

Overcoming Constitutional Obstacles to the Resolution of General Stream Adjudications

*Rhett B. Larson**

The adjudication of water rights in the Gila River basin in Arizona is arguably the most complex piece of litigation in the history of the United States. The adjudication is over forty years old. Today, there are over 38,000 parties with nearly 100,000 claims. At stake in the case is the sustainability and productivity of a river basin that includes critical habitat and endangered species, scarce water supplies for desert communities, farms, and industries, and sacred resources for indigenous peoples. While there are many obstacles preventing an expeditious resolution of the Gila River general stream adjudication, some of the most significant obstacles are presented by the United States Constitution and the Constitution of the State of Arizona. This Article describes the Gila River Adjudication, discusses the potential constitutional obstacles to its resolution, and proposes reforms that could serve to overcome or mitigate those constitutional obstacles.

Contents

Introduction 53

I. Background of the Gila River General Stream Adjudication 53

 A. The Complexity of Arizona Water Law 54

 B. The Main Legal Issues in the Gila River Adjudication 56

 C. Why Resolving the Gila River Adjudication is Important 58

II. Constitutional Obstacles in the Gila River Adjudication 60

 A. Due Process and the Gila River Adjudication 61

 B. Separation of Powers and the Gila River Adjudication 63

III. Overcoming Constitutional Obstacles in the Adjudication 65

 A. Test Case, Contingent Legislation & Settlement 65

 B. State Water Escrow 66

 C. Voluntary Regional Mitigation Authorities 67

Conclusion 68

* Richard Morrison Fellow in Water Law and Associate Professor of Law, Arizona State University Sandra Day O'Connor College of Law and Senior Research Fellow, Morrison Institute of Public Policy's Kyl Center for Water Policy. Thanks to the participants and organizers of the Arizona Water Law Symposium at the University of Arizona and the editors of the Arizona Journal of Environmental Law and Policy. All errors are mine.

INTRODUCTION

The general adjudication of all water rights in the Gila River basin in Arizona is perhaps the most complex litigation in the history of the United States.¹ The Gila River Adjudication is now over 40 years old, and includes over 38,000 parties with nearly 100,000 claims.² The Gila River begins in the highlands of southwestern New Mexico, and stretches over 600 miles west through Arizona, traversing the Gila River Indian Community and the Phoenix metropolitan area, finally joining the Colorado River near Yuma.³ The river drains nearly half of the entire state of Arizona.⁴ Many of the most significant rivers in Arizona are tributaries to the Gila, including the San Pedro River, Salt River, Agua Fria River, and Verde River.⁵ The Gila River is the second largest river in Arizona next to the Colorado River, and provides around 20 percent of the water used in Arizona.⁶

Resolving the Gila River Adjudication is essential to clarifying water rights for the purposes of improved water management.⁷ However, many reforms that could facilitate the adjudication's resolution face significant constitutional obstacles. A particular example is the Arizona Supreme Court's decision in *San Carlos Apache Tribe v. Superior Court*.⁸ This Essay discusses how constitutional obstacles limit potential reforms that would address the problems of the Gila River Adjudication, and how those obstacles might be overcome or mitigated.

This Essay proceeds in three parts. In Part I, I provide necessary background on Arizona water law and the Gila River Adjudication. In Part II, I describe how constitutional issues such as eminent domain, due process, and separation of powers have, or may, preclude certain potentially helpful reforms aimed at resolving the Gila River Adjudication. In Part III, I suggest some possible approaches to reform the Gila River Adjudication that will not run afoul of constitutional challenges.

I. BACKGROUND OF THE GILA RIVER GENERAL STREAM ADJUDICATION

This Part describes the necessary background to understand the Gila River Adjudication and explains why the resolution of the adjudication should be a priority in Arizona water policy.

1 Rhett Larson & Brian Payne, *Unclouding Arizona's Water Future*, 49 ARIZ. ST. L.J. 465, 477 (2017).

2 *Id.*

3 Rhett Larson & Kelly Kennedy, *Bankrupt Rivers*, 49 U.C. DAVIS L. REV. 1335, 1349 (2016).

4 ENVTL. DEF. FUND, RIVER OF THE MONTH SERIES: AUGUST 2012 THE GILA RIVER (2012), <http://www.edf.org/sites/default/files/GilaRiverFactSheet.pdf>.

5 Larson & Payne, *supra* note 1, at 478.

6 Joseph M. Feller, *The Adjudication that Ate Arizona Water Law*, 49 ARIZ. ST. L.J. 405, 409 (2007); *see also* JIM TURNER, ARIZONA: A CELEBRATION OF THE GRAND CANYON STATE 43 (2011).

7 Larson & Payne, *supra* note 1, at 468; Larson & Kelly, *supra* note 3, at 1355.

8 *San Carlos Apache Tribe v. Superior Court*, 972 P.2d 179 (Ariz. 1999).

A. *The Complexity of Arizona Water Law*

Like most arid western states, Arizona allocates rights to surface water based on the doctrine of prior appropriation.⁹ Under prior appropriation, an early water user who appropriates a certain quantity of surface water and puts that water to a beneficial use has superior priority to that quantity of water than any subsequent water appropriator – a “first-in-time, first-in-right” regime.¹⁰ At first glance, this can appear to be a relatively simple approach to allocating water rights on a first-come, first-serve basis, making enforcement and dispute resolution fairly straightforward. In a way, prior appropriation is similar to the ancient and hallowed law of calling “shotgun.”

A norm recognized in all civilized societies is that, when multiple people will be riding in one car, the first passenger to shout “Shotgun!” has claim to the front passenger seat superior to all other passengers. One day, as I was leaving a movie theater with three of my children, my son shouted, “Shotgun!”. His older sister said, “You can’t yell ‘shotgun’ until you can see the car.” As we turned the corner, my youngest daughter caught sight of the car in the parking lot and shouted, “Shotgun!”. My oldest daughter said, “You can’t call shotgun until you are standing on the same surface as the car. We’re still on the sidewalk. You have to wait until you’re standing on the blacktop of the parking lot.” At that point, my oldest daughter hopped off the curb and onto the black top, and loudly shouted, “Shotgun!”. Her two younger siblings reacted as if they felt they had been fairly bested by sound reasoning based on well-established and familiar rules.

Similarly, water law has so many rules and exceptions that a straightforward application of “first-in-time, first-in-right” priorities is very nearly impossible. For example, prior to 1919, surface water appropriators could perfect a water right by intending to divert water, diverting the water, and putting the water to beneficial use.¹¹ Then, in 1919, the state of Arizona enacted a comprehensive prior appropriation code that required the filing of a notice of intent and the issuance of a certificate to perfect a water right.¹² As such, many of the highest priority rights in the state are based on less than reliable historical evidence.¹³

Additionally, a water right holder’s priority date may be the date the right holder filed their notice of intent, the date they began construction of their diversion, or the date they first put the water to beneficial use, depending on the question of “diligence.”¹⁴

9 Peter L. Reich, *The “Hispanic” Roots of Prior Appropriation in Arizona*, 27 ARIZ. ST. L.J. 649, 649 (1995).

10 Alexandra B. Klass, *Property Rights on the New Frontier: Climate Change, Natural Resource Development, and Renewable Energy*, 38 ECOLOGY L.Q. 63, 86 (2011).

11 Larson & Kennedy, *supra* note 3, at 1350; *see also* Sean E. O’Day, *San Carlos Apache Tribe v. Superior Court: Rejecting Legislative Favoritism in Water Rights Allocations*, 4 U. DENV. WATER L. REV. 29, 35 (2000).

12 Larson & Kennedy, *supra* note 3, at 1350; O’Day, *supra* note 11, at 49–50.

13 Larson & Kennedy, *supra* note 3, at 1350.

14 Dennett L. Hutchinson, *Determining Priority of Federal Reserved Rights*, 48 U. COLO. L. REV. 547, 554 (1977).

For example, imagine a man who filed a notice of intent to divert surface water with the state of Arizona on December 1, 1941, and began to dig a ditch to divert water to irrigate his farm. Shortly thereafter, he is drafted into the military and is away from his farm for three years. In those three years, several other parties file notices of intent and divert water for irrigation. Has our soldier lost his place in line, or does his priority date “relate back” to December 1, 1941? His priority date is December 1, 1941 only if he is considered to have been “diligent” during those years. Answering the question of diligence is a difficult, fact-specific inquiry, and introduces another layer of uncertainty with respect to priority dates, quantities, and uses for surface water rights.¹⁵

Under this “relation-back doctrine,” parties could challenge each other’s relative priority dates. But competing water right holders could also challenge the legality of their respective water uses. Under Arizona’s 1919 Water Code, all water must be put to a beneficial use, without waste, a concept that is the “basis, measure and limit to the use of the water in the state.”¹⁶ Furthermore, a person might not only have their priority date and type of use questions but could forfeit their right entirely through non-use.¹⁷ In Arizona, if a water right holder fails to use their surface water for a period of five years, the right holder forfeits that portion of their right that went unused.¹⁸ The threat of forfeiture encourages full development of an appropriative water right, but can discourage water conservation.¹⁹

In addition to the complexities added by the relation-back doctrine, beneficial use requirements, and the risk of forfeiture, some surface water rights do not fit perfectly within the state law prior appropriation framework. For example, Native American tribal water rights and the water rights held by federal lands, such as national parks, include elements of prior appropriation, but are also grounded in federal law that does not apply to other water rights.²⁰ When the U.S. federal government reserves land, including for Indian reservations or national parks, it implicitly reserves the minimum amount of water necessary to meet the primary purpose of the reservation.²¹ These rights are often called

15 Larson & Payne, *supra* note 1, at 471; *see also* Barton H. Thompson, Jr., *Uncertainty and Markets in Water Resources*, 36 MCGEORGE L. REV. 117, 118 (2005).

16 ARIZ. REV. STAT. ANN. § 45-141(B).

17 *See generally* Janet C. Neuman & Keith Hirokawa, *How Good is an Old Water Right? The Application of Statutory Forfeiture Provisions to Pre-Code Water Rights*, 4 U. DENV. WATER L. REV. 1, 2-3 (2000) (“A central tenet of the prior appropriation system is ‘use it or lose it.’”).

18 *Id.* at 14.

19 Larson & Payne, *supra* note 1, at 472; *see also* Sharon Megdal et al., *The Forgotten Sector: Arizona Water Law and the Environment*, 1 ARIZ. J. ENVTL. L. & POL’Y 243, 289 (2011).

20 Kobi Webb, *Federal vs. State Authority to Regulate Groundwater: Concerns Raised over U.S. Forest Service Proposed Directive*, 19 U. DENV. WATER L. REV. 297, 301 (2016).

21 *Arizona v. California*, 373 U.S. 546, 601 (1963); *Winters v. United States*, 207 U.S. 564, 577 (1908); *Cappaert v. United States*, 426 U.S. 128, 141 (1976); *see also* *United States v. New Mexico*, 438 U.S. 696, 718 (1978).

Winters rights. In *Winters v. United States*²² the Supreme Court famously created the doctrine of federal reserved water rights. Courts have quantified tribal water rights by examining the tribal reservation's practicably irrigable acreage (PIA).²³ However, the Arizona Supreme Court has declined to rely on PIA as the only quantification method, and has relied instead on the evaluation of reservation-specific factors like tribal culture, population, and water use plans.²⁴ The quantification of non-tribal federally-reserved rights is far less jurisprudentially developed.²⁵ While the determination of acceptable use and quantification for these federal rights differs from state rights, the rights still retain priority dates, including a priority of "time immemorial" for reserved aboriginal tribal lands,²⁶ or the date the reservation was established for other federal reservations, like national parks.²⁷

Normally, under prior appropriation, when stream flows are insufficient to meet the quantities claimed by all right-holders, a senior right-holder places a "call on the river" to ensure that its relative priority is recognized and satisfied first.²⁸ In some circumstances, a junior right holder may claim that such action is a "futile call," meaning that even if all junior water right holders agreed to forebear, the senior right holder would receive no water, and thus juniors are permitted to take out of priority under the rationale that it is better that someone can use the water than no one.²⁹

Despite (or because of) all of these legal complexities, Arizona continues to experience intractable legal disputes involving the water rights of both federal and state appropriators in the Gila River basin, and the sheer spatial and temporal scope of the Gila River disputes are such that a simple call on the river would likely prove inadequate to resolve all competing claims.³⁰ Therefore, Arizona, like other states, has attempted to resolve these broad-ranging disputes through general stream adjudications (GSA).

B. *The Main Legal Issues in the Gila River Adjudication*

22 *See Winters*, 207 U.S. at 577-78.

23 *Arizona*, 373 U.S. at 600-01. Included in calculating the PIA are total acreage, arability of the land, and engineering and economic feasibility. *In re Gen. Adjudication of All Rights to Use Water in the Big Horn River Sys.*, 753 P.2d 76, 101 (Wyo. 1988), *aff'd by an equally divided Court*, *Wyoming v. United States*, 492 U.S. 406 (1989).

24 *In re Gen. Adjudication of All Rights to Use Water in the Gila River Sys. & Source*, 35 P.3d 68, 78-80 (Ariz. 2001).

25 Larson & Kennedy, *supra* note 3, at 1365.

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

27 *Cappaert v. United States*, 426 U.S. 128, 138 (1976).

28 Brian E. Gray, *No Holier Temples: Protecting the National Parks Through Wild and Scenic River Designation*, 58 U. COLO. L. REV. 551, 579 (1988).

29 A. Dan Tarlock, *The Law of Equitable Apportionment Revisited, Updated, and Restated*, 56 U. COLO. L. REV. 381, 406 (1985).

30 For an overview of Arizona's general stream adjudications, *see generally* Larson & Kennedy, *supra* note 3.

Like the majority of western states, Arizona relies on GSAs to resolve basin-wide water rights disputes.³¹ In an attempt to allow such proceedings to be integrated and comprehensive, Congress passed the McCarran Amendment in 1952, thereby waiving federal sovereign immunity in state water rights disputes involving an entire river system – effectively allowing federal and tribal parties to have their water rights adjudicated in state courts so long as the proceeding was sufficiently comprehensive.³²

GSAs are comprehensive proceedings extending across a large geographic area, and thus tend to be prolonged and expensive.³³ The Gila River GSA officially began in 1974, and over forty years later remains unresolved.³⁴ This legal quagmire now includes over 38,000 parties with nearly 100,000 claims.³⁵ There are several reasons why the Gila River GSA has proved so difficult to resolve, including the number and diversity of parties involved, the resource constraints within the relevant agencies and courts, and the need to address other water policy priorities such as the management of groundwater withdrawals or the transboundary sharing of the Colorado River.³⁶ Despite the myriad complexities of a proceeding like a GSA, I believe the greatest obstacle to resolving the Gila River GSA is the subflow challenge.

Arizona has a bifurcated water rights regime, in which surface water rights are treated as legally distinct from groundwater rights.³⁷ Surface water is governed by prior appropriation, while groundwater is governed by a separate and equally complex set of rules and legal doctrines.³⁸ Arizona's GSAs apply only to surface water rights.³⁹ Anyone with a basic understanding of hydrology knows that there is no obvious, non-arbitrary hydrologic line between surface water and groundwater.⁴⁰ Consider the following example:

31 See ALASKA STAT. §§ 46.15.065-.169 (2016); ARIZ. REV. STAT. ANN. §§ 45-251 to -264 (2016); CAL. WATER CODE §§ 2000- 2900 (2016); COLO. REV. STAT. §§ 37-92-101 to -602 (2016); IDAHO CODE §§ 42-1401 to -1428 (2016); MONT. CODE ANN. §§ 85-2-201 to -243 (2015); NEB. REV. STAT. §§ 46-226 to -231 (2016); NEV. REV. STAT. ANN. §§ 533.090-.320, 534.100 (2015); N.M. STAT. ANN. §§ 72-4-13 to -19 (2016); N.D. CENT. CODE §§ 61-03-15 to -20 (2016); OKLA. STAT. ANN. tit. 82, §§ 105.6- .8 (2016); OR. REV. STAT. §§ 539.010- .350, 541.310- .320 (2016); S.D. CODIFIED LAWS §§ 46-10-1 to -13 (2016); TEX. WATER CODE ANN. §§ 11.301-.341 (2015); UTAH CODE ANN. §§ 73-4-1 to -24 (2016); WASH. REV. CODE ANN. §§ 90.03.110- .245 (2016); WYO. STAT. ANN. §§ 41-4-301 to -331 (2016).

32 43 U.S.C. § 666 (2012); see generally Aubri Goldsby, *The McCarran Amendment and Groundwater: Why Washington State Should Require Inclusion of Groundwater in General Stream Adjudications Involving Federal Reserved Water Rights*, 86 WASH. L. REV. 185 (2011); see also Reed D. Benson, *Deflating the Deference Myth: National Interests vs. State Authority under Federal Laws Affecting Water Use*, 2006 UTAH L. REV. 241, 268-69 (2006).

33 Larson & Kennedy, *supra* note 3, at 1347-48.

34 Larson & Kennedy, *supra* note 3, at 1348.

35 *Id.*; see also *General Description of Adjudications Program*, ARIZ. DEP'T WATER RES. (Feb. 1, 2017), <http://www.azwater.gov/AzDWR/SurfaceWater/Adjudications/>.

36 Larson & Payne, *supra* note 1, at 476-85.

37 Larson & Kennedy, *supra* note 3, at 1342 n.32-33.

38 For an overview of Arizona groundwater law, see Larson & Payne, *supra* note 1, at 483-88.

39 Larson & Kennedy, *supra* note 3, at 1342.

40 See Robert Glennon & Thomas Maddock, III, *In Search of Subflow: Arizona's Futile Effort to Separate Groundwater from Surface Water*, 36 ARIZ. L. REV. 567, 570-74 (1994).

A shallow well drilled near a river may be pumping mostly water from the river itself. A deeper well located further from the river may be pumping mostly water from an aquifer in the phreatic zone, but could nevertheless still be taking some water more closely associated with the surface. Water associated with the surface must have a priority date and be adjudicated as part of the GSA, and a well pumping ‘surface water’ may be taking that water out of priority.⁴¹

The concept of “subflow” is a judicially-crafted attempt to distinguish where the laws of surface water apply (including the jurisdiction of the GSA) and where the laws of groundwater apply.⁴² After an initial attempt to draw this line failed to garner the support of the Arizona Supreme Court,⁴³ “subflow” was defined as water drawn from the “saturated floodplain Holocene alluvium,” thus more closely associated with surface water, requiring a priority date and falling under the jurisdiction of the GSA.⁴⁴ As such, wells pumping from the subflow zone, or with cones of depression intersecting the subflow zone, should be included in the GSA. An enormous amount of time and energy is expended determining who is subject to the GSA and who is excluded as solely pumping groundwater.⁴⁵

C. *Why Resolving the Gila River Adjudication is Important*

One might reasonably respond to any suggestion of investing in the resolution of the Gila River GSA: “How big of a problem can it really be? We’re all still getting plenty of water right now, and there are bigger issues looming for Arizona water policy, such as the sustainability of the Colorado River and groundwater overdraft in many parts of Arizona.” While I agree that the resolution of the Gila River GSA is perhaps not Arizona’s highest water policy priority, I do think that it is arguably our most underrated water challenge. Two examples – one theoretical and one concrete – illustrate the importance of investing in the equitable and efficient resolution of the Gila River GSA.

Imagine you go shopping for a TV and a freezer at a neighborhood-wide garage sale involving several households. You see the TV and freezer you want to buy, and approach someone who looks to be the owner. The person says, “Oh, I own the TV, but

41 Larson & Payne, *supra* note 1, at 480.

42 Glennon & Maddock, III, *supra* note 40, at 570-71.

43 *In re* Gen. Adjudication of All Rights to Use Water in Gila River Sys. & Source (*Gila River II*), 857 P.2d 1236, 1239-40 (Ariz. 1993).

44 *In re* Gen. Adjudication of All Rights to Use Water in Gila River Sys. & Source (*Gila River IV*), 9 P.3d 1069, 1073 (Ariz. 2000).

45 *See, e.g.*, Comprehensive Case Management Order No. 1 Regarding Objections Filed to the Silver Creek Hydrographic Survey Report at 3, *In re* Gen. Adjudication of All Rights to Use Water in Little Colo. River Sys. & Source, No. CV-6417 (Super. Ct. Apache Cty. Dec. 2, 1991). The Hydrographic Survey Report for Silver Creek was completed by the Arizona Department of Water Resources (ADWR) in 1990, and its function was to catalog claims, diversion points, uses, and subflow zones. During the 180-day objection period established for the draft HSR, 3,456 objections were filed.

not the freezer.” Someone standing nearby says, “No, I own the TV, and half of the freezer.” Another person says, “I own both completely.” Yet another shouts, “That’s not even a freezer and the TV isn’t for sale!”. You are unlikely to stick around and make your purchases in that kind of environment.

The perpetuation of the Gila River GSA makes the market for water rights in central Arizona comparable to that ridiculous garage sale. Water right markets can be effective water management tools by introducing flexibility into an otherwise rigid property rights regime.⁴⁶ However, markets can only be efficient and effective management tools under certain circumstances – where there are low transaction costs, limited externalities, fewer information asymmetries, and clearly defined property rights.⁴⁷ The Gila River GSA precludes clearly defined property rights because as long as it persists, the quantity, use, and relative priority of each water right in the basin remains under a cloud of uncertainty.

A more concrete example of why we should invest in the resolution of the Gila River GSA is the recent controversy surrounding real estate development in Sierra Vista, Arizona.⁴⁸ Sierra Vista is a town of over 40,000 people located near the San Pedro River, within the Gila River basin, in southern Arizona.⁴⁹ Sierra Vista shares the San Pedro River with other users, including the federal government’s San Pedro Riparian National Conservation Area (SPRNCA), which has federally-reserved water rights under *Winters*.⁵⁰ Developers in Sierra Vista sought a Certificate of Adequate Water Supply (CAWS) from the Arizona Department of Water Resources (ADWR). The CAWS requires a demonstration that there be 100 years of physically, legally, and continuously available water for a subdivision for the sale of subdivided land in many parts of Arizona under Arizona’s Groundwater Management Act.⁵¹

The U.S. Department of the Interior, representing the interests of SPRNCA, claimed that the water rights relied upon by developers in securing the CAWS are not groundwater rights, but instead might be subflow, and thus within the jurisdiction of the

46 For an overview and example of the role and potential of markets in water management, see PETER W. CULP, ROBERT GLENNON & GARY LIBECAP, SHOPPING FOR WATER: HOW THE MARKET CAN MITIGATE SHORTAGES IN THE AMERICAN WEST 13, http://waterinthewest.stanford.edu/sites/default/files/market_mitigate_water_shortage_in_west_paper_glen_non_final.pdf; see also Carol M. Rose, *Property Rights and Responsibilities*, in THINKING ECOLOGICALLY: THE NEXT GENERATION OF ENVIRONMENTAL POLICY 49, 49 (Marian R. Chertow & Daniel C. Esty eds., 1997).

47 Larson & Kennedy, *supra* note 3, at 1356; see also Daniel C. Esty, *Toward Optimal Environmental Governance*, 74 N.Y.U. L. REV. 1495, 1507 (1999); see generally R.H. Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1 (1960).

48 For an overview of the water controversy and its related judicial proceedings, political implications, and legislative interventions, see Larson & Payne, *supra* note 1, at 488-96.

49 *Id.* at 489.

50 *Id.*

51 For an overview of Arizona’s Groundwater Management Act, see Larson & Payne, *supra* note 1, at 483-87.

GSA.⁵² ADWR issued the CAWS to the developers, and the issuance was challenged at the administrative level, and then in court. The Maricopa County Superior Court rejected ADWR's position and that of the administrative law judge, and held that ADWR must consider the impact of the development's pumping on SPRNCA's rights in determining if water is "legally available."⁵³ The developers then sought a legislative solution by lobbying state legislators to relax the Adequate Water Supply requirements, but the resulting legislation was ultimately vetoed by Arizona Governor Doug Ducey.⁵⁴

The Sierra Vista controversy illustrates the potential economic costs of the perpetuation of the Gila River GSA.⁵⁵ Throughout the history of Arizona, the state's greatest innovations in water policy have often been sparked by legal controversies.⁵⁶ For example, the Salt River Project arose, in part, out of the water rights disputes that gave rise to the Kent Decree, a federal court declaration of water rights in the Salt River made in 1910.⁵⁷ The development of the Central Arizona Project was an innovation born out of the legal disputes between Arizona and California over the Colorado River.⁵⁸ The catalyst for the development of Arizona's Groundwater Management Act was a water rights dispute between pecan farmers, the City of Tucson, and mining interests in southern Arizona.⁵⁹ Perhaps the legal disputes surrounding development in Sierra Vista will also spur water policy innovations aimed at improving or resolving the GSAs. But, any momentum generated by the Sierra Vista controversy could be arrested by constitutional obstacles that have precluded reforms in the past.

II. CONSTITUTIONAL OBSTACLES IN THE GILA RIVER ADJUDICATION

The sheer spatial and temporal scope of the Gila River General Stream Adjudication, combined with the inherent arbitrariness of any attempt to resolve the challenge of subflow, pose significant hurdles to the timely and equitable resolution of the GSA proceedings. But these hurdles are heightened in some instances by constitutional guarantees of due process, protections against unlawful exercises of eminent domain, and structural issues of separation of powers. Each of these constitutional issues were addressed to some degree in the Arizona Supreme Court's 1999 decision in *San Carlos Apache Tribe v. Superior Court*, which struck down several legislative amendments to Arizona's water code as unconstitutional.⁶⁰

Arizona passed legislation in 1995 aimed at challenges of administering the

⁵² *Id.* at 489-491.

⁵³ *Silver v. Pueblo del Sol Water Company*, 241 Ariz. 131 (Ariz. Ct. App. 2017) (review granted by Arizona Supreme Court on December 11, 2017)

⁵⁴ Larson & Payne, *supra* note 1, at 492-94.

⁵⁵ *Id.* at 494-96.

⁵⁶ *Id.* at 466-68.

⁵⁷ *Id.*

⁵⁸ *Id.*

⁵⁹ *Id.*

⁶⁰ *San Carlos Apache Tribe v. Superior Court*, 972 P.2d 179 (Ariz. 1999).

state's surface water rights regime and reforming the GSA process.⁶¹ The legislature's stated intent in enacting these reforms was to "clarify existing laws and adopt changes that are equitable and fair to all parties...provide long-term security to all water rights holders within the state and...streamline the adjudication process and remove undue burdens on litigation from the parties."⁶²

The legislation had five principal functions: (1) to protect senior water rights by limiting the application of forfeiture to certain older rights and addressing issues of adverse possession in water rights; (2) to exempt *de minimis* water users from the GSA; (3) to establish a statutory presumption in favor of the water rights of certain existing users under the GSAs; (4) to retroactively alter certain water rights settlements; and (5) to limit the application of the public trust doctrine in the context of the GSAs.⁶³

Shortly after the law was passed, several Native American tribes challenged the constitutionality of the bill.⁶⁴ In 1999, the Arizona Supreme Court invalidated many features of the law as violating constitutional principles of due process and separation of powers.⁶⁵ This Part discusses two possible ways in which constitutional rights and constitutionally-prescribed governmental structures limit the legal viability of certain GSA reforms, with particular reference to the Arizona Supreme Court's decision in *San Carlos Apache Tribe*.

A. *Due Process and the Gila River Adjudication.*

In an important step in its constitutional analysis, the Arizona Supreme Court held that surface water rights are "vested substantive rights."⁶⁶ Such "vested rights are 'actually assertable as a legal cause of action or defense or are so substantially relied upon that retroactive divestiture would be manifestly unjust.'"⁶⁷

Under Article II, Section 4 of the Arizona Constitution, "[n]o person shall be deprived of life, liberty, or property without due process of law." Interpreting this due process clause, the Court in *San Carlos Apache Tribe* struck down a number of the provisions in the reformed water code statute because the new laws retroactively and substantively altered vested property rights.⁶⁸ The Court invalidated portions of the legislation as violations of due process because the legislation would unconstitutionally alter or impact the priority of many vested surface water rights.⁶⁹

The Court concluded that the legislation's protections against forfeiture of water

⁶¹ *Id.* at 187.

⁶² 1995 Ariz. Sess. Laws Ch. 36, § 2276.

⁶³ 1995 Ariz. Sess. Laws Ch. 17, §§ 2276, 2193.

⁶⁴ *San Carlos Apache Tribe*, 972 P.2d at 179.

⁶⁵ *Id.*

⁶⁶ *Id.* at 189.

⁶⁷ *Id.* (quoting *Hall v. A.N.R. Freight Sys.*, 717 P.2d 434, 444 (Ariz. 1986)).

⁶⁸ *Id.*

⁶⁹ *Id.* at 189-90.

rights and its modifications of the role of adverse possession in surface water rights violated due process under state law because of their impact on the vested interest of priority.⁷⁰ The Court noted that it is essential to consider the ongoing nature of the GSAs, stating that “substantive rights and consequent priorities cannot be determined by statutes subsequently enacted, especially those enacted while the case is pending before the court.”⁷¹

The Arizona Supreme Court’s holding in *San Carlos* respecting due process rights likely precludes any legislative reforms that alter the relative priority of a water right. This holding could thus prove an obstacle to certain reforms that might otherwise facilitate resolution of the GSAs. For example, any legislation that grants a post-1919 subflow well a priority date within the surface water regime that is superior to other vested surface water rights may violate due process.

One possible argument in favor of such legislation is that it would be a valid exercise of the state’s police power to promote the sustainable and beneficial use of water. Additionally, one could argue that granting such rights to subflow pumpers is tantamount to grandfathering their water rights into the existing water rights regime, no different than what the Arizona legislature did under the Arizona Groundwater Management Act. Such grandfathering was upheld despite constitutional challenges of government takings without due process. Despite the constitutional validity of grandfathered groundwater rights under the GMA, I believe the recognition of subflow rights is distinguishable for constitutional purposes.

To illustrate this distinction, imagine you wake up on your birthday to a new Ferrari sitting in your driveway. You can’t wait to take it out on the road and see what it can do. But, the government has set a 75 mile-per-hour speed limit on the highway, effectively “taking” a large portion of your speedometer. Has the government deprived you of a vested right without due process? Almost certainly not – the government has engaged in a valid exercise of its police power to protect the welfare of its citizens.⁷²

Now imagine that the government has enacted legislation requiring you to share your shiny new birthday present for three days a week with your neighbor. Now has the government taken your property without due process? I would argue yes. In this instance, the government is not regulating your property as part of a broadly-applicable regulatory approach aimed at public safety or welfare, but instead is granting rights in your property to another private party. Such governmental action may run afoul of the requirement under federal law that takings be for a “public use,” and state law limits on the power of the state to take private property for use by other private parties.⁷³

70 *Id.* at 190-91.

71 *Id.* at 190.

72 *See, e.g., Village of Euclid v. Ambler Realty Co.*, 272 U.S. 365, 386-88 (1926) (holding that zoning regulations did not constitute a taking or a violation of due process in impacting property rights, but were instead a valid exercise of police power).

73 U.S. CONST. amend. V; ARIZ. CONST. art. II, § 17. *See also Kelo v. City of New London*, 545 U.S. 469,

In the case of grandfathered groundwater rights under the GMA, the state of Arizona quantified existing groundwater rights based on historic pumping rates.⁷⁴ This regulation of groundwater pumping was upheld over constitutional challenges as a valid exercise of the state’s police power in protecting a critical and scarce natural resource.⁷⁵ But this is tantamount to placing a speed limit on a car – the property right is not taken, simply regulated for the public welfare. Recognition of subflow rights would be tantamount to requiring you to share your Ferrari with your neighbor – vested senior water right holders would lose priority to some extent and recognized subflow rights would interfere to some degree with those vested interests. This is perhaps the primary obstacle to fully integrating Arizona’s bifurcated groundwater and surface water regimes – the right held by senior right holders that effectively precludes a straightforward grandfathering or recognition of subflow pumper’s rights that would inevitably interfere with vested senior rights.

B. Separation of Powers and the Gila River Adjudication.

Under Article III of the Arizona Constitution, “[t]he powers of the government of the state of Arizona shall be divided into three separate departments, the legislative, the executive, and the judicial; and, except as provided in this constitution, such departments shall be separate and distinct, and no one of such departments shall exercise the powers properly belonging to either of the others.”⁷⁶

In *San Carlos Apache Tribe*, the Arizona Supreme Court relied on separation of powers doctrine to strike down provisions of legislation aimed at reforming Arizona’s surface water code.⁷⁷ In particular, the court determined that the effective lack of judicial review for statutory *de minimis* exceptions of some water appropriations violated the principle of separation of powers because it deprived the courts of their “constitutional authority to find facts and to define and apply the law.”⁷⁸

According to the Arizona Supreme Court, the constitutional problem with such a provision was that the legislation altered substantive law in play in the ongoing court proceeding, most particularly the GSAs. The court invalidated the legislative provisions that gave *de minimis* water users a *per se* exemption from the adjudication.⁷⁹ The court explained that it is the judiciary’s role to consider evidence, apply the law, and decide

490 (2005) (holding that a governmental taking of private property for private use does not violate the U.S. Constitution’s Fifth Amendment requirement that exercises of eminent domain be for “public use” so long as the transfer to private ownership is “rationally related to a conceivable public purpose.”).

74 ARIZ. REV. STAT. ANN. § 45-401 *et seq.* (2016); *see also* Larson & Payne, *supra* note 1, at 483-86.

75 *Town of Chino Valley v. City of Prescott*, 638 P.2d 1324, 1329 (Ariz. 1981).

76 ARIZ. CONST., art. III.

77 *San Carlos Apache Tribe v. Superior Court*, 972 P.2d 179 (Ariz. 1999).

78 *San Carlos Apache Tribe*, 972 P.2d at 194.

79 *Id.* at 196 (The court concluded that “[t]he essential nature of the power exercised [by the legislature in the provisions] is judicial.”).

cases involving the adjudication of property rights, such as those involved in the GSAs.⁸⁰

Regarding specifically the *de minimis* exemption, “[t]he practical effect of the enactment...was to remove all possibility of meaningful judicial conclusions based on findings of fact.”⁸¹ By enacting such an exemption, the legislature had taken “complete control” of the evidentiary function of the judiciary in the GSA. As such, the exemption was declared invalid as a violation of separation of powers.⁸²

There is an obvious attraction to the *de minimis* exception, in the same way there is an obvious attraction to the recognition of subflow rights. With regards to the recognition of subflow rights, such recognition would eliminate the most vexing problem in the GSA – the bifurcated nature of the state’s water rights regimes. In regard to the *de minimis* exception, such an exception would dramatically reduce the number of parties involved in the GSA. Such a reduction in claimants would represent an important improvement in the adjudications, as the high transaction costs involved in providing notice to, and negotiating with, tens of thousands of people place a strain on resources and delay progress.⁸³

Other legal proceedings face similar problems with potentially high transaction costs. GSAs have striking similarities to two other types of legal proceedings. The first is a large class-action case because both involve large numbers of parties.⁸⁴ However, unlike a large class action, it is more difficult to certify a whole class of water users in a GSA because their interests will frequently not align.⁸⁵ In some sense, a *de minimis* exemption is an attempt to certify a class of particular water users – but this “lumping together” of a class of claimants is both (a) inappropriate in the stream adjudication context (because *de minimis* subflow appropriators may ultimately have conflicting interests) and (b) deprives the court of its constitutional authority to resolve property disputes between individuals and to certify groupings of claimants as having sufficient identities of interest.

The second legal proceeding that is similar to a GSA is a bankruptcy proceeding.⁸⁶ In both, there is a limited resource that cannot satisfy all of the claims of those with a legal right to a portion of the resource. In bankruptcies, courts may rely on an “administrative convenience class” to group together small creditors for whom it may not be worth the costs to retain in the full court proceeding.⁸⁷ The *de minimis* exemption is thus similar to the administrative convenience class, but presents the same constitutional problems as attempting to certify such users as a class – it assumes their

⁸⁰ *Id.*

⁸¹ *Id.*

⁸² *Id.*

⁸³ Larson & Kennedy, *supra* note 3, at 1335-37, 1377.

⁸⁴ Larson & Payne, *supra* note 1, at 477.

⁸⁵ *Id.*

⁸⁶ See generally Larson & Kennedy, *supra* note 3 (comparing a general stream adjudication to bankruptcy).

⁸⁷ *Id.* at 1377.

interests are, or will remain, aligned, and interferes with the court's constitutionally-prescribed duty to manage such resource disputes.

Of course, one obvious solution to the separation of powers challenge is to simply enact legislation that removes the GSA from the courts entirely, and places the adjudication under an executive agency. The state of Colorado has been able to limit costly GSAs in part because of its reliance on specialized executive agency water courts.⁸⁸ There are at least two reasons why such an approach is likely not advisable at this stage, even if it might have been a good approach had it been taken initially. First, it is unclear that such legislation would not run afoul of separation of powers issues and even claims of limits on the powers of the legislature to delegate such judicial functions to agencies. Of course, agencies adjudicate on a regular basis, but once the GSA has been delegated to the courts, there is a non-negligible possibility that removing that jurisdiction would run afoul of separation of powers. Second, even if such re-delegation to the executive branch could be accomplished within the strictures of separation of powers, there is a risk that such delegation would somehow result in the GSA no longer being sufficiently "comprehensive" for purposes of the McCarran Amendment, resulting in efforts by some parties to remove portions of the stream adjudication to federal court.⁸⁹

III. OVERCOMING CONSTITUTIONAL OBSTACLES IN THE ADJUDICATION

As discussed above, the Arizona Supreme Court's decision in *San Carlos Apache Tribe* establishes constitutional parameters that preclude certain otherwise helpful reforms to the GSAs, including *de minimis* exemptions and the recognition of the rights of subflow appropriators. This Part proposes three possible reforms that could approximate the benefits of *de minimis* exemptions and the recognition of subflow rights while potentially avoiding crossing those constitutional parameters. I note, however, that even these proposed reforms could each raise constitutional challenges themselves. Therefore, this Part will also evaluate the legal and political viability of the reforms, including (A) a test case, potentially accompanied by legislation contingent upon the court's decision in the case and a recommended procedural settlement by ADWR; (B) development of a state water escrow; and (C) the formation of voluntary regional mitigation authorities.

A. Test Case, Contingent Legislation & Settlement

One possible approach to avoid the separation of powers question altogether is to rely on a test case before the superior court (Maricopa County Superior Court in the case of the Gila River GSA and Apache County Superior Court in the case of the Little Colorado GSA). ADWR, as the technical arm of the court, could propose certain reforms that the court could recognize, including possibly *de minimis* exemptions. To support this test case, the state legislature could enact legislation recognizing ADWR's proposals, with the viability of the legislation contingent upon the court's ultimate decision in the

⁸⁸ *Id.* at 1341.

⁸⁹ *Id.* at 1346.

test case. Additionally, ADWR could work toward a broad, global settlement incorporating some recognition of subflow rights. This approach could grandfather in existing subflow pumpers and recognize their right to the limited quantity of water from each well. All other pumping from within the established subflow zone would be prohibited, unless new pumpers could purchase the existing grandfathered subflow rights. If this proposal were recommended by ADWR and approved by the court, it would avoid separation of powers issues.

The proposal, however, would face significant obstacles. A broad, global settlement, or even broad consensus for contingent legislation, would be difficult given the scope and diversity of interests of the claimants in the GSA. Additionally, there is likely to be some political opposition to this approach as it would effectively freeze existing pumping rates in some subflow zones of the state. This might have the effect of limiting growth in some areas, and the political and economic impact of limited growth may preclude this approach. Also, finding the appropriate parties to the test case, structuring that test case, and coordinating it between the enactment of the contingent legislation and ADWR's proposal would present an enormous logistical challenge with a complex set of variables and an unpredictable outcome.

Nevertheless, reforms aimed at encouraging a judicial approach grounded on ADWR technical recommendations provide all of the judicial process necessary to alleviate concerns of due process while ensuring the court's appropriate place in adjudicating these rights separate from the broader role of the state legislature.

B. State Water Escrow

Voluntary, market-based approaches may prove the best way to avoid constitutional challenges to stream adjudication reforms because they would not be takings. One such approach could be the establishment of a state water escrow.⁹⁰ The state could create an escrow into which water right holders could temporarily or permanently place their water rights. While in escrow, those rights would be shielded from forfeiture. This would allow farmers to reap the benefits of improved water efficiency without risking losing water rights. While held in escrow, the water would be used for in-stream flow protection. The escrow would also serve as a clearinghouse for water transactions, with water rights transactions through the escrow enjoying an expedited sever and transfer process. The protection from forfeiture and the more efficient means of buying and selling water rights would attract buyers and sellers to the escrow.

The cost of relying on the benefits of the escrow, however, would be that each transaction through the escrow would include a hold-back of a certain percentage of the water. This would serve two purposes. The first is to create a source of water rights held in escrow for the purpose of riparian and aquatic habitat protection. The second is to

⁹⁰ For an evaluation of the state water escrow concept, *see* Larson & Kennedy, *supra* note 3, at 1378-80; Larson & Payne, *supra* note 1, at 496-500.

build up a bank of discounted water rights that could be used to mitigate any losses to those who lose water supplies through the adjudication process. One of the major impediments to the resolution of the GSA is that too many parties see little reason to expedite its resolution when there is so much risk that at the end of the process, they will lose water supplies. An effective water escrow could serve to alleviate those concerns.

Nevertheless, the water escrow idea has significant limits and risks. This reform may not work in all river basins or segments. It would require the presence of enough farmers or cities in the basin to allow for enough fallowing or conservation gains to facilitate transfers to the escrow. Additionally, the basin would need enough growth that buyers would rely on the escrow as a means of purchasing water rights. The expedited sever and transfer process may not provide enough notice and opportunity to object to water right holders whose vested rights would be impacted by those sales. In those cases, the water escrow would create constitutional due process claims, rather than avoid them.

Despite these potential limits and risks, the idea is worthy of serious consideration. Some states, in particular Washington, have relied on similar structures to facilitate water transactions and enhance the adaptive capacity of water rights regimes.⁹¹ Washington's statewide Trust Water Rights Program⁹² is aimed at the protection of salmon fisheries, so the approach would obviously require adaptation in the legal, ecological, climatological, and geographic contexts in Arizona.⁹³

C. Voluntary Regional Mitigation Authorities

In addition to a state water escrow, other voluntary, market-based reforms could facilitate resolution of the GSA without violating constitutional limits. One such approach could be the establishment of regional water mitigation authorities ("RWMA's").⁹⁴

Under this RWMA approach, the ADWR would apply a mathematical model to evaluate any well's relationship to subflow. The model would conservatively estimate the well's impact on available surface water. ADWR would then use that estimate to establish a mitigation fee owed by the subflow appropriator and voluntarily paid to its RWMA. The RWMA would be a quasi-municipal entity, created by statute to collect augmentation fees paid by its members. The RWMA boundaries would be based on river sub-basins, and RWMA membership would be voluntary. So long as members pay their mitigation fee to the RWMA, they are shielded from a call by senior water right holders.

91 Larson & Kennedy, *supra* note 3, at 1378.

92 WASH. REV. CODE §§ 90.42.005–.42.900 (2016); *see generally* Matthew Rajnus, *Washington's Water Right Impairment Standard: How the Current Interpretation Impedes the State's Policy of Maximizing Net Benefits*, 4 WASH. J. ENVTL. L. & POL'Y 178 (2014).

93 § 90.42.005(2)(a); H.B. 2026, 52d Leg., Reg. Sess. (Wash. 1991).

94 For an overview of the regional water mitigation authority concept, *see* Larson & Payne, *supra* note 1, at 500-05.

Those senior rights holders would call on the RWMA to use member fee payment to make them whole, either by compensating them for impacts on their vested water rights, buying other water rights, or paying for water augmentation projects, like desalination or improved forest management. Indeed, RWMAs could rely on the state water escrow as a source of water rights to purchase to make senior water right holders whole for the impacts of RWMA member pumping on their water rights. Subflow appropriators who do not join the RWMA could still seek to adjudicate their water rights as part of the GSA. This voluntary approach would approximate the benefits of the recognition of subflow rights, without running afoul of due process. Additionally, the establishment of RWMAs would make it simpler for senior water right holders to identify parties in negotiating settlements or resolving disputes, thus lowering transaction costs in a manner similar to a *de minimis* exemption without the related separation of powers issues.

There are practical and technical limits to the RWMA proposal, including the extent to which RWMAs could conceivably invest in water augmentation projects to compensate senior water right holders, and the challenge of establishing an appropriate model and fee determination process. Additionally, the proposal raises some political and legal questions, including the authority of the RWMAs to issue bonds, establish and enforce regulations on members, and exercise eminent domain. Nevertheless, the RWMA proposal at least attempts to preserve the availability of water to subflow appropriators without ignoring the constitutional rights of senior vested water right holders.

CONCLUSION

* * *

Arizona's Gila River GSA presents a legal puzzle of such complexity that none of the proposals contained in this short Essay could hope to improve, much less resolve, the proceeding without a great deal more careful thought. My purpose here is not an ambitious proposal to remake Arizona water law, and I am not ignorant of the enormous economic and political interests involved in water management in the state. My purpose, instead, is to raise the profile of the Gila River GSA in relative importance in Arizona water policy, and to point out that technological improvements combined with collaborative governance alone will be insufficient to resolve the case. Any proposed reforms or measures to address the Gila River GSA must carefully consider the constitutional rights implicated by the proceeding, and appreciate that those legal obstacles are as real and significant as those presented by water scarcity and growing populations. None of these challenges can be ignored as Arizona innovates in preparation for a bright water future.