

“PERMIT” ME ANOTHER DRINK:
A PROPOSAL FOR SAFEGUARDING THE
WATER RIGHTS OF FEDERAL LANDS IN THE
REGULATED RIPARIAN EAST

*Jeremy Nathan Jungreis**

Federal lands in the eastern United States are at a crossroads. Water consumption in the East has increased at the same time that quality supplies have dwindled. With eastern states currently adopting comprehensive permit programs that allocate water resources to permitted users, federal lands can no longer assume that there will be adequate supplies on hand to meet mission requirements.

After a brief background on water law regimes across the United States, this Article identifies and discusses the various mechanisms by which federal installations may acquire water rights under state and federal law. It then discusses the degree that states may exercise their police powers to limit or curtail the exercise of federal rights.

The Article concludes by proposing a compliance strategy for federal installations in the eastern United States that avails itself of state and federal water rights. This strategy commends federal agencies to conditionally comply with state water allocation laws as a matter of comity while maintaining federal prerogatives and good relationships with state permitting agencies.

Eastern states are wrangling over a question that suddenly seems to matter very much: Whose water is it?¹

I. INTRODUCTION

Alabama, Georgia, and Florida recently sued each other in three different federal district courts over the use of water from the Chattahoochee River, and Atlanta grows thirstier by the day.² Virginia and Maryland took their grievances over consumption of the Potomac River to the U.S. Supreme Court,³ while sprawl and demand for water in the Washington, D.C.,

* LL.M., The George Washington University Law School, 2004; J.D., Florida State University College of Law, 1996; B.S., University of Central Florida, 1993. Mr. Jungreis is a major in the United States Marine Corps and currently serves as a regional environmental counsel for Marine Corps installations in the western United States. This Article is adapted from the author's LL.M. thesis. It represents only the views of the author, unless otherwise attributed, and should not be construed as representing the official position of any federal agency. This Article is dedicated to Jeanette and Nathan Jungreis—my wife and son—who make it all worthwhile.

¹ Douglas Jehl, *A New Frontier in Water Wars Emerges in East*, N.Y. TIMES, Mar. 3, 2003, at A1.

² See generally Dustin S. Stephenson, *The Tri-State Compact: Falling Waters and Fading Opportunities*, 16 J. LAND USE & ENVTL L. 83, 84–85 (2000) (discussing the Chattahoochee River as a water resource). See also COUNCIL OF STATE GOVERNMENTS, TRENDS ALERT: WATER WARS 2 (July 2003) [hereinafter WATER WARS] (discussing effects of urban sprawl and Atlanta's increased reliance on the Chattahoochee for water supply) (on file with the Harvard Environmental Law Review).

³ *Virginia v. Maryland*, 540 U.S. 56 (2003).

metropolitan area show no sign of abating.⁴ Coastal groundwater aquifers from Maine to Florida are experiencing “dewatering,”⁵ land subsidence, and salt water intrusion⁶ as a result of poor management and over-pumping.⁷ Can this be the American East—where water has always been plentiful?

The reality of a finite water resource is a wake-up call for federal installations⁸ in the eastern United States.⁹ With few exceptions, federal lands are not able to fulfill their statutory obligations without an adequate water supply.¹⁰ The eastern states have had to change with the times, and federal installations in the East are going to have to change likewise. Increased demand¹¹ and a dwindling supply¹² of good quality water have prompted many eastern states to overhaul their common law water allocation systems

⁴ See generally Olivia S. Choe, *Appurtenancy Reconceptualized: Managing Water in an Era of Scarcity*, 113 YALE L.J. 1909, 1910–11 (2004) (stating that water shortages in the eastern United States are expected to continue for years to come).

⁵ See *infra* note 320 for discussion of aquifer “dewatering.”

⁶ Saltwater intrusion occurs in coastal aquifers when fresh water is depleted by over-draft and heavier saltwater, normally contained in the deeper regions of the aquifer, is able to percolate up and contaminate the freshwater supply. See Wendy B. Davis, *Reasonable Use Has Become the Common Enemy: An Overview of the Standards Applied to Diffused Surface Water and the Resulting Depletion of Aquifers*, 9 ALB. L. ENVTL. OUTLOOK J. 1, 4 (2004) (citing Florida Water Management District manual).

⁷ See Choe, *supra* note 4, at 1910–12; WATER WARS, *supra* note 2, at 9–13.

⁸ The term “federal installation” as used in this Article encompasses all federally owned lands that withdraw or divert large quantities of water in furtherance of their statutory missions. This Article does not address federal contract rights in water, nor water right acquisition on Indian lands, though it is worth noting that Indian reservations may face obstacles in establishing water rights in evolving eastern water systems similar to those faced in the West. See generally Judith V. Royster, *Winters in the East: Tribal Reserved Rights to Water in Riparian States*, 25 WM. & MARY ENVTL. L. & POL’Y REV. 169 (2000) [hereinafter Royster, *Winters in the East*].

⁹ The terms “eastern United States” or “East,” as used herein, refer to the states east of Kansas City, Missouri, the de facto dividing line between eastern and western water regimes. See Joseph W. Dellapenna, *Issues Arising Under Riparian Rights: Replacing Common-Law Riparian Rights With Regulated Riparianism*, in WATER RIGHTS OF THE EASTERN UNITED STATES 35, 36 (Kenneth W. Wright ed., 1998) [hereinafter Dellapenna, *Replacing Common-Law*]. See generally Bernhard Grossfeld, *Geography and Law*, 82 MICH. L. REV. 1510 (1984).

¹⁰ See William A. Wilcox, Jr., & David Stanton, *Maintaining Federal Water Rights in the Western United States*, ARMY LAW., Oct. 1996, at 3, 10 (“Survival of one’s business—be it ranching, farming, recreation or military training—depends on water.”).

¹¹ Cities and coastal towns are seeking to increase their water usage to support burgeoning populations. See WATER WARS, *supra* note 2, at 12–13; Choe, *supra* note 4, at 1910.

¹² Many traditional water supplies have become too polluted to support traditional water uses. See Dellapenna, *Replacing Common-Law*, *supra* note 9, at 36. Further limiting water availability, agricultural interests resist efforts to modify wasteful irrigation practices that might free up additional supply, environmental groups lobby to have water left in place to benefit natural resource values, and Indian tribes seek to have their traditional water rights restored. See WATER WARS, *supra* note 2, at 5; A. Dan Tarlock, *Water Law Reform In West Virginia: The Broader Context*, 106 W. VA. L. REV. 495, 501 (2004) [hereinafter Tarlock, *Water Law Reform*]. All of these supply pressures confront a suddenly finite resource that may soon be further degraded by global warming and associated climatological change. See *id.* at 508–09; WATER WARS, *supra* note 2, at 9–10.

in favor of a regulatory hybrid that Professor Joseph W. Dellapenna has termed “regulated riparianism.”¹³

Regulated riparianism borrows from eastern and western water doctrines and injects an element of command and control regulation into a common law that traditionally was characterized by enforcement of water rights through private judicial action.¹⁴ Though requirements vary from state to state,¹⁵ the salient characteristic of regulated riparianism is the “requirement that generally no water is to be withdrawn from a water source without a permit from the state where the withdrawal occurs.”¹⁶ Twenty eastern states now impose some form of regulated riparianism on large quantity water users of surface water, groundwater or both,¹⁷ and that number is expected to grow in the near future.¹⁸

Many federal installations in the East, as large quantity water users, have been asked to register usage with states and apply for regulated riparian permits as a condition of continued withdrawal. Some have queried whether they are obliged to comply with regulated riparian requirements—which can be costly and time consuming—in the absence of explicit Congressional direction on the matter.¹⁹ They opine that federal installations may have the ability to assert “federal water rights,”²⁰ and need not comply with state water allocation requirements unless otherwise required by federal law.²¹ They suggest that federal installations negotiate Memoranda of Agreement with states in lieu of obtaining permits.²²

¹³ See Joseph W. Dellapenna, *The Law of Water Allocation in the Southeastern States at the Opening of the Twenty First Century*, 25 U. ARK. LITTLE ROCK L. REV. 9, 10 (2002) [hereinafter Dellapenna, *Southeastern States*]. See also Steven T. Miano & Michael E. Crane, *Eastern Water Law: Historical Perspectives and Emerging Trends*, 18 NAT. RESOURCES & ENV'T, Fall 2003, at 14. Other commentators eschew the regulated riparian label, describing eastern water allocation systems as “non-temporal priority permit systems.” See, e.g., Peter N. Davis, *Australian and American Water Allocation Systems Compared*, 9 B.C. INDUS. & COM. L. REV. 647, 697 (1967-1968).

¹⁴ See Miano & Crane, *supra* note 13, at 14–17.

¹⁵ Cf. George A. Gould, *Water Rights Systems*, in WATER RIGHTS OF THE EASTERN UNITED STATES 7, 10 (Kenneth W. Wright ed., 1998) (“[W]ater law is primarily a matter of state law and, technically, there are 50 systems of water law in the United States.”).

¹⁶ Dellapenna, *Southeastern States*, *supra* note 13, at 34.

¹⁷ See Debra L. Freeman, *Introduction*, in WATER RIGHTS OF THE EASTERN UNITED STATES 1, 3 (Kenneth W. Wright ed., 1998) (listing regulated riparian states).

¹⁸ See Miano & Crane, *supra* note 13, at 18.

¹⁹ See Thomas Kathe, *Federal Water Rights, Consumptive Use Permits, and Utility Privatization* 18–19, 26–27 (Feb. 26, 2004) (unpublished Naval Facilities Engineering Command training publication on file with the Harvard Environmental Law Review). See also Michael Palmer, *Federal Water Rights: Proposed Department of Defense Policy Guidance* 3–4 (Feb. 23, 2003) (unpublished article draft on file with the Harvard Environmental Law Review).

²⁰ As used herein, “federal water right” means the legally protected right of a federal installation to utilize water independent of state law governing water allocation. For a thorough discussion of federal water rights, see *infra* notes 132–182 and accompanying text. See also Michael C. Blumm, *Reserved Water Rights*, in 4 WATERS & WATER RIGHTS § 37.03 (Robert E. Beck ed., repl. vol. 2004) [hereinafter Blumm, *Reserved Water Rights*].

²¹ Kathe, *supra* note 19, at 26; Palmer, *supra* note 19, at 46–48.

²² Kathe, *supra* note 19, at 26; Palmer, *supra* note 19, at 46–48.

Regulated riparianism, though in many ways an improvement over the common law of “reasonable use,”²³ poses a compliance dilemma for federal installations in the East. They can comply with state laws that they are arguably not required to obey²⁴ or risk impairment of state law water rights to which they might otherwise be entitled.²⁵

Even if legally permissible, is foregoing a state water allocation permit a good idea? After reviewing the fundamental principles of common law and regulated riparian systems in Part II, Part III endeavors to answer that question. Identifying the best federal compliance strategy entails an inquiry into the nature of federal property rights and the scope of state regulatory power over resources in light of federal sovereign immunity. After completing this inquiry, this Article posits that federal installations in the East, though not legally required to do so, should nevertheless conditionally comply with regulated riparian requirements to the extent such requirements do not conflict with federal law and are not reasonably anticipated to interfere with the accomplishment of the federal installation’s mission.

No established federal policy governs acquisition and management of water rights on federal installations,²⁶ but policy is needed to guide federal decision-making.²⁷ Part IV of this Article proposes a framework for federal compliance with regulated riparian requirements in the absence of a unified federal policy.

II. BACKGROUND PRINCIPLES OF WATER ALLOCATION LAW

Before federal practitioners can accurately evaluate the compliance obligations of federal installations, they must first understand the nature of water rights and the manner in which they are created. This requires an inquiry into state and federal common law, as well as the manner in which each has been modified by statute.²⁸ After reviewing common law doc-

²³ See *infra* notes 41–49 and accompanying text for a discussion of the “reasonable use” standard.

²⁴ See *infra* notes 199–280 and accompanying text for a discussion of federal sovereign immunity.

²⁵ See *infra* notes 300–312 and accompanying text.

²⁶ See generally Memorandum for the Assistant Attorney General, Land and Natural Resources Division, United States Department of Justice, Theodore B. Olson, Assistant Attorney General, Office of Legal Counsel, United States Department of Justice, 6 Op. Off. Legal Couns. 328, 355 (1982) [hereinafter Olson Memo] (“[T]here has never been a uniform policy . . . regarding the extent to which the federal government should or would comply with state laws and procedures in acquiring water rights.”). The Olson Memo provides federal agencies with some guidance on proper administration of water rights, but by its own terms, the memo is geared toward administration of western lands. *Id.* at 330. For further discussion of the Olson Memo, see *infra* notes 158–175 and accompanying text.

²⁷ The regulatory posture of the land management agencies is much the same now as it was in 1982 when the Olson Memo was issued. Most agencies retain their own unique approach to water rights management. See, e.g., Palmer, *supra* note 19, at 4 (discussing the different approaches used by the military branches).

²⁸ Because nearly all of the relevant precedent pertaining to water rights on the federal

trines, the next step is to examine regulated riparian systems in order to identify salient characteristics of these regimes and their likely impact on federal operations.

A. *Water Rights, the Common Law, and the Winters Doctrine*

A “water right” is a private property right, but not in the traditional sense.²⁹ A water user does not own a water resource such as an aquifer or a river, but rather owns an inchoate right to use water from the resource—a “usufructuary” right.³⁰ In the western United States, once water is withdrawn from a water resource for beneficial use, it is generally recognized as the personal property of the diverter.³¹ Conversely, in the eastern United States the right to use water is a real property right that runs with land appurtenant to the water resources.³²

Prior to the advent of regulated riparianism, there were essentially three common law systems of water law in the United States: riparian systems in the East, prior appropriation systems in the West, and hybrid systems that combined elements of the first two in states such as California.³³ Though states often apply slightly different rules to surface and groundwater, most state water regimes can be characterized generally as riparian or appropriative for both.³⁴

1. *Common Law Riparian Doctrine*

The riparian doctrine is utilized today in some form by all of the states east of Kansas City.³⁵ It is a doctrine derived from the English common law and is premised upon an abundance of water.³⁶ Where water is plentiful, there is no need to prioritize uses. In riparian states, one need only buy riparian property—land adjacent to a surface water or overlying

lands is derived from litigation in the western United States, see Joseph W. Dellapenna, *Regulated Riparianism*, in 1 *WATERS & WATER RIGHTS* § 9.06(b)(2), at 9-193 (Robert E. Beck ed., LexisNexis 2001) [hereinafter Dellapenna, *Regulated Riparianism*], federal practitioners must familiarize themselves with western water law. Regulated riparianism borrows salient characteristics of western water law—most notably temporal priority and quantification of water rights, see Royster, *Winters in the East*, *supra* note 8, at 189-90, and eastern courts are likely to extrapolate from western precedent to decide water allocation disputes that involve the federal government.

²⁹ See generally Robert E. Beck, *The Legal Regimes*, in 1 *WATER & WATER RIGHTS* § 4, at 4-1 to 4-2 (Robert E. Beck ed., repl. vol. 2001) (water right is a “court-protected” ability to use water in prescribed ways); see also Amy K. Kelley, *Federal-State Relations in Water*, in 4 *WATER & WATER RIGHTS* § 36, 36-8 n.16 (Robert E. Beck ed., repl. vol. 2004).

³⁰ See Tarlock, *Water Law Reform*, *supra* note 12, at 514-15.

³¹ See *State v. Superior Court of Riverside County*, 93 Cal. Rptr. 2d 276, 280-81 (Cal. Ct. App. 2000).

³² See Gould, *supra* note 15, at 10-11.

³³ DAVID H. GETCHES, *WATER LAW IN A NUTSHELL* 4-8 (1997).

³⁴ See generally Dellapenna, *Southeastern States*, *supra* note 13, at 44.

³⁵ See Dellapenna, *Southeastern States*, *supra* note 13, at 30-31.

³⁶ See *WATER WARS*, *supra* note 2, at 6.

groundwater—to acquire a riparian right.³⁷ The problem is that the riparian right acquired is unquantified and subject to judicial reallocation when competing users enter the watershed.³⁸

Under the classical formulation of the riparian doctrine, the “natural flow theory,” landowners adjacent to water resources have the right to utilize an essentially unlimited amount of water on their land.³⁹ State courts recognized, however that an absolute right to unlimited water use by all riparian owners was a physical impossibility.⁴⁰ Therefore, courts replaced the natural flow theory with some form of “reasonable use” standard.⁴¹ Under the reasonable use standard, riparians may, at any time, make “reasonable” use of water from an adjacent water source to the extent that such use does not unreasonably interfere with the correlative use of other riparians.⁴² Water must generally be used on riparian land, and “domestic” uses (such as irrigation) are generally preferred to municipal uses such as water supply.⁴³ Though an improvement over the natural flow theory, the reasonable use standard is highly subjective⁴⁴ and contains no mechanism to protect public resource values.⁴⁵ Quantification of a water right can only occur through private judicial action, an expensive and cumbersome process. Even after the entry of judgment, the court’s decision is only binding upon the parties to the lawsuit.⁴⁶ When new riparian users call upon the resource, which they have every right to do, the entire state court calculation of reasonableness may no longer be valid.⁴⁷ Moreover, the reasonable use standard may not adequately protect some of today’s most important societal uses, such as the provision of potable drinking water, because the water users usu-

³⁷ See Dellapenna, *Replacing Common-Law*, *supra* note 9, at 37.

³⁸ *Id.* at 38.

³⁹ See Royster, *Winters in the East*, *supra* note 8, at 186 n.79.

⁴⁰ See generally H. FARNHAM, 1 *THE LAW OF WATERS AND WATER RIGHTS* 285 (1904) (“[T]o have the natural state of the water maintained to its full extent would prevent any use of it by others having an equal right to its use.”); see also Joseph W. Dellapenna, *Riparian Rights*, in 1 *WATER & WATER RIGHTS* § 7.02(c), at 7-32 to 7-33 (Robert E. Beck ed., 2001) [hereinafter Dellapenna, *Riparian Rights*].

⁴¹ See GETCHES, *supra* note 33, at 47–48; A. DAN TARLOCK, *LAW OF WATER RIGHTS AND RESOURCES* § 3:12 (2000) [hereinafter TARLOCK, *WATER RIGHTS AND RESOURCES*]. All of the eastern states have essentially adopted a reasonable use (or similar correlative rights) standard for groundwater allocation as well. See GETCHES, *supra* note 33, at 248; Dellapenna, *Southeastern States*, *supra* note 13, at 43–44.

⁴² See, e.g., *Harris v. Brooks*, 283 S.W.2d 129, 133 (Ark. 1955).

⁴³ See Dellapenna, *Replacing Common-Law*, *supra* note 9, at 37.

⁴⁴ See Dellapenna, *Southeastern States*, *supra* note 13, at 14 (describing reasonable use standard as a “relational test, a weighing of the social value of . . . uses against each other to determine which is more valuable to society”). Results in riparian disputes are often unpredictable because the decision may turn on the judge’s own notions of equity. Additionally, identical uses under identical circumstances may result in different results depending on the state court and the equitable factors the judge considers. This kind of unpredictability is a deterrent to private investment in water-dependent industries. *Id.*

⁴⁵ *Id.*

⁴⁶ See Dellapenna, *Replacing Common-Law*, *supra* note 9, at 38.

⁴⁷ See Dellapenna, *Southeastern States*, *supra* note 13, at 16–17.

ally are not riparian to the water resource.⁴⁸ Because riparian rights may not easily be alienated from the adjacent real property to which they adhere, it may be difficult for states and local governments to reallocate water to more socially or economically productive uses.⁴⁹

2. *Common Law Prior Appropriation Doctrine*

When American settlers moved into the arid western United States, they brought the common law riparian doctrine with them.⁵⁰ These new westerners quickly learned, however, that riparian principles make little sense when water is scarce. Riparian uses were limited to lands adjoining water resources, but the water needs of settlers—for mining, irrigation or drinking water supply—occurred on lands that were often many miles removed from the water. Compounding the problem, the limited water resources available frequently were situated on federal public domain⁵¹ lands and were putatively the property of the federal government under riparian principles.⁵² Miners and ranchers invoking self-help on the public domain appropriated water to support their activities, a practice that Congress first ignored and then encouraged by granting fee title to those who put land and water to beneficial use.⁵³ Western legislatures codified the customs of the miners and ranchers, thereby creating the prior appropriation doctrine that prevails in *most*⁵⁴ of the western United States today.

⁴⁸ *Id.* at 17.

⁴⁹ See Dellapenna, *Replacing Common-Law*, *supra* note 9, at 38.

⁵⁰ See generally Mark T. Kanazawa, *Efficiency in Western Water Law: The Development of the California Doctrine, 1850–1911*, 27 J. LEGAL STUD. 159, 162–65 (1998).

⁵¹ The federal “public domain” includes lands that are open to settlement, public sale, or other disposition under the federal public land laws, and that are not exclusively dedicated to any specific governmental or public purpose. See, e.g., *Fed. Power Comm’n v. Oregon*, 349 U.S. 435, 443–44 (1955). Public domain lands are for the most part managed by the Department of the Interior, Bureau of Land Management. See *United States v. City and County of Denver*, 656 P.2d 1, 5 (Colo. 1982).

⁵² See Dellapenna, *Southeastern States*, *supra* note 13, at 20.

⁵³ See Dellapenna, *Southeastern States*, *supra* note 13, at 20–21. See generally *California v. United States*, 438 U.S. 645 (1978) (discussing Congressional approval of appropriation of water resources on the public domain). See also *Desert Land Act of 1877*, 43 U.S.C. § 321 (2000); *General Mining Law of 1866*, 43 U.S.C. § 1661 (2000). “Beneficial use” is a term of art that is defined differently by each prior appropriation state.

⁵⁴ As previously noted, some of the more temperate western states, primarily the Pacific and Central Plains states, still utilize vestigial elements of riparian law. See Dellapenna, *Southeastern States*, *supra* note 13, at 21–22. In many of these states remnants of riparian law have little impact on surface water management—primarily because riparian uses generally must be registered within a statutory period and may be declared inferior to perfected non-riparian appropriative rights if not timely registered. See, e.g., *In re Water of Hallett Creek Stream Sys.*, 749 P.2d 324, 336–38 (Cal. 1988) (noting authority to subordinate unexercised riparian right to previously perfected appropriative rights). *But cf.* *City of Barstow v. Mojave Water Agency*, 5 P.3d 853, 864 (Cal. 2000) (stating that exercised riparian rights retain priority over appropriative rights in times of shortage).

Unlike riparian doctrine, prior appropriation is a private property-oriented approach to water allocation⁵⁵ that operates upon the principle of “first in time, first in right.”⁵⁶ The first appropriator of a water resource—whether or not the owner of riparian land—obtains a legally protected state law right to take a fixed quantity of water from the resource by diverting (or withdrawing in the context of an aquifer) the water from the resource and putting it to “beneficial use.”⁵⁷ In times of shortage, the senior appropriator has a right to unimpeded use of his quantified water right regardless of the adverse effect on junior appropriators in the watershed. Junior appropriators lose everything before a senior appropriator loses anything.⁵⁸

Appropriative rights are personal property and can be sold or transferred in accordance with state regulation.⁵⁹ They cannot be abolished by government without payment of just compensation.⁶⁰ Appropriators are not required to be efficient in their water usage, though appropriative rights are subject to forfeiture for non-use.⁶¹ Prior appropriation developed under the common law, but most prior appropriation states enacted statutes to regulate “perfection,” maintenance and transfer of appropriative rights.⁶²

3. Federal Reserved Rights and the Winters Doctrine

The federal government owned most of the land in the western United States during the nineteenth century as the prior appropriation doctrine de-

⁵⁵ See generally Gould, *supra* note 15, at 10–12.

⁵⁶ See Dellapenna, *Southeastern States*, *supra* note 13, at 22.

⁵⁷ Domestic, agricultural, industrial and municipal uses are recognized as beneficial uses in virtually every state. See GETCHES, *supra* note 33, at 97.

⁵⁸ See Dellapenna, *Southeastern States*, *supra* note 13, at 24.

⁵⁹ See GETCHES, *supra* note 33, at 156.

⁶⁰ See, e.g., *Hage v. United States*, 35 Fed. Cl. 147 (1996); *Tulare Lake Basin Water Storage Dist. v. United States*, 49 Fed. Cl. 313 (2001). Interestingly, generally prior appropriation states restricted or abolished existing but unexercised riparian rights to some degree upon implementing appropriative systems without paying compensation. See GETCHES, *supra* note 33, at 85–88. The one exception is Oklahoma, where the state supreme court held that the elimination of unexercised riparian rights was a taking. See *Franco-Am. Charolaise v. Okla. Water Res. Bd.*, 855 P.2d 568, 577 (Okla. 1990).

⁶¹ In many ways appropriators have an incentive to be *inefficient* in their water usage. They initially use the maximum amount of water possible in order to establish a baseline of historical use that can be quantified in future water right adjudications. The larger the water right, the more valuable it is. After adjudication of the right, an appropriator has every incentive to continue using an excessive amount of water in order to foreclose other appropriators from asserting forfeiture through non-use. Dellapenna, *Replacing Common-Law*, *supra* note 9, at 39–40.

⁶² See generally GETCHES, *supra* note 33, at 74–77. In western states, water rights must be “perfected” under state law before they can be enforced against competing users. State procedures for perfecting a water right claim vary significantly but generally require satisfaction of common law elements, registration of historic usage, public notice and comment, payment of filing fees and submission of a permit application. *Id.* at 138–49. Eastern states are beginning to require perfection of water rights as well. See *infra* notes 126–131 and accompanying text.

veloped,⁶³ but it gave little thought to its own future water needs.⁶⁴ Congressional intent through much of the nineteenth century was to privatize and dispose of the public domain as quickly as possible—Manifest Destiny required no less.⁶⁵ Over time, private water uses vested under state law, and courts recognized these uses as private property rights enforceable against competing appropriators—including the federal government.⁶⁶

As the United States shifted its focus from disposal of the public lands to retention and multiple use-sustainable yield management, federal agencies gradually recognized that they, too, needed water to accomplish their statutory directives. Yet, most Congressional enactments pertaining to the federal lands were silent on water rights.⁶⁷ Because of this silence, most water law practitioners assumed that outside the context of federal navigation and reclamation projects—for which the federal government could claim minimum flows in accordance with the navigational servitude doctrine,⁶⁸ the federal government could only obtain water rights in accordance with state law.⁶⁹ The first clear indication to the contrary came in *Winters v. United States*.⁷⁰

Winters involved a dispute over the waters of the Milk River in Montana. The United States, as trustee for Indian tribes inhabiting the Fort Belknap Indian Reservation, sought to enjoin upstream diversions that interfered with tribal irrigation projects on the reservation.⁷¹ The upstream defendants perfected a state law water right after the creation of the res-

⁶³ The federal government still owns 28% of the land in the United States—the vast majority in the West and Alaska. See GEORGE CAMERON COGGINS ET AL., *FEDERAL PUBLIC LAND AND RESOURCES LAW* 10 (2002).

⁶⁴ See John D. Leshy, *Water Rights for New Federal Land Conservation Programs: A Turn of the Century Evaluation*, 4 U. DENV. WATER L. REV. 271, 274 (2001) (noting that the federal government did little during the nineteenth century to prevent private use of water on federal land because “conserving land for national purposes” was not a priority).

⁶⁵ See generally *Pollard’s Lessee v. Hagan*, 44 U.S. (3 How.) 212 (1845).

⁶⁶ See, e.g., *United States v. New Mexico*, 438 U.S. 696, 713 n.21 (1976) (stating that senior state law rights have priority over subsequently created federal reserved rights).

⁶⁷ See COGGINS ET AL., *supra* note 63, at 538–39. Congress’s silence on water rights issues largely ended about twenty years ago. Since that time, Congress has routinely directed the disposition of water rights when it reserves public domain lands. See Leshy, *supra* note 64, at 279.

⁶⁸ See, e.g., *United States v. Rio Grande Dam & Irrigation Co.*, 174 U.S. 690, 703 (1898) (noting that state and private rights are “limited by the superior power of the General Government to secure the uninterrupted navigability of all navigable streams within the limits of the United States”). See also Jeremy N. Jungreis, *Drawing Lines in the Shifting Sands of Cape Canaveral: Why Common Beach Erosion Should Not Yield a Compensable Taking Under the Fifth Amendment*, 11 J. LAND USE & ENVTL. L. 375, 387 (1996) (discussing ability of federal government to displace state law rights without compensation in furtherance of the dominant public servitude in navigation).

⁶⁹ See Frank J. Trelease, *Uneasy Federalism—State Water Laws and National Water Uses*, 55 WASH. L. REV. 751, 758–62 (1980) [hereinafter Trelease, *Uneasy Federalism*].

⁷⁰ 207 U.S. 564 (1908). The result in *Winters* was not entirely surprising given the dicta in *Rio Grande Dam & Irrigation Co.*, 174 U.S. at 703 (noting federal government’s broad powers to protect its non-navigation related property rights).

⁷¹ *Winters*, 207 U.S. at 576.

ervation but prior to the construction of the Indian irrigation project. They argued that their beneficial use was senior under state law because it predated the Indian irrigation project.⁷² The Supreme Court held that seniority of appropriation under state law was not controlling because Congress impliedly reserved a sufficient quantity of water, as of the date of the Fort Belknap reservation, to fulfill the purposes of the reservation.⁷³ The Court reasoned that Congress had the power to withdraw⁷⁴ water on the public domain from appropriation under state law, and had impliedly done so at Fort Belknap.⁷⁵

Throughout the first half of the twentieth century most legal scholars believed that *Winters* was a peculiarity of Indian law.⁷⁶ A dynamic Supreme Court under the leadership of Chief Justice Earl Warren saw things differently. In 1963 the Court decided *Arizona v. California*⁷⁷ and explicitly recognized that federal reserved rights can attach to any federal land reserved from the public domain.⁷⁸ The Court reaffirmed its commitment to federal reserved rights in *Cappaert v. United States*,⁷⁹ hinting that *Winters* rights extend to groundwater.⁸⁰ In *Cappaert*, defendant landowners irrigated their land with groundwater in accordance with Nevada law but depleted water levels in an underground pool at the Devils Hole National Monument. Through Chief Justice Burger, the unanimous Court held that federal reserved rights prevent diversion of groundwater that is physically interrelated with surface water if such diversion interferes with the Congressional purpose for the federal reservation.⁸¹ The Court did not squarely decide the applicability of federal reserved rights in groundwater because it concluded that the underground pool at Devils Hole was “surface water.”⁸²

⁷² *Id.* at 577.

⁷³ *Id.* at 577–78.

⁷⁴ Although often used in the same context, the terms “withdrawal” and “reservation” have distinct meanings. See *Sierra Club v. Block*, 622 F. Supp. 842, 854 (D. Colo. 1985). “Withdrawal” generally refers to the act of removing public domain lands from particular uses such as mining, homesteading, or grazing. *Id.* at 854–55. “Reservation,” on the other hand, generally refers to Congressional or Executive dedication of federal lands to specific federal purposes. *Id.* at 855.

⁷⁵ *Winters*, 207 U.S. at 577. The *Winters* Court seemed to base its decision largely on equitable grounds—namely, it would have been unfair for Congress to create an agriculturally oriented Indian reservation pursuant to a treaty without reserving sufficient water to accomplish the agricultural purpose designated. *Id.* at 576.

⁷⁶ See, e.g., Frank J. Trelease, *Federal Reserved Water Rights Since PLLRC*, 54 DENVER U. L. REV. 473, 475 (1977) (“At no time prior to 1955 did I ever hear a suggestion that the reserved rights doctrine was anything but a special quirk of Indian water law.”).

⁷⁷ 373 U.S. 546 (1963).

⁷⁸ *Id.* at 601.

⁷⁹ 426 U.S. 128 (1976).

⁸⁰ *Id.* at 142–43.

⁸¹ *Id.* at 143.

⁸² *Id.* at 142. The applicability of federal reserved rights in groundwater is technically still an open question, though the overwhelming weight of authority is that federal reserved rights can extend to groundwater. See, e.g., *Confederated Salish & Kootenai Tribes of the Flathead Reservation v. Stults*, 59 P.3d 1093, 1099 (Mont. 2002); *In re General Adjudication of All Rights to Use Water in the Gila River System and Source*, 989 P.2d 739 (Ariz.

The Supreme Court reversed course (at least partially) in *United States v. New Mexico*,⁸³ narrowing the application of federal reserved rights to situations where water is necessary to support the “primary purpose” of a reservation.⁸⁴ After *United States v. New Mexico*, federal agencies must obtain water for “secondary purposes” of the reservation under state law. *New Mexico* did not, as some westerners fervently hoped,⁸⁵ eliminate the *Winters* doctrine. It simply clarified that federal reserved rights are only available if Congressional intent for a particular reservation would be significantly frustrated by state water law.⁸⁶

Winters and its progeny superimpose an implied federal water right—requiring no specific triggering mechanism other than the reservation itself—onto state prior appropriation systems that rely on water being put to a “beneficial use” on a certain date.⁸⁷ This is not always a comfortable fit in state water rights adjudications. Federal reserved water rights are difficult to quantify,⁸⁸ and the time of federal reservation often predates even the most senior state law appropriations.⁸⁹ Perhaps this explains why, with some exceptions, state courts are a hostile forum for the assertion of federal water rights.⁹⁰ In Part III, this Article will assess the potential applicability of fed-

1999); Robert Anderson, *United States & Lummi Indian Nation v. Washington*, WATER RESOURCES COMMITTEE NEWSL. A.B.A., June 2003, at 11. *But see In re General Adjudication of All Rights to Use Water in the Big Horn River Sys.*, 753 P.2d 76, 99–100 (Wyo. 1988) (declining to apply reserved rights to groundwater notwithstanding acknowledgment that there was no logical reason to treat surface and groundwater differently), *aff'd on other grounds by an equally divided Court sub nom.*, *Wyoming v. United States*, 492 U.S. 406 (1989).

⁸³ 438 U.S. 696 (1978).

⁸⁴ In *United States v. New Mexico* the U.S. Forest Service sought to obtain federal reserved water rights for wildlife management and recreation. *Id.* at 705. The Supreme Court construed the 1897 Forest Service Organic Act to reserve water only for timber and watershed management, the primary purposes of the reservation. Wildlife management and recreation were secondary uses for which the Forest Service would need to obtain water in accordance with state law. *Id.* at 711–12. Arguably the *New Mexico* majority overlooked significant legislative history indicating the preservation of wildlife was a significant purpose behind the 1897 Act. *See id.* at 721 (Powell, J., dissenting).

⁸⁵ *See, e.g.*, Trelease, *Uneasy Federalism*, *supra* note 69, at 758–62.

⁸⁶ *See* Olson Memo, *supra* note 26, at 349–50.

⁸⁷ *See* COGGINS ET AL., *supra* note 63, at 514.

⁸⁸ Federal reserved water rights support current and *future* water needs of a federal reservation, *see* *Arizona v. California*, 373 U.S. 546, 600 (1963), and theoretically may expand or constrict over time. *See* Olson Memo, *supra* note 26, at 355–56. Most state law prior appropriative regimes do not provide for future increases in use for changed circumstances. *Id.*

⁸⁹ *See* Blumm, *Reserved Water Rights*, *supra* note 20, § 37.01(c)(1).

⁹⁰ *See, e.g.*, *United States v. Idaho*, 23 P.3d 117, 126 (Idaho 2001) (holding that wildlife refuge on islands that protect migratory birds from predation does not require water notwithstanding strong evidence that islands would cease to provide adequate nesting habitat without water); *Potlatch Corp. v. United States*, 12 P.3d 1260 (Idaho 2000) (reversing Supreme Court of Idaho’s own decision of previous year after election defeat of the justice that authored the opinion to hold that reserved water rights do not extend to wilderness reservations); *see also* Michael C. Blumm, *Reversing the Winters Doctrine?: Denying Reserved Rights For Idaho Wilderness and Its Implications*, 73 U. COLO. L. REV. 173, 222–24 (2002) [hereinafter Blumm, *Denying Reserved Rights*]. *But cf.* COGGINS ET AL., *supra*

eral reserved rights (and other “federal” water rights)⁹¹ in the eastern United States.

B. Regulated Riparianism

The advent of regulated riparianism in the East is a predictable response to population growth and increased per capita water consumption.⁹² Common law riparian doctrine broke down in the East for the same reasons it failed in the West—namely, the reasonable use standard makes little sense when there is not enough water to go around.⁹³ In 1957, Iowa enacted what is considered the first comprehensive regulated riparian statute.⁹⁴ With the exception of Mississippi,⁹⁵ all of the eastern states that modified their common law system essentially followed Iowa’s example. Rather than enact prior appropriation systems, which some states seriously considered,⁹⁶ twenty eastern states enacted some form of administrative permit system to control water allocation.⁹⁷ In these states an “expert” state regula-

note 63, at 547 (“[S]urprising some observers, state law appropriators have not always come out ahead in state court adjudications, because state judges have for the most part appeared to make a conscientious effort to apply the principles of federal law that govern the *Winters* doctrine.”).

⁹¹ See *infra* notes 136–138 and accompanying text for discussion of federal non-reserved, or “regulatory” water rights.

⁹² See Gould, *supra* note 15, at 13 (noting that increased conflict over water motivated the move to regulated riparianism); Choe, *supra* note 4, at 1909–11.

⁹³ As Dellapenna notes:

Under a common property system like riparian rights, all co-owners of the property are left to their own individual judgment to decide . . . how to use the resource. . . . [W]hen a common property system approaches the carrying capacity of the resource, a “tragedy of the commons” ensues. Acting purely rationally, each co-owner will continue to place ever greater demands on the resource even as it is exhausted, if only because other co-owners are doing likewise. . . .

Dellapenna, *Replacing Common-Law*, *supra* note 9, at 36.

⁹⁴ *Id.* at 41. Few commentators recognized the Iowa model as a separate legal regime at the time. *Id.* Some commentators still view regulated riparian statutes as inartfully drafted prior appropriation statutes. See, e.g., Frank J. Trelease, *A Water Management Law for Arkansas*, 6 U. ARK. LITTLE ROCK L. REV. 369 (1983).

⁹⁵ The State of Mississippi experimented with a hybrid appropriative rights system in 1955, but repealed the authorizing statute in 1985 in favor of a regulated riparian system. Dellapenna, *Replacing Common-Law*, *supra* note 9, at 40. Prior appropriation failed in Mississippi primarily because appropriative rights were legally inferior to previously established riparian rights. *Id.* at 40–41.

⁹⁶ *Id.* at 42.

⁹⁷ See Freeman, *supra* note 17, at 3. Alabama, Connecticut, Florida, Georgia, Indiana, Iowa, Kentucky, Maryland, Massachusetts, Minnesota, Mississippi, New Jersey, North Carolina, Virginia, and Wisconsin adopted regulated riparian systems that extend to surface water and groundwater. Arkansas, Delaware, and New York extend their systems to surface waters only, while Illinois and South Carolina apply theirs exclusively to groundwater. *Id.* Outside of the continental United States, Hawaii and Puerto Rico each adopted a form of regulated riparianism as well. See *id.* at 2; United States v. Puerto Rico, 287 F.3d 212, 214 (1st Cir. 2002) (describing Puerto Rico’s statutory framework for water allocations and administrative permits). The trend is growing. Recently, some of the remaining “pure” com-

tory agency decides who gets water, how much, and under what conditions.⁹⁸

Each state's approach to regulated riparianism is different. Local geography and interest group politics often account for significant variations from state to state.⁹⁹ One mechanism to identify salient characteristics of regulated riparian systems is to reference the Regulated Riparian Model Water Code developed by the American Society of Civil Engineers in 1996.¹⁰⁰ The most fundamental departure from the common law in nearly every regulated riparian state is the requirement that large quantity users¹⁰¹ of water—particularly those that use water consumptively¹⁰²—obtain a permit from a state regulatory agency.¹⁰³ The permit then governs all aspects of future water use.

Under the Model Code, as in most regulated riparian states the riparian nature of water use is no longer dispositive. Permits may authorize uses on non-riparian land or in a different watershed altogether.¹⁰⁴ However, the common law reasonable use standard retains vitality as the benchmark for permit decisions.¹⁰⁵ In making permit allocations, the administering state agency weighs the “reasonableness” of competing uses against each other utilizing regulatory criteria.¹⁰⁶

mon law riparian states took preliminary steps toward establishing regulated riparian systems. *See* Miano & Crane, *supra* note 13, at 17. Pennsylvania, for example, enacted a statute that requires annual registration of uses that exceed 10,000 gallons per day (“GPD”). *Id.*

⁹⁸ *See* Dellapenna, *Replacing Common-Law*, *supra* note 9, at 41–42. Or, as Professor Trelease might argue, “Goddam Bureaucrats” make the water allocation decisions. *See generally* Frank J. Trelease, *The Model Water Code, the Wise Administrator, and the Goddam Bureaucrat*, 14 NAT. RESOURCES J. 207 (1974).

⁹⁹ *See* Dellapenna, *Regulated Riparianism*, *supra* note 28, §§ 9.03(a)(1), (3). Because of political compromises, regulated riparian programs are not always comprehensive in scope. They may exempt specific waters or geographic areas from regulation, or exempt entire classes of use from regulation. *Id.* Where regulated riparian coverage is absent, disputes over allocation must be resolved using common law procedures and remedies. *Id.* § 9.03(a).

¹⁰⁰ *See generally* WATER LAWS COMMITTEE, WATER RESOURCES PLANNING AND MANAGEMENT DIVISION, AMERICAN SOCIETY OF CIVIL ENGINEERS, THE REGULATED RIPARIAN MODEL WATER CODE: FINAL REPORT OF THE WATER LAWS COMMITTEE OF THE WATER RESOURCES PLANNING AND MANAGEMENT DIVISION OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS (Joseph W. Dellapenna ed., 1997) [hereinafter MODEL CODE]. The Model Code contains the drafters' rationale behind each provision and references to comparable state statutes. Dellapenna, *Replacing Common-Law*, *supra* note 9, at 41–42.

¹⁰¹ Regulated riparian statutes typically exempt “*de minimis* uses” from permitting requirements, though registration of use with the state may still be required. *De minimis* exemptions range from 10,000 GPD to 100,000 GPD. *See generally* Patricia K. Flood & Kenneth R. Wright, *Summary of Water Rights Law in the 31 Eastern States*, in WATER RIGHTS OF THE EASTERN UNITED STATES 105, 107–39 (Kenneth R. Wright ed., 1998) (providing a snapshot of the water law system of each state).

¹⁰² *See infra* notes 107–109 and accompanying text.

¹⁰³ *See* Royster, *Winters in the East*, *supra* note 8, at 189. *See also* MODEL CODE, *supra* note 100, § 6R-1-01.

¹⁰⁴ *See* Dellapenna, *Southeastern States*, *supra* note 13, at 35; *see also* Royster, *Winters in the East*, *supra* note 8, at 186 n.80.

¹⁰⁵ *See* Dellapenna, *Regulated Riparianism*, *supra* note 28, § 9.03(b), at 9-95.

¹⁰⁶ *Id.* § 9.03(b)(1).

Regulated riparian statutes primarily regulate consumptive uses.¹⁰⁷ Non-consumptive uses, or uses that do not require removal or diversion of water from a watercourse,¹⁰⁸ are excluded from the permitting process in most eastern states.¹⁰⁹ This may change in the near future. Conservation groups in the East are increasingly demanding the protection of in-stream flows that perpetuate natural resource values. One possible mechanism to protect in-stream flows may be the issuance of regulated riparian permits or other indicia of water right ownership to natural resource managers that guarantee a minimum flow of water and protect “public rights” in water.¹¹⁰

Other salient characteristics of regulated riparian systems are discussed below.

1. Quantification of Water Rights

Regulated riparian systems authorize users to withdraw a specified quantity of water from a regulated resource much like permits issued in prior appropriation states.¹¹¹ However, unlike appropriative permits, most regulated riparian permits are valid only for a term of years and are subject to adjustment in the public interest.¹¹² During times of shortage, permitting agencies may adjust allocations to protect threatened resources.¹¹³ The Model Code suggests that state agencies premise reductions on the social value of each water use so that those uses with the lowest societal value receive the greatest permit reductions.¹¹⁴ Few states use this approach;¹¹⁵ instead, during times of shortage states often require across the board pro rata reductions¹¹⁶ or reductions based on seniority of use.¹¹⁷

¹⁰⁷ Consumptive uses are those that require the removal of water from a watercourse to a designated place of use. Industrial, residential, and agricultural uses all tend to be consumptive in nature. See Lynda L. Butler, *Environmental Water Rights: An Evolving Concept of Public Property*, 9 VA. ENVTL. L.J. 323, 324 (1990).

¹⁰⁸ Non-consumptive uses may include navigation, recreation, and wildlife protection and propagation. *Id.*

¹⁰⁹ See generally Dellapenna, *Regulated Riparianism*, *supra* note 28, § 9.05(c).

¹¹⁰ See generally Butler, *supra* note 107, at 366.

¹¹¹ See Royster, *Winters in the East*, *supra* note 8, at 189. See also MODEL CODE, *supra* note 100, § 7R-1-01(b).

¹¹² Durations of permits range from three years in Maryland to fifty years in Georgia. Dellapenna, *Regulated Riparianism*, *supra* note 28, § 9.03(a)(4). The Model Code sets the initial term of the permit at twenty years for private users and up to fifty years for large scale public entities. MODEL CODE, *supra* note 100, § 7R-1-02.

¹¹³ See Dellapenna, *Replacing Common-Law*, *supra* note 9, at 43.

¹¹⁴ *Id.*

¹¹⁵ *Id.* Perhaps state agency hydrologists and civil engineers are not anxious to undertake the politically tinged value judgments inherent in the Model Code’s suggested approach.

¹¹⁶ See, e.g., N.C. ADMIN. CODE tit. 15A r.2E.0503 (Aug. 2002) (requiring all groundwater permittees overlying imperiled aquifer to reduce withdrawals by 75% over period of sixteen years).

¹¹⁷ See Dellapenna, *Replacing Common-Law*, *supra* note 9, at 43. Allocation of shortage premised on seniority of use is, of course, the hallmark of western water law. See *infra* note 157 and accompanying text.

2. Information Gathering To Support Resource Planning

Permitting agencies may require, inter alia, water system inventories, periodic monitoring, reporting, and implementation of comprehensive conservation plans as conditions of permit issuance.¹¹⁸ Users that are otherwise exempt from permit requirements may nevertheless be required to submit water use data to states for planning purposes.¹¹⁹

3. Permit Fees

About half of regulated riparian states require payment of fees in conjunction with permit application or water use registration.¹²⁰ Unlike prior appropriation system fees,¹²¹ regulated riparian fees are intended to partially offset the cost of state oversight and are generally set without regard to the volume of water used.¹²²

4. Enforcement

Like most state permit programs, regulated riparian statutes typically authorize a broad gamut of regulatory controls designed to bring about timely compliance from the regulated community. Enforcement mechanisms can include criminal and civil penalties, fines, injunctions, administrative orders, and—in some states permit revocation.¹²³ Permittee grievances are vetted through normal state administrative procedures, and judicial review is available upon exhaustion of administrative remedies.¹²⁴ The specter of state enforcement is probably the greatest trouble spot for

¹¹⁸ See, e.g., N.C. ADMIN. CODE tit. 15A r.2E.0502 (Aug. 2002); MODEL CODE, *supra* note 100, § 4R-2-03. Cf. Dellapenna, *Southeastern States*, *supra* note 13, at 36 (“One of the major purposes of regulated riparian permits is to assure the gathering of the necessary information to enable such planning to occur on an ongoing basis.”).

¹¹⁹ See Dellapenna, *Regulated Riparianism*, *supra* note 28, § 903(b)(3), at 9-111. See also Dellapenna, *Southeastern States*, *supra* note 13, at 50-54 (discussing Alabama and Arkansas systems that generally require periodic registration of water usage in lieu of formal permits).

¹²⁰ Dellapenna, *Regulated Riparianism*, *supra* note 28, § 9.03(a)(5)(c), at 9-82.

¹²¹ Prior appropriation system fees are often tied to the volume of water used by the appropriator and can be quite expensive. See generally B-207695, Comptroller General of the United States, 1983 Comp. Gen. LEXIS 1006 (June 13, 1983) (invalidating federal installation payment of permit registration fee to Arizona as invalid tax). Cf. Stephen G. Bartell, *Contemporaneous Water Law Issues Involving the Department of Defense & the Department of Energy 1* (Dec. 3, 2003) (describing U.S. opposition to permit fees sought in Nevada) (unpublished manuscript on file with the Harvard Environmental Law Review).

¹²² See Dellapenna, *Regulated Riparianism*, *supra* note 28, § 9.03(a)(5)(c). The Model Code recommends that states set permit application fees at levels that recoup the full cost of administering the permit program, but as of yet none have followed this suggestion. *Id.*

¹²³ See Dellapenna, *Regulated Riparianism*, *supra* note 28, § 9.03(a)(5)(B). Surprisingly, only eleven of the regulated riparian states formally authorize revocation or suspension of permits for material non-compliance. *Id.* at 9-72.

¹²⁴ *Id.* § 9.03(a)(5)(A), at 9-64 to 9-66.

federal installations otherwise inclined to comply with regulated riparian requirements—particularly to the degree states may seek punitive fines or penalties for non-compliance.¹²⁵

5. Temporal Priority and Perfection of State Law Rights

Under common law riparian doctrine, seniority of use is largely irrelevant. A common law riparian owner that commences use tomorrow theoretically possesses an equal right to reasonable use as a riparian who commenced use two hundred years ago.¹²⁶ Regulated riparianism changes this dynamic at least in times of shortage. Though temporal priority is not accorded the overwhelming significance characteristic of prior appropriation jurisdictions, the date that a regulated riparian user first obtains a permit is important.¹²⁷ This is so for a number of reasons. First, a non-permitted user may be unable to obtain an adequate (or any) water allocation in times of shortage if his proposed use would have an adverse effect on existing permit holders.¹²⁸ Second, regulated entities may be deemed to have forfeited some or all of their common law state water rights if they fail to apply for a permit within the time period designated by statute.¹²⁹ After expiration of the regulatory grace period, existing uses may be curtailed outright¹³⁰ or treated as “new,” only receiving a permit if the

¹²⁵ See *infra* notes 337–339, 345–349 and accompanying text. See also William D. Benton, *Applicability of Environmental “Fees” and “Taxes” to Federal Facilities*, 31 A.F. L. REV. 253 (1989).

¹²⁶ See Dellapenna, *Southeastern States*, *supra* note 13, at 16 (citing *Harris v. Brooks*, 283 S.W.2d 129 (1955)) (“[E]ven long established uses can be cut off without compensation if a court decides that a recently begun use is more reasonable.”).

¹²⁷ See Gould, *supra* note 15, at 15–16 (discussing permits’ length). For example, unlike western systems where a senior use defeats all newcomers in times of shortage, a senior permittee in regulated riparian states does not necessarily receive priority over all other existing uses. In theory, where there is insufficient water to satisfy all permitted uses the permitting agency allocates more water to uses with the greatest social utility. In reality, however, seniority of use does matter. See *supra* notes 116–117 and accompanying text.

¹²⁸ See, e.g., *Harloff v. Sarasota*, 575 So.2d 1324, 1328 (Fla. Dist. Ct. App. 1991) (holding that non-permitted groundwater user was ineligible to receive requested allocation because requested allocation would interfere with City’s existing permit); ARK. CODE ANN. §§ 15-22-215, -217 (2000) (cutting off unregistered uses from the allocation process, including allocation, during times of shortage). See also Royster, *Winters in the East*, *supra* note 8, at 190 (“[I]f a sufficient amount of water is not available, then later-proposed withdrawals may be denied or curtailed because the permits already granted have left insufficient water to safely allow the newly proposed uses.”); Richard C. Ausness, *Water Rights Legislation in the East: A Program for Reform*, 24 WM. & MARY L. REV. 547, 555–56 (1983) (“In the East, existing users receive some protection because the agency usually is prohibited from issuing a new permit that impairs the rights of existing water users.”).

¹²⁹ See, e.g., FLA. STAT. § 373.226(3) (2004) (“Application for permit . . . must be made within a period of 2 years from the effective date of implementation of these regulations in an area. Failure to apply within this period shall create a conclusive presumption of abandonment of the use.”).

¹³⁰ See, e.g., Dellapenna, *Southeastern States*, *supra* note 13, at 36 (“Users who refuse to apply for a permit within a short period of time can then be presumed to have aban-

permitting agency determines that issuance will not adversely impact previously permitted users.¹³¹

III. DISCUSSION: FEDERAL COMPLIANCE WITH REGULATED RIPARIANISM—BALANCING SOVEREIGNTY AND PRAGMATISM

As water shortages have moved east, eastern states have taken a more aggressive stance in the management of water resources. To the extent they have not done so already, many eastern states will ask federal installations to obtain permits and comply with state water allocation regimes in the near future. Should federal installations refuse to comply, states may attempt to exercise their police powers to force federal compliance in state court, particularly if the water resource in question is imperiled by overuse.

Thus, federal installations should analyze two distinct but interrelated questions when faced with state regulated riparian requirements. First, to what extent does the federal installation possess the right to use water under state and federal law? Second, to the extent that the federal installation possesses rights in water, to what extent may a state subjugate the enjoyment of those rights through the exercise of the state's police powers? These questions must be analyzed separately, although they necessarily impact each other. Because state regulation is of little moment if federal installations do not possess legally cognizable water rights, analysis must begin with an evaluation of water rights on federal land.

A. *Federal Water Rights in the East—Competing Theories on the Scope of Federal Power*

Federal installations may theoretically acquire water rights under state law, federal law, and in some circumstances both.¹³² If Congress has reserved public domain lands¹³³ for a specific federal purpose, a federal in-

done their claim.”).

¹³¹ See, e.g., *Tequesta v. Jupiter Inlet Corp.*, 371 So.2d 663 (Fla. 1979). Takings claims premised upon statutory impairment of common law water rights have been remarkably unsuccessful in state courts. See, e.g., *id.*; *Crookston Cattle Co. v. Minn. Dep't of Natural Res.*, 300 N.W.2d 769 (Minn. 1980); *Omernik v. State*, 218 N.W.2d 734 (Wis. 1974). Cf. *In re Deadman Creek Drainage Basin*, 694 P.2d 1071 (Wash. 1985) (cutting off riparian rights in favor of timely perfected appropriative rights). *But cf.* *Franco-Am. Charolaise, Ltd. v. Okla. Water Res. Bd.*, 855 P.2d 568 (Okla. 1990). Water right takings claims against the federal government have fared better. See *infra* note 299 and accompanying text.

¹³² See, e.g., *In re Water of Hallett Creek Stream Sys.*, 749 P.2d 324, 330 (Cal. 1988) (granting Forest Service state law riparian water right for wildlife management on Forest Service lands, a “secondary purpose” of the reservation, where Forest Service already possessed federal reserved water rights for timber management).

¹³³ There are public domain lands in the eastern United States. However, they are small parcels and widely scattered. See Memorandum for the State Director, Eastern States, Bureau of Land Management, Instruction Memorandum No. ES-2003-01, Land Use Planning Strategy for Eastern States (Nov. 8, 2002) (on file with the Harvard Environmental Law

stallation may be entitled to federal reserved water rights in accordance with the *Winters* Doctrine.¹³⁴ However, the law is less clear for federal installations that were acquired¹³⁵ or created by means other than reservation from the public domain. It is possible that courts will recognize “federal non-reserved water rights” (“FNRWR”)¹³⁶ for such lands, though the theory behind FNRWR is “rife with controversy”; FNRWR are likely to be vehemently opposed by states and private water users.¹³⁷ Yet, to the extent courts will recognize FNRWR,¹³⁸ they are worth pursuing because federal water rights are substantively superior to state law rights. Among other things, federal water rights cannot be destroyed by state action,¹³⁹ are not contingent upon “perfection” of state procedural requirements,¹⁴⁰ allow for senior priority dates, and cannot be lost through non-use.¹⁴¹ Perhaps equally important, federal water rights are largely immune from political manipulation at the state and local level.¹⁴² To a great extent, the only signifi-

Review).

¹³⁴ Blumm, *Reserved Water Rights*, *supra* note 20, § 37.01(a), at 37-5. *See also supra* notes 71–86 and accompanying text.

¹³⁵ “Acquired lands” are “lands acquired by the federal government from a nonfederal owner by purchase, condemnation, gift or exchange.” *Hallett Creek*, 749 P.2d at 330.

¹³⁶ FNRWR, known alternatively as federal “regulatory water rights,” are rights to use water on federal land that arise, independent of reservation from the public domain, from the exercise of Congressional power. *See* Blumm, *Reserved Water Rights*, *supra* note 20, § 37.06(c)–(c)(3). Practitioners frequently confuse federal reserved rights with FNRWR. Though both are “federal water rights,” they are distinct. FNRWR may be of junior priority vis-à-vis federal reserved rights because they arise at the time of use rather than the time of reservation. *Id.* § 37.06(c). Perhaps more importantly, federal reserved rights only exist to the extent there is unappropriated water available on the public domain at the time of reservation. *United States v. New Mexico*, 438 U.S. 696, 698–99 (1978). FNRWR, as an incidence of federal preemption, are not necessarily so restricted.

¹³⁷ Blumm, *Reserved Water Rights*, *supra* note 20, § 37.06(c) (noting significant opposition to FNRWR and confusion over whether they are proprietary or regulatory in nature).

¹³⁸ *Waters of the Klamath River*, Case Nos. 273–75 (Or. Water Resources Dep’t July 29, 2004) [hereinafter *Klamath Cases*] (determining relative rights). *Cf.* Supplemental Memorandum for the United States at 3–5, *Waters of the Klamath River*, Case Nos. 273–75, Or. Water Resources Dep’t (filed Feb. 20, 2004) [hereinafter *Klamath Brief*] (urging court to grant National Wildlife Refuge a FNRWR, in response to the Klamath Project Water Users and the Nicholson Group’s motion for ruling on legal issues) (on file with the Harvard Environmental Law Review); *see also* *United States v. Oregon*, 44 F.3d 758 (9th Cir. 1994).

¹³⁹ *See* *Sierra Club v. Yeutter*, 911 F.2d 1405, 1419 (10th Cir. 1990) (“[F]ederal reserved water rights, as creatures of federal law, are protected from extinguishment under state law by the Supremacy Clause.”).

¹⁴⁰ *See, e.g., Arizona v. California*, 373 U.S. 546, 600 (1962) (holding that federal reserved rights are “present perfected rights” as of the date of congressional reservation). *Accord* *Arizona v. California*, 376 U.S. 340, 341 (1963) (entry of decree) (defining term “perfected right” in decree to include “water for the use of federal establishments under federal law whether or not the water has been applied to beneficial use.”).

¹⁴¹ *See* *Hackford v. Babbitt*, 14 F.3d 1457, 1461 n.3 (10th Cir. 1994); *Colville Confederated Tribes v. Walton*, 647 F.2d 42, 51 (9th Cir. 1980).

¹⁴² *Cf. COGGINS ET AL.*, *supra* note 63, at 553 (“In the politically delicate area of water rights, states may . . . respond to . . . pressure to discriminate against federal agencies, especially if doing so would advantage state water users.”). Of course, federal water rights are not immune from intervention by a displeased Congress. *See infra* notes 304–306 and

cant limitation on federal water rights is that they must be utilized for the primary purpose of the federal reservation.¹⁴³

Notwithstanding the advantages of federal water rights, no court east of Kansas City has ever adjudicated one, so their scope on the largely acquired federal installation lands of the East is unknown.¹⁴⁴ There are two possible explanations for the dearth of law on this issue. First, federal water right claims are typically raised in basin-wide adjudications under the McCarran Amendment,¹⁴⁵ and no eastern state has ever conducted a McCarran Amendment adjudication.¹⁴⁶ Second, until recent times, water was plentiful in the East, and acquisition of federal water rights typically would not have yielded any greater usufructuary right than that which already adhered in riparian land under the common law.¹⁴⁷

On its face, the rationale supporting *Winters* reserved rights seems to exist on eastern reserved lands to the same degree as it would on western reservations,¹⁴⁸ though a court might have difficulty quantifying the amount of water reserved utilizing reasonable use principles.¹⁴⁹ But what of acquired federal installations in the East that are ineligible for *Winters* rights?¹⁵⁰ Can they nevertheless obtain “federal water rights” via the FNRWR theory? There are essentially two competing theories on this question. This Article will refer to them as the “Western Theory” and the “Olson Theory.”

accompanying text.

¹⁴³ See *United States v. New Mexico*, 438 U.S. 696, 702 (1978).

¹⁴⁴ See Judith V. Royster, *A Primer On Indian Water Rights: More Questions Than Answers*, 30 TULSA L.J. 61, 101–02 (1994) [hereinafter Royster, *Indian Water Rights*]. Accord COGGINS ET AL., *supra* note 63, at 530.

¹⁴⁵ 43 U.S.C. § 666 (2000).

¹⁴⁶ See Royster, *Indian Water Rights*, *supra* note 144, at 101. McCarran Amendment general stream adjudications are cognizable in riparian jurisdictions provided the adjudicating state can demonstrate compliance with all statutory elements. See *United States v. District Court In and For the County of Eagle*, 401 U.S. 520, 524 (1971); see also *In re Water of Hallet Creek Sys.*, 749 P.2d 324 (Cal. 1988) (approving adjudication of federal riparian rights).

¹⁴⁷ See Dellapenna, *Regulated Riparianism*, *supra* note 28, § 9.06(b)(2), at 9-187.

¹⁴⁸ See generally GETCHES, *supra* note 33, at 324; COGGINS ET AL., *supra* note 63, at 530; Olson Memo, *supra* note 26, at 333, 381–82. *But cf.* Dellapenna, *Regulated Riparianism*, *supra* note 28, § 9.06(b)(2), at 9-187 (asserting that federal reserved water rights cannot exist in the original thirteen colonies, Vermont, Kentucky, or in “any other part of [an eastern state] that was settled by Europeans before the passage of the public domain into federal hands,” because the federal government never owned the public domain in those states).

¹⁴⁹ Compare COGGINS ET AL., *supra* note 63, at 530–31 (“In pure riparian jurisdictions, the extent to which federal reserved water rights may be superior to state law riparian rights . . . is not clear [though] . . . [f]ederal reserved water rights . . . can be quantified on the basis of the amount of water necessary to carry out [federal installation] purposes.”), with Dellapenna, *Regulated Riparianism*, *supra* note 28, § 9.06(b)(2), at 9-194 (arguing that the scope of a federal reserved right is defined by the state law where the federal installation is located, thereby making a reserved right in the East no more than a right to reasonable use).

¹⁵⁰ There are federal installations in the eastern United States that came into existence as the result of reservation from the public domain. See generally GETCHES, *supra* note 33, at 324.

The “Western Theory,” captioned as such because it is premised upon cases out of the Ninth Circuit and commentaries by western water lawyers,¹⁵¹ posits that although the United States possesses sovereignty over land that it owns, it “acquires” water rights as an “ordinary proprietor” and obtains no greater water rights than those possessed by the United States’ predecessor in title when it purchases or condemns land.¹⁵² Proponents of this theory argue that since a private landowner cannot obtain federal water rights, and is only entitled to those uses of water that he has perfected under state law,¹⁵³ the United States acquires, at most, a state law water right when it purchases or condemns property.¹⁵⁴ They reason that, in any event, state law water rights are more than adequate to protect federal interests,¹⁵⁵ and there are state court decisions that lend credence to this assessment.¹⁵⁶ Should the federal government require more water than

¹⁵¹ See generally Trelease, *Uneasy Federalism*, *supra* note 69.

¹⁵² *Id.* at 765 n.66 (“[A]side from reserved water the United States should acquire water in the same manner as any other appropriator.”). Compare *Sturr v. Beck*, 133 U.S. 541, 551 (1890) (holding that water rights federal government possessed as owner of the public domain could not be resurrected once appropriated in accordance with state law), with *Camfield v. United States*, 167 U.S. 518, 524 (1897) (“The government has, with respect to its own lands, the rights of an ordinary proprietor, to maintain its possession and . . . deal with such land precisely as a private individual may deal with his farming property.”). See also *In re SRBA Case No. 39576*, Subcase Nos. 61-11783 *et al.*, slip op. at 16 (Idaho Dist. Ct. Apr. 6, 2001), *vacated*, Order No. 27535 (Idaho Oct. 11, 2002) [hereinafter Mountain Home AFB Adjudication] (rejecting premise that federal water right can exist on Air Force Base composed partially of acquired lands). The Mountain Home AFB Adjudication was vacated and is of no precedential value. However, it is an example of “results oriented” decision-making against federal interests that can occur in state court adjudications of federal rights.

¹⁵³ See *United States v. Anderson*, 736 F.2d 1358, 1363 (9th Cir. 1984). *But cf.* *Colville Tribes v. Walton*, 647 F.2d 42 (9th Cir. 1981) (interpreting Allotment Act of 1887 to permit Indian tribes to alienate federal water rights under limited circumstances).

¹⁵⁴ See *California v. United States*, 235 F.2d 647, 656 (9th Cir. 1956); *United States v. Fallbrook Pub. Util. Dist.* 165 F. Supp. 806, 832–46 (S.D. Cal. 1958), *rev’d in part* 347 F.2d 48 (1965) (rejecting argument that federal sovereignty on military base yielded anything greater than state law water rights against upstream appropriators). The cases cited above, hereinafter referred to as the “Camp Pendleton Litigation,” pertain to disputes over water rights in the Santa Margarita River, a coastal river midway between Los Angeles and San Diego. The Santa Margarita flows twenty-one miles through a U.S. Marine Corps Base, Camp Pendleton, before entering the Pacific Ocean. *California v. United States*, 235 F.2d at 652. Litigation over water rights in the Santa Margarita persists to this day. See Bartell, *supra* note 121, at 3.

¹⁵⁵ See generally Trelease, *Uneasy Federalism*, *supra* note 69, at 765; Leshy, *supra* note 64 at 283 (“States’-righters argue that complete deference to state water law systems will work just fine to meet federal needs.”).

¹⁵⁶ See, e.g., *State v. Morros*, 766 P.2d 263, 268 (Nev. 1988) (approving grant of state law appropriative water right to United States Bureau of Land Management for recreational uses and wildlife stock-watering on federal land); *In re Water of Hallett Creek Stream Sys.*, 749 P.2d 324, 330 (Cal. 1988) (holding that United States is entitled to state law riparian rights to the same extent as any other riparian landowner). There are, of course, other western state actions that support quite a different conclusion. See generally Blumm, *Denying Reserved Rights*, *supra* note 90 (discussing discriminatory treatment of United States in Idaho State courts); COGGINS ET AL., *supra* note 63, at 553 (describing attempts by the Arizona legislature to divest the United States of previously obtained state law water rights).

that which it has perfected under state law, it can simply acquire additional water rights through its power of eminent domain after payment of “just compensation.”¹⁵⁷

The Western Theory finds some support in the history of Congressional deference to state law on questions of federal water rights,¹⁵⁸ the Camp Pendleton litigation,¹⁵⁹ and most recently the pronouncements of the trial judge in the Mountain Home AFB Adjudication.¹⁶⁰

On the other hand, proponents of the “Olson Theory,” captioned as such because of the Olson Memo that partially vindicated the notion of FNRWR,¹⁶¹ assert that the issue is not one of property rights, but of conflicting regulatory power between two sovereigns.¹⁶² They place little emphasis on the previous status of the federal land, and focus instead on the Congressional or Executive purpose in reserving the federal installation.¹⁶³ Olson Theory proponents cite *Kleppe v. New Mexico*,¹⁶⁴ *Minnesota v. Block*,¹⁶⁵ and *United States v. Rio Grande Irrigation Co.*,¹⁶⁶ for the propo-

¹⁵⁷ See *United States v. California*, 235 F.2d at 655; Trelease, *Uneasy Federalism*, *supra* note 69, at 765.

¹⁵⁸ See *United States v. New Mexico*, 438 U.S. 696, 702 (1978) (“Where Congress has expressly addressed the question of whether federal entities must abide by state water law, it has almost invariably deferred to the state law.”).

¹⁵⁹ See *supra* note 154 and cases cited therein.

¹⁶⁰ See *Mountain Home AFB Adjudication*, *supra* note 152, at 20–21. In *Mountain Home AFB Adjudication*, the trial judge denied federal water rights notwithstanding that the United States’ request for water rights was “uncontested,” and no other party timely filed an “objection.” *Id.* at 2–4. Undeterred, the judge allowed competing water users to “intervene” in the proceedings. He then issued a tortured ruling that appears to have little basis in law. The court misquoted *United States v. New Mexico*, 438 U.S. at 700, to conclude that because a small portion of the Base was acquired—and therefore purportedly required to obtain state law water rights—withholding federal water rights from the remainder of the Base would not “entirely defeat” the congressional purpose in establishing the Base. *Id.* at 26–28. Congressional intent is the key to determining the scope of a federal reserved water right. Whether a small portion of Mountain Home AFB was acquired or not, it is hard to imagine Congress intended for one of its premier Air Force bases to be divested of its entire water supply by operation of Idaho state law. Had Mountain Home AFB not perfected its state law water rights as a matter of comity in years past, the trial judge’s decision could have theoretically shut down all operations at Mountain Home.

¹⁶¹ This memo was authored by Theodore Olson, the Solicitor General of the United States from 2001 to 2004, who took up the highly charged political issue of FNRWR in 1982 in his capacity as Assistant Attorney General for the Office of Legal Counsel (“OLC”). See Lesly, *supra* note 64, at 287–88 (noting that the Olson Opinion is “the modern equivalent of an Attorney General’s opinion, the highest legal authority in the executive branch.”).

¹⁶² See Olson Memo, *supra* note 26, at 332–33; Klamath Brief, *supra* note 138, at 3–5.

¹⁶³ Olson Memo, *supra* note 26, at 363; COGGINS ET AL., *supra* note 63, at 530.

¹⁶⁴ 426 U.S. 529, 539 (1976) (“[W]hile the furthest reaches of the power granted by the Property Clause have not yet been definitively resolved . . . [t]he power over the public land thus entrusted to Congress is without limitations.”) (citation omitted).

¹⁶⁵ 660 F.2d 1240, 1250 (8th Cir. 1981) (holding that Property Clause authorizes Congress to preempt state law *on non-federal land* where state law would interfere with accomplishment of Congressional purposes on federal land).

¹⁶⁶ 174 U.S. 690, 703 (1899) (noting in dicta that “a state cannot, by its legislation, destroy the right of the United States, as the owner of lands bordering on a stream, to the continued flow of its water; so far, at least, as may be necessary for the beneficial uses of the government property . . .”).

sition that state water laws may be preempted by Congressional (or Executive) action under the Property¹⁶⁷ and Supremacy Clauses¹⁶⁸ of the Constitution whenever such laws have the potential to interfere with the accomplishment of the primary federal purpose that Congress has established for a federal installation.¹⁶⁹

Olson's primary objective in drafting the Memo was not to expand the scope of federal water rights beyond traditional *Winters* reservations, but to rebut former Solicitor General of the Department of the Interior Leo Krulitz's broad pronouncements on the scope of federal agency power in management of the public domain.¹⁷⁰ Solicitor Krulitz claimed that in the absence of Congressional direction to the contrary, there is a presumption that federal agencies may use whatever unappropriated water is necessary to support Congressionally authorized management programs, notwithstanding conflicting state water law.¹⁷¹ Olson concluded that the presumption is to the contrary, and advised federal agencies to assume that they must acquire water in accordance with state law unless state law would frustrate a specific Congressional purpose.¹⁷² However, Olson agreed with Krulitz's assertion that where Congress has clearly manifested an intent, a federal installation can claim preemptive federal water rights on acquired lands to the same extent as it could on lands reserved from the public domain.¹⁷³

Though the Office of Legal Counsel ("OLC") published the Olson Memo in 1982, no court decision has ever followed (or repudiated) it.¹⁷⁴ It is still, according to Professor Leshy, "the last word on the subject."¹⁷⁵ Aside from the Olson Memo itself, there are two reported cases that may be probative of federal water rights on acquired lands, *Arizona v. California*¹⁷⁶ and *United States v. Anderson*.¹⁷⁷ Both cases involve adjudication of federal water rights on lands that were partially "acquired" by the United States, though neither case discusses the basis for its decision vis-à-vis

¹⁶⁷ U.S. CONST. art. IV, § 3, cl. 2.

¹⁶⁸ U.S. CONST. art. VI, cl. 2.

¹⁶⁹ Olson Memo, *supra* note 26, at 333, 381-82. *See also* Leshy, *supra* note 64, at 288 ("Congress has the constitutional power to create a non-reserved federal water right if its legislation made clear that's what it was doing"). Leshy, the Solicitor of the Department of the Interior from 1993 to 2001, opines that the Olson Memo "seems clearly right on the issue of constitutional power." *Id.*

¹⁷⁰ *Id.* at 287-88.

¹⁷¹ *Id.*; Olson Memo, *supra* note 26, at 331-32.

¹⁷² Olson Memo, *supra* note 26, at 332-33.

¹⁷³ *Id.* at 332, 381-82.

¹⁷⁴ *But cf.* Mountain Home AFB Adjudication, *supra* note 152, at 16-20 (reaching result that is arguably inconsistent with Olson Memo without reference to same).

¹⁷⁵ Leshy, *supra* note 64, at 288.

¹⁷⁶ 373 U.S. 546, 578-79 (1963) (approving finding of special master awarding reserved water right to federal wildlife refuge where small portion of refuge was acquired land).

¹⁷⁷ 736 F.2d 1358, 1363 (9th Cir. 1984) (approving federal water rights for reacquired tribal reservation lands as of the date of reacquisition by tribe).

acquired lands.¹⁷⁸ Nevertheless, because they approved adjudication of federal water rights on lands that had previously been privately owned, *Arizona* and *Anderson* arguably support Olson's premise that reservation from the public domain is not a sine qua non for judicial recognition of federal water rights.¹⁷⁹

A clearer answer may be forthcoming. As alluded to earlier,¹⁸⁰ Oregon is currently adjudicating water rights in the Klamath River Basin, and the United States is a claimant in the adjudication.¹⁸¹ To the surprise of some, the United States requested federal water rights for acquired lands in three National Wildlife Refuges, the Upper and Lower Klamath, and the Lake, and cited the Olson Memo as the primary authority for its position.¹⁸² The administrative law judge ("ALJ")¹⁸³ agreed with the United States.¹⁸⁴ He ruled in all three sub-cases that federal water rights are cognizable on "reserved" and "acquired" portions of the subject wildlife refuges, and ordered that the priority date for acquired refuge lands is the date of re-acquisition by the United States.¹⁸⁵ Though a significant victory for the United States, the impact of the ALJ's recommended decision may be short lived. These cases are still in the administrative phase of the Klamath adjudication¹⁸⁶ and must work their way through the Oregon state court system before they can become enforceable water rights.¹⁸⁷ With the issue squarely raised, the Oregon state courts may soon provide guidance on this dynamic issue.

¹⁷⁸ *Arizona v. California*, 373 U.S. at 578–79; *Anderson*, 736 F.2d at 1363.

¹⁷⁹ *Accord* Klamath Brief, *supra* note 138, at 3–5.

¹⁸⁰ *See supra* note 138 and accompanying text.

¹⁸¹ *See generally* *United States v. Oregon*, 44 F.3d 758 (9th Cir. 1994). *United States v. Oregon* is a reported decision from an earlier skirmish over sovereign immunity in the *Klamath* adjudication.

¹⁸² Klamath Brief, *supra* note 138, at 2–5.

¹⁸³ Oregon utilizes administrative law judges to conduct quasi-judicial "contested cases" during the first phase of water rights adjudications. *United States v. Oregon*, 774 F. Supp. 1568, 1574 (D. Or. 1991), *aff'd in part and rev'd in part on other grounds*, 44 F.3d 758 (9th Cir. 1994). *See also* *United States v. Puerto Rico*, 287 F.3d 212, 219 (1st Cir. 2002) (describing water rights adjudication process in Oregon and contrasting it with that of Puerto Rico).

¹⁸⁴ *See* Klamath Cases, *supra* note 138.

¹⁸⁵ *Id.*

¹⁸⁶ Upon completion of all the contested cases, the Director of the Oregon Water Resources Department ("OWRD") must approve the decision. *United States v. Oregon*, 774 F. Supp. at 1574. After the Director's action is complete, OWRD forwards the case to the state trial court in the county where the water body is located for further proceedings. *Id.*

¹⁸⁷ *Id.* *See also* *United States v. Puerto Rico*, 287 F.3d at 218–19. It is worth noting that Oregon state trial courts have significant discretion on the weight to accord prior administrative proceedings. They are not constrained by the administrative record and may take additional evidence or appoint a special master for further fact finding in its de novo review of prior proceedings. *See Warner Valley Stock Co. v. Lynch*, 336 P.2d 884, 900–01 (Or. 1959); *United States v. Puerto Rico*, 287 F.3d at 220.

B. Acquiring State Law Water Rights in the East—Not as Simple as It Used To Be

Nearly all states recognize the ability of the federal government to acquire state law water rights (via statute or through the common law),¹⁸⁸ though there are occasional aberrations.¹⁸⁹ The fact that a federal installation possesses (or claims to possess) federal water rights should not affect the validity of state rights that the installation might otherwise have perfected under state law,¹⁹⁰ although some western “water buffaloes”¹⁹¹ have used the perceived adequacy of state law rights to argue that federal reserved rights are a burdensome redundancy.¹⁹²

Under state law, a federal installation in the East may be able to acquire common law water rights, regulated riparian permit water rights, or hybrid¹⁹³ state law water rights. Each of these acquisition methods is discussed below.

1. Common Law Riparian Rights

Federal installations can still acquire common law riparian water rights in most of the eastern states—though the significance of those rights will vary with the degree that regulated riparian permit systems abrogate the common law.¹⁹⁴ Assuming that common law rights pertain, obtaining a

¹⁸⁸ See, e.g., *DeKay v. U.S. Fish and Wildlife Serv.*, 524 N.W.2d 855 (S.D. 1994) (granting federal agency state law water right for maintenance of waterfowl habitat); *State v. Morros*, 766 P.2d 263, 269 (Nev. 1988) (“[T]he United States is entitled to equal treatment [in obtaining water rights] under state law.”); *In re Water of Hallett Creek Stream Sys.*, 749 P.2d 324 (Cal. 1988).

¹⁸⁹ For example, during the mid-1990s Nevada and Arizona passed discriminatory legislation forbidding the federal government from obtaining certain kinds of state law water rights. The legislation came in response to political pressure from ranchers seeking to “privatize” federal range lands. See *COGGINS ET AL.*, *supra* note 63, at 556–57; *Leshy*, *supra* note 64, at 283–84. Cf. *WAYNE HAGE, STORM OVER RANGELANDS: PRIVATE RIGHTS IN FEDERAL LANDS* 212–14 (1994) (assessing assertion of Fifth Amendment takings claims premised on state law water rights in order to force federal government to cede title over federal grazing lands to ranchers). Both state laws were ultimately overruled by their respective state supreme courts. See *United States v. State Eng’r*, 27 P.3d 51 (Nev. 2001); *San Carlos Apache Tribe v. Superior Court*, 972 P.2d 179 (Ariz. 1999). Still, discriminatory treatment under state law remains a real threat for federal installations. See *Leshy*, *supra* note 64, at 283–84.

¹⁹⁰ See, e.g., *In re General Adjudication of All Rights to Use Water in the Big Horn River Sys.*, 753 P.2d 76, 93–94 (Wyo. 1988) (securing state law water right does not imply a federal inability to claim rights under federal law). See also *GETCHES*, *supra* note 33, at 344–45.

¹⁹¹ “Water Buffalo” is a term used jestingly by commentators to describe politically powerful western interests that traditionally controlled water allocation in the West. See generally *STEPHEN C. STURGEON, THE POLITICS OF WESTERN WATER: THE CONGRESSIONAL CAREER OF WAYNE ASPINALL* (2002).

¹⁹² See generally *Trelease, Uneasy Federalism*, *supra* note 69, at 755, 765.

¹⁹³ See *infra* notes 200–205 and accompanying text.

¹⁹⁴ For example, a federal installation in Florida would have a much more difficult time claiming riparian rights under Florida’s comprehensive regulated riparian scheme than

water right at common law is as simple as buying land that overlies an aquifer or abuts a stream.¹⁹⁵ Though simple to obtain, during times of shortage, common law rights may not be adequate to meet federal needs. Common law rights are inherently nebulous as to quantity, and federal installation uses may not be sufficiently “riparian” to receive protection as “reasonable uses” in state courts.¹⁹⁶ Yet, as long as water remains plentiful, co-riparians are unlikely to complain, and federal installations can generally obtain all of the water they need.

2. *Regulated Riparian Rights*

The right to withdraw water in accordance with a regulated riparian permit, though theoretically of a limited duration and subject to adjustment in the public interest, is nevertheless a protected property interest in water.¹⁹⁷ Though most states have the option not to renew a permit, few exercise this option.¹⁹⁸ Moreover, senior permitted uses tend to fare well during permit renewals—perhaps better than contemplated by regulated riparian statutes.¹⁹⁹

3. *Hybrid Rights*

“Hybrid” state law water rights possess characteristics of state and federal water law.²⁰⁰ Currently recognized in Nevada and Florida, they are a recent phenomenon and may gain popularity in the East as water disputes

would a similarly situated installation in a pure riparian state such as Michigan. *See generally supra* notes 98–99 and accompanying text.

¹⁹⁵ *See supra* note 37 and accompanying text.

¹⁹⁶ For example, under traditional riparian common law, farming and other household uses of water directly tied to appurtenant land were often given preference over “artificial” uses such as manufacturing and municipal water supply. *See Dellapenna, Riparian Rights, supra* note 40, § 7.02(b)(1), at 7-29. *But cf.* *United States v. Fallbrook Pub. Util. Dist.*, 347 F.2d 48, 54 (9th Cir. 1965) (noting that operation of military base was riparian use under California law). Moreover, for large federal installations that span multiple river systems, state law may limit assertion of riparian rights to those uses that occur in the same watershed as the water withdrawal. *See Dellapenna, Riparian Rights, supra* note 40, § 7.02(a)(2).

¹⁹⁷ *See Gould, supra* note 15, at 11–13.

¹⁹⁸ *See Dellapenna, Southeastern States, supra* note 13, at 38.

¹⁹⁹ *See Dellapenna, Regulated Riparianism, supra* note 28, § 9.03(b)(3), at 9-113 (“One might suspect, however, that agencies defer to temporal priorities in exercising their discretion . . . perhaps even more than the statutes authorize.”).

²⁰⁰ *See generally* Royster, *Indian Water Rights, supra* note 144, at 101–02 (discussing Seminole Land Claims Settlement Act of 1987, 25 U.S.C. §§ 1772–1772g (2000), a hybrid settlement of Tribal claims in Florida whereby the Seminole Tribe received a percentage of water from specified water sources in perpetuity in exchange for its compliance with non-procedural “terms and principles” of state law water system); Michael Cianci, Jr., *The New National Defense Water Right—An Alternative to Federal Reserved Water Rights for Military Installations*, 48 A.F. L. REV. 159, 172 (2000) (describing Nevada’s recognition of “National Defense Water Right” for Nellis Air Force Base that incorporated seniority and flexibility of federal reserved right while allowing Nevada limited ability to manage the right under state law).

between state and federal interests intensify. Hybrid rights are necessarily the result of compromise between state and federal negotiators to a water rights dispute. Florida and Nevada may have recognized hybrid rights as a means to avoid the risk that a court would adjudicate a broad federal water right over which they would have little or no control. Hybrid rights, as a creature of negotiation and compromise, are by their very nature flexible enough to satisfy most state and federal interests in a water rights dispute. For example, in the adjudication of water rights in and around Las Vegas (which included Nellis Air Force Base), the State of Nevada did not want to recognize reserved rights in groundwater.²⁰¹ Under the hybrid agreement negotiated with the Air Force, Nevada state courts could avoid deciding the issue, and the state engineer could require the Air Force to exhaust its contractual entitlement to Colorado River water and state-based water rights prior to extracting additional groundwater from the aquifer that underlies Las Vegas.²⁰² The Air Force, for its part, received an “unlimited” right to groundwater provided the use was necessary for national defense and other available water sources were inadequate. Equally important, the hybrid state law right the Air Force acquired was as “senior” as a federal reserved water right would be under the circumstances.²⁰³ The federal government has incentives to enter into hybrid compromises because adjudication of *Winters* rights is never a sure thing in courts,²⁰⁴ and a hybrid water right can convey many of the same advantages as a federal water right.²⁰⁵

²⁰¹ See Bartell, *supra* note 121, at 1. At the time of the Nellis Air Force Base settlement, it was an open question whether federal water rights extended to groundwater. Cf. *In re General Adjudication of All Rights to Use Water in the Big Horn River Sys.*, 753 P.2d 76, 99–100 (Wyo. 1988) (holding that reserved water does not extend to groundwater).

²⁰² *Id.*

²⁰³ *Id.* See also Cianci, *supra* note 200, at 172.

²⁰⁴ See generally Blumm, *Reserved Water Rights*, *supra* note 20, § 37.04(c), at 37-93 to 37-94 (“Litigation of reserved water rights . . . can take decades to complete, produce substantial uncertainties in existing water rights during that period, cost millions of dollars, polarize communities, and leave unanswered numerous questions about the parties’ rights. As a result, there is widespread interest in negotiation of reserved rights as an alternative to litigation.”).

²⁰⁵ For example, in the Seminole Indian Compact, the Seminoles knew that no federal water right had ever been recognized in an eastern state, and that the scope of the federal right would be difficult to predict utilizing riparian law principles. See Jim Shore & Jerry C. Straus, *The Seminole Water Rights Compact and the Seminole Indian Land Claims Settlement Act of 1987*, 6 J. LAND USE & ENVTL. L. 1, 9 (1990). The Tribe recognized, however, that by dropping its insistence upon recognition of broader *Winters* rights, and entering into an agreement with Florida that would commit the Tribe to manage tribal waters in accordance with Florida environmental (and some procedural) laws, the Tribe could obtain “clearly defined rights to water necessary to satisfy tribal needs and to allow orderly development of its lands” as well as the ability to “protect tribal lands and waters from any activities of neighboring landowners that might violate its rights.” *Id.* at 11–12.

C. No, You Cannot Tell Us What To Do: The Intersection of State Police Power and Federal Sovereign Immunity

State regulatory agencies are used to telling people what to do. It is their job to balance resource development and protection in the public interest. That is why the issue of federal sovereign immunity, when raised, often produces furrowed brows on the faces of state regulators. State regulators ask why federal installations are not required to comply with state environmental and land use regulations when every other state citizen is required to comply. The answer is complex, but boiled down to its essence the federal government is not required to comply because it is a sovereign—and a supreme sovereign at that.²⁰⁶ States may only regulate the United States to the extent that Congress approves of such regulation, and only to the extent that Congress manifests its approval in a clear and unambiguous manner.²⁰⁷ To the extent that statutory language is ambiguous, the scope of waiver must be strictly construed in favor of the United States.²⁰⁸ There is no such thing as a “de facto waiver” of immunity. The actions of federal officials (and installations) may not be deemed a waiver absent a showing of unequivocal Congressional intent.²⁰⁹

State regulators do not like this answer, and often they have good reason. State regulatory programs can be difficult to implement; they are perhaps made even more so when large scale users of a resource, such as the United States, fall outside the grasp of state regulation. Congress responded to state concerns of this nature by waiving the sovereign immunity of the United States across a wide spectrum of environmental media.²¹⁰ It did not,

²⁰⁶ See U.S. CONST. art. VI, cl. 2. (“This Constitution, and the Laws of the United States . . . shall be the supreme Law of the Land; and the Judges in every State shall be bound thereby, any Thing in the Constitution or Laws of any State to the Contrary notwithstanding.”).

²⁰⁷ See *United States v. Mitchell*, 445 U.S. 535, 538 (1980) (“[T]he United States, as sovereign, is immune from suit save as it consents to be sued . . . [a] waiver of sovereign immunity cannot be implied but must be unequivocally expressed.”) (internal citations and quotations omitted). Waivers of sovereign immunity can not be implied or inferred. They must be “surrendered in unmistakable terms” in statutory text. *Bowen v. Pub. Agencies Opposed To Soc. Sec. Entrapment*, 477 U.S. 41, 52 (1986) (internal citations omitted).

²⁰⁸ See *U.S. Dep’t of Energy v. Ohio*, 503 U.S. 607, 615 (1992); *United States v. Nordic Village*, 503 U.S. 30, 37 (1992) (noting that waiver of immunity must be clear from statutory text, “[i]f clarity does not exist there, it cannot be supplied by a committee report”); see also *City of Olmstead Falls v. EPA*, 233 F. Supp. 2d 890, 897 (N.D. Ohio 2002) (citing *Lane v. Pena*, 518 U.S. 187, 192 (1996)) (“Only Congress can waive the federal government’s sovereign immunity, and any waiver of sovereign immunity must be construed strictly, with all doubts resolved in favor of the sovereign.”).

²⁰⁹ See, e.g., *United States v. Murdock Mach. & Eng’g Co.*, 81 F.3d 922, 931 (10th Cir. 1996) (quoting *United States v. New York Rayon Importing Co.*, 329 U.S. 654, 660 (1947)) (“Because waiver must be ‘unequivocally expressed’ by Congress, ‘officers of the United States possess no power through their actions to waive an immunity of the United States or to confer jurisdiction on a court.’”).

²¹⁰ See, e.g., *Coastal Zone Management Act*, 16 U.S.C. § 1456(c) (2000); *Endangered Species Act*, 16 U.S.C. § 1531 (2000); *Clean Water Act* (“CWA”), 33 U.S.C. § 1323 (2000); *Safe Drinking Water Act*, 42 U.S.C. § 300j-6 (2000); *Resource Conservation and Recovery*

however, waive sovereign immunity for state water allocation programs,²¹¹ except in the limited context of basin-wide adjudications conducted by states under the McCarran Amendment.²¹²

Given the importance of the state interest in sustainable water resources and the natural aversion of states to federal assertions of sovereign immunity, regulated riparian states are not likely to back down upon a federal installation's assertion of federal water rights and federal sovereign immunity. States can be expected to respond as Florida did when confronted with U.S. Navy assertions of sovereign immunity;²¹³ specifically, states are more likely to argue that Congress has waived federal sovereign immunity under one or more of the theories discussed in the following pages. The arguments may urge waiver under the McCarran Amendment, Section 313 of the Clean Water Act ("CWA"),²¹⁴ or the Safe Drinking Water Act of 1974 ("SDWA").²¹⁵ Alternatively, states may argue that waiver is not necessary because of state "ownership" interest in the water. Fortunately for federal installations, none of these potential waiver theories "holds water."

1. Basin-Wide Adjudications Under the McCarran Amendment

The McCarran Amendment,²¹⁶ like the prior appropriation system itself, can be traced to the fact that the federal government owns much of the land in the western United States—land that contains much of the West's water supply.²¹⁷ Early in the twentieth century, western state legislatures developed legal mechanisms to allocate scarce water resources and prevent water wars. They enacted statutes authorizing comprehensive, basin-

Act ("RCRA"), 42 U.S.C. § 6961 (2000).

²¹¹ Not that certain members of Congress haven't tried. See *infra* notes 304–305 and accompanying text.

²¹² Under the McCarran Amendment, 43 U.S.C. § 666 (2000), states may require the federal government to assert federal water rights in general stream adjudications conducted in state court. See *United States v. Idaho*, 508 U.S. 1, 7 (1993). See also *infra* notes 221–226 and accompanying text.

²¹³ See, e.g., Letter from Cynthia A. Chritton, Assistant General Counsel, St. Johns River Water Management District, to Regional Environmental Counsel, United States Department of the Navy (July 10, 2001) (on file with Harvard Environmental Law Review).

²¹⁴ 33 U.S.C. § 1323.

²¹⁵ 42 U.S.C. §§ 300f–300j–26 (2000).

²¹⁶ 43 U.S.C. § 666. The McCarran Amendment provides, in pertinent part:

Consent is given to join the United States as a defendant in any *suit* (1) for the adjudication of rights to the use of water of a river system or other source, or (2) for the administration of such rights, where it appears that the United States is the owner of or . . . acquiring water rights

43 U.S.C. § 666(a) (emphasis added).

²¹⁷ See *United States v. Oregon*, 44 F.3d 758, 765 (9th Cir. 1994).

wide water right adjudications in state court.²¹⁸ Claimants had to submit their claims or risk losing them.²¹⁹

The problem for the states was that they could not bring the largest holder of rights, the United States, to the table because of sovereign immunity. The federal government's absence caused great uncertainty in the administration of state rights because claimants could not be certain that their adjudicated prior appropriation rights would stick.²²⁰ So, at the urging of Senator McCarran of Nevada, Congress enacted legislation waiving the United States' sovereign immunity for the limited purpose of compelling federal agencies to participate in comprehensive state adjudications of water rights.²²¹

The resulting waiver is narrow. A court, be it state or federal,²²² must find the following elements present before it can join the United States in a state water rights proceeding: that the proceeding is a "suit,"²²³ leading to the general "adjudication of rights to the use of water,"²²⁴ and resolving "all of the rights of various owners on a given stream."²²⁵ In other words, the state proceeding must presently result in a definitive disposition of all water rights claims in a particular water resource.²²⁶ Future intent to conduct a comprehensive McCarran adjudication is not enough to trigger federal compliance obligations.²²⁷

²¹⁸ See *id.* at 763–64.

²¹⁹ See *id.* at 764 (describing a Oregon statute whereby failure to assert a water right claim "creates the rebuttable presumption that the claim has been abandoned"); *cf.* *Sierra Club v. Andrus*, 487 F. Supp. 443, 445 (D.D.C. 1980) (detailing suit by environmental group to compel Department of Interior to participate in state adjudication out of fear that water rights would be lost by non-participation).

²²⁰ See *United States v. Akin*, 504 F.2d 115, 119 (10th Cir. 1974) *rev'd*, 424 U.S. 800 (1976) ("The Amendment's purpose was to permit complete adjudication in a state court action and to prevent frustration of the parties because of inability to obtain jurisdiction over the United States.").

²²¹ See generally *COGGINS ET AL.*, *supra* note 63, at 541–43.

²²² Both federal and state courts can determine the rights of the federal government in McCarran Amendment adjudications. See *Cappaert v. United States*, 426 U.S. 128, 145 (1976). However, because of the predominant role of state law, the Supreme Court has indicated a preference for adjudications in state court. See generally *Arizona v. San Carlos Apache Tribe*, 463 U.S. 545 (1983). See also *COGGINS ET AL.*, *supra* note 63, at 542.

²²³ See, e.g., *United States v. Puerto Rico*, 287 F.3d 212, 218 (1st Cir. 2002) (enjoining Commonwealth's administrative action against United States over water "franchise" because action was not a "suit") ("The word 'suit' has a particularized meaning in legal parlance; it refers specifically to *an action in a judicial forum.*") (emphasis added).

²²⁴ *Dugan v. Rank*, 372 U.S. 609, 618 (1963).

²²⁵ *Id.*

²²⁶ See generally *United States v. District Court for Water Div. No. 5*, 401 U.S. 527, 529 (1971); *Jicarilla Apache Tribe v. United States*, 601 F.2d 1116, 1130 (10th Cir. 1979) ("The legislative history of the McCarran Amendment . . . manifests the Congressional intent to accomplish in one forum the general settlement of water rights of many users of a river system or other source.").

²²⁷ See, e.g., *United States v. Puerto Rico*, 287 F.3d at 215 (referring to the district court ruling in which a declaration of intent to join other claimants at later date was insufficient to confer jurisdiction); *United States v. Oregon*, 44 F.3d 758, 770–71 (9th Cir. 1994) (state could not require United States to submit water right registrations in water-

As explained below, regulated riparian permit enforcement cannot satisfy the elements of a McCarran adjudication.

a. Regulated Riparian Permit Disputes Are Not “Suits”

As the Commonwealth of Puerto Rico forcefully learned in its battle with the U.S. Navy over military training on the island of Vieques, the McCarran Amendment cannot be used for the purpose of “hauling the United States into . . . an adversarial state administrative proceeding”²²⁸ because administrative disputes are not “suits.”²²⁹ Unlike the “seamless procedure” approved by the court in *United States v. Oregon*, where administrative involvement “merely paves the way for an adjudication by the court of all the rights involved,”²³⁰ judicial and administrative processes are entirely separate in regulated riparian systems.²³¹

b. Regulated Riparian Permits Do Not Adjudicate Rights

Though they may authorize use for an extended period of time, regulated riparian permits do not convey permanent property rights in water.²³² What the state giveth today, it theoretically may take back tomorrow. Moreover, the process of permit approval in most regulated riparian states is more akin to a rulemaking than an adjudication.²³³ Upon receipt of a permit application, the agency staff conducts a technical review and decides on an appropriate allocation. After public notice and opportunity for comment, the staff approves, conditionally approves, or denies the permit. There is no adjudication of claims before a neutral third party unless a party requests a formal hearing.²³⁴

sheds that were not the subject of present McCarran Amendment adjudication).

²²⁸ *United States v. Puerto Rico*, 287 F.3d at 216, 218.

²²⁹ *Id.* at 221. To qualify as a “suit,” a McCarran adjudication must be conducted in state or federal court or, alternatively, in a “seamless scheme possessing both administrative and judicial components” whereby the state agency serves as “an aid to the court.” *Id.* at 220.

²³⁰ *United States v. Oregon*, 44 F.3d 758, 765 (9th Cir. 1994) (citing *Pacific Livestock Co. v. Or. Water Bd.*, 241 U.S. 440, 451 (1916)).

²³¹ Formal disputes over regulated riparian requirements are typically resolved in a state APA proceeding pitting the regulatee against the agency. See generally Dellapenna, *Regulated Riparianism*, *supra* note 28, § 9.03 (a)(5)(B). That was the scenario in *United States v. Puerto Rico* before the United States sought relief in federal court. See *United States v. Puerto Rico*, 287 F.3d at 214–16.

²³² See *supra* notes 112–114 and accompanying text.

²³³ See Dellapenna, *Regulated Riparianism*, *supra* note 28, § 9.03(a)(5)(A).

²³⁴ *Id.* See, e.g., *United States v. Puerto Rico*, 287 F.3d 212, 219–20 (1st Cir. 2002) (describing non-judicious nature of permitting process in Puerto Rico).

c. Regulated Riparian Systems Do Not Determine the Rights of All Claimants in One “General” Proceeding

Private disputes between a state and the federal government are not cognizable under the McCarran Amendment.²³⁵ A dispute over water allocation can only pass sovereign immunity muster if all of the competing users on the same water resource are joined in one “judicial” proceeding to determine individual rights in the water resource.²³⁶ Few, if any regulated riparian states have regulatory mechanisms in place to bring about adjudication of this magnitude.²³⁷

2. Waiver of Immunity Under the Clean Water Act

The Federal Water Pollution Control Act of 1972, popularly referred to as amended as the Clean Water Act (“CWA”),²³⁸ was enacted “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters by reducing and eventually eliminating the discharge of pollutants.”²³⁹ The CWA regulates water pollution primarily through the enforcement of effluent limitations and state water quality standards.²⁴⁰

The CWA is not a water allocation statute.²⁴¹ It neither enlarges, nor constricts, the authority of states to allocate waters within their borders.²⁴² Nevertheless, regulated riparian states may attempt to compel federal compliance by invoking the CWA’s limited sovereign immunity waiver, Section 313.²⁴³ It is difficult to imagine a set of facts whereby a state could suc-

²³⁵ See, e.g., *Wyoming v. United States*, 933 F. Supp. 1030, 1037 (D. Wyo. 1996) (holding suit between irrigation district, state, and United States not a “general adjudication”); see also *Fent v. Oklahoma Water Res. Bd.*, 235 F.3d 553, 556 (10th Cir. 2000) (holding action for damages not covered by McCarran); *Gardner v. Stager*, 103 F.3d 886, 888 (9th Cir. 1996); *Nevada ex rel. Shamberger v. United States*, 279 F.2d 699, 701 (9th Cir. 1960).

²³⁶ Cf. *Wyoming v. United States*, 933 F. Supp. at 1037 (“procedure which allows *specific* parties to obtain a right to use water” is not a “general adjudication.”).

²³⁷ See Dellapenna, *Replacing Common-Law*, *supra* note 9, at 38. Perhaps if a federal-state dispute pertained exclusively to remote lands where the state and federal governments were the only holders of water rights in a watercourse, the resulting adjudication could be considered “general” and “stream wide” so as to satisfy this aspect of the McCarran Amendment.

²³⁸ 33 U.S.C. §§ 1251–1387 (2000).

²³⁹ *Maier v. EPA*, 114 F.3d 1032, 1034 (10th Cir. 1997) (quoting 33 U.S.C. § 1251(a)).

²⁴⁰ See *North Dakota v. U.S. Army Corps of Eng’rs*, 270 F. Supp. 2d 1115, 1123 (D.N.D. 2003). See also *Arkansas v. Oklahoma*, 503 U.S. 91, 101 (1992).

²⁴¹ See 33 U.S.C. § 1251(g) (2000).

²⁴² See generally TARLOCK, *WATER RIGHTS AND RESOURCES*, *supra* note 41, at 5:91.

²⁴³ 33 U.S.C. § 1323 (2000). Section 313 provides that:

Each . . . instrumentality of the . . . Federal Government (1) having jurisdiction over any property or facility, or (2) engaged in any activity resulting, or which may result, in the discharge or runoff of pollutants . . . shall be subject to, and comply with, all Federal, State, interstate, and local requirements . . . respecting the control and abatement of water pollution in the same manner, and to the same extent as any nongovernmental entity

cessfully invoke Section 313 to haul the federal government into court for an alleged violation of a regulated riparian requirement.²⁴⁴ To the extent that water withdrawals are ever regulated by the CWA,²⁴⁵ only withdrawals affecting surface water are actionable unless a state can show that groundwater withdrawals cause violations of state water quality standards *in surface waters*.²⁴⁶ Moreover, although withdrawals of water may result in “pollution,”²⁴⁷ they are not discharges of “pollutants”²⁴⁸ from a “point source”²⁴⁹ such that states can utilize their federally delegated CWA regulatory authority to compel federal installation compliance.²⁵⁰

States may argue that Section 313 nevertheless compels federal agencies to comply with state “requirements” for the control of nonpoint source (“NPS”) pollution²⁵¹ where federal water withdrawals have the potential to violate state water quality standards.²⁵² In most regions of the country, it

33 U.S.C. § 1323(a) (emphasis added).

²⁴⁴ See generally WILLIAM H. RODGERS, JR., ENVIRONMENTAL LAW: AIR AND WATER, § 4.3 (Supp. 1995) (describing historically narrow judicial interpretation of Section 313). Cf. U.S. Dep’t of Energy v. Ohio, 503 U.S. 607 (1992) (narrowly interpreting Section 313).

²⁴⁵ Compare *Colo. Wild, Inc. v. U.S. Forest Serv.*, 122 F. Supp. 2d 1190, 1194–95 (D. Colo. 2000) (rejecting argument that Section 313 waives the sovereign immunity of United States for withdrawals of water); *North Carolina v. Fed. Energy Reg. Comm’n*, 112 F.3d 1175, 1187–88 (D.C. Cir. 1997) (holding withdrawal of water not subject to CWA regulation) with *Nat’l Wildlife Fed’n v. U.S. Army Corps of Eng’rs*, 132 F. Supp. 2d 876 (D. Or. 2001) (holding sovereign immunity waived where reduction of water from federal dam likely to violate state water quality standards).

²⁴⁶ See generally *Idaho Rural Council v. Bosma*, 143 F. Supp. 2d 1169, 1178–80 (D. Idaho 2001) (citing cases). In some jurisdictions, courts refuse to consider impacts to groundwater altogether—notwithstanding significant hydrologic connections to surface waters. See, e.g., *Village of Oconomowoc Lake v. Dayton Hudson Corp.*, 24 F.3d 962 (7th Cir. 1994); *Town of Norfolk v. U.S. Army Corps of Eng’rs*, 968 F.2d 1438, 1451 (1st Cir. 1992).

²⁴⁷ 33 U.S.C. § 1362(19) (2000) (defining “pollution”).

²⁴⁸ See 33 U.S.C. §§ 1362(6) (defining “pollutant”), 1311(a), 1342 (prohibiting discharge of pollutants to navigable waters without a National Pollutant Discharge Elimination System (“NPDES”) permit).

²⁴⁹ A “point source” is a discrete conveyance, such as a pipe or a well, from which pollutants are or may be discharged. See 33 U.S.C. § 1362(14).

²⁵⁰ See *Or. Natural Res. Council v. U.S. Forest Serv.*, 834 F.2d 842, 849 (9th Cir. 1987) (“We do not agree with plaintiffs that Congress intended [Section 301] to apply to nonpoint sources.”). Accord *Or. Natural Desert Ass’n v. Dombeck*, 172 F.3d 1092, 1097–98 (9th Cir. 1998) (holding Forest Service not required to obtain state water quality certification for issuance of grazing permit because pollution would not come from point source); *North Dakota v. U.S. Army Corps of Eng’rs*, 270 F. Supp. 2d 1115, 1124 (D.N.D. 2003) (noting that diversions from dams not covered by NPDES program). Moreover, because the CWA citizen suit provision is inapplicable in the absence of a point source discharge, see *Or. Natural Desert Ass’n*, 172 F.3d at 1098, legally cognizable judicial review can only be obtained under the deferential standards of the APA. See 5 U.S.C. § 706(2)(A) (entitling plaintiff to relief only upon a showing that the conduct of the United States is “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.”).

²⁵¹ NPS is “pollution that does not result from the ‘discharge’ or ‘addition’ of a pollutant” from a “point source.” *Or. Natural Res. Council*, 834 F.2d at 849 n.9. NPS is typically associated with runoff from agricultural or silvicultural operations, but can encompass other activities that degrade water quality including water withdrawals. See generally *Or. Natural Res. Council*, 834 F.2d at 849.

²⁵² See, e.g., *North Dakota v. U.S. Army Corps of Eng’rs*, 270 F. Supp. 2d at 1126 (North Dakota making identical argument in suit to enjoin Corps of Engineers from releas-

is an open question whether the federal government has waived sovereign immunity for state regulation of NPS pollution. The Ninth Circuit has answered the question in the affirmative, and allows suits under the APA for alleged violations of state water quality standards when caused by NPS from federal actions.²⁵³ However, other courts outside the Ninth Circuit seem to have reached a different conclusion,²⁵⁴ and Congressional intent on this point is far from clear.²⁵⁵ Whether federal courts in the East ultimately follow the Ninth Circuit's decisions on NPS pollution or not, the options of regulated riparian states under the CWA are still very limited in the context of federal water withdrawals. First, unlike agricultural or silvicultural activities, removal of water from a river (or a well), though perhaps a cause of "pollution,"²⁵⁶ does not result in "runoff" or "discharge" of pollutants so as to trigger Section 313.²⁵⁷

Second, regulated riparian permitting and registration regulations are not, for the most part, objective and ascertainable "requirements" of state delegated CWA programs that trigger federal compliance.²⁵⁸ States enacted regulated riparian programs to facilitate orderly water allocation and sustainability of water resources, not to achieve attainment of specific water quality standards.²⁵⁹

Third, because most regulated riparian requirements are not associated with water quality, it may be difficult for states to prove that federal withdrawals of water, and not a myriad of other factors, are the cause of wa-

ing water from dams).

²⁵³ See, e.g., *Idaho Sporting Cong. v. Thomas*, 137 F.3d 1146, 1153 (9th Cir. 1998); *Or. Natural Res. Council*, 834 F.2d at 850–52. See also *Nat'l Wildlife Fed'n. v. U.S. Army Corps of Eng'rs*, 132 F. Supp. 2d 876 (D. Or. 2001).

²⁵⁴ See, e.g., *Colo. Wild, Inc. v. U.S. Forest Serv.*, 122 F. Supp. 2d 1190, 1194–95 (D. Colo. 2000) (rejecting plaintiff's argument that Section 313 waives the sovereign immunity of the United States for violations of state water quality standards) ("[T]he language of Section 313 appears to be limited to requiring a federal facility to comply with pollution control measures in the same fashion as a nongovernmental entity.").

²⁵⁵ Compare 33 U.S.C. § 1323(a) (requiring federal government to comply with state "requirements" for controlling "runoff") with 33 U.S.C. § 1329(k) (requiring federal agencies to enter into non-mandatory cooperative agreements with states for controlling and reducing non-point source pollution). It seems odd that Congress would create a seemingly superfluous requirement in Section 1329(k) to negotiate cooperative agreements on NPS compliance if it intended federal installations to be bound by all state NPS requirements.

²⁵⁶ See generally *North Dakota v. U.S. Army Corps of Eng'rs*, 270 F. Supp. 2d at 1124.

²⁵⁷ See, e.g., *State of Missouri ex rel. Ashcroft v. U.S. Dep't of the Army*, 672 F.2d 1297, 1303–04 (8th Cir. 1982) (holding erosion of soil caused by fluctuations in river associated with operations of Corps of Engineers did not constitute "discharge" or "runoff" under Section 313).

²⁵⁸ See generally *Fla. Dep't of Env'tl. Regulation v. Silex Corp.*, 606 F. Supp. 159, 163 (M.D. Fla. 1985) (opining that courts should "strictly define requirements as objective and ascertainable state regulations [such as] state pollution standards or limitations, compliance schedules, emission standards, and control requirements.").

²⁵⁹ Although regulated riparian permits may inadvertently improve water quality, they are not the "relatively precise standards capable of uniform application" that allow a court to waive federal sovereign immunity. *Romero-Barcelo v. Brown*, 643 F.2d 835, 855 (1st Cir. 1981), *rev'd on other grounds, sub nom.*, *Weinberger v. Romero-Barcelo*, 456 U.S. 305 (1982).

ter quality standard violations—a requisite showing for success under Section 313.²⁶⁰

Finally, to the extent that a regulated riparian state discriminates in favor of certain water users, and most do,²⁶¹ states may be foreclosed from alleging waiver under Section 313 because the United States is only obliged to comply with state CWA requirements “to the same extent as any non-governmental entity.”²⁶²

3. Waiver of Immunity Under the Safe Drinking Water Act

Congress passed the SDWA in 1974 to ensure the safety of the nation’s public drinking water supplies.²⁶³ The SDWA, as amended, requires the EPA to establish national primary drinking water regulations (“NPDWR”) that contain enforceable maximum contaminant levels (“MCL”)²⁶⁴ for drinking water. The NPDWR applies to “public water system[s].”²⁶⁵ Water systems that serve less than twenty-five individuals on an annual basis may be exempt from regulation.²⁶⁶ Additionally, the SDWA protects underground sources of drinking water through grants for protection of sole source aquifers²⁶⁷ and the development of state wellhead protection area plans.²⁶⁸

States may assume control of the SDWA program from the EPA upon demonstration that state regulations for administration of the NPDWR are at least as stringent as the national standards.²⁶⁹ Many have done so. Upon assumption, states must ensure that drinking water meets all established

²⁶⁰ See generally *North Dakota v. U.S. Army Corps of Eng’rs*, 270 F. Supp. at 1126–27 (“North Dakota’s failure to show . . . how the [Corps of Engineers] is currently in violation of the Clean Water Act or state water quality standards weighs against its success on the merits.”).

²⁶¹ See Dellapenna, *Regulated Riparianism*, *supra* note 28, § 9.03(a)(3), at 9-48. See also *supra* note 99 and accompanying text.

²⁶² 33 U.S.C. § 1323 (2000).

²⁶³ 42 U.S.C. §§ 300f to 300j-26 (2000). See *Natural Res. Def. Council v. EPA*, 806 F. Supp. 275, 276 (D.D.C. 1992).

²⁶⁴ MCLs are national standards for EPA designated “contaminants” that ensure drinking water is safe for human consumption. *Id.*

²⁶⁵ See 42 U.S.C. § 300g (2000).

²⁶⁶ See LINDA A. MALONE, ENVIRONMENTAL REGULATION OF LAND USE § 9:7 (2003) (citing 42 U.S.C. 300f(4) and EPA regulations at 40 C.F.R. § 141.2) “The term ‘public water system’ means a system for the provision of water for human consumption through pipes or other constructed conveyances, if such system has at least fifteen service connections or regularly serves at least twenty-five individuals.” 42 U.S.C. § 300f(4)(A).

²⁶⁷ See 42 U.S.C. § 300h-6.

²⁶⁸ See 42 U.S.C. § 300h-7(a). Congress added the wellhead protection program in 1986 as a prophylactic measure to prevent contamination of drinking water wells. A wellhead protection areas is “the surface and subsurface area surrounding a water well or wellfield, supplying a public water system, through which contaminants are reasonably likely to move.” 42 U.S.C. § 300h-7(e). States establish the boundaries of wellhead protection areas and the types of contaminants that may endanger water supplies.

²⁶⁹ See 42 U.S.C. § 300g-2(a)(1); 40 C.F.R. § 142.10 (2004).

MCLs.²⁷⁰ States must also administer their wellhead protection programs to prevent contamination of drinking water supplies.²⁷¹

Like the CWA, the SDWA contains a limited waiver of federal sovereign immunity. The waiver provides in pertinent part:

Each department, agency and instrumentality of . . . the Federal Government [owning or operating a facility in a wellhead protection area or a public water system] . . . shall be subject to, and comply with . . . State . . . and local requirements, both substantive and procedural . . . respecting the protection of such wellhead areas, respecting such public water systems . . . to the same extent as any person is subject to such requirements.²⁷²

Though the language of the waiver is seemingly broad, its reach is geographically narrow; it covers drinking water destined for public water systems.²⁷³ Most regulated riparian requirements—with their focus on *water quantity* and *resource sustainability*—will accordingly fall outside state SDWA regulatory authority.²⁷⁴ This is so for a number of reasons.

First, many federal installations are not public water systems that are required to comply with state SDWA requirements because they do not regularly provide drinking water to the requisite number of customers.²⁷⁵ Second, the NPDWR are end of the pipe requirements. They do not regulate what comes in, only the allowable level of contaminant that reaches the end user. While there is little question that federal drinking water treatment and distribution systems must meet or exceed state MCLs, Section 300-j does not contemplate state regulation of *in situ* groundwater on federal installations.²⁷⁶ Third, riparian regulations and permits are no more “requirements” under the SDWA than they are under the CWA. To be enforceable, state “requirements” must be predetermined, objective standards capa-

²⁷⁰ See 40 C.F.R. § 142.10.

²⁷¹ See 42 U.S.C. § 300h-7.

²⁷² 42 U.S.C. § 300j-6(a).

²⁷³ See generally 42 U.S.C. § 300g-2. See also 40 C.F.R. § 142.3.

²⁷⁴ See generally 42 U.S.C. § 300g-1(b)(1). EPA has responsibility to assess risk and determine contaminants that require MCLs; states implement the standards, but do not determine the contaminants to be regulated. However, to the extent that regulated riparian directives utilize objective criteria and govern the location, construction and operation of federal drinking water wells, such regulations might pass sovereign immunity muster as valid wellhead protection area requirements. See 42 U.S.C. § 300h-7(a).

²⁷⁵ See 42 U.S.C. § 300f(4)(A).

²⁷⁶ Congress considered legislation in 1986 that would have created enforceable groundwater quality standards analogous to those enforced by the states under Section 303 of the CWA. It did not pass. MALONE, *supra* note 266, at § 9:8. The failure of a proposed amendment “strongly militates against a judgment that Congress intended a result that it expressly declined to enact.” *Gulf Oil Corp. v. Copp Paving Co.*, 419 U.S. 186, 200 (1974). See also *Umatilla Waterquality Protective Assoc., Inc. v. Smith Frozen Foods*, 962 F. Supp. 1312, 1319 (D. Or. 1997).

ble of uniform application.²⁷⁷ Most states do not have specific enforceable MCLs for contaminants associated with overdraw of an aquifer or river (such as salt). Even if they did, it would make little difference. Regulated riparian permit decisions are inherently *ad hoc* determinations that balance a wide variety of factors in setting permit allocations.²⁷⁸ They are not the relatively precise standards capable of uniform application for which the United States has waived immunity.²⁷⁹ Finally, as with the CWA, to the extent other large scale water users are exempt from regulation under regulated riparian systems, states may be precluded from invoking the SDWA waiver of immunity.²⁸⁰

4. Claims of State Ownership of Water: The Public Trust and Equal Footing Doctrines

Though conceptually different than the sovereign immunity issues discussed above, states may attempt to coerce federal compliance with regulated riparian requirements via assertion of “ownership” of state waters per the Equal Footing Doctrine or the Public Trust Doctrine.²⁸¹ Many states claim ownership of water resources within their borders by virtue of one or both of these doctrines, and these claims are justified to a limited degree. It is beyond question that states can manage their waters as trustees for the use and benefit of the public.²⁸² It is also clear that, per the Equal Footing Doctrine, states own the beds of traditionally navigable waters and tidelands.²⁸³ However, trustee responsibilities and ownership of the beds *do not imply an ownership of the corpus* of the water itself,²⁸⁴ nor do they in

²⁷⁷ See Florida Dep’t of Env’tl. Regulation v. Silex Corp., 606 F. Supp. 159, 163 (M.D. Fla. 1985).

²⁷⁸ See *supra* notes 105–106 and accompanying text.

²⁷⁹ Cf. *supra* notes 258–259 and accompanying text.

²⁸⁰ 42 U.S.C. § 300j-6(a) (waiving sovereign immunity only to the “same extent as any person is subject to such requirements.”).

²⁸¹ As owners, states might argue, they have the right to exclude the federal government (or any other user) from withdrawing its “property” without permission. These types of claims have not fared well in the courts. See generally Kelley, *supra* note 29, § 36.02 at 36-9 to 36-10 (“[C]laims of ‘ownership’ of the water itself by the state or its grantees are not adequate to insulate water or water rights from federal control.”) (internal citations omitted).

²⁸² See, e.g., United Plainsmen Assoc. v. N.D. State Water Conservation Comm’n, 247 N.W.2d 457, 461 (N.D. 1976) (“The state holds the navigable waters, as well as the lands beneath them, in trust for the public.”). Where Congress has manifested its approval, as in the Clean Water Act, states can regulate certain activities of federal installations on public trust waters. See 33 U.S.C. § 1323 (2000). They may not do so when Congress has manifested a contrary purpose. See *New England Power Co. v. New Hampshire*, 455 U.S. 331, 338 n.6 (1982) (“Whatever the extent of the State’s proprietary interest in the river, the preeminent authority to regulate the flow of the navigable waters resides with the Federal Government.”).

²⁸³ See *Phillips Petroleum v. Mississippi*, 484 U.S. 469, 487–91 (1988) (holding that the state of Mississippi, by virtue of its admission to the Union, owns bottoms of non-navigable tidal waters in addition to bottoms of traditional navigable waters).

²⁸⁴ See *Sporhase v. Nebraska*, 458 U.S. 941, 951–52 (state claims of ownership a “fiction”). See also *State v. Superior Court of Riverside County*, 93 Cal. Rptr. 2d 276, 287–

any manner diminish the sovereign immunity of the federal government to use water as it sees fit upon its lands.²⁸⁵

D. The Solution—Conditional Compliance as a Matter of Comity

The foregoing analysis of sovereign immunity indicates that in all but the rarest of circumstances, federal installations in the East cannot be compelled to comply with state regulated riparian requirements. But is non-compliance the wisest course of action? It is not. As explained in Part IV and the paragraphs below, the best course of action is for federal installations in the East to conditionally comply with substantive and procedural regulated riparian requirements as a matter of comity,²⁸⁶ provided compliance does not conflict with federal law or interfere with the accomplishment of the federal installation mission. Reasons for this approach, as explained fully below, include: the fluid nature of federal sovereign immunity, the uncertainty surrounding federal water rights in the East, avoiding impairment of state law water rights, and public policy considerations.

1. Sovereign Immunity Is a Fluid Concept

States can (and do) amend their water allocation statutes to fall with the ambit of one of the existing waivers of sovereign immunity.²⁸⁷ Even if states do not act, Congress may act in their absence. Congressional action waiving sovereign immunity for state water allocation requirements is a realistic scenario if federal assertions of sovereign immunity begin to interfere with state administration of regulated riparian regimes.²⁸⁸

88 (Cal. Ct. App. 2000) (“The state ‘owns’ the groundwater in a regulatory sense, but it does not own it in a possessory, proprietary sense.”).

²⁸⁵ See *Arizona v. California*, 373 U.S. 546, 597–98 (1963) (rejecting Arizona’s claim that Equal Footing Doctrine eliminates federal power to reserve water for use on federal lands under the Property Clause); *Minnesota v. Block*, 660 F.2d 1240, 1252 (8th Cir. 1981) (noting that state has “power to control the use” of waters in the public trust, but “[t]his authority, like any other state police power . . . must yield, to a valid exercise of federal power.”). Cf. Olson Memo, *supra* note 26, at 365 (“We believe that state and federal claims . . . to ownership of unappropriated water . . . do not provide an adequate basis for either denial or assertion of federal water rights.”).

²⁸⁶ “Comity” is a rule of courtesy by which one sovereign voluntarily defers to the concomitant jurisdiction of another. See WEBSTER’S NINTH NEW COLLEGIATE DICTIONARY 264 (1988).

²⁸⁷ See, e.g., *North Dakota v. U.S. Army Corps of Eng’rs*, 270 F. Supp. 2d. 1115 (D.N.D. 2003) (interpreting statute regulating dams that legislature amended in order to fall within CWA waiver of sovereign immunity). See also *United States v. District Court for Eagle County*, 401 U.S. 520, 524 (1971) (holding McCarran Amendment provides for adjudication of riparian rights).

²⁸⁸ See *infra* notes 303–306 and accompanying text.

2. Federal Water Rights Cannot Yet Be Relied Upon in the Eastern United States

As the conflicting Olson and Western water rights theories aptly demonstrate, the future viability of “federal” water rights on acquired lands, though constitutionally possible,²⁸⁹ is highly uncertain.²⁹⁰ Moreover, judicial recognition of FNRWR in the East is only the initial salvo. Before it can claim a federal water right, a federal installation *must* be able to point to Congressional or Executive Branch intent, whether explicit or implied from surrounding circumstances,²⁹¹ to preempt inconsistent state water law.²⁹² For many federal installations, this will not be an easy task.²⁹³ As *United States v. New Mexico* illustrates, there is a presumption that federal installations will acquire water rights in accordance with state water law, and Congressional actions indicating a contrary intent must be very clearly stated.²⁹⁴

Prior to the 1980s, most statutes were silent on water rights,²⁹⁵ and courts are unlikely to discern a Congressional intent to preempt state law absent compelling facts.²⁹⁶ Federal installations will need to demonstrate, based on an actual (as opposed to theoretical) application of state water allocation regulations to federal land, that the state regulation at issue either prevents or significantly frustrates the federal installation’s efforts to comply with its statutory mission.²⁹⁷ State directives that merely inconvenience an installation or drive up the cost of doing business are not likely to support a finding of preemption.²⁹⁸

²⁸⁹ See Leshy, *supra* note 64, at 288.

²⁹⁰ See Dellapenna, *Regulated Riparianism*, *supra* note 28, at 9-194.

²⁹¹ *E.g.*, *Winters v. United States*, 207 U.S. 564 (1908) (holding that Congress reserved water by implication because Indian land required water to fulfill Congressional purpose of the reservation).

²⁹² See Blumm, *Reserved Water Rights*, *supra* note 20, at § 37.03(a).

²⁹³ *Id.*

²⁹⁴ See *United States v. New Mexico*, 438 U.S. 696, 702 (1978). See also Olson Memo, *supra* note 26, at 378-80.

²⁹⁵ COGGINS ET AL., *supra* note 63, at 538-39.

²⁹⁶ See *United States v. Kimbell Foods, Inc.*, 440 U.S. 715, 728-29 (1979). In *Kimbell Foods*, the Supreme Court developed a three part test for determining the propriety of federal preemption: the need for uniform nationwide rules governing implementation or administration of federal programs; the extent that state law rules would frustrate specific objectives of a federal program; and the extent to which application of a federal rule would disrupt relationships based on state law. *Id.*

²⁹⁷ See *id.* Cf. N.C. ADMIN. CODE tit. 15A, r.2E.0503 (Aug. 2002) (requiring certain regulated groundwater users to reduce their withdrawals by 75% phased in over period of sixteen years). A state requirement to reduce water usage by 75% might be so burdensome to a federal installation’s mission accomplishment that a court would be inclined to find preemption.

²⁹⁸ See generally *Kimbell Foods*, 440 U.S. at 738-39; Olson Memo, *supra* note 26, at 380. Even if a federal agency shows that a regulated riparian requirement is a significant burden on a federal program, a federal court may still be hesitant to grant broad relief where the state can establish that its water allocation system is fair, and state residents have invested time and money in reliance on the system. Cf. *Kimbell Foods*, 440 U.S. at 729.

To the extent that a federal court is inclined to reallocate limited water resources to a federal agency pursuant to a FNRWR, private citizens who are deprived of historic usage as a result thereof may file Fifth Amendment takings claims against the United States in the Court of Federal Claims.²⁹⁹ In recent years, landowners in western states have successfully asserted water right takings claims against the United States,³⁰⁰ and property rights activists see these claims as an effective tool to frustrate what they perceive as burdensome federal land management decisions.³⁰¹ There is little advantage in claiming federal water rights if the federal government must compensate each adversely affected regulated riparian permittee as a result thereof.³⁰²

By obtaining regulated riparian permits federal installations greatly decrease potential takings liability. To the extent that federal installations utilize water in accordance with a state permit, any regulatory action is that of the state, and any “taking” cannot be attributed to the federal government.³⁰³

Finally, federal water rights exist at the pleasure of Congress. They can be wiped out with the stroke of a pen.³⁰⁴ Every year western senators introduce legislation that would entirely eliminate federal water rights, reserved or otherwise.³⁰⁵ This past year was no different.³⁰⁶ Senator Crapo’s bill did not pass, but query how a similar bill might fare in future Congresses if federal courts in the East begin to recognize federal water rights that divest powerful water dependent industries of their traditional sup-

²⁹⁹ See Kelley, *supra* note 29, at § 36.02 n.19 (“Congress can exert its powers . . . to whatever extent it is willing to weather the very considerable political maelstrom that would follow any substantial interference with settled state water regimes (and to pay just compensation if the control went so far as to amount to a taking . . .).”).

³⁰⁰ See, e.g., Hage v. United States, 35 Fed. Cl. 147 (1996); Tulare Lake Basin Water Storage Dist. v. United States, 49 Fed. Cl. 313 (2001).

³⁰¹ See, e.g., HAGE, *supra* note 189, at 212–14. See also David Abelson, *Water Rights and Grazing Permits: Transforming Public Lands Into Private Lands*, 65 U. COLO. L. REV. 407, 422–26 (1994).

³⁰² See Dellapenna, *Regulated Riparianism*, *supra* note 28, at 9-194 to 9-195 (noting that the primary purpose behind federal water rights is to avoid having to compensate holders of state water rights).

³⁰³ See, e.g., Blue v. United States, 21 Cl. Ct. 359, 362–63 (1990) (where federal government acts strictly in a proprietary capacity as landowner it will not be held liable for a taking because regulatory action is that of a different sovereign). *Accord* Persyn v. United States, 32 Fed. Cl. 579, 584 (1995) (Jackson, J., concurring).

³⁰⁴ See generally Olson Memo, *supra* note 26, at 371 n.91; see also *infra* note 305.

³⁰⁵ See Congressional Press Release, *Crapo Pushes to Protect State Water Rights* (Mar. 7, 2003) (describing Senator Mike Crapo of Idaho’s introduction of Senate Bill 561, the “State Water Sovereignty Protection Act” and Crapo’s rationale therefore) (“[f]ederal agencies and some in the Congress are . . . ignoring long established statutory provisions concerning state water rights and state water contracts.”). See also Wilcox, *supra* note 10, at 8 (referencing past legislative efforts of Senator Crapo to divest the United States of water rights) (“Because the [proposed legislation] contains no grandfathering provision, it is likely that its passage would effectively deprive many federal reservations of most, if not all, of their water rights.”).

³⁰⁶ See, e.g., State Water Sovereignty Protection Act, S. 561, 108th Cong. (2003).

plies. Federal installations in the East might win the federal water rights battle in the courts only to witness the passage of the State Water Sovereignty Protection Act of 2010.³⁰⁷

3. State Law Water Rights May Be Impaired If the United States Fails To “Perfect” Them

Given the uncertainty surrounding federal water rights, federal agencies neglect their state law water rights at their peril.³⁰⁸ Some eastern states now require users to “perfect” their state law rights by obtaining a regulated riparian permit.³⁰⁹ These states may grant preference in times of shortage to senior water uses, and an otherwise senior user, like the United States, can lose priority if it does not comply with state procedures.³¹⁰

Moreover, common law riparian rights, to the extent they are not supplanted by regulated riparian regimes, may be inadequate to meet federal needs.³¹¹ Unlike the common law, regulated riparian permits convey an enforceable property right to a finite amount of water.³¹² Though this permit right is not absolute, it is far more certain than a common law riparian right.³¹³ Permit allocations are protected by state administrative procedures, and state agencies rarely ratchet back allocations beyond demonstrated historic usage.³¹⁴

Finally, water disputes do not always involve the state as a party. If the federal government has not “perfected” its state law water rights, a competing user to a shared resource can pump water to the detriment of a federal installation, and there may be little the United States can do about it barring a judicial determination of preemptive federal water rights or exercise of federal eminent domain powers.³¹⁵ Federal installations should not forget that state law can be both sword and shield.

³⁰⁷ Cf. Trelease, *Uneasy Federalism*, *supra* note 69, at 773–75 (opining that recognition of FNRWR in courts would likely spur Congress to action).

³⁰⁸ See, e.g., *United States v. Bell*, 724 P.2d 631, 643 (Colo. 1986) (en banc) (holding that federal agency’s failure to comply with state notice laws for perfecting state law water right cost agency six decades of seniority); *United States v. Fallbrook Pub. Util. Dist.*, 347 F.2d 48, 55 (9th Cir. 1965) (discussing loss of priority for failure to perfect appropriative right under state law).

³⁰⁹ See *supra* notes 126–131 and accompanying text.

³¹⁰ See *supra* notes 126–131 and accompanying text. Cf. Olson Memo, *supra* note 26, at 372 n.93 (“In ‘permit’ states, which award priority based on the date an application is filed, [federal] agencies risk having their rights cut off by a junior appropriator who has complied with state procedural requirements.”).

³¹¹ See *supra* notes 47–49 and accompanying text.

³¹² See Gould, *supra* note 15, at 13 (comparing regulated riparian permit right to a leasehold estate).

³¹³ *Id.*

³¹⁴ See generally Dellapenna, *Regulated Riparianism*, *supra* note 28, § 9.03(b)(3); Miano & Crane, *supra* note 13, at 17.

³¹⁵ See, e.g., *California v. United States*, 235 F.2d 647, 656 (9th Cir. 1956) (“The government, as regards all claimants to water outside the enclave, is not in the position of sovereign, but in the position of a lower riparian . . .”); *United States v. Fallbrook Pub.*

4. *Compliance With State Water Allocation Requirements Is Good Policy*

Western antagonism to federal interests is a by-product of the historically vast land holdings of the federal government in the western United States. Neither side trusts the other,³¹⁶ and each has its reasons.³¹⁷ Eastern states may be more sympathetic to the comparatively modest water needs of federal installations. Regulated riparian states are not seeking to usurp federal power when they request federal installation compliance with regulated riparian requirements. They are, for the most part, simply trying to manage a finite resource in a sustainable manner.³¹⁸ States need federal installation water usage data so they can accurately plan for the future, and they need to quantify federal usage in a permit so that they do not over-allocate available water supplies.

Sovereign immunity waiver or not, these are legitimate state goals that federal installations should support to the maximum extent practicable.³¹⁹ Federal installations need a sustainable water supply, and all users of a water resource suffer alike if a resource is destroyed by overuse.³²⁰ Moreover, a refusal to comply with what appears to be a reasonable state program may damage the overall relationship between the federal installation and the state environmental regulatory community.³²¹

Util. Dist., 165 F. Supp. 806, 840 (S.D. Cal. 1958) (“There is absolutely no doubt as to the power of the federal government to take what it needs for its public uses; if vested rights are involved, the government will obviously be required to pay compensation.”); Trelease, *supra* note 69, at 757–58.

³¹⁶ See Leshy, *supra* note 64, at 283.

³¹⁷ *Id.*

³¹⁸ See Dellapenna, *Southeastern States*, *supra* note 13, at 36. Of course, if parochial interests come to control state water allocation processes in the East, as they have in some western states, then a federal installation would be well within its prerogatives to seek a declaration of preemption in federal court.

³¹⁹ Cf. 42 U.S.C. §§ 8252, 8256(c) (2000) (encouraging federal agency participation in water conservation programs); Exec. Order No. 13,123, 64 Fed. Reg. 30,852 (June 8, 1999) (requiring federal agencies to develop goals for “reduc[ing] water consumption . . . in their facilities.”); Exec. Order No. 12,088, 3 C.F.R. § 243 (1978) (requiring federal agencies to cooperate “in the prevention control, and abatement of environmental pollution”).

³²⁰ Damage to aquifers from overdraw can be permanent. See, e.g., DIV. OF WATER RES., N.C. DEP’T OF ENV’T AND NATURAL RES., CENTRAL COASTAL PLAIN CAPACITY USE INVESTIGATION REPORT 4 (1998), available at http://www.ncwater.org/Reports_and_Publications/GWMS_Reports/cuainvestigation121598.pdf (last visited Apr. 5, 2005). Once an aquifer is drawn down below critical levels, or “dewatered,” the interior structure of the aquifer may become unstable. If this occurs, the aquifer may no longer be capable of storing groundwater. Even where dewatering does not occur, saltwater intrusion may render the aquifer unusable for many years. *Id.* at 6. See also Benjamin R. Vance, Comment, *Total Aquifer Management: A New Approach to Groundwater Protection*, 30 U.S.F. L. REV. 803, 804–05 (1996). Damage to surface waters from over-allocation is theoretically of a more temporary nature, but inadequate volumes of water in freshwater rivers can be devastating to natural ecosystems and can cause a wide range of socioeconomic disruptions. See generally Dennis R. Delaney, Note, *Federal Guidance: A Middle of the River Approach to Water Conservation*, 76 B.U. L. REV. 375, 376 (1996); Miano & Crane, *supra* note 13, at 14.

³²¹ As most federal installation practitioners have learned first-hand, a good relation-

IV. PUTTING IT ALL TOGETHER: A “CONDITIONAL COMPLIANCE”
STRATEGY FOR FEDERAL INSTALLATIONS IN THE REGULATED
RIPARIAN EAST

A. *The Need for Coherent Federal Policy*

Establishing a uniform federal policy on water rights is a complex endeavor. Every state has a slightly different legal regime for water right acquisition and management,³²² and a guideline for water right acquisition that makes perfect sense in Virginia may be wholly unworkable in Florida. Further confusing the task, each federal agency has its own unique statutory mandate for the management of lands under its cognizance.³²³

Yet, the absence of any coherent federal policy on water rights management in the East is a problem.³²⁴ Inconsistent approaches to compliance among the various agencies invite challenge from states and competing water users.³²⁵ The Department of Justice has the ability to simplify matters. It could, for example, issue new policy guidance that updates the 1982 Olson Memo and further explores the relevance of federal water rights in the eastern United States. However, there is no indication such guidance is forthcoming. In its absence, the recommendations below should point federal installations in the right direction when confronted with state regulated riparian requirements.

B. *Proposed Framework for Regulated Riparian Compliance*

1. *State Information Gathering Requirements*

As previously discussed in Part II, one of the primary catalysts for regulated riparian systems is effective state planning concerning water resources.³²⁶ Before a state can effectively develop a long term plan for a water resource, it must first determine how much water is available, what percentage is being used, and the manner of use. This entails significant data

ship with state regulators is paramount to a successful environmental compliance program. If the overall relationship degrades because of a regulated riparian permit dispute, state regulators may redouble their enforcement efforts in other environmental media where a valid waiver of sovereign immunity does exist.

³²² See Gould, *supra* note 15, at 10.

³²³ See *supra* notes 26–27 and accompanying text.

³²⁴ Cf. Wilcox, *supra* note 10, at 10 (“guidance was badly needed because attorneys and engineers at some federal installations were woefully ignorant of the importance of maintaining records to protect water rights.”).

³²⁵ See generally Olson Memo, *supra* note 26, at 355; Palmer, *supra* note 19, at 4 (“each [federal agency] implements a slightly different installation water use policy that frustrates state and local authorities, complicates inter-agency coordination, ensures inconsistent applications, and [will] likely result in the loss of federal water rights.”).

³²⁶ See *supra* notes 118–119 and accompanying text. See also Tarlock, *Water Law Reform*, *supra* note 12, at 535.

collection. The data must come, in large part, from the regulated community. Regulated riparian states typically seek such information via annual registrations, mandatory facility water use audits, and monitoring requirements contained in regulated riparian permits.³²⁷

Though a state cannot force federal installations to provide water use data outside the context of a McCarran Amendment adjudication,³²⁸ compliance with state information gathering requirements—as a matter of comity—is in the best interests of federal installations. Comprehensive water audits can be expensive and time consuming to generate, but the information generated therein puts federal installations in good stead in the event of a McCarran Amendment adjudication or other water rights dispute.³²⁹ Additionally, water use inventories can support installation requests for permit allocation increases, and shield installations from pro rata reductions during times of shortage.³³⁰ Thus, federal installations should comply with regulated riparian information gathering requirements to the extent such requirements do not violate federal law. Where federal money is not available to support information gathering requirements, federal installations should inform permitting agencies that they will use their best efforts to obtain appropriations in a timely manner.³³¹

2. *Regulated Riparian Permits*

For the reasons discussed in Part III.D, federal installations should apply for and comply with regulated riparian permits as a matter of comity. Since voluntary compliance with something as inherently “command and control” as an administrative permit can be a difficult proposition, the following guidance will hopefully assist federal installations to strike the proper balance.

³²⁷ See *supra* note 118 and accompanying text.

³²⁸ See, e.g., *United States v. Oregon*, 44 F.3d 758, 770–71 (9th Cir. 1994).

³²⁹ See generally *Wilcox*, *supra* note 10, at 10 (describing Army policy guidance urging maintenance of detailed water records). Even where states do not seek water usage data, federal installations are well advised to have their water system data available anyway. Good record keeping is critical to obtaining and maintaining water rights. *Id.*

³³⁰ *Id.* Federal installations may be able to avoid permit allocation reductions by obtaining credit for previous voluntary reductions undertaken in accordance with federal conservation programs. *Cf.* Exec. Order No. 13,123, 64 Fed. Reg. 30,851, 30,852 (June 8, 1999) (requiring federal agencies to utilize water conservation in new construction and to implement other best management practices).

³³¹ Federal installations must, of course, temper assertions of “best efforts” with the explanation that future appropriations lie entirely within the discretion of Congress. See generally 31 U.S.C. § 1341(a) (2000) (forbidding an officer or employee of the United States from obligating funds before an appropriation is made).

a. Note Sovereign Immunity Concerns Up Front

Federal installations should make every effort to submit a complete and timely permit application. The United States is not a typical permittee, however, and states need to be aware of this. To avoid misunderstandings, federal installations should clearly inform the permitting agency³³² that the permit application is submitted strictly as a matter of comity—and not because of any legal obligation. Tactful discussion of sovereign immunity is important for a number of reasons. First, it is an agreement between two sovereigns. The United States will abide by the permit because of the importance of sustainable water resources to both parties, not because state law compels it to do so.³³³ Second, it puts states on notice that use of normal state enforcement mechanisms may not be appropriate during the course of the permit. Third, it largely forecloses the argument that the installation has implicitly waived its immunity. While a federal installation does not, and indeed cannot, waive the immunity of the United States by applying for and accepting a state water allocation permit,³³⁴ states may make the argument anyway. Where the permit application makes clear that the federal installation has no intention (or authority) to waive the immunity of the United States by its acceptance of a permit, this argument is less likely to succeed.

b. Request Language in the Permit To Address Unique Circumstances of Federal Installations

States may be willing, upon request, to insert language in regulated riparian permits that addresses federal installation concerns. One appropriate topic for clarifying language is federal water rights. Federal installations should expressly note in permit applications that compliance with regulated riparian requirements in no way waives federal water rights. They can then suggest language acknowledging this caveat in the permit.³³⁵ The state may not agree to insert the requested language, but the request itself

³³² Sovereign immunity concerns should be submitted in writing and in such a manner that they become part of the formal state administrative record.

³³³ In this vein, the cover letter should tactfully opine that the United States has the ability (if not the desire) to use water in contravention of permit conditions where federal requirements so dictate.

³³⁴ See *supra* note 209 and accompanying text.

³³⁵ Language along the following lines might be appropriate:

Permittee reserves to itself all federal water rights that it may possess under federal law (reserved or otherwise). This permit shall not be construed to waive any right of permittee to withdraw water in accordance with federal water rights should such withdrawals be required.

puts states on unambiguous notice that preemptive federal water rights are an issue.³³⁶

Federal installations should request permit language that addresses state enforcement powers under the permit. While state enforcement authority over regulated riparian permits is normally quite broad,³³⁷ federal installations cannot comply with certain aspects of state enforcement, such as fines, penalties, and administrative process.³³⁸ Federal installations should request acknowledgement of these preclusions in the permit. Where appropriate, an installation can agree to allow inspections and submit to monitoring protocols as a matter of comity, but such matters might be more cogently addressed in a separate memorandum of agreement between the parties.³³⁹

c. If the State Says No to “Reasonable” Federal Requests

Where a state refuses to negotiate on permit terms, a federal installation essentially has three choices. It can sign the permit anyway, file an administrative appeal, or walk away from the permit and wait for the state to make the first move.

If the permit allocation is of sufficient quantity to meet federal requirements and there is no language in the permit that disclaims federal rights, the most likely best course of action is to sign the permit. If the federal installation chooses this option, it should reiterate in a cover letter that the United States will abide by the signed permit only as a matter of comity, and that signature of the permit in no way indicates the United States’ intent to be bound by previously identified objectionable terms.

Where the permitted allocation is inadequate to meet the needs of the installation, or if the state refuses to issue the permit because of federal assertions of sovereign immunity, the installation—in consultation with its headquarters and the Department of Justice—should evaluate whether filing an objection or “contested case” under state administrative procedures is appropriate. In some cases, it will be. There may be numerous state law grounds that afford relief to a federal installation deprived by state agency action of its historic use of water—particularly where the federal use is senior to other competing uses or serves an important public purpose.³⁴⁰

³³⁶ Cf. Mountain Home AFB Adjudication, *supra* note 152, at 28 (opining that federal installation’s past compliance with state permitting procedures was indicative that federal water rights did not exist). Conversely, state permit language that in any way minimizes or disclaims the applicability of federal water rights would be objectionable and perhaps reasonable ground to refuse to sign the permit.

³³⁷ See *supra* notes 123–124 and accompanying text.

³³⁸ See, e.g., Dep’t of Energy v. Ohio, 503 U.S. 607 (1992) (fines); United States v. Puerto Rico, 287 F.3d 212, 218 (1st Cir. 2002) (administrative proceedings). See also *infra* notes 347–349 regarding restrictions on payment of fines and penalties.

³³⁹ See *infra* notes 368–369 and accompanying text.

³⁴⁰ See generally *supra* notes 124, 127 and accompanying text.

However, where it is clear that state administrative procedures are politically biased or likely to yield an unfair result, the installation may decide to forego compliance with state procedures, continue to withdraw water at existing levels, and wait for the state to make the first move.³⁴¹ Upon review of the prevailing law on sovereign immunity, the state may experience a change of heart and negotiate in good faith. However, if it decides to proceed in court, its path is a difficult one. Once the case reaches federal court,³⁴² the state must prove the existence of subject matter jurisdiction over the United States. If the state can make such a showing, a dubious proposition in most eastern states,³⁴³ it still must withstand the United States' argument that the inadequate permit allocation is preempted by FNRWR.³⁴⁴

3. *Payment of Federal Funds to State Agencies*

Most federal installations in regulated riparian states will encounter a request (or demand) that they pay money to the permitting agency.³⁴⁵ The request could come in the form of a state-assessed fine or administrative penalty,³⁴⁶ but is more likely to arise in the context of a fee request associated with permit processing or registration of water usage.³⁴⁷ Federal agencies may spend money only on purposes authorized by Congress,³⁴⁸ and there are potentially serious consequences for unauthorized expenditures.³⁴⁹

³⁴¹ See, e.g., *United States v. Puerto Rico*, 287 F.3d 212 (1st Cir. 2002) (U.S. waited until Puerto Rico initiated adverse administrative proceedings and then filed suit requesting declaratory and injunctive relief in Federal District Court).

³⁴² Cf. *S. Delta Water Agency v. United States*, 767 F.2d 531 (9th Cir. 1985) (holding that federal court possesses federal question jurisdiction to decide water allocation disputes involving the federal government).

³⁴³ See generally *supra* notes 206–213 and accompanying text.

³⁴⁴ See *supra* note 173 and accompanying text. Of course, even if the state survives the sovereign immunity and preemption arguments, it still must prevail on any pertinent state law arguments that the United States raises. See generally *In re Water of Hallett Creek Stream Sys.*, 749 P.2d 324 (Cal. 1988) (granting United States state law water right notwithstanding state law objections of state permitting agency).

³⁴⁵ See *supra* notes 120–122 and accompanying text.

³⁴⁶ There are at least two instances where regulated riparian jurisdictions attempted to impose administrative penalties on federal installations. The St. Johns River Water Management District (“SJRWMD”), a regional permitting authority in northeast Florida, threatened a civil penalty against the Naval Air Station-Jacksonville Florida for water use in excess of permit allocation. The Navy declined to pay on sovereign immunity grounds, and the SJRWMD did not pursue the penalty further. Telephone Interview with Pam Morris, Office of the Assistant General Counsel (I&E), Department of the Navy (June 28, 2004). Puerto Rico tried the same tactic on a much grander scale during the Vieques controversy—demanding \$17 million in fees and penalties from the United States—and lost in federal court. See *United States v. Puerto Rico*, 287 F.3d 212 (2002); Bartell, *supra* note 121, at 2.

³⁴⁷ See *supra* notes 120–122 and accompanying text.

³⁴⁸ See 31 U.S.C. § 1301(a) (2000).

³⁴⁹ The expenditure of appropriated funds in the absence of valid Congressional authorization may constitute a violation of the Federal Anti-Deficiency Act, a criminal statute. See 31 U.S.C. §§ 1341(a), 1349, 1350 (2000).

It is beyond peradventure that federal installations do not pay fines or penalties without the express and unambiguous consent of Congress.³⁵⁰ To the extent that a regulated riparian state seeks such an assessment, the affected federal installation should politely decline to pay, citing federal fiscal law prohibitions and sovereign immunity. There is little room for negotiation. Federal installations simply do not have authority to pay.³⁵¹

Permit fees are a closer question. Though Congress has expressed a desire for federal agencies to participate in water conservation programs whenever practicable,³⁵² it has not directed federal agencies to spend money to offset the cost of state water allocation programs.³⁵³ Decisions of the comptroller general of the United States indicate that federal installations may pay water allocation program fees only where the fee provides a specific measurable benefit to the United States that is distinct from the benefit conveyed to the public at large.³⁵⁴ This is a difficult standard for a state agency to satisfy.³⁵⁵

It is an open question whether a regulated riparian permit fee could meet this standard. On the one hand, the primary benefit conveyed by regulated riparian systems, a sustainable water supply, is one enjoyed by all permitted users.³⁵⁶ On the other, a federal installation arguably obtains a specific measurable benefit upon perfection of a regulated riparian permit, at

³⁵⁰ See, e.g., *U.S. Dep't of Energy v. Ohio*, 503 U.S. 607 (1992) (holding that broad waivers of immunity in CWA and RCRA do not authorize state issued punitive fines and penalties).

³⁵¹ See generally *Propriety of SSA paying Municipality's Alarm Sys. Registration Fee*, B-227,388 (Comp. Gen. Sept. 3, 1987), 1987 WL 102892, at *2 ("In order for the [federal government] to be liable for a fine or penalty, there must be an express statutory waiver of sovereign immunity.").

³⁵² See 42 U.S.C. § 8252 (2000).

³⁵³ To the limited extent that Congress has manifested any preference, the inference to be drawn is that federal agencies should not defray the cost of state water allocation systems by paying fees. See generally 43 U.S.C. § 666(a)(2000) (United States not liable for "costs" in general stream adjudication). *Accord* *United States v. Oregon*, 44 F.3d 758, 770-71 (9th Cir. 1994).

³⁵⁴ *Compare Fees to State Officials*, 1 Comp. Gen. 560 (1922) (allowing five dollar payment of permit fee to state of Washington upon Comptroller's finding that payment would "protect the right of the Government against any subsequent appropriation of the water.") *with* *Matter of Williams Air Force Base Compliance with Arizona Groundwater Code*, B-207,695 (Comp. Gen. June 13, 1983) 1983 WL 26953 [hereinafter *Williams AFB*] (invalidating federal agency payment of groundwater registration fee to State of Arizona as improper because fee did not convey specific benefit to United States, and was thus an impermissible state tax).

³⁵⁵ See *Propriety of SSA paying Municipality's Alarm Sys. Registration Fee*, 1987 WL 102892, at *1 ("If the state . . . does not show that the fee was calculated solely on the basis of the value of the service provided to the government, then the fee is a tax which may not be paid."). Under this reasoning, the fact that a regulated riparian fee results in a sustainable water supply for all permitted users (including federal installations) is not enough. See *Williams AFB*, *supra* note 354, at *2.

³⁵⁶ See generally *Williams AFB*, *supra* note 354, at *2.

least in some states,³⁵⁷ because the permitted use is protected against new uses during times of shortage.³⁵⁸

Because of the uncertainty on this point, the best approach is to avoid payment of regulated riparian permit fees if at all practicable. State agencies often operate under fiscal limitations analogous to those that restrict federal agencies. They may be sympathetic to a federal inability to pay—particularly if the fee is nominal in value. However, where refusal to pay seems likely to end in a permit denial or litigation, and the federal installation determines that there are specific measurable benefits that accrue as a result of paying a regulated riparian fee, it should consider requesting permission to pay the fee from its agency headquarters and—where appropriate—the Comptroller General.³⁵⁹ In order to avoid inconsistent compliance approaches that might undermine agency positions, federal agencies should try to establish a regional strategy to fee payment that evaluates the merits of paying individual state water fees.

4. Reasonable Conservation Requirements

Where state water resources are strained, regulated riparian systems may require the implementation of conservation measures to enhance resource sustainability.³⁶⁰ Conservation strategies can include, *inter alia*, requirements to audit existing water infrastructure, meter daily usage, implement conservation oriented pricing, implement water reuse and recycling, install low flow fixtures, and implement public education and outreach programs promoting water conservation.³⁶¹

To the extent that federal funds are available to pay for conservation oriented improvements,³⁶² and federal law otherwise permits, federal installations should endeavor to comply with state requirements of this nature. Not only is water conservation good public policy,³⁶³ federal installations

³⁵⁷ See *supra* notes 128–131 and accompanying text.

³⁵⁸ See generally Fees to State Officials, 1 Comp. Gen. 560 (1922) (prior appropriation permit fee properly payable where payment was necessary to perfect state law water right enforceable against other users). Cf. Dellapenna, *Replacing Common Law*, *supra* note 9, at 43.

³⁵⁹ Some federal installations have paid nominal permit fees in recent years utilizing this strategy. Cf. Memorandum from the Department of the Army, Office of the Assistant Secretary (Installations, Logistics and Environment), Subject: Policy Guidance on Water Rights at Army Installations in the United States (Nov. 24, 1995) (opining that payment of permit fees may be allowed under narrow circumstances) (on file with Harvard Environmental Law Review).

³⁶⁰ See, e.g., N.C. ADMIN CODE tit. 15A, § 2E.0502 (Aug. 2002) (requiring permittees to “develop and implement a feasible water conservation plan.”).

³⁶¹ See WATER WARS, *supra* note 2, at 16–19.

³⁶² See 1 GENERAL ACCOUNTING OFFICE, PRINCIPLES OF FEDERAL APPROPRIATIONS LAW 4-2 (2d ed. 1991) (describing requirement that Congressional appropriation be “available” to fund agency expenditures).

³⁶³ See UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, WATER CONSERVATION PLAN GUIDELINES, PART I, at 3 (Feb. 9, 2004) available at <http://www.epa.gov/OW-OWM>.

have an independent obligation to conserve water where practicable.³⁶⁴ Once again, good record keeping is important. If federal agencies can demonstrate voluntary reduction of water usage through implementation of conservation measures, they may be relieved from pro rata reductions during times of shortage vis-à-vis other less efficient users.

5. *Avoiding and Resolving Federal-State Conflict*

a. *Engage Early and Stay Engaged*

Federal agencies must engage early and stay informed of local and state activities that involve water supply. The last one to the table often gets the smallest share of the pie, and federal installations must be active stakeholders in decision making processes.³⁶⁵ Federal installations may have assumed in the past that they would have access to desired resources because of political clout and eastern state ambivalence toward enforcement against the federal government. To the extent this belief was ever valid, it is not anymore. State and local communities in the East are willing to sue the federal government where it is perceived as callous to local needs.³⁶⁶

Federal installations should carefully monitor state and local water resource studies and participate in stakeholder advisory groups. When state agencies draft administrative rules or policies affecting water allocation, federal installations should identify potential conflicts with federal interests up front before the rules go out for formal notice and comment. Once rules are officially proposed, federal installations should formally comment and make any objections part of the state administrative record. By so doing, federal agencies increase the chances that regulated riparian permit agencies will adequately account for the unique circumstances of federal installations in final agency rules, thereby eliminating irreconcilable conflicts before they develop.

<http://water-efficiency/wave0319/index.htm> (last visited Apr. 5, 2005) (“While the capital cost savings effects of water conservation are compelling enough, the potential benefits do not end there Water conservation extends water supplies [and can] also reduce utility operating costs Reducing water withdrawals also helps improve water quality, maintain ecosystems, and protect water resources.”).

³⁶⁴ See generally 42 U.S.C. §§ 8251–8270 (2000); Exec. Order No. 13,123, 64 Fed. Reg. 30,851 (June 8, 1999).

³⁶⁵ Cf. Tarlock, *Water Law Reform*, *supra* note 12, at 532 (“[C]entral water planning exercises . . . are being replaced by open comprehensive planning processes . . . that feature much more stakeholder participation . . . and less reliance on a state plan.”).

³⁶⁶ See generally Jay Price, *Battle Crosses State Lines: Washington County Airfield Would Help Virginia Beach’s Noise Problem*, RALEIGH NEWS & OBSERVER, Mar. 15, 2004, at A1.

b. Negotiate Separate Memoranda of Agreement

Certain aspects of comity compliance with state permits are likely to be recurring points of contention.³⁶⁷ One possible mechanism to resolve disagreement before it flares into a major conflict is to develop a memorandum of agreement (“MOA”) to guide parties through legal gray areas.³⁶⁸ An MOA could, for example, provide a protocol whereby states are authorized to conduct inspections of federal water production facilities upon “reasonable notice” as defined in the agreement, or provide that federal installations use “best efforts” to obtain necessary federal appropriations to support installation water conservation plans.³⁶⁹ Federal installations, however, should not attempt to substitute an MOA for a regulated riparian permit. Permits may convey state law property rights where a memorandum of agreement does not.³⁷⁰

c. Negotiate Hybrid Water Rights To Settle Litigation

If a dispute over water rights reaches litigation, both parties have much to lose. If a state survives the threshold sovereign immunity challenge, the federal installation may want to avoid testing the question of federal preemption and FNRWR.³⁷¹ As an alternative to continuing with litigation the parties could agree upon some form of “hybrid” state law water right.³⁷² The federal government has utilized this strategy successfully in Nevada and Florida, and it could work again.³⁷³ If properly configured, hybrid rights can satisfy state and federal interests, and a presiding court may be only too happy to approve a hybrid settlement that obviates the need to decide the novel question of federal water rights in the East.

³⁶⁷ See generally *supra* notes 334–338, 346–350 and accompanying text. See also *supra* note 125, and accompanying text.

³⁶⁸ The Navy contemplated use of this strategy to overcome disagreements with the State of Florida on the enforcement and payment of fees. To this point, the parties have worked through their differences without a formal MOA, but it remains an option. Telephone Interview with Richard A. Barfield, Assistant Environmental Counsel, Naval Facilities Engineering Command, Southern Division (June 23, 2004).

³⁶⁹ See generally *United States v. MacCollom*, 426 U.S. 317, 321 (1976) (“The established rule is that the expenditure of public funds is proper only when authorized by Congress . . .”).

³⁷⁰ See *supra* notes 127–131 and accompanying text.

³⁷¹ Cf. *Dellapenna, Regulated Riparianism*, *supra* note 28, § 9.06(b)(2), at 9-194.

³⁷² See generally *supra* notes 200–205 and accompanying text.

³⁷³ See Cianci, *supra* note 200, at 183 (recommending expanded use of hybrid water rights because they “can be tailored to blend with existing state water law”); Leshy, *supra* note 64, at 288–89 (discussing Congressional enactment of hybrid water right for Great Sand Dunes National Monument in Colorado).

V. CONCLUSION

Water policy in the eastern United States is changing. Societal pressures on a finite water resource continue to mount, and federal installations need to make tough choices about how to best preserve mission capability. Though federal water rights may be a viable tool for the acquired lands of the East at some future date, they are too speculative at this juncture to be relied upon. As such, federal installations must ensure that their state law water rights are perfected and legally enforceable.

In evolving regulated riparian systems, the best mechanism for federal installations to ensure they have enforceable state law water rights is to comply with regulated riparian requirements to the maximum extent practicable. They should decline to do so only when state requirements conflict with federal law, or are reasonably anticipated to interfere with the accomplishment of the federal installation's mission.

Compliance in this area is admittedly difficult. Federal installations must walk a narrow line between upholding federal powers and immunities on one side, and respecting the legitimate interest of states to control water resources on the other. The compliance framework proposed in Part IV of this Article will provide sound footing to those who must embark upon this path. If federal installations in the East manage wisely, they will have water to accomplish the purposes entrusted to them by Congress for many years to come.

