

Montana v. Wyoming: A Rising Tide of Water Issues

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The rights that apportion bodies of water are carefully guarded. Nowhere is this truer than in the arid western United States, where water is frequently at issue in interstate lawsuits. This paper examines the recent Supreme Court water-rights case, Montana v. Wyoming, and explores how this seemingly limited decision could impact water-rights cases and water compacts throughout the West. This paper outlines various factors currently impacting interstate water supplies and how these factors, combined with courts adopting the Supreme Court’s reasoning in Montana v. Wyoming, can increase interstate water litigation. This paper also outlines several methods to thwart or abate this increased litigation and recommends amending water compacts as the best solution.

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I. INTRODUCTION

Water is essential to sustain life. In the United States, water rights are most closely guarded in the West — the area covering some of the driest parts of the country. In the West, water apportionment is based upon seniority of use system: the doctrine of prior appropriation. While some have argued that this system of water management is more talk than action,¹ the recent Supreme Court decision *Montana v. Wyoming*² shows that this is far from true. This case has the potential to shape environmental law and impact state and local governments.

This Note does three things: first, analyzes *Montana v. Wyoming* and its potential impact on environmental law; second, introduces issues that state and local governments may have to confront, as well as proposed methods for change; and third, shows how *Montana v. Wyoming* can be a catalyst for changes in water apportionment in the West.

II. THE SUPREME COURT AND WATER CONFLICTS

When the United States Supreme Court hears a case, the case has typically gone through a lengthy adjudicative process to reach this Court of last resort. However, in some instances, the Supreme Court is the first court to hear a case and sits as the finder of fact.³ One such rare adjudication is a state versus state claim.⁴ When western states sue each other, water is almost certainly to be involved.

Despite the crucial role water plays in society, water laws usually merit little consideration in the United States where resources are often taken for granted. Additionally, Western water law varies from state to state.⁵ Therefore, when the Supreme Court exercises its original jurisdiction in an interstate water conflict, it is only interpreting the water law of the specific states before the Court. Indeed,

¹ See, e.g., A. Dan Tarlock, *Prior Appropriation: Rule, Principle, or Rhetoric?*, 76 N.D. L. REV. 881, 882 (2000).

² *Montana v. Wyoming*, 131 S. Ct. 1765 (2011).

³ See U.S. CONST. art. III, § 2, cl. 2.

⁴ *Id.*

⁵ Jill Sacra Hoffman, *The Status of Surface Water Rights in Texas: A Comparison to Other Prior Appropriation States*, 39 TEX. ENVTL. L.J. 168, 171 (2009); see, e.g., CAL. WATER CODE § 1240 (West 2013) (stating that in California a water right terminates instantly upon failing to put water to a beneficial use); N.M. STAT. ANN. § 72-5-28 (West 2013) (stating that in New Mexico a water right is revoked if water is not put to beneficial use for four years); TEX. WATER CODE ANN. § 11.173 (WEST 2013) (stating that in Texas, a water right is revoked if water is not put to beneficial use for ten years); see also Hoffman, *supra*, at 171-84 (highlighting the variances in water law between four western states: Colorado, California, New Mexico, Texas).

the Supreme Court has reaffirmed that “[t]he highest court of each state remains the final arbiter of what is state law” and as such “it is not this Court’s role to guide the development of state water regulation.”⁶ Taking all of this into consideration, it is easy to see why Supreme Court decisions on water rights rarely make headlines.

A. *Water Compacts: A Background*

While it is quite convenient for state and local lawmakers when a body of water is contained entirely within one state, in reality many bodies of water straddle state borders and even serve as natural borders.⁷ To address the potential problem of ownership, states frequently enter into water compacts — agreements on how a specific state may use a particular body of water.⁸ The Supreme Court encourages states to reach these agreements themselves,⁹ recognizing that if states become litigious, the Court’s ruling on the matter creates a rule less amiable to change.¹⁰

There are currently twenty-six water allocation compacts existing between states.¹¹ States use water compacts to address a variety of interstate water issues such as pollution, flood control, and restoration of the Atlantic salmon.¹² However, the most important issue addressed by water compacts is water apportionment: how much water a state can take from a specified body of water.

B. *Water Compacts: The Basics*

Water rights are a specialization within the already niche legal field of environmental law. Therefore, to understand the potential impact of *Montana v. Wyoming*, it is helpful to have at least a rudimentary understanding of the western water allocation rules that serve as “the foundation of interstate river compacts.”¹³ A brief overview, namely of the basic terminology, is beneficial:

⁶ *Montana*, 131 S. Ct. at 1773 n.5 (2011) (citing *West v. Am. Tel. & Tel. Co.*, 311 U.S. 223, 236-37 (1940)).

⁷ See, e.g., *Ohio v. Kentucky*, 410 U.S. 641, 642-43 (1973).

⁸ See, e.g., *Colorado River Compact*, COLO. REV. STAT. § 37-61-101 (West 2012).

⁹ *Colorado v. Kansas*, 320 U.S. 383, 392 (1943) (“[W]hile we have jurisdiction of such disputes, they involve the interests of quasi-sovereigns, present complicated and delicate questions, and, due to the possibility of future change of conditions, necessitate expert administration rather than judicial imposition of a hard and fast rule. . . . [M]utual accommodation and agreement should, if possible, be the medium of settlement, instead of invocation of our adjudicatory power.”).

¹⁰ See *id.*

¹¹ See Douglas L. Grant, *Limiting Liability for Long-Continued Breach of Interstate Water Allocation Compacts*, 43 NAT. RESOURCES J. 373, 373 (2003); see also *Digest of Federal Natural Resources Law*, U.S. FISH & WILDLIFE SERV., <http://www.fws.gov/laws/lawsdigest/InterstateCompacts.html> (last visited Jan. 30, 2013).

¹² U.S. FISH & WILDLIFE, *supra* note 11.

¹³ Edella Schlager & Tanya Heikkila, *Left High and Dry? Climate Change, Common-Pool*

prior appropriation, beneficial use, no-injury, and recapture.

The Mississippi River acts as the unofficial demarcation for the states that apply a water rights principle known as “the doctrine of prior appropriation.”¹⁴ The seventeen states west of the Mississippi apply prior appropriation in some form.¹⁵ Eight of those seventeen states (Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming) apply prior appropriation exclusively.¹⁶

The doctrine of prior appropriation stemmed from the need to allocate water during the western mining boom.¹⁷ Since prior appropriation arose from “the wild West,” the doctrine has a territorial “every man for himself” feel, resembling laws outlawing claim jumping.¹⁸ The phrase “first in time, first in right” captures this disposition.¹⁹ This sentiment is often used in water law and frequently serves as the summary of prior appropriation. More importantly, this phrase acts as its fundamental principle.²⁰

“First in time, first in right” means that the first person to appropriate water can take the amount of water that he can beneficially use.²¹ Then the unused water and any run-off continue downstream where the next user can then appropriate a portion of water based on what he can beneficially use.²² The remaining water and run-off continue downstream to the next user, and so on.²³ “First in time, first in right” is the lodestar of water use in the West, ensuring a fair distribution of water based on seniority.²⁴ Though prior appropriation initially appears to provide limitless control of bodies of water to the first appropriator, three rules define a senior appropriator’s water intake: beneficial use, the no-injury rule, and the doctrine of recapture.²⁵

Beneficial use limits the amount of water a senior appropriator can take before a junior appropriator receives water. A senior appropriator is not entitled

Resource Theory, and the Adaptability of Western Water Compacts, 71 PUB. ADMIN. REV. 461, 462 (2011).

¹⁴ Chennat Gopalakrishnan, *The Doctrine of Prior Appropriation and its Impact on Water Development: A Critical Survey*, 32 AM. J. ECON. & SOC’Y. 61, 61 (1973).

¹⁵ *Id.* (listing the states Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming).

¹⁶ *Id.*

¹⁷ David B. Schorr, *Appropriation as Agrarianism: Distributive Justice in the Creation of Property Rights*, 32 ECOLOGY L.Q. 3, 7-8 (2005).

¹⁸ *Id.*

¹⁹ *See id.*

²⁰ *See* Lawrence Berger, *An Analysis of the Doctrine That “First in Time is First in Right,”* 64 NEB. L. REV. 349, 371 (1985).

²¹ *Id.*

²² *Id.*

²³ *See* Hoffman, *supra* note 5, at 168-69.

²⁴ Berger, *supra* note 20, at 371; Hoffman, *supra* note 5, at 168-69.

²⁵ *See* *Montana v. Wyoming*, 131 S. Ct. 1765, 1772-73 (2011).

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to an unlimited supply of water.²⁶ Rather, he may only take “the amount of water that is necessary to irrigate his land by making reasonable use of the water.”²⁷

Another check on a senior appropriator is the no-injury rule. Under this rule a junior appropriator,

may insist that the prior appropriators shall confine themselves strictly . . . to the amount of water within the extent of their appropriation which they actually apply to some beneficial use or purpose [The prior appropriator] can not enlarge his rights to the injury of the subsequent appropriators by increasing his demands, even if used for a beneficial purpose.²⁸

While the doctrine of beneficial use limits the amount of water a senior appropriator may take from a source in the initial withdraw, the no-injury rule prevents a senior appropriator from increasing this allotment in the future.²⁹ A future increase in intake by a senior appropriator, even for a beneficial use, would injure the junior appropriator.

The doctrine of recapture applies to any efforts made by an appropriator to recapture and reuse excess water before it exits his property and flows downstream or filters deep into the soil.³⁰ Once a farmer irrigates a field, not all of the water will achieve the desired result — nourishment of crops. Rather, a percentage of the water will become runoff, returning to its source and continuing downstream, or percolating down through the soil. Water law frequently refers to this water as seepage, waste, or wastage.³¹ But, even with wastage, the cardinal rule of prior appropriation — first in time, first in right — still applies. An appropriator has a right to the specific amount of water he has consistently taken, including the wastage.³²

A basic understanding of these four terms is essential for the legal professional and government officials because these terms are typically at the core of any water dispute in the western United States. *Montana v. Wyoming* was no exception.

²⁶ See *id.* at 1772 (“The scope of the [water] right is limited by the concept of ‘beneficial use.’”).

²⁷ See *id.* (quoting 1 C. KINNEY, LAW OF IRRIGATION AND WATER RIGHTS § 586, at 1007-08 (2d ed. 1912)).

²⁸ CLESSON S. KINNEY, A TREATISE ON THE LAW OF IRRIGATION AND WATER RIGHTS AND THE ARID REGION DOCTRINE OF APPROPRIATION OF WATER § 784 (2d ed. 1912).

²⁹ See *id.*

³⁰ *Montana*, 131 S. Ct. at 1774.

³¹ *E.g.*, *id.* at 1774-75; *Nebraska v. Wyoming*, 325 U.S. 589, 636 (1945); *Ide v. United States*, 263 U.S. 497, 506 (1924); *United States v. Tilley*, 124 F. 2d 850, 858 (8th Cir. 1941).

³² *Ide*, 263 U.S. at 506 (citing *United States v. Haga*, 276 F. 41, 43 (D. Idaho 1921)).

III. MONTANA V. WYOMING

While prior appropriation encourages fairness in interstate water allocation, disputes still arise. The Supreme Court acknowledges the serious nature of water issues. In a recent water case, Chief Justice John Roberts stated, “Our original jurisdiction over actions between States is concerned with disputes so serious that they would be grounds for war if the States were truly sovereign. A dispute between States over rights to water fits that bill.”³³

The most recent dispute litigated at the Supreme Court between states over water involved Montana and Wyoming. The Court published its opinion on May 2, 2011, but this interstate feud was under review before the Supreme Court for almost four and a half years — starting January 2007.³⁴

The complaint concerned Article V of the Yellowstone River Compact. Article V ensures the continuation of any water rights acquired before 1950, when the compact went into effect.³⁵ Article V also provides that the doctrine of prior appropriation governs all water rights under the compact.³⁶ This means that the rules governing water appropriation are applicable, and as such, Article V is the most important provision of the Yellowstone River Compact.³⁷

Montana argued that Wyoming was violating Article V because Wyoming had increased its water consumption.³⁸ Montana claimed that the increased consumption resulted from Wyoming’s switch from watering crops with flood irrigation to sprinkler irrigation.³⁹ The high-efficiency sprinklers, Montana argued, increased crop consumption, which resulted in less runoff and, therefore, less water returning to the Yellowstone River and going downstream to Montana.⁴⁰ Montana asserted that the efficiency of sprinkler irrigation reduced the amount of water returning to Yellowstone River by at least 25%.⁴¹ Essentially, Montana’s rationale stated that less water available downstream was synonymous with increased consumption by Wyoming upstream. Therefore, the issue before the Supreme Court was essentially whether improved water efficiency equaled increased water consumption.⁴²

³³ *South Carolina v. North Carolina*, 130 S. Ct. 854, 876 (2010) (Roberts, C.J., dissenting) (citation omitted).

³⁴ Motion for Leave to File Bill of Complaint at 2, *Montana v. Wyoming*, 131 S. Ct. 1765 (2011) (No. 220137), available at www.stanford.edu/dept/law/mvn/.

³⁵ MONT. CODE ANN. § 85-20-101 (West 2013); N.D. CENT. CODE § 61-23-01 (West 2013); WYO. STAT. ANN. §41-12-601 (West 2013).

³⁶ See *supra* note 35.

³⁷ Shiran Zohar, *A Deal Is a Deal in the West, or Is It?* *Montana v. Wyoming and the Yellowstone River Compact*, 6 DUKE J. CONST. L. & PUB. POL’Y SIDEBAR 160, 161 (2011).

³⁸ *Montana v. Wyoming*, 131 S. Ct. 1765, 1770 (2011).

³⁹ *Id.* at 1771.

⁴⁰ *Id.*

⁴¹ *Id.*

⁴² See *id.*

The Court's opinion offers insight into the scope and extent of prior appropriation. An example of this is the Court's limitation of the scope of no-injury rule, finding it "is not absolute."⁴³ Although water use by a senior appropriator may harm a junior appropriator, the no-injury rule does not automatically prohibit the use.⁴⁴ Rather, the Court found that under Montana and Wyoming case law, the no-injury rule specifically restricts only three changes in water use by a senior appropriator: diversion of the water from its source; the place the water is used; and the purpose of the water use.⁴⁵

However, the greatest impact from the decision came in the holding. The Court concluded: "[W]e hold that the doctrine of appropriation in Wyoming and Montana allows appropriators to improve their irrigation systems, even to the detriment of downstream appropriators."⁴⁶ This holding places economy above equality, essentially allowing members of water compacts to place their desire for efficiency above concern for fellow members.

Practitioners and legislators, however, may feel inclined to disregard *Montana v. Wyoming*. As mentioned, the scope of the decision is limited to Montana and Wyoming.⁴⁷ The impact of the decision is even further limited when one considers that Wyoming and Montana are the least and eighth least populated states, respectively.⁴⁸

Beyond the new name Justice Scalia coined for Wyoming residence,⁴⁹ this decision may initially seem unimportant. However, this decision holds weight as a clear holding in a murky area of law.⁵⁰ Immediately after its holding, the Court stated, "We readily acknowledge that this area of law is far from clear."⁵¹ Legal professionals, state and local governments, and environmentalists alike should not overlook the clarity this decision provides. This case impacts specific, long-held doctrines in water law. As this note explores, changes in water law affect states, cities, and citizens more than we tend to think.

This decision has already sent environmental lawyers scrambling to remind

⁴³ *Id.* at 1773.

⁴⁴ *Id.* ("Accordingly, certain types of changes can occur even though they may harm downstream appropriators.").

⁴⁵ *Id.*

⁴⁶ *Id.* at 1777.

⁴⁷ *See supra* Part I.

⁴⁸ PAUL MACKUN ET AL., POPULATION DISTRIBUTION AND CHANGE: 2000–2010, at 2 (2011), available at <http://www.census.gov/prod/cen2010/briefs/c2010br-01.pdf>.

⁴⁹ In his dissent, Justice Scalia noted that the term for a Wyoming resident is "Wyomingite," but also noted this is a name for a type of lava. He then decided to refer to Wyoming citizens as "Wyomans" because "the people of Wyoming deserve better." *Montana*, 131 S. Ct. at 1779 n*.

⁵⁰ *Id.* at 1778 ("This plain reading [of the compact] makes sense in light of the circumstances existing in the signatory States when the Compact was drafted."); *id.* at 1771 n.4 ("As with all contracts, we interpret the Compact according to the intent of the parties, here the signatory States.").

⁵¹ *Id.* at 1777.

western water users outside Montana and Wyoming of the limited reach of the Supreme Court's decision.⁵² While western water users outside of Montana and Wyoming can take comfort in the geographical boundaries of this decision, lawyers also recognize its potential reach.⁵³ Issues of water appropriation and water use efficiency will become more prevalent because water will become increasingly scarce in the arid West. The scarcity of water in the western United States will result from two primary causes: (1) population growth, and (2) the shrinking water supply.

IV. ENVIRONMENTAL STRESS: NATURAL SUPPLY AND DEMAND

Two types of environmental pressures affect a given water supply: supply-side and demand-side.⁵⁴

The supply-sided pressures include climate change . . . but also include environmental degradation, where for example pollution reduces the amount of water available for use. Demand-side pressures include population growth and concentration, leading to increased demands for domestic, industrial and agricultural (particularly irrigation) water, increased environmental demands and the effects of changes in the way demands for water are managed.⁵⁵

Since the current water supply establishes the amount available to meet demand-side pressures, I will address supply-side pressures first.

A. Supply-Side Pressures: Climate Change and Pollution

The two most prominent supply-side pressures are climate change and

⁵² See, e.g., Joseph M. Carpenter, *United States Supreme Court Holds That Under Montana and Wyoming State Law, the No Injury Rule Does Not Apply to Reduced Return Flows Caused by Installation of More Efficient Irrigation Systems*, SOMACH SIMMONS & DUNN (May 24, 2011), <http://www.somachlaw.com/alerts.php?id=128>; Matthew E. Jensen, *Montana v. Wyoming*, WATER AND THE LAW (Summer 2011), <http://archive.constantcontact.com/fs002/1101971314519/archive/1104930579047.html>; Jeff Kray, *United States Supreme Court Weighs Into Western Water Law, Sets Precedent for Return Flows*, MARTEN LAW (June 2, 2011), <http://www.martenlaw.com/newsletter/20110602-return-water-flows-precedent-set>.

⁵³ Carpenter, *supra* note 52 ("Given the likelihood that numerous agricultural appropriators in California will eventually increase their net water consumption by switching to more efficient irrigation systems or by employing conservation techniques that catch irrigation runoff for reuse — resulting in reduced return flows and a decrease in the amount of water available for downstream appropriators — it is foreseeable that the issue decided by the Supreme Court will be litigated in California."); Kray, *supra* note 52 ("Given the economic and environmental incentives for increasing irrigation efficiency, agricultural water-users throughout the west will continue to increasingly employ water conservation techniques that reduce return flows and trigger future claims by junior water right holders.").

⁵⁴ Nigel W. Arnell, *Climate Change and Global Water Resources*, 9 GLOBAL ENVTL. CHANGE, S31, S31 (1999).

⁵⁵ *Id.* at S31-32.

pollution.⁵⁶ While these two pressures can be distinct, they can also be causally connected.⁵⁷ The western United States has always had a reputation for having limited annual rainfall.⁵⁸ However, a recent study shows that the southwestern United States is becoming even drier.⁵⁹ Additionally, modeling predicts that this is lasting climate change, and not a temporary dry spell.⁶⁰ Scientists expect this dryness to continue escalating into the first quarter of the 21st century, resulting in a permanent shift to a climate similar to that of the Dust Bowl in the 1930's.⁶¹ When this change occurs, dryness will further increase during La Niña years, a period marked by increased dryness in the southern United States, creating droughts beyond anything experienced since medieval times.⁶² As comforting as it would be to think that humans are not responsible, studies support a causal connection between the increasing dryness and pollution.⁶³

In the western United States, the temperamental water supply experiences naturally occurring, multi-decade periods of wetness and dryness.⁶⁴ After a period of drought, patience is normally rewarded by a period of plenty, restoring balance to the hydrological system.⁶⁵ Recent studies of western snowpack, winter temperature, and river flow⁶⁶ reveal that 1950-1999 was a period of dryness.⁶⁷ A multi-decade period of dryness would normally permit western states to anticipate a natural self-correction and return to a period of increased moisture. However, this same study showed that the cause of the recent dry period was not due to a natural cycle, but rather to human-induced climate change from pollution,⁶⁸ making the return of a period of increased moisture unlikely.⁶⁹

⁵⁶ See *id.*

⁵⁷ See, Tim P. Barnett et al., *Human-Induced Changes in the Hydrology of the Western United States*, 319 SCI. 1080, 1080 (2008).

⁵⁸ See *id.*; Hoffman, *supra* note 5, at 168; Berger, *supra* note 20, at 371; Schorr, *supra* note 17, at 8.

⁵⁹ Richard Seager et al., *Model Projections of an Imminent Transition to a More Arid Climate in Southwestern North America*, 316 SCI. 1181, 1181 (2007).

⁶⁰ See *id.*

⁶¹ *Id.*

⁶² *Id.* at 1183-84.

⁶³ See, Barnett et al., *supra* note 57, at 1080.

⁶⁴ COMM. ON THE SCIENTIFIC BASIS OF COLO. RIVER BASIN WATER MGMT. ET AL., COLORADO RIVER BASIN WATER MANAGEMENT, EVALUATING AND ADJUSTING TO HYDROCLIMATIC VARIABILITY 5 (2007) [hereinafter COMMITTEE].

⁶⁵ See Barnett et al., *supra* note 57, at 1180.

⁶⁶ These three are considered the most important factors to gauge the western water cycle. *Id.*

⁶⁷ See *id.*

⁶⁸ *Id.* at 1080, 1082.

⁶⁹ *Id.* at 1082.

B. Demand-Side Pressure: Population

While some people feel that such dramatic climate change may not occur, the population of the western United States increases at an undeniably rapid pace. According to the 2010 census, in the past ten years the West surpassed the Midwest in population and is now the second most populated region in the United States.⁷⁰ Additionally, the five fastest-growing states in the country (Nevada, Arizona, Utah, Idaho, and Texas) all apply prior appropriation in water allocation.⁷¹ The four fastest-growing states (Nevada, Arizona, Utah, and Idaho) are exclusively prior appropriation states.⁷² Nevada is worth particular note, having held the national title of “fastest-growing state” for the last five decades.⁷³ Even Wyoming, the least populated state in the union,⁷⁴ experienced an above-average growth rate during the last census period for the first time in at least thirty years.⁷⁵

Additionally, while the western United States appears to be growing faster than much of the country, the entire country as a whole continues to grow.⁷⁶ While this past decade saw the nation’s smallest growth rate increase since the 1930’s, the country still grew at a rate of 9.7%, adding 27.3 million people to the country’s population.⁷⁷

A specific example of the western population boom exigency is the diminishing water supply of Denver, Colorado. Colorado’s population is growing at a rate close to double the national average.⁷⁸ Denver estimates that the demand for water will exceed its supply as early as 2015.⁷⁹ With such little time before demand surpasses supply, a change needs to occur soon.

C. Farming: The Convergence of Demand-Side and Supply-Side Pressures

Demand-side pressures and supply-side pressures converge with agriculture.

⁷⁰ MACKUN ET AL., *supra* note 48, at 1-2.

⁷¹ *Id.* at 2 (discussing the fastest-growing states); Gopalakrishnan, *supra* note 14, at 61 (listing the states that use the prior appropriation doctrine). The census report was released Mar. 2011. MACKUN ET AL., *supra* note 48, at 1.

⁷² MACKUN ET AL., *supra* note 48, at 2; Gopalakrishnan, *supra* note 14, at 61.

⁷³ MACKUN ET AL., *supra* note 48, at 2-3.

⁷⁴ *Id.* at 2 tbl. 1.

⁷⁵ *Id.* at 3.

⁷⁶ The South grew by 14.3% and the West grew by 13.8%, while the Midwest and Northeast only grew by 3.9 and 3.2%. *Id.* at 1.

⁷⁷ *Id.*

⁷⁸ *Id.* at 1-2 (showing that the United States population is increasing at a rate of 9.7%, while Colorado’s population is growing at a rate of 16.9%).

⁷⁹ DENVER BD. OF WATER COMM’R, WATER FOR TOMORROW: THE HISTORY, RESULTS, PROJECTIONS, AND UPDATE OF THE INTEGRATED RESOURCE PLAN 44 fig. III-4 (2002), available at <http://www.dwater.org/pages/conservation/DenverWaterIRP2002MasterDocIRP.pdf> (showing that demand will likely overreach supply somewhere between 2015 and 2030).

The population continues to rise, resulting in increased demand for food. At the same time, there is less water available for farmers to use in cultivating crops to meet greater food demand.

Farmers in America already need a lot of water to meet the food demanded by the growing population. According to the National Resources Defense Council, agriculture accounts for 85% of the country's water use.⁸⁰ This places agriculture at the center of the nation's water conflict: produce more food with a shrinking supply of water.⁸¹ While several solutions exist,⁸² the preferred method is irrigation modernization and efficiency.⁸³ However, as more western farmers apply efficient water-use methods, another *Montana v. Wyoming* becomes more likely.⁸⁴

D. Western Water Compacts: Products of a Different World and a Different Mindset

Not only do the supply-side pressures and demand-side pressures on the nation's water supply prompt change, evidence suggests some prior appropriation compacts were based upon incorrect information.

For example, the Colorado River Compact was the first interstate water compact in the United States.⁸⁵ Seven states alone participate in this compact: Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming.⁸⁶ Research now shows that at the 1922 signing, the Colorado River was experiencing a period of above-average water flow.⁸⁷ Research also shows that the participants overestimated the river's long-term mean annual flow because the preceding period was abnormally wet.⁸⁸ These facts affect current water-rights agreements and allocation of water.⁸⁹ This means that the signatory states drafted the terms of what has become the oldest and most venerated water compact in the country with faulty information.

Additionally, Montana, Wyoming, and North Dakota signed the Yellowstone

⁸⁰ NAT'L RES. DEF. COUNCIL, WATER EFFICIENCY SAVES ENERGY: REDUCING GLOBAL WARMING THROUGH WATER USE STRATEGIES 3 (2009), available at <http://www.nrdc.org/water/files/energywater.pdf>.

⁸¹ Enrique Playán & Luciano Mateos, *Modernization and Optimization of Irrigation Systems to Increase Water Productivity*, 80 AGRIC. WATER MGMT. 100, 101 (2006).

⁸² *Id.* at 102.

⁸³ *Id.* at 102-03.

⁸⁴ See *Montana v. Wyoming*, 131 S. Ct. 1765, 1771 (2011) (framing the issue at hand around efficient water-use methods and water rights).

⁸⁵ Robert W. Adler, *Revisiting the Colorado River Compact: Time to Change?*, 28 J. LAND RESOURCES & ENVTL. L. 19, 19 (2008) [hereinafter Adler, *Revisiting the Colorado River Compact*].

⁸⁶ See COLO. REV. STAT. ANN. § 37-61-101 (Westlaw 2013).

⁸⁷ COMMITTEE, *supra* note 64, at 5.

⁸⁸ See *id.* at 5-6.

⁸⁹ *Id.* at 5.

River Compact, the focus of *Montana v. Wyoming*, in 1950.⁹⁰ As already mentioned, research now shows that the western United States has been in a dry period from 1950-1999.⁹¹ Thus, not only has Montana received less water than it previously received due to Wyoming's change in irrigation methods, but also both states have less water available than previously thought.

Therefore, at least nine western states entered into water allocation compacts with inaccurate information about the amount of water available.⁹² Over time, these facts could become grounds for disagreement. The potential for interstate disagreement further increases if these states strive to relieve demand-side and supply-side pressures by increasing water-use efficiency, or if research reveals similar errors in other interstate compacts.

Given the above, one can see how *Montana v. Wyoming* occurred. The populations of both states are currently growing at or above the national average, and both are located in the second-fastest growing and second most populated region in the United States,⁹³ which also happens to be in one of the driest areas in the country.⁹⁴ Since these two states — as well as North Dakota — signed the Yellow Stone River Compact in 1950,⁹⁵ the region has only become dryer, resulting in a general decrease of the amount of water available since the signing of the compact.⁹⁶ Additionally, the long-term forecast for the region shows an exacerbation of the dryness, culminating in a long-term climate similar to the Dust Bowl.⁹⁷ In an effort to alleviate some supply-side and demand-side pressures, Wyoming began modernizing its irrigation to increase efficiency and found itself in court.⁹⁸

The supply-side pressures and demand-side pressures explain why Wyoming would want to increase irrigation efficiency. But these same pressures affect Montana as well. The only difference is that Montana is downstream from Wyoming; therefore, Wyoming has first right to the Yellowstone River, and Montana gets the remainder.⁹⁹ This is how the two states have operated, in relative harmony, since 1950. However, the actions Wyoming took to cope with the supply-side and demand-side pressures resulted in Montana receiving even

⁹⁰ See WYO. STAT. ANN. §41-12-601 (West 2013).

⁹¹ See *supra* note 67 and accompanying text.

⁹² These states include the seven signatory states of the Colorado River Compact (Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming) and two of the signatory states of the Yellowstone River Compact (Montana and North Dakota). See COLO. REV. STAT. ANN. § 37-61-101 (West 2013); MONT. CODE ANN § 85-20-101 (West 2013).

⁹³ MACKUN ET AL., *supra* note 48, at 1-2.

⁹⁴ Gopalakrishnan, *supra* note 14, at 62.

⁹⁵ See WYO. STAT. ANN. § 41-12-601 (West 2013).

⁹⁶ See Barnett et al., *supra* note 57, at 1080.

⁹⁷ See Seager et al., *supra* note 59, at 1181.

⁹⁸ *Montana v. Wyoming*, 131 S. Ct. 1765, 1771 (2011).

⁹⁹ See Berger, *supra* note 20, at 371.

less water. This dispute for “liquid gold” reached critical mass and spilled over into what these two states perceived to be the best venue available — the United States Supreme Court. While it appears that Wyoming’s irrigation modifications stemmed simply from trying to use water more efficiently, the resulting suit revealed a dark side to the “green” movement.

With these same pressures increasing across the West, other states will make greater efforts to maximize their water supply. In doing so, states that apply prior appropriation will decrease the amount of water available to the next state downstream. This tension from new issues in an old set of laws will ensure that the disagreement between Montana and Wyoming is not the last of its kind.

V. METHODS FOR CHANGE

With available water supply to western states decreasing, litigation will most certainly increase. Not only will the shrinking water supply coupled with the growing demand increase litigation, defendants now have an additional shield: *Montana v. Wyoming*.

In the recent years, legal scholars have questioned the enforceability of prior appropriation. Some have posited that prior appropriation is actually more akin to customs or etiquette rather than enforceable law.¹⁰⁰ While prior appropriation fosters fair play, when there is a breach of etiquette, “enforcement is more bluff than substance.”¹⁰¹ Thus, prior appropriation gains its power not by enforcement but by the threat of enforcement.¹⁰² Others have suggested that prior appropriation remains unchanged not because it has been tried and proven, but quite the opposite. Prior appropriation persists because until recently there has always been enough water — thinly spread as it may be — to meet demand.¹⁰³ Therefore, “the harsh implications of prior appropriation [had] yet to be tested in a significant way.”¹⁰⁴

The decision in *Montana v. Wyoming* undercuts all of these presumptions about the impact and enforceability of prior appropriation. With the statement “we hold that the doctrine of appropriation in Wyoming and Montana allows appropriators to improve their irrigation systems, *even to the detriment of downstream appropriators*,”¹⁰⁵ the Court made it very clear how much it respects the contractual water rights of a senior appropriator and that it is willing to enforce them.¹⁰⁶ Moreover, two states suing each other over a significant drop

¹⁰⁰ Tarlock, *supra* note 1, at 891.

¹⁰¹ *Id.* at 883.

¹⁰² *Id.*

¹⁰³ Robert W. Adler, *Climate Change and the Hegemony of State Water Law*, 29 STAN. ENVTL. L.J. 1, 24 (2010).

¹⁰⁴ *Id.*

¹⁰⁵ *Montana v. Wyoming*, 131 S. Ct. 1765, 1777 (2011) (emphasis added).

¹⁰⁶ *Id.*

in water from a major water source should certainly qualify as a significant test of the implications of the prior appropriation doctrine.¹⁰⁷

Even though *Montana v. Wyoming* is not binding precedent on all states, judges will still find this case very persuasive. Not only is it a Supreme Court case with a clear 7-1 decision,¹⁰⁸ but also in reaching this decision, the Court relied on a report prepared by a Special Master—a court-appointed environmental law expert who spent nearly eight months wading through the issues.¹⁰⁹ A judge, except in the unlikely event that he is an expert in water law, will find it helpful that the Court did a lot of the work for him and presented a clear solution.¹¹⁰ The Supreme Court, whether intentionally or not, further promulgated the use of *Montana v. Wyoming* in future litigation by positing possible exceptions to the doctrine of prior appropriation besides increased efficiency. While the court held that using the same amount of water more efficiently did not violate the no-injury rule—the guardian of junior appropriators¹¹¹—it went on to state other ways a senior appropriator could use more water without violating the no-injury rule:

Accordingly, certain types of changes can occur even though they may harm downstream appropriators. For instance, an appropriator may increase his consumption by changing to a more water-intensive crop so long as he makes no change in acreage irrigated or amount of water diverted. . . . Consumption can even be increased by adding farm acreage, so long as that was part of the plan from the start, and diligently pursued through the years.¹¹²

An illustration of this would be a California farmer wanting to switch his crop to rice in order to capitalize on the state's nearly \$2 billion rice market.¹¹³ Rice is one of the most water-intensive crops on the planet.¹¹⁴ The California Rice Commission estimates that its small group of 2,500 rice farmers¹¹⁵ use close to

¹⁰⁷ See *supra* note 104 and accompanying text.

¹⁰⁸ *Montana*, 131 S. Ct. at 1769.

¹⁰⁹ *Id.* at 1769; see Order Granting Special Master Fees and Expenses for the Period of Oct. 20, 2008–June 12, 2009 at 1, *Montana v. Wyoming*, 130 S. Ct. 355 (2009) (No. 137).

¹¹⁰ See *Montana*, 131 S. Ct. at 1777.

¹¹¹ See *id.* at 1773.

¹¹² *Id.* at 1773-74 (citation omitted).

¹¹³ CAL. RICE COMM'N, CALIFORNIA RICE FACTS 1 (n.d.), available at <http://www.calrice.org/pdf/CARicefacts.pdf>.

¹¹⁴ According to the World Wildlife Fund the four most water-intensive crops are cotton, sugar, rice, and wheat. WORLD WILDLIFE FUND, AGRICULTURAL WATER USE AND RIVER BASIN CONSERVATION 3 (Tim Davis, ed., 2003), available at http://wwf.panda.org/about_our_earth/about_freshwater/freshwater_resources/?uNewsID=9182.

¹¹⁵ *Role of the CRC*, CAL. RICE COMM'N, <http://www.calrice.org/Industry+Info/About+CRC/Role+of+the+CRC.htm> (last visited Mar. 26, 2012).

three percent of the state's water supply.¹¹⁶ A switch to growing rice would affect the amount of water junior appropriators would receive, yet according to the Supreme Court, this could be permissible. Attorneys in California have already recognized the potential impact *Montana v. Wyoming* could have on the state if a California court finds the Supreme Court's reasoning persuasive.¹¹⁷

The strain on the water supply could escalate litigation by compelling junior appropriators to file more claims. However, the decision in *Montana v. Wyoming* will give senior appropriators support for their water usage. The impact of *Montana v. Wyoming* should increase awareness in the legal community of the need to amend these water compacts.

Change needs to occur. The legal community is not the only field that recognizes the need for a solution to a growing problem. Professionals in a variety of fields recognize the increased tension and are calling for change.¹¹⁸ Once people understand that need for change, the challenge is how to change water law properly.

When it comes to addressing changes to western water law, there are three options: adjudication, congressional intervention, and compact amendment.¹¹⁹ Each method has unique advantages and disadvantages. An examination of each method however, supports that western states will obtain the best, long-term results by amending their individual water compacts.

A. Case-by-Case Adjudication

The first option is for states to do nothing except adjudication. States can leave water compacts the way they are and address any water conflicts through litigation. The obvious initial benefit to this approach is economy of effort. Attempting to amend water compacts that so many people have come to rely on could open a legislative Pandora's Box for state and local governments.

Robert W. Adler outlined the potential difficulties of renegotiating the Colorado River Compact, but the potential problems faced by policy makers in

¹¹⁶ *Water Supply – Chapter 2: Water Supply in Relation to Rice Farming*, CAL. RICE COMM'N, <http://www.calrice.org/Environment/Balance+Sheet/Chapter+2++Water+Supply.htm> (last visited Mar. 26, 2012).

¹¹⁷ *E.g.*, Carpenter, *supra* note 52.

¹¹⁸ *See, e.g.*, Barnett et al., *supra* note 57, at 1080 (“these changes [in hydrology] are highly likely to accelerate, making modifications to the water structure of the western United States a virtual necessity”); HEATHER COOLEY ET AL., PAC. INST., MORE WITH LESS: AGRICULTURAL WATER CONSERVATION AND EFFICIENCY IN CALIFORNIA, A SPECIAL FOCUS ON THE DELTA 5-10, 41-42 (Nancy Ross ed., 2008), available at http://www.pacinst.org/reports/more_with_less_delta/more_with_less.pdf (using the San Joaquin Delta as a case study to examine agricultural water efficiency and make sustainability recommendations and stating, “California . . . recognizes both riparian and appropriative rights . . . California's water rights system should be reexamined given changing social, economic, and environmental conditions”).

¹¹⁹ *See* E. Leif Reid, *Ripples from the Truckee: The Case for Congressional Apportionment of Disputed Interstate Water Rights*, 14 STAN. ENVTL. L.J. 145, 155 (1995).

amending the grandfather of all interstate water compacts also apply to its progeny.¹²⁰ A host of interests, which either were not considered or did not exist at the time of a compact's signing, may arise — e.g., environmental groups' and Native American tribes' interests.¹²¹ Additionally, a reservoir of statutes, regulations, and judicial opinions has built up around these compacts over the years to assist in their interpretation. Amending the primary document can have a ripple effect on these bodies of law, creating an “administrative and judicial nightmare.”¹²² Most importantly, changes in a water compact will affect the people and business that have come to rely on these compacts.¹²³

However, these possible difficulties would come after the potential struggle of the signatory states reaching an agreement in the first place. *Montana v. Wyoming* displayed this interstate friction over water,¹²⁴ and it was present with the first water compact as well.¹²⁵ Each of these potential difficulties to amendment can bring the same result as leaving compacts unamended: increased litigation and a boon to water lawyers with little to show for it. Amending a water compact *might* create litigation; leaving compacts unamended *will* create litigation, as was the case in *Montana v. Wyoming*.

The court should not handle these issues. As the Supreme Court noted, unlike the water that flows through many western rivers, the doctrine of prior appropriation can be far from clear.¹²⁶ In interstate water disputes, the Supreme Court often appoints a water law expert as a Special Master to assist the Court with this niche area of law,¹²⁷ as it did in *Montana v. Wyoming*.¹²⁸ Even then, some feel the issues at play are too technical and the Court is too far removed to reach a truly equitable solution.¹²⁹ While the Supreme Court has the resources to

¹²⁰ See Adler, *Revisiting the Colorado River Compact*, *supra* note 85, at 23.

¹²¹ *Id.*

¹²² *Id.* at 24.

¹²³ *Id.* at 25.

¹²⁴ See *Montana v. Wyoming*, 131 S. Ct. 1765, 1770-71 (2011).

¹²⁵ Adler, *Revisiting the Colorado River Compact*, *supra* note 85, at 23 (“[I]t took seven year for the legislatures of six of the seven states to actually ratify the [Colorado River Compact]. The seventh state, Arizona, did not ratify the Compact until 1944, following a series of failed efforts by the state to undermine it in the U.S. Supreme Court and elsewhere.”).

¹²⁶ *Montana*, 131 S. Ct. at 1777 (“We readily acknowledge that this area of law is far from clear.”).

¹²⁷ L. Elizabeth Sarine, *The Supreme Court's Problematic Deference to Special Masters in Interstate Water Disputes*, 39 *ECOLOGY L.Q.* 535, 553-55.

¹²⁸ Order Appointing Barton H. Thompson Special Master in the Case, *Montana v. Wyoming*, 129 S. Ct. 480 (2008), (No. 137).

¹²⁹ E.g., Carl Erhardt, *The Battle Over “The Hooch”: The Federal-Interstate Water Compact and the Resolution of Rights in the Chattahoochee River*, 11 *STAN. ENVTL. L.J.* 200, 213-14 (1992) (“[T]he Court is inherently incapable of fully understanding the technicalities that are necessary in providing for an equitable solution. While the Court in all earnestness may attempt to rule in a manner it perceives to be fair, the lack of truly informed decision-making in this process may cause unpredictable results.”).

attempt wading through these issues, not all water cases make it to the Supreme Court. This leaves the interpretation of a niche area of a law to judges who could be far less equipped. It should also be remembered that the heart of the litigation process is always adversarial,¹³⁰ hardly an environment conducive to compromise. States continually hauling each other into court will do little for regional amicability. In short, handling the water issues that will surely arise by adjudication only resembles sticking fingers in a leaking dam.

B. Congressional Intervention

A second option is to leave water apportionment to Congress. Compacts are not solely for water.¹³¹ Compacts have a lengthy, pre-Constitutional history as a colonial means of settling state border disputes.¹³² As the popularity of compacts grew, the founders decided to formalize the process and, incorporated it into the United States Constitution.¹³³ Known as the Compact Clause, it states that “No State shall, without the Consent of Congress . . . enter into any Agreement or Compact with another State”¹³⁴ Pursuant to the Compact Clause, valid compacts require not only the consent of the signatory states, but also the consent of Congress.¹³⁵ The Compact Clause reminds the states of the federal government’s power while allowing Congress to avoid drafting agreements, thereby promoting economy of effort on the federal level.¹³⁶

A problem arises if Congress attempts to revoke its consent unilaterally. While strong arguments exist for why Congress cannot do so once it has granted consent, the judiciary has never directly addressed this issue.¹³⁷

Regardless, Congress can achieve the same effect as revoking consent by adopting legislation directly addressing areas governed by a compact, or by passing laws “that provide for suspension, reapproval, or the ability to withdraw consent after a specified period of time.”¹³⁸ Mounting supply-side and demand-

¹³⁰ See Reid, *supra* note 119, at 159.

¹³¹ See e.g., CAL. VEH. CODE § 15000 (West 2012) (enacting the Driver License Compact); N.J. STAT. ANN. § 32:8-1 (West 2012) (forming an interstate compact between New Jersey and Pennsylvania creating the Delaware River Joint Toll Bridge Commission); ILL. STAT. ch. 45 § 20/1 (West 2012) (authorizing “reciprocal agreements with other states regarding the interstate transfer and out of state residence of conditionally released persons who are classified as sexually dangerous”).

¹³² Comment, *Congressional Supervision of Interstate Compacts*, 75 YALE L.J. 1416, 1422 (1966).

¹³³ U.S. CONST. art. I, § 10, cl. 3.

¹³⁴ *Id.*

¹³⁵ CAROLINE N. BROUN ET AL., *THE EVOLVING USE AND CHANGING ROLE OF INTERSTATE COMPACTS: A PRACTITIONER’S GUIDE* *passim* (2006).

¹³⁶ See Nathan C. Johnson, *Protecting Our Water Compacts: The Looming Threat of Unilateral Congressional Interaction*, 2010 WIS. L. REV. 875, 893 (2010).

¹³⁷ *Id.* at 892.

¹³⁸ *Id.* at 895.

side pressures, particularly from “water-poor” states, could cause Congress to undermine a compact, or attempt to revoke consent to a compact altogether.¹³⁹

States and Congress should avoid this approach altogether, because “[w]ithout some level of implied permanency, . . . [water compacts are] at best a phantom regulatory scheme wholly void of any ability to substantially manage the basin.”¹⁴⁰ If the state citizens bound by water compacts suspect congressional regulation, the long-standing system of governing water will be undermined, thus destroying the trust necessary to sustain water compacts. With constant potential of congressional intervention, states will be less inclined toward amicability toward each other.

C. Water Compact Amendment

The best approach is state negotiation. The affected states themselves, and the people “who live within, understand, and are fundamentally tied to the basin”¹⁴¹ are best qualified to manage the water that flows through it, rather than the “comfortably removed bureaucrats hundreds of miles away.”¹⁴² The founders understood this when creating the Compact Clause.¹⁴³ Amending and renegotiating these compacts could be very challenging for everyone involved, but it would present the best long-term results.¹⁴⁴ While states renegotiating their water compacts could present a situation verging on war,¹⁴⁵ recent evidence supports that states are capable of civilly approaching water compacts in this water-sensitive time.¹⁴⁶

One example is the recent Great Lakes Compact.¹⁴⁷ The Great Lakes is the largest fresh water system in the world, excluding the polar ice caps.¹⁴⁸ Signed in 2005, the compact was a large international effort, involved eight states (Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania,

¹³⁹ See *id.* at 878.

¹⁴⁰ *Id.* at 894-95.

¹⁴¹ *Id.* at 894.

¹⁴² *Id.*

¹⁴³ See Case Note, *Constitutional Law — Power of Congressional Committee to Investigate an Interstate Compact Denied Due to Lack of Grant of Specific Authority*, 31 FORDHAM L. REV. 581, 584-85 (1962).

¹⁴⁴ See Adler, *Revisiting the Colorado River Compact*, *supra* note 85, at 23-25.

¹⁴⁵ See *South Carolina v. North Carolina*, 130 S. Ct. 854, 876 (2010) (Roberts, C.J., dissenting).

¹⁴⁶ See *e.g.*, COUNCIL OF GREAT LAKES GOVERNORS, GREAT LAKES-ST. LAWRENCE RIVER BASIN WATER COMPACT, (2005) [hereinafter GREAT LAKES COMPACT], available at http://www.cglg.org/projects/water/docs/12-13-05/Great_Lakes-St_Lawrence_River_Basin_Water_Resources_Compact.pdf (providing a recent example of a successful, collaborative, inter-state water compact).

¹⁴⁷ See *id.*

¹⁴⁸ Jessica A. Bielecki, *Managing Resources with Interstate Compacts: A Perspective from the Great Lakes*, 14 BUFF. ENVTL. L.J. 173, 173 (2007).

Wisconsin), as well as the Canadian Provinces of Ontario and Quebec.¹⁴⁹ In addition to the different states and countries, the drafters solicited and considered public comments from businessmen to environmentalists.¹⁵⁰ The entire process took over four years.¹⁵¹

Rather than each state and province focusing on its particular water needs, the compact presents a collective focus on the particular water resource and its fragility.¹⁵² This resulted in the creation of a single binding set of standards to determine how each state and province can use water once allocated, whether allocation should be increased,¹⁵³ and how to promote conservation and increase use efficiency.¹⁵⁴

Congress granted consent in 2008.¹⁵⁵ This indicates that Congress approves such interstate cooperation, further diminishing the argument for congressional intervention. Such a sweeping and positive change should help assuage hesitations about compact amendment. If eight states and another country can reach such an equitable agreement, then the seven signatory states of the Colorado River Compact, as well as the signatories of other smaller compacts, can amend existing compacts to obtain similar results.¹⁵⁶

This is not to say that compact amendment is easy. Compacts can fail. The Apalachicola-Chattahoochee-Flint Basin Compact is an example. The states involved — Alabama, Florida, Georgia¹⁵⁷ — spent roughly two decades¹⁵⁸ in what has been described as a “water war”¹⁵⁹ over allocation of that basin, and entered into this compact as an effort to negotiate allocation.¹⁶⁰ The states could not reach an agreement despite six years of negotiation.¹⁶¹ Western states could face more difficulty than those faced by the signatory states of the Great Lakes Compact because eastern states use riparian water rights — treating water as

¹⁴⁹ Press Release, Council of Great Lakes Governors, Governors and Premiers Sign Agreements to Protect Great Lakes Water (Dec. 13, 2005), available at http://www.cglg.org/projects/water/docs/12-13-05/Annex_2001_Press_Release_12-13-05.pdf.

¹⁵⁰ See Bielecki, *supra* note 148, at 183-84.

¹⁵¹ See *id.* at 183.

¹⁵² See *id.* at 174-75.

¹⁵³ GREAT LAKES COMPACT, *supra* note 146, § 4.11.

¹⁵⁴ See *id.* at § 4.2.

¹⁵⁵ Press Release, Council of the Great Lakes Governors, President Bush Signs Great Lakes Compact (Oct. 3, 2008), available at <http://www.cglg.org/projects/water/docs/PressReleasePresidentSignsCompact10-3-08.pdf>.

¹⁵⁶ See COLO. REV. STAT. § 37-61-101 (West 2012).

¹⁵⁷ See Douglas L. Grant, *Interstate Allocation of Rivers Before the United States Supreme Court: The Apalachicola-Chattahoochee-Flint River System*, 21 GA. ST. U. L. REV. 401, 401 (2004) [hereinafter Grant, *Interstate Allocation*].

¹⁵⁸ *Id.*

¹⁵⁹ Dustin S. Stephenson, *The Tri-State Compact, Falling Waters And Fading Opportunities*, 16 J. LAND USE & ENVTL. L. 83, 84 (2000).

¹⁶⁰ Grant, *Interstate Allocation*, *supra* note 157, at 402.

¹⁶¹ *Id.*

common property rather than as private property as in prior appropriation.¹⁶²

Additionally, eastern states tend to have a greater abundance of water.¹⁶³ As such, eastern states are historically less prone to conflict compared to prior appropriation states.¹⁶⁴ However, it is possible, despite decades of reliance, for a water compact to be improved without copious litigation or congressional involvement, but rather by agreements between the states, just as was done when they first created these compacts. When examining all three options, the West should consider amending water compacts — the best long-term option for the strained water supply.

VI. CONCLUSION

Change in water law is inevitable. Population and demand for water continue to grow as water availability continues to shrink. This will lead to increased litigation. The new and clear decision in *Montana v. Wyoming*, if advanced by attorneys and relied on by judges, will compound water problems by legalizing harm to other water users. In such a predicament, leaving water compacts unamended is not a beneficial approach. Leaving these issues to judges encourages a diversity of jurisprudence, resulting in disparate outcomes. Furthermore, the nature of litigation will create opposition rather than cooperation. Additionally, Congress is too far removed from these unique interstate conflicts, which have long been an issue for the states, not the federal government. While it presents a difficult task, compact amendment is an issue best left to the respective states.

The fact that many western water compacts have lasted as long as they have testifies to the resilience of the prior appropriation system.¹⁶⁵ However, given that some of these compacts were based on inaccurate information, in addition to the recent climate, population, and jurisprudential changes, western states should give great consideration to amending their respective compacts. *Montana v. Wyoming* is a catalyst in bringing about this change.

¹⁶² See Joseph W. Dellapenna, *The Evolution of Riparianism in the United States*, 95 MARQ. L. REV. 53, 53-54 (2011).

¹⁶³ *Id.* at 53.

¹⁶⁴ See *id.* at 53-54.

¹⁶⁵ See A. Dan Tarlock, *The Future of Prior Appropriation in the New West*, 41 NAT. RESOURCES J. 769, 770 (2001) (“The distinguishing feature of prior appropriation is its continual evolution in response to a changing West. Because prior appropriation is grounded in both abstract principles of justice and hard experience, it has constantly had to adapt to changed conditions.”).