”).



Third, the Special Master ruled that the Hopi Tribe is “entitled to federal reserved rights to groundwater to provide water for livestock and wildlife” because “[s]eeps, wetlands, impoundments, and washes” are insufficient sources.<sup>200</sup> However, it should be noted that the Hopi Tribe and other parties stipulated to the 824 acre-feet/year—including groundwater—for stock and wildlife use.<sup>201</sup>

Perhaps the most striking groundwater ruling was in connection with the Hopi Tribe’s water claims for “ceremonial and subsistence gardens.”<sup>202</sup> There, the Hopi Tribe claimed 9,471 acre-feet of groundwater for “one-quarter to one-third of the nationwide [future] Hopi population” to grow crops on their own acres of land.<sup>203</sup> The Hopi Tribe argued “the project is needed to maintain Hopi cultural and religious traditions.”<sup>204</sup>

The “ceremonial and subsistence garden” water claim was seemingly subjected to three tests: (1) “it must satisfy the basic standard set forth in *Gila V*,” (2) “it must also meet the PIA standard that requires a showing of economic feasibility and that the land is practicably irrigable” because it is a new irrigation project, and (3) “due to the choice of groundwater as the source of the irrigation, the Hopi Tribe must satisfy the *Gila III* test that allows federal reserved water rights to groundwater only ‘where other waters are inadequate to accomplish the purpose of a reservation.’”<sup>205</sup>

The Special Master determined that the Tribe failed to “adequately identify the location” of the gardens,<sup>206</sup> failed to meet the burden that the project was “economically sound,”<sup>207</sup> and failed the *Gila III* test.<sup>208</sup> The Special Master ruled against the project.<sup>209</sup>

The next step in the Hopi Tribe’s case is for Judge Brain, of the Arizona Superior Court, to resolve any lodged objections to the Special Master’s

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200. Final Report, *supra* note 6, at 207 (Conclusion of Law No. 66 and Finding of Fact No. 264).

201. *Id.* at 203.

202. *See id.* at 189.

203. *Id.* at 188–89.

204. *Id.* at 194.

205. *Id.* at 189 (citing *Gila III*, 989 P.2d 739, 748 (Ariz. 1999)).

206. *Id.* at 190 (Finding of Fact No. 242).

207. *Id.* at 194–95 (Finding of Fact No. 246).

208. *Id.* (Finding of Fact No. 247). The Special Master seemed particularly concerned that the water for the Ceremonial and Subsistence Gardens would be duplicative with the Hopi Tribe’s water claims for general agriculture.

209. *Id.* at 195 (Conclusion of Law No. 57) (“Federal reserved water rights to 9,471 acre-feet of groundwater annually for irrigation uses is not permitted because the Hopi Tribe did not meet its burden to prove that surface water is inadequate for that purpose.”).

Recommended Decree, and then approve a final decree.<sup>210</sup> All objections to the Special Master’s decree were due on November 21, 2022.<sup>211</sup> Further, on August 19, 2022, Judge Brain granted an extension for any responses to the objections, ruling they “must be filed on or before March 10, 2023.”<sup>212</sup> Once all responses are received, Judge Brain is tasked with “hearing and resolving any objections to the Special Master’s report” and “issu[ing] a final decree for each watershed.”<sup>213</sup> After Judge Brain issues a final decree, parties will have the opportunity to appeal to the Arizona Court of Appeals, if desired.<sup>214</sup>

#### IV. ALL HOMELANDS NEED *AGUA CALIENTE*

Arizona’s *Gila V*’s primary goal is to determine the minimum water needed for a Tribe to sustain “a permanent home and abiding place.”<sup>215</sup> The Arizona-specific law purports to tackle that goal by utilizing a holistic and multi-faceted evaluation, while pushing away from PIA’s inherent problem of pigeonholing Tribes in an agrarian position.<sup>216</sup> In the abstract, *Gila V* might hit the mark. However, the Hopi Tribe’s recommended decree demonstrates that the *Gila III* rule is preventing *Gila V* from truly providing a holistic evaluation.

In the Special Master’s recommended decree of water for the Hopi Tribe, “climate change” is only mentioned twice.<sup>217</sup> The term is mentioned in the

210. While this is occurring, Navajo Nation’s adjudication is currently in front of the Special Master. See Case Initiation Ord. for Navajo Nation, *In re* Gen. Adjudication of All Rts. to Use Water in the Little Colorado River Sys. & Source, CV6417-300 (Ariz. Super. Ct. Aug. 11, 2016), <http://www.superiorcourt.maricopa.gov/superiorcourt/generalstreamadjudication/docs/sm-Navajoord081116.pdf> [<https://perma.cc/XY2X-LEJF>] (phase 1’s trial began April 10, 2023, with phase 2’s trial set for September 20, 2027).

211. Final Report, *supra* note 6, at 1.

212. Order Amending the Filing Date for Responses to Objections to the Special Master’s Final Report, *In re* Gen. Adjudication of All Rts. to Use Water in the Little Colorado River Sys. & Source, CV 6417-203 (Ariz. Super. Ct. Aug. 19, 2022), <http://www.superiorcourt.maricopa.gov/SuperiorCourt/GeneralStreamAdjudication/docs/6417-203-OR-ext-filing-date-8-22-22.pdf> [<https://perma.cc/CD9T-LLNK>].

213. *Overview of General Stream Adjudications*, *supra* note 3 (discussed under the “What is the position of Special Master?” FAQ).

214. However, as of late January 2023, Special Master Susan Harris has resigned from the position, and Judge Blaney will be replacing Judge Brain in the near future. See Minute Entry, *supra* note 8.

215. *Gila V*, 35 P.3d 68, 74 (Ariz. 2001).

216. *Id.* at 76 (“Other right holders are not constrained in this, the twenty-first century, to use water in the same manner as their ancestors in the 1800s. Although over 40% of the nation’s population lived and worked on farms in 1880, less than 5% do today.”).

217. See Final Report, *supra* note 6, at 194.

same section where the Hopi Tribe's water claim for ceremonial and subsistence gardens failed.<sup>218</sup> Although testimony by the Hopi and United States argued that climate change will harm the Hopi Tribe's surface water sources, the decree states "insufficient evidence was introduced to reasonably permit any determination about whether the magnitude of that future impact of climate change would cause the available surface water to be inadequate to meet the agricultural needs of the reservation thereby giving rise to a federal reserved water right to groundwater."<sup>219</sup>

By following a rule that provides access to groundwater *only if* surface water is insufficient, Arizona is placing a high burden on Tribes. Not only must they provide strong evidence for future population size and economic feasibility of water-consuming projects, but they must also demonstrate that climate change will harm their surface water sources substantially enough for a need to access groundwater. If a Tribe is unable to meet such a high burden, they seemingly have no federally reserved right to groundwater.<sup>220</sup>

Arguably, at best, a Tribe would be able to return to Arizona state courts—in the event a surface water source becomes insufficient—to again argue for federally reserved groundwater rights or groundwater rights under Arizona state law.<sup>221</sup> This, of course, is not a great option and disregards judicial economy. Thus, *Gila III* clearly flies in the face of *Winters* and *Gila V*'s goal of "satisfy[ing] both present and future needs of the reservation as a livable homeland."<sup>222</sup>

With that in mind, Arizona should strike down *Gila III* and apply a rule akin to the Ninth Circuit's *Agua Caliente* rule when adjudicating federally reserved water rights, such as the Hopi's.<sup>223</sup> Although the swiftest method would involve legislation, presumably an opportunity to amend the standard will only arise if a Tribe appeals its decree to the Arizona Supreme Court.

For example, if the Hopi Tribe or Navajo Nation do not agree with their final decrees at the Arizona Superior Court and Court of Appeals levels, then they could appeal to the Arizona Supreme Court. There, the Arizona Supreme Court would have an opportunity to review and overturn its *Gila III* precedent. If the Arizona Supreme Court does so, lower Arizona courts will

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218. *Id.* at 189, 194.

219. *Id.* at 194.

220. As evidenced by the Hopi Tribe's Recommended Decree.

221. See Final Report, *supra* note 6, at 6 ("Rights to pump percolating groundwater underlying the Hopi Reservation based on state law are outside the scope of this case.").

222. *Gila V*, 35 P.3d 68, 77 (Ariz. 2001).

223. This piece understands that only the Arizona Supreme Court or United States Supreme Court can strike down *Gila III*; however, if given the opportunity, one of those courts should follow *Agua Caliente*'s clear rule.

be better equipped to take on the task of decreeing water rights for a Tribe's future homeland. Such a rule would likely result in better water security for Tribes and reduce the likelihood of costly litigation and uncertainty—for all parties—over groundwater in the future.

With the current *Gila III* rule, one can foresee a pile of litigation that will return to the courts due to uncertainty over groundwater. Some issues might include: dealing with access to groundwater not allocated to a Tribe, but under its land; whether Tribes are out of luck, due to *res judicata*, if their surface water is hit hard by climate change in the near future; or whether Tribes will need to return to court to reassert groundwater rights claims in the future (not to mention high litigation costs associated with this). By adhering to an *Agua Caliente*-like rule, groundwater claims will be fully included in any GSA. This will provide clarity to all parties involved once the final decree is formalized.

Finally, an *Agua Caliente*-like rule would better protect Tribes' sovereignty over their lands and resources. Many prominent scholars have noted that increased recognition of Tribal sovereignty is key to environmental justice and avoiding future environmental harms.<sup>224</sup> By recognizing a federally reserved right to groundwater, without the surface water sufficiency test, Tribes will be in the best position to assert sovereignty over their lands and resources. For example, a Tribe might have a preference of groundwater for a project (this could be for economic, historic, or traditional reasons). With an *Agua Caliente*-esque rule controlling, the Tribe need not overcome the *Gila III* rule, where the Arizona Supreme Court makes the decision that surface water wins the day. Instead, the Tribe could voice its preference for groundwater over surface water.

To be sure, due to the fact that groundwater is often not a renewable resource or polluted,<sup>225</sup> courts should carefully refrain from abusing an *Agua Caliente*-like rule to solely decree Tribes groundwater rights. If a Tribe's situation includes both surface and groundwater resources, Arizona courts

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224. See Tsosie, *supra* note 13, at 1676 (“Yet from an indigenous perspective, justice can only be achieved by an affirmative commitment to protect indigenous peoples within their traditional lands. This is the type of justice envisioned by advocates of an indigenous right to environmental self-determination.”); see also Whyte, *supra* note 13, at 199 (“Tribal governments will be more capable of preventing environmental injustices the more they contest federal policies and programs that impinge on their sovereignty.”).

225. See, e.g., James, *supra* note 1 (discussing how “[t]he Hopi have long lacked adequate drinking water” and “the ground naturally contains arsenic”); see also Schluter, *supra* note 139, at 733 (“But, during times of drought, the groundwater level continues to drop due to lack of recharge combined with unsustainable groundwater practices and overuse . . . Additionally, groundwater may be relied upon more as local surface waters dry up and water users are forced to use the aquifer's resources more heavily.”).

should ensure a decree provides the Tribe with a diversified water-source portfolio. Both *Winters* and *Gila V* seek to establish present and future homelands for Tribes<sup>226</sup>—pigeonholing them into a non-renewable box would directly violate these legal standards.

Some may ask whether Tribes would receive “an excessive quantification” of water because an *Agua Caliente* standard would allow claims for both surface water and groundwater.<sup>227</sup> With the current state of the Colorado River, this question is a valid concern.<sup>228</sup> However, Tribes have historically been excluded from Colorado River negotiations—resulting in disastrous issues for many Tribes.<sup>229</sup>

Legally, the *Winters* doctrine and *Gila V* are forward-looking and seek to provide water for a Tribe’s present and future homeland. With climate change and increased water scarcity, an *Agua Caliente* standard will serve to better protect Tribes and their communities in the long term, will avoid costly future litigation for all parties, and is better aligned with *Gila V*’s overarching policy goals. Thus, rather than “excessive quantification,” Tribes are simply attempting to secure the fulfillment of promises made by the United States through treaties and federal law—here, those promises manifest in reserved water rights for both surface water and groundwater sources.<sup>230</sup>

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226. See *supra* Section II.A.

227. The AZ Supreme Court seemed to be especially concerned with this in *Gila V*, pushing away from the PIA standard because it “awards what may be an overabundance of water by including every irrigable acre of land in the equation.” See *Gila V*, 35 P.3d at 79.

228. See Dante Chinni, *Colorado River Drought Holds Long-Term Problems for 40 Million People*, NBC NEWS (Aug. 21, 2022, 7:56 AM), <https://www.nbcnews.com/meet-the-press/western-u-s-faces-long-term-colorado-river-drought-issues-n1298102> [<https://perma.cc/96TV-AR6D>].

229. See Michael Elizabeth Sakas, *Historically Excluded from Colorado River Policy, Tribes Want a Say in How the Dwindling Resource Is Used. Access to Clean Water Is a Start.*, CPR NEWS (Dec. 7, 2021, 7:42 AM), <https://www.cpr.org/2021/12/07/tribes-historically-excluded-colorado-river-policy-use-want-say-clean-water-access/> [<https://perma.cc/3RFA-U5KE>] (“Native Americans weren’t considered U.S. citizens when the Colorado River agreement was signed. Tribes were excluded from this agreement and had no direct say in how the water they relied on for millennia was divided—a racial injustice tribal leaders say continues to hurt their members.”). For example, Sakas discusses how dozens of federally recognized Tribes “have relied on [the Colorado River] for drinking water, farming, and supporting hunting and fishing habitats for thousands of years.” *Id.* Yet, many Tribal members are lacking running water and much-needed infrastructure, and “[t]he situation has blocked tribal governments from accessing federal funding to build their own reservoirs, pipes and treatment facilities to direct clean water to their citizens.” *Id.*

230. In a similar vein, the Navajo Nation brought litigation against the United States Department of Interior at the U.S. Supreme Court. The Navajo Nation asserted a breach of the Department’s trust responsibility pertaining to Navajo’s water rights to Colorado River water. Navajo’s argument stems out of the Nation not being included in historical Colorado River

## V. CONCLUSION

The Special Master’s decision in the Hopi adjudication provides the first substantive decisions involving Arizona’s *Gila III* and *Gila V* precedents.<sup>231</sup> In doing so, the recommended decree demonstrates why the *Gila III* rule is harmful to all parties—especially Tribes—with accelerating climate change concerns. Hopi Tribe’s Chairman, Timothy Nuvangyaoma, went as far as classifying the decree “insulting” and “modern-day genocide,” because it forecloses future growth for the Hopi Tribe and people.<sup>232</sup>

Arizona should scrap the *Gila III* rule, which allocates federally reserved rights to groundwater only when surface water is insufficient, and pivot to a rule like the Ninth Circuit’s *Agua Caliente* decision. Such a change will: (1) be more sustainable and water secure for Tribes, (2) better align with Arizona’s *Gila V* and the federal *Winters* Doctrine, (3) reduce the likelihood of costly litigation and uncertainty over groundwater in the future for all parties, and (4) better protect Tribes’ sovereignty over their lands and resources.

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negotiations, with the federal government even actively opposing Navajo Nation as an intervening party in the landmark *Arizona v. California* case. *Arizona I*, 373 U.S. 546 (1963). The U.S. Supreme Court disagreed and ruled against Navajo Nation. *See Arizona v. Navajo Nation*, 599 S. Ct. 1804, 1816 (2023).

231. *See* Final Report, *supra* note 6, at 6, 289.

232. Farooq, *supra* note 4.