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Borderless Commons Under Attack? Reconciling Recent Supreme Court Decisions with Watershed scale Management

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Cover Page Footnote

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Borderless Commons Under Attack? Reconciling Recent Supreme Court Decisions with Watershed Scale Management

Mike Pease[†] and Olen Paul Matthews^{††}

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I. INTRODUCTION

Wilkinson famously eulogized the Prior Appropriations system in 1991.¹ Recent Supreme Court cases raise the question of whether such a eulogy is now appropriate for the Commerce Clause as it relates to bulk water transfers across state lines. During the 1980s several key cases settled doubt that water is article of commerce and a commodity.² The fungible nature of water frustrates water resource managers and economists alike, meaning

¹ Charles Wilkinson, *In Memoriam: Prior Appropriation 1848-1991*, 21 ENVTL. L. 3. (1991). This work was followed by Benson, R. D. (2011). *Alive but irrelevant: The Prior Appropriation Doctrine in Today's Western Water Law*. *U. Colo. L. Rev.*, 83, 675.

² *Sporhase v. Nebraska*, 458 U.S. 941 (1982). *City of El Paso v. Reynolds*, 563 F. Supp. 379 D.N.M. (1983).

it is 'property' that does not exhibit all 'traditional' properties of ownership.³ The legal commoditization of water corresponded with an increase in academic research calling for open markets for bulk water sales, allowing for water to be reallocated to higher economic uses.⁴ *Sporhase v. Nebraska* and *City of El Paso v. Reynolds* were instrumental in knocking down economically protectionist statutes, creating a trend towards a 'borderless commons' for resource reallocation.⁵ Fast forward to 2014 and bulk water transfers are still

³ Olen P. Matthews, *Fundamental Questions about Water Rights and Market Reallocation*, 40 WATER RESOURCES RES. No. 9 W09S08 (2004). George A. Gould, *Water Rights Transfers and Third-party Effects*, 23 LAND AND WATER LAW REVIEW 1-41 (1988); Olen P. Matthews, *Water is not Real Property*. 85 WATER RESOURCES UPDATE 19 (1991).

⁴ Dinar, A., & Letey, J. (1991). *Agricultural Water Marketing, Allocative Efficiency, and Drainage Reduction*. JOURNAL OF ENVIRONMENTAL ECONOMICS AND MANAGEMENT, 20(3), 210-223 (1991). MacDonnell, L. J. *Recent Developments in Water Marketing and Water Transfers*. JOURNAL OF CONTEMPORARY WATER RESEARCH AND EDUCATION, 79(1), 5 (2011). Anderson, T. L., & Turner, J. A. *Marketing the West's Life Blood*. JOURNAL OF CONTEMPORARY WATER RESEARCH AND EDUCATION, 92(1), 4 (2011).

⁵ Borderless commons is also referred to as a borderless national market. See, e.g., Dan T. Coenen, *Untangling the Market-Participant Exemption to the Dormant Commerce Clause*, 88 MICHIGAN L. REV. 395 (1989).

fraught with problems,⁶ including unclear property rights, and high costs of transport.⁷

Tarrant Regional Water District v. Herrmann ET AL has brought the transferability of water across state lines into question.⁸ Tarrant Regional Water District (Tarrant) provides water to suburbs of Dallas including Fort Worth. The district's population has been fast growing.⁹ To keep pace with growing water demands,¹⁰ Tarrant has actively sought to acquire water using a variety of means, including purchasing water rights from parties in multiple states and

⁶ Joseph W. Dellapenna, *The Importance of Getting Names Right: The Myth of Markets for Water*, WM. & MARY ENVTL. L. & POL'Y REV. 317-77 (2000).

⁷ For a thorough review of types of transaction costs associated with natural resource transactions, see K. Krutilla, *Transaction Costs and Environmental Policy: An Assessment Framework and Literature Review*, 4 INT'L REV. OF ENVTL. AND RESOURCE ECON., 261-354 (2010); K. Krutilla, & A. Alexeev, *The Political Transaction Costs and Uncertainties of Establishing Environmental Rights*, 107 ECOLOGICAL ECON. 299-309 (2014).

⁸ *Tarrant Regional Water District v. Herrmann ET AL*. 569 U.S. 614, 614 (2013).

⁹ *Id.*

¹⁰ The 2007 Texas State Water Plan estimates Dallas-Ft. Worth water demands to increase from approximately 1.2 million acre-feet per year in 2000 to 3.35 million acres—feet per year by 2060. See, e.g., TEXAS WATER DEVELOPMENT BOARD 2007, <http://www.twdb.texas.gov/waterplanning/swp/2007/index.asp>.

attempting to appropriate water in Oklahoma for use in Texas.¹¹ In *Tarrant*, the Supreme Court prevented Tarrant from obtaining a water right in Oklahoma based on the Red River Compact.

On its face, *Tarrant* required the court to address commerce clause limitations on Oklahoma water allocation statutes, while simultaneously delving into whether an interstate compact pre-empted state law. However, instead of using Oklahoma water law to claim unappropriated water within the Kiamichi River Basin, *Tarrant* claimed the existence of unallocated water under the Red River Compact. This circumvention of the normal appropriation process allowed the Court to evaluate the compact using contract law principles; the Court then determined the compact's language showed insufficient intent to pre-empt Oklahoma's statutes. The Court avoided any significant discussion of the commerce clause. That said, the decision runs contrary to contemporary trends in both water resource management, which call for integrated watershed-

¹¹ *Tarrant* attempted to make an appropriation of unappropriated water on the Kiamichi River in Oklahoma.

level management,¹² and neo-classical economics, which call for borderless-markets for efficient commoditization and reallocation of resources.¹³ The decision also runs contrary to the Court's previous decisions to ignore state boundaries when both states use the Prior Appropriations system.¹⁴

The Supreme Court framed Tarrant's position as follows: 1) The Red River Compact pre-empts Oklahoma statutes giving Tarrant "the right to cross state lines and divert water from Oklahoma"¹⁵ within a specific portion of the river where the Compact grants "equal rights to the runoff."¹⁶ "In Tarrant's view, this provision essentially creates a borderless commons in which each of the four signatory States may cross each other's boundaries

¹² C. Howe, *The Return to the River Basin: The Increasing Cost of "Jurisdictional Externalities"*, 131 J. OF CONTEMP. WATER RES. AND EDUC. 26-31 (2005).

¹³ David S. Brookshire, et al., *Ecosystem Services and Reallocation Choices: A Framework for Preserving Semi-Arid Regions in the Southwest*, 144 J. OF CONTEMP. WATER RES. AND EDUC. 60-74 (2010).

¹⁴ See, *State of Montana v State of Wyoming and State of North Dakota* 131 U.S. 1765 (2011); *Wyoming v. Colorado*, 259 U.S. 419 (1922).

¹⁵ *Tarrant Regional Water District v. Herrmann ET AL.*, 569 U.S. 614 (2013) at 9.

¹⁶ *Id.* at 615.

to access a shared pool of water.”¹⁷ 2) “Tarrant argues that the Oklahoma water statutes impermissibly “discriminat[e] against interstate commerce’ for the ‘forbidden purpose’ of favoring local interests” by erecting barriers to the distribution of water left unallocated under the Compact” (emphasis added).¹⁸ In rejecting these arguments, the Court makes statements raising critical issues for water managers.

First, the Court ignores the fact authority over water is shared—not exclusive. Placing substantial emphasis on “sovereignty” provided the Court with the justification for finding the Red River Compact does not pre-empt Oklahoma water allocation law.¹⁹ However, the sovereignty argument ignores the historic interplay and tensions between state and federal authority over water; it also disregards the requirement for sharing between states. Water is an inherently shared resource that cannot fit under traditional notions of ownership and sovereignty.²⁰ While ignoring

¹⁷ *Id.* at 616.

¹⁸ *Id.* at 617.

¹⁹ *Id.*

²⁰ Olen P. Matthews, *The Dominate Water Estate and Water Reallocation*, 144 J. OF CONTEMP. WATER RES. & EDUC. (2010); George

the shared nature of water management the Court seems to indicate there is something unmanageable with a “borderless common in which each of the four signatory States may cross each other’s boundaries to access a shared pool of water.”²¹ Such reasoning is peculiar because political boundaries are artificial constructs running contrary to watershed management. Although a completely borderless commons may not be politically feasible, reducing borders as much as practicable is a commonly stated water management goal²², as well as fundamental principle of neo-

A. Gould, *Water Rights Transfers and Third-Party Effects*, 23 LAND AND WATER L. REV. 1 (1988).

²¹ *Tarrant Regional Water District v. Herrmann ET AL.* 569 U.S. 614 (2013) at 627-28. “But if §5.05(b)(1)’s silence instead reflects a background understanding on the part of the Compact’s drafters that state borders were to be respected within the Compact’s allocation, then the Oklahoma statutes do not conflict with the Compact’s allocation of water.”

²² Water managers frequently cite a common goal of integrated (holistic) watershed management. J. Hoornbeek, & E. Hansen, (2013). *Integrated Water Resource Management (IWRM) in the United States: An Inquiry into the Role of Total Maximum Daily Loads (TMDLs)*. INT’L J. OF WATER GOVERNANCE, 1 (3), 339-360 (2013); Eve Vogel, *Parceling Out the Watershed: The Recurring Consequences of Organizing Columbia River Management within a Basin-Based Territory*. WATER ALTERNATIVES 5(1), 161-190 (2012). “This goal can only be achieved by erasing the boundaries as much as possible.” Olen P. Matthews and Dan St. Germaine, *Boundaries and Transboundary Water Conflicts*, 133 J. OF WATER RES. PLANNING AND MGMT. 386-396 (2007). Water managers frequently cite a common goal of integrated (holistic) watershed management.

classical economics. A borderless commons could have a positive impact on water management. Second, by narrowing Tarrant's commerce clause arguments to water "left unallocated under the compact", the whole issue of Oklahoma's blatant and intentionally discriminatory statutes is left unresolved. These two points form the focus for our discussion below.

Because of the Red River Compact's singular language and Tarrant's argument based on "unallocated" water, the implications of this case are unclear. But this precedent brings into question the ability to divert or market water across state boundaries. Interpreted at its margin this decision represents a reversal of trends towards a national free-market of water as a commoditized good.²³ We argue that *Tarrant*, in spite of some language within the decision, should not fundamentally constrain water transfers across state boundaries.

II. SHARED AUTHORITY OVER WATER

John Wesley Powell recognized dividing watersheds with state boundaries would create water management problems.²⁴ His

²³ See, *Sporhase v. Nebraska*, 458 U.S. 941 (1982); *City of El Paso v. Reynolds* 563 F. Supp. 379 D.N.M. (1983).

²⁴ JOHN W. POWELL, A REPORT ON THE LANDS OF THE ARID REGION OF THE UNITED STATES 31 (2nd ed. 1878).

fear of states incessantly fighting over borders, water allocation, and fishing rights, instead of managing watersheds as an interdependent resource, was prescient.²⁵ His recommendation of using watershed boundaries as political borders instead of rivers was ignored, and States have been at odds ever since. In 1879 when Powell made his report, individual water users in the arid West were ignored at the federal level giving states leeway to develop a system for allocating

²⁵ Powell's *A Report on the Lands of the Arid Region of the United States*, suggested using watershed boundaries instead of rivers as political boundaries. He also suggested development in the western United States needed to occur with recognition of the limited freshwater supplies. *Id.* at 27.

water.²⁶ Powell did not foresee the heavy federal presence that evolved subsequently.²⁷

A. *The Fiction of State Sovereignty*

In *Tarrant*, the Court draws on an 1842 Supreme Court decision²⁸ based on river bed ownership to describe the attributes of sovereignty. “We have long understood that as sovereign entities in our federal system, the states possess an ‘absolute right’ to all their

²⁶ The federal government did not have the resources in the sparsely settled West to resolve water disputes even if they desired. Local custom evolved instead which in the later part of the 1800s became the basis for the western states’ appropriation doctrine. A similar process happened with mining law in the West. In the early 1800s the U.S. developed a lease system for minerals on the frontier. The lease law was unenforceable partly because the program was inadequately administered. For example, rents were only collected for one year between 1836 and 1846. See, e.g., Robert W. Swenson, *Legal Aspects of Mineral Resources Exploitation* in GATES, PAUL W. HISTORY OF PUBLIC LAND LAW DEVELOPMENT at 705 (1968). The lease system was abandoned in 1846 the sale of specific mineralized lands was authorized. California was not included in the authorization. When gold was discovered in 1849 the California miners were in fact trespassing on federal land when they extracted minerals. A vacuum existed at the local level and mining camps developed their own rules for establishing property rights and resolving disputes. In time these local practices were codified as the Mining Law of 1866 and 1872. Arguably a federal system for allocating water could have developed, especially on federal land and in the territories. See also, *Irwin v. Phillips*, 5 Cal. 140 (1855). These same miners needed water for their placer claims and local customs based on “first in time, first in right” evolved for water as well.

²⁷ *Supra* note 26.

²⁸ *Martin v. Waddell*, 41 U.S. 367 (1842).

navigable waters and the soils under them for their own common use” (emphasis added).²⁹ Most definitions of sovereignty use terms like “supreme and absolute power”, “paramount political authority”, or “absolute right to govern.”³⁰ But, is sovereignty a concept that applies to water? Within an international context sovereign states (countries)³¹ are independent and exercise jurisdiction over their territory, resources, and citizens. Even sovereign countries have obligations under international law which restrict the “absolute” exercise of power.³² Obligations are especially important since absolute power over water can be exercised in ways that cause substantial harm to other country’s interests. Water is a mobile resource with individual molecules moving through the hydrologic cycle independent of political boundaries. Indeed, only one of the

²⁹ *Arnold v. Mundy*, 6 N. J. Law, 1 at 14-15. (Since the issue in the case was the ownership of the river bed (soil beneath the navigable water) the reference to the water itself is dicta.)

³⁰ Black’s Law Dictionary available at thelawdictionary.org.

³¹ We will use the term *country* when referring to an internationally recognized state to avoid confusion with the term *state* which is also used for governing units within the U.S. federal system.

³² For example, the Mekong River Basin Commission is an inter-governmental agency that has worked to create clear expectations of each nation on how it treats the Mekong River and its principal tributaries.

world's 264 large river basins is undivided by a political boundary.³³

This necessitates some form of sharing.

Four major theoretical approaches have been advocated for governing international waters.³⁴ First, “absolute territorial sovereignty”³⁵ allows upstream countries to use water as they chose with no obligation to prevent harm to downstream countries. This seems to be the position taken by the Supreme Court in *Tarrant*.³⁶ Second, “absolute riverine integrity” prevents upstream countries from reducing the full natural flow of the river thereby benefiting downstream countries. Third, “equitable utilization” limits territorial sovereignty by allowing each country to use an equitable and reasonable share of the water. Fourth, the “community theory”

³³ The Murray-Darling River Basin is entirely within Australia. The other 263 largest basins cross at least one international boundary. Shim Yoffe, Shira, Aaron T. Wolf, and Mark Giordano, *Conflict and Cooperation over International Freshwater Resources: Indicators of Basins at Risk*, 39 JOURNAL OF THE AMERICAN WATER RESOURCES ASSOCIATION (2003) at 1109.

³⁴ Joseph W. Dellapenna, *International Water Law*, in *Water and Water Rights*, §49.03 (Robert E. Beck ed. 1991).

³⁵ Carolin Spiegel, *International Water Law: The Contributions of Western United States Water Law to the United Nations Convention on the Law of the Non-navigable uses of International Watercourses*, 15 DUKE JOURNAL OF COMPARATIVE AND INTERNATIONAL LAW (2005) at 348.

³⁶ The Circuit Court decision seems even more extreme in its embrace of this approach.

advocates river basin development as a unit without regard for political boundaries. Although, the first two doctrines have been advocated at different times these have never been accepted at international law³⁷ equitable utilization is the current standard.³⁸ The community theory is more recent and would virtually erase the political boundary. Equitable utilization at international law goes beyond the concept of equitable apportionment which will be discussed below. Equitable apportionment as developed by the US Supreme Court requires the benefits of water use be shared and not just the allocation of water.

Kansas v. Colorado, a dispute over the Arkansas River, illustrates how several of these theoretical approaches were articulated.³⁹ In 1906, large dams and major diversions for irrigation and other purposes were just becoming technically feasible. International water law was largely limited to navigation disputes as were most disputes between U.S. states. This controversy helped

³⁷ U.S. advocated absolute territorial sovereignty Harmon Doctrine. See also, state arguments in *Kansas v. Colorado*.

³⁸ International Law Association. Berlin Conference 2004. Water Resources Law. Fourth Report at 4.

³⁹ *Kansas v. Colorado*, 206 U.S. 46 (1907).

shape early international water allocation law because of the way the Court approached a dispute between equal sovereigns. The international aspect of sovereignty is illustrated by the Court's stating it was "sitting ... as an international, as well as a domestic tribunal."⁴⁰ Colorado was following the approach espoused in 1895 by Attorney General Judson Harmon.⁴¹ The Harmon Doctrine evolved as the result of a dispute over the Rio Grande between the U.S. and Mexico but was later repudiated.⁴²

Kansas as the downstream state argued for absolute riverine integrity. "The State of Kansas appeals to the rule of the common law that owners of lands on the banks of a river are entitled to the continual flow of the stream..."⁴³ Flowing water provided an energy source for mill wheels with water being valued more for its energy than for other uses. Interfering with the flow harmed the mills. The

⁴⁰ *Kansas v. Colorado*, 185 U.S. 125, 146 (1902).

⁴¹ Judson Harmon, 21 Op. U.S. Att'y Gen. 281 (1895).

⁴² This doctrine never developed as the standard under international law and arguably was not actually used by the United States. See, Stephen C. McCaffrey, *The Harmon Doctrine One Hundred Years Later: Buried, Not Praised*, 36 NAT. RESOURCES J. 549, 565 (1996).

⁴³ *Kansas v. Colorado*, 185 U.S. 125, 146 (1902).

natural flow theory would require Colorado to leave the river untouched benefiting downstream Kansas.⁴⁴

In their subsequent decision the Court adopted the standard of “equitable apportionment.”⁴⁵ This new federal common law doctrine articulated a principle based on sharing, but Kansas was not allocated a share of the river because they could not prove they were being harmed.

“[W]e are not satisfied that Kansas has made out a case entitling it to a decree. At the same time it is obvious that if the depletion of the waters of the river by Colorado continues to increase there will come a time when Kansas may justly say that there is no longer an equitable division of benefits and may rightfully call for relief against the action of Colorado, its corporations and citizens in

⁴⁴ As the Court points out accepting this theory would not necessarily benefit Kansas irrigators since the next downstream state could make the same argument. *Kansas v. Colorado*, 206 U.S. 46 (1907). This point was noticed by irrigators in western Kansas who objected to the use of this doctrine. See, JAMES E. SHEROW, WATERING THE VALLEY: DEVELOPMENT ALONG THE HIGH PLAINS ARKANSAS RIVER, 1870-1950, University Press, Kansas (1990).

⁴⁵ *Kansas v. Colorado*, 206 U.S. 46 at 47 (1907). The idea that state sovereignty could be limited when one state harmed another had already been accepted by the Court in a water quality dispute over the Illinois River. A public nuisance created in one state causing harm in another was within the Supreme Court’s jurisdiction. Although state sovereignty was restricted by enunciating the principle, the harm to the downstream state could not be proven. *Missouri v. Illinois and Chicago*, 200 U.S. 496 (1906).

appropriating the waters of the Arkansas for irrigation purposes.” (emphasis added)⁴⁶

The Court did leave open the door by stating Kansas could

“institute new proceedings whenever it shall appear that through a material increase in the depletion of the waters of the Arkansas, ...the substantial interests of Kansas are being injured to the extent of destroying the equitable apportionment of benefits between the two States resulting from the flow of the river.”(emphasis added)⁴⁷

The doctrine of equitable apportionment evolved as a limitation on a state’s territorial sovereignty creating an obligation on upstream states to share the benefits of the water originating within their boundaries.⁴⁸ As this standard evolved it has been limited to an actual apportionment of a “share” or quantity of water rather than an apportionment of the “benefits” of the water use. This is playing out in the current dispute in the Apalachicola-Chattahoochee-Flint (ACF) Basin, as Georgia and Florida seem entrenched in their respective positions on flow dimensions and

⁴⁶ *Id.* at 47.

⁴⁷ *Id.* at 47-48.

⁴⁸ The exact nature of the elements that create an “equitable apportionment” were eventually defined but were left open ended and flexible. Although the rules have been articulated for an equitable apportionment, the Supreme Court rarely actually apportions a quantity of water and prefers states resolve disputes through compacts.

equity.⁴⁹ The two states invoked an Interstate Compact, but the compact expired in 2003.⁵⁰ Even the use of a “Special Master”⁵¹ did not create a determination of equity the Court deemed satisfactory. As a result litigation over flows in the ACF is ongoing.

In 1966, the Helsinki Rules, a precursor in the evolution of international water law, stated “each basin state is entitled, within its territory, to a reasonable and equitable share in the beneficial uses of the waters of an international drainage basin.”⁵² This is the doctrine of “beneficial uses,” which is perhaps closer to the Supreme Court’s original articulation which included an “equitable division of benefits” and certainly implies more than just an allocation of a quantity of water. As international law has evolved there may be

⁴⁹ *Florida v. Georgia*, 138 S. Ct. 2502 (2018).

⁵⁰ *Apalachicola-Chattahoochee-Flint River Basin Compact P.L.* 105-104 (1997).

⁵¹ The Special Master’s recommendation suggested Georgia receive a disproportionate quantity of water in this system stating, “Florida has not proven by clear and convincing evidence that its injury can be redressed by an order equitably apportioning the waters of the Basin.” *Id.* 51 at 2502. The Court determined the Special Master “applied too strict a standard when he determined that the Court would not be able to fashion an appropriate equitable degree.” (*See* footnote 51 at 2516). This suggests the Court will, if no negotiated settlement is reached, judicially allocate waters.

⁵² *The Helsinki Rules on the Uses of the Waters of International Rivers*, Chapter 2, Article 6 (1966).

even more limitations on sovereignty than exist in disputes between U.S. states. International law emphasizes the “fairness” or “equities” “rather than... a strict application of legal rights.”⁵³ Thus sharing the benefits includes a share in the hydroelectricity generated by a dam located entirely within one country. Although equitable utilization includes sharing the benefits of water use, it allows independent development on each side of a boundary, and the boundary is not completely erased.

The doctrine of “equitable participation” goes one step further and includes integrated watershed-scale management, the process looking at the entire river basin when making water management decisions.⁵⁴ Water managers have long advocated this as a way of optimizing water use. Although there is a growing movement toward integrated management at the international level it is not fully articulated. “Many modern treaties apparently take the principle of shared rights or common use as a presumed starting point of departure and proceed without articulating any general rule,

⁵³ Joseph W. Dellapenna, *International Water Law*, in *Water and Water Rights*, §49.05(b)91 (Robert E. Beck ed. 1991).

⁵⁴ *Id.*

to spell out the specifics of their sharing of responsibilities....”⁵⁵ In 1997, a U.N. Convention specifically recognized a duty to cooperate, consult and negotiate.⁵⁶ The Berlin Rules also recognize a duty to consult and negotiate.⁵⁷

At the international level limitations are imposed by U.N. conventions on sovereignty in transboundary watersheds⁵⁸. This is a long way from the absolute power advocated under the Harmon Doctrine. In many ways the international obligations and limitations on sovereignty far exceed those that exist for U.S. states. There is a difference, however. In the U.S., a “superior” federal government also has power over water. The U.S. Constitution also limits state powers and puts in place mechanisms for resolving disputes between states. Sovereignty does NOT mean absolute power when it comes to water; it never has. To further understand these

⁵⁵ Stephen M. Schwebel (Special Rapporteur of Int’l Comm’n), *Third Rep. on the Law of Non-Navigational Uses of International Watercourses*, U.N. Doc. A/CN.4/348 (1982).

⁵⁶ U.N. Convention on the Law of Non-Navigational Uses of International Watercourses, U.N. Doc. A/51/49 (May 21, 1997).

⁵⁷ *Id.*

⁵⁸ Aaron T. Wolf, *A Long Term View of Water and International Security*, 142 J. CONTEMP. WATER RES. & EDUC. 67, 67-75 (2009).

limitations on state power, the balance between state and federal power over water needs to be examined.

B. Balancing Federal and State Power

Federal regulatory power over water has gradually increased over time. This evolution is comparable to the changing relationships between the state and federal governments within the U.S. federal system.⁵⁹ One significant dividing point is the Reclamation Act of 1902. Prior to this, the exercise of federal power was generally limited to navigation. Government roles before the Reclamation Act are discussed in the first section below. The Reclamation Act itself was a compromise between federal power and local interests as will be discussed in the second part. Subsequent federal statutes used other constitutional justifications other than the navigation justification. As long as there was a constitutionally enumerated power, this federal expansion was

⁵⁹ Four components of this federal system have been identified: 1) state sovereignty and constitutional limits on that sovereignty; 2) federal power; 3) relationship between federal and state governments; and 4) relationship between the states. All four of these components are important in understanding how water is managed. None of the components can be looked at in isolation. Thus, state sovereignty can only be understood by also examining the constitutional limits on sovereignty, federal power, and the obligations to other states; Robert A. Sadler, *The Constitution and the American Federal System*, 55 WAYNE L. REV. 1487, 1488 (2004).

upheld. The main constitutional powers exercised are under the Commerce Clause and the Property Clause as discussed in the third section. Lastly, this article will discuss congressional apportionment. Over the past 100 years the scale of water management issues has changed, and the balance between state and federal power has shifted as the role water plays in development, ecosystem services, and agricultural and fisheries production has been better understood and re-evaluated.

1. Pre- “Reclamation Era” roles

Before 1902 the federal role in water management was limited in scope. This is partly due to the scale of the management concerns of that era. Except for navigation, most water management issues were local. During this period the balance between state and federal power depended on the definition of “navigable water.”⁶⁰ The Constitution does not specifically mention water, but the Commerce Clause affirmatively gives the federal government the power to “regulate commerce” which includes power over

⁶⁰ The designation of a navigable waterbody means actions interfering with navigable commerce must be precluded; *United States v Rands*, 389 U.S. 121 (1967).

navigation.⁶¹ With an almost non-existent road system water transportation was the backbone for moving goods from one place to another when the U.S. was founded. The federal Commerce Clause power is not exclusive; states also retain the capacity to regulate commerce.⁶² State attempts to restrict “commerce” through protectionist laws led to the evolution of the dormant or negative Commerce Clause.⁶³ Protectionist state laws are consistently deemed unconstitutional, as will be discussed in more detail below.⁶⁴

Whether federal power extended beyond navigable waters was an open question. Other federal constitutional powers like the Property Clause, treaty power, and spending power potentially granted the federal government authority to directly or indirectly affect water. Generally, issues concerning these other constitutional

⁶¹ *Gibbons v. Ogden*, 221 U.S. 1 (1824).

⁶² *Maine v. Taylor*, 477 U.S. 131 (1986).

⁶³ *Ogden*, 22 U.S. 1 (1824); *Wilson v. Black-Bird Creek Marsh Co.*, 27 U.S. 245 (1829); See generally Norman G. Williams, *Gibbons*, 79 N.Y.U. L. REV. 1398 (2004); M.H. Redish and S. V. Nuegent, 1987 *The Dormant Commerce Clause and the Constitutional Balance of Federalism*. DUKE L. REV. 4, 569-618 (1987).

⁶⁴ *Sporhase*, *supra* note 24; *Fort Gratiot Sanitary Landfill v. Michigan Dep't of Natural Resources*, 504 U.S. 353 (1992).

powers did not arise with regard to water in the 1800s. The rule was clear that, if Congress exercised one of its specific constitutional powers, that law was supreme and pre-empted contradictory state laws.⁶⁵

With federal power over navigable waters being well settled in the 1800s, it became a regular practice for Congress to pass an annual Rivers and Harbors bill financing navigation improvements.⁶⁶ Politicians of that era did not feel there was constitutional authorization for federal flood control levees and reservoirs, federal projects to drain wetlands, or federal reclamation projects.⁶⁷ On the other hand, the benefits to the local politicians from navigation improvements were well recognized and the almost annual Rivers and Harbors Acts were broadly supported.⁶⁸

Non-navigational federal water initiatives that could not be developed through direct means were accomplished indirectly. Two

⁶⁵ *Ogden*, 22 U.S. 1 (1824).

⁶⁶ See Rivers and Harbors Act of 1879, 21 Stat. 37 (created the Mississippi River Commission to improve navigation on the river).

⁶⁷ See generally, ELLIS L. ARMSTRONG, ET AL., HISTORY OF PUBLIC WORKS IN THE UNITED STATES, 1776-1976 (Amer. Public Works Assoc., 1976).

⁶⁸ See generally, O.P. MATTHEWS, WATER RESOURCES: GEOGRAPHY AND LAW (Assoc. of Amer. Geographers, 1984).

basic indirect strategies were developed to bypass the perceived restrictions on federal power. One strategy was designed to provide federal funding for big projects the states could not afford.⁶⁹ The Federal government had one asset that was not restricted by the constitution- federal land. The federal government could donate federal land to the states, states could sell the land, and the proceeds could be used for water projects.⁷⁰ Thus, through indirect means states were provided funds for draining swamps,⁷¹ building canals,⁷² and for reclamation projects.⁷³

The second indirect method involved states claiming a project benefited navigation when the major impact was actually for another purpose. This method became increasingly common as the

⁶⁹ *Id.*

⁷⁰ *See generally*, DONALD PISANI, *WATER, LAND, AND LAW IN THE WEST: THE LIMITS OF PUBLIC POLICY, 1850-1920* (University of Kansas Press, 1996).

⁷¹ *See, e.g.*, Swamp Land Acts of 1849 (9 Stat. 352), 1850 (9 Stat. 520), and 1860 (12 Stat 3). Over 64,000.000 acres eventually went to states under a series of Swampland Acts; *See* PAUL W. GATES, *HISTORY OF PUBLIC LAND LAW DEVELOPMENT*, at 325 (Public Land Law Commission, Wash. D.C., 1968).

⁷² GATES, *HISTORY OF PUBLIC LAND LAW DEVELOPMENT*, at 325. In 1827 and 28 grants were made to Ohio, Indiana, Illinois and Alabama.

⁷³ The Carey Act, 43 Stat. 2610 (1894). This act was largely unsuccessful (*See* Gates, at 650, *supra* note 73; Pisani, at 104, *supra* note 71.)

1800s progressed, because of the high rate of success in getting these projects funded. Thus, the federal government constructed levees to improve navigation even though they also prevented floods, and constructed reservoirs to improve navigation by capturing debris, even though the reservoirs also prevented floods. Discharging refuse into navigable waters was prohibited because it could interfere with navigation.⁷⁴ By the end of the 19th century federal power had been extended to tributaries of navigable water bodies and other sources affecting a water body's "navigable capacity."⁷⁵ Since western states were developing laws allowing streams and rivers to be depleted for irrigation, and even sometimes completely dewatered, state "irrigation" potentially could conflict with federal "navigation." During this period federal power over water was limited to navigation related water issues, but this power was none the less substantial. All that was needed was a link to navigation which Congress was increasingly willing to find.

⁷⁴ The Rivers and Harbors Act of 1899, 33 U.S.C. 403 (1899).

⁷⁵ *Id.*, prevented excavations or filling that would affect the navigable capacity of navigable waters; *See also United States v. Rio Grande Dam & Irrig. Co.*, 174 U.S. 690 (1899).

Perhaps the most important “state” water management role was in defining water rights. Property rights are generally defined by state law, rather than federal law. In the east, water rights were considered an attribute of riparian land ownership and were thus defined by each individual states’ property law.⁷⁶ Land owners decided how water was used, and conflicts between riparian owners were resolved in court as were disputes over land.⁷⁷ State water management agencies did not exist. The riparian rights doctrine did not work as a property rights system in the western states and territories.⁷⁸ Water could only be used on adjacent land limiting the amount of developable lands and could not be diverted outside a watershed.⁷⁹ Miners needed water for placer operations and often had to seek water courses miles from their claims to find it. Irrigators had a similar problem; the lands immediately adjacent to a river were often not ideal for production, and upland areas required extensive irrigation works to supply water. Out of need, a new

⁷⁶ See O.P. Matthews, *supra* note 69.

⁷⁷ *Id.*

⁷⁸ See *Irwin v. Phillips*, 5 Cal. 140 (1855).

⁷⁹ See O.P. Matthews, *supra* note 69.

system of water rights, the appropriation doctrine, evolved.⁸⁰ The appropriation doctrine grants a temporal priority to anyone who intentionally diverts water from a watercourse and applies it to a beneficial use,⁸¹ and land ownership is not required.⁸²

The end of the 1800s was a crucial turning point in the scale of water management. Western states were formalizing a system for establishing water rights separate from land ownership.⁸³ The annual Rivers and Harbors Acts had dropped the “navigation” justification for spending federal funds.⁸⁴ Levees and dams were authorized for flood control, not just navigation.⁸⁵ A significant change was made in 1890 when the annual Rivers and Harbors bill moved from funding projects to prohibiting interference with a water body’s navigable capacity.⁸⁶ Bridges, dams, and channel alterations now

⁸⁰ See *Irwin*, *supra* note 79.

⁸¹ See generally O.P. Matthews, *supra* note 69.

⁸² Early California miners operated on public land they did not own. They were in fact trespassers. Without ownership they had no riparian right; *Irwin*, 5 Cal. 140 (1855).

⁸³ See O.P. Matthews, *supra* note 69.

⁸⁴ Rivers and Harbors Act, *supra* note 75.

⁸⁵ River and Harbor Act of 1890 26 Stat. 426 §13 (1890); River and Harbor Act of 1892 27 Stat. 88 (1892).

⁸⁶ *Id.*

required federal permission.⁸⁷ The major irrigation projects being contemplated during the 1890s would have to comply with this federal requirement. The Rivers and Harbors Act of 1899 reauthorized the 1890 requirement⁸⁸ and added a permit requirement for the discharge of refuse.⁸⁹ This early environmental statute was a substantial assertion of federal power. The integrity of navigable waters was being protected not just the water's "navigable capacity." Discharges into tributaries of navigable water also required a permit.⁹⁰ Before 1900 the federal government had asserted strong interests in water. This is the same period that western states were developing statutory frameworks for allocating water rights.⁹¹ These state water rights could not be exercised in ways that interfered with the federal requirements.

⁸⁷ *Id.*

⁸⁸ Rivers and Harbors Appropriation Act of 1899 30 Stat. 1121 §10 (1899).

⁸⁹ Rivers and Harbors Appropriation Act of 1899 30 Stat. 1121 §13 (1899).

⁹⁰ *Id.*

⁹¹ See *generally*, Pisani, *supra* note 71.

2. The Reclamation Act Compromise

By the time the federal Reclamation Act passed in 1902, the appropriation doctrine was well established. State constitutions or statutory provisions recognized it,⁹² and courts had endorsed it.⁹³ Even so, the appropriation doctrine was a cobbled together system designed to solve specific local problems. Not until the Wyoming Constitution and water code (enacted in 1890) did comprehensive water laws emerge.⁹⁴ The Wyoming Constitution asserts state ownership of all the water within the state's boundaries.⁹⁵ Other state codes evolved in time with many claiming water "ownership" in state's name or for the "public." Even though state or public ownership was asserted, each code created rules for establishing private property rights held by individuals, corporations or local

⁹² See Article 14 of the California Constitution (adopted in 1879), which directed that water be regulated and controlled by the State. The Colorado Constitution, at Article 16, § 5 (1876), declared unappropriated water in the State to be the "property of the public."

⁹³ *Irwin*, supra note 79; *Coffin v. Left Hand Ditch Company* 6 Colo. 443 (1882).

⁹⁴ ROBERT E. BECK & OWEN L. ANDERSON, INTRODUCTION AND BACKGROUND, 11 *Waters and Water Rights* § 11.04(b) (2012).

⁹⁵ WYO. CONST. art 8, § 1.

governments.⁹⁶ These property rights are “use” (usufructuary) rights that can be sold under defined circumstances.⁹⁷ In spite of the substantial interest claimed by states under the state ownership doctrine, allowing water to be sold in private transactions makes water a commodity. The public’s interest in market transactions was nominally protected,⁹⁸ but this protection had a very low bar capable of being passed by any economically beneficial use.⁹⁹

The Reclamation Act was a game changer in the administration of western water allocation law. States had no systematic method for adjudicating water rights creating substantial uncertainty within the existing property rights systems. Why should

⁹⁶ See generally, Pisani, *supra* note 71.

⁹⁷ See Gould, *supra* note 4.

⁹⁸ “Of the 19 member states of the Western Governors Association, 12 states contain some form of broad statement that approval of a water transfer cannot run contrary to the general interest of the citizens of the state”; Mike Pease, *Water Transfer Laws and Policies: Tough Questions and Institutional Reform for the Western United States*, 4 [J] NAT. RESOURCE POL’Y RES. 103, 112 (2012).

⁹⁹ Beneficial use is loosely defined. For example, South Dakota defines beneficial use as “reasonable and useful and beneficial to the appropriator, and at the same time is consistent with the interests of the public of this state” S.D § 46-1-6(3). For a more detailed overview of beneficial use, see generally Robert Beck & Owen L. Anderson, *Elements of Prior Appropriation*, 11 *Waters and Water Rights* §11.01 (2012).

the federal government spend money on large reclamation projects when existing water rights were unknown? Fear that speculators would claim water rights in areas prior to a federal project led to a push to reform state laws.¹⁰⁰ Wyoming's comprehensive approach was adopted in some western states while other states adopted the Bien Code.¹⁰¹ The Bien Code is a model water allocation code developed around 1903 by the federal Reclamation Service. Unclear state laws and unadjudicated water rights prompted a more systematic approach to water management.¹⁰² Before large projects were approved or funded, the Reclamation Service encouraged states to adopt a comprehensive code. These codes clarified the existing systems for establishing water rights and resolving conflicts. When the Reclamation Act was eventually passed, Congress deferred to these state laws allowing states to control water

¹⁰⁰ This was a catalyst for the relation-back doctrine, which attempts to clarify expectations for the progression and finalization of a water diversion, *see generally Coffin*, 6 Colo. 443 (1882).

¹⁰¹ See F.M. PHILLIPS, G.E. HALL, AND M.E. BLACK, *REINING IN THE RIO GRANDE: PEOPLE LAND, AND WATER*, (UNM Press, 2015).

¹⁰² See W.A. Hutchins, J.P. DeBaal & H.H. Ellis, *Water Rights Laws in the Nineteen Western States*, at 458-59 (U.S. DEPT. OF AGR., NAT. RESOURCE ECON. DIV., 1974).

rights.¹⁰³ Federal authority over navigation and commerce was retained.

States were also motivated to adopt comprehensive codes by the fear of federal authority over water rights.¹⁰⁴ As the owner of the public domain, the federal government had a strong claim to water “ownership.”¹⁰⁵ The federal Irrigation Survey had identified 147 reservoir sites by 1890,¹⁰⁶ poisoning the federal government to be a player in western irrigation. The federal threat to western state’s allocation systems could not be ignored, but states required federal financial support to develop large irrigation projects.

The debates leading up to the Reclamation Act of 1902 show that there was substantial disagreement over the way federal and state roles should be balanced in reclamation projects.¹⁰⁷ The original bill introduced by westerners gave the states almost

¹⁰³ See Pisani, *supra* note 71.

¹⁰⁴ See Pisani, *supra* note 71, at 64.

¹⁰⁵ See *Kansas v. Colorado* (1907) where the U.S. intervened and made this argument. Although the Court did not support the federal position this was an unknown when the Reclamation Act was being negotiated and during its early implementation.

¹⁰⁶ Pisani, *supra* note 71, at 163.

¹⁰⁷ See Pisani, *supra* note 71.

complete power over projects and rendered the federal role to financing.¹⁰⁸ This was met with a tepid reception from eastern senators and congressmen who wanted a more expansive federal role. Subsequent western concessions were insufficient to move eastern interests.¹⁰⁹ Eastern politicians were reluctant to approve a bill that would be costly and of no benefit to their constituents. Only President Roosevelt's veto threat to the pending Rivers and Harbors Bill, which largely benefited eastern interests, brought the Reclamation Act to a vote.¹¹⁰

When the Reclamation Act was first passed the federal government did not have a system for establishing water rights.¹¹¹ States stepped into this void and actively granted water rights in 1902, even though their systems for doing so were still a bit

¹⁰⁸ See generally Pisani, *supra* note 71; LAWRENCE J. MACDONELL, FROM RECLAMATION TO SUSTAINABILITY: WATER, AGRICULTURE AND THE ENVIRONMENT IN THE AMERICAN WEST (1999).

¹⁰⁹ To accomplish this, the Bureau of Reclamation established long-term contracts with irrigation districts and individual irrigators. Within these contracts were long-term pricing agreements for water deliveries and repayment schedules for the irrigation works. For a review of the success of these projects, see generally Pisani, *supra* note 71; MacDonell, *supra* note 108.

¹¹⁰ See Pisani, *supra* note 71, at 319.

¹¹¹ Pisani, *supra* note 71.

chaotic.¹¹² The western congressmen who supported the Act made sure that this power remained with the States.¹¹³ States could establish property rights, but those rights could not interfere with other federal powers.¹¹⁴ After being largely silent during the 1800s, Congress and the Supreme Court were more willing to recognize an expanded federal role.¹¹⁵

C. Muddying the Federalism Waters

After the Reclamation Act, the first Supreme Court case addressing the federal role in water management was *Kansas v. Colorado*, discussed above. The extreme positions taken by Kansas and Colorado threatened the future of federal irrigation projects which prompted the federal government to intervene.¹¹⁶ If Kansas' position was upheld the ability to divert water for reclamation projects would be destroyed.¹¹⁷ Although the federal government

¹¹² *Id.*

¹¹³ *Id.*

¹¹⁴ See ROBERT E. BECK & AMY K. KELLY, *THE LEGAL REGIMES, Water and Water Rights* § 4.02 & 4.03 (2012).

¹¹⁵ *Id.*

¹¹⁶ Douglas L. Grant, *Equitable Apportionment Suits Between States*, § 45.02, in *Water and Water Rights* (LexisNexis 2012).

¹¹⁷ *Id.*

liked Colorado's appropriation doctrine, it did not like Colorado's claim of absolute power over water as it would negatively affect interstate commerce.¹¹⁸

The federal position in *Kansas v. Colorado* seems a bit extreme in light of the specific congressional deference to state water allocation law, but the states also had extreme positions. Neither state recognized the rights in the other state. Colorado attempted to argue full control over its portion of the Arkansas River, citing state sovereignty over the watercourse as it passes through state territory.¹¹⁹ Kansas took an opposite, yet similarly uncompromising position arguing Colorado had no right to disrupt the natural flow of the Arkansas River.¹²⁰ Such extreme positions exemplify the protectionist actions that necessitated the commerce clause. None of the extreme positions were accepted, but a balance between state and federal rights was recognized.

In the next year, federal power over water was once again before the Supreme Court. The Fort Belknap Indian Reservation in

¹¹⁸ Amy K. Kelly, Federal Reclamation Law, § 41.04, in *Water and Water Rights* (LexisNexis 2012).

¹¹⁹ *Supra* note 118.

¹²⁰ *Id.*

Montana was created by federal action in 1888.¹²¹ Over the next decade, the tribes used water from the Milk River for irrigation and domestic purposes.¹²² After the federal reservation was created, Montana citizens acquired water rights using Montana law on the Milk River.¹²³ Because the water supply was insufficient for all users, a conflict developed.¹²⁴ In *Winters v. United States*¹²⁵ the Court addressed whether the creation of the reservation set aside water for tribal use or whether Montana acquired control over water by attaining statehood.¹²⁶

¹²¹ *Winters v. U. S.*, 207 U.S. 564, 567 (1908).

¹²² *Id.*

¹²³ *Id.*

¹²⁴ *Id.*

¹²⁵ *Id.*

¹²⁶ *Winters v. U. S.*, 207 U.S. 564, 577 (1908). The Court stated: “The power of the Government to reserve the waters and exempt them from appropriation under the state laws is not denied, and could not be. *United States v. The Rio Grande Ditch & Irrigation Co.*, 174 U.S. 690, at 702; *United States v. Winans*, 198 U.S. 371. That the Government did reserve them we have decided, and for a use which would be necessarily continued through years” In *United States v. Winans*, 198 U.S. 371 (1905), the Court upheld the rights of Tribes to hunting and fishing rights, stating, “...the Treaty of 1859, was not a grant of right to the Indians, but a reservation by the Indians of rights already possessed and not grated away by them.”

By 1908, state laws were subservient to federal law if the navigable capacity of a stream was harmed or if the federal government reserved water.¹²⁷ Anytime the federal government reserves land, a federal water right is created.¹²⁸ This reserved rights doctrine was viewed as an exception under Indian law until it was expanded in 1963.¹²⁹ The federal right supersedes any state right created subsequent to the federal reservation.¹³⁰ The volumetric limit of the right is defined by an amount sufficient to accomplish the purposes of the federal reservation.¹³¹ This reserved rights doctrine was viewed as an exception under Indian law until it was expanded in 1963.¹³²

As the federal presence in other aspects of water management grew,¹³³ deference to state laws that established water

¹²⁷ *Gibbons* (1870), *supra* note 61., *Id.* at 577-78.

¹²⁸ *Arizona v. California*, 373 U.S. 546, 548 (1963).

¹²⁹ *Id.*

¹³⁰ *Winters* (1908), *supra* note 121.

¹³¹ *Id.* at 703-05.

¹³² *Arizona v. California*, 373 U.S. 546, 548 (1963).

¹³³ Nothing in this chapter shall be construed to supersede or abrogate rights to quantities of water which have been established by any State. The Clean Water Act of 1977 § 101, 33 U.S.C.A. § 1251 (West 2018).

rights were provided in federal statutes. Federal “deference” to state law allows individuals to obtain water rights and sell those rights but does not capitulate other federal powers over water. Rather, deference to a state’s water rights laws is a very limited form of deference; the substantial federal presence in water regulation would be untenable if such deference gave states the power to veto federal laws.¹³⁴

The exercise of these federal powers has frequently been challenged, but almost always upheld. For example, in *U.S. v. Riverside Bayview Homes*, the U.S. Army Corps of Engineers’ power to determine ‘waters of the United States’ as laid-out in the Clean Water Act was upheld.¹³⁵ Federal jurisdiction can even extend to non-navigable watercourses if a “significant nexus” exists between those watercourses and a navigable stream.¹³⁶

¹³⁴ *Sporhase*, *supra* note 3.

¹³⁵ *U.S. v. Riverside Bayview Homes, Inc.*, 474 U.S. 121, 121 (1985).

¹³⁶ *Rapanos v. U.S.*, 547 U.S. 715, 742 (2006) (The case does not include as broad a definition of “waters” of the U.S. as some members of the Court advocated, but it is not as restrictive as others proposed. The nuances of this case are beyond the scope of this article).

D. Congressional Apportionment

In *Kansas v. Colorado*, the Supreme Court expressed doubt that Congress had power to apportion water in a dispute between two states.¹³⁷ The Court held for federal power over water extended to federal lands through the constitution's property clause, but that congressional power "cannot determine the rule which shall control between the two states."¹³⁸ The Court also refused to enforce the law of one state on another, and instead used federal common law (equitable apportionment) since there was no other choice to resolve the dispute. Federal congressional authority seemed to be limited to navigation and instances where there was federal property. This decision came at a time of transition in the balance between state and federal power. Western states had begun claiming ownership of water shortly before this,¹³⁹ while at the same time the definition of

¹³⁷ *Kansas v. Colorado*, 206 U.S. 46, 117 (1907).

¹³⁸ *Id.* at 94.

¹³⁹ Most prior appropriation states claim ownership over water, but reserve the right for its appropriation by citizens willing to that water to a 'beneficial use.' For example, New Mexico law states, "All natural waters flowing in streams and watercourses, whether such be perennial, or torrential, within the limits of the state of New Mexico, belong to the public and are subject to appropriation for beneficial use." N.M. Stat. Ann. § 72-1-1 (West, Westlaw through Ch. 40 of the 1st Regular Session of the 54th Legislature (2019)).

navigable waters was expanding to include tributaries that were not in themselves navigable.¹⁴⁰ Through much of the next century, federal power under the commerce clause expanded dramatically.¹⁴¹ The Court was asked to rebalance these competing interests with federal power gradually expanding. Congressional power to apportion water illustrates this process.

In 1931, the Court seemed to backtrack on whether Congress had power to apportion water.¹⁴² Then, in 1963 the Court stated unequivocally, “Where Congress has so exercised its constitutional power over waters, courts have no power to substitute their own notions of an ‘equitable apportionment’ for the apportionment chosen by Congress.”¹⁴³ This was a complete reversal of the position taken in 1907. The Court went on to say that in 1928 Congress had

¹⁴⁰ *State of Or. By and Through Div. of State Lands v. Riverfront Protec. Ass'n*, 672 F.2d 792, 794 (9th Cir. 1982).

¹⁴¹ *Kaiser Aetna v. U. S.*, 444 U.S. 164, 173 (1979) (Congressional power under Commerce Clause is not limited to navigation but includes any water that affects interstate commerce); Sporhase, *supra* 3.

¹⁴² *State of Arizona v. State of California*, 283 U.S. 423, 458 (1931) (“The further claim is that the mere existence of the act will invade quasi sovereign rights of Arizona by preventing the state from exercising its right to prohibit or permit under its own laws the appropriation of unappropriated waters flowing within or on its borders”).

¹⁴³ *Arizona v. California*, 373 U.S. 546, 565 (1963).

exercised its power and apportioned the lower Colorado River between California, Arizona, and Nevada.¹⁴⁴ Congress again exercised its apportionment power in the Carson-Truckee-Pyramid Lake Water Rights Settlement Act of 1990.¹⁴⁵ The question then is not whether there is substantial congressional power over water, but whether there is a constitutional basis for congressional action.

E. State v. State

Much of the background for understanding conflicts between states was discussed above. Three basic ways are available to resolve disputes: an equitable apportionment with the Supreme Court exercising original jurisdiction, a negotiated interstate compact between states that is approved by congress, and congressional apportionment.¹⁴⁶ None of these mechanisms are

¹⁴⁴ Boulder Canyon Project Act, §§ 1–21.

¹⁴⁵ Fallon Paiute Shoshone Indian Tribes Water Rights Settlement Act of 1990, 104 Stat. 3289 (1990) (Prior to this act California and Nevada had negotiated a compact. The compact was not approved by Congress because it ignored Indian water rights in Pyramid Lake. The congressional apportionment was used to resolve the impasse.).

¹⁴⁶ Douglas L. Grant, *State Regulation of Inter-state Water Export*, 3 WATERS AND WATER RIGHTS § 48.03 (Robert E. Beck and Amy L. Kelley, eds., 3d ed. LexisNexis/Matthew Bender 2009); Douglas L. Grant, *Interstate Water Allocation*, in 3 WATERS AND WATER RIGHTS § 43.02 (Amy K. Kelley ed., 2014).

satisfactory strategies for managing interstate water, at least in their current form in the western states. Equitable apportionment and interstate compacts will be evaluated below.

F. Equitable Apportionment

In *Kansas v. Colorado*, the Supreme Court established the equitable apportionment doctrine as federal common law.¹⁴⁷ The decision did not, however, actually apportion water.¹⁴⁸ Kansas could not prove that it was being harmed by the irrigation practices in Colorado. This result is not uncommon,¹⁴⁹ and the Supreme Court would prefer states resolve such disputes through a negotiated agreement—an interstate compact.¹⁵⁰ The Supreme Court has only

¹⁴⁷ *Kansas*, *supra* note 138.

¹⁴⁸ *Id.*

¹⁴⁹ *See also*, *Arkansas River--Kansas v. Colorado* (1902 Court has jurisdiction), (1907 The court chose to not interject as no demonstrable harm was proven by Kansas), (1943 The Court determined Kansas is incapable of showing redressable harm); *Catawba River--South Carolina v. North Carolina* (2007 & 2010 still pending on the main issues); *Colorado River--Arizona v. California* (1963 The Court ruled the equitable apportionment standard does not apply for the ‘lower basin’ of the Colorado River because there was a Congressional apportionment); *Connecticut River--Connecticut v. Mass* (1931 Connecticut failed to prove harm); *Vermejo River--Colorado v. New Mexico* (1982 & 1984 New Mexico lacked proof of harm), *Walla Walla River--Washington v Oregon*, 297 U.S. 517 (1936) WA couldn’t prove diversions to irrigators in Oregon materially lessen the quantity of water for use in Washington.

¹⁵⁰ *Texas v. New Mexico*, 462 U.S. 554, 554–55 (1983) (“This Court cannot rewrite the Compact so as to provide for a third, tie-breaking vote.

apportioned water three times, the last time being in 1945.¹⁵¹ This is not because the Court has had no opportunity,¹⁵² but because of their reluctance to impose a solution on states and the state's difficulties in proving the seriousness and degree of harm.

In equitable apportionment cases the Supreme Court has primary and exclusive jurisdiction.¹⁵³ Instead of acting as a "trial court" and determining the facts of the case, a Special Master is appointed to collect evidence and preside over hearings.¹⁵⁴ These cases are factually difficult and take an enormous amount of time. For example, in *Kansas v. Colorado* the Special Master spent six years gathering evidence resulting in 8,559 pages of testimony from

Moreover, the Court's equitable powers have never been exercised so as to appoint quasi-administrative officials to control the division of interstate waters on a day-to-day basis).

¹⁵¹ See also, *Nebraska v. Wyoming*, 325 U.S. 589 (1945); *New Jersey v. New York*, 283 U.S. 805 (1931); *Wyoming v. Colorado*, 259 U.S. 419 (1922).

¹⁵² *Id.*

¹⁵³ U.S. CONST. art. III, § 2, cl.2.

¹⁵⁴ Douglas L. Grant, State Regulation of Inter-state Water Export, *supra* note 147.

347 witnesses.¹⁵⁵ There were also 122 exhibits.¹⁵⁶ More recent cases have taken even longer and are even more complex with “dueling experts.” At the conclusion the court-appointed “Special Master” files a report with the Supreme Court, but the Court is not bound by its recommendations.¹⁵⁷ Although they give deference to the report, modifications are possible. In *Colorado v. New Mexico*, the Masters’ recommendation to give Colorado a share of the Vermejo River was rejected twice.¹⁵⁸

The equitable apportionment process has many problems. A decision is not final since equities can change. In fact, in the first dispute the Court encouraged Kansas to seek redress if the equities changed as a result of Colorado increasing water use.¹⁵⁹ For example, Kansas sued Colorado again over the Arkansas River but once again failed to prove that Colorado was causing them

¹⁵⁵ James Earl Sherow, *Watering the Valley: Development along the High Plains Arkansas River, 1870-1950* 105-06 (1990).

¹⁵⁶*Id.*; Marguerite Chapman, *Where East Meets West in Water Law: The Formulation of an Interstate Compact to Address the Diverse Problems of the Red River Basin*, 38 *Okla. L. Rev.* 1, 33 n.195 (1985).

¹⁵⁷ *Colorado v. New Mexico*, 467 U.S. 310 (1984).

¹⁵⁸ *Id.*

¹⁵⁹ *Kansas*, 206 U.S. at 117.

“substantial harm.”¹⁶⁰ The apportionment on the North Platte and the Delaware River were also re-litigated and modified.¹⁶¹

Another problem is the uncertain outcome that faces states when they begin this process. Uncertainty stems from several sources. The factors used in making an equitable apportionment are open ended. The weighing of each variable is unknown. In addition, the harm done must be of “serious magnitude” that is “clearly and convincingly proven.” What constitutes a “serious magnitude” for Kansas may not be viewed similarly by the Supreme Court.

The last major issue is the Court’s inability to have a continuing role in river management and their lack of technical expertise to even participate. The decisions occur at a point in time based on current circumstances. This means the solutions have to be simple from an administrative perspective. In *Wyoming v. Colorado*, on the Laramie River the principle of prior appropriation was used but the boundary was not erased because that would require a federal

¹⁶⁰ 320 U.S. at 385.

¹⁶¹ Grant, *infra* note 147.

water master to administer the priorities.¹⁶² In *Wyoming v. Nebraska*, a percentage of the rivers flow was allocated because it was simple to administer. In the Delaware River dispute a River master appointed but the role there was strictly technical.¹⁶³ The Court itself admits it does not have the technical expertise for continuing management that is required for complex river systems.¹⁶⁴

G. Interstate Compacts

Interstate compacts are negotiated between interested States and ratified by Congress, making them federal law.¹⁶⁵ Twenty-two

¹⁶² Grant, *State Regulation of Inter-state Water*, *supra* note 147; Douglas L. Grant, *Interstate Water Allocation*, in 3 *WATERS AND WATER RIGHTS* § 45.07 (Amy K. Kelley ed., 2014).

¹⁶³ *Nebraska v. Wyoming*, 325 U.S. 589 (1945) (also appointed a River Master on the Pecos River. This was not an equitable apportionment case but one involving an interstate compact as will be discussed below).

¹⁶⁴ Grant, *State Regulation of Inter-state Water*, *supra* note 147; Douglas L. Grant, *Interstate Water Allocation*, in 3 *WATERS AND WATER RIGHTS* § 46.05 (Amy K. Kelley ed., 2014).

¹⁶⁵ *Montana v. Wyoming*, 563 U.S. 368, 386 (2011) (held that the Delaware River Basin Commission was founded via the Delaware River Compact P.L. 87-238 (1961). The signatory states, New York, New Jersey, Delaware, and Pennsylvania agreed to conjunctively manage issues of flood control and water supply. The Susquehanna River Basin Compact P. L. 91-575 (1970) was created to introduce cooperation and comprehensive planning between the signatory states, Pennsylvania, New York, and Maryland.).

water compacts have been approved in the West, with the first compacts being drafted and approved in the 1920s.¹⁶⁶ As compacts require states to reach an agreement they frequently have severe limitations that hinder water management.¹⁶⁷ Even after compacts are enacted their interpretation is frequently the subject of litigation.¹⁶⁸ Three major problems occur with these western allocation compacts: 1) limited scope of the compacts; 2) lack of clarity in the allocation process and method; and 3) failure to include a continuing administrative process and structure.¹⁶⁹

¹⁶⁶ Boulder Canyon Project Act, §§ 1–21, 43 U.S.C.A. §§ 617–617t; Act Aug. 19, 1921, 42 Stat. 171

¹⁶⁷ See generally, Zachary L. McCormick, *Interstate Water Allocation Compacts in the Western United States—Some Suggestions*, 30 WATER RESOURCES BULL. 385 (1995). Zachary L. McCormick, *The Use of Interstate Compacts to Resolve Transboundary Water Allocation Issues*, Doctoral Dissertation, Oklahoma State University (1994).

¹⁶⁸ These include (river basin included in parentheses); *Oklahoma and Texas v. NM* (Canadian), *Tex v. NM* (Rio Grande), *Kansas v. Col* (Arkansas), *Kansas v. Neb.*, *Mont. V. Wyo* (Yellowstone). In addition other suits have been brought by private parties for example, *Hinderlider vs. La Plata River and Cherry Creek Ditch Company* 304 U.S. 92 (1938), and *Tarrant Regional Water District v. Herrmann* D.C. No. 5:07-CV-00045-HE No. 10-6184 (2011). See generally HALL, G. E. 2002, *HIGH AND DRY: THE TEXAS-NEW MEXICO STRUGGLE FOR THE PECOS RIVER*, UNM Press, pp. 291., and Douglas L. Grant, *Interstate Water Allocation Compacts: When the Virtue of Permanence Becomes the Vice of Inflexibility*, 74 U. COLO. L. REV.105 (2003).

¹⁶⁹ McCormick (1995) *supra* note 168. McCormick uses four categories including “nonunanimous vote” and “dispute resolution”. These are included under continuing administrative process and

Western water compacts are limited in scope and focus almost exclusively on the allocation of surface waters. In fact, western water compacts prevent comprehensive watershed management.¹⁷⁰ They are inefficient in resolving problems that arise subsequent to compact negotiation due to a limited purpose and rigid structure. For example, ignoring groundwater hydrologically connected to the compact river has caused many problems.¹⁷¹ Only one compact expressly includes groundwater in its apportionment,¹⁷² while another specifically excludes it.¹⁷³ Two

structure. This term is used to match that used in the seminal article on compacts. *See also* Felix Frankfurter & James M. Landis, *The compact Clause of the Constitution—A Study in Interstate Adjustments*, 34 *YALE L.J.* 685 (1925). The authors thought compacts had an advantage over litigation because they resulted from a “sensible compromise” and would provide for a “continuing administration”. *See generally* Grant *supra* note 165. At the time the Frankfurter and Landis article was written not many compacts had been completed. The benefits they saw did not in fact materialize.

¹⁷⁰ Howe, *supra* note 13.

¹⁷¹ For example, on the Pecos River groundwater pumping caused a depletion in surface water supplies, leading to a shortfall in New Mexico’s water delivery to Texas. *See Texas v. New Mexico*, 462 U.S. 554 (1983). A similar situation occurred on the Arkansas River. *See Kansas v. Colorado*, 514 U.S. 673 (1995) and *Alamosa La Jara etc v. Gould* 674 P2d 914 Colo. (1983).

¹⁷² Amended Bear River Compact 1980. *See generally* Grant *supra* note 165.

¹⁷³ Klamath River Basin Compact, Pub. L. No. 85-222, § 1 (1957).

others recognize that groundwater pumping may impact the surface water apportionment.¹⁷⁴ By implication, groundwater has been included by subsequent litigation when surface water flows failed to meet downstream surface delivery obligations.¹⁷⁵ Early water allocation compacts also ignore the connection between water quantity and water quality.¹⁷⁶ Reducing the volume of flowing water can have a direct impact on water quality.¹⁷⁷ Most allocation compacts also exclude federal interests. Specifically, these include reserved water rights, which were mostly unquantified when

¹⁷⁴ Kansas-Nebraska Big Blue River Compact, Pub. L. No. 92-308, (1972), and Upper Niobrara River Compact, Pub. L. No. 83-191, ____ (1953).

¹⁷⁵ In *Texas v. New Mexico*, 482 U.S. 124 (1987), the Court required New Mexico to curtail ground water pumping to improve downstream flows.

¹⁷⁶ The Red River Compact specifically includes pollution as one of its principal purposes as well as flood control. See Pub. L. No. 96-564, 94 Stat. 3305 (1980). Beck lists others. NEED TO INCLUDE purposes of flood control.

¹⁷⁷ *Riverside Irrigation District v. Andrews*, 568 F. Supp. 583 (D. Colo 1983).

compacts were negotiated.¹⁷⁸ Failure to include federal interests can lead to a rejection of the compact.¹⁷⁹

Allocation methods that seem like a “sensible compromise” when negotiated often turn out to be controversial and challenging to interpret leading to litigation.¹⁸⁰ Allocation methods are generally based on storage (limiting the amount of water stored by the upstream state), flow (dividing the water flowing in a river), or a method designed to fit particular circumstances.¹⁸¹ The critical

¹⁷⁸ For example, the reserved rights of five tribes within the Colorado River basin were not quantified until 1963. In *U.S. v. New Mexico*, 438 U.S. 696 (1978), the Court expanded federal reserved rights by recognizing federally reserved rights on U.S. Forest Service lands to secure favorable streamflows and for timber production.

¹⁷⁹ President Roosevelt vetoed the Republican River Compact in 1942 because the compact negotiation committee lacked federal representation. Congress did not ratify the California-Nevada Interstate Compact Commission’s agreement. The agreement was ratified by both states in 1971; the two states then executed the agreement without the backing of the federal government. Edella Schlager and Yanya Heikkila, *Strengthening Cross-State Linkages to Improve Watershed Governance: The Case of Western Interstate River Compacts*, Published Abstract, American Political Science Association Annual Meeting, (2007).

¹⁸⁰ For example, there is ongoing litigation between Texas and New Mexico concerning the Pecos River Compact, *Texas v. New Mexico*, 482 U.S. 124 (1987). A lack of quantification of water rights between Lower Basin states led to litigation under the Colorado River Compact in *Arizona v. California*, 373 U.S. 546 (1963). See generally, Felix Frankfurter & James Landis, *The Compact Clause of the Constitution — A Study in Interstate Adjustments*, 34 YALE L. J. 685, 749–54 (1928).

¹⁸¹ McCormick *supra* note 168. See also Grant, *supra* note 165; although Grant states this slightly differently: “[C]ompacts must either

factor in understanding the impact of a particular method is determining whether the upstream or downstream state will assume the risk in a time of shortage. A storage allocation limits the size of the risk in a time of shortage. A storage allocation limits the size of the upstream state's reservoirs.¹⁸² This method seems like a reasonably simple solution with the downstream state receiving only the surplus above the storage allowance. The downstream state in this instance assumes the risk that there will be a surplus.

Flows are allocated by three methods: percentage of flow, use of models, and guaranteed quantities.¹⁸³ As mentioned previously, the percentage of flow was used by the Supreme Court in its equitable apportionment of the North Platte.¹⁸⁴ With this allocation method, states must agree on the percentage allocation each state will receive and the point or points where to take measurements. Risk of shortage is shared based on the percentage

(1) limit how much water the upper state can use or (2) guarantee the lower state a certain amount of water.”

¹⁸² Canadian River Compact, Pub. L. No. 82-345, Art.2(d) (1946). The Canadian River Compact was flawed because it referred to water “originating” above a specific point on the Canadian River. The meaning of “originating” was debated in *Oklahoma and Texas v. New Mexico* 501 U.S. 221 (1991).

¹⁸³ McCormick (1995) *supra* note 168.

¹⁸⁴ *Supra* note 150.

allocation. Models can also be used as a means of sharing the risk between two states. Models are based on scientific studies designed to give a more rigorous description of a river's hydrologic conditions.¹⁸⁵ For example, in the Rio Grande Compact, flowing water is measured at specific upstream points, and a schedule of delivery is used to determine how much water must be delivered at downstream locations.¹⁸⁶ The Pecos River Compact was based on a scientific study designed to reflect the river's status as of 1947.¹⁸⁷ Unfortunately, the science proved incorrect, which led to litigation.¹⁸⁸ Flow can also be allocated by upstream state or states guaranteeing delivery of a specified quantity. If a shortage in flow occurs the upstream states assume the risk and must deliver the specified volume. Thus, on the Colorado River the upper basin states have guaranteed to deliver a volume of water to the lower basin

¹⁸⁵ McCormick (1995) *supra* note 168.

¹⁸⁶ Rio Grande Compact, Pub. L. No. 76-96, Art III. (1938).

¹⁸⁷ Pecos River Compact, Pub. L. No. 81-89, Art II (1948).

¹⁸⁸ *Texas v. New Mexico*, 482 U.S. 124 (1987).

states.¹⁸⁹ The guaranteed delivery was based on average flows of the River that were substantially inflated.¹⁹⁰

Compacts must be approved by the legislature of each state involved in the negotiation. Approval is a political decision focused on protecting existing rights rather than a water management decision. Although water managers may feel the best way to manage a watershed is through a comprehensive and flexible system incorporating an entire watershed, compacts are based on state protectionism. If they were not, the politicians would never approve of them. This leads to very weak administrative processes and structures that make responding to change very difficult. Three significant faults occur: 1) ineffective compact commissions; 2) ineffective dispute resolution; and 3) state insistence in retaining authority over water rights.

Compact commissions are the administrative structure for interstate compacts. Unfortunately, only two-thirds of the compacts

¹⁸⁹ Colorado River Compact Pub. L. No. 67-56, Art. III. (1928).

¹⁹⁰ Jason A. Robison and Douglas S. Kenney. *Equity and the Colorado River Compact*. 42 ENVTL LAW 1157 (2012).

have a commission.¹⁹¹ Even if there is a commission, there may not be any permanent staff or budget supporting it. Frequently the commission's authority is limited to data gathering, but these may not be binding on a court if litigation occurs.¹⁹² Only a few compacts authorize enforcement.¹⁹³ Changes or amendments to compacts are beyond the commission's power.

If a dispute occurs, there may not be any internal mechanism for resolving it. One evaluation shows that over half the western interstate compacts have no specified dispute resolution mechanism.¹⁹⁴ This means each state has a right to veto any decision forcing the dispute into litigation. In three compacts with more than two states, a supermajority would allow one state to vote in the negative and still gain approval.¹⁹⁵ Each state is given two votes but

¹⁹¹ Douglas Grant, *Water Apportionment Compacts*, in *Water and Water Rights*, §46.03 (Robert E. Beck ed. 1991). *See generally*, Jerome C. Muys, *Interstate Water Compacts: The Interstate Compact and Federal-Interstate Compact*. (National Water Commission, Legal Study No.14, 1971).

¹⁹² Douglas Grant, *Water Apportionment Compacts*, in *Water and Water Rights*, §46.03 at note 87. (Robert E. Beck ed. 1991).

¹⁹³ Douglas Grant, *Water Apportionment Compacts*, in *Water and Water Rights*, §46.03 at note 88 (Robert E. Beck ed. 1991).

¹⁹⁴ McCormick (1995) *supra* note 168, at Table 1.

¹⁹⁵ McCormick (1995) *supra* note 168, at Table 1.

requires three votes to make a decision (as long as a state's commission votes together they have a veto). Arbitration is possible in three states, but it is not mandatory in two of them, which provides a unilateral veto. In one state an *ad hoc* committee may be appointed, but any decision requires legislative ratification. Two compacts allow the federal representative to break a tie vote, but it is unlikely the federal government would ever exercise this responsibility over anything significant.¹⁹⁶

Most compacts make it clear states want to retain authority over water rights. Compacts typically include language like that in the Red River Compact.¹⁹⁷ This means new appropriations or transfers of existing rights must comply with the water law of the

¹⁹⁶ *Supra* note 168. Of the 22 compacts, only one has mandatory arbitration, three allow supermajorities to prevail, and the remainder, in essence, give a single state a veto. Compacts were designed to be ineffective and maintain the status quo. There is nothing flexible about them. With changing populations, increasing water demand, and uncertain water supplies, this inflexibility undermines the benefits of compacts.

¹⁹⁷ Red River Compact Pub. L. No. 96-564, (1980). Section 2.10 provides that “[n]othing in the Compact shall be deemed to: (a) interfere with or impair the right or power of any signatory State to regulate within its boundaries the appropriation, use and control of water or quality of water....”

state of origin. This language is virtually identical to the boilerplate language in the Reclamation Act and the Federal Power Act.

Congress generally does not play a substantive role in the negotiations of these compacts, and most western allocation compacts exclude federal interests. If the federal government is not a party to the compact, it is difficult to believe Congress consents to a burden on interstate commerce without making this intention explicitly clear.¹⁹⁸

III. BORDERLESS COMMONS

A critical aspect of the U.S. federal system is the limitations placed on state sovereignty by the constitution.¹⁹⁹ These state limitations were recognized in *Gibbons v. Ogden*.²⁰⁰ Striking a balance between federal and state power over commerce has never been an easy task, with debate harking back to the first

¹⁹⁸ There is a compelling argument that states can unilaterally withdraw from a compact. See Douglas L. Grant, *Interstate Water Allocation Compacts: When The Virtue Of Permanence Becomes The Vice Of Inflexibility*, 74 U. COLO. L. REV. 105 (2003). If this is true, can the federal government be held accountable?

¹⁹⁹ See Richard Sedler, *The Negative Commerce Clause as a Restriction on State Regulation and Taxation: An Analysis in Terms of Constitutional Structure*, 31 Wayne St. L. Rev. 885 (1985).

²⁰⁰ *Supra* note 62. In *Gibbons* the Supreme Court upheld the federal power to regulate navigation under the commerce clause.

Constitutional Congress. The Commerce Clause affirmatively grants the federal government power over commerce. At the same time, states using their police powers can regulate commerce. Drawing the line between the acceptable exercise of state power and an infringement on federal interests continues as a contentious issue.²⁰¹ These limitations, sometimes called the dormant or negative Commerce Clause, are not accepted by all legal scholars,²⁰² and one Supreme Court justice finds no constitutional support for them.²⁰³ Strong arguments have been made refuting this position,²⁰⁴

²⁰¹ See generally Norman R. Williams, *The Commerce Clause and the Myth of Dual Federalism*, 54 UCLA Law Review 94 (2007); Barry Cushman, *Formalism and Realism in Commerce Clause Jurisprudence*, 67 U. Chic. Law R. 1089 (2000); Eric R. Claeys, *The Living Commerce Clause: Federalism in Progressive Political Theory and the Commerce Clause After Lopez and Morrison*, 11 Wm. & Mary Bill Rts. J. 403 (2002).

²⁰² E.g. Eule, Julian N. *Laying the Dormant Commerce Clause to Rest*, 91 Yale L.J. 425 (1982); Richard D. Friedman, *Putting the Dormant Commerce Clause out of its Misery*, 12 Cardozo L. Rev. 1745 (1991); Amy M. Petragani, *The Dormant Commerce Clause: On its Last Leg*, 7 Alb. L. Rev. 1215 (1994).

²⁰³ Justice Thomas does not recognize the dormant or negative commerce clause. See *Camps Newfoundland/Owatonna, Inc. v. Town of Harrison*, 520 U.S. 564 (1997); *American Trucking Association v. Michigan*, 545 U.S. 429 (2005); *Hillside Dairy etc. v. Lyons etc.* 539 U.S. 59 (2003). Justice Scalia has also questioned the validity of a dormant or negative commerce clause.

²⁰⁴ E.g. Denning, Brandon P. *Confederation-Era Discrimination Against Interstate Commerce and the Legitimacy of the Dormant Commerce Clause*, 94 Ky. L. Rev. 37 (2005).

and it is commonly recognized that this provision creates a U.S. common market—a form of borderless commons.²⁰⁵

A. *The Commerce Clause –Prohibiting States from
Discrimination*

The standard used for determining the constitutionality of state laws has evolved. During the 1800s states had authority to regulate commerce using their inherent police powers unless the regulation infringed upon national interests; statutes were challenged using a local versus national comparison²⁰⁶ and tried to distinguish whether commerce was intrastate or interstate²⁰⁷ or

²⁰⁵ *H. P. Hood & Sons, Inc. v. Du Mond.*, 336 U.S. 525 (1949). See also, Williams, Norman R. and Brannon P. Denning, *The “New Protectionism” and the American Common Market*, 85 Notre Dame L. Rev. 247 (2009); Konar-Steenberg, Mehmet K, *One Nation or One Market? Liberals, Conservatives and the Misunderstanding of H.P. Hood & Sons v. DuMond.*, 11 U. Pa. J. Const. L. 957 (2009); Schragger, Richard C. *Cities, Economic Development, and the Free Trade Constitution*, 94 Va. L. Rev. 1091 (2008); Williams Norman R., *The Foundation of the American Common Market*, 84 Notre Dame L. Rev. 409 (2008); Denning, Brandon P. (2005) *Confederation-Era Discrimination Against Interstate Commerce and the Legitimacy of the Dormant Commerce Clause*, 94 Ky. L. Rev. 37 (2006).

²⁰⁶ *Cooley v. Board of Wardens*, 53 U.S. 299 (1851); *Henderson v. NY*, 92 U.S. 259 (1875); *Wabash etc. v. Illinois*, 118 U.S. 557 (1886).

²⁰⁷ *The Delaware Railroad Tax*, 85 U.S.C. § 206 (1874); *W. Union Tel. Co. v. Texas*, 105 U.S. 460 (1881); *Kidd v. Pearson*, 128 U.S. 1 (1888); *Louisville, N. O. & T. R. Co. v. Mississippi*, 133 U.S. 587 (1890).

whether the impact was a direct or indirect impact on commerce.²⁰⁸ Import bans were a common problem and were routinely struck down.²⁰⁹ After *Guy v. Baltimore*, a case over fees imposed on vessels from other states for the use of public wharves, discrimination claims were sufficient for invalidating state legislation.²¹⁰ Even state statutes not facially discriminatory, but which result in a discriminatory impact, were struck down.²¹¹ Import and export bans were particularly hard to justify because of the inherent discrimination in such bans.²¹²

The Supreme Court has used a variety of “tests” to nullify discriminatory state statutes. If the statute is “facially discriminatory” a two-part test is used to scrutinize state statutes strictly.²¹³ They are upheld only if: 1) a legitimate local interest exists that is unrelated to the state’s economic well-being, and 2)

²⁰⁸ *Sherlock v. Alling*, 93 U.S. 99 (1876); *Hall v. DeCuir*, 95 U.S. 485 (1878); *Brennan v. Titusville*, 153 U.S. 289 (1894); *Diamond Glue Co. v. U.S. Glue Co.*, 187 U.S. 611, 616 (1903).

²⁰⁹ *Railroad Co. v. Husen* 95 U.S. 465 (1877); *Leisy v. Hardin*, 135 U.S. 100 (1890); *Schollenberger v. Pennsylvania*, 171 U.S. 1 (1898).

²¹⁰ *Guy v. Baltimore*, 100 U.S. 434 (1897).

²¹¹ *Minnesota v. Barber*, 136 U.S. 313 (1890).

²¹² See note 196.

²¹³ *Pike v. Bruce Church*, 397 U.S. 137 (1970).

nondiscriminatory alternatives do not exist.²¹⁴ Few statutes survive this strict scrutiny, but one notable exception exists.²¹⁵ For state statutes that are not facially discriminatory but still have a discriminatory impact, a balancing test is necessary.²¹⁶ “Evenhanded,” “legitimate” local purposes must be balanced against “excessive” impacts which burden interstate commerce.²¹⁷ For this to be applicable, the statute must apply to an article of commerce.²¹⁸ Natural resources commonly sold in across state lines make this determination relatively straightforward. For example, an Oklahoma ban on exporting natural gas was unconstitutional,²¹⁹ as was a West Virginia statute granting its citizens preference in purchasing natural gas.²²⁰

²¹⁴ *Sporhase*, *supra* note 24.

²¹⁵ In *Maine v. Taylor*, 477 U.S. 131 (1986) the court allowed clearly protectionist legislation precluding imports to stand because of the unknown parasitic threats posed by imported baitfish.

²¹⁶ *Pike v. Bruce Church, Inc.*, 397 U.S. 137 (1970); *See Southern Pacific Co. v. Arizona*, 325 U.S. 761 (1945) for an early use of a balancing approach.

²¹⁷ *Sporhase* (1982), *supra*, note 24.

²¹⁸ *City of Philadelphia v. New Jersey*, 437 U.S. 617 (1978) (Is garbage an article of commerce?); *Hughes v. Oklahoma*, 441 U.S. 322 (1979)(minnows); *Sporhase* (1982), *supra*, note 26 (water).

²¹⁹ *West v. Kansas Natural Gas Co.*, 221 U.S. 229 (1911).

²²⁰ *Pennsylvania v. West Virginia*, 262 U.S. 553 (1923).

Federal courts have also specifically addressed water as a tradable commodity. In *Altus v. Carr*, a federal district court found Texas an anti-export statute invalid.²²¹ Although the Supreme Court did not necessarily adopt the reasoning of the District Court decision in *Altus v. Carr* when it summarily affirmed it,²²² they did so in *Sporhase* discussed below.²²³ At issue in *Altus v. Carr* was a Texas statute prohibiting groundwater export unless approved by the Texas legislature.²²⁴ Part of Texas' argument was that groundwater was not an article of commerce. However, in Texas, groundwater is the personal property of the overlying landowners who are free to sell what they pump.²²⁵ The ability to sell that water makes it an article of commerce, making the Texas statute an impermissible burden on commerce.

Three questions were answered in *Sporhase*: 1) Is groundwater an article of commerce?; 2) Does the Nebraska statute

²²¹ *Altus v. Carr*, 255 F.Supp. 828 (WD Tex) summarily aff'd, 385 U.S. 35 (1966).

²²² *Id.*

²²³ *Sporhase, supra*, note 24.

²²⁴ *Supra* note 224 at 830.

²²⁵ *Id* at 833.

impose an impermissible burden on commerce?; and 3) Has Congress consented to what would otherwise be an unconstitutional statute?²²⁶ In Nebraska, landowners did not own groundwater as landowners did in Texas since Nebraska claimed groundwater ownership.²²⁷ However, groundwater transfers (sales) were allowed between users within the state.²²⁸ The Court concluded state ownership was a ‘legal fiction’ and groundwater was an article of commerce. Dismissing this as a groundwater case ignores the similarities to state surface water laws. Western states allow the transfer and sale of surface waters under a defined set of administrative or statutory criteria.²²⁹ These statutes cannot impose discriminatory burdens against out of state interests as they are subject to the provisions outlined under the Commerce Clause.²³⁰

In answering the second question, the Court applied the test from *Pike v. Bruce Church*.²³¹ If a state statute, “regulates

²²⁶ *Sporhase, supra*, note 24.

²²⁷ *Id.*

²²⁸ *Id.*

²²⁹ *See generally*, Pease, *supra* note 99.

²³⁰ *Sporhase* at 954 citing *Pike* at 142.

²³¹ *Id.*

evenhandedly to effectuate a legitimate local public interest, and its effects on interstate commerce are only incidental, it will be upheld unless the burden imposed on such commerce is clearly excessive in relation to the putative local benefits. If a legitimate local purpose is found, then the question becomes one of degree".²³² The Court agreed Nebraska's public interest in the conservation and preservation of ever increasingly scarce water resources was a legitimate local purpose. However, the statute contained a facially discriminatory reciprocity provision that would only allow exportation of groundwater to states that did not ban exports.²³³ In this case, Colorado prohibited groundwater exports. Applications made in Nebraska to export water to Colorado would be denied

Facially discriminatory legislation can be upheld if one of two exceptions is found. First, if there is a state interest exception, which was not directly considered in *Sporhase*.²³⁴ By finding the

²³² *Sporhase*, *supra* note 26 at 942.

²³³ *Id.*

²³⁴ *Hughes v. Alexandria Scrap Corp.*, 426 US 794 (1976); *Hicklin v. Orbeck*, 437 U.S. 518 (1978); *Reeves, Inc. v. Stake*, 447 U.S. 429 (1980); *White v. Mass. Council for Constr. Employers, Inc.*, 460 U.S. 204 (1983); *South-Central Timber Development, Inc. v. Wunnicke*, 467 U.S. 82 (1984).

state ownership doctrine a legal fiction, this exception is not viable. The second exception is congressional consent²³⁵; Nebraska argued language in 37 federal statutes and interstate compacts deferring to state law represents congressional consent.²³⁶

Congressional consent to construct burdens on commerce is not easily obtainable. Congressional consent must be “expressly stated”²³⁷ and an “unambiguous statement.”²³⁸ Congressional intent must be “unmistakably clear.”²³⁹ Congress must “affirmatively

²³⁵ *Sporhase*, supra note 24. *New Eng. Power Co. v. New Hampshire*, 455 U.S. 331 (1982); *South-Central Timber Development, Inc. v. Wunnicke*, Id; *Maine v. Taylor*; *Northeast Bancorp v. Federal Reserve*, 472 U.S. 159 (1985); *Wyoming v. Oklahoma*, 502 U.S. 437 (1992).

²³⁶ The Reclamation Act is typical of such language. In *Sporhase*, the Court said “[s]uch language mandates that questions of water rights that arise in relation to a federal project are to be determined in accordance with state law.” (at 959 emphasis added). State laws controlling water rights were already in place when these statutes were passed, and Congress chose not to create a duplicative federal system. This is the extent of federal deference. “Although the 37 statutes and interstate compacts demonstrate Congress’ deference to state water law, they do not indicate Congress wished to remove federal constitutional constraints on such state laws. The negative implications of the Commerce Clause, like the mandates of the Fourteenth Amendment, are ingredients of the *valid* state law to which Congress has deferred.” (at 959-60).

²³⁷ *Sporhase*, supra note 26, at 959, *New England Power Company v. New Hampshire*, 455 U.S. 331 (1982).

²³⁸ *Maine v. Taylor*, 477 U.S. 131 (1986).

²³⁹ *South-Central Timber v. Wunnicke*, 467 U.S. 82 (1984).

contemplate” before it consents to state provisions burdening interstate commerce.²⁴⁰ Therefore, boilerplate language deferring to state law does not meet this stiff requirement.²⁴¹

IV. TARRANT V. OKLAHOMA

A. *Red River Compact*

Negotiations over the Red River Compact (Compact) began in the 1940s²⁴² and were delayed because of the influence of droughts, concerns for water quality, and disagreements over water allocation and storage.²⁴³ The complex history of negotiations and lack of water storage in downstream states, such as Louisiana, contributed to one of the more complicated allocation schemes found in an interstate compact.

The Compact goes into considerable detail allocating water to the signatory States.²⁴⁴ Articles IV-VIII divide the River basin

²⁴⁰ *Id.*

²⁴¹ Olen P. Matthews, & Michael Pease, *The Commerce Clause, Interstate Compacts, and Marketing Water Across State Boundaries*, 46 NAT. RESOURCES J. 601 (2006) at 628.

²⁴² Zackary L. McCormick, *The Use of Interstate Compacts to resolve Transboundary Water allocation Issues*, Doctoral Dissertation, Oklahoma State University (1994) at 213.

²⁴³ *Id.* at 214.

²⁴⁴ Red River Compact, Pub. L. No. 96-564, 94 Stat. 3305 (1980).

into five river-reaches, and many of these reaches divide into subbasins. Articles IV-VIII apportion water using both total volume and percentage-based allocations.²⁴⁵ At issue in *Tarrant* is Article V, addressing the allocation of water between Oklahoma and Texas – defined as, Reach II.²⁴⁶ Section 5.05 states the “Signatory States shall have *equal rights* to the use of *runoff* originating in subbasin 5”(emphasis added)--assuming specific instream flow requirements are met.²⁴⁷

Section 5.05 is unique among interstate compacts in relation to allocations of ‘runoff,’ which is a term of art within hydrology. The term refers to “all water transported out of the watershed by streams. Some of this water may have had its origins as overland flow, while much may have originally infiltrated and traveled through the soil mantle as interflow.”²⁴⁸ After a precipitation event, water moves as overland flow and subsurface flow towards rivers

²⁴⁵ *Id* at Art. IV-VIII.

²⁴⁶ *Id* at Art. V.

²⁴⁷ *Id.* at §5.05. Subbasin 5 is a watershed within Reach II as defined in the Compact.

²⁴⁸ WARD, A.D. AND STANLEY W. TRIMBLE, ENVIRONMENTAL HYDROLOGY 2d. (2004) at 119.

and streams within a watershed. Runoff is generally measured at a specific point downstream where the cumulative effect of all flowing water can be measured, and includes every part of the watershed.²⁴⁹ The Compact states the runoff originating in subbasin five is to be equally shared.²⁵⁰ In determining allocations of water among the signatory states, Oklahoma argued “runoff” in this portion of the Red River should be interpreted to include only the disconnected tributaries originating within Texas.²⁵¹ This runs contrary to the way runoff is measured and seems to be a denial of the science associated with the hydrologic cycle as tributaries affect streamflow downstream.

B. Tarrant’s Attempt to Transfer

In the early 2000’s, in an attempt to keep pace with rising water demand within its district, Tarrant attempted to purchase water from a variety of entities including parties in Oklahoma and

²⁴⁹ For example, the United States Geological Survey measures water in the Kiamichi River in a series of gages.

²⁵⁰ The Signatory States shall have equal rights to the use of runoff originating in subbasin 5 and undesignated water flowing into subbasin 5”, Red River Compact, *supra* note 248 at §5.05.

²⁵¹ *Tarrant*, *supra* note 10 at 627.

the Choctaw and Chickasaw Nations.²⁵² In addition to these pursuits, Tarrant endeavored to appropriate water from the Kiamichi River and Beaver Creek – tributaries of the Red River in Oklahoma. Tarrant chose the Kiamichi because of its lower salinity levels, claiming other tributaries in the basin are not fit for cost-effectively extracting potable water.²⁵³

In 2007, Tarrant applied to the Oklahoma Water Resources Board (OWRB) for a total of 310,000 acre-feet annually.²⁵⁴ Concurrently, Tarrant filed a motion in Federal District Court seeking to enjoin the OWRB from applying Oklahoma’s strict requirements for out of state applicants.²⁵⁵ Tarrant could never meet these requirements because they were intentionally designed to prevent water exports. Tarrant claimed the Compact pre-empted Oklahoma’s statutes since there was water within Oklahoma in

²⁵² *Tarrant* (2013), *supra* note 10.

²⁵³ Brief of Petitioners Tarrant Regional Water District to the Supreme Court of the United States, No.11-889 (2013). The Kiamichi River is a moderate sized watercourse flowing through largely forested lands. Because of its rural nature, and the predominate landcover, it contains unappropriated water as it flows through Oklahoma.

²⁵⁴ *Id.*

²⁵⁵ *Tarrant*, *supra* note 10 at 621.

excess of that allocated to them by the compact.²⁵⁶ This “unallocated” water should be available to Texas. Also, Tarrant had a right to cross the border to obtain the water. This claim is unprecedented and presumably would be exercised without regard to Oklahoma law.

New appropriations and transfers of existing rights must comply with state water law. Since *Sporhase*, western states have passed specific provisions setting the rules for out-of-state appropriations.²⁵⁷ But, Section 2.01 of the Compact noted each signatory State is allowed to use the water allocated to it “in any manner deemed *beneficial by that state*.”²⁵⁸ From Oklahoma’s perspective, this created a separate class of water—one over which the state has complete control and is outside the limits of the Commerce Clause.²⁵⁹ Tarrant argued the state, as part of its allocation process, can define beneficial use, but may not

²⁵⁶ *Tarrant*, *supra* note 10 at 627.

²⁵⁷ These rules must comply with the constitutional limitations on state sovereignty implicit in the commerce clause.

²⁵⁸ Red River Compact, Pub. L. No. 96-564, 94 Stat. 3305 (1980) at §2.01.

²⁵⁹ *Supra* note 246.

discriminate against out-of-state interests; defining “beneficial use” requires the same criteria be applied whether the use is in-state or out-of-state. This would not be the first time water rights have been enforced across a state boundary.²⁶⁰

Also at issue was the question of whether the twenty-five percent allocation cap found in Section 5.05 represents an “absolute” provision to a signatory state or an initial allocation of water.²⁶¹ If this is an absolute provision of water, as Oklahoma argued, the Commerce Clause would not apply and Oklahoma could exclusively control the water. If the allocation cap represents an initial allocation of water, then the Commerce Clause applies. Unappropriated water should be available for appropriation by out-of-state parties under Oklahoma statutes. These statutes must pass constitutional muster.²⁶² In addition, compact water that is already appropriated for beneficial use within Oklahoma should be available for transfers out-of-state. Any appropriation under Oklahoma

²⁶⁰ *Weiland v. Pioneer Irrigation Co.*, 259 U.S. 498 (1922).

²⁶¹ Red River Compact, Pub. L. No. 96-564, 94 Stat. 3305 (1980) at §5.05.

²⁶² O.K. STAT §82-105.9-§82-105.11.

statutes creates a perfected water right for which market reallocations can occur between willing parties to balance supply and demand.²⁶³ Assuming they apply these waters to a beneficial use, these waters should be available to a party such as Tarrant.²⁶⁴

In looking at Tarrant's attempts to obtain water, several different types of water are potentially available. Unappropriated non-compact water should be available for an out-of-state user. An out-of-state user should be able to purchase (transfer) a perfected water right if the right is to non-compact water. If water is covered by the compact, it should also be available for appropriation or transfer; unless the Compact exempts this water from the Commerce Clause. Although all these types of water were on the table for Tarrant, they chose another variety "unallocated" compact water available to them without regard to Oklahoma law. To put this in perspective, an additional discussion of the Commerce Clause is required.

²⁶³ For a more expansive discussion of this issue, see Grant, D. L., *Interstate Water Allocation Compacts: When the Virtue of Permanence becomes the vice of Inflexibility*, 74 U. Colo. L. Rev. 105 (2003).

²⁶⁴ O.K. STAT §82-105.2 "Beneficial use shall be the basis, the measure and the limit of the right to the use of water...."

The constitutionality of Oklahoma's water appropriation statutes hinges on their intent. The Commerce Clause creates a common market within the U.S.²⁶⁵ Moving water, be it in raw form or embedded in finished products,²⁶⁶ across a state boundary is part of that national market. The Commerce Clause precludes states from imposing "regulations that place an undue burden on interstate commerce."²⁶⁷ In *Hughes v. Oklahoma*, the court ruled state statutes regulating interstate trade must do so evenhandedly and without discrimination.²⁶⁸ This precedent was substantiated in *Sporhase*.²⁶⁹ The Supreme Court ruled that because water is an article of commerce Nebraska's statutes imposing restrictions on export were unconstitutional. In *City of El Paso v. Reynolds*,²⁷⁰ a federal district court struck down New Mexico's water export statute, ruling states could only discriminate "to the extent that water is essential to

²⁶⁵ *Supra* note 203.

²⁶⁶ *Sporhase, supra* 24.

²⁶⁷ *United States v. Lopez*, 514 U.S. 549, 579 (1995).

²⁶⁸ *Hughes v. Oklahoma*, 441 U.S. 322 (1979) at 331.

²⁶⁹ *Sporhase v. Nebraska*, 458 U.S. 941 (1982).

²⁷⁰ *City of El Paso v. Reynolds*, 563 F. Supp. 379 (D.N.M. 1983).

human survival. Outside of fulfilling human survival needs water is an economic resource.”²⁷¹

Tarrant argued Oklahoma’s statutes should be declared unconstitutional because they impose unfair restrictions on interstate transfers. For example, the statutes

“1) Require legislative approval for out-of-state uses but not in-state uses;²⁷² 2) Prohibit the Oklahoma Water Conservation Storage Commission from granting permits for the sale or resale of water outside the state;²⁷³ 3) Put additional requirements on water to be exported that are not placed on in-state uses;²⁷⁴ and 4) Require that long term water appropriations, such as those needed for municipal development, promote “optimal beneficial use of water” within Oklahoma²⁷⁵.”²⁷⁶

Sporhase is the controlling precedent.²⁷⁷ Oklahoma’s limitations on water exports are protectionist. The questions at hand

²⁷¹ *City of El Paso v. Reynolds*, 563 F. Supp. at 389 (D.N.M 1983).

²⁷² Okla. Stat. tit. 82 § 105.12A(D); § 1085.2(2); § 1324.10(B).

²⁷³ Okla. Stat. tit. 82 § 1085.22.

²⁷⁴ Stat. tit. 82 §105.12(F); §105.12A(B); § 105.12(A)(5).

²⁷⁵ Okla. Stat. tit. 82 § 105.12(F).

²⁷⁶ Brief of Olen Paul Matthews and Michael Pease as *AMICI CURIAE*, *Tarrant Regional Water District v Herrmann*. No. 11-889 (2013).

²⁷⁷ *Sporhase v. Nebraska*, *supra* note 24.

are whether 1) Tarrant properly obtained perfected water rights or properly appropriated unappropriated water in Oklahoma making the case “ripe” for evaluating these statutes, 2) the Compact grants congressional consent to an infringement on the national free market, 3) the Compact left “unallocated” water within Oklahoma’s boundaries and Tarrant was entitled to it.²⁷⁸ The courts at various stages determined there were no perfected rights that were ripe.²⁷⁹ Congress had consented to an otherwise unconstitutional infringement on commerce, and the Compact left no water “unallocated.”²⁸⁰

C. The Lower Court Decisions

After a complex case history, the U.S. Court of Appeals for the Tenth Circuit reviewed the Western District of Oklahoma’s decision in 2011 preventing Tarrant from appropriating water.²⁸¹ The District Court granted summary judgment to OWRB finding that the “Red River Compact insulates Oklahoma water statutes

²⁷⁸ *Supra* note 15, at 639.

²⁷⁹ *Tarrant Reg'l Water Dist. v. Herrmann*, 656 F.3d 1222, 1236 (10th Cir. 2011), at 4; *Supra* note, 15 at 638.

²⁸⁰ *Supra* note 15, at 639.

²⁸¹ *Tarrant* (2011), *supra* note 279.

from dormant Commerce Clause challenge.”²⁸² The court also refused to address Tarrant’s challenges of Oklahoma export statutes calling such challenges “not justiciable.”²⁸³

The Court of Appeals then focused its review on the issue of preemption, and whether the Compact gave Oklahoma “measures that otherwise might violate the dormant Commerce Clause.”²⁸⁴ The decision gave determinative weighting to language in the Red River Compact.²⁸⁵ The Court found §2.01 gave each state virtually exclusive domain over water allocated to it, citing precedent created in *New England Power v. New Hampshire* and *Lewis v. BT Investment*.²⁸⁶ The Court stated it is “well settled that Congress may use its powers under the Commerce Clause to confer ‘upon the

²⁸² *Infra* at 51.

²⁸³ *Infra* at 51.

²⁸⁴ *Tarrant Regional Water District v. Herrmann* D.C. No. 5:07-CV-00045-HE No. 10-6184 (2011) at 4.

²⁸⁵ *Id.*

²⁸⁶ *New England Power Co. v. New Hampshire*, 455 U.S. 331 (1982) at 340-341; *Lewis v. BT Investment Mangers Inc.*, 447 U.S. 27 (1980).

States an ability to restrict the flow of interstate commerce that they would not otherwise enjoy.”²⁸⁷

The language in §2.01 of the Compact gives each state the ability to “freely administer water rights and uses”. The Court determined “[b]y ratifying that Oklahoma may “freely administer” apportioned water and use it “in any manner” the state deems beneficial, Congress conferred broad regulatory authority on the state using unqualified terms.”²⁸⁸ The Court cited in its reasoning an excerpt of the interpretive comments, which provide, “each state is free to continue its existing internal water administration, or to modify it in any manner it deems appropriate.”²⁸⁹ The Court added, “[t]he broad language of key Compact provisions inoculates the Oklahoma statutes challenged here from dormant Commerce Clause attack.”²⁹⁰ From this perspective, the Compact represented

²⁸⁷ *New England Power, supra* at 340-41, *Lewis v. BT Investment Managers, Inc.* 447 U.S. 27 (1980) at 44.

²⁸⁸ *Tarrant Regional Water District v. Herrmann* D.C. No. 5:07-CV-00045-HE No. 10-6184 (2011) at 25.

²⁸⁹ *Id.* at 25, citing Appellate Application. Vol. I, 251.

²⁹⁰ *Id.* at 24.

affirmative consent by Congress to infringe upon the Commerce Clause.

D. Supreme Court

While the Supreme Court affirmed the 10th Circuit, it went beyond the language contained within the Compact to rule that §5.05(b)(1) did not create cross-border water rights that preempt Oklahoma's water statutes.²⁹¹ The Court pointed to three factors to determine that "cross-border rights were not granted by the Compact:[(1)] the well-established principle that states do not easily cede their sovereign powers, ...; [(2)] the fact that other interstate water compacts have treated cross-border rights explicitly; and [(3)] the parties' course of dealing."²⁹²

Despite what the Supreme Court believes, Tarrant's actions are not uncommon. City and water districts regularly have standing calls to purchase water while they simultaneously seek

²⁹¹ *Tarrant*, *supra* note 15.

²⁹² *Tarrant*, *supra* note 15 at 628.

unappropriated water.²⁹³ The Court also considered the gap of time between the passage of the Red River Compact in 1980 and Tarrant's application for Oklahoma's water in 2007.²⁹⁴ The Court believed that Tarrant, or some other entity in Texas, would have attempted to claim Oklahoma water sometime before the 2007 application if they believed it was possible under the Compact.²⁹⁵ Yet, the Court's logic overlooks both the physical difficulties in moving large quantities of bulk water and the rate of increasing water demand during the 2000s in the Dallas-Fort Worth 'metroplex.'²⁹⁶ To juxtapose the silence in §5.05(b)(1), the Supreme Court cited the Bear River Compact which "unambiguously permits signatory States to cross each other's borders . . ." by stating "[N]o state shall deny the right of another signatory state, any person or entity of another signatory state, to acquire rights to the use of water

²⁹³ The cities of Santa Fe, New Mexico, Albuquerque, New Mexico, El Paso, Texas, and the Municipal Water District in California have all run simultaneous efforts to appropriate new water and purchase existing rights. See generally, Ari Michelsen and Robert Young, *Optioning agricultural water rights for urban water supplies during drought*, American Journal of Agricultural Economics (1993).

²⁹⁴ *Tarrant*, 569 U.S. at 637.

²⁹⁵ *Id.*

²⁹⁶ *Id.* at 634.

or to construct or to participate in the construction and use of diversion works and storage reservoirs with appurtenant works, canals, and conduits in one state for use of water in another state, either directly or by exchange.”²⁹⁷ In evaluating the parties’ course of dealing, the Court pointed to Tarrant’s actions and found it odd that it would simultaneously seek purchases of water and attempt to appropriate unallocated water.²⁹⁸

The Court also addressed Tarrant’s claim that there was unallocated water within Oklahoma to which they were entitled.²⁹⁹ Each state received an equal share (25 %) of Reach 2 sub-basin 5. Because §2.01 of the Compact gives each state the right to “use the water allocated to it by this Compact in any manner deemed

²⁹⁷ *Tarrant Reg’l Water Dist. v. Herrmann*, 569 U.S. 614, 633-34 (1984); *See generally* Bear River Compact, Pub. L. No. 96-189, Art. VIII., 94 Stat. 4 (1978); The Yellowstone River Compact also addresses this issue stating, “[a] lower signatory State shall have the right, by compliance with the laws of an upper signatory State, except as to legislative-consent, to file application for and receive permits to appropriate and use any waters in the Yellowstone River System not specifically apportioned to or appropriated by such upper State...” Yellowstone River Compact, Pub. L. No. 231, Art. VII, 65 Stat. 663.

²⁹⁸ “Tarrant’s earlier offer to purchase water from Oklahoma was a strange decision if Tarrant believed the Compact entitled it to demand water without payment.” *Id.* at 637.

²⁹⁹ *Id.* at 639.

beneficial by that state.”³⁰⁰ Oklahoma’s allocation of 25% of the “excess flow” of water is for its exclusive use.³⁰¹ The Court added requiring the OWRB to determine the total amount of water available in Oklahoma beyond the 25% cap would be “Herculean.”³⁰² The Court’s finding is both disturbing and surprising because precipitation data coupled with stream and reservoir gages make such measurement possible. The United States Geological Survey and the United State Bureau of Reclamation compile these data with regular frequency and can estimate the volume and speed with which reservoirs will fill after a given precipitation event.³⁰³ The Court’s willingness to categorize runoff determinations as both laborious and logistically infeasible is partially understandable since neither of the parties in *Tarrant*

³⁰⁰ Red River Compact, Pub. L. No. 96-564, §2.01, 94 Stat. 3305 (1980).

³⁰¹ *Tarrant*, 569 U.S. at 639.

³⁰² *Id.* at 634.

³⁰³ See generally Bureau of Reclamation, U.S. Dep’t. of the Interior, *Manuals and Standards: Guidelines for Collecting Data to Support Reservoir Water Quality and Hydrodynamic Simulation Models* (2009), <https://www.usbr.gov/tsc/techreferences/mands/mands-pdfs/hydromodels.pdf>.

presented conclusive data showing the runoff from within their boundaries.

The Court evaded determining whether Oklahoma's out of state appropriation statutes violate the Commerce Clause. This was, in part, because of Tarrant's argument that some of Reach 5 was "unallocated" and thereby available.³⁰⁴ The Court stated, "[t]he Oklahoma water statutes cannot discriminate against interstate commerce with respect to unallocated waters because the Compact leaves no waters unallocated."³⁰⁵ The Court does state Texas or any other signatory state is free to challenge Oklahoma under Section 2.11 if they feel Oklahoma is applying more than their 25% share to a beneficial use.³⁰⁶ Tarrant's claim Oklahoma infringed on its right to apply unappropriated water to *beneficial use* failed "for the reason that the Compact does not create any cross-border rights in signatory States" and all the water was "allocated."³⁰⁷

³⁰⁴ *Tarrant*, 569 U.S. at 639.

³⁰⁵ *Id.* at 640.

³⁰⁶ *Id.* at 639.

³⁰⁷ *Tarrant*, 569 U.S. at 639-40.

E. Get Ready for a Rematch?

What is unclear is whether the provision allowing states to “use the water allocated to it by this Compact in any manner deemed beneficial by that state”³⁰⁸ allows Oklahoma to prevent any interstate transfer of water. This distinction requires seeing the subtle difference between the allocation of water under the compact and the ‘normal’ appropriation process by which a private party establishes a water right. Normally, unappropriated waters are held in trust by the state and are subject to appropriation.³⁰⁹ Oklahoma never objected to Tarrant’s claim unappropriated water exists in the Kiamichi River, and the right of out-of-state parties to appropriate unappropriated waters is settled law.³¹⁰ Denying Tarrant the opportunity to appropriate the unappropriated waters of the Kiamichi River creates confusion. In *Tarrant*, the Court stated that

³⁰⁸ Red River Compact, Pub. L. No. 96-564, §2.01, 94 Stat. 3305 (1980).

³⁰⁹ Gould, George A, *Water Rights Transfers and Third-Party Effects*, 23 Land and Water Law Review 1-41, 28, (1988).

³¹⁰ *Tarrant*, 569 U.S. at 632-33 n.10. (citing *Wyeth v. Levine*, 555 U.S. 555, 565-566 n. 3 (2009) which states ‘Congress does not cavalierly pre-empt’ ” state laws, adding, “When the States themselves have drafted and agreed to the terms of a compact, and Congress’ role is limited to approving that compact, there is no reason to invoke the presumption.”). For out-of-state parties appropriating water, see *City of El Paso v. Reynolds*, *supra* note 3.

the Compact did not grant cross-border rights.³¹¹ A plain reading would suggest that the Court discussed water that had been allocated under the compact, meaning Tarrant could not appropriate unallocated water under the Compact.³¹² However, it may be possible for Tarrant to appropriate unappropriated water in the Kiamichi River.

The Court did not address this specific difference directly as Tarrant did not make this argument. This clearly leaves the door open for Tarrant to attempt to appropriate water or to purchase perfected water rights in Oklahoma derived from Oklahoma's allocation of Red River water. The Compact allows Oklahoma to, "use the water allocated to it by this Compact in any manner deemed beneficial by that state."³¹³

It may be possible for Tarrant to appropriate water for a use recognized as beneficial in Oklahoma. It could also purchase perfected water rights being used for a 'beneficial use' in Oklahoma. These actions would fall beyond the narrow ruling of the Court. If

³¹¹ *Tarrant*, 569 U.S. at 634.

³¹² *Id.* at 639.

³¹³ Red River Compact, Pub. L. No. 96-564, §2.01, 94 Stat. 3305 (1980).

Tarrant does this it will either have to comply with Oklahoma's strict standards of review for out of state transfers of water or go through a lengthy constitutional challenge using the standards outlaid in *Sporhase*. If Tarrant had tried to perfect a water right under Oklahoma law or attempted to transfer a valid right these issues would have been clearly before the Court. However, Tarrant's flawed argument that unallocated water was present proved fatal to its case.

V. POLICY IMPLICATIONS OF *TARRANT*

Tarrant leaves unanswered questions about the transferability of several types of water within a River Basin governed by an interstate compact. Most major western interstate rivers are already governed by interstate compacts, and the amendment process for these make it highly unlikely they will be modified by the signatory states.³¹⁴ Many of these compacts were ratified before the 'era of water markets' began in the 1970s, and it could be argued that many contain language that is intentionally obstructionist. Like the Red

³¹⁴ See generally Douglas L. Grant, *Interstate Water Allocation Compacts: When the Virtue of Permanence becomes the vice of Inflexibility*, 74 U. COLO. L. REV. 105, 180 (2003).

River Compact, many compacts are devoid of explicit language on water transfers across state lines.³¹⁵

It is probable that the impact of *Tarrant* will be minimal—the court determined the Red River Compact’s allocation scheme in §5.05 fully partitioned the water in sub-basin 5, so Tarrant could not claim water was unallocated. However, courts could interpret this case more broadly as a precedent for other compacts. If so, the question remains whether compacts that are silent about interstate transferability means that those compacts fully allocate water between states. For example, the Colorado River Compact was ratified in 1928 and divides water between “Upper Basin” and “Lower Basin” states.³¹⁶ The Colorado River Compact does not specifically allocate water between states, but does state, “[t]he provisions of this article shall not apply to or interfere with the regulation and control by any State within its boundaries of the appropriation, use, and distribution of water.”³¹⁷ This language is

³¹⁵ See generally McCormick, The Use of Interstate Compacts to Resolve Transboundary Water Allocation Issues, *supra* 168.

³¹⁶ See Colorado River Compact, Ch. 42, 45 Stat. 1064 (1921).

³¹⁷ Colorado River Compact, Ch. 42, Art. IV(c), 45 Stat. 1064 (1921).

similar to that contained in the Red River Compact. Does this rather generic language represent an explicit intent to preclude voluntary transfers of water across state lines? For example, if an irrigator in Utah attempts to reallocate water to a buyer in Nevada, is that a violation of the Compact?

Similarly, the Rio Grande Compact allocates water between Colorado, New Mexico, and Texas using an inflow-outflow model.³¹⁸ Section 11 states, "...nothing herein shall be interpreted to prevent recourse by a signatory state to the Supreme Court of the United States for redress should the character or quality of the water, at the point of delivery, be changed hereafter by one signatory state to the injury of another."³¹⁹ Based on the Court's quite literal interpretation of the Red River Compact, does this mean *any change*, even if accomplished through a voluntary transfer of water rights between two private parties in differing states, is subject to challenge via the Rio Grande Compact? Under such vague language, can the state of origin preclude its citizen from exercising their

³¹⁸ Rio Grande Compact, Ch. 155, Art. IV, 53 Stat. 155 (1938).

³¹⁹ Rio Grande Compact, Ch. 155, Art. XI, 53 Stat. 155 (1938).

perfected water right in a different beneficial use, and if so, does this constitute legal takings requiring just compensation?

Oklahoma's overtly protectionist statutes on out of state water applications³²⁰ appear unconstitutional. The court did state "nor do Oklahoma's laws run afoul of the Commerce Clause,"³²¹ whether this is because there was no "unallocated" water, or whether the court made a determination based on the validity of these statutes was not specified.³²² The Court's statement runs in direct conflict to the precedent established in *Sporhase* which recognized water as an article of commerce and creates a high bar for exclusionary statutes. This suggests the court did not address Oklahoma's statutes directly. Until future litigation provides clarity, the exact extent to which Oklahoma or another state can impose barriers on the exportation of water subject to an interstate compact remains unclear.³²³

³²⁰ *Tarrant*, 569 U.S. at 624-626.

³²¹ *Id.* at 640.

³²² *Id.*

³²³ See George C. Coggins, *Grizzly Bears Don't Stop at Customs: A Preface to Transboundary Problems in Natural Resources Law*, 32 U. Kan. L. Rev. 1, 16 (1983), and Olen P. Matthews, & Michael Pease, *The Commerce Clause, Interstate Compacts, and Marketing Water Across State Boundaries*, 46 NAT. RESOURCES J. 601, 656 (2006), for a more expansive review.

Tarrant also fails to clarify whether Texas or other states can purchase perfected water rights from willing sellers in Oklahoma and transfer this water out of state. Although the Court determined that “the Compact creates no cross-border rights in Texas,”³²⁴ *Tarrant* or other water districts could possibly purchase water from upstream water rights holders in Oklahoma and extract those waters from the mainstem of the Red River at its South Bank. Under most hydrologic conditions, Texas must already ‘enter’ Oklahoma to extract water from the Red River as the border between the two states is the South “cut-bank.”³²⁵ To stop a purchase, the OWRB would likely invoke its water transfer statutes; such an action could make the constitutionality of Oklahoma’s export laws ripe for review. Such a scenario would seem to be similar in legal structure to that of *Sporhase*,³²⁶ in which the Supreme Court shot down economic protectionist statutes in Nebraska, unless the Court gives

³²⁴ *Tarrant*, 569 U.S. at 637.

³²⁵ See *Oklahoma v. Texas* 260 U.S. 606, 636 (1923).

³²⁶ See generally *Sporhase v. Nebraska*, 458 U.S. 941 (1982).

the phrase, “use the water allocated to it by this Compact in any manner deemed beneficial by that state”³²⁷ determinative weighting.

Taking this uncertainty further, it is unclear whether the ruling in *Tarrant* precludes ‘water wheeling,’ an associative conveyance process by which water which would traditionally have gone to user ‘A’ instead goes to user ‘B,’ and user ‘B’s’ water then goes to user ‘C.’ Wheeling is conducted when physical barriers make moving water directly from user ‘A’ to user ‘C’ difficult.³²⁸ Wheeling utilizes the diffusion of runoff down a watercourse as a way of limiting the amount of infrastructure needed. A niche of the natural resource economics and water resource management suggests consideration of wheeling as a method for redistributing water between users in areas of adequate supply to those in areas experiencing scarcity.³²⁹

³²⁷ Red River Compact, 94 Stat. 3305, §2.01, Pub. L. No. 96-564 (1980).

³²⁸ See generally Timothy H. Quinn, *Wheeling Provisions of the Model Water Transfer Act*, 14 HASTINGS W.—NW. J. ENVTL. LAW & POL’Y 727, 738 (2008).

³²⁹ See e.g., David Zetland, *How Markets Can End Persistent Intra-organizational Conflict*, 6 THE ECONOMICS OF PEACE AND SECURITY JOURNAL 22, 22-28 (2011), and Terry L. Anderson, & Pamela Snyder, *WATER MARKETS: PRIMING THE INVISIBLE PUMP* (1997).

The Red River Compact, like many western interstate compacts, ignores groundwater.³³⁰ This is unsurprising; many of these compacts were negotiated before conjunctive management of surface and ground waters were legally codified. This omission has had unintended and confusing implications.³³¹ Because ground water is not covered under the compact,³³² it is unclear whether Texas could purchase groundwater from a willing upstream seller in Oklahoma and extract those waters at the South bank of the Red River. Geographical transfers of groundwater like this are legal within Oklahoma.³³³ In *Sporhase*, the Court upheld an irrigator's right to transfer groundwater from Nebraska to Colorado, calling

³³⁰ See McCormick (1994), *supra* note 167.

³³¹ On the Pecos River groundwater pumping caused depletion in surface water supplies, leading to a shortfall in New Mexico's water delivery to Texas. See *Texas v. New Mexico*, 462 U.S. 554 (1983); See Emlen G. Hall, HIGH AND DRY: THE TEXAS-NEW MEXICO STRUGGLE FOR THE PECOS RIVER 291 (2002), for a thorough review of this issue.

³³² See *Tarrant Reg'l Water Dist. v. Herrmann*, 656 F.3d 1222, 1236 (10th Cir. 2011) (“*Sporhase* is distinguishable because Nebraska was attempting to regulate the interstate transfer of groundwater that was not subject to an interstate compact.”).

³³³ “Water turned into any natural or artificial watercourse by any party entitled to the use of such water may be reclaimed below and diverted therefrom by such party, subject to existing rights, due allowance for losses being made by the Board.” Okla. Stat. tit. 82, §105.4.

Nebraska's attempt to block the transfer, despite the fact the same transfer would be legal in Nebraska "an impermissible burden on interstate commerce."³³⁴

The legality of transferring water from Tribes across state boundaries is unclear. Tarrant attempted to transfer water from the Apache,³³⁵ Choctaw, and Chickasaw Nations.³³⁶ While those deals fell through, the transferability of Tribal waters remains a possibility. The Compact generically states, "[n]othing in this Compact shall be deemed to impair or affect the powers, rights, or obligations of the United States, or those claiming under its authority, in, over and to water of the Red River Basin."³³⁷ This suggests that the Apache, Choctaw, and Chickasaw nation's waters fall outside the purview of the Red River Compact. States would find it difficult to argue tribal waters are subject to state review in its attempt to block the transfer. It is unclear whether the state of origin would have legal standing to attempt to block such a transfer.

³³⁴ *Sporhase v. Nebraska*, 458 U.S. 941, 941-42 (1982).

³³⁵ *See Tarrant*, 656 F.3d at 1222.

³³⁶ *Tarrant*, 569 U.S. at 624.

³³⁷ Red River Compact, Pub. L. No. 96-564, §2.07, 94 Stat. 3305 (1980).

Tarrant attempted to include the proposed Apache transfer within its challenge of Oklahoma's Water transfer statutes. The Court of Appeals affirmed the district court's finding that the proposed Apache transfer issue was not ripe.³³⁸ As more tribal rights are quantified, the transferability of these waters will lead to litigation similar to *Tarrant*. At the time that Tarrant brought the claims, neither Tarrant nor the Apache Tribe had applied for transferring water with the OWRB. The Court stated that "[t]he relationship between the Red River Compact and surface water owned by the Apache Tribe is fraught with complex questions of federalism, tribal sovereignty, and the reserved water rights doctrine."³³⁹ The Court also recognized this issue was not ripe because it is unclear "what rights the Apache Tribe has to Oklahoma surface water. . ."³⁴⁰ *Tarrant's* legal strategy must be questioned. Its first error was not fully pursuing water appropriations and perfecting the rights before bringing this case. Tarrant also failed to purchase rights making the case 'ripe' before the court challenge.

³³⁸ *Tarrant supra* 281, syllabus at 4.

³³⁹ *See Tarrant*, 656 F.3d at 1250.

³⁴⁰ *Id.*

Most global Climate Models suggest water supply vulnerabilities are likely to intensify in upcoming decades.³⁴¹ Concurrently natural resource economists increasingly call for the expanded use of markets to allow the price of water to reflect its scarcity.³⁴² Whether this case was a defeat for the marketing of water in all river basins governed by an interstate compact is unclear. What is clear is that *Tarrant* adds uncertainty rather than providing lucidity on cross-border water transfers. The unique language in the compact was the sole focus of the Court's decision, suggesting the decision is very narrow in scope. It is quite possible this decision did not impact transboundary water reallocations.

³⁴¹ See generally IPCC, *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation* (2012), https://www.ipcc.ch/site/assets/uploads/2018/03/SREX_Full_Report-1.pdf, and Robert G. Varady et al., *Transboundary adaptive management to reduce climate-change vulnerability in the western U.S.-Mexico border region*, 26 *Env'tl. Sci. Pol'y.*, 102, 102-112 (2013).

³⁴² See generally David S. Brookshire et al., *Western Urban Water Demand*, 42 *Nat. Resources J.* 873, 898 (2002), and George A. Gould, *Transfer of Water Rights*, 29 *Nat. Resources J.* 457, 478 (1989), and Charles W. Howe, *Protecting Public Values in a Water Market Setting: Improving Water Markets to Increase Economic Efficiency and Equity*, 3 *U. Denv. Water L. Rev.* 357, 372 (2000).