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MUDDYING THE PUBLIC TRUST DOCTRINE ONE VOTE AT A TIME

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I. Introduction

Few legal theories are as exalted, or as confused, as the Public Trust Doctrine.¹ The doctrine's own legal basis is uncertain.² The most likely modern origin was English Crown Counsel Thomas Digges' claim of the foreshore along the English Channel on behalf of Queen Elizabeth I for the benefit of the Royal Navy.³ The new

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^{1.} See generally, Sidney F. Ansbacher, Stop the Beach Renourishment: A Case of MacGuffins and Legal Fictions, 35 Nova L. Rev. 588 (2011).

^{2.} Id. at 638 (quoting Joseph L. Sax, The Public Trust Doctrine in Natural Resources Law: Effective Judicial Intervention, 68 MICH. L. REV. 471 (1970)). Professor Sax died on Mar. 9, 2014, as this article was being edited. Joseph Sax was and remains synonymous with the modern Public Trust Doctrine. We all owe him a great debt.

^{3.} Id. at 610-14 (citing various interpretations of the Roman Emperor Justinian's Code, J. INST. 2.1.1-.4, 2.1.20 (Thomas Cullet Sanders, trans., Chicago, Callershorn & Co. 1876)). Justinian either established a public trust standard or discussed respective public and private rights in the foreshore. Justinian either established law or generated a textbook. Ansbacher, supra note 1, and numerous authorities cited therein. Regardless, Justinian is generally cited as the historical antecedent of the note 1, public trust doctrine. Id. One commentator observes that the first public trust opinion in the United States, Arnold v. Mundy, 6 N.J.L. 1 (1821), cites five English crown grants along the shore. These include "one by Knute, one by Edward the Confessor, two by William I, and one by John." William R. Tillinghast, Tide-Flowed Lands and Riparian Rights in the United States, 18 HARV. L.

royal prerogative created sovereign title in the foreshore. This reversed historic baronial title down to the low water mark, but established the doctrine "that all subjects of the Crown were liable for maritime defence [sic] because all benefited from the security and prosperity of the seas around England." That pragmatic birth developed into the traditional public trust, which has the far broader goal of protecting the public's rights of fishing, commerce, and navigation of and to lands below navigable waters. Each state's own law governs that state's public trust authority over navigable waterbodies and over tidelands within its boundaries. Until 1970, states that deviated from that scope typically limited the doctrine's use. That shifted dramatically when Professor Joseph Sax wrote by far the most famous article concerning the public trust in 1970. He urged expansion of the public trust where and as needed to protect the environment. The schism between the

REV. 341 (1905). King John ceded many erstwhile public lands to his barons in the Magna Carta, although the degree and scope of the grants is up for debate. Ansbacher, *supra* note 1, at 596-98, 618-21. Queen Elizabeth I's counsel, Thomas Digges, undid baronial acquisitions by laying the groundwork for the modern public trust doctrine. *Id.* at 621 and authority cited therein.

- 4. DAVID ARMITAGE, THE IDEOLOGICAL ORIGINS OF THE BRITISH EMPIRE 117 (2004). See, Ansbacher, supra note 1 at 610-14 (citing, inter alia, the preeminent compilation on the topic, STUART A. MOORE, A HISTORY OF THE FORESHORE AND THE LAW RELATING THERETO 182-84 (3d ed. 1888)). Moore states at 212-24 that Queen Elizabeth established a commission that confirmed her ownership of certain foreshores. She granted Digges patents to her fee ownership he could establish within seven years. So, Digges did not simply serve his Queen. Digges directly served his own interests as well. Tillinghast says Digges was one of a class of "title hunters," who purported to discover college and church lands that were concealed when Henry VIII and Edward VI attempted to confiscate them. Tillinghast, supra note 3, at 346. Richard Lazarus' seminal article on the public trust stated Elizabeth I "considered the private holdings in the English shoreline in the sixteenth century an impediment to English naval power . . . "Richard J. Lazarus, Changing Conceptions of Property and Sovereignty in Natural Resources Law: Questioning the Public Trust Doctrine, 71 IOWA L.REV. 631, 635 n.19 (1986), (citing MOORE supra, at 185-211). We discuss ports in Elizabethan England and shortly thereafter, infra, notes 88-90 and accompanying text.
- 5. See, e.g., *PPL Montana, LLC v. Montana*, 132 S. Ct. 1215, 1235 (2012), although *Phillips Petroleum Co. v. Mississippi*, 484 U.S. 469 (1988), discussed below, raises a question of whether the public trust historically covered all tidelands. *See generally*, William D. Araiza, *The Public Trust Doctrine as an Interpretive Canon*, 4 U.C. DAVIS L. REV. 693 (2012) (addressing the Canon's erratic history and modern expansion). Allan Kanner states: "In the early United States, it protected beaches and navigable waterways so that commerce could proceed unimpeded." Allan Kanner, *The Public Trust Doctrine, Parens Patriae, and the Attorney General as the Guardian of the State's Natural Resources*, 16 DUKE ENVTL L. & POL'Y F. 57, 62 n.31 and accompanying text (citing Lazarus, *supra* note 4, at 636); DENNIS J. COYLE, PROPERTY RIGHTS AND THE CONSTITUTION: SHAPING SOCIETY THROUGH LAND USE REGULATION 224 (1993).
- 6. Joseph L. Sax, *The Public Trust Doctrine in Natural Resources Law: Effective Judicial Intervention*, 68 MICH. L. REV. 471 (1970). See also, Sidney F. Ansbacher & Joe Knetsch, *The Public Trust Doctrine and Sovereignty Lands in Florida: A Legal and Historical Analysis*, 4 J. LAND USE & ENVTL. L 337, 346-47 (1989). Pre-Saxian decisions still often imposed the public trust to limit sovereign lands sales, as in *Ward v. Mulford*, 32 Cal. 365, 372 (1867).

classical public trust navigability test and Sax's robust proposal caused scholarship and litigation to explode since 1970:7 The most significant modern expansion of the public trust might seem logical. It is, however, increasingly engrained in various western states. This "modern trend" arose from scholars, courts and agencies, weighing the "public trust when new water uses are permitted, when existing water uses are changed, and, retrospectively, when existing water uses harm the public trust."8

The crucial obligation of a sovereign state to conserve and to allocate water, however, often runs against the federalist obligation to apportion increasingly scarce potable resources among the various states. The landmark Supreme Court decision in *Sporhase v. Nebraska*⁹ established that states cannot avoid out-of-state water diversion without implicating the dormant Commerce Clause. ¹⁰

Comity demanded that navigable rivers should be free, and therefore the freedom of the Mississippi, the Rhine, the Scheldt, the Danube, the St. Lawrence, the Amazon, and other rivers has been at different times secured by treaty; but if a state of this Union deprives another state of its rights in a navigable stream, and Congress has not regulated the subject, as no treaty can be made between them, how is the matter to be adjusted?

^{7.} See id. The best compilations are Robin Kundis Craig, A Comparative Guide to the Eastern Public Doctrines: Classifications of States, Property Rights, and State Summaries, 16 PENN. St. ENVIL. L. REV. 1 (2007); Robin Kundis Craig, A Comparative Guide to the Western States' Public Trust Doctrines: Public Values, Private Rights, and the Evolution Toward an Ecological Public Trust, 37 Ecology L.Q. 53 (2010).

^{8.} Michelle Bryan Mudd, Hitching Our Wagon to a Dim Star: Why Outmoded Water Codes and "Public Interest" Review Cannot Protect the Public Trust in Western Water Law, 32 STAN. ENVIL. L.J. 283, 295 (2013).

^{9.} Sporhase v. Nebraska, 458 U.S. 941 (1982). Scholars at Georgia State University graded the degree to which western states used the public trust to protect water as of 2002. Jennifer Adams et al, Water as a Part of the Public Trust: A Review of Selected State Codes (Water Pol'y, Working Paper No. 2002-01).

^{10.} Article I, Section, 8, clause 3 of the U.S. Constitution, contains the Commerce Clause, which authorizes Congress to "[r]egulate commerce with foreign nations and among the several States, and with the Indian Tribes." The dormant commerce clause is a judicially created doctrine that prohibits local and state governments from improperly burdening or discriminating against interstate commerce. See generally, Sporhase 458 U.S. 941 (declaring water an article of commerce). Water law developed originally on two tracks. States regulated and allocated individual use. Edward B. Schwartz, Water as an Article of Commerce: State Embargoes Spring a Leak Under Sporhase v. Nebraska, 12 B.C. ENVIL. AFF. L. REV. 103, 104 (1985). Conversely, the federal government focused on interstate implications; "[t]he national government does not concern itself with the property rights of water users; it does not regulate the conduct of citizens or plan what they may do with water." Frank J. Trelease, Uneasy Federation—State Water Law and National Water Law, 55 WASH. L. REV. 751, 755 (1980). The Commerce Clause has long limited state water related regulation that overreached. In Gibbons v. Ogden, 22 U.S. 1 (1824), the Court held that the Commerce Clause supported a federal navigational servitude that prohibited the interstate impact of an exclusive state steamboat license. Ansbacher, supra note 1, at 649-50 and authority cited therein. The Supreme Court revisited the issue in the context of interstate water allocation in Kansas v. Colorado, 185 U.S. 125 (1902), where the Court held it had jurisdiction to consider interstate water allocation disputes:

The current Court seems to treat *Sporhase* as a relic. This shift presents potentially dangerous results.¹¹

This article discusses the inevitable battle between each state's water conservation and allocation goals, and the clearly national parallel goals of conserving and allocating water for national needs. ¹² We discuss further how the modern Supreme Court's reduced deference to precedent, increasing deference to local decision-making, and reduced deference to federal preemption and the Commerce Clause, as well as the Court's increasingly robust but ad hoc takings jurisprudence, combine with a misunderstanding of the public trust doctrine to lead to Balkanized water law and use everywhere in the Nation. A series of inconsistent Supreme Court decisions have at various points undermined established federal, state, and private rights to create a virtually unusable patchwork quilt of public trust law.

II. THE MODERN PUBLIC TRUST DAWNS

Appleby v. City of New York, 13 in 1926, was the Supreme Court's only significant twentieth century public trust decision pri-

Applying the principles settled in previous cases, we have no special difficulty with the bare question whether facts might not exist which would justify our interposition"

Kansas v. Colorado, 185 U.S. 125, 144 (1902). The Court created the doctrine of "equitable apportionment" of an interstate river when it proceeded to hear the case, in Kansas v. Colorado, 206 U.S. 46 (1907). Colorado claimed the unconditional right to allocate the waters of the Arkansas River within the state. Kansas countered that it had the right to flow undiminished by Colorado. The Supreme Court imposed a federalist rationale. It held that the regulation by one state that "reaches . . . into the territory of another state" requires the court to "recognize the equal rights of both and at the same time establish justice between them." Kansas v. Colorado, 206 U.S. at 98. The Kansas court held the federal government could not impose a particular water regulatory structure on a state, but the court could rule on interstate impacts of that regulation. Kansas v. Colorado, 206 U.S. at 94. Professor Reed Benson conducted a thorough exegesis of the Kansas v. Colorado decision and the whole body of law concerning federalism versus state water law in 2006. Reed D. Benson, Deflating the Deference Myth: National Interests vs. State Authority Under Federal Laws Affecting Water Use, 2006 UTAH L. REV. 241 (2006).

- 11. We expand on this topic infra note 263, in the discussion of *Tarrant Reg'l Water Dist. v. Hermann*, 133 S. Ct. 2120 (2013).
- 12. This article focuses on state public trust and water law versus Commerce Clause and equitable allocations. Space and stamina limitations preclude my discussions of the essential federal limitations on state water rights under the Property Clause of the Constitution, which the Supreme Court discussed in dicta in its navigational servitude decision in United States v. Rio Grande Dam and Irrigation Co., 174 U.S. 690 (1899). Similarly, the critically important federal reserved water rights doctrine is well beyond our scope. Winters v. United States, 207 U.S. 564 (1908), established that "Congress had the power to reserve waters needed to fulfill the purposes of federal reservations, and that water rights that had been so reserved . . . prior to statehood survived [a state's] admission to the Union." Benson, supra note 10, at 264 (discussing Winters and its progeny).
 - 13. Appleby v. City of New York, 271 U.S. 364 (1926).

or to the Sax article. The City conveyed large portions of its harbor to Appleby to allow him to fill swaths of the submerged lands to develop mixed private/public projects. The state subsequently established bulkhead lines that would "prevent the filling of plaintiff's lots out-shore from the bulkhead line, and the making of docks on the lots, and the enjoyment of wharfage at the ends thereof within 100 feet of the city's piers." Appleby sought to enjoin the City's subsequent effort to dredge his submerged lands to facilitate navigation. Justice Taft held that New York obtained the sovereign submerged lands upon statehood. Justice Taft accepted as a given that the state could convey those lands. 15

Appleby disagreed with the City of New York's argument that the private claim was barred by the Court's 1892 decision in *Illinois Central R.R. Co. v. Illinois.* Two interesting points arise when one compares the two decisions. First, *Illinois Central* held that the public trust was "settled law" in all states. Taft observed in *Appleby* that the earlier decision was "necessarily a statement of Illinois law," Just as he held New York law controlled *Appleby*. Second, while many modern observers cite *Illinois Central* as barring or at least impeding the state's right to convey submerged sovereign lands, it anticipated *Appleby* in holding that the state

^{14.} Id. at 370.

^{15.} Id. at 381.

^{16.} Illinois Cent. R.R. Co. v. Illinois, 146 U.S. 387 (1892). Continuing our theme, *Illinois Central* was a 4-3 bare majority decision. Justice Field's opinion has been cited hundreds of times as august authority. Yet he barely captured a majority of his own court.

^{17.} Id. at 435. Charles Wilkinson attempted to ascertain just what "settled law" supported the public trust directive. Charles F. Wilkinson, The Headwaters of the Public Trust: Some Thoughts on the Source and Scope of the Traditional Directive, 19 ENVIL. L. 425 (1989). Wilkinson considered and then discounted several options before settling on the Commerce Clause. Id. at 456-57. If Wilkinson is correct, then the modern Supreme Court's retrenchment of the scope of the Commerce Clause holds a tinge of irony. Other scholars hold different views. Crystal Chase states federal common law implements the phrase "this Union" in Article IV, Section 3 of the Constitution through the Equal Footing Doctrine to establish a "public trust floor." Crystal S. Chase, The Illinois Central Public Trust Doctrine and Federal Common Law: An Unconventional View, 16 HASTINGS W.-NW. J. ENVIL. L. & POLY 113, 162 (2010). Sax originally objected that property law was too restrictive a source and was even a "dubious" authority for the doctrine." Sax, supra note 6, at 478-84. Yet, Sax later discussed respective public and private property rights on either side of the high water line, albeit without mentioning the public trust by name. Joseph L. Sax, Some Unorthodox Thoughts About Rising Sea Levels, Beach Erosion, and Property Rights, 11 Vt. J. Envtl. L. 641, 643-648 (2010). The foregoing begs the question—just how "settled" was the public trust law when Illinois Central was decided, or even now, if no consensus exists as to its legal basis? By extension, how prudent is it to extend the public trust doctrine in an ad hoc manner? Is it truly a settled and historic doctrine? Or is it a convenient label to use, and to extend, ad hoc? Or, are both of these points accurate? Kanner holds a contrary view of Illinois Central. He contends "the United States Supreme Court cleverly avoided the constitutional question by finding the original grant of land to be invalid because it violated public trust obligations in Illinois." Kanner, supra note 5, at 70, (citing Illinois Cent., 142 U.S. at 464-65).

^{18.} Appleby, 271 U.S. at 395.

may do so as long as doing so does "not substantially impair the public interest in the [submerged sovereign] lands and [overlying] waters remaining." ¹⁹

In fact, Justice Taft stated that *Illinois Central* supported Appleby's claim. While Justice Taft stated that Illinois law necessarily governed *Illinois Central*, Justice Field concluded in the earlier case:

It is only by observing the distinction between a grant of such parcels [of sovereign submerged lands] for the improvement of the public interest, or which when occupied do not substantially impair the public interest in the lands and waters remaining, and a grant of the whole property in which the public is interested, that the language of the adjudged cases can be reconciled.²⁰

The two cases hold that the sovereign can convey public trust lands as long as the transfer does not wholly undermine the public's navigational rights in the area.

Justice Taft himself emphasized in *Appleby* that *Illinois Central* did not bar conveyances of sovereign submerged lands. Instead the earlier decision confirmed a "general principle" that the state sovereign may convey submerged lands for such public purposes as furthering public "navigation of the waters and in commerce." Justice Taft said *Illinois Central* voids a conveyance that "would sanction the abdication of the general control of the state over lands under the navigable waters of an entire harbor or bay, or of a sea or a lake."²¹

III. SAX

Sax's seminal 1970 article cited *Illinois Central* as the "lodestar" public trust decision in American jurisprudence. Sax's article sought a "tool" that best supported citizen standing to protect the environment. He decided that the public trust doctrine was best suited:²² "Of all the concepts known to American law, only the public trust doctrine seems to have the breadth and substantive content which might make it useful as a tool of general application for citizens seeking to develop a comprehensive legal approach to re-

^{19.} Illinois Cent., 146 U.S. at 452 quoted in Ansbacher, supra note 1, at 629.

^{20.} Id., quoted in Appleby, 271 U.S. at 394-95.

^{21.} Id. at 452-53.

^{22.} Sax, *supra* note 6, at 489-91.

source management problems."²³ He acknowledged that Roman and English common law provided useful precedent. In three pages, however, Sax cited *Illinois Central* as Supreme Court authority for his goal. Sax proposed that we use the public trust, not as a "substantive set of standards for dealing with the public domain," but as "a technique by which the courts may mend perceived imperfections in the legislative and administrative process."²⁴ Inexplicably, Professor Sax saw this doctrine as a tool to use as "as a medium for democratization" through citizen suits, which would allow "courts [to] give [the name 'public trust'] to their concerns about the insufficiencies of the democratic process."²⁵ Modern scholars and advocates urge expansion of the public trust into all sorts of places and uses that Thomas Digges could scarcely have imagined when he sought to please his Queen, protect the Royal Navy, and line his own pockets.²⁶

IV. THE ROBERTS COURT'S EXPANDING STRIKE ZONE

Unfortunately, that ultimately and often places the public's and private parties' rights in waters of the United States, and in the individual states, in the hands of a five member majority of the Supreme Court. Chief Justice John Roberts stated early that he sought as many unanimous opinions as possible.²⁷ As we have seen, however, 5-4 votes are the norm in the Roberts Court's core cases:

The current Justices spent much of their lives being rewarded for a particular intellectual approach. That ap-

^{23.} Id. at 474.

^{24.} Id. at 509.

^{25.} Id. at 509-21.

^{26.} The proposed expansions range among the expected, such as Gary D. Meyers, Variations on a Theme: Expanding the Public Trust Doctrine to Include the Protection of Wildlife, 19 ENVIL. L. 723 (1989); to the modern permutations such as public trust and offshore wind farms in Andrew Campbell, You Don't Need a Weatherman to Know Which Way the Wind Blows: An Argument for Offshore Wind Development in the Gulf of Mexico, 50 Hous. L. Rev. 899 (2013); to the wildly creative and clever, such as Ivan Kaplan, Does the Privatization of Publicly Owned Infrastructure Implicate the Public Trust Doctrine? Illinois Central and the Chicago Parking Meter Concession Agreement, 7 NW J.L. & Soc. Pol'y 136 (2012); to arguing that the public trust supports a claim for reimbursement by a professional sports team of public investment in its sports stadium, in Chris Dumbroski, Application of the Public Trust to the Pittsburgh Stadium and Exhibition Authority, 7 DEPAUL J. SPORTS L. & CONTEMP. PROBS. 63 (2010).

^{27.} Jeffrey Toobin, *No More Mr. Nice Guy*, THE NEW YORKER (May 25, 2009), *available at* http://newyorker.com/reporting/2009/05/25/090525fa_fact_toobin. Toobin quotes Chief Justice Roberts at his confirmation hearing, saying his role was to be an "umpire" who acted with "modesty and humility."

proach can stand them in good stead when it comes to technical legal issues: The Court's unanimity in many of its statutory interpretation cases perhaps stems from there being a shared lawyerly perspective on what the right answer is. But many of the constitutional cases before the Supreme Court are there precisely because they raise hard questions that cannot be answered simply by bringing technical acumen to bear. In these cases, Justices whose stock-in-trade has been their doctrinal acuity or their articulation of a particular interpretive method may continue to elevate lawyerly technique over alternative ways of thinking about the Constitution. . .

This assertion of legal analysis over other methods of constitutional argument – treating the Constitution as a kind of statute, albeit a superior one, rather than as a quintessentially political document – ties into another development of the past half-century. Not only has politics become more ideological, but constitutional theory has also become more confident that it can deliver "right answers" to even difficult constitutional questions.²⁸

Judge Richard Posner counsels judicial restraint. He contrasts this with "[l]egalists like Justice Scalia [who] plow new constitutional ground in the belief that they have the key to understanding what the Constitution 'really' means."²⁹ Posner advocates that courts apply a "lighter touch" in making constitutional analysis. He cites a laundry list of reasons to hesitate:

Justices usually are competent lawyers, but rarely more; judicial decisions can be rich in unintended consequences; the scope of the Constitution is vast and the Justices operate on limited information; because there are no sensible algorithmic methods of deciding difficult cases, most constitutional decisions have only weak claims to objective validity; the parts of the Constitution that generate litigation at the Supreme Court level are too old and general to be di-

^{28.} Pamela S. Karlan, Foreward: Democracy and Disdain, 126 Harv. L. Rev. 1, 67-68 (2011), which in one passage performs the magnificent intellectual gymnastic feat of citing both the august Seventh Circuit Judge and polymath, Richard Posner, and Isaiah Berlin, The Hedgehog and the Fox: An Essay on Tolson's View of History (1953). Karlan notes, at 68, for example, that the Commerce Clause is particularly susceptible to such analysis. More on that later.

^{29.} Richard A. Posner, *The Rise and Fall of Judicial Self-Restraint*, 100 CALI. L. REV. 520, 554 (2012).

rective; the issues presented in constitutional cases tend to be both emotional and momentous and the decisions resolving them inescapably reflect the Justices' personal values, psychology, background, peer pressures, political anxieties, professional experiences, idealogical inclinations, and other non-legalistic factors, often operating unconsciously; unrestrained courts produce unrestrained backlash (so compare the Warren and Roberts Courts); and courts have limited tools and as a result their "legislative" efforts can often be undone by the other branches.³⁰

The current Court neither sets nor follows a clear guidance on such central points as: federal preemption;³¹ state sovereignty versus the Commerce Clause;³² Substantive Due Process;³³ and Takings.³⁴ All of these doctrines direct where and how states may preserve public and private rights in water. The Supreme Court's recent precedents have flip-flopped between 5-4 and similarly divided decisions that radically alter core principles of water use by the slimmest of margins and the occasional, watered-down, unanimous decisions that not only provide little useful precedent, but so gut or virtually exclude discussion of black letter precedent as to leave one wondering if the previously bedrock principles endure.³⁵

This article operates on a single premise. If *Brown v. Board of Education*³⁶ required consensus building to construct a unanimous

^{30.} Id. at 553-54.

^{31.} Daniel J. Meltzer, Preemption and Textualism, 112 MICH. L. REV. 1 (2013).

^{32.} Nat'l Fed'n of Indep. Bus. v. Sebelius, 132 S. Ct. 2566 (2012), better known as the "Obamacare" decision, continued the ever-shrinking power of the Commerce Clause, perhaps because the Warren Court cited that power so often in expanded federal regulation that the Roberts Court is working so hard to rein in or undo entirely.

^{33.} Compare Justice Scalia's attack on Justice Kennedy for "Lochner-izing" by applying substantive due process in the latter's concurrence in *Stop the Beach Renourishment v. Florida Department of Environmental Protection*, 560 U.S. 702, 733-42 (2010) (Kennedy, J., concurring), with Justice Scalia's joinder of a plurality eleven days later in *McDonald v. City of Chicago*, 130 S. Ct. 3020, 3050 (2010) (holding that the Second Amendment was incorporated in the Fourteenth Amendment's Due Process Clause).

^{34.} Laura S. Underkuffler, *Property and Change: The Constitutional Conundrum*, 91 Tex. L. Rev. 2015 (2013), makes a compelling argument that the past quarter-century of Supreme Court takings jurisprudence has been inconsistent, murky, and so ad hoc as to be of little use.

^{35.} Good examples of each are, respectively, *South Carolina v. North Carolina*, 558 U.S. 256, 227 (2012) (Roberts, C.J., dissenting), where a 5-4 majority extended standing for the first time in any interstate water allocation case to an "entity other than a State, the United States, or an Indian tribe," and *Tarrant v. Herrmann*, 133 S. Ct. 2120, 2133 n.11 (2013), where Justice Sotomayor's unanimous opinion concerning the four state Red River Compact cited *Sporhase* once in passing.

^{36.} Brown v. Bd. of Educ., 347 U.S. 483 (1954).

decision,³⁷ decisions that dictate how we preserve or allocate rapidly dwindling water resources that dictate whether and where our civilization survives deserve a similar combination of passion to do right and rectitude guiding the process. The public trust applied to water rights deserves better than the recent, ad hoc, series of Court decisions that focus on points and not precedent.

V. RESOURCES IMPLICATIONS

Many reasons support a more aggressive and uniform water policy. Most significant is the precipitous drop in water supply as populations and food supply needs increase. For example, the Colorado River is a shadow of what Powell saw.³⁸ The Ogallala Aquifer cannot continue to survive the rate of pumping necessary to sustain the massive scale agriculture permeating the High

The Colorado River Compact [of 1922] and many of the other federal and state statutes, interstate compacts, court decisions, and other operating criteria and administrative decisions that define the river's overall governance were framed in an era in which water for irrigation land (and municipal uses in Southern California) was of paramount concern."

NAT'L RESEARCH COUNCIL, COLORADO RIVER BASIN WATER MANAGEMENT: EVALUATING AND ADJUSTING TO HYDROCLIMATIC VARIABILITY unmarked 4 (2007). The NRC recommended a regional basin study to forecast future needs and responses. *Id.*

^{37.} See, e.g., Cass R. Sunstein, Did Brown Matter, THE NEW YORKER (May 3, 2004), available at http://newyorker.com/archive/2004/05/03/040503crbo_books.

^{38.} Major John Wesley Powell explored the river through the Grand Canyon for three months in 1869. Three of the nine-man crew were killed by Indians. "The area through which they traveled was then just a blank space on the map of the United States." Mary C. Rabbit, John Wesley Powell's Explorations of the Colorado River, USGS (Mar. 28, 2006), http://cr.nps.gov/history/online_books/geology/publications/inf/powell/index.htm. To understand the Colorado today, see Jeffery Jacobs, The Sustainability of Water Resources in the Colorado River Basin, THE BRIDGE, Winter 2011, at 6, available at https://nae.edu/File.as px?id=55285. Jacobs notes the upper basin of the Colorado drains Colorado, New Mexico, Utah, and Wyoming. Arizona, California, and Nevada are in the lower basin. While "90 percent of the river's flow is derived from snowmelt from precipitation in three upper basin states, Colorado, Utah and Wyoming[,] . . . most of the demand and use of the flows are in the lower basin states, Arizona, California and Nevada." Id. at 7. The most significant water delivery mandate is found in the Colorado River Compact of 1922. Recent droughts caused historically low levels in Lakes Mead and Powell, "which together represent roughly 90 percent of the surface water storage capacity in the Colorado River basin " Id. at 8. This led to a National Research Council (NRC) study. Id. at 6-8. Jacobs worked on the panel that conducted the NRC study. The NRC report concluded that variability in weather, increasing population, and drought combined to exacerbate limits that have always faced the region. Id. at 8-9. The disturbing trends undermine the future in the region for the roughly thirty million people who rely on the basin for their drinking water. This does not even factor in climate change. While most of the states with the fastest growing populations in the country use the Colorado, that cannot continue without some major changes in policies and technologies. The National Academics: Advisors to the Nation on Science, Engineering and Medicine summarized the NRC report, which was compiled under their authority. They noted that:

Plains.³⁹ The Court must develop a unified public trust water policy to best allocate necessary disappointment among competing us-

39. The Ogallala, or High Plains Aquifer, underlies eight states in the Great Plains. Substantial portions of Texas, New Mexico, Oklahoma, Colorado, Kansas, Nebraska, Wyoming, and South Dakota overlie the aquifer. The USGS recites the staggering amount of irrigation use in this semi-arid and generally sparsely populated area:

Approximately 27 percent of the irrigated land in the United States is in the High Plains and about 30 percent of the groundwater used for irrigation in the U.S. is pumped from the High Plains aquifer. Irrigation withdrawals in 2000 were 17 billion gallons per day. In 2000, 1.9 million people were supplied by groundwater from the High Plains aquifer with total public-supply withdrawals of 315 million gallons per day.

Nat'l Water-Quality Assessment (NAWQA) Program—High Plains Regional Groundwater (HPGW) Study: High Plains Aquifer System, USGS (Apr. 29. 2013) [hereinafter NAWQA Program Study] http://co.water.usgs.gov/nawqa/hpgw/HPGW_home.html. The Ogallala suffers an outsized resource impact in relation to its region's miniscule population, which in 2000 was only 2.3 million, with seventy-seven percent living in rural areas and small municipalities. High Plains Groundwater Availability Study: Introduction/Background, USGS (Jan. 23, 2013), http://txpub.usgs.gov/HPWA/intro.html. "In 2000, water withdrawals from the High Plains aquifer accounted for 21.2 percent of all groundwater withdrawn in the United States." Id. This is due to the irrigation required for massive-scale agriculture in the region. The Ogallala "sustains more than one fourth of the Nation's agricultural production." Id. The USGS concludes that "[t]hese conditions of concentrated agricultural land use, semi-arid and variable climatic conditions (which demands [sic] agricultural irrigation), and the hydrogeologic setting combine to produce the documented aquifer water-level declines." Id. While the water is generally adequate for irrigation use, the USGS states that much of the Ogallala does not meet United States Environmental Protection Agency drinking water standards. NAWQA Program Study. The drop in the water table has been precipitous. Between "predevelopment (about 1950)" and 2011, "[w]ater-level declines were 50 feet or more in 33 percent of the area with water-level rises of 5 feet or more." High Plains Water-Level Monitoring Study (Groundwater Resources Program): Generalized Geology and Hydrogeology, USGS (Feb. 4, 2014), http://ne.water.usgs.gov/ogw/hpwlms/hydsett.html. The remaining fifty-four percent ranged between five foot gain and five foot loss. Id. The worst drop was Texas, which declined by 242 feet. Id. The USGS issued a new study on May 20, 2013, that should have shocked the nation, but it barely made a ripple. LEONARD F. KONIKOW, USGS, Scientific Investigations Report 2013-5079, Groundwater Depletion in the United STATES (1900-2008) available at http://pubs.usgs.gov/sir/2013/5079. [hereinafter Ground-WATER DEPLETION]. The Konikow study analyzed the long-term depletion volumes in forty areas or significant aquifers across the nation, and one land use category, agriculture and associated land drainage. The study estimated that cumulative depletion of groundwater in the United States between 1900 and 2008 totaled about 1000 km3, or "about twice that of the volume of water contained in Lake Erie (about 480 km3.)" Id. at 50. Just between 2000 and 2008, the nation's depletion volume since 1900 increased by twenty-five percent. Id. The largest three contributors to the depletion were the Central Valley aquifer system (144.8 km3), Mississippi Embayment Aquifer System (182.0 km3), and the Ogallala (340.9 km3). Id. Pumping in the Ogallala accelerated the decline, which is increasingly unabated by the aquifer's unconfined status, high evaporation rate and low precipitation. Id. at 22. The rate of water loss is staggering. The depletion in the Ogallala between 2000 and 2008 alone equaled almost one-third of the depletion for the entire twentieth century (82 km3 and 259 km3, respectively). GROUNDWATER DEPLETION, supra, at 50. The secondary impacts of widespread depletion in the United States are widespread. Associated drainage shrank wetlands from 720,000 km2 in 1900 to 459,000 km2 in 1992 (the last measured year), estimating an associated lost volume of subsurface water totaling 55 km3. Id. at 49. "[T]he depletion also impacts communities dependent on groundwater resources in that the continuation of depletion at observed rates makes the water supply unsustainable in the long term." Id. at 50. The USGS conditions that on the reality that eventually associated "economic and physical

ers and conservation, not make points in a series of 5-4 decisions.⁴⁰ We now turn to several significant recent water law cases where pluralities or bare majorities muddied the law, followed by a watered-down unanimous decision that further confused the issue.

VI. THE SHIFTING COURSE OF RECENT PUBLIC TRUST DECISIONS

A. Phillips Petroleum v. Mississippi

The first major Supreme Court case after *Appleby*, and the first after the Sax article, to discuss the public trust doctrine was *Oregon ex rel. State Land Board v. Corvallis Sand & Gravel Co.*⁴¹ Even though Sax advocated a broader public trust doctrine, *Corvallis* held "that a state may make sovereignty land definitions more restrictive after it achieves statehood."⁴² That decision comported with the Court's 1876 *Barney v. Keokuk*⁴³ decision, which held that a state may choose to retain title to certain sovereign

constraints [must] lead to reduced levels of extraction." *Id.* Further, groundwater depletion contributes measurably to sea-level rise. *Id.* at 51. *See also* Leonard F. Konikow, *Contribution of global groundwater depletion since 1900 to sea-level rise*, 38 GEOPHYSICAL LETTERS, L17401, 2011. Konikow explained that depletion "not only can have negative impacts on water supply, but also can lead to land subsidence, reductions in surfacewater flows and spring discharges, and loss of wetlands," as well as "[transferring] mass from land to the oceans[, and thus contributing] to sea-level rise." *Id.* at 1. He concludes that "the data clearly indicate that groundwater depletion, as a distinct hydrologic factor, is a small but nontrivial and increasing contributor to [sea level rise]." *Id.* at 5. The May, 2013, USGS depletion study estimates that "depletion in the United States alone can explain 1.3 percent of the sea-level rise observed during the 20th century, and 2.3 of the observed rate of sea-level rise during 2001-2008." GROUNDWATER DEPLETION, *supra*, at 51.

- 40. Galloway's, A Plea for a Coordinated National Water Policy, lists numerous factors that affect the future of our national water supply. Professor Galloway lists: (1) more frequent and more severe droughts and increased water demand; (2) degraded water quality, particularly from nonpoint-source pollution; (3) increased storm-related and other flood damage; (4) aging and inadequate maritime infrastructure (5) inadequate environmental protection, particularly related to degraded and reduced floodplains and wetlands; (6) "legacy" environmental damage from historic impairment, particularly because "resources needed for restoration far exceed the amount that has been, or is likely to be, committed to these efforts"; (7) lack of understanding of the amount of water needed to extract energy sources; (8) inadequate groundwater protection; (9) watershed planning "by earmark rather than by national priorities and watershed needs"; (1) failure of states to agree among themselves, pointing to the Missouri and the "Tri-State" debate among Georgia, Alabama, and Florida; (11) crumbling and outdated water infrastructure far past its safe use; and (12) lack of knowledge due to the federal government's failure to conduct a national water study since 1976. Gerald E. Galloway, Jr., A Plea for a Coordinated National Water Policy, THE BRIDGE, Winter 2011, at 38-39.
- 41. Oregon ex. rel. State Land Bd. v. Corvallis Sand & Gravel Co., 429 U.S. 363 (1977).
 - 42. Ansbacher & Knetsch, supra note 6, at 344.
 - 43. Barney v. City of Keokuk, 94 U.S. 324, 334 (1876).

lands but convey other sovereign lands to private grantees as long as the conveyance is in the public interest.⁴⁴

After a lapse of a decade, the Court next issued *Phillips Petroleum Co. v. Mississippi.*⁴⁵ The floodgates opened. A bare 5-3 majority (Justice Kennedy recused) held in *Phillips* that the sovereign boundary in tidal waters at statehood under the equal footing doctrine extended to all tidal waters. The holding ran counter to prior Mississippi practice. The state never before challenged private claims to nonnavigable tidelands.⁴⁶ In fact, Mississippi courts never addressed public versus private claims in such lands before *Phillips.*⁴⁷ Joseph Sax, hardly a proponent of private claims over public trust expansion, questioned the majority.⁴⁸ The opinion mis-

44. *Id.*, *cited in* Ansbacher & Knetsch, *supra* note 6, at 344. It must be noted that *Barney* preceded *Illinois Central* by sixteen years. *Barney* is considered precedential for extending the public trust doctrine to navigable waters beyond tidal influence. The English common law precedent held that sovereign public trust lands underlay tidal waters. *Barney*, 94 U.S. at 336, 338. The *Barney* Court barely paused to address the sovereign's right to convey sovereign lands. It treated the issue of what could be done with Iowa's sovereign submerged lands as one of Iowa state law:

But whatever may be the true rule on this vexed question, and whether we rightly comprehend the Iowa decisions or not, we have no doubt that the city authorities of Keokuk, representing the public, had the right to widen and improve Water Street to any extent on the river side, by filling in below high water, and building wharves and levees for the public accommodation.

Id. at 339.

Note that the Barney Court's reliance on Iowa law anticipates Appleby, which relied on New York law and held that Illinois Central was "necessarily" decided by Illinois law. This contrasts with the squishy, inherent public trust doctrine that Illinois Central itself cited, although both Barney and Illinois Central deferred to state law. Both cases addressed wharves and associated railroad access. Barney allegedly differed because Keokuk did so as an appurtenance to public navigational rights, consistent with Keokuk's charter as adopted by the State in 1847 and the city in 1848. This is not far afield from Justice Field's intent in Illinois Central. Kearney and Merrill state Justice Field's "public trust doctrine was designed to preserve access to the lake for commercial vessels at competitive prices, not to preserve [today's Grant] Park or the shoreline from further economic development." Joseph D. Kearney & Thomas W. Merrill, The Origins of the American Public Trust Doctrine: What Really Happened in Illinois Central, 71 U. CHI. L. REV. 799, 924 (2004). Moreover, they conclude each side got what it sought in Illinois Central. The City ended up with riparian rights in Lake Michigan, while the railroad expanded its right-of-way and access to the lake. Id. at 801.

- 45. Phillips Petroleum Co. v. Mississippi, 484 U.S. 469 (1988).
- 46. Id. at 485 (O'Connor, J., dissenting).
- 47. Id.

^{48.} Joseph L. Sax, Rights that "Inhere in the Title Itself": The Impact of the Lucas Case on Western Water Law, 26 Loy. L.A. L. Rev. 943, 950 n.50 (1993) ("The majority's conclusion that its decision will 'do no more than confirm the prevailing understanding,' appears to be directed to its federal ruling that the state originally obtained title to non-navigable tidal waters, and is free to hold title or to relinquish it. The Court does not appear to suggest that Phillip's expectations, or those of others in its position, are not disappointed, though it does imply that not many claimants are in Phillip's position.") As stated below, the majority

stated and misunderstood Roman, English and American law on the scope of public trust lands, in creating a state public trust right out of the whole cloth.

This hotly contested decision ran contrary to clearly established English Common Law, as well as Roman law to the extent that putative precedent mattered. My Nova article recounts the historical antecedents. Justinian's Code is the oldest putative authority authorizing a public trust. That source stated that "[t]he seashore extends to the highest point reached by the waves in winter storms."

The English application of the doctrine was similarly limited. Digges claimed sovereign ownership for Queen and Crown between the high and low tide marks. The definitive source on English law of the foreshore confirmed that Digges claimed for the sovereign only as far upland as the high water line. One of the grounds the Roundheads gave for the authority to behead Charles I was his "taking away of men's rights under colour of the King's title to land between high and low water marks. One has to assume that an assertion that the Crown also claimed private tidal lands above the high water mark would only have furthered their grounds for regicide. John Bradshaw, President of the High Court that tried Charles, did not hide his utter disdain for the monarch; his epitath famously stated: "Rebellion to tyrants is obedience to God."

Hale ensured Digges' legacy. His *De Jure Maris* preceded Newton's *Principia*, so Hale did not know that lunar cycles affected the tides.⁵³ Hale stated the foreshore was "overflowed" by "[o]rdinary tides or neap tides." Neap tides are not equivalent to ordinary

erred if it thought precedent established public trust equal footing ownership in nonnavigable tidelands.

^{49.} Ansbacher, *supra* note 1, at 654 n.624 and accompanying text.

^{50.} MOORE, *supra*, note 4, at 185-211 (citing Digges Arguments proving the Queens Majesties property in the Sea Landes, Salt Shores Thereof).

^{51.} *Id.* at 310 (citing Article 26 of the Great Remonstrance presented to Charles I on Dec. 1, 1641, *available at* www.constitution.org/eng/conpur043.htm). The House of Commons delivered that document listing numerous grievances. Subsequent to Digges creating the prima facie standard, Parliament passed "An Act for the General Quest of the Subject Against All Pretenses of Concealment Whatsoever," which barred the Crown or any other claimant from disturbing titles that were over sixty-years-old. Charles I immediately claimed foreshore prima facie rights as an exception to the record title act. Hand-picked courts found for the Crown against claims that dated to the Magna Carta and before. This background underlay Article 26 of the Grand Remonstrance that led to the King's execution. *See* Willam R. Tillinghast, *Tide-Flowed Lands and Riparian Rights in the United States*, 18 HARV. L. REV. 341, 347-48 (1905).

^{52.} OXFORD ESSENTIAL QUOTATIONS (Susan Ratcliffe, ed., 2012).

^{53.} Ansbacher, supra note 1, at 656.

tides, but Hale apparently intended to state the foreshore was bounded by the high water mark.⁵⁴

The English tidelands title history lesson is key to understanding *Phillips*. The case originated in a typical Gulf state transaction: a state oil lease. Phillips claimed that the State of Mississippi took title under only navigable waters at statehood. Mississippi countered that it took title to all tidelands along the Gulf of Mexico, regardless of whether they underlay navigable waters. This distinction dictated whether the tidelands under nonnavigable waters where Phillips wanted to drill required a state lease. As I have stated, the "state was in the ironic position of asserting title to exploit, rather than to protect the wetlands." ⁵⁵

A 5-3 majority of the Supreme Court agreed with the State. The majority misconstrued multiple authorities, starting with English Common Law. *Phillips* held that the English crown owned all tidal waters, so each state owned all tidal waters in its boundaries upon statehood. For As stated just above, one must assume Roundheads seeking legal grounds to behead their King would not have understated the extent of his alleged usurpation of their title. Yet the Great Remonstrance against Charles I stated he stole their private lands between the high and low water marks. Further, the English common law decision that is most cited for confirming the tidal boundary cites Hale for establishing the medium or ordinary high water mark as the landward extent of sovereign tidelands.

^{54.} Id. at 655 (citing George M. Cole, Tidal Water Boundaries, 20 STETSON L. REV. 165, 165-66 (1990)). A multi-disciplinary study of the foreshore in Britain only confirms the high water mark boundary. Derek J. McGlasham et al., Defining the Foreshore: Coastal Geomorphology and British Laws, 62 ESTUARINE, COASTAL, & SHELF SCIENCE 183 (2005). The authors delineate three different legal boundaries in three regions in Britain. The Udal law, which applies to Orkney and Shetland lands that did not pass to the Crown, holds that private lands extend to the "lowest low water mark." Id. at 188 (citing Smith v. Lerwick Harbor Trs., 5 F. 680 (1905)). Scots law has two lines of precedent. The prevailing line holds the foreshore is between the high and low water marks of the ordinary spring tides, while another line applies the mean high and low water springs. Id. at 187 (citing various authority). They cite numerous decisions setting the foreshore in English law as extending from Mean High Water to Mean Low Water "of ordinary tides between the springs and the neaps." Id. at 186, (citing Atty. Gen. v. Chambers, 43 Eng. Rep. 486 (ch.) 4 DEG. M & G 206 (1854)). This analysis confirms the original reason the Crown originally ceded the coast: "The modern legal ideal of the foreshore is based on an 800-year-old construct that the intertidal area is 'waste land' and unusable." Id. at 190. This well-documented analysis supports the dissent in Phillips.

^{55.} Ansbacher, supra note 1, at 644 (citing Cinque Bambini P'Ship v. State, 491 So.2d 508, 511 (Miss. 1986) (en banc), aff'd sub nom; Phillips Petroleum Co. v. Mississippi, 484 U.S. 469 (1988)).

^{56.} Phillips Petroleum Co. v. Mississippi, 484 U.S. 469 (1988).

^{57.} MOORE, supra note 4, at 310.

^{58.} Attorney-Gen., v. Chambers, 43 Eng. Rep. 486 (ch.), 4 DEG. M & G 206 (1854).

The majority likewise misconstrued its own precedent. The majority opinion cited *Shively v. Bowlby*⁵⁹ as holding that the public trust covered all tidelands. *Shively* followed two years after *Illinois Central*. Interestingly, the *Phillips* majority cited *Shively*, and not *Illinois Central*, as the "seminal case in American public trust jurisprudence."⁶⁰

Shively concerned a quiet title dispute. Shively claimed under a federal patent that preceded Oregon's stateland. Bowlby and Parker claimed title under a statutory deed from the State. The disputed lands underlay a clearly navigable stretch of the tidally influenced portion of the lower Columbia River. The Shively Court never had to consider, nor did it address, putative sovereign ownership of nonnavigable tidelands. ⁶²

Justice Gray's opinion in *Shively* cited Hale's treatise supporting the *prima facie* rule in favor of the sovereign title in tidelands. Shively did generally follow *Illinois Central* in stating that sovereign ownership "over lands covered by tide waters" was "settled law." Justice Gray's reliance on Hale, however, confirmed the presumption that Digges, Hale, and King Charles' had limited submerged sovereign title to the high water mark. had limited submerged cited the high water line as the boundary of sovereign lands. Justice Gray cited *The Genesee Chief* in confirming that the limit was the high water line, not tidal influence:

^{59.} Shively v. Bowlby, 152 U.S. 1 (1894).

^{60.} Ansbacher, supra note 1, at 634, (quoting Phillips Petroleum, 484 U.S. at 473 (quoting Petitioner's Reply Brief at 11)). Tillinghast wrote shortly after Illinois Central and Shively. He sought to explain why the two decisions, sixteen months apart, did not conflict, even though he acknowledged that Cobb v. Lincoln Park Commissioners, 67 N.E. 5 (Ill. 1905), made that claim. Tillinghast saw Shively as deferring to the Oregon Supreme Court's ruling on property in that state. The doctrine then as now was that state law, "typically issues such as rights to real property within the state," was inherently local and best determined by the state. Kermit Roosevelt III, Choice of Law in Federal Courts: From Erie and Klaxon to CAFA and Shady Grove, 106 N.W. U. L. REV. 1, 4-5 (2012) (citing Swift v. Tyson, 41 U.S. 1, 18 (1842)) (labeling as local issues those concerning things that are "immovable and intraterritorial in their nature and character"). He noted that "the Supreme Court of Illinois had not apparently determined the law of the state at that time, so the court was free to ascertain and apply the common law." Tillinghast, supra note 51, at 360. But see Roosevelt, supra. Tillinghast analyzed English Common Law and the original states on the prima facie standard in making a colorable argument that the doctrine was by no means historically universal.

^{61.} Brent R. Austin, *The Public Trust Doctrine Misapplied:* Phillips Petroleum Co. v. Mississippi and the Need to Rethink an Ancient Doctrine, 16 ECOLOGY L.Q. 967, 995 (1989) (citing Shively, 152 U.S. at 8).

^{62.} Id.

^{63.} Shively, 152 U.S. at 13.

^{64.} *Id.* at 47

^{65.} See supra notes 50-54 and accompanying text.

^{66.} Propeller Genessee Chief v. Fitzhugh, 53 U.S. 443 (1851).

Chief Justice Taney, taking the same line of argument as Chief Justice Tilghman in *Carson v. Blazer*, above cited, said that in England, where there were no navigable streams beyond the ebb and the flow of the tide, the description of the admiralty jurisdiction as confined to tide waters was a reasonable and convenient one, and was equivalent to saying that it was confined to public navigable waters; but that, when the same description was used in this country, "the description of a public navigable river was substituted in the place of the thing intended to be described. And under the natural influence of precedents and established forms, a definition originally correct was adhered to and acted on, after it had ceased, from a change in circumstances, to be the true description of public waters." 67

Nine years after *Phillips*, the Supreme Court held that the boundaries of sovereign lands in Alaska at statehood were tidelands and nontidal navigable waters. The Court did not cite *Phillips*. Rather, it cited a decision that preceded *Phillips* by one year, but which held that the equal footing doctrine grants the foreshore between the low and high water marks to each new state. In *United States v. Alaska*,⁶⁸ the Supreme Court addressed a quiet title suit to certain coastal submerged lands. In a unanimous portion of the Supreme Court's decision, Justice O'Connor wrote:

Several general principles govern our analysis of the parties' claims. Ownership of submerged lands – which carries with it the powers to control navigation, fishing, and other public uses of water – is an essential attribute of sovereignty. *Utah Div. of State Lands v. United States*, 482 U.S. 193, 195 (1987).⁶⁹ Under the doctrine of *Lessee of Pollard v. Ha*-

^{67.} *Id.* at 454-55 quoted in Shively, 152 U.S. 1, 34-35. Sax, who first resuscitated, then expanded the public trust doctrine, cited *Shively* in his seminal article: "It has rather been a general rule that land titles from the federal government run down only to the high water mark, with title seaward of that point remaining in the states, which, upon their admission to the Union, took such shorelands in 'trusteeship' for the public." Sax, *supra* note 6, at 476 n.23 and accompanying text (citing *Shively*, 152 U.S. at 57-58).

^{68.} United States v. Alaska, 521 U.S. 1 (1997).

^{69.} Utah Div. of State Lands preceded Phillips by one term. It too was a 5-4 decision. The primary issue was whether the United States reserved the submerged lands before statehood. The waterbody, Utah Lake, was nontidal, so discussion of equal footing title "under navigable waters." Utah Div. of State Lands had no bearing on whether tidal public trust waters included nonnavigable tidelands. Regardless, there was virtually no consistency between the blocs. Of those who held in that case that sovereign ownership underlay all navigable waters (O'Connor, Rehnquist, Scalia, Blackman and Powell), Rehnquist and Blackman joined in the Phillips majority; Scalia joined O'Connor's dissent; Kennedy, replac-

gan, 44 U.S. 212 (1845), new states are admitted to the Union on an 'equal footing' with the original 13 Colonies and succeed to the United States' title to the beds of navigable waters within their boundaries.⁷⁰

The *Alaska* court proceeded to repeatedly state this meant that "[a]s a general matter, then, Alaska is entitled under . . . the equal footing doctrine . . . to submerged lands beneath tidal and inland [sic] navigable waters"⁷¹ The unanimous court therefore, adopted the broad definition of tidal sovereign lands from the *Phillips* majority. Its repeated citation of *Utah* is therefore puzzling. This is especially so because discussion of tidal waters in a decision addressing Utah Lake could only be dicta.

The ironic result of expansive public trust ownership claims in nonnavigable tidelands is evident in *Phillips*. The expansion of public trust lands seems to support conservation. This is not necessarily true. States in need of income search for creative sources. This is particularly true where a state constitution or statute requires a balanced budget, as in Mississippi. When the Supreme Court or a state Supreme Court upends settled understandings of private landholdings, the sovereign might have designs other than protecting the public trust. If not up front, then in application. In fact, the public coffers might well play a role. Digges' desire to claim Crown patents in the foreshore was a primary basis for his aggressive assertion of the sovereign's presumptive public trust rights in the foreshore. Phillips shows this point, as the state wanted to assert mineral lease rights.

ing Powell, recused. Of the *Utah Div. of State Lands* dissent, one year later, Brennan and Marshall joined White's *Phillips* majority opinion, while Stevens flipped to the dissent.

^{70.} United States v. Alaska, 521 U.S. 1, 5 (1997).

^{71.} Id. at 6. The Alaska opinion makes the common error of equating nontidal with "fresh" or, in this case, "inland" waters. Tidal influence can extend many miles inland. This is particularly so in many places in Alaska. For example, the tidal range in the Turnagain Arm of the Cook Inlet is one of the most extreme in the world, at twelve meters. Fisheries and Oceans Canada, GOVERNMENT OF CANADA, http://tides.gc.ca/eng/info/faq (last visited June 27, 2014). The other major arm, the Knik, has a range exceeding 10 meters. Steven F. Greb & Allen W. Archer, Influences on Fluvian-Estuarine Transitions, Examples from Hypertidal Turnagain Arm, Alaska, SEDIMENTOLOGISTS.COM, http://www.sedimentologists.org/docs/meetings/ims-scientific-programme/T4S3.pdf. (last visited June 27, 2014); see also Jonathan V. Hall, Alaska Coastal Wetlands Survey, U.S. FISH & WILDLIFE SERVICE (Sept. 1988), available at http://fws.gov/wetlands/Documents/Alaska-Coastal-Wetlands-Survey.pdf (describing massive-scale tidal influences throughout whole regions of the state).

^{72.} MISS. CODE. ANN. § 27-104-13 (2014). See also MISS. ECON. POLICY CTR., Putting the Pieces Together: A Taxpayer's Guide to the Mississippi Budget (2007), available at http://mepconline.org/images/admin/spotedit/attach/0/MS_Budget_and_Tax_Guide.pdf.

^{73.} Tillinghast, supra note 51, at 345-46.

I can cite another example with which I am familiar. In Coastal Petroleum v. American Cyanamid,⁷⁴ the Florida Supreme Court held that Florida held presumptive title to submerged lands, below the ordinary high water line of a nontidally-influenced navigable stretch of the Peace River. That case had two connections to financial interests. Its basis was a dispute like Phillips – private mineral rights, state lease fees and taxation.⁷⁵ The state offered to sell lands affected by Coastal to multiple record titleholders, in exchange for all or a portion of the title insurance claim of the record titleholder.⁷⁶ Granted, many of the presumptively sovereign lands the state offered to sell might have been filled or otherwise impaired for public use, but Coastal joined Phillips in demonstrating that many state governments did not, and do not, treat public trust lands as entirely sacrosanct. That, of course, is consistent with Illinois Central and Appleby.

Why would the extent of sovereign lands be greater in tidally influenced than in non-tidally influenced waters? The primary uses of nonnavigable waters are those of transitional zones. The English had no cognizance of these public benefit functions when Digges and Hale lived, nor did the United States until the last few decades. After all, it took Sax in 1970 to urge that courts expand the then-limited, even moribund, public trust canon to protect the environment. The USGS describes the generalized functions of wetlands:

These include the storage of water, transformation of nutrients, growth of living matter, and diversity of wetland plants, and they have value for the wetland itself, for surrounding ecosystems, and for people. Functions can be grouped broadly as habitat, hydrologic, or water quality, although these distinctions are somewhat arbitrary and simplistic.

Not all wetlands perform all functions nor do they perform all functions equally well. The location and size of a wetland may determine what functions it will perform. For ex-

^{74.} Coastal Petroleum Co. v. Am. Cyanamid Co., 492 So. 2d 339 (Fla. 1986).

^{75.} Id.

^{76.} Multiple conversations in 1995 between the author and then-Florida Department of Natural Resources attorneys Eugene "Mac" McClellan and Suzanne Brantley. One must acknowledge that *Coastal* reversed precedent of short life. *Odom v. Deltona Co.*, had held nine years before that private claims under the Marketable Record Title Act could divest state sovereign lands title based on the Equal Footing Doctrine. Odom v. Deltona Co, 341 So. 2d 977 (Fla. 1977). *Odom* ran counter to Florida law confirming presumptive state sovereign title below the high water line. Martin v. Busch, 112 So. 274 (Fla. 1927).

ample, the geographic location may determine its habitat functions, and the location of a wetland within a watershed may determine its hydrologic or water-quality functions.⁷⁷

The United States Environmental Protection Agency (USEPA) addresses marshes, or "wetlands frequently or continually inundated with water, characterized by emergent soft-stemmed vegetation adopted to saturated soil conditions." Tidal marshes "buffer storm, seas, slow shoreline erosion, and are able to absorb excess nutrients." Lower marsh tends to be saline and covered only at higher tides. Brackish and freshwater higher marshes are more diverse. Modern studies indicate "that plant diversity, primary production, and nutrient recycling ecosystem functions of tidal fresh and brackish marshes exceed those of salt marshes."

The use of British marshes when Digges and Hale lived undermines the argument that they valued marshes for public purposes. To the contrary, Bosselman shows that the English adapted to the massive Romney Marsh, Sommerset Levels and the Great Fens and other wetlands not long after the Middle Ages. While flooding, malaria and other naturally limiting factors impaired their use, residents used the wetlands including marshes for salt, roofing thatch, peat for fuel, food, and grazing lands. Accordingly, the English treated wetlands as public commons from the Norman Conquest in 1066 until the reign of Henry the VIII. After he confiscated monastery lands, pre-modern drainage began to convert increasingly vaster wetlands and marshes. Various enclosure and "private acts" passed by Parliament combined with incipient technology to convert the former marsh commons to private, drained lands of the gentry during Digges and Hale's lifetimes.

Today, we know that coastal marshes play "a significant positive effect on wave attenuation and shoreline stabilization "86

^{77.} Richard P. Novitski, R. Daniel. Smith & Judy D. Fretwell, *Wetland Functions*, *Values, and Assessment*, U.S. GEOLOGICAL SURVEY (Oct. 20, 1997), http://water.usgs.gov/nwsum/WSP2425/functions.html.

^{78.} Marshes, U.S. Envtl. Prot. Agenct (Oct. 12, 2012), http://water.epa.gov/type/wetlands/marsh.cfm.

^{79.} Id.

^{80.} Id.

^{81.} Kazimierz Wieski et al, Ecosystem Functions of Tidal Fresh, Brackish and Salt Water Marshes on the Georgia Coast, ESTUARIES & COASTS, 33:161, 168 (2010).

^{82.} Fred P. Bosselman, Limitations Inherent in the Title to Wetlands at Common Law, 15 Stan. Envil. L.J. 247, 260-97 (1996).

^{83.} MOORE, *supra* note 4, at 276-303.

^{84.} Bosselman, supra note 82, at 299-302.

^{85.} Id

^{86.} Christine C. Shepard et al, *The Protective Role of Coastal Marshes: A Systematic Review and Meta-Analysis*, PLOS ONE, Nov. 2011, at 5.

Regardless, "[h]istorically, coastal protection plans have relied on hardened infrastructure solutions such as sea walls, jetties and groins while ignoring or even destroying coastal marshes that could provide protective benefit."87

Coincidentally, another Thomas Digges played a major role in developing coastal armoring in Elizabethan England. That Digges was a mathematician, navigator, surveyor and astronomer who translated Copernicus into English. He directed the replacement of the failed Dover Harbor pier that Henry VIII had constructed at great expense. The English had many other failed or failing harbors on the Southeast Coast by 1550. He major role in developing the structure of the failed or failing harbors on the Southeast Coast by 1550.

The court counsel Digges drafted his pamphlet inventing the *prima facie* theory in 1568-69, after Dover failed but before polymath Digges revived the harbor. 91 Recall that Hale cites the foreshore as lying between the high and low water marks. 92 Tillinghast dissects Hale to support private rights to ports and harbors in the foreshore:

The case of the Sutton Marsh (Chap. VI of De Jure Maris) in 12 Charles I. is of considerable interest because of the five distinctions of pleading made to sustain the decision between relictam and projectum, and still more because of the distinction between the open sea and ports and rivers. He says:

But although a subject cannot acquire the interest of the narrow seas, yet he may by usage and prescription acquire interest in so much of the sea as he may reasonably possess, viz. of a *districtus maris*, a place in the sea between such points, as a particular part contiguous to the shore, or of a port or creek or arm of the sea.⁹³

Similarly, long after the era in which the Supreme Court decided Genesee Chief, Illinois Central Railroad, Shively and Appleby, the United States considered wetlands and marshes to be "swampy lands that bred diseases, restricted overland travel, impeded the

^{87.} Id. at 1.

^{88.} Ansbacher, supra note 1, at 621 n.286 and various authorities cited therein.

^{89.} Id.

^{90.} STEPHEN JOHNSTON, MAKING MATHEMATICAL PRACTICE: GENTLEMEN, PRACTITIONERS AND ARTISANS IN ELIZABETHAN ENGLAND at 223-228 (1994), available at http://www.mhs.ox.ac.uk/staff/saj/thesis/dover.htm.

^{91.} Tillinghast, supra note 51, at 345-46.

^{92.} See supra notes 53-54 and accompanying text.

^{93.} Tillinghast, supra note 51, at 349-50 n.2 and accompanying text.

production of food and fiber, and generally were not useful. . . ."⁹⁴ Technology facilitated conversion of wetlands and marshes throughout the nation.⁹⁵ Massive public works projects only exacerbated wetlands losses.⁹⁶

Only in the 1960s and 1970s did the United States develop our modern environmental ethos. Sax urged a resuscitation and expansion of the public trust to protect the environment. Sax's urged extension assumed that the public trust in 1970 concerned only navigable issues. That assumption was historically accurate.

Massive regional aquifers are part of a freshwater cycle with wetlands and associated recharge areas. Modern research "Address[es] the full range of interacting systems including lakes, streams, surrounding uplands (and associated land uses) and wetlands." Prairie and other freshwater wetlands play direct roles in recharge of potable supplies. We see increased irrigation that mines whole regional aquifers. The Ogallala's associated wetlands and streams dry up, threatening the region's survival above a subsistence level. Frankly, freshwater wetlands, particularly these underlying vast stretches of nontidal inland waters, are if anything, more significant to public survival than are coastal marshes, not less. Regardless, *Phillips* expanded sovereign lands contrary to the vast weight of precedent.

B. Lucas v. South Carolina Coastal Council

It seems appropriate that Professor Sax critiqued *Phillips* in an article that also criticized our next questionable split Supreme Court opinion, *Lucas v. South Carolina Coastal Council.* ¹⁰⁰ *Lucas* addressed the State's adoption of a new coastal construction setback line that barred Lucas from building houses on two shorefront lots. The South Carolina Supreme Court rejected his takings claim due to the state legislature's finding that coastal construc-

^{94.} Thomas Dahl et al., *History of Wetlands in the Coterminous United States*, NAT'L WATER SUMMARY ON WETLANDS RESOURCES (Mar. 7, 1997, 7:45 AM), *available at* http://water.usgs.gov/nwsum/WSP2425/history.html.

 $^{95. \} Id.$

^{96.} BUREAU OF LAND MANAGEMENT, THE MANUAL OF SURVEYING INSTRUCTIONS $\$ 7-95. (8th ed. 1973), available~at http://blm.gov/cadastral/Manual/73man/id286_m.htm.

^{97.} Henry R. Murkin, Freshwater Functions and Values of Prairie Wetlands, GREAT PLAINS RESEARCH (1998), http://digitalcommons.unl.edu/greatplainsresearch/362.

 $^{98.\ \} See\ id.$ at 8-9. We must note here that many freshwater wetlands are associated with tidal waters closer to our coasts.

^{99.} Id. at 6, 9; See supra note 39 and accompanying text.

^{100.} Lucas v. S.C. Coastal Council, 505 U.S. 1003 (1992), analyzed in Sax, supra note 48, at 943.

tion would cause a "Public harm." ¹⁰¹ A balkanized Supreme Court reversed. Justice Scalia wrote for four other justices in one of the most significant opinions in his efforts to establish a robust takings legacy. Justice Kennedy concurred, because he disagreed with Justice Scalia's static definition of "background principles" of state law, discussed below.

Professor John Echeverria stated this opinion "is a landmark in takings jurisprudence because it converted two previously inchoate ideas reflected in the Court's takings jurisprudence into relatively definitive legal rules." First, the Court held that a governmental action that deprives an owner of "all economically beneficial" use of a property will have taken the property *per se. Lucas* eliminated the prior categorical exception for takings that protected the public from harm. As Echeverria states: "The *Lucas* case resolved this conflict in favor of the per se rule that the destruction of all property value represents a taking." Echeverria stated that the *per se* rule required Justice Scalia to develop a clear definition of what constitutes property subject to compensation for a taking. This leads to Sax's objection to what he labeled the "*Lucas/Phillips* approach" to defining property.

Mississippi alleged in *Phillips* that it held the subject lands under the equal footing doctrine, subject to the *per se* test applicable to sovereign lands. ¹⁰⁷ The state previously showed no, let alone any traditional public trust interest in non-navigable tidelands. Mississippi never claimed non-navigable tidelands before it sought lease fees. ¹⁰⁸ Phillips and its predecessors held record title and paid taxes for over a century. ¹⁰⁹ The majority in *Phillips* held that the private interests did not have "reasonable expectations of property interests in light of the state's previously unasserted claim to nonnavigable tidelands." Sax sums up: "The opinion in *Phillips* invites the conclusion that definitions of property are of

^{101.} Lucas v. S.C. Coastal Council, 404 S.E.2d 895, 901 (S.C. 1991), (rev'd 505 U.S. 1003 (1992)).

^{102.} John D. Echeverria, *The Public Trust Doctrine as a Background Principles Defense in Takings Litigation*, 45 U.C. DAVIS L. REV. 931, 943 (2002).

^{103.} Id. at 943-44 (citing Lucas, 505 U.S. at 1015-19, which eliminated the $per\ se$ nuisance exception stated in $Mugler\ v.\ Kansas$, 123 U.S. 623, 668-69 (1887)); Keystone Bituminous Coal Assn. v. DeBenedictis, 480 U.S. 470, 491 n.20 (1987). Keystone preceded Lucas by only five years, holding: "since no individual has a right to use his property so as to create a nuisance or otherwise harm others, the State has not 'taken' anything when it asserts its power to enjoin a nuisance-like activity." Id.

^{104.} Id. at 944.

^{105.} Id.

^{106.} Sax, supra note 48, at 951.

^{107.} Phillips Petroleum Co. v. Mississippi, 484 U.S. 469 (1988).

^{108.} Sax, supra note 48, at 944.

^{109.} Id.

primary, if not determinative, importance, notwithstanding their non-enforcement for many years, and notwithstanding government behavior to suggest that the law is different from its formal statement."¹¹⁰

Sax points out that Justice Scalia, who joined in Justice O'Connor's dissent in *Phillips*, actually augmented that earlier opinion's hyper-technical and constricted definition of property rights in his *Lucas* opinion.¹¹¹ Sax states *Lucas* "adopted a definitional/historical, rather than a functional, view of property."¹¹² As he points out, this can be exceedingly problematic when the government argues that the public trust trumps a putative private use.¹¹³ *Phillips* reminds us that one cannot under American law establish prescriptive or adverse rights against sovereign title.¹¹⁴ The public trust is deemed to date from statehood.

This constricted definition of property undermines Justice Scalia's apparently broad intent in Lucas. While he introduced the categorical takings standard in a "total wipeout," his equally categorical exception cut the heart out of the decision's applicability where the state applies the public trust doctrine. The majority opinion in Lucas states that a governmental action that furthered "background principles of the state's law of property and nuisance" was not a taking. 115

Justice Scalia emphasized that a court must resolve the background principles as a "logically antecedent inquiry." ¹¹⁶ Lucas requires the court to determine the background principles as of the date the private party acquired the property. ¹¹⁷ Michael Blumm and Lucus Ritchie emphasize that the application of background principles "does not depend on the landowner's knowledge of the background limitation." ¹¹⁸ Again, *Phillips* shows that the *prima facie* rule creates an irrebuttable presumption that sovereign title in any public trust asset exists retroactive to statehood.

^{110.} Sax, supra note 48, at 950.

^{111.} Id. at 951.

^{112.} Id. at 944.

^{113.} Id.

^{114.} *Id.* at 950; see also Ansbacher & Knetsch, supra note 6, (discussing the general prima facie rule that a conveyance must expressly include sovereign lands or else such lands remain in the State); Tillinghast, supra note 51, (stating the prima facie standard while questioning its historical authenticity).

^{115.} Lucas v. S.C. Coastal Council, 505 U.S. 1003, 1029 (1992).

^{116.} Id. at 1027.

^{117.} Id. at 1029.

^{118.} Michael C. Blumm & Lucas Ritchie, Lucas's Unlikely Legacy: The Rise of Background Principles as Categorical Takings Defenses, 29 HARV. ENVIL. L. REV. 321, 325 (2005).

That is a prime reason we need to be exceedingly careful in extending the public trust doctrine beyond its historic bounds. A true public trust asset exists at statehood as a component of state equal footing sovereignty. We must hesitate to label a power as "public trust" when we really want to apply a super police power right. *Phillips* is a paradigm of how such expansions can upend settled real property rights. The majority there referred to Phillips' claims as flawed and unreasonable "expectations," despite the fact that no one in that chain had any notice that the state would decide one day to expand the geographic bounds of sovereign claims landward of high water.

Conversely, Lucas creates a potentially unintended consequence in application of background principles of both property and nuisance. Justice Kennedy's concurrence expressed concern over Justice Scalia's foreclosing of expanded definitions of nuisance law responding to changing societal norms. The nature of western states' prior appropriation water law creates potentially incongruent results under Lucas. Sax opines that retroactive application of public trust claims can undermine property rights in water permits. Prior appropriation establishes a first in time, first in right permitting system based on when users establish a "beneficial use." Professor Tarlock explains prior appropriation:

Under the law of prior appropriation, water rights are allocated to the first person to put a specific quantity of water to beneficial use. The user obtains a temporal priority, and in times of scarcity, the right to withdraw or pump water is

^{119.} Phillips Petroleum Co. v. Mississippi, 484 U.S. 469 (1988).

^{120.} Lucas, 505 U.S. at 1035 (Kennedy, J., concurring).

^{121.} Sax, *supra* note 48, at 951-52. The right to use water, not the water itself, is the property right. This is called a usufructuary right. *Coffin v. Left Hand Ditch Company*, 6 Colo. 443, 446 (1882), long ago established this general principle of prior appropriation permitting.

^{122.} A. Dan Tarlock, *Prior Appropriation: Rule, Principle or Rhetoric?*, 76 N.D. L. REV. 881, 910 n.1 (2000) (citing SAMUEL WIEL, Water Rights in the Western States, 307 (3d ed. 1911)). Christine Klein explains the core ethos of the prior appropriation system:

Beneficial use concerns the quality or type of water use, and waste relates to the excessive use of water. Together, the two concepts define the parameters of a water right: an application of water to beneficial use without waste constitutes an "appropriation" that is entitled to protection of law. It is beneficial use, and not diversion, that is the constitutional hallmark of a water right. . . . Although western constitutions require beneficial use, they do not provide a comprehensive definition of the concept. Instead, beneficial use has a flexible meaning, generally reflecting the dominant public interest of the time.

curtailed in reverse order of the manifestation of an intent to appropriate. The most junior user right holder must yield to the more senior and so on along a stream system, or, in theory in some states, in a groundwater basin . . . The right is good to the last drop. 123

Tarlock points out various limitations in the prior appropriation system. He concludes, however, that it is better than the alternatives, particularly in the arid and semi-arid states. The pure and modified Anglo riparian systems that prevail in Eastern States tie water rights to stream adjacency. Riparianism does not limit use of the resource as does the prior appropriation system. ¹²⁴ Christine Klein emphasizes prior appropriationism's rights of diversion from the riparian land as key to developing the arid western states. ¹²⁵ She quotes the landmark Colorado decision in *Coffin v. Left Hand Ditch Co.*, ¹²⁶ which stated emphatically: "[T]he disastrous consequences of our adoption of the [riparian] rule contended for, forbid our giving such a construction to the statutes."

Tarlock joins Klein and many others in stating that prior appropriation is not a static construct:

Prior appropriation has been the primary institution for the development and use of western water, but it is an institution under stress. Thus, it is legitimate to ask, what is the future of prior appropriation? I believe that the more appropriate question, however, is how will the doctrine continue to evolve?

The distinguishing feature of prior appropriation is its continual evolution in response to a changing West. Because prior appropriation is grounded in both abstract principles of justice and hard experience, it has constantly had to adapt to changed conditions. 127

Sax explains how the *Lucas/Phillips* paradigm affects the ability of states to modify prior appropriation systems to respond to changed circumstances. He cites multiple Supreme Court decisions

^{123.} Tarlock, supra note 122, at 882.

^{124.} Klein, supra note 122, at 345-46.

^{125.} Id.

^{126.} *Id.* at 346 (citing Coffin v. Left Hand Dutch Co., 6 Colo. 443, 449 (1882), which upheld the right to divert a prior established use from the watershed for irrigation).

^{127.} A. Dan. Tarlock, The Future of Prior Appropriation in the New West, 41 NAT. RESOURCES J. 769, 769-70 (2001). See also Klein, supra note 122.

that hold most property interests are created by state law with little federal court oversight. Sax states that Lucas/Phillips leave "property rights in water . . . not only restrictively defined, but the definitions [of prior appropriation requiring responsible and beneficial use without waste] openly anticipate changes that may diminish or abolish uses that were once permitted." He cites the special master's report in $Arizona\ v.\ California$, which said "[u]ndoubtedly when and if water becomes scarce in this area, its use will be regulated much more efficiently, than at present." Sax warns that "[t]his is a standard definition for water rights of what the Court in Lucas described as the 'bundle of rights that [appropriators] acquire when they obtain title to property' in water rights." 132

The fundamental question is whether the *Lucas/Phillips* standard will favor property owners by examining the appropriation rights when they acquired them, or the government, because any expectations the appropriator had that the permitting region would not change to the appropriator's detriment were not reasonable. Sax makes a compelling argument that *Lucas* and *Phillips* combine to undermine, rather than augment, appropriators' rights to takings claims. Frankly, that might be logical in a time when water resources are diminishing at an astonishing rate. One doubts if that was Scalia's goal, but it follows logically from the two decisions' formalistic focus on property rights.

One might assume that the property rights are better established in a riparian rights regime. A classic riparian right is appurtenant to the land lying next to a natural water body. Classic riparian rights are generally inalienable or assignable except was part of the riparian parcel. The precedent is mixed. A majority of the Oklahoma Supreme Court held in a widely mixed set of opinions (two partial dissents and one full dissent) in *Franco-American Charolaise v. Oklahoma Water Resources Board*, that riparian rights were property that could not be taken without just compensation: "We hold that the Oklahoma riparian owner enjoys a vested common law right to the reasonable use of the stream. The right is

^{128.} Sax, supra note 48, at 953 n.65 and accompanying text.

^{129.} Id. at 951.

^{130.} Arizona v. California, 373 U.S. 546 (1963).

^{131.} Sax, supra note 48, at 952.

^{132.} Id. (citing Lucas v. S.C. Coastal Council, 505 U.S. 1003, 1027 (1992)).

^{133.} Atchison v. Peterson, 87 U.S. 507, 511 (1874).

^{134.} Franco-American Charolasie v. Oklahoma Water Res. Bd., 855 P.2d 568 (1993).

a valuable part of the property owner's 'bundle of sticks' and may not be taken without compensation." ¹³⁵

The dissents argued vehemently that the majority analysis was badly flawed. Vice Chief Justice Lavender argued the majority failed to consider, or at least misunderstood, the public trust; "misperceives that future, unqualified use of stream flow by a riparian is a vested property right that can only be limited or modified pursuant to judicially mandated common law factors that were generally used to decide piecemeal litigation between competing water use disputed"; "ignores the virtually admitted fact that neither riparians nor appropriators own the water they are being allowed to use"; and does not factor the possibility that "lack of water to a riparian, if it occurs, [which] is caused by his own neglect or inaction . . . ," in establishing appropriative rights in Oklahoma's dual riparian/appropriation system. 136

Special Justice Reif joined Justice Lavender, emphasizing that riparian rights are "qualified and not an absolute right of property." Particularly, "[p]rospective or future uses by riparians have not been recognized or treated as 'vested' any more than the riparian right itself has been treated as an absolute right of property." Justice Hargrave's dissent concludes similarly that the legislature may define or redefine riparian rights. ¹³⁹

This decision shows the inherent difficulty in applying absolute, static property standards to water rights doctrines which necessarily adapt to the times, resource limits, and societal reallocation of priorities. The two sides in the Oklahoma Supreme Court take, respectively, the majority position that appurtenant riparian rights can be taken when subordinated to appropriative rights; and the dissents, who state that a riparian cannot reasonably expect that the state cannot and will not alter those riparian rights. As Sax noted about appropriative rights, the *Lucas/Phillips* impact only complicates issues by exalting formalistic property rights without considering the myriad implications.

The Hawaiian Supreme Court later distinguished Franco-American in its massive decision, In re Water Use Permit Applica-

^{135.} *Id.* at 571. It must be noted that while footnote five of the majority opinion states the holding "rests on independent and adequate state grounds," the Court issued its first opinion in 1990, before *Lucas*, but readopted and reissued it in 1993, post-*Lucas*. Professor Gary Allison thoroughly and critically analyses the decision in Gary D. Allison, *Oklahoma Water Rights: What Good Are They?* 64 OKLA. L. REV. 469 (2012).

^{136.} Id. at 582-96 (Lavender, J., concurring & dissenting).

^{137.} Id. at 596 (Reif, S.J., concurring & dissenting).

^{138.} *Id*

^{139.} Id. at 596-97 (Hargrave, J., dissenting).

tions. 140 The Court majority distinguished *Lucas* as addressing a "wipe-out" or total take, from the deprivation of appurtenant water use, which does not *per se* deprive one of all economic use of the parcel. 141

The *Waiahole* Court majority relies on Hawaii's public trust rights in the water:

[T]he reserved sovereign prerogatives over the waters of the state precludes [sic] the assertion of vested rights to water contrary to public trust purposes. This restriction preceded the formation of property rights in this jurisdiction; in other words, the right to absolute ownership of water exclusive of the public trust never accompanied the "bundle of rights" conferred in the Mahele.¹⁴²

In re Water Permit Use Applications analyzed uniquely Hawaiian property rights, including tracing the public trust to the 1848 Mahele, rather than 1950 statehood pursuant to the Equal Footing Doctrine. Just the same, that state's Supreme Court addressed public trust, property and water rights in case law from numerous state and federal courts. Modern riparian regimes condition riparian rights so thoroughly that Waiahole more likely than Franco-American reflects the property rights expectations in most riparian jurisdictions, and in dual jurisdictions. Waiahole demonstrates how the equal footing doctrine, or subsequently adopted but retroactively applied public trust claims, can undermine seemingly settled property rights expectations. That decision clarifies how Phillips conditions the categorical property rights protections Justice Scalia intended to impose in Lucas. 143

What are the implications of the background nuisance prong that Justice Scalia created in *Lucas*? This issue troubles the viewer in a different way than does the property prong. The Supreme

^{140.} In re Water Use Permit Applications, 9 P.3d 409 (Haw. 2000).

^{141.} *Id.* at 493 n.99 (citing Village of Tequesta v. Jupiter Inlet Corp., 371 So. 2d 663 (Fla. 1979), *cert. denied* 444 U.S. 965 (1979) (in which owner who had not exercised common-law water right had no perfected property right supporting inverse condemnation claim), in distinguishing *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1017 n.7 (1993)).

^{142.} *Id.* at 494. The Great Mahele, or the Mahaele, was the division of lands among Kamehameha III, the chiefs, and the konohiki (headmen of land divisions with appurtenant control of adjacent fishing waters) in 1848. MAHELE BOOK, http://archives1.dags.hawaii.gov/mahelebook.pdf.

^{143.} Professor Echeverria notes that the "[b]ecause the threshold question of whether the claimant can identify a vested property interest is a potential issue in any case brought under the Takings Clause, the *Lucas* background principle applies in every takings lawsuit regardless of whether the case is governed by the *Lucas* per se takings test or some other takings test." Echeverria, *supra* note 102, at 945-46.

Court broadly applies nuisance doctrine as a categorical takings defense just five years before *Lucas*, in *Keystone Bituminous Coal Assn. v. DeBenedictis.* ¹⁴⁴ *Lucas* sought to rein in the recitation of a nuisance as a defense. Justice Scalia emphasized that new statutory defenses would not suffice. "[T]he legislature's declaration that the uses Lucas [the claimant] desires are inconsistent with the public interest . . ." is not a background principle. ¹⁴⁵ Justice Kennedy's concurrence took great exception. He countered that the state must be free to respond to changing conditions. ¹⁴⁶

Justice Scalia encompassed both private and public nuisances in background principles.¹⁴⁷ Private nuisance is an inherently problematic defense for a public taking. Private nuisances apply to acts that disturb or injure private interests in land.¹⁴⁸ "An action for private nuisance generally may not be maintained by the State."¹⁴⁹ The Restatement limits standing to possessors of land; owners of easements and profits in land; and owners of nonpossessory estates in the land that are detrimentally affected by inference with its use and enjoyment.¹⁵⁰

The more problematic aspect of reliance on private nuisance is its ephemeral nature. One of Dean Prossor's most famous passages despaired of the law of nuisance:

"Nuisance" unhappily has been a sort of legal garbage can Blackstone¹⁵¹ defined it as [sic] "Anything that worketh hurt, inconvenience, or damage, or which is done to the hurt of the lands, tenements, or hereditaments of another" — which certainly is broad enough to cover all conceivable torts. There has been a deplorable tendency to use the word as a substitute for any thought about a problem, to call something a "nuisance" and let it go at that. If "nuisance" is

^{144.} Smith v. Turner, 48 U.S. 470 (1987), which followed Mugler v. Kansas, 123 U.S. 623 (1887); Goldblatt v. Hempstead, 369 U.S. 590 (1962), (broadly holding that government may abate common law or statutory nuisances without effecting a compensable taking).

^{145.} Lucas v. S.C. Coastal Council, 505 U.S. 1003, 1030 (1992).

^{146.} Id. at 1035 (Kennedy, J., concurring).

^{147.} See generally, Osborne M. Reynolds, Of Time and Feedlots: The Effect of Spur Industries on Nuisance Law, 41 Wash. U.J. Urb. & Contemp. L. 75, 79 (1992); Robert Abrams, The Misunderstood Law of Public Nuisance: A Comparison with Private Nuisance Twenty Years After Boomer, 54 Albany L. Rev. 359 (1990).

^{148.} Boomer v. Atlantic Cement Co., 257 N.E.2d 870 (N.Y. 1970).

^{149. 58} Am. Jur. 2D Nuisances § 214 (2013).

^{150.} RESTATEMENT (SECOND) OF TORTS § 821E (2013).

^{151. 3} WILLIAM BLACKSTONE COMMENTARIES *216.

to mean anything at all, it is necessary to disregard much of this as mere aberration. 152

The private nuisance defense presents all sorts of issues. Why should a public entity, which enjoys no standing to assert a private nuisance, have standing to present such a nuisance as a defense? Prosser shows us the practical implication, which is that the use of an amorphous, catch-all doctrine like private nuisance allows a "garbage can" full of potential defenses to counter the formalistic property interest asserted under *Lucas/Phillips*.

The public nuisance prong of *Lucas* presents another broad defense that is difficult to address. The root of this defense in the water law context is an ancient term, "purpresture on the crown." English Common Law after Digges held that any private structure that was erected below the high water mark constituted a purpresture, or invasion of the Crown's property. ¹⁵³

One article cites the English law of riparian right of access, which lies subject to the sovereign's right to remove purprestures:

There is, however, in the English law what is known as the riparian right of access, incident to lands bordering upon navigable waters. The celebrated case of *Lyon v. Fishmongers' Company* has been understood to decide that this "right of access," like the riparian right to the appropriation and beneficial use of running water, is a "natural right," dependent solely on natural relations. The words of Lord Selborne in that case have been quoted as applicable to the right in question: "The rights of a riparian proprietor, so far as they relate to any natural stream, exist *jure nature*, because his land has by nature the advantage of being washed by the stream." ¹⁵⁴

The same article describes the riparian right of access as a special kind of private right to use a public asset: "The public, including the riparian owner, having the right to navigate the stream, a private right distinct from the public right is given the riparian owner, as owner, to enable him to get to navigable water, where he can exercise his public right." The riparian right of access is an

^{152.} William L. Prosser, Nuisance Without Fault, 20 Tex. L. Rev. 399, 411 (1942).

^{153.} Note, Waters and Watercourses—Tidal Waters—Purprestures, 20 HARV. L. REV. 657 (1907) (citing Atty-Gen'l. v. Richards, 2 Anstr. 603).

^{154.} Alfred E. McCordic & Wilson G. Crosby, *The Right of Access and the Right to Wharf Out to Navigable Water*, 4 HARV. L. REV. 14 (1890).

^{155.} Id. at 18.

easement over the sovereign submerged land to reach navigable depths. 156

Prosser cites several cases holding that obstruction of a navigable stream constitutes a public nuisance. Shively holds similarly: "That the people have a public interest, a jus publicum, of passage and repassage with their goods by water, and must not be obstructed by nuisances." Usufructuary water rights are similar property rights that we subject to public regulation of the commons. 159

C. Stop the Beach Renourishment v. Florida Department of Environmental Protection

The Supreme Court has proven to be less than thoroughly analytical in applying the background principles *Lucas* rule to riparian and littoral cases. For example, the Court cited as settled Florida law a Florida Supreme Court decision in *Stop the Beach Renourishment v. Florida Department of Environmental* Protection (STBR)¹⁶⁰ that the lower court had not cited, let alone relied upon, in holding that a Florida statute could vest public title in publicly filled, previously private lands above mean high water line. The

The plurality's analysis betrays a seemingly artless conception of property rights, epitomized by its resort to a deus ex machina - a Florida case never cited by the Florida Supreme Court that, miraculously, resolves the entire question. This kind of exercise is appropriate for a 'Where's Waldo' adventure, but takings law deserves better.

Mary Doyle & Stephen J. Schnably, Going Rogue: Stop the Beach Renourishment as an Object of Morbid Fascination, 64 HASTINGS L.J. 83, 114, 120-25 (2012). The Martin analysis is more appropriately cited as part of the unanimous portion of the opinion at Part IV, not the plurality portion. Otherwise, the law review article accurately portrays Martin as a long-moribund, factually distinguishable Florida decision. The lack of precision in the STBR decision is evident in its reference to Martin's addressing Lake Okeechobee's "mean high water line." The lake is nontidal. The ordinary, not the mean high water line, applies. I must disclose that I co-authored an amicus brief for the Coalition for Property Rights on behalf of the property owners in the STBR case.

^{156.} *Id.* at 19. The article notes: "This easement of ingress and egress is appurtenant to the upland, and of course inseparable from it." *Id. But see infra* note 160 and accompanying text.

^{157.} Prosser, supra note 152, at 413 n.95 and accompanying text.

^{158.} Shively v. Bowley, 152 U.S. 1, 12 (1894).

^{159.} See generally, Eric R. Claeys, Exclusion and Private Law Theory: A Comment on Property as the Law of Things, 125 HARV. L. REV. F. 133, 140-42 (2012) (distinguishing between Blackstone's concept of "that sole and despotic dominion" one enjoys in uplands and chattels from the usufruct enjoyed in riparian rights). Id. at 141 n.52, (citing WILLIAM BLACKSTONE COMMENTARIES *2, *14).

^{160.} Stop the Beach Renourishment Inc. v. Fla. Dep't of Envtl Prot., 130 S. Ct. 2592, 2611-12 (2010) (citing Martin v. Busch, 93 Fla. 535, 112 So. 274 (1927)). Two scholars who oppose the Scalia judicial takings analysis heap disdain on his citation to *Martin*:

decision allowed the state to change the waterward mean high water line boundary of certain Gulf-front lots that had been set by the Equal Footing Doctrine and Article X, Section 11 of the Florida Constitution to the subsequently, statutorily created Erosion Control Line, upland of the mean high water line, without compensation. In fact, intervening Florida Supreme Court authority expressly overruled the allegedly controlling authority *STBR* cited. ¹⁶¹

STBR counts as either a tie or a unanimous decision. Observors [sic] and participants believed Justice Scalia thought he had a fifth vote in Justice Kennedy for holding that a judicial takings doctrine exists. ¹⁶² Once he failed to garner the fifth vote, Justice Scalia wrote for a four-justice plurality in stating the judicial takings doctrine exists. Having no further reason to discuss the merits of the case, Justice Scalia disposed quickly of the underlying private riparian (or littoral, as riparian rights on lakes, oceans and the like are called) rights issues for a unanimous court.

STBR allowed the state to eliminate a fundamental element of riparian rights – the exclusive access to the water held by the adjacent upland owner. It further established a public easement upland of the mean high water line, additionally undermining the riparian owners' preexisting bundle of sticks. It augments Sax's Lucas/Phillips concerns, in that the STBR court gave short shrift to even formalist property rights established not just in Florida, but since English Common Law.

Lord Selborne confirmed the English riparian rights doctrine in *Fishmongers*, holding that the ownership of submerged lands "cannot be the natural foundation of riparian rights property so called, because the word 'riparian' is relative to the bank, and not

^{161.} Bd. of Trs. of the Internal Improvement Trust Fund v. Sand Key Assocs., 512 So. 2d 934, 941 (Fla. 1987) (holding that accretions to a littoral parcel that were caused when the state constructed a nearby jetty vested in the littoral parcel). Justice Ehrlich of the Florida Supreme Court dissented vehemently in *Sand Key* that the majority was improvidently overturning *Martin*.

^{162.} Gary K. Oldehoff, Florida's Beach Restoration Program Weathers a Storm in the Courts: Stop the Beach Renourishment v. Florida Department of Environmental Protection, FLA. B.J., Nov. 2010, 11, 19-20; Ansbacher, supra note 1, at 589; Ben Barros, What's at Stake in Stop the Beach Renourishment, PROPERTYPROF BLOG (July 1, 2009), http://lawprof essors.typepad.com/property/2009/07/whats-at-stake-in-stop-the-beach-renourishment.html (focusing on Justice Scalia having passed on "at least" fifteen petitions arguing judicial takings between Stevens v. Cannon Beach, 510 U.S. 1207 (1994) and STBR); see also infra notes 178-80. Justice Scalia wrote for a four justice plurality in STBR in stating that a state court depriving one of an established property right has effected a taking. Stop the Beach Renourishment, 30 S. Ct. at 2608. Unlike other takings, the remedy for a judicial taking would be reversal, thereby allowing the state legislature to "either provide compensation or acquiesce in the invalidity of the offending features of the Act." Id. at 2607.

^{163.} See generally, Sidney F. Ansbacher et al., Stop the Beach Renourishment Stops Private Beachowner's Rights to Exclude the Public, 12 Vt. J. Envtl. L. 43 (2010).

^{164.} Id. at 108.

to the bed, of the stream . . ."¹⁶⁵ Noted common law scholar A.S. Wisdom summed up the rights accordingly:

For riparian rights properly so named to arise, the land must be in actual contact with the stream, but lateral contact is as good jure naturae as vertical, that is to say, a man has as much right to water flowing past his land as he has to water flowing over his land. 166

The right of wharfage was subject to permission from the Crown and the law of nuisance.¹⁶⁷

Florida was long one of the many states that held riparian or littoral owners enjoy the rights to wharf, access and view, together with accretions and third-party avulsive deposits. Hayes v. Bowman¹⁶⁸ is the state's seminal authority confirming the rights of a riparian or littoral owner to access, wharfage or dockage and view to the adjacent navigable waters. The Florida Supreme Court explained these rights in Game & Freshwater Fish Commission v. Lake Islands Ltd., ¹⁶⁹ where it upheld a rule barring motorboats on a navigable lake, but striking the rule as applied to littoral owners on the lake:

For the riparian right of ingress and egress to mean anything, it must at the very least establish a protectable interest when there is a special injury. To hold otherwise means the state could absolutely deny reasonable access to an island property owner or block off both ends of a channel without being responsible to the riparian owner for any compensation. A waterway is often the street or public way; when one denies its use to a property owner, one denies him access to his property Reasonable access must, of course, be balanced with the public good, but a substantial diminution or total denial of reasonable access to the prop-

^{165.} Lyon v. Fishmongers Co., L.R. Ch. 679, 683 (Lord Selborne emphasized: "The rights of a riparian proprietor, so far as they relate to any natural stream, exist *jure naturae*, because his land has by nature the advantage of being washed by the stream." *Id.* at 682).

^{166.} A. S. WISDOM, THE LAW OF RIVERS AND WATERCOURSES 82 (2d ed. 1970).

^{167.} JOHN M. GOULD, A TREATISE ON THE LAW OF WATERS 331 n.1 (2d ed. 1900).

^{168.} Hayes v. Browman, 91 So. 2d 795 (Fla. 1957).

^{169.} Game & Fresh Water Fish Comm'n v. Lake Islands Ltd., 407 So. 2d 189 (Fla. 1981).

erty owner is a compensable deprivation of a property interest. 170

A private riparian landowner may share the navigable access with the public in Florida as elsewhere. Brickell v. Town of Ft. Lauderdale¹⁷¹ held that the developers who platted streets that faced each other across a navigable river conveyed a presumptive public right of access across the river. Conversely, the same court held in Burkart v. City of Ft. Lauderdale¹⁷² that a recorded plat that dedicated a street along a navigable waterbody, but which reserved riparian rights, granted the public the right to use the street but retained riparian rights in the developers, subject to "the general public's right to use the accreted property [appurtenant to the riparian parcel] as a way of ingress and egress to the [navigable] waters "¹⁷³

Private riparian access may be shared by plat intent and implication, as shown above. It can likewise be shared with the public through prescription or by right of custom. The Florida Supreme Court held in *City of Daytona Beach v. Tona-Roma, Inc.*, ¹⁷⁴ that the public may establish access rights by "the recreational use of the sandy area [in a manner that is] ancient, reasonable, without interruption, and free from dispute" ¹⁷⁵ *Tona-Roma* limited the public right by custom to the "particular area of the beach" the public used in that fashion. ¹⁷⁶

The Supreme Court refused certiorari in *Stevens v. City of Cannon Beach*, ¹⁷⁷ where Justices Scalia and O'Connor dissented. Justice Scalia was adamant in his dissent that custom is fact and location specific. ¹⁷⁸ The Florida Fifth District Court of Appeal subsequently cited both *Tona-Roma* and Scalia's *Stevens* dissent, in stating "it appears to us that the acquisition of a right to use private property by custom is intensely local and anything but theoretical." ¹⁷⁹

^{170.} Id. at 193, quoted in Ansbacher et al., supra note 161, at 67-68.

^{171.} Brickell v. Town of Ft. Lauderdale, 78 So. 681 (Fla. 1918).

^{172.} Burkart v. City of Ft. Lauderdale, 168 So. 2d 65 (Fla. 1964).

¹⁷³ Id. at 70

^{174.} City of Daytona Beach v. Tona-Roma, Inc., 294 So. 2d 73 (Fla. 1974).

^{175.} Id. at 78.

^{176.} Id.

^{177.} Stevens v. City of Cannon Beach, 510 U.S. 1207 (1994) (Scalia, J., dissenting) ("Our opinion in *Lucas*, for example, would be a nullity if anything that a state court chooses to denominate 'background law'—regardless of whether it is really such—could eliminate property rights.").

^{178.} *Id.* Mary Doyle and Stephen Schnably discuss *Stevens* and *Stop the Beach Renourishment* in Mary Doyle & Stephen Schnably, *supra* note 160, at 109-10.

^{179.} Trepanier v. Cnty. of Volusia, 965 So. 2d 276, 289 (Fla. 5th DCA 2006).

All of this leads one to conclude that Justice Scalia's plurality opinion in STBR reflected his apparently foundered expectation that five justices would vote to establish the doctrine of judicial takings. Once he could not obtain, or lost, Justice Kennedy, the merits of the case no longer mattered. After all, there was no reason to apply judicial takings as dicta if the Court were to deny certiorari on the merits. He waited through at least fifteen prior opportunities to establish the judicial takings doctrine. 180 He could keep his powder dry. Justice Scalia expounded for the plurality on what his judicial takings doctrine looked like before he disposed quickly of the merits for a unanimous court. Regardless, STBR allowed Florida to create a public easement on Gulf-front lots by filling in eroded sands within the private lots and to convert formerly private fee ownership into a joint access on lands the statute transferred from the record owner to the State. No matter how noble the goal, the title transfer and public easement uprooted settled rights of ownership.

Again, Sax surprisingly shows why Justice Scalia's quick resolution on the merits in *STBR* violates common law and Florida law. Sax wrote a thorough historical analysis of the doctrines of accretion and avulsion as *STBR* pended before the Supreme Court. Sax cited numerous English Common Law authorities in explaining that the strong common law presumption favoring title shifts through accretion over static boundaries from avulsion was because shoreland value was primarily for pasturage. Access to navigable water is a more modern issue. Sax of the doctrines of the doctrines of accretion and avulsion are supplied to the sax of the doctrines of accretion and avulsion as the sax of the doctrines of accretion and avulsion are sampled to the sax of the doctrines of accretion and avulsion are sampled to the sax of the doctrines of accretion and avulsion as a sax of the doctrines of accretion and avulsion as a sax of the doctrines of accretion and avulsion as a sax of the doctrines of accretion and avulsion as a sax of the doctrines of the doctrines of accretion and avulsion as a sax of the doctrines of the doctrines of accretion and avulsion are sax of the doctrines of the doctrines

Sax tracks the development of an increasingly firmer presumption favoring accretion through the Nineteenth Century. 183 The most significant was *County of St. Clair v. Lovingston*, 184 which applied the doctrine of accretion to alluvial deposits that came from upstream public improvements. 185 The Court distinguished the general rule that one cannot improve one's own property and take title to the resulting alluvial deposits. 186 The rationale did not apply, however, where the landowner had no role in offsite works

^{180.} Barros, supra note 162.

^{181.} Joseph L. Sax, The Accretion/Avulsion Puzzle: Its Past Revealed, Its Future Proposed, 23 Tul. Envil. L.J. 305 (2010).

^{182.} Sax, supra note 181, at 333 n.148.

^{183.} *Id.* at 343. (acknowledging fealty to Roman and English precedent before stating that "[c]loser examination reveals two striking departures: the definition of what constitutes accretion, as contrasted with avulsion, has dramatically expanded; and a new justification for applying the accretion rule, maintaining water access for littoral/riparian owners, has become central").

^{184.} Cnty. of St. Clair v. Lovingston, 90 U.S. 46 (1874).

^{185.} Id. at 61-62.

^{186.} Id. at 52.

that added physically to his or her parcel's waterfront depth. 187 This is essentially what the Florida Supreme Court held in *Sand Key* as well.

Twentieth Century authority likewise strongly presumed accretion over avulsion. As the Supreme Court emphasized in *Hughes v. Washington*, ¹⁸⁸ riparian lands presumptively retain adjacency to navigable waters after boundaries change. "Any other rule would leave riparian owners continually in danger of losing the access to water which is often the most valuable feature of their property." ¹⁸⁹ *Hughes* is doubly significant because Justice Stewart's concurring opinion there revived the judicial takings concept that *STBR* expounded upon. ¹⁹⁰

The *STBR* plurality and unanimous decisions demonstrate the risks of the Court accepting certiorari for one policy reason. The implications of the *STBR* decision not only undermine rights of exclusive use of riparian lands in Florida, they necessarily uproot nationwide and English common law precedent on the key issues of accretion and avulsion. Ignoring the long-established strong presumption in favor of accretion for administrative convenience only leads one to wonder what other riparian and littoral rights can be discarded so readily.

Eric Claeys' recent article concerning the property right of exclusion distills the most evident concern. He notes that Henry Smith states that property is defined by "boundary-driven rights of exclusive rights of exclusive control, use, and disposition we associate with trespass to land and [to] chattels." Claeys disagrees with Smith, who "trivializes [non-exclusive] riparian rights on the ground that they are 'less property-like."

Claeys is right. Sax is right. Smith errs. Appurtenant water rights are clearly property. More to the point, STBR did not alter littoral rights to view, access and wharfage shared with, and subject to public rights. It eliminated exclusive rights down to the water and imposed a springing public easement on formerly private littoral lands. Once STBR begins allowing the state to redefine the exclusive rights of a littoral or riparian landowner to access to the high water line without takings liability, it is hard to withstand

^{187.} Id. at 61-65.

^{188.} Hughes v. Washington, 389 U.S. 290 (1967).

^{189.} Id. at 293.

^{190.} Id. at 294-98 (Stewart, J., concurring).

^{191.} Claeys, supra note 159.

^{192.} Id. at 140-41 (citing Henry E. Smith, Property as the Law of Things, 125 HARV. L. REV. 1691, 1701 (2012)).

 $^{193.\} Id.$ (citing Henry E. Smith, Property as the Law of Things, 125 Harv. L. Rev. 1691, 1711).

state efforts to redefine the more heavily regulated, but more essential appurtenant usufructuary rights to water. Our next case did the opposite in the same Supreme Court term; it granted private parties equal standing to sovereign states equitably apportioning each state's rights to interstate waters.

D. South Carolina v. North Carolina

The Supreme Court decided another case in the same term as *STBR* that has extraordinarily potentially wide-ranging implications on water rights law throughout the nation. In *South Carolina* v. *North Carolina*, ¹⁹⁴ a 5-4 majority allowed Duke Energy-Carolinas, LLC to be the first full party private party intervenor in equitable apportionment of navigable waters among states. ¹⁹⁵ The bare majority redefined standing in a crucial manner. A private party has property rights in the use of water in and as established by its own state. Each state owns water in its boundaries in the public trust, subject at one end to private property claims to use, and at the other end to Commerce Clause limitations. *South Carolina* gives private, and public, property owners in water use the same standing as the sovereign that owns the very water the permittee is using or intends to use. The implications are catastrophic; the rationale short-sighted.

Interstate water allocation is a necessarily *parens patriae* dispute, where apportionment of limited and dwindling resources requires a global analysis. ¹⁹⁶ Various federal and state statutes limit natural resources trustee claims to sovereign entities and their

^{194.} South Carolina v. North Carolina, 130 S. Ct. 854 (2010).

^{195.} Id. at 869 (Roberts, C.J., concurring in part, dissenting in part).

^{196.} The parens patriae (or "parent of the country") doctrine is often linked with the public trust doctrine. See, e.g., Deborah G. Musiker, Tom France & Lisa A. Hallenbeck, The Public Trust and Parens Patriae Doctrines: Protecting Wildlife in Uncertain Political Times, 16 Pub. Land & Resources L. Rev. 87 (1995). The doctrine grants a sovereign the authority to protect common resources in its sovereign capacity. Id. at 101. Allan Kanner analyzed the relationship at great length in arguing that states should pursue aggressive public trust and parens patriae actions to recover for natural resources damages. Allan Kanner, The Public Trust Doctrine, Parens Patriae, and the Attorney General as the Guardian of the State's Natural Resources, 16 DUKE ENVTL. L. & POLY (2005). The Supreme Court held that parens patriae standing requires a state to "articulate an interest apart from the interests of particular private parties, i.e., the State must . . . express a quasi-sovereign interest." Alfred L. Snapp & Sons, Inc. v. Puerto Rico ex rel. Barez, 458 U.S. 592, 607 (1982). It is generally based on a state's interests in the health and well-being of its residents. Id. While parens patriae standing may be grounded in the economic well-being of the state's residents, "[i]nterests of private parties are obviously not in themselves sovereign interests, and they do not become such simply by virtue of the State's aiding in their achievement." Id. at 601-02. Parens patriae actions are common in one state's challenge of another state's allegedly illegal water diversions. See, e.g., Kansas v. Colorado, 185 U.S. 125 (1902); Kansas v. Colorado, 206 U.S. 46 (1907).

subdivisions. Parens patriae standing in equitable apportionment must be similarly paramount, if not inviolate, or else economic interests will predominate. Interstate allocation already rewards states that rush to utilize interstate waters, so the 5-4 decision would scarcely send a worse signal concerning priority of allocations than granting full standing to private parties.

The Court also could scarcely have picked a worse Eastern river than the Catawba River to experiment with private standing in a traditionally sovereign body of law as interstate water apportionment. Logan Starr's thoughtful article cites various authorities claiming that the Catawba was "endangered" and its management antiquated. North Carolina and South Carolina had not adopted any compact attempting to allocate the river's waters. He two states left themselves wide open for equitable allocation of a dwindling river. Once the states failed in a last-ditch effort to compact, South Carolina requested, and obtained, Supreme Court leave to sue North Carolina for that remedy. 199

The suit concerned North Carolina's enacting a statute that authorized inter-basin transfers exceeding 2 million gallons per day. North Carolina had authorized over 48 million gallons per day in inter-basin transfers emanating from the Catawba basin. The tipping point was North Carolina's approval of 13 million gallons of interbasin transfers per day from the Catawba basin for two North Carolina cities in the Yadkin-Pee Dee River Basin. The Catawba originates in North Carolina's Blue Ridge Mountains before it flows into South Carolina's Broad River. South Carolina tried to resolve its concerns with North Carolina, but filed the law-suit once the upriver state began authorizing large-scale inter-basin transfers.²⁰⁰

North Carolina and South Carolina were originally pure riparian rights states, like most Eastern states.²⁰¹ The riparian system

^{197.} Logan Starr, The High Court Wades Into State-Law Water Allocation, 62 DUKE L.J. 1425, 1426 (2013).

^{198.} Caitlin S. Dykman, Another Case of the Century? Comparing the Legacy and Potential Implications of Arizona v. California and the South Carolina v. North Carolina Proceedings, 51 NAT. RESOURCES J. 189, 195 n.46 and accompanying text (2011).

^{199.} South Carolina, 130 S. Ct. at 859 (addressing the Supreme Court's exclusive authority pursuant to Article III, Section 2 of the U.S. Constitution and 28 U.S.C. § 1251(a) to hear "all controversies between two or more States").

^{200.} On Motion for Leave to File Complaint, Application of the State of South Carolina for a Preliminary Injunction, South Carolina v. North Carolina, 130 S. Ct 845 (2010) (No. 06-138) at 3.

^{201.} Dunlap v. Carolina Power & Light Co., 195 S.E. 43 (1938), states the common law riparian rule: "A lower riparian owner has the right to use the water of a stream as it comes upon his land in its natural state for any purpose to which it may be applied without material injury to the just rights of others." Id., 195 S.E. at 45. The reasonable use rule remains, allowing riparian owners the natural flow diminished only by the reasonable use of others.

originated in Eastern states where water was long abundant. While many commentators and courts assert that riparianism emanated in Common Law England, the truth is not so clear-cut. English riparianism overtook an earlier priority rights doctrine similar to western states' prior appropriation doctrine.²⁰²

As water shortages in the East increased, however, North Carolina converted to a regulated riparian system in 1967.²⁰³ The South Carolina Water Assessment synopsized why the transition was necessary there, as in any modern riparian state:

The ultimate public interest in any system of water law is to discourage waste and foster the best possible use of the resource. Beyond the interest in providing security to beneficial private uses, a public interest exists in the protection of the resource in general. Such public interests include the maintenance of minimum streamflow for protection of water quality, fisheries, resources, navigation, recreation, and aesthetics. The riparian system does not provide protection to these public interests, because riparian rights are a common-property system. Under a common-property system, it is up to all the co-owners to decide if, how, and when to use their water right. The problem with a common-property scheme is that when the use reaches capacity, a "tragedy of the commons" results. Water users, exercising

L&S Water Power, Inc. v. Piedmont Triad Regional Water Authority, 211 N.C.App 148 (N.C. Ct.App. 2011). South Carolina's landmark riparian decision was *Omelvany v. Jaggers*, 20 S.L.C. 634, 640 (S.C. 1835), which held that "[e]very proprietor of lands on the banks of a river, has naturally an equal right to the use of the water which flows in the stream adjacent to his lands, as it was wont to flow, . . . without diminution or alteration." *Id.*

202. Anthony Scott & Georgina Coustalin, *The Evolution of Water Rights*, 35 NAT. RES. J. 821, 850-70 (1995). *Mason v. Hill*, 10 Eng. Rep. 692 (1833) overturned two centuries of English prior use law, in favor of riparianism. Wells Hutchins and Harry Steele said riparianism came from the Romans to the United States through the Spanish and Mexican governments in one line and from French civil law in another line. Wells A. Hutchins & Harry A. Steele, *Basic Water Rights Doctrines and their Implications for River Basin Development*, LAW AND CONTEMP. PROBS. 276, 280 (1957). The seminal, massive Scott & Coustalin, supra, at 914, 898 states the same.

203. See Water Use Act of 1967, N.C. laws, ch. 933 § 1 (to be codified as the Capacity Use Act at N.C. GEN. STAT. §§ 143-215.11-22B). North Carolina adopted its Water Supply Planning Law in 1989 and amended it in 1993. N.C. GEN. STAT. § 143-35(l)-(m). The Regulation of Surface Water Transfers Act was at issue in this litigation. That act, found at N.C. GEN. STAT. § 143.215.22I, et. seq., required an Environmental Management Commission certificate for transfers of two million gallons or more per day from one river basin to another or increases of existing transfers by twenty-five percent or more if the resulting total transfer of two million gallons or more per day. Id. The 2009 legislature passed the Water Resource Policy Act (SB 907) in response to the North Carolina Environmental Review Commission's 2008 water allocation report. The 2009 act adopted a far stricter permitting regime, based expressly on the State's public trust duty in waters of the State to protect consumptive and nonconsumptive uses of the waters. Id.

their own private interests, appropriate their share of water to the point of exhaustion.

Because riparian rights apply to private use, lawsuits are brought in the nature of individual property actions. The adversary process rivets the court's attention to the particular parcel of land in dispute and is based on particular individual damages. This method of enforcement is not designed to reach conclusions regarding social policy and the public interest. The practical policy implication of riparian law is that water must be used without damage to others as opposed to a public policy that water be used wisely and beneficially.

. . .

To address these problems, about half of the eastern states have moved towards a permit system to replace common-law riparian rights. This new system, sometimes called "regulated riparianism," attempts a transition from a common property system to that of a public-property system. Under a regulated riparian system, a water user must obtain a permit from the state in order to withdraw water. The water rights of users are determined by a permit instead of the riparian doctrine. Even so, the criterion of reasonable use is applied by the state in deciding whether to approve a permit. The major difference, however, in applying the reasonable-use standard under a permitting system is that the reasonable use of water is decided prior to actual water consumption; whereas under a traditional riparian approach the determination of reasonable use has begun and litigation over such use is underway. Additionally, states judge reasonable use in a broader context, including public-policy considerations.²⁰⁴

^{204.} S.C. DEP'T OF NAT. RES., SOUTH CAROLINA WATER ASSESSMENT, at 2-24-25 (Andrew Wachob et al. eds. 2d ed. 2009) (emphasis added). South Carolina's current regulated riparianism is found in the South Carolina Surface Water Withdrawal, Permitting Use, and Reporting Act, 49 S.C. CODE ANN. §§ 49-4-10 to 180 (2013). South Carolina's act regulates withdrawals exceeding three million gallons per month. The statute contains criteria for determining the reasonableness of the request for interbasin transfer. § 49-4-80(B). South Carolina also sets minimum flow requirements for different sections of regulated water systems, which differ as well by the season. Permits are valid for a minimum of twenty years, to allow the permittee a reasonable use of the necessary capital investment. § 49-4-100(B). South Carolina's Supreme Court broadly defined the state's public trust: "[E]veryone has the inalienable right to breathe clean air, to drink safe water; to fish and sail; and recreate upon the high seas, territorial seas, and navigable waters, as well as to land on the seashores and riverbanks." Sierra Club v. Kiawah Resort Assn., 318 S.C. 119 (S.C. 1995). The South Carolina Constitution states that "all navigable waters within the limits of the State shall be common highways and forever free, as well as to the inhabitants of this State as to the citizens of the United States " except as authorized by the State

The most recent South Carolina Water Assessment²⁰⁵ expressed concern over various interstate and intrastate water issues among North Carolina, South Carolina and Georgia.²⁰⁶ These included Duke Energy's FERC license to operate a hydroelectric dam on the Catawba-Wateree basin that expired in 2008.²⁰⁷

The Water Assessment listed the three methods of allocating interstate waters – "interstate compacts, litigation in the U.S. Supreme Court, and congressional apportionment." The third method is exceedingly rare. ²⁰⁹ The Assessment states correctly that a compact, approved by each state and adopted by Congress, is favored. ²¹⁰ Compacts give each party the opportunity to clarify issues, even if application of compacts is often confused.

Equitable apportionment by the Supreme Court in uncompacted waters is fact specific, and, like most litigation, highly unpredictable. The Supreme Court stated the standard for the equitable apportionment in prior appropriation states:

Priority of appropriation is the guiding principle. But physical and climatic conditions, the consumptive use of water in several sections of the river, the character and rate of return flows, the extent of established uses, the availability of storage water, the practical effect of wasteful uses on downstream areas, the damage to upstream areas as compared to the benefits to downstream areas if a limitation is imposed on the former – these are all relevant factors. They are merely an illustrative, not an exhaustive catalogue. They indicate the nature of the problem of apportionment

General Assembly. S.C. Const. art. XIV, § 4. Art. One study cites South Carolina as one of few states that have completed programs to locate all instate navigable waters subject to the public trust. Bruce B. Dykaar & David A. Schrom, *Public Ownership of US Streambeds and Floodplains: A Basis for Ecological Stewardship*, 53 BIOSCIENCE 2, 3 (2003).

205. *Id.* Regulated riparianism brings Eastern riparian states closer to the western prior appropriation states, which Sax describes as follows:

There is no more striking modern illustration of the relationship between public goals and private rights than the regime of Western water law, which permits the acquisition of only those elements of a property right that are thought to advance the interests of the community. Under this system, the private party receives the right to make a beneficial use only, to use without waste, to use but not hold for speculation.

Joseph L. Sax, Why We Will Not (Should Not) Sell the Public Lands: Changing Conceptions of Private Property, 1983 UTAH L. REV. 313, 316 (1983).

206. SOUTH CAROLINA WATER ASSESSMENT, supra note 204.

^{207.} Id. at 2-26.

^{208.} Id.

^{209.} Id.

^{210.} Id. at 2-26.

and the delicate adjustment of interests which must be made.²¹¹

The Court long recognized state systems of water law, with limited intrusions to protect pre-existing uses and economic interests. Justice Thurgood Marshall's opinion in *Colorado v. New Mexico*²¹³ first considered efficiency and conservation measures as additional flexible tools in interstate equitable apportionment. While certain observers state that this "indicate[s] a new direction in equitable apportionment, a direction that will necessarily undermine expectations long settled under state law," the move comports with modern policy and responds to impaired and threatened water resources.

The *Colorado* Court crystallized the modern standards of equitable apportionment. The Court approved the Special Master's recommendation to consider New Mexico's diversion under certain conditions:

We conclude that it is entirely appropriate to consider the extent to which reasonable conservation measures by New Mexico might offset the proposed Colorado diversion and thereby minimize any injury to New Mexico users. Similarly, it is appropriate to consider whether Colorado has undertaken reasonable steps to minimize the amount of diversion that will be required.²¹⁵

The Court remanded for fact finding.²¹⁶ After remand, the Court confirmed the states' respective burdens. The state opposing the diversion must demonstrate the diversion will cause it "real or substantial injury or damage."²¹⁷ If it meets that burden, the diversion is required to establish "that reasonable conservation

^{211.} Nebraska v. Wyoming, 325 U.S. 589, 618 (1945).

^{212.} Richard A. Simms, Equitable Apportionment—Priorities and New Uses, 29 NAT. RESOURCES. J. 549-50 (1989). Simms points to two eastern decisions in 1931, where the Court ignored strict interbasin transfer laws in pure riparian states to allow great cities to obtain more water. Id. at 553. Connecticut v. Massachusetts, 282 U.S. 660, 669-70 (1931), held that "the exigencies of the particular case" controlled over riparian limitations to allow an interbasin transfer for the use and benefit of Boston." The Court similarly "secure[d] an equitable apportionment without quibbling over formulas" to allow transfer to New York City over New Jersey's objections in New Jersey v. New York, 283 U.S. 336, 343 (1931).

^{213.} Colorado v. New Mexico, 459 U.S. 176 (1982).

^{214.} Simms, supra note 212, at 563.

^{215.} Colorado, 459 U.S. at 186.

^{216.} Id. at 189.

^{217.} Colorado v. New Mexico, 467 U.S. 310, 317 (1984).

measures could compensate for some or all of the proposed diversion and that the injury, if any, to New Mexico would be outweighed by the benefits to Colorado from the diversion."²¹⁸

We note above²¹⁹ the two prior, significant Supreme Court eastern riparian equitable apportionment decisions.²²⁰ South Carolina is significant for a similar reason. Just as Connecticut and New Jersey in 1931 disregarded riparian limitations to create equitable arguments to provide water for, respectively, Boston and New York City, the five members of the South Carolina majority ignored the Court's long-established limited parens patriae standing in interstate water apportionments. The Court revisited New Jersey in 1953, when New York City sought to modify the Court's 1931 decree limiting diversions. This latter case established the Court's intervention rule in original jurisdiction actions.²²¹

The Court had granted Pennsylvania's motion to intervene to protect its interests in the Delaware River.²²² The City of Philadelphia sought to intervene in 1952, also claiming an interest in the Delaware.²²³ New Jersey sued both the State and City of New York in the initial action, because the state diverted waters for the City's use.²²⁴ Conversely, the existing parties opposed Philadelphia's intervention, arguing that the Eleventh Amendment,²²⁵ parens patriae state standing limitations in an equitable allocation action, and the Court's discretion barred the intervention.

Requiring Colorado to present clear and convincing evidence in support of its proposed diversion is necessary to appropriately balance the unique interests involved in water rights disputes between sovereigns. The standard reflects this Court's long-held view that a proposed diverter should bear most, though not all, of the risks of [an] erroneous decision: "The harm that may result from disrupting established uses is typically certain and immediate, whereas the potential benefits from a proposed diversion may be speculative and remote."

^{218.} *Id.* The Court explained that the clear and convincing standard required meeting a "highly probable" as opposed to a preponderance of the evidence standard. *Id.* at 316. The Court emphasized why:

Id., (emphasis added) (quoting Colorado v. New Mexico, 459 U.S. at 187).

^{219.} Simms, supra note 212 and accompanying text.

^{220.} New Jersey v. New York, 345 U.S. 369 (1953).

^{221.} Id.

^{222.} *Id.* at 371.

^{223.} Id. at 372.

^{224.} Id. at 370-71.

^{225. &}quot;The Judicial power of the United States shall not be construed to extend to any suit in law or equity, commenced or prosecuted against one of the United States by Citizens of another State, or by Citizens or subjects of any foreign State." Professor Bradford R. Clark's exegesis is the most thorough piece tracing the history of and interpreting the amendment. Bradford R. Clark, *The Eleventh Amendment and the Nature of the Union*, 123 HARV. L. REV. 1817 (2010). The Constitution gave states the sovereign right to sue one another in federal court at Article III, Section 2, but municipalities were no different from other nonstate persons. *Id.*

The Supreme Court in New Jersey established a two-prong test for proposed non-state intervenors from states already embroiled in an original jurisdiction action. The entity bears "the burden of showing some compelling interest in his own right, apart from his interest in a class with all other citizens and creatures of the state, which interest is not properly represented by the state."226 The Court emphasized that the parens patriae principle was both "a necessary recognition of sovereign dignity, as well as a working rule for good judicial administration."227 As the discussion of Snapp²²⁸ above emphasizes, "[p]arens patriae standing permits a state to seek judicial review of public rights, but such standing must be founded upon an interest, or injury, that is not of the same character as that suffered individually by its citizens."229 A state's proprietary interest is not the basis for a parens patriae suit.²³⁰ Snapp supplemented this limitation in holding that the state may not simply act as a nominal party representing the economic interests of its citizens in a parens patriae action.231 Parens patriae standing requires the state to seek to vindicate either the "general well-being of its residents" or "the terms under which it participates in the federal system."232 The New Jersey Court emphasized that a looser doctrine might leave the state "judicially impeached on matters of policy by its own subjects, and there would be no practical limitation on the number of citizens, as such, who would be entitled to be made parties."233

The Court allowed private or non-state intervention in other original actions between states several times before *South Carolina*. Each case involved direct property interests. The Court allowed the City of Port Arthur, Texas, to intervene concerning an island it claimed was within its city limits, ²³⁴ seventeen pipeline companies concerning taxation "imposed on certain uses of natural gas," ²³⁵ and Indian Tribes to protect their reserved rights in a section of the Colorado River. ²³⁶

The arguments for maintaining strict parens patriae equitable apportionment standing in interstate waters cases parallel those

^{226.} New Jersey, 345 U.S. at 373.

^{227.} Alfred L. Snapp & Sons, Inc. v. Puerto Rico ex rel. Barez, 458 U.S. 592 (1982).

²²⁸ Id.

^{229.} Calvin Massey, State Standing After Massachusetts v. EPA, 61 FLA. L. REV. 249, 263 (2009).

^{230.} Id.

^{231.} Snapp, 458 U.S. at 593.

^{232.} Id. at 607-08.

^{233.} New Jersey v. New York, 345 U.S. 369, 372 (1953).

^{234.} Texas v. Louisiana, 426 U.S. 465 (1976).

^{235.} Maryland v. Louisiana, 451 U.S. 725, 728 (1981).

^{236.} Arizona v. California, 460 U.S. 605 (1983).

in favor of sovereign public trustee standing to collect natural resource damages under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), ²³⁷ Clean Water Act, ²³⁸ Park System Resources Protection Act, ²³⁹ Deepwater Port Act, ²⁴⁰ and Natural Marine Sanctuaries Act, ²⁴¹ Those acts allow designated agencies, none of which is the United States Environmental Protection Agency (EPA), to sue to restore natural damages. ²⁴² None of these statutes allows private parties to sue to restore natural resources. ²⁴³ These acts measure damages as the cost of restoration. ²⁴⁴ This is an inherently sovereign function, particularly emphasized by the various federal acts' listing trustees as "Federal, State or Indian Tribe[s]." ²⁴⁵

State natural resource funds statutes parallel the federal acts. Compare Consolidated City of Indianapolis v. Union Carbide Corporation, which held a municipality was not a natural resources trustee under that state's Environmental Legal Actions Statute (ELA), which paralleled CERCLA, with Curd v. Mosaic Fertilizer, where the Florida Supreme Court misapplied parallel natural resource damages provisions of Ch. 376, Florida Statute, to "allow commercial fishermen to recover damages for their loss of income despite the fact that the fishermen do not own any real or personal property damaged by the pollution."

The only private cause of action natural resources damages statutes provide concerning non-economic damages is to sue a statutory trustee to enforce such a statute.²⁴⁹ The bar to private recovery is grounded in a fundamental element of all of these statutes. They bar "double recovery" because the statutory restoration fund will pay out a finite amount for restoration. Private recovery

^{237. 42} U.S.C.A. § 9601 (2002).

^{238. 33} U.S.C.A. § 1251 (2014).

^{239. 16} U.S.C.A. § 19jj (1996).

^{240. 33} U.S.C.A. § 1501 (2002).

^{241. 16} U.S.C.A. § 1433 (2000).

^{242.} Sidney F. Ansbacher et al., Strictly Speaking, Does § 376.313(3) Create Duty to Everybody, Everywhere? Part II, 84 Fla. B. J. 32 (2010).

^{243.} Id.

^{244.} See, e.g., \S 1006(d)(1) (33 U.S.C.A. \S 1306(d)(1)) of the Oil Pollution Control Act of 1990, which established the trustees requirements under the Federal Water Pollution Control Act.

^{245.} See, e.g., § 1012(a)(2) (33 U.S.C.A. § 13012(A)(2)) of the Oil Pollution Control Act.

^{246.} Consolidated City of Indianapolis v. Union Carbide Corp., $2003~\mathrm{WL}~22327832$ (S.D. Ind.)

^{247.} Curd v. Mosaic Fertilizer, L.L.C., 39 So. 3d 1216 (Fla. 2010).

^{248.} Id. cited in Sidey F. Ansbacher et al., Strictly Speaking, Does F.S. § 376.313(3) Create Duty to Everybody, Everywhere? Part I, 84 FLA. B. J., (2010), at 36 n.37 and accompanying text.

^{249.} Allan Kanner & Mary E. Ziegler, *Understanding and Protecting Natural Resources*, 17 DUKE ENVTL. L. & POL'Y F. 119, 134 (2006), and decisions cited therein.

from the fund for economic damages deprives the natural resources fund of monies necessary to restore the damaged resources.²⁵⁰

Even recovery from responsible parties reduces the funds available, because only a finite amount is available to restore damages from one event. If Trustee I recovers X funds from the discharger, then X funds are removed from the pot available to all statutory trustees to restore all natural resources that are impaired by a pollutive condition, hence the bar on double recovery.

Multiple federal decisions explain that the limited natural resources funds and related bar to double recovery require equitable apportionment of natural resources among co-trustees. An award for natural resources damages to one party necessarily reduces funds available for others to restore the environment. Courts try to bring all trustees together to best allocate the limited funds for a finite harm.

The Court in *Couer D'Alene Tribe v. Asarco, Inc.*, ²⁵¹ held that the "only feasible way to compensate the co-trustees and avoid a double recovery or unjust enrichment to one trustee at the expense of the another" is to equitably apportion natural resource damages among co-trustees. The Court in *State of Oklahoma v. Tyson Foods*, ²⁵² cited *Couer D'Alene* in dismissing a CERCLA natural resources claim by the state. The pollution damaged both state and sovereign Cherokee lands, and the Tribe invoked sovereign immunity in refusing to join the case. The *Oklahoma* Court said the state sought relief that would so reduce the available damages for natural resources impacts that it would impair the Tribe's ability to restore resources within its own sovereign jurisdiction. ²⁵³

The Federal Ninth Circuit Court of Appeals distinguished between public natural resources damages and private economic damages in *Alaska Sport Fishing Association v. Exxon Corp.*, ²⁵⁴ concerning the Exxon Valdez disaster. The Court held that the Federal and Alaskan governments were the trustees responding to the spill. It refused a claim by sport fishers "for [the] loss of use of the injured beach and water before and while they were being cleaned." ²⁵⁵ The *Exxon* court summed up:

 $^{250.\ {\}rm Sidney\ F.}\ {\rm Ansbacher\ et\ al.}, supra\ {\rm note\ }242,$ at n.21-29, and accompanying text (citing various decisions on-point).

^{251.} Coeur D'Alene Tribe v. Asarco Inc., 280 F. Supp. 2d 1094, 1116 (D. Idaho 2003).

^{252.} Oklahoma v. Tyson Foods, Inc., 258 F.R.D. 472 (N.D. Okla. 2009).

^{253.} Id. at 479-80.

^{254.} Alaska Sports Fishing Ass'n v. Exxon Corp., 34 F.3d 769 (9th Cir. 1994).

^{255.} Id. at 772, (quoting appellate brief at 16).

[I]f we were to accept [Sport Fishers'] argument, the result would be to severely limit the amount of damages government trustees could recover on behalf of the public in future environmental disasters. Given the restorative purposes behind the CWA and CERCLA, it simply makes no sense to reserve a portion of lost-use damages for recovery by private parties. Unlike trustees, private parties are not bound to use recovered sums for the restoration of natural resources, or the acquisition of equivalent resources.²⁵⁶

Duke sought intervention in South Carolina because its eleven dams "effectively control the Catawba's flow both upstream and downstream of the proposed diversion."²⁵⁷ Professor Robert Abrams asserts that private intervention by Duke was beneficial because it allowed the two states to negotiate with Duke over Federal Energy Regulatory Commission (FERC) authorized dams over which the states otherwise lacked any control.²⁵⁸ The Special Master in the case describes Duke's arguments for intervention:

Duke claimed that it had an interest separate from the interests of the [s]tates by virtue of its FERC license and its operation of power plants both north and south of the border, including a significant reservoir at the border [of] Lake Wylie where water from Duke's plant would have to be regulated in order to give effect to any equitable apportionment decree that ultimately was entered in the case. Duke also claimed that it had a significant stake in the controversy, by virtue of the pending FERC proceedings relating to its relicensing application, which Duke argued reflected a comprehensive agreement among constituencies that could be undermined by the relief sought by one or both of the [state] parties. Finally, Duke contended that the terms of its current and future licenses would be crucial to any con

²⁵⁶ Id

^{257.} Robert Haskell Abrams, Water, Climate Change, and the Law: Integrated Eastern States Water Management Founded on a New Cooperative Federalism, 42 ENVIL. L. REP. NEWS & ANALYSIS 10433, 10444 (2012).

^{258.} Id. at 10444-45.

sideration by the Court of whether and how equitably to apportion the Cawtawba River. 259

The 5-4 majority allowed Duke to intervene, as a full party, principally because its FERC license gave Duke special interests. The license "regulates the very subject matter in dispute: [T]he river's minimum flow into South Carolina."²⁶⁰ The majority allowed CRWSP to intervene as a full party, principally because it was an interstate entity that was not adequately represented by either party.²⁶¹ Conversely, the majority rejected Charlotte's motion, reasoning that North Carolina adequately represented its city.²⁶²

The dissent exercised justifiable alarm at the majority decision. Article III, Section 2, envisioned allocation among sovereign states. Once the Court opened the door to certain "private entities with interests in the water, others who also have an interest will feel compelled to intervene as well – and we will be hard put to refuse them."²⁶³ The dissent emphasized the practical issues related to "pick[ing] and choos[ing] arbitrarily among similarly situated litigants,"²⁶⁴ but the more significant concern is allowing permittees to have equal resource allocation standing with *parens patriae* states in splitting a literally indispensable, public natural resource.

If anything, there is far less basis to afford full party standing to private, or public, non-state actors in an Article III, Section 2 case between states acting in *parens patriae* capacities than in a statutory natural resource trustee action. I cannot improve on Logan Starr's trenchant observation: "[A] rise in citizen interventions will threaten the traditional contours of water federalism and create more obstacles to developing sound water policy." More to the point, the bare majority now squarely gives corporate interests that might be, and often are, adverse to *parens patriae* claims equal dignity and standing in special jurisdiction actions that were designed to allocate scarce resources among sovereign players in a federal system. It might seem logical, even efficient, to bring all

^{259.} Kristin Linsley Myles, South Carolina v. North Carolina: Some Problems Arising in an East Coast Water Dispute, 12 Wyo. L. Rev. 3, 7-8 (2012).

^{260.} South Carolina v. North Carolina, 558 U.S. 256, 273 (2010).

^{261.} Id. at 268.

^{262.} Id. at 273-276.

^{263.} Id. at 285-89 (Roberts, C.J., concurring in part and dissenting in part).

^{264.} Id. at 287.

 $^{265.\ \}mathrm{Starr},\, supra$ note 194, at 1461.

players to the table, but the Court's sense of administrative convenience must be subordinate to the preeminent public interest in allocation of interstate waters.²⁶⁶

E. Tarrant Regional Water District v. Herrmann

South Carolina shows how the Court can confuse settled law, ignore Sporhase and disturb natural resources allocation in uncompacted rivers. Tarrant Regional Water District v. Herrmann, 267 however, demonstrates how to do so in a compacted river, even if done arguably in dicta. Just the same, the unanimous Tarrant court left one wondering just how much this Court understands, let alone is willing to preserve, Sporhase.

The 1978 Red River Compact allocated that river's water among Oklahoma, Texas, Arkansas, and Louisiana. Of the four states, Texas is the largest, most powerful, and most parched. Tarrant sought Oklahoma water in the subbasin where the Kiamichi River entered the Red because it said available Texas waters were way too salty to be potable.

Tarrant serves over 1.6 million customers in north-central Texas, including Arlington and Ft. Worth. Ft. Worth in particular is often cited as one of America's cities whose viability is most threatened due to water shortages. Tarrant was founded in 1924 for flood control, in response to massive flooding of the Trinity River in 1922 that killed dozens and wiped out property. Tarrant has necessarily turned more to water supply. Its efforts to take water in Oklahoma led to the dispute.

As we discuss, supra Part VI. D, concerning *South Carolina*, three tools generally allocate interstate waters among the states. First are unilateral congressional acts, which are virtually unused.

^{266.} See Chelsey J. Hadfield, Civil Procedure—Intervention—Nonsovereign Entities in Equitable Apportionment Actions Involving Original Jurisdiction, 78 TENN. L. REV. 613 (2011).

^{267.} Tarrant Reg'l Water Dist. v. Hermann, 133 S. Ct. 2120 (2013).

^{268.} Red River Compact, Pub. L. No. 96-564. 94 Stat. 3305.

^{269.} Amal Bala, Blocking the Flow: Texas Faces New Challenges in its Water Crisis After an Unfavorable Ruling in Tarrant, 40 B.C. ENVIL. AFF. L. REV. 13, 14 (2013).

^{270.} Tarrant, 133 S. Ct. at 2128. The largest city in the District, Ft. Worth, relies principally on storage water, making the system particularly susceptible to prolonged drought. Sidney F. Ansbacher, Tarrant Water District: Another battle in the Texas-Oklahoma water wars, 43 A.B.A. Sec. of Env't, Engery, & Resources Newsl., May/June, 2012, at 15.

^{271.} Sidney F. Ansbacher, *Tarrant Water District Appeal: Just the Latest Chapter in Oklahoma-Texas Water Wars*, A.B.A. Sec. of Env't, Energy, & Resources Newsl., Aug. 2012, at 2.

^{272.} Id.

^{273.} Id.

Second is adjudication, which typically requires original jurisdiction of equitable allocation in noncompacted waters. *South Carolina* involved such a case. The "theoretically . . . most practical and cost-effective option for states to allocate scare water resources" is by interstate compact. 274

The Compact Clause of the Constitution provides that "no state shall, without the consent of Congress . . . enter into any agreement or compact with another state, or with a foreign power." Once Congress approves a compact, the document preempts state laws conflicting with it and is enforceable as a contract among its signatories:

[O]nce given, "congressional consent transforms an interstate compact within this Clause into a law of the United States." *Cuyler v. Adams*, 449 U.S. 433, 438, 101 S. Ct. 703, 706, 6 L. Ed. 2d 641 (1981); see *Pennsylvania v. Wheeling & Bellmont Bridge Co.*, 13 How. 518, 566, 14 L. Ed. 249 (1852). One consequence of this metamorphosis is that, unless the compact to which Congress has consented is somehow unconstitutional, no court may order relief inconsistent with its express terms.²⁷⁶

The Supreme Court cases addressing such compacts therefore typically turn on contract terms. 277

Interstate water compacts address interstate commerce, and therefore require Congressional approval to effectively preempt federal power. The Supreme Court distinguished such compacts from those that do not preempt federal power, therefore not requiring Congressional imprimatur, in *Virginia v. Tennessee*.²⁷⁸ The Court gave no bright-line test, so "[i]f there is *any* danger of federal preemption, proponents often consider seeking congressional consent."²⁷⁹ Interstate water allocation clearly requires such con-

^{274.} Id. at 3-4 (citing Joe Norris, Montana v. Wyoming: Is Water Conservation Drowning the Yellowstone River Compact?, 15 U. DENV. WATER L. REV. 189, 190 (2011)).

^{275.} U.S. CONST. art. I, § 10, cl. 3.

^{276.} Texas v. New Mexico, 462 U.S. 554, 564 (1983).

^{277.} See, e.g., Montana v. Wyoming, 131 S. Ct. 1765, 1769 (2011) (turning on the undefined term "beneficial use" in the Yellowstone Compact). Norris discussed the ramifications at length. Joe Norris, Montana v. Wyoming: Is Water Conservation Drowning the Yellowstone River Compact?, 15 U. DENV. WATER L. REV. 189, 190 (2011)). While beneficial uses are central to prior appropriation rights, each state defines these used differently. The failure to define the term left the compacting states to the Court's contractual interpretation. Id. at 1771 n.4.

^{278.} Virgina. v. Tennessee, 148 U.S. 503 (1893).

^{279.} Marlissa S. Briggett, State Supremacy in the Federal Realm: The Interstate Compact, 18 B.C. Envill. Aff. L. Rev. 751, 758 (1991).

sent.²80 Future Justice Frankfurter coauthored a seminal article in 1925 that advocated the expansive use of interstate compacts to accommodate state sovereign needs in an increasingly integrated, industrialized and modern society.²81 Water compacts have proven natural subjects of such compacts.²82 One commentator describes interstate water compacts as falling into two paradigms, western and eastern templates. "Western water compacts . . . typically focus on allocating coveted water rights to a shared river among the party states."²83 Conversely, the traditional "eastern model" established a centralized regime among the member states and the federal government.²84 Predictability of use and hierarchy of allocation were more the eastern focus, while the western model allocated an increasingly scarce water resource among the compacting states.²85

The Red River Compact involves two relatively water rich states, Louisiana and Arkansas; a drier state that has managed to retain relatively good surface water resources, Oklahoma; and a fourth, Texas, which faces massive shortages for an equally massive and expanding population. The 1978 compact capped twenty years of negotiation among the four states.

The Red River Compact designated five "reaches," each split further into "subbasins." The section at issue in *Tarrant* was Reach II, subbasin 5, just before the river reached Arkansas and Louisiana. Tarrant sought diversion of about 310,000 acre-feet from the Kiamichi River, which would have provided the equivalent water needs of 300,000 families. Once the water requested

^{280.} See generally, id.; Felix Frankfurter & James M. Landis, *The Compact Clause of the Constitution—A Study in Interstate Adjustments*, 34 YALE L.J. 685, 696 (1925). ("Community interest in navigation upon common waters of adjoining States gave rise to difficulties prior to the Constitution, are pressing today, and are bound to manifest themselves in the future.")

^{281.} See generally, id.

^{282.} *Id.* at 701 ("The judicial instrument is too static and too sporadic for adjusting a social-economic issue consciously alive in an area embracing more than a half a dozen States [the Colorado River].") The *Texas v. New Mexico* Court chastened that "litigation of such disputes is . . . a poor alternative to negotiation between the interested States." Texas v. New Mexico 462 U.S. 554, 568 n.13 (1982).

^{283.} Noah D. Hall, Toward a New Horizontal Federalism—Interstate Water Management in the Great Lakes Region, 77 U. Colo. L. Rev. 405, 411 (2006).

^{284.} Id. at 412.

^{285.} *Id.* at 411-12. Of course, the modern eastern disputes address many of the same tragedy of the commons issues the western states have always faced. Mark S. Davis & Michael Pappas, *Escaping the Sporhase Maze: Protecting State Waters within the Commerce Clause*, 73 LA. L. REV. 175, 179-83 (2012).

^{286.} Tex. Water Code Ann. § 5.05(b)(1) (West 2014).

^{287.} Christine Klein, *The Lesson of* Tarrant Regional Water District v. Herrmann: *Water Conservation, not Water Commerce*, CENTER FOR PROGRESSIVE REFORM BLOG (Mar. 18, 2014, 1:31 PM), http://progressivereform.org/CPRBlog.cfm?idBlog=5CA2075E-9126-E28C-666D65E902073C68.

reached the Red, its water quality was so degraded that it was no longer potable.

Oklahoma staked its position prior to the 1978 compact, let alone the compact's 1980 approval by Congress. The 1977 Oklahoma Legislature declared "legal title" to all unappropriated water that would leave its boundaries. ²⁸⁸ The Oklahoma Attorney General issued an opinion that concluded that legislation authorized the state to block out-of-state applicants from divesting any Oklahoma waters:

Considering these factors together, we consider the proposition unrealistic that an out-of-state user is a proper permit applicant before the Oklahoma Water Resouces Board. We can find no intention to create the possibility that such a valuable resource as water may become bound, without compensation, to use by an out-of-state user.²⁸⁹

No one can say that Oklahoma hid its rationale or intent before the Compact became final. Little doubt exists that the state's bold protectionism violated *Sporhase* unless the Compact preempted the Commerce Clause argument. Oklahoma buttressed its protectionist position by passing several "Anti-Export Laws" concerning water resources beginning in 2001.²⁹⁰

The City of El Paso blocked similar efforts by New Mexico right after *Sporhase*. New Mexico embargoed out-of-state groundwater diversions. The District Court found the state was suffering no groundwater shortage. Further, even if it were, the embargo facially discriminated against out-of-state users but did not restrict any in-state users.²⁹¹ This violated *Sporhase*. The state amended the statutes to address in- and out-of-state diversions while the case was on appeal, as well as a moratorium on new appropriations, to allow a committee to study the impact of the District Court decision.²⁹² The District Court held the moratorium had a discriminating intent of blocking out-of-state applicants from establishing

^{288. 1977} Okla. Sess. Laws 1005.

^{289.} Okla. Op. Att'y Gen. No. 77-274 (1978).

 $^{290.\} See,\ e.g.,\ Okla.\ Stat.\ tit.\ 74\ \S\ 1221\ A\ (2004);\ Okla.\ Stat.\ tit.\ 82\ \S\ 1B\ (2004)\ (imposing a moratorium on sales or exports of water from June 6, 2002\ for three years and then extended for five years from Nov. 1, 2004). The alleged purpose of the moratoria was to convene a committee to establish a state water resources plan. <math>Id.$ The committee never met before the legislature repealed its enabling authority, deleted reference to the study, and extended the moratorium five years after Tarrant filed suit.

^{291.} City of El Paso v. Reynolds, 563 F. Supp. 379, 381 (D.N.M. 1983).

^{292.} City of El Paso v. Reynolds, 597 F. Supp. 694, 696-97 and 704 (D.N.M. 1984).

permit priority.²⁹³ It emphasized that fear of a theoretical future shortage did not justify the protectionist measure taken.²⁹⁴

The *Tarrant* case involved two *potentially* major issues. The first was whether the compact allocated "excess waters" above those that were assigned to individual states.²⁹⁵ Justice Sotomayor's opinion for the Court analyzed the compact's language:

[The four states] shall have equal rights to the use of runoff originating in [this] subbasin . . . and undesignated water flowing into [this] subbasin . . . so long as the flow of the Red River at the Arkansas-Louisiana state boundary is 3,000 cubic feet per second or more, provided no state is entitled to more than 25% of the water in excess of 3,000 cubic feet per second. 296

Tarrant alleged this language allowed each state to select up to twenty-five percent from anywhere as long as the flow met the amount set.²⁹⁷ The entire waterbody represented a common area without boundaries. The district said *Sporhase* prevented Oklahoma from hoarding the water originating or located in that state.²⁹⁸

Oklahoma's argument was sounder under compact law. First, the compact superseded *Sporhase* once Congress approved its terms.²⁹⁹ Second, the Court's precedents held virtually universally that a compact had to state expressly that interstate diversions were allowed.³⁰⁰ Silence meant none were allowed.³⁰¹ Finally, the above standards led to the inescapable conclusion that each state was to take its respective twenty-five percent in-state.³⁰² Justice Sotomayor's opinion appropriately followed Oklahoma's argument.

The second issue was more global. The Court considered each state's sovereign ability to control and to hoard water. Justice Sotomayor quoted *Martin v. Lessee of Waddell*, in emphasizing that "the States possess 'an absolute right to all their navigable waters and the soils under them for their own common use.' "303 The earli-

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293. Id. at 704-05.
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^{294.} Id. at 701.

^{295.} Tarrant Reg'l Water Dist. v. Hermann, 133 S. Ct. 2120 (2013).

^{296.} *Id.* at 2127 (quoting compact at 25).

^{297.} Id. at 2129.

^{298.} Supplemental Brief For Petitioner at 294, Tarrant Reg'l Water Dist. v. Hermann, 133 S. Ct. 2120 (2013), (No. 11-899).

^{299.} Tarrant, 133 S. Ct. at 2130 n.8 (2013).

^{300.} Id. at 2133.

^{301.} Id.

^{302.} Id. at 2134.

^{303.} Id. at 2132, (quoting Martin v. Lessee of Waddell, 16 Pet. 367, 41 U.S. 367 (1842)).

er Court considered the authority of a state to bar private oyster bed leases on sovereign lands. A leap of faith is necessary to say *Martin* gives a state the right to hoard water, without consideration of the interstate reach of navigable streams. Another early Supreme Court decision, *Gibbons v. Ogden*,³⁰⁴ held the navigational servitude barred enforcement of an exclusive New York Steamboat License in navigable waters across state lines. The Commerce Clause implications are that much greater for consumptive water rights.

Justice Sotomayor did not totally ignore *Sporhase*. She mentioned it in passing in a footnote: "Of course, the power of States to control water within their borders may be subject to limits in certain circumstances."³⁰⁵ That elliptical reference bodes ill in the face of the Roberts Court's efforts to rein in the Commerce Clause. Traditional public trust cases address state submerged sovereign lands, which "are virtually per se limited to each state's static boundaries, absent accretion or erosion."³⁰⁶

Tarrant's conflation of Public Trust rights in interstate waters with the classic Public Trust ownership each state inherited in submerged sovereign lands is extremely troubling dicta. The Tarrant court ruled narrowly, but its dicta shows a strong inclination to allow hoarding in contravention of Sporhase. While one previously could have reasonably inferred Sporhase was rarely cited because it was unassailable, one now must worry that the Court stands ready to eviscerate it on the ill-founded basis that it is a dead letter.

VII. CONCLUSION

The above-cited parade of bare majority decisions, capped by one unanimous opinion of the Supreme Court, shows two things. First, the Public Trust Doctrine is a crucial tool to protect public water rights. Second, the Court has lurched in one direction and another to apply the doctrine as cases and convenience dictate. Meanwhile, the Court dilutes the purpose and the power of this tool, often by one vote at a time.

^{304.} Gibbons v. Ogden, 22 U.S. 1 (1824).

^{305.} Tarrant, 133 S. Ct. at 2130 n.11.

^{306.} Sidney F. Ansbacher, Tarrant Water District: Either a Minimalist Contractual Decision or an Invitation to Hoard Water, A.B.A. Sect. of Env't, Energy, & Resources, Jan./Feb. 2014, at 5, 8.

THE PROMISE OF A PUBLIC COMMONS IN NEW COMMUNITIES IN THE UNITED STATES: TOWARD A QUALIFIED CONSTITUTIONAL RIGHT OF A SUBDIVISION DEVELOPER TO DEDICATE STREETS AND PARKS TO A MUNICIPALITY AS A MEANS TO CHALLENGE LOCAL GOVERNMENT POLICIES REQUIRING PRIVATIZATION OF NEW SUBDIVISIONS AND AS A MEANS TO ENSURE PUBLIC STREETS AND PARKS IN NEW COMMUNITIES

STEVEN SIEGEL*

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I. INTRODUCTION: THE RISE OF PRIVATE RESIDENTIAL COMMUNITIES IN THE UNITED STATES AND THE CONCOMITANT DECLINE OF CORE CONSTITUTIONAL VALUES THAT ARE PREMISED ON THE AVAILABILITY OF PUBLIC LAND AND DIRECT MUNICIPAL CONTROL OVER TRADITIONAL PUBLIC SERVICES.

Community associations¹ have become the dominant form of new community development in the United States, particularly in the high-growth areas of the South and West.² In 1960, there were an

1. The terms "community association," "common interest community," or "common-interest association," are generic terms that are used to refer to three distinct but closely related legal entities: *i.e.*, planned single-family home developments, condominiums and housing cooperatives.

In a planned single-family home development, a homeowner generally holds title to both the exterior and interior of a residential unit and the plot of land around it. The planned development association (often called a homeowners' association) owns and manages common properties, which may include streets, parking lots, open spaces and recreational facilities.

In a condominium, a homeowner holds title to a residential unit (sometimes just the interior of an apartment) and to a proportional undivided interest in the common spaces of an entire condominium property. A condominium association manages the common spaces but does not hold title to any real property. A condominium property is usually situated in either a single high-rise apartment building or in attached housing units frequently known as "townhouses." In general, an owner of a condominium unit does not own, in individual fee, the ground under his or her unit, in contrast to the owner of a home in a planned single-family home development.

In a housing cooperative, the entire property is owned by a cooperative corporation, and the members of the cooperative own shares of stock in the corporation and hold leases that grant occupancy rights to their residential units. Housing cooperatives usually, but not always, are situated in apartment buildings. In the United States, the cooperative form of housing ownership is exceedingly rare, and is largely confined to owner-occupied apartment buildings in New York City.

For purposes of this article, the typology of legal ownership of common interest property is less important than a broad characterization of community associations as either "territorial" or "nonterritorial." See U.S. ADVISORY COMM'N ON INTERGOVERNMETAL RELATIONS, Pub. No. A-122, Residential Community Associations: Private Governments in the INTERGOVERNMENTAL SYSTEM? 1-12 (1989) (adopting and explaining typology of "territorial" versus "nonterritorial" community associations). As noted above, some community associations are geographically limited to a single high-rise apartment building. These are nonterritorial community associations, which are owned either in the form of a condominium or a housing cooperative. Other community associations manage a significant amount of real estate. These territorial community associations most frequently encompass planned singlefamily home associations, but may include, in whole or in part, dwelling units subject to the condominium form of ownership. Territorial community associations exercise authority over a network of streets, parking lots, open space, and recreational facilities. Like municipalities, territorial communities typically provide services such as street cleaning, trash collection, maintenance of open space, and security. Territorial community associations also exercise extensive land-use powers traditionally associated with the municipal zoning and police-power authority, such as review of proposed home alterations and enforcement of rules governing home occupancy. See id. This article is exclusively concerned with territorial community associations.

2. Most new residential development in the fastest growing Southern and Western states is subject to governance by a community association. See EVAN MCKENZIE, PRIVATOPIA: HOMEOWNER ASSOCIATIONS AND THE RISE OF RESIDENTIAL PRIVATE GOVERNMENT 11-12 (1994) (stating that "'[i]n many rapidly developing areas . . . nearly all new residential development is within the jurisdiction of residential community associations.'" (quoting

estimated 500 community associations in the United States.³ Today, an estimated 323,600 associations are in existence.⁴ These communities are home to sixty-three million residents, or about one in five Americans.⁵ In fast-growing Sunbelt states such as California, Florida, and Texas, "nearly all new residential development is governed by a [community association]."⁶

The rise of the community association as the dominant form of new community development has been described as a "quiet revolution." A key aspect of this quiet revolution is the widespread adoption by local government of the community association form as an instrument of municipal privatization.

Over twenty years ago, Harvard Professor Gerald Frug presciently observed: "The privatization of [local] government is the most important thing that's happening [right now]. . . . We haven't

U.S. ADVISORY COMM'N ON INTERGOVERNMENTAL RELATIONS, *supra* note 1, at 3); Steven J. Eagle, *Privatizing Urban Land Use Regulation: The Problem of Consent*, 7 GEO. MASON L. REV. 905, 906 (1999) ("In some metropolitan areas, such as Los Angeles and San Diego, [the percentage of housing units in community associations] exceeds seventy percent."). The scope and scale of the growth in the number of common interest communities is described by one commentator as follows:

To put this trend in perspective, compare the growth of [community interest communities] to the trend of suburbanization more generally. Since 1970, common interest developments have grown faster than the suburbs as a share of all housing units in both California and the United States. This growth rate exceeds the pace of suburbanization during the peak years of 1940 to 1960 by a factor of five. Although a vast literature has explored the social, economic and political implications of suburbanization, the consequences of this most recent transformation are largely unknown.

TRACY M. GORDON, PLANNED DEVELOPMENTS IN CALIFORNIA: PRIVATE COMMUNITIES AND PUBLIC LIFE 3 (2004).

- 3. See C. James Dowden, Community Associations and Local Governments: The Need for Recognition and Reassessment, in U.S. Advisory Comm'n on Intergovernmental Relations, supra note 1, at 27.
- 4. Industry Data, Comty Ass'ns Inst., http://caionline.org/info/research/Pages/defa ult.aspx (last visited June 10, 2014). Because the U.S. Census Bureau does not maintain data on the number of individuals or housing units subject to community-association governance, no authoritative and comprehensive database on the subject exists. The membership lists and estimates of the Community Associations Institute (CAI), an industry trade association, generally have been considered the most reliable sources of information on the extent of community associations in the United States. See ROBERT JAY DILGER, NEIGHBORHOOD POLITICS: RESIDENTIAL COMMUNITY ASSOCIATIONS IN AMERICAN GOVERNANCE 18 (1992).
 - 5. Comty. Ass'ns Inst., supra note 4.
- 6. McKenzie, supra note 2, at 11-12 (quoting U.S. Advisory Comm'n on Intergovernmental Relations, supra note 1, at 3).
- 7. Stephen E. Barton & Carol J. Silverman, *Shared Premises: Community and Conflict in the Common Interest Development*, in COMMON INTEREST COMMUNITIES: PRIVATE GOVERNMENTS AND THE PUBLIC INTEREST xi (Stephen E. Barton & Carol J. Silverman eds., 1994).

thought of it as government yet." This observation remains true even today. The large-scale privatization of local government remains a largely invisible issue in the public discourse and in the law. Most importantly, the formation of community associations as an instrument of local government privatization policy raises substantial social, political, and constitutional questions.

In several significant ways, large community associations are the functional equivalent of municipalities. For example, community associations are financed by mandatory assessments, which are broadly analogous to municipal real estate taxes. As with real estate taxes, association assessments are levied on real property, and the proceeds of the assessments are used to pay for local services, such as street maintenance, curbside refuse collection, and maintenance of open space. A homeowner's failure to pay an assessment, like the failure to pay a municipal real estate tax, results in a lien on the residence and, ultimately, may lead to the forced sale of the residence through the enforcement of the lien. 10

Furthermore, community associations—like municipalities—are empowered to issue rules of general applicability affecting residents (and nonresidents) within their territorial jurisdiction. Community associations typically "exercise extensive land-use powers traditionally associated with the municipal zoning and police-power authority, such as [the] review of proposed home alterations and enforcement of rules governing home occupancy." Community association rules sometimes restrict the age of those who may own homes in the community, the number and ages of overnight visitors, the color a homeowner may paint her house, whether a homeowner may build an addition to her house, the whether residents may assemble in common areas of the communi-

^{8.} JOEL GARREAU, EDGE CITY: LIFE ON THE NEW FRONTIER 185 (1991) (quoting Professor Gerald Frug).

^{9.} See id. at 187.

^{10.} See Gemma Giantomasi, Note, A Balancing Act: The Foreclosure Power of Homeowners' Associations, 72 FORDHAM L. REV. 2503, 2516 (2004); see also Inwood N. Homeowners' Ass'n v. Harris, 736 S.W.2d 632 (Tex. 1987) (holding that homeowners are not protected against foreclosure for failure to pay assessments).

^{11.} See Steven Siegel, The Constitution and Private Government: Towards the Recognition of Constitutional Rights in Private Residential Communities Fifty Years After Marsh v. Alabama, 6 WM & MARY BILL RTS J. 461, 467 (1998) [hereinafter The Constitution and Private Government]; see also MCKENZIE, supra note 2, at 135; DILGER, supra note 4, at 23-24.

^{12.} See Garreau, supra note 8, at 190; McKenzie, supra note 2, at 15.

^{13.} See U.S. Advisory Comm'n on Intergovernmental Relations, supra note 2, at 16.

^{14.} See DILGER, supra note 4, at 23.

^{15.} See id. at 23-24.

ty,¹⁶ and whether a homeowner may display political signs on her home that are visible to the adjoining street.¹⁷ A violation of the rules can lead to the imposition of penalties against the homeowner, often in the form of significant fines,¹⁸ the denial of the right to use the facilities,¹⁹ and even foreclosure.²⁰

Finally, territorial community associations are responsible for the delivery of many essential services to their residents, including the maintenance of streets and parks, the provision of curbside refuse collection, the furnishing of water and sewer service, and the regulation of land use and home occupancy. There was a time when cities used to perform these services and collect these taxes. But in many fast growing areas of the United States—particularly the South and the Southwest—traditional municipal governance and delivery of these and other services is rapidly becoming a distant memory. 22

^{16.} See Comm. for a Better Twin Rivers v. Twin Rivers Homeowners Ass'n, 929 A.2d 1060, 1074 (N.J. 2007) (challenge to a community association's restrictions on the use of common area in the community).

^{17.} See Mazdabrook Commons Homeowners Ass'n v. Khan, 46 A.3d 507 (N.J. 2012) (challenge to a community association's prohibition on all political signs).

^{18.} See Wayne S. Hyatt & James B. Rhoads, Concepts of Liability in the Development and Administration of Condominium and Home Owners Associations, 12 WAKE FOREST L. REV. 915, 919 (1976).

^{19.} Id.

^{20.} See Giantomasi, supra note 10, at 2516-17. Although a community association servitude regime is nominally private, the regime nevertheless places the coercive power of the State behind private actors (i.e., the boards of community associations) who "exercise power over members and even nonmembers in vital areas of concern, in that their decisions govern what individuals do in the privacy of their own home and what they do with the physical structure of the house and its surroundings." McKenzie, supra note 2, at 135. Undoubtedly, if these powers that are typically exercised by community associations (such as the powers listed in the text above) instead were exercised by public officials operating under color of public law, then such exercise of powers by a state actor would, under many circumstances, be held as an unconstitutional abridgement of rights secured by the First, Fourth, and Fourteenth Amendments. But, under current law, the nominal public-private distinction holds sway, meaning that constitutional strictures do not attach to the governance of territorial community associations. See infra notes 38-46 and accompanying text.

^{21.} EVAN MCKENZIE, BEYOND PRIVATOPIA: RETHINKING RESIDENTIAL PRIVATE GOVERNMENT 10 (2011); U.S. ADVISORY COMM'N, supra note 2 at 112-13.

^{22.} DILGER, *supra* note 4, at 18 ("According to CAI, [association-related housing] govern nearly all new residential development in California, Florida and Texas"); Wayne Batchis, *Free Speech in the Suburban and Exurban Frontier: Shopping Malls, Subdivisions, New Urbanism and the First Amendment, 21 S. CAL. INTERDISC. L.J. 301, 345 (2012) (noting that for many homebuyers in "[the] developed Sun Belt regions of the country... there is little choice, unless their home search is to be severely constrained, but to submit to membership in a homeowners association.").*

A. The critical role of local governments in the establishment of new private residential communities, including land use policies that require the privatization of new communities.

If the widespread adoption of community associations in the United States were solely or principally the product of choices made by private developers, then perhaps a case could be made that the phenomenon is merely the product of dynamic market forces responding to consumer choices and, as such, legal and judicial intervention is unwarranted.²³ However, in a prior article, I examined evidence that suggests that the continued proliferation of community associations is, to a considerable extent, the direct product of conscious and deliberate government policy aimed at load-shedding municipal functions and services onto newly created private communities.²⁴

For example, many municipal land use ordinances *expressly* require the establishment of community associations as a condition of land use approval.²⁵ The following municipal code provisions are illustrative.

^{23.} See e.g., U.S. ADVISORY COMM'N, supra note 1, at 13 (noting that "strong proponents of [community associations] argue that these organizations provide a vehicle for greater consumer choices"); Robert H. Nelson, Privatizing the Neighborhood: A Proposal to Replace Zoning with Private Collective Property Rights in Existing Neighborhoods, 7 GEO. MASON L. REV. 827, 828 (1999) (opining that "economic forces . . . made private neighborhood associations the choice for millions of people for their residential property"); Laura T. Rahe, The Right to Exclude: Preserving the Autonomy of the Homeowners' Association, 34 URB. LAW 521, 552 (2002) (arguing that the homeowners' association is properly viewed as "the product of individual [consumer] choices"); Uriel Reichman, Residential Private Governments: An Introductory Survey, 43 U. CHI. L. REV. 253, 255-56 (1976) (opining that community associations are "of a private nature" because they are "based on private initiative, private money, private property and private law concepts"). But see Paula A. Franzese & Steven Siegel, Trust and Community: The Common Interest Community as Metaphor and Paradox, 72 Mo. L. REV. 1111, 1129 (2007) [hereinafter Trust and Community] (arguing that community associations are not the product of market forces and consumer demand for a variety of reasons, including governmental land use and taxing policies, housing consumers' lack of knowledge and understanding of the complexities of community associations prior to purchasing housing subject to a community association and the inflexibility and virtual immutability of association governing rules originally established by developers and bequeathed to residents).

^{24.} See Steven Siegel, The Public Role in Establishing Private Residential Communities: Towards a New Formulation of Local Government Land Use Policies That Eliminate the Legal Requirements to Privatize New Communities in the United States, 38 URB. LAW. 859, 873-98 (Fall 2006) [hereinafter The Public Role]. In "The Public Role," I offered principally legislative and possible common-law remedies to local government policies that categorically preclude municipal acceptance of dedication. Id. at 914-32. In this article I offer constitutional remedies to these local government policies.

^{25.} Id. at 889-95.

In Texas, the City of Dallas Development Code provides:

Prior to Final Plat Approval, the owner(s) of the Property must execute an instrument creating a homeowners' association for the maintenance of common areas, screening walls, landscape areas (including perimeter landscape areas), private streets and for other functions. The instrument must be approved as to form by the City Attorney, approved by the City Planning Commission and filed in the Dallas County Deed Records (Ord. Nos. 22477, 25267).²⁶

In New Jersey, the *Township of Jackson Zoning Code* requires the creation of a homeowners' association in all residential developments in areas zoned as PUD districts, multifamily housing districts, and "planned retirement communities" districts.²⁷ The homeowners' association is responsible for maintenance of common property, solid waste disposal, and "the replacement and repair of all private utilities, street lighting, sidewalks, landscaping, common open space, recreation facilities, and equipment."²⁸

Even when municipal privatization policy is not codified, the result is often the same. Municipalities simply can decide, on an informal basis, that a developer must establish a homeowners' association as a condition of land use approval. Developers have no choice but to acquiesce if they wish to obtain the necessary municipal approvals.²⁹

Some residential developers have gone on the record and have spoken quite candidly of certain municipalities' informal practices to require the establishment of a community association as a condition of land use approval.³⁰ For instance, a prominent developer based in the fast-growing Phoenix area was asked about his personal knowledge of formal and informal municipal requirements. In response, he stated: "[C]ities throughout the metro Phoenix area generally require [community associations]. [T]he builder is really not given much of a choice."³¹

Similarly, an executive of the Orange County Chapter of a California homebuilders association observed that, "in California specifically,' the establishment of a community association generally

^{26.} Dallas Tex., Development Code, ch. 51P-S-11.114 (2007).

^{27.} JACKSON, N.J., ZONING CODE ch. 109, art. IV, §§ 109-46J, 109-48L, 109-49N.

^{28.} Id. ch. 109, art. IV § 109-46J(2) (2006).

^{29.} The Public Role, supra note 24, at 895-98.

^{30.} See id.

^{31.} *Id.* at 895-96 (quoting Unpublished Written Statement of Larry Kush, President, Montevina Estate Homes, Scottsdale, Arizona (July 6, 2006)) (internal quotation marks omitted).

operates as a form of municipal 'exaction' against new home development." Attributing this practice to the enactment of California's Proposition 13 in 1978—the ballot initiative that sharply limited the ability of the State's local government to rely on the property tax as a revenue source—she added that Proposition 13 "was the beginning of the end of local government provision of municipal services." 33

The policy of privatizing new communities continues to be embraced by some free-market advocates.³⁴ Yet, when privatization is actually compelled by government, the first principle of free-market economics is violated: that is, a presumption of noninterference by government in the private marketplace. Indeed, it is difficult to conceive of a more heavy-handed public interference in the private marketplace than a government rule that mandates a highly particularized form of template on new community development—the community association—and then precludes, without public discussion or judicial review, alternate forms of community development that previously were available and that, until recently, were the dominant forms of suburban community development in the United States.³⁵

In my prior article, I referred to this phenomenon as a "public service exaction," which I defined as a policy of local government that requires subdivision developers, as a condition of land use approval, to establish a community association as the mechanism to carry out functions and services that traditionally were the responsibility of the municipality itself.³⁶ I concluded that, as a consequence of the municipal imposition of public service exactions, the privatization of new communities is occurring even when the market would not otherwise have "chosen" the privatization of traditionally municipal services, or even the establishment of a private community in the first place.³⁷

^{32.} *Id.* at 897 (quoting Unpublished Written Statement of Kristine Thalman, Chief Executive Officer, Building Industry Association of Orange County, Irvine, California (May 22, 2006)).

^{33.} Id.

^{34.} See supra note 23.

^{35.} The Public Role, supra note 24, at 873-87.

^{36.} *Id.* at 861. It is important to distinguish public service exactions from "traditional" exactions. The latter take the form of compelled dedication of land and/or a requirement that a developer construct subdivision infrastructure and, upon completion of construction, turn over the infrastructure to the municipality. *See id.* at 886-87.

^{37.} The critical role of local governments in the privatization of new suburban subdivisions also has been noted by several leading commentators, although the issue has received only passing mention. See e.g., JAMES C. DOWDEN, supra note 3, at 42 (noting that "[i]t is clear that in many instances homeowner associations have been created in cluster or PUD communities primarily for the purpose of meeting local government requirements to deliver services such as maintenance of private roads, streets and open areas"); MCKENZIE, supra note 2, at 178 (noting that that it was "no accident" that community associations be-

B. Courts are unlikely to undertake a broad extension of state action theory so as to treat established community associations as if they were municipalities—even if it could be demonstrated that, in many cases, the community association form is an instrument of municipal privatization policy.

The critical role of local governments in the establishment of many community associations perhaps suggests that the resulting community—as a product of government policy—is properly regarded as a "state actor" under the Constitution, and thereby subject to public constitutional norms.³⁸ However, it is fundamental

gan to proliferate in the 1970s, a period in which local governments were contending with increased demands for services, reduced federal aid, and burgeoning tax revolts); Gregory Longhini & David Mosena, Homeowners' Associations: Problems and Remedies, American Planning Association Advisory Service Report #337, at 2 (noting that "[l]ocal governments find private cluster subdivisions attractive because of lower public service and maintenance costs. Since the public will not assume ownership of streets and utilities, it is believed overall future maintenance costs will be reduced for local governments"); BARTON & SILVERMAN, supra note 7, at 11 (noting that "[m]any local government responded [to increasing fiscal constraints] by requiring the developer to provide such infrastructure as streets, street lighting, water and sewer lines, parks, playgrounds and parking areas. Making these facilities remain privately owned, with a mandatory homeowners' association that is responsible for maintenance, further reduces costs to local government") (emphasis added); JULIA LAVE JOHNSTON & KIMBERLY JOHNSTON-DODDS, COMMON INTEREST DEVELOPMENT: HOUSING AT RISK? (2002), at 11 (noting that "[l]ocal governments wanted to avoid the costs of new infrastructure. [The establishment of] CIDs effectively transferred these costs from [the local government] general fund to the developer.").

38. In a prior article, I argued for a new and expansive application of state-action theory to take account of the modern phenomenon of large-scale community associations, and the concomitant erosion of a public sphere where constitutional rights had once been vested but where those rights no longer exist by virtue of the privatization of that sphere. See The Constitution and Private Government, supra note 11, at 546-63. In that article, I argued for an expansive view of the Supreme Court's seminal decision in Marsh v. Alabama, 326 U.S. 501 (1946), wherein the Court extended the reach of the First Amendment to privately owned streets in certain company-owned towns. Id. at 508-09. However, the broad sweep of Marsh has not been fulfilled. Thirty years after Marsh, the Supreme Court in Hudgens v. NLRB, 424 U.S. 507 (1976), largely confined the holding of Marsh to its facts and held that state action (based on a private community performing public functions) could not be found in any private community that did not contain all of the physical attributes of the company town in Marsh. See id. at 516-17. The Hudgens decision has remained the Supreme Court's last word on the Marsh doctrine.

Following *Hudgens*, the lower federal courts generally have declined to apply state action theory to community associations. *See e.g.*, Snowdon v. Preferred RV Resort Owners Ass'n, 379 Fed. App'x. 636, 637 (9th Cir. 2010) (community association held not to be a state actor because association "did not perform the traditional and exclusive public function of municipal governance"); Short v. Noble Mountain Cmty. Ass'n, 2012 WL 466915, at *9 (D. Ariz. 2012) (holding that an Arizona homeowners' association was not a state actor because it did not have "all the attributes of a town"); Lennon v. Overlook Condo. Ass'n, 2008 WL 2042636, at *6-*7 (D. Minn. 2008) (holding that the condominium association did not become state actor by virtue of its power to impose and enforce its own lien and power to impose fines because various other private actors have that same power); Fromal v. Lake Monticello Owners' Ass'n, 2006 WL 1195778, at *2 (W.D. Va. 2006) (holding that community association not a state actor because it "has not assumed all the attributes of a state-created municipality"); Kalian at Poconos, LLC v. Saw Creek Estates Cmty. Ass'n, 275 F.Supp.2d 578, 588-90 (M.D. Pa. 2003); Goldberg v. 400 E. Ohio Condo. Ass'n, 12 F. Supp. 2d 820, 823 (N.D. Ill.1998) (noting that condominium association did not exercise powers that were ex-

that the Constitution applies generally only to the state and its instrumentalities,³⁹ and even the most robust application of "state action" theory is unlikely to implicate most community associations, which traditionally have been understood as creatures of private law.⁴⁰

Moreover, direct application of state action theory to established community associations is subject to numerous conceptual, legal, and practical difficulties.⁴¹ An established community asso-

clusive state functions, such as government elections, comprehensive ownership of town, and tax collection); Midlake On Big Boulder Lake Condo. Ass'n v. Cappuccio, 673 A.2d 340, 342 (Pa. 1996); Rullan v. Council of Co-owners of McKinley Court Condo., 899 F. Supp. 857, 860 (D.P.R.1995) (dismissing § 1983 claim against condominium association when "[t]here is not one allegation that the [association] acted as private persons jointly engaged with state officials or that their conduct is otherwise chargeable to the state").

A few state courts, most notably New Jersey, have discerned in their own state constitutions a basis to subject the private realm of community associations to a constitutional, or quasi-constitutional, regime. See Mazdabrook Commons Homeowners Ass'n v. Khan, 46 A.3d 507 (N.J. 2012) (holding that homeowners' association's prohibition on all political signs violated unit owner's right to free speech under the state constitution); Comm. for a Better Twin Rivers v. Twin Rivers Homeowners Ass'n, 929 A.2d 1060, 1074 (N.J. 2006) (holding that, under certain circumstances, the "residents of a homeowners' association may . . . seek constitutional redress [under the New Jersey Constitution] against a governing association that unreasonably infringes their free speech rights"); Laguna Publ'g Co. v. Golden Rain Found, 182 Cal. Rptr. 813 (1982) (holding that a community association is not a state actor for federal constitutional purposes but is a state actor under the California Constitution). For a discussion of the implications of the decision of the New Jersey Supreme Court in Twin Rivers, see Paula A. Franzese & Steven Siegel, The Twin Rivers Case: Of Homeowners Associations, Free Speech Rights and Privatized Mini-Governments, 5 RUT-GERS J. L. & Pub. Poly 729, 729-768 (2008). In any event, the New Jersey decisions that apply state constitutional norms to community associations are limited in scope to the exercise of a resident's free speech rights. See id.

39. In the Civil Rights Cases, 109 U.S. 3 (1883), decided fifteen years after the adoption of the Fourteenth Amendment, the Supreme Court determined that the guarantees of the Fourteenth Amendment apply only to actions taken by the government. See The Civil Rights Cases, 109 U.S. at 11. In general, private conduct, "however discriminatory or wrongful," does not come within the ambit of the Fourteenth Amendment. Shelley v. Kraemer, 334 U.S. 1, 13 (1948). However, the Court, beginning in the 1930s, has come to recognize that the distinction between public and private conduct is not always clear-cut, and that, under some circumstances, the actions of private parties may be attributed to the state. See, e.g., Georgia v. McCollum, 505 U.S. 42 (1992) (holding that state action was present in a defendant's use of a peremptory challenge in a criminal case); Lugar v. Edmondson Oil Co., 457 U.S. 922 (1982) (holding that state action was present when a creditor obtained a prejudgment writ of attachment of a debtor's property); Burton v. Wilmington Parking Auth., 365 U.S. 715 (1961) (holding that state action was present in the conduct of a privately owned restaurant that leased space from a government agency); Shelley, 334 U.S. 1 (holding that state action was present in the judicial enforcement of a private restrictive covenant); Marsh v. Alabama, 326 U.S. 501 (1946) (holding that state action was present in the operation of a company town that was the functional equivalent of a municipality); Smith v. Allwright, 321 U.S. 649 (1944) (holding that state action was present in political party primary elections).

- 40. See The Constitution and Private Government, supra note 11, at 467-68.
- 41. See Wayne S. Hyatt, Common Interest Communities: Evolution and Reinvention, 31 J. MARSHALL L. REV. 303, 340 (1998) ("[T]he weaknesses in the analogy between municipalities and [community associations] are many and fundamental."); Robert H. Nelson, supra note 23, at 828 (opining that "economic forces . . . made private neighborhood associations the choice for millions of people for their residential property"); Laura T. Rahe, supra

ciation has acquired vested rights of property and contract.⁴² Consequently, rigid application of state action theory in this context may run afoul of countervailing constitutional values, including elemental notions of property rights as well as the freedom of association secured by the First Amendment.⁴³ For example, community associations derive their power and authority from the hallmark and legal embodiment of private property ownership: the deed.⁴⁴ The various covenants and restrictions attached to the deed impose a set of rules on those who choose to purchase property within the community association. These rules—and the promise of their enforcement—are firmly rooted in the common law of property and contract.⁴⁵

Thus, courts have usually declined to undertake a broad extension of state action theory so as to treat most private communities as if they were municipalities.⁴⁶ This trend is likely to continue—

note 23, at 552 (arguing that the homeowners' association is properly viewed as "the product of individual [consumer] choices").

- 42. See Reichman, supra note 23, at 255-56 (opining that community associations are "of a private nature" because they are "based on private initiative, private money, private property and private law concepts").
- 43. As to the freedom of association, see Roberts v. United States Jaycees, 468 U.S. 609, 618-20 (1984) ("The Court has long recognized that, because the Bill of Rights is designed to secure individual liberty, it must afford the formation and preservation of certain kinds of highly personal relationships a substantial measure of sanctuary from unjustified interference by the State.") It might be argued that a community association is properly viewed as a group of like-minded homeowners that have come together to manage their jointly held property, to govern themselves through an elected board of directors and a system of rules, and generally to share their common interests and values. As such, such an association might appear to be the type of organization that is entitled to a high degree of protection from government interference by virtue of the constitutionally guaranteed freedom of association. See Boy Scouts of America v. Dale, 530 U.S. 640 (2000) (holding that the Boy Scouts' freedom of association was violated by a state law requiring the organization to admit a homosexual scoutmaster). But see The Constitution and Private Government, supra note 11, at 548-50 (arguing that community associations should not be regarded as the type of organization that is entitled to a high level of protection in connection with the exercise of associational rights).
 - 44. See The Constitution and Private Government, supra note 11, at 547.
 - 45. See id.
- 46. See e.g., Snowdon v. Preferred RV Resort Owners Ass'n, 379 Fed.Appx. 636, 637 (9th Cir. 2010) (community association held not to be a state actor because association "did not perform the traditional and exclusive public function of municipal governance"); Short v. Noble Mountain Cmty. Ass'n, 2012 WL 466915, at *9 (D. Ariz. 2012) (holding that an Arizona homeowners' association was not a state actor because it did not have "all the attributes of a town"); Lennon v. Overlook Condo. Ass'n, 2008 WL 2042636, at 6-7 (D. Minn. 2008) (holding that condominium association did not become state actor by virtue of its power to impose and enforce its own lien and power to impose fines because various other private actors have that same power); Fromal v. Lake Monticello Owners' Ass'n, Inc. 2006 WL 1195778, at *2 (W.D. Va. 2006) (holding that community association not a state actor because it "has not assumed all the attributes of a state-created municipality"); Kalian at Poconos, LLC v. Saw Creek Estates Cmty Ass'n, 275 F. Supp.2d 578, 588-90 (M.D. Pa. 2003) (same); Goldberg v. 400 E. Ohio Condo. Ass'n, 12 F. Supp.2d 820, 823 (N.D.Ill.1998) (noting that condominium association did not exercise powers that were exclusive state functions, such as government elections, comprehensive ownership of town, and tax collection); Midlake On Big Boulder Lake Condo. Ass'n v. Cappuccio, 673 A.2d 340, 342 (1996)(same); Rul-

even if it could be demonstrated that, in many cases, the community association form is an instrument of municipal privatization policy effected through local government's broad authority and discretion over land use regulation.

C. A new constitutional approach to the problem of the widespread adoption by local government of the community association form as an instrument of municipal privatization.

In this article, I propose a quite different constitutional approach to the problem of the widespread adoption by local government of the community association form as an instrument of municipal privatization. Recognizing the limitations and shortcomings of traditional state action theory as applied to established community associations,⁴⁷ I instead propose to address *directly* the constitutional infirmities of the governmental decision-making process that often leads to the compelled establishment of community associations. More particularly, I propose judicial recognition of a qualified constitutional right of a subdivision developer to dedicate streets and parks to a municipality as a means to ensure that local governments do not arbitrarily exercise their power to accept or reject a subdivision developer's offer of dedication for streets and parks, and, by so doing, coerce the developer to privative a community that the developer does not wish to privatize.⁴⁸

The recognition of a qualified constitutional right of a subdivision developer to dedicate land for public use represents a limited and prudent application of state action theory. This application of state action theory derives from the recognition that: (1) municipal privatization and load-shedding policies have given rise to many larger territorial community associations which are the functional equivalent of municipalities, but courts generally do not recognize these community associations as "state actors";⁴⁹ and (2) residents and nonresidents of these associations are thereby deprived of a

lan v. Council of Co-owners of McKinley Court Condo., 899 F. Supp. 857, 860 (D.P.R.1995) (dismissing § 1983 claim against condominium association when "[t]here is not one allegation that the [association] acted as private persons jointly engaged with state officials or that their conduct is otherwise chargeable to the state").

^{47.} See supra notes 38-45 and accompanying text.

^{48.} See supra notes 23-38 and accompanying text.

^{49.} As previously noted, a territorial community association is the functional equivalent of a municipality in many significant ways. *See supra* notes 9-22 and accompanying text.

constitutional remedy for abridgment of fundamental rights by such associations.⁵⁰

As previously noted, direct application of state action theory to community associations, in most circumstances, has been rejected by almost all federal and state courts.⁵¹ Even if present land use development trends were to continue and large-scale privatization of new communities were to occur over the next few decades, it is highly unlikely that there will be any change in courts' traditional reluctance to apply state action theory—that is, constitutional principles intended to restrain the conduct of governmental entities—to entities that have been long regarded as wholly private under state law.⁵² Furthermore, as described above, direct application of state action theory to established community associations is unlikely to offer a viable approach to the unique conceptual issues raised by the privatization of new communities.⁵³

In recognition of these limitations of state action theory, the qualified constitutional right of a subdivision developer (to dedicate land for public use) shifts the focus of the judicial inquiry from the established community association to the municipal decision-making process that often leads to the formation of such associations. The qualified constitutional right is intended to ensure that the formation of a community association is the developer's voluntary choice, rather than the product of municipal privatization policy. The right is thereby intended to be limited to only those community associations that—at their inception—are solely the product of municipal policy-making. The right is the policy-making.

^{50.} As previously noted, although a community-association servitude regime is nominally private, the regime nevertheless places the coercive power of the State behind private actors (i.e., the boards of community associations) whom "exercise power over members and even nonmembers in vital areas of concern, in that their decisions govern what individuals do in the privacy of their own home and what they do with the physical structure of the house and its surroundings." MCKENZIE, supra note 2, at 135. See supra notes 9-22 and accompanying text. Undoubtedly, if these same powers were exercised by public officials operating under color of public law (as distinct from such powers exercised by community-association officials operating under the authority of private servitudes backed by judicial enforcement), such powers would, under many circumstances, be held as an unconstitutional abridgement of rights. See id.

^{51.} See supra note 45 and accompanying text.

^{52.} See supra notes 38-46 and accompanying text.

^{53.} See supra notes 38-46 and accompanying text. See also Wayne S. Hyatt, Common Interest Communities: Evolution and Reinvention, 31 J. MARSHALL L. REV. 303, 340 (1998) ("[T]he weaknesses in the analogy between municipalities and [community associations] are many and fundamental."); Nelson, supra note 23, at 828 (opining that "economic forces . . . made private neighborhood associations the choice for millions of people for their residential property"); Rahe, supra note 23, at 552 (arguing that the homeowners' association is properly viewed as the product of individual [consumer] choices").

^{54.} See infra notes 230-38 and accompanying text.

^{55.} See infra notes 230-38 and accompanying text.

The qualified constitutional right exclusively belongs to the subdivision developer, and not to third parties. The developer may or may not elect to exercise that right in furtherance of its own interest as well as in the public interest. The issue of the developer's standing is intrinsic to my conception of the qualified constitutional right.⁵⁶

The qualified constitutional right aligns itself with the interests of the property owner at the point of community formation, and does so by giving the property owner *more property rights*. The substantive property rights conferred include the subdivision developer's right to dedicate land for public use and thereby be relieved of the burden of maintaining the land and providing services that until recently were regarded as traditional municipal services. In this way, the qualified constitutional right seeks to establish a rare alignment of public interest and private interest, and to focus and direct that private interest toward the preservation and strengthening of core constitutional values implicit in traditional public communities.⁵⁷

Crucially, it is the prophylactic value of the qualified constitutional right that distinguishes it from other more expansive and unworkable forms of state action doctrine that are directed at the product, rather than the source, of state action.⁵⁸ In particular, if the subdivision developer does not invoke the qualified constitutional right, then it can be presumed that the developer does not seek to dedicate land for streets and parks and is inclined to establish a community association to operate and maintain these facilities. If, however, the subdivision developer does invoke the qualified right, then it can be presumed that privatization decision originated from local government itself. In this sense, affording the developer the qualified right—in one stroke—resolves the critical and often difficult question (that otherwise would arise in other litigation contexts) as to whether or not a community association is the product of government coercion.⁵⁹ That is to say: the qualified right is so designed and attaches at a point in the development process such that the developer's mere invocation of the qualified right constitutes the resolution of that question of government coercion.

The qualified constitutional right obviously will not eliminate the establishment of new community associations, nor will it pro-

^{56.} See infra notes 122-39 and accompanying text.

^{57.} See infra notes 122-39 and accompanying text.

 $^{58. \ \} See \ supra$ notes 38-45 and accompanying text.

^{59.} See supra notes 23-37 and accompanying text. As to the many factors—both governmental and market-based—that have contributed to the growth of the community association form in single-family planned developments throughout the United States, see *The Public Role, supra* note 24, at 866-73.

vide a remedy for aggrieved homeowners, renters, or nonresidents once an association is established. It will, however, provide a mechanism to reduce municipal service load-shedding and privatization that is antithetical to the public interest. 60 It will promote public constitutional values that are implicit in public streets and parks. 61 It will do all of this without abridging countervailing private constitutional values that only attach once a community is established and once vested rights of property and contract come into being. 62

II. HISTORICAL AND LEGAL BACKGROUND OF THE LAW OF VOLUNTARY DEDICATION OF LAND FOR PUBLIC USE.

In this section, I provide a brief historical overview of the law of voluntary dedication of land for public use. ⁶³ The purpose of this overview is two-fold: (1) to place the right of voluntary dedication in its proper historical and legal context, and (2) to lay the groundwork for the application of a constitutional remedy aimed at curbing governmental policies that, in essence, require the establishment of a private community as an improper means to implement local government's service privatization and load-shedding agenda.

At the outset, I wish to emphasize that my principal arguments in support of a qualified constitutional right to dedicate land for public use do not arise from the substantive law of dedication itself.⁶⁴ Instead, my principal arguments arise from the substantive constitutional values embodied in the First and Fourth Amendments and the Equal Protection Clause as applied to municipal decision making that results in the establishment of a community association as a means to privatize and load-shed traditional municipal services and to compel private parties to shoulder this burden.⁶⁵ In this context, the developer's qualified constitutional right to dedicate is offered as the remedy to the constitutional violation rather than as the source of the right itself.⁶⁶

^{60.} See infra notes 230-38 and accompanying text.

^{61.} See infra notes 157-71 and accompanying text (discussing constitutional values that are closely associated with a public commons, including First Amendment rights of speech and association that attach to public (but not private) streets and parks).

^{62.} See supra notes 41-45 and accompanying text.

^{63.} See generally The Public Role, supra note 24 at 915-25. This section of this Article is adopted substantially from my prior article.

^{64.} However, one of my five arguments in support of a qualified constitutional right to dedicate does indeed arise from the substantive law of dedication itself. *See infra* Part III.E.

^{65.} See infra Parts III.A-D.

^{66.} See Id.

In other words, the qualified constitutional right is premised on using the legal mechanism of voluntary dedication as the procedural vehicle by which both public and private interests will be vindicated. Thus, although the current state of the law of voluntary dedication is not central to the principal substantive constitutional arguments put forth in this article, the subject is obviously highly relevant to any understanding of how the qualified constitutional right, if adopted, would be applied in practice.⁶⁷

A. Background principles of property law pertaining to the dedication of private land for public use.

The public land component of traditional urban areas—that is, public streets and parks—typically comes into being through the law of dedication, which is a species of land transfer that has been in existence for centuries.⁶⁸ The concept of dedication for public use began as a common law device whereby a landowner/developer of a new residential subdivision "offered" up its property to the municipality, and the municipality "accepted" the offer.⁶⁹

Intrinsic to the common law doctrine of dedication is that the conveyance of property is gratuitous, and both the offer and acceptance are voluntary. That is to say: neither the property owner *need* offer the land to the government, nor the government *need* accept the offer. Importantly, this form of traditional dedication is quite different than a municipal "exaction" of land—sometimes referred to as a *mandatory* dedication—wherein the municipality requires landowners to "dedicate" streets and public facilities as a condition of subdivision approval. We are concerned here exclu-

 $^{67.\} See\ infra$ notes 230-38 and accompanying text (discussing the qualified constitutional right as applied).

^{68.} See, e.g., Mayor of New Orleans v. United States, 35 U.S. 662, 712 (1836) (describing dedication as "a well-established principle of the common law . . . sanctioned by the experience of the ages"); 2 WILLIAM BLACKSTONE, COMMENTARIES *33 (describing dedication as "arising from the necessities of the thing or of the public").

^{69. &}quot;A definite intention to dedicate on the part of the land owner and an acceptance by the public are essential elements of common law dedication." Parish of Jefferson v. Doody, 167 So. 2d 489, 492 (La. Ct. App. 1964), rev'd on other grounds, 174 So. 2d 798 (La. 1965). Note, however, that neither the offer nor the acceptance need be "formally expressed, but both must be sufficiently clear so as to exclude any rational hypothesis other than that of dedication." ANTIEAU ON LOCAL GOVERNMENT LAW § 24.12[2] (2d ed. 2009).

^{70.} The following treatises provide a useful overview of the law of dedication: E.C. Yokley, Law of Subdivisions §§ 30-36 (2d ed. 1981); Eugene McQuillin, The Law of Municipal Corporations §§ 33.01-33.80 (3d ed. 2013); Am. Jur. 2d, *Dedication* §§ 1-72 (2013); 38 Am. Jur. Proof of Facts 2d 633, *Dedication of Land to Public Use* §§ 1-27 (1984)); 26 C.J.S., *Dediction* §§ 1-45 (2013).

^{71.} See supra note 70.

^{72.} Recognizing the inherently coercive nature of mandatory dedication, the Supreme Court, in 1987, held that, under the Fifth Amendment, mandatory dedications may constitute a "taking" just as surely as a taking would arise if the municipality had *directly* appro-

sively with voluntary dedication, its historical role and its present widespread repudiation by municipalities in contemporary land planning.⁷³

A threshold question with respect to a property owner's use of dedication is this: In light of the gratuitous and voluntary nature of traditional dedication, why would the profit-seeking owner of real property ever wish to gift its property to the government? The answer is that a property owner's dedication of its property is a "gift" in only the narrowest and most technical of senses; that is, no consideration is stated in the land transfer itself. Viewed more broadly, the act of voluntary dedication constitutes effectively a quid pro quo—the property owner transfers the necessary land at no cost to the acquiring public entity, and in return is entitled to receive the public provision of certain amenities and services ancillary to the development and use of property.⁷⁴

The common law of voluntary dedication reflects a fundamental understanding embedded in the traditional development of private property; that is, that certain functions and services incident to the development and use of private property were *public* functions and services to be furnished by a *public* entity. For example, public access to an individual subdivided lot was part of the traditional understanding, and for this a *public* road was necessary. From the public road arose other public functions and services ancillary to the road, such as utilities, curbside trash pick-up and public police patrols of the street. Later, other neighborhood-related public amenities became the subject of dedication, such as

priated the exacted property, without the property owner's consent and without payment of just compensation. See Nollan v. Cal. Coastal Comm'n, 483 U.S. 825, 834-37 (1987). In general, however, so long as the mandatory dedication is "directly proportiona[te]," both in nature and extent, to the "impact of the proposed development" upon which the mandatory dedication is premised, the compelled dedication is valid. Dolan v. City of Tigard, 512 U.S. 374, 390 (1994).

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^{73.} Although mandatory dedication (also known as a municipal exaction of land) continues to play an important role in modern municipal subdivision and zoning law, the focus here is on a municipal practice that may be fairly characterized as the inverse of a municipal policy of mandatory dedication of land: *i.e.*, the *refusal* of a municipality to accept voluntary dedication of land.

^{74.} Although voluntary dedication is sometimes characterized as merely a "gratuitous" transfer made by the dedicator, that characterization is true only in the strict sense that monetary consideration is generally not received by the dedicator in exchange for the transfer of title (or the imposition of a public easement) in respect of the dedicated lot. As made clear in the text above, a voluntary dedication is seldom an act of public charity, but rather amounts to an in-kind exchange of land for public access, municipal services and enhanced property values.

^{75.} See Friends of the Trails v. Blasius, 93 Cal. Rptr. 2d 193, 199 (Cal. Ct. App. 2000) (observing that "American courts have freely applied th[e] common law doctrine [of dedication] not only to streets, parks squares and commons, but to other places subject to public use") (quoting John V. Gallagher et al. Implied Dedication: The Imaginary Waves of Gion-Dietz, 5 Sw. U. L. Rev. 48, 52 (1973)).

public parks and schools.⁷⁶ To obtain the benefit of these public functions and services, a property owner dedicates a portion of his or her property for these public purposes.⁷⁷

Dedication has "ancient" roots in the common law. According to one court, "no one can doubt that there were, . . . [at the time of William the Conqueror], innumerable throughfares, and many squares and open spaces, which had been dedicated to the use of the people at large. Blackstone, in his influential *Commentaries on the Law of England*, recognized dedication as "arising from the necessities of the thing or of the public. Similarly, an English decision from the early eighteenth century, applying the doctrine of dedication, stated, If a vill be erected, and a way laid out to it, if there be no other way but that to the vill . . . it shall be deemed a public way.

In general, the states of the United States, at the time of the Revolution, adopted the common law of England as that law existed in 1776.⁸² Although the states' "reception" of the common law was not universal or uniform, ⁸³ the states unquestionably adopted the fundamental English common law principles of real property, including the law of dedication. Thus, for example, the United States Supreme Court, in an 1836 decision captioned *Mayor of New Orleans v. United States*, ⁸⁴ described dedication as "a well-

^{76.} See, e.g., City of Cincinnati v. Lessee of White, 31 U.S. (6 Pet.) 431 (1832) (holding that dedication of a common area rests on the same principle as the public's right to use streets); Seaway Co. v. Att'y Gen, 375 S.W.2d 923 (Tex. Civ. Ct. App. 1964) (finding that beach had been dedicated to the public).

^{77.} Dedication has been defined as the "the devotion of land to a public use by an unequivocal act of the owner of the fee manifesting an intention that it shall be accepted and used presently or in the future for such public use." DONALD A. WILSON, EASEMENTS RELATING TO LAND SURVEYING AND TITLE EXAMINATION (1941). Thus, a dedication is a particular form of transfer of private land for public use. In contrast to the exercise of the power of eminent domain by government or its delegee, the act of dedication is, in its traditional usage, initiated by a private property owner seeking to secure the transfer of its property for public use. In contrast to the judicial procedure known as an "inverse condemnation"—which is initiated by the present or prior owner of private property with a view toward obtaining "just compensation" for the alleged "taking" of its property—the act of dedication, once complete, does not require the payment of "just compensation," nor is "just compensation" even sought by the property owner as consideration for the dedication. Because dedication, by definition, is a voluntary and gratuitous transfer of private property for public use, no compensation is sought, nor is it required under the Fifth Amendment's Takings Clause.

^{78.} Blasius, 93 Cal. Rptr. 2d at 201.

^{79.} Appleton v. City of New York, 219 N.Y. 150, 164; 114 N.E. 73, 76 (N.Y. 1916) (quoting Post v. Pearsall, 22 Wend. 425, 433 (N.Y. 1839)).

^{80. 2} WILLIAM BLACKSTONE, COMMENTARIES *33.

^{81.} The Queen v. Inhabitants of Hornsey, (1712) 88 Eng. Rep. 670 (Q.B.); 10 Mod. 150.

^{82.} As to common law reception generally, see 15A C.J.S. Common Law § 5 (2013) ("[T]he greater part of the common law in the United States is derived from the common or unwritten law of England."); Ford W. Hall, The Common Law: An Account of its Reception in the United States, 4 VAND. L. REV. 791, (1951).

^{83.} See id.

^{84.} Mayor of New Orleans v. United States, 35 U.S. (10 Pet.) 662 (1836).

established principle of the common law . . . sanctioned by the experience of the ages." 85

The Court in Mayor of New Orleans further noted:

That property may be dedicated to public use, is a well established principle of the common law. It is founded in public convenience, and has been sanctioned by the experience of ages. Indeed, without such a principle, it would be difficult, if not impracticable, for society in an advanced state of civilization, to enjoy those advantages which belong to its condition, and which are essential to its accommodation.

The importance of this principle may not always be appreciated, but we are in a great degree dependent on it for our highways, the streets of our cities and towns, and the grounds appropriated as places of amusement or of public business, which are found in all our towns, and especially in our populous cities.⁸⁶

Although the Supreme Court may have employed a bit of rhetorical license to regard our "advanced state of civilization" as founded on the common law right of dedication, the essential kernel of truth recognized by the Court in 1836 remains valid even today: the balance of "public" and "private" in community development is important, and, more particularly, that the character of life in our urban and suburban communities is due in no small measure to the availability and use of dedication as a means to transfer private property into the public domain.⁸⁷ If there be any doubt as to

Wherever the title of streets and parks may rest, they have immemorially been held in trust for the use of the public and, time out of mind, have been used for purposes of assembly, communicating thought between citizens, and discussing public questions. Such use of the streets and public places has, from ancient times, been a part of the privileges, immunities, rights, and liberties of citizens. The privilege of a citizen of the United States to use the streets and parks for communication of views on national questions may be regulated in the interest of all; it is not

^{85.} Id. at 712.

^{86.} Id at 712-13.

^{87.} For example, as previously noted, the branch of First Amendment jurisprudence known as the "public forum" doctrine is premised on the Supreme Court's recognition that speech conducted on certain types of *public* property—particularly streets and parks—is entitled to special protection and solicitude under the First Amendment. See, e.g., Schneider v. Irvington, 308 U.S. 147 (1939); Hague v. Comm. of Indus. Org., 307 U.S. 496, 515-16 (1939) (J. Roberts, concurring). Importantly, the real estate upon which the traditional public forum doctrine is grounded (quite literally) is real estate owned by the State and obtained principally, one surmises, through acts of dedication by landowners.

As to the constitutional significance of publicly owned streets and parks, it is well to recall Justice Roberts' famous concurring opinion that laid the groundwork for the Court's recognition of the public forum doctrine:

the truth of this proposition in the contemporary United States, one need only compare the experience of living in a traditional suburban community (containing public streets and parks) with the experience of living in a gated community.⁸⁸

The common law doctrine of dedication, as it developed in the United States, appropriated the familiar contract-law principles of "offer" and "acceptance"—that is, the landowner "offers" up its property to the municipality and the municipality "accepts" the dedication.⁸⁹ What constitutes an "offer" and an "acceptance" of dedication gave rise to an enormous body of state-by-state case law, which is by no means uniform either in approach or result.⁹⁰

Depending on the jurisdiction, a developer's offer to dedicate may be effected in a number of ways. Under prevailing common law principles that remain effective in most states, an offer of dedication may be by express or implied act of the landowner.⁹¹ Express acts include dedication by deed,⁹² by recordation of a plat,⁹³

absolute, but relative, and must be exercised in subordination to the general comfort and convenience, and in consonance with peace and good order; but it must not, in the guise of regulation, be abridged or denied.

Hauge, 307 U.S. at 515-16. To the extent that some municipalities have elected to categorically refuse to accept dedication of land for street or park purposes, Justice Roberts' vision—and traditional First Amendment values—will suffer.

It is, of course, true that some state courts, applying the free speech guarantees of their own state constitutions, have recognized a limited right to engage in expressive activity on certain forms of *private* property, including—in a recent and important case in New Jersey—community association property. See Mazdabrook Commons v. Khan, 46 A.3d 507, 520 (2012) (holding that homeowners' association's prohibition on all political signs violated unit owner's right to free speech under the state constitution). But this state-by-state protection is limited and piecemeal and, even in individual states, cannot hope to replicate the robust protections of the public-forum doctrine of the First Amendment.

- 88. See generally Blakely & Snyder, supra note 22; Setha Low, infra note 165.
- 89. "A definite intention to dedicate on the part of the land owner and an acceptance by the public are essential elements of common law dedication." Jefferson v. Doody, 167 So. 2d 489, 492 (La. Ct. App. 1964). Note, however, that neither the offer nor the acceptance need be "formally expressed, but both must be sufficiently clear so as to exclude any rational hypothesis other than dedication." Antieau on Local Government Law § 24.12 (2d ed. 2009).
- 90. Surveying the law of dedication, see Yokley, supra note 70, at §§ 30-36; McQuillin, supra note 70, at §§ 33.01-33.80; Am. Jur. 2D, Dedication §§ 1-72 (2013); 38 Am. Jur. Proof of Facts 2D 633, Dedication of Land to Public Use §§ 1-27 (2004) (rev. 2013); 26 C.J.S. Dedication §§ 1-45 (2013); Note, Public Ownership of Land through Dedication, 75 Harv. L. Rev. 1406 (1962).
- 91. YOKLEY, supra note 70 at \S 33; McQuillin, supra note 70, at \S 33.03; Am. Jur. 2D Dedication $\S\S$ 1, 18-33.
- 92. See, e.g., Carlson v. Burkhart, 27 P.3d 27 (Kan. 2001); St. Charles Parish Sch. Bd. v. P & L Inv. Corp., 674 So. 2d 218 (La. 1996); Hale v. City of Stratham, 504 S.E.2d 691 (Ga. 1998); $In\ re\ .88$ Acres of Property, 676 A.2d 778 (Vt. 1996); Helsel v. City of North Myrtle Beach, 413 S.E.2d 821 (S.C. 1992); Volvo, Inc. v. Lickley, 889 P.2d 1099 (Id. 1995).
- 93. See, e.g., Davenport v. Buffington, 97 F. 234 (8th Cir. 1899); Bauer Enters. v. City of Elkins, 317 S.E.2d 789 (W.V. 1984); Vallone v. City of Cranston, 197 A.2d 310 (R.I. 1964); City of Peoria v. Central Nat. Bank, 79 N.E.296 (Ill. 1906); Carroll v. Village of Elmswood, 129 N.W. 537 (Neb. 1911); People v. Reed, 22 P. 473 (Cal. 1889).

by sales of lots with reference to a plat, ⁹⁴ even by oral declaration of the owner. ⁹⁵ Dedications also can be implied "from circumstances or by acts or conduct of the owner that clearly indicate an intention to devote land to public use or from which a reasonable inference can be drawn." ⁹⁶

Similarly, depending on the jurisdiction, a municipality's mode of acceptance can be accomplished in many ways. Acceptance of dedication can be effectuated by express or implied acts of the municipality. Express acts include adoption of the offer of dedication by ordinance or formal resolution. Implied acts include opening up or improving a street, Prepairing a street, Snow removal, Snow rem

Recognizing that the common law of dedication may leave open substantial uncertainty in particular circumstances as to whether a valid dedication has been accomplished, many states have codified the law of dedication. Statutory dedication typically provides procedural prerequisites which, when satisfied, constitute a valid dedication. Statutory treatments of dedication essentially follow the existing common law, but add a degree of certainty to the process by setting forth specific procedures for carrying out a

^{94.} See, e.g., Copeland v. City of Dallas, 454 S.W.2d 279, 284 (Tex. 1970); Whitaker v. Town of Tipton, 426 P.2d 336, 338; Richards v. Colusa County, 16 Cal. Rptr. 232 (Ca. Ct. App. 1961); Highway Holding Co. v. Yara Engineering Corp., 123 A.2d 511, 125-26 (N.J. 1956); City of Molalla v. Coover, 235 P.2d 142, 146 (Or. 1951); Gowera v. City of Van Buren, 197 S.W.2d 741, 780 (Ark. 1946); Village of Benld v. Dorsey, 142 N.E. 563, 565 (Ill. 1924); Henderson v. Young, 103 A.719, 720 (Pa. 1918).

^{95.} See, e.g., Irwin v. Dixon, 50 U.S. (9 How) 10 (1850); Gutierrez v. Cnty. of Zapata, 951 S.W.2d 831 (Tex. Ct. App. 1997); City of Hollywood v. Zinkil, 283 So. 2d 581 (Fla. Ct. App. 1973).

^{96. 77} Am. Jur. Proof of Facts 3d § 6.

^{97.} See, e.g., Luter v. Crawford, 92 So. 2d 348 (Miss. 1967); Allen v. Village of Savage, 112 N.W.2d 807 (Minn. 1961); Horn v. Crest Hill Homes, Inc., 164 N.E.2d 150 (Mass. 1960).

^{98.} See e.g., Hooper v. Haas, 64 N.E. 23 (Ill. 1928); Barber Asphalt Paving Co. v. Jurgens, 19 P. 560 (Cal. 1915); Riley v. Buchanan, 76 S.W. 527 (Ky. 1903); Martin v. Redmond, 638 N.W.2d 142 (Mich. Ct. App. 2001).

^{99.} See, e.g., Brown v. Moore, 500 S.E.2d 797 (Va. 1998); Tupper v. Dorchester Cnty., 487 S.E.2d 187 (S.C. 1997); Thorton v. City of Colo. Springs, 478 P.2d 665 (Col. 1970); Foster v. Bergstorm, 515 N.W.2d 581 (Minn. Ct. App. 1994).

^{100.} See, e.g., Ross v. Hall C
nty. Bd. Of Comm'rs, 219 S.E.2d 380 (Ga. 1975); Pulleyblank v. Mason County, 86 N.W.2d 309 (Mich. 1957); Ackley v. City of San Francisco, 89 Cal. Rptr. 480 (Cal. Ct. App. 1970).

^{101.} See, e.g., A & H Corp. v. City of Bridgeport, 430 A.2d 25 (Conn. 1980); Pepin v. City of Manchester, 231 A.2d 481 (N.H. 1967).

^{102.} See e.g., S. Ry. Co. in Ky. v. Caplinger's Adm'r, 152 S.W. 947 (Ky. 1913).

 $^{103.\} See,\ e.g.,\ IDAHO\ CODE\ \S\S\ 50-1309,\ 50-1312\ (2013);\ KAN.\ STAT.\ ANN.\ \S\ 12-752\ (2013);\ KY.\ REV.\ STAT.\ ANN.\ \S\ 82.400\ (West\ 2013);\ LA.\ REV.\ STAT.\ ANN.\ \S\ 813,\ 5051\ (West\ 2013);\ MINN.\ STAT.\ ANN.\ \S\ 505.03\ (West\ 2013);\ MISS.\ CODE\ ANN.\ \S\ 17-1-23\ (2013);\ Mo.\ REV.\ STAT.\ \S\ 445.010\ (2013);\ N.C.\ GEN.\ STAT.\ \S\ 135-66.10\ (2013);\ OHIO\ REV.\ CODE\ \S\S\ 723.03,\ 5553.31\ (West\ 2013);\ OKLA.\ STAT.\ ANN.\ tit.\ 11,\ \S\ 41-109\ (West\ 2013);\ UTAH\ CODE\ ANN.\ \S\ 10-9a-607\ (West\ 2013);\ WIS.\ STAT.\ ANN.\ \S\ 236.29\ (West\ 2013).$

^{104.} Yokley, supra note 70, § 31.

dedication of a plat."¹⁰⁵ Thus, statutory dedication adopts the common law principles of "offer" and "acceptance," and specifically defines the specific events constituting "offer" and "acceptance" in a way that the common law does not.

Unlike most other statutory codifications of the common law, however, statutory enactments of dedication did *not* abrogate the preexisting common law. ¹⁰⁶ Rather, where states have enacted dedication statutes, the common law has survived as an alternate method of dedication, usually available when the putative conveyance of property has failed to satisfy the statutory prerequisites. ¹⁰⁷ Thus, in virtually all states, the common law of dedication remains in full force and effect, supplemented and augmented, in some states, by the statutory law of dedication. ¹⁰⁸

In summary, the centuries-old law of dedication is grounded in the English common law and continues to apply the essential common law principles of an individualized "offer" of dedication and a governmental body's "acceptance" of dedication. These elements of the law of dedication may be found in the law of each state although these elements are described or applied in somewhat different ways. 109 Either by virtue of an express statute or by operation of the common law, municipalities are given discretion to accept or not to accept dedication. The rationale underlying this principle of discretionary acceptance of dedication is that:

[T]he place offered to be dedicated may be one in which, because of location or other reasons would be a burden rather than a benefit to the municipality or else the benefits would

^{105.} Mark S. Dennison, *Proof of Offer and Acceptance of Land to Public Use* § 3, in 77 Am. Jur. Proof of Facts 3D 1 (2004) (rev. 2014).

^{106.} See, e.g., McQuillin, supra note 70, § 33.03 ("The authorization of statutory dedication does not in any way restrict the common-law power of the owner to devote his or her land . . . to public use."); 38 AM.JUR. PROOF OF FACTS 2D 633 § 2 (rev. 2013) ("Within the same jurisdiction a dedication of land to public use may be statutory or pursuant to common law.") (emphasis added).

^{107.} See, e.g., Holmes v. Parish of St. Charles, 653 So. 2d 653 (La. 1995); First Ill. Bank of Wilmette v. Valentine, 619 N.E.2d 834 (Ill. 1993); Town of Moorcroft v. Lang, 779 P.2d 1180 (Wyo. 1989); Las Vegas Pecan & Cattle Co., Inc. v. Zavala County, 682 S.W.2d 254 (Tex. 1984); Thornton v. City of Colorado Springs, 478 P.2d 665 (Colo. 1970); Tuccio v. Lincoln Dev. Corp., 239 A.2d 69 (Conn. 1967); Weakly v. State Highway Comm'n, 364 S.W.2d 608 (Mo. 1963); Ginter v. City of Webster Groves, 349 S.W.2d 895 (Mo. 1961); Neill v. Hajke, 93 N.W.2d 821 (Minn. 1958); Witherall v. Stone, 90 So. 2d 251 (Ala. 1956); Galewski v. Noe, 62 N.W.2d 703 (Wis. 1954).

^{108.} See McQuillin, supra note 70, at \S 33.03; 38 Am. Jur. Proof Of Facts 2D 633 \S 2.

^{109.} See YOKLEY, supra note 70, §§ 30-36; McQuillin, supra note 70, at §§ 33.01-33.80; 23 Am. Jur. 2d, Dedication §§ 1-72 (2013); 38 Am. Jur. Proof of Facts 2d 633, Dedication of Land to Public Use §§ 1-27 (2004) (rev. 2013); 26 C.J.S. Dedication §§ 1-45 (2013).

be slight in comparison to the burden. In such a case, the imposition of liability on the municipality without its consent is apparently unjust.¹¹⁰

B. Recent developments in municipal land use policy—including policies that categorically preclude voluntary dedication in all new residential subdivisions—amount to a repudiation of the long established common law of voluntary dedication of land for public use.

As discussed above, the law of voluntary dedication contemplates a landowner's individualized offer of dedication and a governmental body's individualized acceptance or rejection of the offer of dedication. 111 At issue in this Article are recent developments in municipal land use policy that eschew the municipality's traditionally individualized consideration of an offer of dedication. Instead, municipalities have adopted ordinances or policies that categorically refuse to accept dedication in all circumstances and instead require private developers, as a condition of land use approval, to operate and maintain public services on private streets by way of a community association. 112 The effect of this categorical refusal to accept dedication is the privatization of infrastructure and services that, until recently, were owned and operated by municipalities. The governmental purpose is load-shedding of these traditionally municipal services onto the future residents of the new community.

In a prior section of this article, I set forth certain legal and empirical evidence for this new phenomenon. I noted that many contemporary municipal land use ordinances *expressly* require the establishment of community associations as a condition of land use approval and that the association will be required to provide certain traditionally municipal services to residents of the new subdivision. I further noted that even when municipal privatization policy is not codified the result is often the same. Municipalities simply can decide, on an informal basis, that a developer must establish a homeowners' association as a condition of land use approval. In support of the foregoing proposition, I noted that some developers have gone on record as confirming this state of affairs

^{110.} McQuillin, supra note 70, at § 33.45.

^{111.} See supra notes 80-110 and accompanying text.

^{112.} See supra Part I.A for a discussion of the widespread adoption by local governments of land use policies that require the privatization of new communities even when a developer otherwise would prefer to dedicate land to the community for public streets and parks.

^{113.} See supra notes 23-33 and accompanying text.

in the communities in which they do business.¹¹⁴ Although the exact scope and extent of formal and informal municipal privatization policy is not known, the available evidence suggests that it is pervasive in the fastest growing regions of the United States.¹¹⁵

Beyond this legal and empirical evidence, common sense suggests that when a municipality categorically refuses to accept dedication, then the developer has little choice but to establish a community association to operate what had been traditionally municipal services, such as street maintenance, sewer maintenance, street lighting, snow removal on public ways, curbside refuse pickup, and security. This is so because if a municipality refuses to accept dedication of land for streets and parks, then the developer will retain ownership of these streets and parks, and, consequently, will remain legally responsible for the provision of the common services that are associated with these streets and parks. Furthermore, when a developer builds owner-occupied housing in a new subdivision, the developer is effectively required to establish a community association as the mechanism by which the developer permanently transfers legal responsibility for the common services to the future residents of the subdivision. The residents will administer the services once the developer relinquishes control over the subdivision. 116

Municipal privatization policies may amount to a repudiation of the common law of voluntary dedication because a municipality's discretion to accept or reject dedication on an individualized basis is qualitatively different than a blanket municipal policy to categorically refuse dedication for all new subdivisions, whether by ordinance or otherwise. More particularly, the residual power of a municipality to refuse to accept dedication is properly understood as a reasonable power to be exercised when the dedicated facility is not truly "public." For example, a municipality might refuse to accept a roadway for dedication when the roadway is more like a driveway than a public street. Moreover, an offer of dedication

^{114.} See supra notes 28-31 and accompanying text.

^{115.} DILGER, *supra* note 4, at 18 ("According to CAI, [association-related housing] govern nearly all new residential development in California, Florida, New York, Texas, and suburban Washington, D.C."); Batchis, *supra* note 22, at 345 (noting that for many homebuyers in "the developed Sun Belt regions of the country . . . there is little choice, unless their home search is to be severely constrained, but to submit to membership in a homeowners association").

^{116.} Edward Hannaman, Homeowner Association Problems and Solutions, 5 RUTGERS J.L. & Pub. Pol'y 699, 704-06 (2008); Trust and Community, supra note 23, at 1127-29.

^{117.} See 26 C.J.S., 277 (Jeanne M. Naffky ed., 2011) ("Land may be dedicated for any use of a nature which the general public can enjoy. . . .") (emphasis added); McQuillin, supra note 70, at § 33.9 ("A dedication cannot be for a private use.").

^{118.} See, e.g., Coward v. Hadley, 246 P.3d 391, 397-98 (Idaho 2010) ("There can be no private dedication to a restricted class of individuals, such as those only owning property

might be properly refused when the facility is not built in conformance with reasonable design or construction standards that the municipality imposes on itself when the municipality constructs the facility. Plainly, a municipality retains discretion to refuse dedication of a facility if either the design or the construction of the facility is substandard.

But, a municipality's particularized discretion to refuse dedication in certain circumstances is qualitatively different from a municipality's categorical refusal to accept dedication in new subdivisions. In the first case, the municipal decision to refuse dedication is based on endogenous considerations: that is, the decision arises from a condition on the land itself. In the second case, the decision is instead based on a generalized policy of cost-shedding. This is not a proper exercise of discretion; it is, rather, a repudiation of municipal responsibility to perform core public-service functions in new subdivisions, a repudiation that is especially unjust and contrary to the public interest when the municipality is performing those very same functions in other areas within its territorial limits. 121

This, then, is a brief historical overview of the law of voluntary dedication of land for public use. The purpose of this overview has been to place the role of voluntary dedication in its proper historical and legal context and to provide some necessary background to the principal subject of this article: that is, the recognition of a qualified constitutional right of a subdivision developer to dedicate streets and parks to a municipality.

III. SOURCES OF AUTHORITY OF A QUALIFIED CONSTITUTIONAL RIGHT OF A SUBDIVISION DEVELOPER TO DEDICATE STREETS AND PARKS TO A MUNICIPALITY.

Courts should recognize a qualified constitutional right of a subdivision developer to dedicate streets and parks to a municipality. This qualified right would help redress the current local gov-

abutting an alley."); Grabnic v. Doskocil, No. 2002-P-0116, 2005 WL 1383967 at *5 (Ohio. Ct. App. June 10, 2005) (noting that dedication of the driveway would "no[t] . . . make[] sense," in view of the fact that the driveway "would be a dead end road leading up to a single street address" and "would be nothing more than a private drive maintained at the municipality's expense").

^{119.} See Longhini & Mosena, supra note 37, at 9 (noting that "[m]ost cities will not accept for dedication any [private] facilities that were not built to public [design and construction] standards").

^{120.} See supra notes 24-37 and accompanying text.

^{121.} Indeed, a municipal policy of unequal service provision that is designed to inure to the detriment of newcomers to the community and inure to the benefit of the community's established residents is properly understood as a violation of the Equal Protection Clause. See infra Part III.C.

ernment policies requiring privatization of new communities. 122 More particularly, the qualified right would ensure that local governments do not arbitrarily exercise their power to accept or reject a subdivision developer's offer of dedication of streets and parks, and, by so doing, coerce the developer to privative a community that the developer does not wish to privatize.

The qualified constitutional right derives from several distinct sources of constitutional authority. At the outset, it is useful to summarize the five constitutional sources upon which I shall rely.

First, a qualified constitutional right of a subdivision developer to dedicate land for public use represents a limited and prudent application of state action theory to the municipal creation of private entities that often perform public functions. As previously noted, this application of state action theory derives from the recognition that municipal privatization and load-shedding policies have given rise to many larger territorial community associations, which are the functional equivalent of municipalities. 123 However, direct application of state action theory to established community associations is unlikely to occur and, in some forms, may run afoul of countervailing constitutional values that underlie rights of private property and private association. 124 By contrast, the qualified constitutional right of a subdivision developer (to dedicate land for public use) shifts the focus of the judicial inquiry from established community associations to the municipal decision-making process that leads to the formation of such associations and ensures that such formation is not the product of undue governmental coercion. 125 The qualified constitutional right exclusively belongs to the subdivision developer, who may or may not elect to exercise that right in furtherance of his or her own interest as well as in the public interest. As such, the qualified constitutional right is intended to be prophylactic and limited to only those community associations that—at their inception—are the product of municipal policy-making.¹²⁶

Second, a qualified constitutional right of a subdivision developer to dedicate land for public use is rooted in core constitutional values that are closely associated with the availability of public land in traditional communities. This includes, most importantly, the existence of public streets and parks that long have been regarded as traditional public fora, wherein residents and non-residents may exercise their First Amendment rights to free

^{122.} See supra notes 24-37 and accompanying text.

^{123.} See supra notes 24-37 and accompanying text; see also infra note 143.

^{124.} See supra notes 41-46 and accompanying text.

^{125.} See infra notes 140-56 and accompanying text.

^{126.} See infra notes 140-56 and accompanying text.

speech and association.¹²⁷ As I have already noted, the rapid growth in the number of community associations in many regions of the United States is corrosive of First Amendment values implicit in the availability of public land.¹²⁸ Thus, the qualified constitutional right is offered as a means to promote, whenever possible, First Amendment values in new community developments.¹²⁹

Third, the qualified constitutional right of a subdivision developer to dedicate streets and parks to a municipality is also rooted in equal protection principles. In the context of a policy of municipal privatization of services in new communities, equal protection principles should be deemed to apply when a municipality imposes an effective tax burden on new community residents that is markedly different than the effective tax burden on the remainder of the municipality. In the established part of the municipality, the local government collects real estate taxes and delivers a standard array of services, including street maintenance, snow removal, police patrols of public streets, and curbside refuse pick-up. By contrast, in the newly developed portions of the municipality (in which the municipality has required the establishment of a community association to deliver services that the municipality itself delivers elsewhere within its territorial limits), the above-listed services are typically provided by the community association and are paid for by mandatory assessments imposed by the association on its members. 130 Yet, with very few exceptions, community association residents do not receive a credit against their real estate tax bills for the portion of their association fees that used to pay for the above-listed services. 131 Because the Supreme Court has held, as a general principle, that a discriminatory property tax scheme (that disfavors newcomers to the taxing jurisdiction) violates the Equal Protection Clause even under a rational basis standard of review, courts also should recognize that this same constitutional infirmity applies in the context of a municipally required community association with mandated unequal service and tax obligations. 132

Fourth, the qualified constitutional right of a subdivision developer to dedicate streets and parks to a municipality derives from the theory of representation reinforcement, which holds that "unblocking stoppages in the democratic process is what judicial review ought preeminently to be about." Such stoppages in the

^{127.} See infra notes 157-71 and accompanying text.

^{128.} See supra notes 11-20 and accompanying text.

^{129.} See infra notes 157-71 and accompanying text.

^{130.} See infra notes 180-88 and accompanying text.

^{131.} See infra note 134 and accompanying text.

^{132.} See infra notes 172-88 and accompanying text.

^{133.} JOHN HART ELY, DEMOCRACY AND DISTRUST 117 (1980).

democratic process typically occur "when . . . the ins are choking off the channels of political change to ensure that they will stay in and the outs will stay out."134 As I will discuss below, the principle of representation reinforcement properly applies in this context and should trigger heightened judicial review of a policy of municipal preclusion of dedication of streets and parks—when: (1) a municipality discriminates against newcomers to the community with respect to the imposition of taxes and the delivery of municipal services, (2) the newcomers have not yet arrived in the community at the time of critical municipal decision-making approving the tax and service package to the new community and thus have no standing to challenge the discriminatory tax and service package at the time of its formulation, and (3) only the developer may effectively represent the interests of the future newcomers at the time of critical municipal decision-making affecting the formation of the community. 135 Thus, the qualified constitutional right of a subdivision developer to dedicate streets and parks to a municipality gains strength from the developer's special status as a surrogate for the interests of hundreds, or even thousands, of future residents of the municipality.

Fifth, a qualified constitutional right of a subdivision developer to dedicate streets and parks to a municipality may be said to derive from: (1) the origins of the doctrine of voluntary dedication in the common law of real property, and (2) the Supreme Court's recognition, in Lucas v. South Carolina Coastal Council, 136 that ownership in real property necessarily encompasses "background principles of the State's law of property[,] . . . which inhere in the title itself."137 As previously discussed, the common law of voluntary dedication is a species of land transfer that has been in existence for centuries and was incorporated into the common law of every state after the American Revolution. Because, under Lucas, the "background" law of property is a stick in the bundle of that which we call "property rights," then a venerable common law practice of voluntary dedication may well be of constitutional dimension, at least insofar as a municipal policy that categorically precludes voluntary dedication. At the very least, the Lucas principle suggests that heightened scrutiny of such municipal "nodedication" policy is warranted. 139

^{134.} Id. at 103.

^{135.} See infra notes 189-201 and accompanying text.

^{136.} Lucas v. S.C. Coastal Council, 505 U.S. 1003 (1992).

^{137.} *Id.* at 1029 (observing that, as a general proposition, ownership in real property necessarily encompasses "background principles of the State's law of property[,] . . . which inhere in the title itself').

^{138.} See supra notes 82-83 and accompanying text.

^{139.} See infra notes 203-29 and accompanying text.

Each of these five constitutional sources of authority is addressed in turn.

A. A limited and prudent application of state action theory.

As I have already briefly discussed, ¹⁴⁰ one source of the qualified constitutional right is state action theory itself. The qualified constitutional right is a limited and prudent application of state action theory to the municipal creation of private entities that often perform public functions. More particularly, this source of constitutional authority derives from the recognition that: (1) municipal privatization and load-shedding policies have given rise to many larger territorial community associations which are the functional equivalent of municipalities, but courts generally do not recognize these community associations as "state actors"; ¹⁴¹ and (2) residents and nonresidents of these associations are thereby deprived of a constitutional remedy for abridgment of fundamental rights by such associations. ¹⁴²

Some larger community associations are, to a considerable extent, private sector analogues to cities and towns. ¹⁴³ For example, some territorial community associations exercise authority over a network of streets, utilities, sewage treatment, open space, and recreational facilities. ¹⁴⁴ For those territorial community associations with dominion over streets, the association typically provides services such as street cleaning, street maintenance, trash collection, and security. ¹⁴⁵

Moreover, community associations are financed by mandatory assessments on their constituent homeowners. The association's assessment power is, for practical purposes, a *taxing power*. As

^{140.} See supra notes 40-41 and accompanying text.

^{141.} See supra notes 38-45 and accompanying text.

^{142.} As to a sampling of the many cases in which courts have declined to apply state action theory to community associations (and thereby declined to provide a constitutional remedy to parties who were aggrieved by the actions of community associations), see supra note 46.

^{143.} An example of very large and complex community association—resembling a small city—is Sun City, a community association in Arizona. Sun City has 46,000 residents and ten shopping centers, which are open to residents and nonresidents alike. The Sun City community association operates parks, libraries, and a fire department. GARREAU, *supra* note 8, at 184. Another large and complex community association is Reston, a community association located in northern Virginia. Reston is spread over 74,000 acres and has a population of over 35,000. It contains 12,500 residential units and over 500 businesses. It also has twenty-one churches, four shopping centers, eight public schools, and a sewage treatment plant. The streets and businesses are open to the general public. *See* Katharine Rosenberry, *Condominium and Homeowner Associations: Should They Be Treated Like Mini-Governments?*, in U.S. ADVISORY COMM'N, *supra* note 2, at 71-72.

 $^{144.\} See\ id.$

^{145.} See U.S. ADVISORY COMM'N., supra note 2, at 12-13.

with municipal real estate taxes, community association assessments are used to pay for local services. The amount of community association assessments, like the amount of municipal real estate taxes, typically varies in proportion to the relative value of the residence. A homeowner's failure to pay an assessment, like the failure to pay a municipal real estate tax, results in a lien on the residence and, ultimately, may lead to the forced sale of the residence through the enforcement of the lien. Plainly, community association assessments are the functional equivalent of municipal real estate taxes.

The powers exercised by community associations are broad, and—like those counterpart powers exercised affect by municipalities—directly affect the daily lives of individuals and families in that most constitutionally sacrosanct of locations: the home. Community associations issue rules of general applicability affecting residents—as well as nonresidents—within the associations' territorial jurisdiction. For example, community associations typically exercise extensive land use powers traditionally associated with the municipal zoning and police-power authority, such as the review of proposed home alterations and enforcement of rules governing home occupancy. 148 Community association rules sometimes restrict the age of those who may own homes in the community, the number and ages of overnight visitors, the color a homeowner may paint her house, whether a homeowner may build an addition to her house, whether residents may assemble in streets and open spaces, and whether a homeowner may display political signs on her home that are visible to the adjoining street. 149 An infraction of the rules may lead to the imposition of a penalty against a homeowner or to the denial of the right to use the facilities backed by judicial injunction. 150

Undoubtedly, if these same powers were exercised by public officials operating under color of public law (as distinct from such powers exercised by community-association officials operating under the authority of private servitudes backed by judicial enforcement), such powers would, under many circumstances, be held as an unconstitutional abridgement of rights. But, under current law,

^{146.} In condominium associations, assessments usually are based on the size of the unit. By contrast, homeowner associations typically charge equal fees regardless of the size of the unit. See U.S. ADVISORY COMM'N, supra note 2, at 18.

^{147.} The Constitution and Private Government, supra note 11, at 536-37.

^{148.} See DILGER, supra note 4, at 23-24.

^{149.} See supra notes 12-17 and accompanying text.

^{150.} The Constitution and Private Government, supra note 11, at 469-71.

the nominal public-private distinction holds sway,¹⁵¹ meaning that constitutional strictures do not attach to the governance of territorial community associations.

As previously noted, direct application of state action theory to established community associations has rarely occurred in the past, and is unlikely to be a viable legal principle in the future even if the present trend toward privatization of new communities continues unabated. Because an established community association has acquired vested rights of property and contract, rigid application of state action theory in this context may run afoul of countervailing constitutional values that underlie rights of private property and private association.

Against this backdrop, the recognition of a qualified constitutional right of a subdivision developer to dedicate land for public use represents a limited and prudent application of state action theory. As previously noted, the qualified constitutional right shifts the focus of the judicial inquiry from established community associations to the decision-making process that leads to the formation of such associations, and ensures that such formation is not the product of undue governmental coercion. Thus, the qualified constitutional right is thereby intended to be limited to only those community associations that—at their inception—are the product of municipal policy-making.

As previously noted, the qualified constitutional right exclusively belongs to the subdivision developer, who may or may not elect to exercise that right in furtherance of its own interest as well as in the public interest.¹⁵⁴ Crucially, it is the prophylactic value of the qualified constitutional right that distinguishes it from other more expansive and unworkable forms of state action doctrine that are directed at the product, rather than the source, of state action.

The qualified constitutional right aligns itself with the interests of the property owner at the point of community formation and does so by giving the property owner *more property rights*. The substantive property rights conferred include the subdivision developer's right to dedicate land for public use and thereby be re-

^{151.} See supra notes 38-46 and accompanying text. For a sampling of the many cases in which courts have declined to apply state action theory to community associations and instead have held that community associations are wholly private entities, see *supra* note 46.

^{152.} See supra notes 38-46 and accompanying text.

^{153.} For a discussion of the substantial evidence that suggests that the continued proliferation of community associations is, to a considerable extent, the direct product of conscious and deliberate government policy aimed at load-shedding municipal functions and services onto newly created private communities, see *supra* notes 24-37 and accompanying text.

^{154.} See supra note 126 and accompanying text.

lieved of the burden of maintaining the land and providing services that until recently were regarded as traditional municipal services. In this way, the qualified constitutional right seeks to establish a rare alignment of public interest and private interest and to focus and direct that private interest toward the preservation and strengthening of core constitutional values implicit in traditional public communities.

If the subdivision developer does not invoke the qualified constitutional right, then it can be presumed that the developer does not seek to dedicate land for streets and parks and is inclined to establish a community association to operate and maintain these facilities. If, however, the subdivision developer does invoke the qualified right, then it can be presumed that privatization decision originated from local government itself. In this sense, affording the developer this remedy—in one stroke—resolves the critical and often difficult question (that otherwise would arise in other litigation contexts) as to whether or not a community association is the product of government coercion—and hence, a product of "state action" rather than the voluntary choice of the private sector. The remedy itself constitutes the resolution of that question.

The qualified constitutional right obviously will not eliminate the establishment of new community associations, nor will it provide a remedy for aggrieved homeowners, renters, or nonresidents once an association is established.¹⁵⁵ It will, however, provide a mechanism to reduce municipal service load-shedding and privatization that is antithetical to the public interest. It will promote public constitutional values that are implicit in public streets and parks. It will do all of this without abridging countervailing private constitutional values that only attach once a community is established and once vested rights of property and contract come into being.¹⁵⁶

B. Application of constitutional values that are closely associated with the availability of a public commons, including First Amendment rights that attach to speech and association on public (but not private) streets and parks.

The qualified constitutional right of a subdivision developer to dedicate land for public use is also rooted in core constitutional values that are closely associated with the availability of public

^{155.} For further discussion of the scope and application of the qualified constitutional right, see Part IV, *infra. See infra* notes 229-38 and accompanying text.

156. See id.

land in traditional communities, including, most importantly, the existence of public streets and parks that have long been regarded as "traditional public fora" under established First Amendment principles. ¹⁵⁷ As to the constitutional significance of publicly owned streets and parks, it is well to recall Justice Roberts' famous concurring opinion that laid the groundwork for the Supreme Court's later recognition of the public forum doctrine:

Wherever the title of streets and parks may rest, they have immemorially been held in trust for the use of the public and, time out of mind, have been used for purposes of assembly, communicating thoughts between citizens, and discussing public questions. Such use of the streets and public places has, from ancient times, been a part of the privileges, immunities, rights, and liberties of citizens. The privilege of a citizen of the United States to use the streets and parks for communication of views on national questions may be regulated in the interest of all; it is not absolute, but relative, and must be exercised in subordination to the general comfort and convenience, and in consonance with peace and good order; but it must not, in the guise of regulation, be abridged or denied. 158

Thus, under Justice Roberts' dictum, the traditional public forum was grounded in the recognition that public streets and parks have "been held in trust for the use of the public" and "time out of mind . . ., have been used for purposes of assembly, communicating thought between citizens, and discussing public questions." As one commentator has noted, Justice Roberts' concept of a public forum for speech and assembly—later adopted by the Court for use tablished "a kind of First-Amendment type easement" on public streets and parks.

^{157.} See, e.g., Frisby v. Schultz, 487 U.S. 474, 480 (1988) (stating that "we have repeatedly referred to public streets as the archetype of a traditional public forum," and that "[t]ime out of mind' public streets and sidewalks have been used for public assembly and debate."); Perry Educ. Ass'n v. Perry Local Educators' Ass'n, 460 U.S. 37, 45 (1983); Carey v. Brown, 447 U.S. 455, 460 (1980); Hudgens v. NLRB, 424 U.S. 507, 515 (1976); Cox v. New Hampshire, 312 U.S. 569, 574 (1941).

^{158.} Hague v. Comm. of Indus. Orgs. 307 U.S. 496, 515-16 (1939) (Roberts, J., concurring).

^{159.} Id. at 515.

^{160.} The Supreme Court formally adopted the public forum doctrine in $Schneider\ v.$ New Jersey, 308 U.S. 147 (1939).

^{161.} Harry Kalven Jr., *The Concept of the Public Forum: Cox v. Louisiana*,1965 SUP. Ct. Rev. 1, 13.

In the nearly seven decades since Justice Roberts' opinion in *Hague*, the Court has repeatedly reaffirmed that public streets and parks occupy a "special position in terms of First Amendment protection." ¹⁶² In such places, the government's ability to permissibly restrict expressive conduct is very limited: the government may enforce reasonable time, place, and manner regulations as long as the restrictions "are content-neutral, are narrowly tailored to serve a significant government interest, and leave open ample alternative channels of communication." ¹⁶³ In a traditional public forum, "any restriction based on the content of . . . speech must satisfy strict scrutiny, that is, the restriction must be narrowly tailored to serve a compelling government interest." ¹⁶⁴

Justice Roberts' First Amendment "easement" attaches only to *public* streets and parks. When the Court adopted the public forum doctrine, public streets and parks were available in almost all municipalities—from the great cities to small rural hamlets. Seventy years later, the present trend of privatization of the public commons portends a literal diminution of public space where people once used to be guaranteed rights of speech and association secured by the First Amendment. Indeed, in light of the fact that public streets and parks are fast becoming an endangered species in many high-growth areas of the United States, 167 the Supreme

^{162.} United States v. Grace, 461 U.S. 171, 180 (1983); see also Frisby v. Schultz, 487 U.S. 474, 480 (1988) (stating that "we have repeatedly referred to public streets as the archetype of a traditional public forum," and that "'[t]ime out of mind' public streets and sidewalks have been used for public assembly and debate. . . ."); Perry Educ. Ass'n v. Perry Local Educators' Ass'n, 460 U.S. 37, 45 (1983); Carey v. Brown, 447 U.S. 455, 460 (1980); Hudgens v. NLRB, 424 U.S. 507, 515 (1976); Cox v. New Hampshire, 312 U.S. 569, 574 (1941).

^{163.} Perry Educ. Ass'n, 460 U.S. at 45; see also Heffron v. Int'l Soc'y of Krishna Consciousness, 452 U.S. 640, 647, 654 (1981); Grayned v. City of Rockford, 408 U.S. 104, 115, (1972); Cox v. Louisiana, 379 U.S. 559, 562-63 (1965).

^{164.} Pleasant Grove v. Summum, 555 U.S. 460, 469 (2009).

^{165.} Kalven, supra note 161, at 13.

^{166.} See The Constitution and Private Government, supra note 11, at 480 (stating that "[i]n 1946, the year Marsh was decided, a human settlement consisting of homes, streets and businesses could be fairly characterized as the sine qua non of a 'town'"); KENNETH T. JACKSON, CRABGRASS FRONTIER: THE SUBURBANIZATION OF THE UNITED STATES 100-02, 184-85, 238-43 (1985) (comparing the dominant patterns of suburban development in the United States over the past century).

^{167.} DILGER, *supra* note 4, at 18 ("According to CAI, estimates..., nearly all new residential development in California, Florida, New York, Texas, and suburban Washington, D.C., is governed by [residential community association]."); Batchis, *supra* note 22, at 345 (noting that for many homebuyers in "the more recently developed Sun Belt regions of the country... there is little choice, unless their home search is to be severely constrained, but to submit to membership in a homeowners association").

Court's public forum doctrine—once universally available in virtually all communities—is in danger of losing its vitality and practical application in these high-growth areas. To the extent that private communities continue to proliferate, Justice Roberts' vision of a universal public *physical* realm available in all communities—and attendant First Amendment values that attach to that public realm—are gravely threatened.

Against this backdrop, the qualified constitutional right is offered as one means to promote, whenever possible, First Amendment values in new community developments. However, the qualified constitutional right is not a cure-all. The qualified constitutional right will not import a First Amendment "easement" onto private land. It will not open up new lines of communications in regions of the United States that have already substantially lost the opportunity to establish new public fora. Furthermore, as previously noted, because the qualified right belongs exclusively to the subdivision developer, its remedial function comes into being only when the subdivision developer seeks public dedication. The qualified right does not have any force and effect when the developer, on his or her own accord, chooses to forgo public streets and parks.

Nevertheless, the connection between the qualified constitutional right and underlying First Amendment values is strong and compelling. Because government regulation of speech in a traditional public forum is subject to strict scrutiny, 170 it properly follows that local government development policy (that is, a local government's categorical refusal to accept dedication of land for public streets and parks) that has the effect of foreclosing the establishment of new public fora also should be subject to strict scrutiny. After all, if there are no traditional public fora in a particular community as a direct result of government policy, then the unique speech and associational rights (that attach in a traditional public fora) are just as surely lost as would have been the case had there

^{168.} See supra note 167.

^{169.} See supra notes 154-55 and accompanying text.

^{170.} See supra note 109 and accompanying text.

been a traditional public forum and had government categorically denied a speaker the right to speak in the public forum. Even in the Internet era, the traditional public forum of streets and parks should be preserved and strengthened.¹⁷¹

171. As to the subset of private communities that are gated, other substantive constitutional rights are adversely affected beyond the First Amendment's right of free speech and association. I briefly discuss herein the particular losses of substantive constitutional rights that are associated with the establishment of a gated community.

By way of background, the Census Bureau in 2009 reported that over ten million households in the United States—about one in ten of all U.S. households—resided in gated communities. U.S. CENSUS BUREAU, AMERICAN HOUSING SURVEY FOR THE UNITED STATES: 2009, 27 tbl.2-8 (2011) available at http://census.gov/content/dam/Census/library/publicatio ns/2011/demo/h150-09.pdf. That figure represented more than a tripling of the number of such households in a decade—a period in which the overall population of the United States increased by less than eleven percent. See EDWARD J. BLAKELY & MARY GAIL SNYDER, FORTRESS AMERICA: GATED COMMUNITIES IN THE UNITED STATES 7 (1999) (estimating that, as of 1997, there were three million housing units contained in gated communities); U.S. CENSUS BUREAU, STATISTICAL ABSTRACT OF THE UNITED STATES, 8-9 tbl.2, 3 (2012) (estimating that between 1997 and 2007, overall U.S. population increased from approximately 274 million to 301 million.). If present trends continue, by mid-century a substantial portion of the United States population will live behind walls and guardhouses, and thereby "protected" from random interactions with strangers in the streets and neighborhoods in which they live.

As to the subset of private communities that are gated, the substantive constitutional rights that are adversely affected (beyond the First Amendment's right of free speech and association) include: (1) freedom from unreasonable searches and seizures that attaches to searches by state actors on public rights-of-way and elsewhere but does not attach to searches by private parties upon entry to roadways in gated communities; and (2) the general right to travel that attaches to public rights-of-way but does not attach to streets and common areas in private gated communities. In this context, to the extent that developers of private communities elect to add gates (which they could not do if the streets and parks within the community were instead owned by government), the qualified constitutional right seeks to preserve and protect core constitutional freedoms on territory that traditionally has been part of the commonweal.

The widespread growth of the subset of community associations that are gated communities is corrosive of the values underlying the Fourth Amendment's guarantee against unreasonable searches and seizures. If a local government were to construct gates and guardhouses on public streets and were to staff the guardhouses with police officers directed to question and search all who pass through, there can be no doubt that such an arrangement would run afoul of the Fourth Amendment. See generally John B. Owens, Westec Story: Gated Communities and the Fourth Amendment, 34 AM. CRIM. L. REV. 1127, 1156-60 (1997) (arguing that private security guards employed in gated communities, under certain circumstances, should be deemed to be "state actors" for purposes of the Fourth and Fourteenth Amendments, thereby subjecting these guards to Fourth Amendment limitations on the exercise of their police-like functions). To the extent that the qualified constitutional right is offered as one means to promote, whenever possible, public streets in new community development whenever possible, the purposes of the Fourth Amendment will be served.

Similarly, the widespread establishment of gated communities throughout the United States can be viewed as having an adverse effect on the constitutional right to travel. That right, although nowhere expressly referenced in the Constitution, has "long been recognized as a basic right under the Constitution." United States v. Guest, 383 U.S. 745, 758 (1966). See, e.g., Shapiro v. Thompson, 394 U.S. 618, 629 (1969) ("This Court long ago recognized that the nature of our Federal Union and our constitutional concepts of personal liberty unite to require that all citizens be free to travel throughout the length and breadth of our land uninhibited by statutes, rules, or regulations which unreasonably burden or restrict this movement."); Passenger Cases, 48 U.S. (7 How.) 283, 492 (1849) ("For all the great purposes for which the Federal government was formed, we are one people, with one common country. We are all citizens of the United States; and, as members of the same community,

C. Application of Equal Protection principles in order to preclude municipalities from discriminating against newcomers by imposing service obligations and an effective tax burden that are markedly different than the service obligations and effective tax burden that are applicable to residents of the established areas of the municipality.

In this section I discuss and apply a constitutional right that arises not from property itself but from the governmental taxing power as applied to property. The right is grounded in equal protection principles.

Although government has broad discretion to impose taxes, that discretion is not unlimited. Under certain circumstances, the Equal Protection Clause "protects the individual from state action which selects him out for discriminatory treatment by subjecting him to taxes not imposed on others of the same class."172 That principle has long been applied to assessments of real property that form the basis of a scheme of real estate taxation. For example, in Sioux City Bridge Co. v. Dakota County, 173 the Supreme Court recognized an equal protection claim where one taxpayer's property was assessed at 100 percent of its value while all others were assessed at 55 percent without the government articulating any differences in the properties that would justify the disparate assessments. 174 More recently, in Allegheny Pittsburgh Coal Co. v. County Commission of Webster County, 175 the Supreme Court concluded the county taxing authority denied the plaintiff taxpayers equal protection by setting their property tax assessment at fifty percent of market value based on recent purchase sale prices, but taxing other property owners at fifty percent of market value based on old appraisal values of their land (that had not been recently sold).¹⁷⁶ According to the Court, "[t]his practice resulted in gross disparities in the assessed value of generally comparable

must have the right to pass and repass through every part of it without interruption, as freely as in our own States.").

As over a century of Supreme Court decisions confirm, the constitutional right to travel was founded on the assumption of near universality of public streets in communities throughout the United States—an assumption that has been rendered increasingly tenuous by virtue of the growth in the number of gated communities. Here again, to the extent that the qualified constitutional right is offered as one means to promote, whenever possible, public streets in new community development, the purposes of the constitutional right to travel also will be served.

^{172.} Hillsborough v. Cromwell, 326 U.S. 620, 623 (1946).

^{173.} Sioux City Bridge Co. v. Dakota Cnty. 260 U.S. 441 (1923).

^{174.} Id. at 445-47.

^{175. 488} U.S. 336 (1989).

 $^{176.\} Id.$ at 338-42. As a consequence, new property owners were assessed at "roughly 8 to 35 times" the rate of those who had owned their property longer. Id. at 344.

property," thereby denying the plaintiffs equal protection. 177 The *Allegheny* decision reaffirmed that the Equal Protection Clause is violated by state action that deprives a citizen of "rough equality in tax treatment of similarly situated property owners" 178

The discriminatory taxing policy that was held invalid by the Court in *Allegheny County* was commonly referred to as the "welcome stranger" rule. 179 Under that rule, newcomers to a taxing jurisdiction are taxed at a far higher effective rate than long-time residents. This discriminatory taxing policy was driven by the reality that local elected officials had much to gain by effectively under-assessing the homes and businesses of long-time residents at the expense of newcomers.

The broad constitutional requirement of "rough equality in tax treatment of similarly situated property owners" applies to a scheme of real property taxation imposed by state or local units of government. Traditionally understood, that constitutional requirement does not apply to the fees charged by private homeowner associations. Because associations are not deemed state actors, the fees charged by them are not "taxes."

However, community association assessments are the functional equivalent of municipal real estate taxes. Community associations are financed by *mandatory* assessments.¹⁸⁰ As with municipal real estate taxes, community association assessments are levied on residential real property, and the proceeds of the assessments are used to pay for local services. The amount of community association assessments, like the amount of municipal real estate taxes, typically varies in proportion to the relative value of the residence. A homeowner's failure to pay an assessment, like the failure to pay a municipal real estate tax, results in a lien on the residence and, ultimately, may lead to the forced sale of the residence through the enforcement of the lien.¹⁸¹

Although community association assessments are, for all intents and purposes, the functional equivalent of municipal real estate taxes, I am *not* here proposing that courts simply deem community associations to be governmental entities for purposes of the Fourteenth Amendment by reason of the fact that community associations exercise a *de facto* taxing power that is essentially governmental in nature. Instead, I am suggesting a much more mod-

^{177.} Id. at 338.

^{178.} Id. at 343.

^{179.} See Michael Handler, Goodbye to the Welcome Stranger Rule, 4 PROB. & PROP. 13 (Sept./Oct. 1990).

^{180.} See supra notes 9-10 and accompanying text.

^{181.} See Giantomasi, supra note 10; see also Inwood N. Homeowners' Ass'n v. Harris, 736 S.W.2d 632 (Tex. App. 1987) (holding that homeowners are not protected against foreclosure for failure to pay assessments).

est application of constitutional principles that views the community association assessment as part of an overall scheme of taxation that is established by local government through its requirement that subdivision developers establish community associations as a mechanism to pay for traditionally municipal services. On this view the constitutional infirmity arises *only* under equal protection principles and *only* when a municipality imposes an effective tax burden on a new community (including privatized real estate taxes in the form of mandatory homeowner association fees) that is markedly different than the effective tax burden on the remainder of the municipality.

Importantly, such a violation is triggered only by categorical municipal policy to refuse to accept dedication of new streets and parks and to impose public service exactions on subdivision developers; the violation is not triggered by a mere voluntary decision on the part of a developer to establish a community association. When a local government requires the establishment of a community association as a condition of land use approval and requires that the community association deliver certain traditionally municipal services funded out of homeowner fees, the local government, in effect, has created a special taxing district. The local government's establishment of the special taxing district—and the differential tax treatment of residents within the district—are antithetical to the equal protection mandate of "rough equality in tax treatment of similarly situated property owners." ¹⁸²

More particularly, the equal protection violation arises because the municipality—through its subdivision and taxing policies—has created a two-tiered structure of taxation to pay for municipal services. The first tier is for the newcomers residing in newly established community associations; the second tier is for existing tax-payers residing in other parts of town that are not subject to community associations. The two-tiered taxation policy makes new home development more expensive by saddling homeowners with the cost of operating and maintaining traditionally municipal infrastructure. The cost of such operations is paid for by a fee to

^{182.} Allegheny Pittsburgh Coal Co. v. C
nty. Comm'n of Webster C
nty., 488 U.S. $336,\,343\,(1989).$

^{183.} By way of example, a homebuilder in California estimated that the approximate cost (in the form of homeowners fees) of private streets and private open space in a subdivision of 50 to 150 homes is in the range of \$2,000 to \$3,000 per homeowner per year. Unpublished written statement dated July 9, 2006 of David Lauletta, Director of Forward Planning, Shea Homes of Southern California, Westlake, California (on file with the author). The estimate would be considerably higher if the homeowners' association were also required to provide private water and sewer service. A New Jersey homebuilder estimated that the annual cost of an on-site sewage treatment facility is \$1,000 per homeowner per year. Unpublished written statement dated July 31, 2006 of Steven Dahl, Vice President, K. Kovnanian Companies, Edison, New Jersey (on file with the author).

the association. Yet homeowners seldom get a tax break from municipal real estate taxes to offset the cost of the fee¹⁸⁴—even though the fee may cover services that the municipality provides directly to residents outside of the association.¹⁸⁵

This two-tiered taxation policy is merely a more sophisticated version of the "welcome stranger" method of taxation—the discriminatory governmental tax policy that the Supreme Court invalidated in Allegheny. 186 As previously noted, the Court in Allegheny invalidated a taxation scheme premised on systematic underassessment of long-held property and systematic over-assessment of newly purchased property. The invalidated taxing scheme was designed to benefit long-time residents and to impose a disproportionate burden on newcomers. In other words, the taxing policy discriminated against newcomers and had no rational basis other than the obvious political advantage of keeping taxes lower for the entrenched political constituency of local elected officials. 187 That is precisely the same purpose and effect as that achieved through the two-tiered municipal taxation policy premised on a municipality's categorical denial of dedication of streets and parks and the concomitant municipal policy of requiring a subdivision developer to establish a community association as a mechanism to pay for traditionally municipal services to residents of the new subdivision (while the municipality continues to pay for the same services to residents outside the new subdivision). Allegheny—properly con-

^{184.} New Jersey—alone among the states—has attempted to address this inequality by statute on a statewide basis. In 1990, New Jersey enacted the Municipal Services Act ("MSA" or "Act"), which requires all local governments to provide certain municipal services to qualifying CICs, or, in the alternative, to require local governments to reimburse community associations for the value of the services furnished by the associations themselves. See N.J. STAT. ANN. §§ 40:67-23.2 to -23.8 (West 2013). Covered services include refuse collection, snow removal, and street lighting. See id. § 40:67-23.3. The MSA, while reducing economic incentives for New Jersey municipalities to privatize, falls far short of eliminating those incentives entirely. For example, the MSA does not require municipal reimbursement of costs associated with the operation of a substantial open space, a private sewage treatment plant or storm drains. Hence, a municipality that requires a developer to establish and operate these services will reap an economic benefit. Therefore, notwithstanding the MSA, New Jersey municipalities continue to have an incentive to require a developer to establish a CIC as a condition of land-use approval.

In any event, New Jersey appears to be the only state that has attempted to redress the tax inequity created by municipal off-loading of services to developers and, ultimately, residents of community associations. In the absence of a remedial statute or ordinance in any particular state or jurisdiction, the tax inequity remains widespread throughout the United States. Consequently, the equal protection violation discussed in the text above remains broadly applicable.

^{185.} See McKenzie, supra note 21, at 3 ("The fiscal benefits to local government [deriving from the provision of traditionally municipal services by community associations in new subdivisions] were easy to see: these new homeowners would be paying a full share of property taxes but would not receive many public services, creating a windfall for the public treasury.").

^{186.} Allegheny Pittsburgh, 488 U.S. at 346 (1989).

^{187.} Id. at 343.

strued—leads inexorably to the invalidation of this modern and sophisticated incarnation of the "welcome stranger" rule.

The right embodied by the invalidation of this latest manifestation of the "welcome stranger" rule under Allegheny also can be expressed in terms of the constitutional remedy that is the subject of this article: that is, the qualified constitutional right of a subdivision developer to dedicate streets and parks to a municipality. If, under *Allegheny*, the two-tiered system of community association taxation is invalid, then the most efficient and systemic remedy rather than case-by-case adjudication—is for courts to recognize the qualified constitutional right of a subdivision developer to dedicate streets and parks to a municipality. That remedy would have a salutary prophylactic effect of curtailing the forbidden practice. It would have the effect of giving the developer a means to lower housing costs by preventing municipal off-loading of services at the critical stage of land use approval. It would prevent categorical nodedication policies that exist in many localities today. 188 Moreover, as to the issue of the scope of dedication of streets and parks, it would shift the balance of power between municipality and subdivision developer and require the municipality to make a showing that a refusal to accept dedication is based on something other than the forbidden purpose of discrimination against newcomers. Finally, it would preserve the developer's ability to voluntarily establish a community association, as long as such establishment is not the subject of municipal coercion.

In summary, the equal protection principle identified above provides an additional source of constitutional authority for the recognition of a qualified constitutional right of a subdivision developer to dedicate streets and parks to a municipality. The application of this equal protection principle—although appropriate and warranted when considered in isolation—is rendered even more compelling when properly considered in tandem with the other sources of constitutional authority identified in this article.

D. Application of the constitutional theory of representation reinforcement.

A leading constitutional theorist, John Hart Ely, has championed the theory of *representation-reinforcement*, which holds that "unblocking stoppages in the democratic process is what judicial review ought preeminently to be about." ¹⁸⁹ As Hart explains, such

^{188.} See supra notes 24-37 and accompanying text.

^{189.} ELY, supra note 133, at 117. Ely drew inspiration for his theory of representation reinforcement from the famous footnote four of *United States v. Carolene Prods. Co.*, 304

stoppages in the democratic process typically occur "when . . . the ins are choking off the channels of political change to ensure that they will stay in and the outs will stay out." 190

Hart's theory of representation-reinforcement has obvious application to a two-tiered municipal taxation policy premised on a municipality's categorical denial of dedication of streets and parks, and the concomitant municipal policy of requiring a subdivision developer to establish a community association as a mechanism to pay for traditionally municipal services to residents of the new subdivision (while the municipality continues to pay for the same services to residents outside the new subdivision). Such a policy—in its immediate implementation—directly involves only the developer and the municipality. Yet the policy binds not only the developer, but also future generations of homeowners that will be living in the community. The new community will be established in a certain way—with private functions and services—and, in most cases, the initial privatization decision will be permanent and binding. 191

The future residents of the community association, of course, play no direct role in this critical decision-making process, ¹⁹² but will be bound by an intricate system of rules that are fashioned in the course of this process—rules that, once implemented, typically may be modified only by a supermajority vote of the residents. ¹⁹³

As previously noted, a municipality, under present law, has virtually unfettered discretion to privatize new communities and to categorically deny dedication. See supra notes 23-37 and accompanying text. Thus, even assuming the developer could be said to be the future residents' predecessor-in-interest (a problematic formulation, in any event), the developer is in no position, under current law, to overcome the municipality's interests, which are to minimize its own expenditures (through public service exactions) and to maximize its revenues. Those interests are antithetical to the interests of the future residents of the subdivision.

In short, the future residents of a community association (that is established as a consequence of the municipal imposition of a public service exaction) presently *have no effective predecessor-in-interest* within the context of the land-use approval process that gave rise to the privatized community.

193. See McKenzie, supra note 2, at 21, 127; U.S. Advisory Comm'n, supra note 2, at 16. As Professor McKenzie notes, changes to community-association rules are rendered particularly difficult because the governing documents typically require a supermajority not just of those who have a cast a vote, but rather of all who are eligible to vote by virtue of

U.S. 144 (1938), wherein the Supreme Court first envisioned a more aggressive judicial role in protecting "discrete and insular minorities." *Id.* at 152, n.4. Many subsequent developments in constitutional law and statutory interpretation can be understood in terms of Ely's theory of representation reinforcement. *See generally* David A Strauss, *Modernization and Representation Reinforcement: An Essay in Memory of John Hart Ely*, 57 STAN. L. REV. 761 (2004).

^{190.} Id. at 103.

^{191.} See Trust and Community, supra note 23, at 1128.

^{192.} Of course, future residents of *any* community play no direct role in the establishment or ratification of a community's legal regime. To cite only the most obvious example: none of us were alive when the Constitution was ratified. But there exists a critical distinction between (on the one hand) the establishment of a legal regime by what may be fairly characterized as the future residents' *predecessors-in-interest* and (on the other hand) the circumstances here presented.

Nor can it be fairly said that these residents "voted with their feet," in light of the dearth of non-association related housing—particularly affordable housing—in many major regional housing markets of the United States, especially in fast-growing areas of the Sunbelt. 194

As previously discussed, a local government's no-dedication policy gives rise to an unequal system of taxation as between the newcomers and the existing residents. ¹⁹⁵ Typically, the newcomers shoulder a greater effective tax burden consisting of ordinary real estate taxes *plus* community association fees to cover the cost of privatized services (that elsewhere in the same municipality may well be provided by the municipality itself at no further cost to those residents). ¹⁹⁶ Surely, this is powerful indicia of a failure of the ordinary democratic processes of government. ¹⁹⁷

Viewed broadly, local governments, by adopting a policy of nodedication and by requiring the establishment of community associations to deliver traditionally municipal services, are effectively creating a second tier of municipality—with no meaningful oversight of the process¹98 and, indeed, virtually no public recognition of either the process or the policy choices that are leading to this result.¹99 Moreover, those individuals who are most directly affected by the exaction policy—that is, the residents of the new community—are unrepresented in the process. Indeed, this constituency literally does not even exist at the time that the process occurs.

For all of these reasons, heightened judicial review of a local government no-dedication policy—consistent with the principles underlying the constitutional theory of representation-

ownership in the community association. MCKENZIE, *supra* note 2, at 21. For this reason, among others, "the developer's idea of how people should live is, to a large extent, cast in concrete." *Id.*

^{194.} See supra notes 2-6 and accompanying text.

^{195.} See supra notes 124-26 and accompanying text.

^{196.} See id

^{197.} Indeed, it should not be forgotten that the American Revolution was fought in part because of the colonists' revulsion with a regime of "taxation without representation."

^{198.} Municipalities imposing public service exactions do so with seemingly unfettered discretion. I have not found a single published decision challenging a municipality's authority to require a subdivision developer to establish a community association as a condition of land use approval or to assume responsibility for traditionally municipal services as a condition of land use approval.

^{199.} The phenomenon of the privatization of traditionally municipal functions and services through the establishment of community associations has been termed "the most significant privatization of local government responsibilities in recent times." U.S. ADVISORY COMM'N, *supra* note 1, at 18. Consider other privatization initiatives, such as, for example, periodic proposals to privatize Social Security. Whatever the merits of privatizing Social Security, one would hope that such a far-reaching privatization proposal would be subjected to rigorous scrutiny and review by all interested parties. The point here is that "the most significant privatization of local government responsibilities in recent times" has *not* only been *not* subject to rigorous scrutiny or review, the process has been largely invisible.

reinforcement—would appear both appropriate and warranted.²⁰⁰ If, as Professor Ely contended, "unblocking stoppages in the democratic process is what judicial review ought preeminently to be about,"²⁰¹ then courts properly should scrutinize carefully, in each case, the various "stoppages" intrinsic to the municipal land use approval process that imposes a mandatory community association coupled with a package of tax and services obligations that disfavors the new residents and benefits long-time residents elsewhere in the municipality.

Thus, the principle of representation reinforcement provides further support to the recognition of a qualified constitutional right of a subdivision developer to dedicate streets and parks to a municipality. More particularly, the principle of representation reinforcement properly should be deemed to apply in this context when: (1) a municipality discriminates against newcomers to the community with respect to the imposition of taxes and the delivery of municipal services, (2) the newcomers have not yet arrived in the community at the time of critical municipal decision-making approving the tax and service package to the new community and thus have no standing to challenge the discriminatory tax and service package at the time of its formulation, and (3) only the developer may effectively represent the interests of the future newcomers at the time of critical municipal decision-making affecting the formation of the community. Thus the qualified constitutional right of a subdivision developer to dedicate streets and parks to a municipality gains strength from the developer's special status as a surrogate for the interests of hundreds, or even thousands, of future residents of the municipality.

As discussed in preceding sections (with respect to other applicable constitutional theories), the application of this constitutional doctrine should not be considered in isolation. Rather, the application of this doctrine is rendered even more compelling when properly considered in tandem with the other sources of constitutional authority identified in this Article.

^{200.} As a practical matter, only the developer could be expected to have standing to bring suit against a municipality to overturn a public-service exaction at the time of its imposition. Thus, although the representation-reinforcement theory would, in this context, be intended to ultimately benefit the future residents of the community, the successful application of the theory would require the developer to, in effect, "stand in the shoes" of the future residents.

^{201.} ELY, supra note 133, at 117.

E. Application of property rights principles to the centuries-old common law right to voluntarily dedicate land for public use.

Finally, the qualified constitutional right (of a subdivision developer to dedicate streets and parks) can be understood as being grounded in the centuries-old right of voluntary dedication, which, I argue, is incorporated into the "background" law of property and, in turn, is properly deemed to be of constitutional dimension. In Part II of this Article, I discussed at length the historical and legal background the common law right to voluntarily dedicate land for public use.²⁰² In this section, I propose that the common law right to dedicate may itself form a conceptual basis for the constitutional remedy that is proposed in this article.

In Lucas v. South Carolina Coastal Council, 505 U.S. 1003 (1992), the Supreme Court held that, as a general proposition, ownership in real property necessarily encompasses "background principles of the State's law of property[,] . . . which inhere in the title itself."²⁰³ The Lucas formulation suggests that the "ancient"²⁰⁴ law of voluntary dedication is properly understood as a property right, which, in the words of the Lucas Court, "inhere[s] in the title itself."²⁰⁵

Concededly, the application of the Lucas principle as a means to constitutionalize, in part, the law of voluntary dedication is somewhat paradoxical and counterintuitive. In broad terms, Lucas arose from a governmental decision to take property for public use without the government paying compensation. The taking was accomplished by the government without the landowner's consent. The Lucas doctrine is a means by which the landowner may compel the government to pay compensation for what the government has taken. In stark contrast, when a landowner is seeking to dedicate its property to the government for use as a street or park, the factual circumstances are typically the inverse of the factual circumstances in Lucas: that is, (1) the landowner desires the government to take title to the property; (2) the government does not wish to take the property; (3) no taking has, in fact, occurred either by way of transfer of title, physical occupation of the property, or

^{202.} See supra notes 43-89 and accompanying text.

^{203.} Lucas v. S.C. Coastal Council, 505 U.S. 1003, 1029 (1992).

^{204.} Friends of the Trails v. Blasius, 93 Cal. Rptr. 2d 193, 201 (Cal. Ct. App. 2000).

^{205.} Lucas, 505 U.S. at 1029.

^{206.} Strictly speaking, the *Lucas* doctrine holds that a "taking" occurs *notwithstanding* that the landowner retains title to the property. Under *Lucas*, what is "taken" is not the title itself but rather all economically viable uses of the property. *Lucas*, 505 U.S. at 1027-29. This is sometimes referred to as a "regulatory taking."

^{207.} Lucas, 505 U.S. at 1007, 1030-31.

governmental deprivation of the beneficial uses of the property; and (4) the landowner does not seek *any compensation whatsoever* from the government for the transfer of its property to the government.²⁰⁸

Thus, these two forms of governmental actions (or inactions) in respect of private land appear diametrically opposed. Nevertheless, the key *Lucas* principle is readily applicable in the quite different context of dedication.

In *Lucas*, the Supreme Court held that the State's deprivation, by way of regulation, of all economically viable uses of real property constitutes a *per se* compensable taking under the Fifth Amendment.²⁰⁹ Of relevance here, the Court's "regulatory taking" analysis was informed by, and made subject to, state law principles of property and nuisance.²¹⁰ Under *Lucas*, even if a regulation had the effect of prohibiting all economically beneficial use of a particular parcel of land, the owner of the parcel nevertheless would not be entitled to compensation, provided the regulation was in accord with "background principles of the State's law of property."²¹¹ Thus, in the context of a claimed regulatory taking based on a total deprivation of economically viable use, the *Lucas* doctrine of "background principles" operates as a defense against such a "takings" claim.

As previously noted, a local government policy that categorically precludes the right of a landowner to voluntarily dedicate land for streets and parks—at issue here—constitute a sort of "mirror image" of the regulatory taking at issue in *Lucas*. Put simply, the right at issue here is not the right to avoid an uncompensated taking but rather the right to have property taken for public use under the state law doctrine of dedication. In this context, the *Lucas* doctrine of "background principles" is properly understood as a "sword," rather than as a "shield."

The mirror image of Lucas, as applied in the context of dedication, is paradoxical but not contradictory. The import of Lucas is that it establishes that, as a general proposition, ownership in real property necessarily encompasses "background principles of the State's law of property[,] . . . [which] must inhere in the title itself." 212 As described above, it is this general proposition of

^{208.} See supra notes 69-77 (discussing the common law right of dedication of private property for public use); see also infra notes 229-30 discussing the application of the proposed qualified right to dedicate.

^{209.} Lucas, 505 U.S. at 1027-29.

^{210.} Id. at 1029.

^{211.} Id.

^{212.} Id.

constitutional law, standing alone, that is readily applicable to the issues here presented.

In Part II.A, I reviewed the long history of the law of dedication. As more fully discussed therein, dedication has "ancient" roots in the common law. According to one court, "no one can doubt that there were . . . [at the time of William the Conqueror], innumerable thoroughfares and many squares and open spaces which had been dedicated to the use of the people at large." Blackstone, in his influential *Commentaries on the Law of England*, recognized dedication as "arising from the necessities of the thing or of the public." ²¹⁶

In a nineteenth century decision, the United States Supreme Court described dedication as "a well-established principle of the common law . . . sanctioned by the experience of the ages." The Court further noted:

That property may be dedicated to public use is a well-established principle of the common law. It is founded in public convenience, and has been sanctioned by the experience of the ages. Indeed, without such a principle, it would be difficult, if not impracticable, for society in an advanced state of civilization, to enjoy those advantages which belong to its condition, and which are essential to its accommodation.

The importance of this principle may not always be appreciated, but we are in a great degree dependent on it for our highways, the streets of our cities and towns, and the grounds appropriated as places of amusement or of public business, which are found in all our towns, and especially in our populous cities.²¹⁸

What was true in 1836 remains true today. The balance of "public" and "private" in community development is important. More particularly, the character of life in our urban and suburban communities is due in no small measure to the availability and use of dedication as a means to transfer private property into the public domain. The common law of dedication reflects a fundamental understanding embedded in the traditional development of private

^{213.} See supra notes 68-121 and accompanying text.

^{214.} Friends of the Trails v. Blasius, 93 Cal. Rptr. 2d 193, 201 (Cal. Ct. App. 2000).

^{215.} Appleton v. City of New York, 114 N.E. 73, 76 (N.Y. 1916) (quoting Post v. Pearsall, 22 Wend. 425, 433 (N.Y. 1839)).

^{216. 2} WILLIAM BLACKSTONE, COMMENTARIES *33.

^{217.} Id. at *712.

 $^{218. \} Id.$

^{219.} See supra notes 74-81 and accompanying text.

property: that is, that certain functions and services incident to the development and use of private property were *public* functions and services to be furnished by a *public* entity.²²⁰

It is instructive to link the Supreme Court's 1836 statement in *Mayor of New Orleans* on the importance of the law of dedication to the Court's recognition of the constitutional public forum doctrine just over a century later. In 1939, Justice Roberts, in *Hague v. Committee for Industrial Organizations*,²²¹ imparted constitutional significance to public streets and parks. Of particular relevance to the present discussion, the *Mayor of New Orleans* and *Hague* decisions each refer to the vital political, social, and economic significance of public streets and parks, and each decision employs quite sweeping terms to underscore the importance of public streets and parks in the historical development of the nation.²²²

In any event, the importance of the common law development of a landowner's qualified right to dedicate property need not *itself* depend on the relationship of the law of dedication to the constitutional public forum doctrine first recognized in *Hague*. For present purposes, the critical significance of the common law of dedication is as a *property right*, not as a right arising under the First Amendment.

More particularly, the common law right of dedication reflects a fundamental understanding embedded in the traditional development of private property: certain functions and services incident to the development and use of private property were *public* func-

^{220.} See Friends of the Trails v. Blasius, 93 Cal. Rptr 2d 193, 199 (Cal.Ct. App. 2000) (observing that "American courts have freely applied th[e] common law doctrine [of dedication], not only to streets, parks, squares, and commons, but to other places subject to public use")

^{221.} Hague v. Comm. for Idus. Org., 307 U.S. 496, 515-16 (1939).

^{222.} I already have discussed application of First Amendment public forum doctrine as a distinct source of authority for the recognition of a qualified constitutional right of a subdivision developer to dedicate streets and parks to a municipality. *See supra* notes 157-71 and accompanying text.

In the present context I reference Justice Roberts' famous concurring opinion in <code>Hague</code>, not for its constitutional significance in and of itself but because Justice Roberts' concurrence reads like a continuation of the Supreme Court's <code>Mayor</code> of <code>New Orleans</code> opinion reaffirming the vital importance of common law dedication of streets. For example, the opinion in <code>Mayor</code> of <code>New Orleans</code> refers to the law of dedication as "sanctioned in the experience of the ages" and "essential to [the] accommodation . . . [of] society in an advanced state of advanced civilization." 35 U.S. at 712.

Using remarkably similar language, Justice Roberts, in his concurring opinion in <code>Hague</code>, refers to public streets and parks as having "been held in trust for the use of the public" and "time out of mind . . . hav[ing] been used for purposes of assembly, communicating thought between citizens, and discussing public questions." 307 U.S. at 515. The link between <code>Mayor</code> of <code>New Orleans</code> and <code>Hague</code> becomes even more pronounced when one recognizes that the real estate upon which the traditional public forum doctrine is grounded (quite literally) is real estate owned by the State and obtained principally through acts of dedication by landowners.

tions and services to be furnished by a *public* entity.²²³ For example, public access to an individual subdivided lot was part of the traditional understanding, and for this a *public* road was necessary. From the public road arose other public functions and services ancillary to the road, such as utilities, curbside trash-pickup, and public police patrols of the street. Later, other neighborhood-related public amenities became the subject of dedication, such as public parks and schools.²²⁴ To obtain the benefit of these public functions and services, a property owner dedicates a portion of his or her property for these public purposes.

This brief summary of the development of the law of dedication (which is more fully set forth in Part II.A) 225 provides a solid basis by which a court could conclude that the common law of dedication constitutes part of the "background" law of property. As previously discussed, the Supreme Court in Lucas recognized that ownership in real property necessarily encompasses "background principles of the State's law of property[,] . . . which inhere in the title itself." 226 Applying Lucas, the law of dedication "inhere[s] in the title itself." 227

The import of the foregoing is *not* to eviscerate a municipality's well-settled right to individually consider and individually reject a proposed voluntary dedication.²²⁸ It is, instead, to subject the municipal decision to a somewhat higher degree of judicial scrutiny. It is to suggest that an owner's qualified right to dedicate is not to be abrogated by undue deference to the exigencies of a municipal land use policy aimed at load-shedding traditionally municipal functions and services.

In summary, the *Lucas* principle—that is, that ownership in real property necessarily encompasses "background principles of the State's law of property[,] . . . which inhere in the title itself"²²⁹—provides an additional source of constitutional authority for the recognition of a qualified constitutional right of a subdivision developer to dedicate streets and parks to a municipality. The application of the *Lucas* principle—although appropriate and warranted

^{223.} See Friends of the Trails v. Blasius, 93 Cal. Rptr. 2d 193, 199 (Cal. Ct. App. 2000) (observing that "American courts have freely applied th[e] common law doctrine [of dedication] not only to streets, parks, squares, and commons, but to other places subject to public use").

^{224.} See e.g., City of Cincinnati v. White's Lessee, 31 U.S. 431, 432 (1832) (holding that dedication of a common area rests on the same principle as the public's right to use streets); Seaway Co. v. Attorney General, 375 S.W.2d 923, 931 (Tex. Civ. App. 1964) (finding that beach had been dedicated to the public).

^{225.} See supra notes 68-110 and accompanying text.

^{226.} Lucas v. S.C. Coastal Council, 505 U.S. 1003, 1029 (1992).

^{227.} Id.

^{228.} See supra notes 91-110 and accompanying text.

^{229.} Id.

when considered in isolation—is rendered even more compelling when properly considered in tandem with the other sources of constitutional authority identified in this article.

IV. THE QUALIFIED CONSTITUTIONAL RIGHT AS APPLIED.

I have proposed judicial recognition of a qualified constitutional right of a subdivision developer to dedicate streets and parks to a municipality. In this section, I discuss the application of the qualified constitutional right in practice.

Under my conception of a qualified constitutional right to dedicate land for public use, a subdivision developer that offers up land for dedication for public streets and parks is required to receive from the municipality, at the very least, an individualized determination by the municipality of an offer to dedicate. A municipality's refusal to accept dedication triggers the right of judicial review.

Under the qualified right, a court would subject the municipality's refusal to accept dedication to heightened scrutiny. Under that standard, a municipal ordinance or informal policy that *categorically* precludes offers of dedication in new subdivisions will be struck down. Heightened scrutiny also requires—at the very least—a municipality's individualized determination of a develop-

230. Under established doctrine, when governmental action abridges rights secured by the Bill of Rights, heightened judicial scrutiny is appropriate. See Moore v. City of E. Cleveland, 431 U.S. 494, 504, n.10 (1977); United States v. Carolene Prods. Co., 304 U.S. 144, 153, n.4 (1938) ("There may be narrower scope for operation of the presumption of constitutionality when legislation appears on its face to be within a specific prohibition of the Constitution, such as those of the first ten Amendments"). As described in the text above, the proposed qualified constitutional right to dedicate private property for public use is intended to remedy government action that is in derogation of rights secured by the First Amendment, the Fourth Amendment, and the constitutional right to travel. See supra notes 140-71 and accompanying text. Therefore, it may be argued, heightened scrutiny is the appropriate standard for this reason alone.

However, my argument that heightened scrutiny is the proper standard to be applied is not based solely on the application of established doctrine arising under Carolene Products and its progeny. Rather, I argue here that close judicial scrutiny of municipal no-dedication policies arises from the unique intersection and confluence of multiple constitutional sources of authority, including: (1) A limited and prudent application of state action theory to the municipal creation of private entities that often perform public functions. See supra Part III.A. (2) Application of constitutional values that are closely associated with the availability of a public commons, including First Amendment rights that attach to speech and association on public (but not private) streets and parks. See supra Part II.B. (3) Application of equal protection principles in order to preclude municipalities from discriminating against newcomers to the community. See supra Part II.C. (4) Application of the constitutional theory of representation reinforcement. See supra Part II.D. And, (5) application of property rights principles to the centuries-old common law right to voluntarily dedicate land for public use. See supra Part II.E. These five constitutional sources of authority, considered together, provide a rationale for heightened scrutiny of municipal no-dedication policies.

er's offer to dedicate land and the municipality's written statement of reasons underlying its determination in the event that the offer of dedication is refused.

The municipality's statement of reasons is critical to the enforcement of the qualified right. Heightened scrutiny requires that a municipality's refusal of an offer of dedication must not be pretextual. Instead, the refusal must be based on sound planning principles. For example, a municipality's individualized determination will be reversed if shown to be based principally on the municipality's desire to off-load public services onto developers and, ultimately, future residents of the subdivision. These motives do not amount to the application of sound planning principles. Instead, these motives indicate impermissible discrimination against new residents of the community and improper favoritism inuring to the benefit of existing residents. The Equal Protection Clause precludes this form of economic discrimination in the application of the municipal taxing power.²³¹

As noted, a municipality may refuse to accept an offer of dedication if the refusal is in accordance with sound planning principles. For example, the qualified constitutional right to dedicate land for streets and parks will not impair a municipality's authority to refuse dedication when it can be shown that a proposed "public" street is, in reality, merely a private driveway or parking lot intended to serve only an apartment building or retail store. ²³² There is no public interest in the municipal takeover and maintenance of a private driveway or parking lot.

Furthermore, municipalities remain free to prescribe reasonable design and construction standards in connection with facilities that the developer constructs in contemplation of dedication. If a developer constructs a street, storm drain, or sewer, a municipality would not be required to accept dedication if the facility is not built in conformance with reasonable design or construction standards that the municipality imposes on itself when the municipality constructs the facility.²³³ A municipality's exercise of discretion in these and other circumstances involving legitimate planning and development concerns should not be disturbed.

^{231.} See supra notes 172-88 and accompanying text.

^{232.} See, e.g., Grabnic v. Doskocil, 2005 WL 1383967 *5 (Oh. 2005) (noting that dedication of driveway would "no[t]...make[] sense," in view of the fact that driveway "would be a dead end road leading to a single street address" and "would be nothing more than a private drive maintained at the municipality's expense").

^{233.} See LOGHINI & MOSENA, supra note 37, at 9 (noting that "[m]ost cities will not accept for dedication] any [private] facilities that were not built to public [design and construction] standards").

Thus, as can be seen, the *qualified* constitutional right is just that. It remains subject to important limitations and conditions. A municipality's exercise of discretion in matters involving dedication is left intact in matters involving bona fide planning and development issues.

The qualified constitutional right is intended principally as a bulwark against widespread municipal land use policies that systematically off-load services on all new subdivisions, or entire classes of subdivisions, by categorically refusing dedication in new subdivision development.²³⁴ The right is especially applicable when a developer seeks to build a new residential subdivision in a municipality that, by ordinance or written policy, categorically refuses dedication.²³⁵ The availability of the remedy—or the mere threat of invocation of the remedy—may induce the municipality to revoke its categorical no-dedication policy and give proper consideration to the developer's proposal to construct a traditional subdivision with traditionally public infrastructure. Of course, the promise of individualized consideration of a developer's proposal to dedicate is no guarantee that a developer's proposal will be accepted by the municipality.

Whether the qualified constitutional right would actually be used by developers would, of course, depend upon many practical considerations. Plainly, the ultimate beneficiaries of the qualified constitutional right are the homeowners who will be living in the new subdivision but whom—at the time of critical municipal decision-making—are not present. Presumably, whether a developer actually would take advantage of the availability of the qualified right to challenge a municipality's no-dedication policy would depend on such practical considerations as whether such a challenge would have a reasonable chance of substantially lowering housing costs to the consumer and thus be in the developer's own interest.

If the financial stakes were high enough, presumably the larger well-financed developers might perceive an advantage in using the blunt instrument of litigation in an effort to lower ultimate housing costs.²³⁶ In this regard, the *Mount Laurel* "builders' reme-

^{234.} See supra notes 23-37, 111-121 and accompanying text.

^{235.} See supra notes 30-33 and accompanying text.

^{236.} Of course, some developers might not wish to antagonize municipal officials through aggressive litigation, particularly in light of municipal officials' generally broad discretion to impose various requirements on developers as a condition of land use approval. Developers might well perceive a risk in commencing litigation against municipal officials when those very officials might be a position to grant or withhold other discretionary approvals. For a discussion of the dynamics of "institutionalized bargaining" between municipality and developer in the context of large-scale subdivision approval and discretionary zoning, see *The Public Role*, *supra* note 24, at 879-82. However, as noted in the text above, if the financial stakes were high enough, presumably the larger well-financed developers

dy"²³⁷—devised by the New Jersey Supreme Court to implement its *Mount Laurel* affordable housing mandate on municipalities—serves as a model for using the economic interests of the developer as a surrogate for the public interest.²³⁸

Ultimately, it can be expected that the mere judicial recognition of the qualified constitutional right will cause many municipalities to reassess and discard their codified and informal nodedication policies. The threat of litigation may alter the status quo, ²³⁹ and cause municipalities to adopt dedication policies that more fully comport with the common law of dedication that, until recently, ensured individualized consideration of offers of dedication. ²⁴⁰ If the qualified constitutional right does not lead to much actual litigation but nevertheless induces municipal consideration of offers of dedication based on sound planning principles (rather than municipal off-loading of services to developers and future residents and favoritism to existing residents at the expense of newcomers), then that would be the best possible result.

V. Conclusion

The privatization of local government in the United States remains a largely invisible issue in the public discourse and in the

might perceive an advantage in using the blunt instrument of litigation in an effort to lower ultimate housing costs.

237. S. Burlington Cnty. NAACP v. Twp. of Mount Laurel, 456 A.2d 390, 452-60 (N.J. 1983) (establishing, under the authority of the New Jersey Constitution, a "builder's remedy" aimed at requiring municipalities to adopt zoning provisions that permit affordable housing for the benefit of moderate- and middle-income households). Under New Jersey's Mount Laurel doctrine, if a municipality has not adopted an affordable housing plan that satisfies certain statutory requirements and the municipality denies zoning approval for the construction of an affordable housing project that meets certain statutory criteria, the builder may then sue the municipality. Under appropriate circumstances, the court—applying the Mount Laurel builder's remedy—may order the municipality to grant the requisite zoning approval to enable to developer to construct the affordable housing project. See E.W. Venture v. Borough of Fort Lee, 669 A.2d 260, 272 (N.J. 1996); Twp. of Mount Laurel, 456 A.2d at 448.

238. As noted by one commentator, when a developer proposed an affordable housing project in New Jersey, the effect of the mere existence of the *Mount Laurel* builders' remedy was often sufficient to induce New Jersey municipal officials to approve development projects. See Alan Mallach, The Mount Laurel Doctrine and the Uncertainties of Social Policy in a Time of Retrenchment, 63 RUTGERS L. REV. 849, 851 (2011). Professor Mallach noted: "While few builder's remedies were ever actually awarded by the courts, the threat was widely seen by local officials . . . as forcing towns to grant approvals and make unwanted zoning changes for builders' projects "Id. at 851.

Similarly, the mere existence of a qualified constitutional right to dedicate private property for public use could be expected to have a prophylactic effect on continuing enforcement of municipal no-dedication policies.

239. See Mallach, supra note 238.

240. See supra notes 68-110 and accompanying text.

law.²⁴¹ Municipal privatization is effected through the mechanism of municipal land use policy and the compelled establishment of community associations for the purpose of delivering services to residents that customarily were provided by municipalities.²⁴² In this way, the municipality uses its land use powers to effect a load shedding of traditionally public services onto developers and, ultimately, future residents.

The phenomenon has operated largely below the radar and has escaped the attention of legislatures, the courts, and the public at large. Nevertheless, this form of municipal privatization policy raises substantial social, political, and constitutional questions.²⁴³

From a constitutional perspective, the critical role of local governments in the establishment of many community associations perhaps suggests that the resulting community—as a product of government policy—is properly regarded as a "state actor" under the Constitution, and thereby subject to public constitutional norms. However, courts have usually declined to undertake a broad extension of state action theory so as to treat most private communities as if they were municipalities. This trend is likely to continue—even if it could be demonstrated that, in many cases, the community association form is an instrument of municipal privatization policy effected through local government's broad authority and discretion over land use regulation.

In this article, I proposed a new approach to the problem of the widespread adoption by local government of the community association form as an instrument of municipal privatization. Recognizing the limitations and shortcomings of traditional state action theory as applied to established community associations, I instead proposed to address *directly* the constitutional infirmities of the governmental decision-making process that often leads to the compelled establishment of community associations. More particularly, I proposed judicial recognition of a qualified constitutional right of a subdivision developer to dedicate streets and parks to a municipality as a means to ensure that local governments do not arbitrarily exercise their power to accept or reject a subdivision developer's offer of dedication for streets and parks, and, by so doing, coerce

^{241.} See Barton & Silverman, supra note 7, at xi (describing the rise of the community association as a "quiet revolution"); GARREAU, supra note 8, at 185 (quoting Professor Gerald Frug) ("The privatization of [local] government is the most important thing that's happening right now. We haven't thought of it as government yet."); The Public Role, supra note 24, at 863-64.

^{242.} See supra notes 23-37 and accompanying text.

 $^{243. \} See \ supra$ notes $38, \, 41$ and accompanying text.

^{244.} See generally The Constitution and Private Government, supra note 11, at 513-28.

^{245.} See supra notes 39-41 and accompanying text.

the developer to privative a community that the developer does not wish to privatize.²⁴⁶

The recognition of a qualified constitutional right of a subdivision developer to dedicate land for public use represents a limited and prudent application of state action theory to the municipal creation of private entities that often perform public functions. This application of state action theory derives from the recognition that: (1) municipal privatization and load-shedding policies have given rise to many larger territorial community associations which are the functional equivalent of municipalities, but courts generally do not recognize these community associations as "state actors"; and (2) residents and nonresidents of these associations are thereby deprived of a constitutional remedy for abridgment of fundamental rights by such associations.²⁴⁷

In recognition of the conceptual and practical limitations of state action theory, the qualified constitutional right of a subdivision developer (to dedicate land for public use) shifts the focus of the judicial inquiry from the established community association to the municipal decision-making process that often leads to the formation of such associations. The qualified constitutional right is intended to ensure that the formation of a community association is the developer's voluntary choice, rather than the product of municipal privatization policy. The right is thereby intended to be limited to only those community associations that—at their inception—are solely the product of municipal policy-making.²⁴⁸

The qualified constitutional right exclusively belongs to the subdivision developer, and not to third parties. The developer may or may not elect to exercise that right in furtherance of its own interest as well as in the public interest. The issue of the developer's standing is intrinsic to my conception of the qualified constitutional right.²⁴⁹

The qualified constitutional right aligns itself with the interests of the property owner at the point of community formation, and does so by giving the property owner *more property rights*. The substantive property rights conferred include the subdivision developer's right to dedicate land for public use and thereby be relieved of the burden of maintaining the land and providing services that until recently were regarded as traditional municipal services. In this way, the qualified constitutional right seeks to establish a rare alignment of public interest and private interest, and to focus

^{246.} See supra notes 122-229 and accompanying text.

^{247.} See supra notes 140-56 and accompanying text.

^{248.} See supra notes 153-56 and accompanying text.

^{249.} See supra notes 153-56, 230-37 and accompanying text.

and direct that private interest toward the preservation and strengthening of core constitutional values implicit in traditional public communities.²⁵⁰

In this article I have presented five sources of constitutional authority as support for the recognition of a qualified constitutional right to dedicate land for public use.²⁵¹ With one exception,²⁵² the five sources of authority do *not* arise from the substantive law of dedication itself. Instead, the dedication of land serves as the remedy to the constitutional violation rather than as the source of the right itself.

The constitutional sources of the qualified right include the First Amendment, which recognizes the special role of public streets and parks in the exercise of free speech and associational rights. A developer's voluntary dedication of land for public use traditionally has operated as a critical mechanism of land transfer leading to the establishment of public streets and parks in new communities. As such, the qualified constitutional right to dedicate promotes First Amendment rights by enabling a developer to challenge municipal no-dedication policies.²⁵³

The qualified constitutional right of a subdivision developer to dedicate streets and parks to a municipality is also rooted in equal protection principles. In the context of a policy of municipal privatization of services in new communities, equal protection principles properly should be deemed to apply when a municipality imposes an effective tax burden on new community residents that is markedly different than the effective tax burden on the remainder of the municipality. 254 In the established part of the municipality, the local government collects real estate taxes and delivers a standard array of services, including street maintenance, snow removal, police patrols of public streets, and curbside refuse pick-up. By contrast, in the newly developed portions of the municipality (in which the municipality has required the establishment of community association to deliver services that the municipality itself delivers elsewhere within its territorial limits), the above-listed services are typically provided by the community association and are paid for by mandatory assessments imposed by the association on its members. Yet, with very few exceptions, community association residents do not receive a credit against their real estate tax bills for the portion of their association fees that used to pay for the

^{250.} See supra notes 230-37 and accompanying text.

^{251.} See supra notes 122-229 and accompanying text.

^{252.} See supra notes 202-29 and accompanying text.

^{253.} See supra notes 151-71 and accompanying text.

^{254.} See supra notes 172-88 and accompanying text.

above-listed services.²⁵⁵ Because the Supreme Court has held, as a general principle, that a discriminatory property tax scheme (that disfavors newcomers to the taxing jurisdiction) violates the Equal Protection Clause even under a rational basis standard of review,²⁵⁶ courts also should recognize that this same constitutional infirmity applies in the context of a municipally required community association with mandated unequal service and tax obligations.²⁵⁷

Another source of constitutional authority is the concept of representation reinforcement—an important constitutional value in a variety of contexts. Presently, local governments—by adopting a policy of no-dedication and by requiring the establishment of community associations to deliver traditionally municipal services—are effectively creating a second tier of municipality. Critically, this public decision-making occurs with no meaningful oversight of the process and, indeed, virtually no public recognition of either the process or the policy choices that are leading to this result. Moreover, those individuals who are most directly affected by the exaction policy—that is, the residents of the new community —are unrepresented in the process. Indeed, this constituency literally does not even exist at the time that the process is occurring. Allowing a developer to challenge a discriminatory policy on behalf of future residents is a form of representation reinforcement.

Finally, the qualified constitutional right of a subdivision developer to dedicate streets and parks to a municipality may be said to derive from: (1) the origins of the doctrine of voluntary dedication in the common law of real property, and (2) the Supreme Court's recognition, in *Lucas v. South Carolina Coastal Commission*, that serves limitations on ownership in real property necessarily encompasses "must inhere in the title itself, in . . . background principles of the State's law of property[,] . . . which must inhere in the title itself." The common law of voluntary dedication is a species of land transfer that been in existence for centuries and was incorporated into the common law of every state after the American Revolution. Because, under *Lucas*, the "back-

^{255.} See supra note 184 and accompanying text.

^{256.} See Allegheny Pittsburgh Coal Co. v. Cnty. Comm'n of Webster Cnty., 488 U.S. 336, 338-42 (1989); supra notes 175-79 and accompanying text.

^{257.} See supra notes 180-88 and accompanying text.

^{258.} See supra notes 189-91 and accompanying text.

^{259.} See supra notes 24-37 and 192-99 and accompanying text.

^{260.} See Trust and Community, supra note 23, at 1127-28.

^{261.} See supra notes 189-201 and accompanying text.

 $^{262.\ \}mathrm{Lucas}\ \mathrm{v.}\ \mathrm{S.C.}\ \mathrm{Coastal}\ \mathrm{Comm'n},\ 505\ \mathrm{U.S.}\ 1003,\ 1029\ (1992)$ (observing this as a general proposition).

^{263.} See supra notes 82-85 and accompanying text.

ground" law of property is a stick in the bundle of that which we call "property rights," 264 then a venerable common law practice of voluntary dedication may well be of constitutional dimension, at least insofar as a municipal policy that categorically precludes voluntary dedication. At the very least, the *Lucas* principle suggests that heightened scrutiny of such municipal no-dedication policy is warranted. 265

What does the qualified right mean in practice? Under the qualified right, a court would subject the municipality's refusal to accept dedication to heightened scrutiny. ²⁶⁶ Under that standard, a municipal ordinance or informal policy that *categorically* precludes offers of dedication in new subdivisions will be struck down. ²⁶⁷ Heightened scrutiny also requires—at the very least—a municipality's individualized determination of a developer's offer to dedicate land and the municipality's written statement of reasons underlying its determination in the event that the offer of dedication is refused. ²⁶⁸

The municipality's statement of reasons is critical to the enforcement of the qualified right. Heightened scrutiny requires that a municipality's refusal of an offer of dedication must not be pretextual. Instead, the refusal must be based on sound planning principles.

The qualified constitutional right obviously will not eliminate the establishment of new community associations, nor will it provide a remedy for aggrieved homeowners, renters, or nonresidents once an association is established.²⁶⁹ It will, however, provide a mechanism to reduce municipal service load-shedding and privatization that is antithetical to the public interest. Just as important, it will promote public constitutional values that are implicit in public streets and parks.²⁷⁰ It will do all of this without abridging countervailing private constitutional values that only attach once a community is established and once vested rights of property and contract come into being.²⁷¹

Over 150 years ago the Supreme Court underscored the importance of the "well-established principle" of dedication as a device to ensure the orderly development of cities and towns.²⁷² The Court observed on dedication:

^{264.} See Lucas, 505 U.S. at 1029.

^{265.} See supra Part III.E.

^{266.} See supra note 230 and accompanying text.

^{267.} See supra notes 230-31 and accompanying text.

^{268.} See supra notes 230-36 and accompanying text.

^{269.} See id.

^{270.} See supra Part III.B.

^{271.} See supra notes 152-56 and accompanying text; see also supra Part I.B.

^{272.} See Mayor of New Orleans v. United States, 35 U.S. (10 Pet.) 662, 712-13 (1836).

[T]he importance of this principle may not always be appreciated, but we are in a great degree dependent on it for our highways, the streets of our cities and towns, and the grounds appropriated as places of amusement or of public business, which are found in all our towns, and especially in our populous cities.²⁷³

That insight has been largely forgotten. In the past few decades, the advent of new municipal land use policies that categorically preclude voluntary dedication is, in no small measure, a result of a shortsighted municipal fiscal policy that, in the interest of municipal expense minimization, is permanently altering the new suburban landscape. The ist ime for the courts to restore the traditional understanding of voluntary dedication as a means to ensure that new development will be in the public interest (and will thereby provide an abundance of housing choices and community options), and not merely in the narrowly defined fiscal interest of municipalities in their exercise of their land use regulatory powers. It is time, as well, for the courts to restore the promise of the public commons—which, for the past 220 years, has stood at the center (quite literally) of the American political, social, and constitutional realm.

HYDRAULIC FRACTURING ON FEDERAL AND INDIAN LANDS: AN ANALYSIS OF THE BUREAU OF LAND MANAGEMENT'S REVISED PROPOSED RULE

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Abstract

The federal government controls 700 million acres of subsurface rights (plus fifty-six million subsurface acres of Indian mineral estate) across twenty-four states, making it the largest landowner in the nation, and thus putting it in a position to negotiate lease terms and shape regulations of oil and gas development. The rules of the federal Bureau of Land Management (BLM) on how drilling activity can take place on federal lands essentially dictate terms, making BLM the largest "regulator" of drilling activity in the country. BLM last revised its oil and gas regulations (the Onshore Orders) in the 1980s and early 1990s, well before the recent rapid expansion of shale gas development. To date, there have been two rounds of proposed revisions, the first issued in 2012 and the most recent issued in May 2013, after BLM received 177,000 comments on the first round. This paper examines the 2013 proposal in several key respects, including the scope and requirements of the new proposal, the substantial changes from the 2012 proposal, and a comparison of BLM's proposed rules with rules in states with shale gas development and significant federal landholdings, based on earlier work. We find that BLM's proposal addresses some apparent gaps in state-level regulation and that, generally, BLM rules do not appear to impose significant requirements beyond existing state regulations, at least across the regulatory elements we analyzed and in those states with large federal landholdings.

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I. INTRODUCTION

The combination of horizontal drilling, hydraulic fracturing, and other technologies has led to a boom in development of oil and gas resources from shale rock previously considered inaccessible, dramatically increasing U.S. hydrocarbon production and opening many areas to significant new drilling activity. This activity is not without environmental, community, and other risks.

Traditionally, state governments have been viewed as the primary regulators of oil and gas development, with the federal government in a secondary role. But it is landowners, not the government, that create the first and, in some cases, strongest limits on developer activity through the restrictions they impose in lease terms. This power is particularly strong for large, institutional landowners. And it is strongest for the federal government, by far the largest landholder in the country. The Federal Bureau of Land Management (BLM) sets the lease terms for oil and gas develop-

ment on 700 million subsurface acres of federal mineral estate.¹ This is similar to (and is often called) a form of regulation but is better characterized as stewardship of land held in the public trust.

BLM also regulates fifty-six million subsurface acres of Indian mineral estate, but the actual leasing is left to the tribes.² BLM has long regulated oil and gas development on federal and Indian lands through its onshore oil and gas operating regulations (Onshore Orders),³ most of which were last revised in the 1980s or early 1990s. The recent expansion of shale gas development has led BLM to propose revisions specifically aimed at hydraulic fracturing activity to its rules. The agency issued a proposed set of rules in May 2012⁴ (the 2012 proposal) and recently issued a revised proposed rule⁵ (the 2013 proposal) after receiving 177,000 comments.

This paper examines the 2013 proposal in several key respects. First, we consider the scope and requirements of the new proposal. Then we identify substantial changes from the 2012 proposal. Finally, we compare BLM's proposed rules with those already in place in states with shale gas development and significant federal landholdings, based on earlier work analyzing state-level rules.⁶

II. BLM'S ROLE IN SHALE DEVELOPMENT ON FEDERAL LANDS

BLM is the administrator of federal and (to a debatable extent) Indian lands, which are held in trust for the American people or for Indian tribes. BLM has the authority to lease federally owned

^{1.} BLM's authority to lease federal mineral estate arises from the Mineral Leasing Act of 1920 and the Mineral Leasing Act for Acquired Lands of 1947. Mineral Leasing Act of 1920, 30 U.S.C. § 181 (2012); Mineral Leasing Act for Acquired Lands of 1947, 30 U.S.C. § 351 et seq. (2012).

^{2.} Under the Federal Land Policy and Management Act of 1976, Congress charged BLM with regulating oil and gas development and other activities on public lands for multiple use and sustained yield. Federal Land Policy and Management Act of 1976, 43 U.S.C. §§ 1701-1782 (1976). BLM has interpreted "public lands" to include Indian lands, although there is some debate as to whether that was Congress's intent.

^{3.} Onshore Oil and Gas Orders/Notices to Lessees, BUREAU OF LAND MGMT., http://blm.gov/wo/st/en/prog/energy/oil_and_gas/onshore_oil_and_gas.html (last updated June 5, 2012).

 $^{4.\,}$ Oil and Gas; Well Stimulation, Including Hydraulic Fracturing, on Federal and Indian Lands, 77 Fed. Reg. 27,691 (May 11, 2012) (to be codified at 43 C.F.R. \S 3160).

^{5.} Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. 31,636 (May 24, 2013) (to be codified at 43 C.F.R. § 3160), available at http://blm.gov/pgdata/etc/medialib/blm/wo/Communications_Directorate/public_affairs/hydraulicfracturing .Par.91723.File.tmp/HydFrac_SupProposal.pdf.

^{6.} Nathan Richardson, Madeline Gottlieb, Alan Krupnick & Hannah Wiseman, *The State of State Shale Gas Regulation*, RESOURCES FOR THE FUTURE, June 2013, *available at* http://www.rff.org/rff/documents/RFF-Rpt-StateofStateRegs_Report.pdf.

(non-Indian) mineral estate, which lies below more than 700 million acres of federal, state, and private land, mostly in western states. BLM has issued such leases since 1988 under the current law, the Federal Onshore Oil and Gas Leasing Reform Act of 1987, and production from federal onshore wells currently accounts for roughly eleven percent of the country's natural gas supply and five percent of its oil supply.

Pursuant to BLM authority granted in its operating regulations, ¹⁰ BLM has issued seven Onshore Orders that implement and supplement the operating regulations. The Onshore Orders apply to all oil and gas development on federal and Indian lands, and thus operators developing shale gas on these lands must comply with these rules. The seven Onshore Orders were created between 1983 and 1993 and only one has since been revised. ¹¹ In addition to the Onshore Orders, which apply to all types of oil and gas development, the operating regulations contain a short provision that is specific to hydraulic fracturing and a few other activities. ¹² That rule was created in 1982 and has not been revised since 1988.

Since the mid-1970s, hydraulic fracturing (commonly referred to as fracking)—a process where water, sand, and other chemicals are injected into the wellbore at high pressure to create fractures and stimulate production—has been commonly used on vertical gas wells. However, it was not until the 2000s that combining hydraulic fracturing and horizontal drilling became widespread as a technique to make the production of oil and gas from shale economically feasible. According to BLM, the expansion of shale gas

^{7.} Note that the federal government may own (and BLM may therefore administer) mineral rights under land (surface rights) not owned by the federal government. This is termed a "split estate."

^{8.} The Mineral Leasing Act of 1920 was amended by the Federal Onshore Oil and Gas Leasing Reform Act of 1987, which leaves BLM to administer leasing but gives the Forest Service a more direct role in the leasing process for lands under its jurisdiction. The amendment also established that all public land leasing must be open to competitive leasing. 30 U.S.C. § 181 (2012).

^{9.} Oil and Gas, BUREAU OF LAND MGMT., http://blm.gov/wo/st/en/prog/energy/oil_and_gas.html last updated June 20, 2014).

^{10. 43} C.F.R. § 3164.1 (2007).Onshore oil and gas operating regulations authorize BLM's director to issue Onshore Oil and Gas Orders when necessary to implement and supplement the operating regulations.

^{11.} Onshore Order Number 1, Approval of Operations, which provides procedures for submitting an Application for Permit to Drill and other required approvals, was updated in 2007. 43 C.F.R. § 3160 (2007).

^{12. 43} C.F.R. § 3162.3-2 (1988).

^{13.} The percentage of total U.S. natural gas production accounted for by shale gas grew from 1.6 percent in 2000 to 23.1 percent by 2010. Zhongmin Wang & Alan Krupnick, U.S. Shale Gas Development: What Led to the Boom?, RESOURCES FOR THE FUTURE, MAY 2013, available at http://rff.org/RFF/Documents/RFF-IB-13-04.pdf.

development has created a need to update existing rules embodied in the Onshore Orders.¹⁴

BLM's recent proposals can be characterized as a set of new rules that will (when and if finalized) apply to fracking and some related activity on those lands within the bureau's jurisdiction—the first substantial revision of such rules since 1993 and the first to apply specifically to fracking.

III. THE 2013 BLM PROPOSAL

The 2013 proposal includes a wide range of requirements spanning the development process but focuses on frack fluid disclosure and testing requirements for casing and cementing. Other sections of the 2013 proposal create new requirements for mapping of fracture propagation and wastewater fluid storage. For several other activities, the 2013 proposal defers to the Onshore Orders issued by BLM more than 20 years ago.

A. Overview

• Frack fluid disclosure: Operators would be required to submit chemical information on FracFocus, ¹⁵ directly to BLM, or to another BLM-approved database after fracking is completed. ¹⁶ Operators will be able to avoid disclosure of compounds they claim are trade secrets in an affidavit, without submitting any chemical information to BLM. ¹⁷

• Testing requirements for casing and cementing:

o *Cement evaluation logs*: Operators would be required to compile cement evaluation logs (CELs) and make them available to BLM.¹⁸ These logs record the results of tests used to detect areas where casing is not

^{14.} See Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. 31,636.

^{15.} FracFocus is an Internet database for industry's voluntary reporting of chemicals used in hydraulic fracturing, as well as a tool for the public and others to use to query this database. See FracFocus Chem. Disclosure Registry, http://www.fracfocus.org (last visited June 30, 2014).

^{16.} Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. 31,636, 31,636 (proposed May 24, 2013) (to be codified at 43 C.F.R. pt. 3160.3-3(i)).

^{17.} Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. 31,636, 31,659 (proposed May 24, 2013) (to be codified at 43 C.F.R. pt. 3162.3-3(j)(1)-(4)).

^{18.} Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. 31,636, 31,641 (proposed May 24, 2013) (to be codified at 43 C.F.R. pt. 3162.3-3(d)(2)).

bound to cement, which creates a risk of fluids inside the wellbore migrating into water aquifers.

- Mechanical integrity testing: In addition to maintaining CELs, operators would be required to run mechanical integrity tests (MIT) on the vertical sections of the casing prior to fracking or refracking to ensure that the casing can withstand fracking pressures, and continue to monitor pressures during fracking.¹⁹
- Fracture propagation monitoring: Operators would be required to create maps plotting estimated fracture propagation (how cracks in the rock would spread as a result of fracking), along with fracture direction, length, and height, to ensure that fracking does not threaten aquifers or other resources.²⁰
- Wastewater fluid storage: Operators would be required to use (at a minimum) lined pits to store flow back fluid and other wastewater, and BLM would reserve the authority to require operators to take other protective measures.

B. Changes from the 2012 Proposal

The 2013 proposed rule is less stringent than the 2012 proposal in two major regulatory areas: frack fluid disclosure and testing well cementing and casing. This is in addition to the other major change discussed above, narrowing the scope of the rule to apply only to shale gas development where hydraulic fracturing is used.

1. Scope

In its 2012 proposal, BLM would have imposed new rules on all "well stimulation" activities, including not only hydraulic fracturing but also other activities that increase the permeability of reservoir rock, such as acidizing, flooding, and tertiary recovery

^{19.} Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. 31,636, 31,676 (proposed May 24, 2013) (to be codified at 43 C.F.R. pt. 3162.3-3 (f)-(g)).

^{20.} Oil and Gas; Hydraulic Fracturing on Federal and Indian Land, 78 Fed. Reg. 31,636, 31,648-49 (proposed May 24, 2013) (to be codified at 43 C.F.R. pt. 3162.3-3(d)(4)(iv)).

through steam injection.²¹ However, BLM narrowed the scope of its 2013 proposal such that it would apply only to "hydraulic fracturing" and "refracturing."²²

"According to BLM, the change was made in response to industry comments that inclusion of well stimulation activities would make the rule too onerous for what they consider routine maintenance operations." However, some of these activities, such as "acidizing" a well by pumping in large amounts of acid to dissolve rock formations and stimulate production, are often used in conjunction with fracking and may involve risk factors similar to those associated with fracking. ²⁴

2. Frack Fluid Disclosure

The 2013 proposal kept in place the 2012 proposal's requirement that fracking chemicals be disclosed after fracking has been completed.²⁵ However, the 2013 proposal revises the nature of the chemical disclosure requirements in three ways. These changes generally reduce burdens on operators, at the cost of some transparency.

First, the 2013 proposal eliminates a requirement that operators provide the estimated chemical composition of flowback fluids before fracking operations begin, as part of the approval process. ²⁶ BLM defended this revision on the grounds that the estimations could be unreliable given that operators are permitted to change the chemical composition of frack fluids after approval to begin operations. ²⁷

^{21.} Oil and Gas; Well Stimulation, Including Hydraulic Fracturing, on Federal and Indian Lands, 77 Fed. Reg. 27,691, 27,695 (proposed May 11, 2012) (to be codified at 43 C.F.R. pt. 3160-5).

^{22.} Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. 31,636, 31,647 (proposed May 24, 2013) (to be codified at 43 C.F.R. pt. 3160.0-5).

²³. Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. $31,636,\,31,645$ (proposed May $24,\,2013$) (to be codified at 43 C.F.R. pt. 3160.0-5).

^{24.} See generally, LEONARD KALFAYAN, PRODUCTION ENHANCEMENT WITH ACID STIM-ULATION (PennWell Books, 2nd ed. 2008); see also ARMSTRONG AGBAJI ET AL., REPORT ON SUSTAINABLE DEVELOPMENT AND DESIGN OF MARCELLUS SHALE PLAY IN SUSQUEHANNA, PA 7 (2009), available at http://energy.wilkes.edu/PDFFiles/Library/Sustainable%20Development%20of%20Marcellus%20Shale%20in%20Susquehanna.pdf.

^{25.} Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. 31,636, 31,636 (proposed May 24, 2013) (to be codified at 43 C.F.R. pt. 31,63-3(i)).

^{26.} Compare Oil and Gas; Well Stimulation, Including Hydraulic Fracturing, on Federal and Indian Lands, 77 Fed. Reg. 27,691, 27,696 (proposed May 11, 2012) (to be codified at 43 C.F.R. pt. 3162.3-3(c)(6)), with Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. 31,636, 31,649 (proposed May 24, 2013) (to be codified at 43 C.F.R. pt. 3162.3-3(d)(5)).

 $^{27.\,}$ Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. 31,636-01, 31,649 (proposed May 24, 2013) (to be codified at 43 C.F.R. pt. 3160).

BLM also noted that requiring the estimations might result in public discovery of chemical constituents of the fluids prior to operations²⁸—some of which might be protected trade secrets. Because the actual chemical composition of frack fluids is reported after fracking takes place rather than as part of the approval process, the 2012 proposal's requirement of advance estimates of flowback fluid composition was the only data related to frack fluids submitted as part of BLM's drilling approval process. Under the 2013 proposal, therefore, no predrilling information on frack fluids is submitted to BLM.

Second, the 2013 proposal changed format and procedural requirements for reporting frack fluids after fracking is completed.²⁹ Frack fluid disclosure to BLM is, under the 2013 proposal, explicitly modeled after the fracking disclosure website, FracFocus. Although reporting directly to BLM or another database specified by BLM would still be permitted, FracFocus will presumably become the preferred, if not the exclusive, choice of operators fulfilling BLM regulations.

Use of FracFocus to comply with the new BLM regulations raises some concerns. A recent Harvard study claims that "reliance on the FracFocus registry as a regulatory compliance tool is misplaced or premature." The study finds that FracFocus encourages inaccurate reporting, lacks a review process for submissions, and leaves regulators unable to enforce reporting deadlines. FracFocus has undergone significant changes since this study was released, however, with version 2.0 of the website deployed on June 1, 2013.

These upgrades may have addressed some of the concerns raised by the Harvard study. The FracFocus website notes that the upgrades "will dramatically improve the site's functionality for state regulatory agencies, industry, and public users."³³ Specifically, users will be able to locate well site chemical information,

⁹⁸ Id

^{29.} Compare Oil and Gas; Well Stimulation, Including Hydraulic Fracturing, on Federal and Indian Lands, 77 Fed. Reg. 27,691, 27,698 (proposed May 11, 2012) (to be codified at 43 C.F.R. pt. 3162.3-3(g)(2), (4), (5)), with Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands 78 Fed. Reg. 31,636, 31,656 (proposed May 24, 2013) (to be codified at 43 C.F.R. pt. 3162.3-3(i)(1)).

^{30.} KATE KOSCHNICK ET AL., LEGAL FRACTURES IN CHEMICAL DISCLOSURE LAWS: WHY THE VOLUNTARY CHEMICAL DISCLOSURE REGISTRY FRACFOCUS FAILS AS A REGULATORY COMPLIANCE TOOL 1 (Harvard Envtl. Law Program, 2013), $available\ at\ http://blogs.law.\ harvard.edu/environmentallawprogram/files/2013/04/4-23-2013-LEGAL-FRACTURES.pdf.$

^{31.} Id.

^{32.} FracFocus Chem. Disclosure Registry, http://fracfocus.org (last visited June 30, 2014).

^{33.} FracFocus 2.0 to Revolutionize Hydraulic Fracturing Chemical Reporting Nationwide, FRACFOCUS CHEM. DISCLOSURE REGISTRY (May 29, 2013), http://fracfocus.org/node/347.

chemical names, and Chemical Abstract Service (CAS) numbers more efficiently. 34

Third and finally, the 2013 proposal also revises substantive rules for fluid disclosure, eliminating the 2012 proposal's requirement that operators submit chemical information to BLM in order to substantiate trade secret claims.³⁵ This was replaced by a provision that instructs operators to submit affidavits that the information is subject to trade secret protection.³⁶ The affidavits, which were modeled after those required by Colorado, must affirm the following:

- that the chemical information is not public;
- that the chemical information is not required to be made public;
- that the information is not easily discoverable through reverse engineering; and
- that its release would likely diminish the competitiveness of the company.³⁷

BLM would retain discretion to require submission of nondisclosed chemical information for review³⁸ and the provision suggests that discretion would be exercised in the event of incomplete affidavits.³⁹ However, no information is provided as to how BLM will review the affidavits or the specific criteria that will be used to evaluate trade secret exemptions.

Whether operators' claims regarding trade secret protection (formalized in affidavits) are sufficiently reliable is not clear. Under the 2013 proposal, BLM will clearly have less information available to evaluate trade secret claims and, in practice, may not be able to do so.

3. Testing Requirements for Casing and Cementing (CELs/CBLs)

^{34.} Id.

^{35.} Compare Oil and Gas; Well Stimulation, Including Hydraulic Fracturing, on Federal and Indian Lands, 77 Fed. Reg. 27,691, 27,711 (proposed May 11, 2012) (to be codified at 43 C.F.R. pt. 3162.3-3(h)-(i)), with Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. 31,636, 31,677 (proposed May 24, 2013) (to be codified at 43 C.F.R. pt. 3162.3-3(j)(1)-(4)).

^{36.} Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. 31,636, 31,677 (proposed May 24, 2013) (to be codified at 43 C.F.R. pt. 3162.3-3(j)(1)).

³⁷ Id.

^{38.} Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. 31,636, 31,659 (proposed May 24, 2013) (to be codified at 43 C.F.R. pt. 3162.3-3(j)(2)).

 $^{39.\,}$ Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. $31,636,\,31,659$ (proposed May $24,\,2013)$ (to be codified at 43 C.F.R. pt. 3160).

A variety of tests are commonly used to detect areas where casing is not properly bound to cement. Such failures increase the risk of frack fluids, flowback water, or other materials in the wellbore migrating into water aquifers. The results of these tests are recorded in instruments referred to as cement evaluation logs (CEL) or cement bond logs (CBL). Both the 2012 and 2013 proposals require such tests and logs, but the 2013 proposal changed several aspects of the testing requirements. Notably, the 2013 requirements regarding when and under what circumstances casing and cementing must be tested would result in less agency overview of well integrity, especially during the approval process.

The 2012 proposal would have required testing on each well,⁴⁰ while the 2013 proposal would allow operators to avoid testing well integrity where other wells with the same specifications and geologic parameters have been tested and have produced satisfactory results.⁴¹ According to BLM, this change was made because of its agreement with industry comments that testing on every well may be unnecessarily expensive, may induce unnecessary delay, and would not decrease the risk of contamination of water aquifers.⁴²

Additionally, the 2012 proposal would have required submissions of test results to BLM during the approval process—before beginning fracking operations. In response to comments asserting that BLM's review of casing and cementing test results during the approval process would cause significant delay, the rule was revised to take submission of test results out of the approval process and instead require operators to submit the results after fracking operations are completed. The 2013 proposal does, however, add a requirement for operators to monitor and record the flow rate, density, and pumping pressure of the cementing and run a cementing and casing test prior to operations in the event that monitoring indicates inadequate cementing.

^{40.} Oil and Gas; Well Stimulation, Including Hydraulic Fracturing, on Federal and Indian Lands, 77 Fed. Reg. 27,691, 27,710 (proposed May 11, 2012) (to be codified at 43 C.F.R. pt. 3162.3-3(c)(2)).

 $^{41.\,}$ Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. 31,636, 31,676 (proposed May 24, 2013) (to be codified at 43 C.F.R. pt. 3162.3-3(e)(3)).

^{42.} Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. 31,636, 31,652 (proposed May 24, 2013) (to be codified at 43 C.F.R. pt. 3160).

^{43.} Oil and Gas; Well Stimulation, Including Hydraulic Fracturing, on Federal and Indian Lands, 77 Fed. Reg. 27,691, 27,710 (proposed May 11, 2012) (to be codified at 43 C.F.R. pt. 3162.3-3(c)(2)).

^{44.} Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. 31,636, 31,658, 31,675 (proposed May 24, 2013) (to be codified at 43 C.F.R. pt. 3162.3-3(e)(2)).

^{45.} Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. $31,636,\,31,675$ (proposed May 24, 2013) (to be codified at 43 C.F.R. pt. 3162.3-3(e)(1)).

The 2013 proposal also adds more flexibility for operators in choosing which method to use in testing the well cementing and casing. The 2012 proposal would have required operators to create CBLs. 46 Those logs comprise data generally gathered through a sonic technology that detects whether casing is bound to the cement based on the level of resonance of vibrations. 47 The 2013 proposal uses the broader term CEL rather than CBL. 48 CELs include a variety of additional methods for testing well cementing and casing. 49 BLM may also allow another test required by a state or tribe so long as it is "at least as effective in assuring adequate cementing." 50 Whether these changes will affect BLM's ability to ensure proper casing and cementing is unclear.

IV. THE BLM PROPOSAL AND STATE REGULATION

All western states with large shale gas reserves and significant federal landholdings regulate oil and gas development and have done so for decades. Within these regulations, many states have rules that apply specifically to unconventional development. State law generally does not apply on Indian lands, but many Indian lands also have their own laws regulating oil and gas development. Therefore, if BLM rules are different than state or tribal regulations, operators would appear to be left with two layers of regulation. In one sense, this is no different than on private lands, where operators must comply with state law as well as any restrictions imposed by the landowner via the lease or other agreement. Nevertheless, BLM rules may require operators on federal lands in many cases to interact with multiple layers of government (federal and state), and therefore function in many ways as concurrent regulations.

A. Preemption

Do BLM rules preempt (i.e., displace) state law? Generally, no. The Supreme Court has recognized two ways that federal law can preempt state law. "Conflict preemption" occurs where a federal

^{46.} Oil and Gas; Well Stimulation, Including Hydraulic Fracturing, on Federal and Indian Lands, 77 Fed. Reg. 27,691 (proposed May 11, 2012) (to be codified at 43 C.F.R. 3162.2-2(c)(2)).

 $^{47. \ \} Oilfield \ \ Glossary, \ SCHLUMBERGER, \ http://glossary.oilfield.slb.com/en/Terms.aspx? \\ LookIn=term%20name&filter=cement%20bond%20log (last visited June 30, 2014).$

^{48.} Oil and Gas; Hydraulic Fracturing on Federal and Indian Land, 78 Fed. Reg. 31,636, 31,651 (proposed May 24, 2013) (to be codified at 43 C.F.R. § 3162.3-3(e)(2)).

^{49.} Id.

^{50.} Id.

and state law directly conflict so that compliance with both is not possible.⁵¹ Even where federal and state laws do not directly conflict, state law may be "field preempted" where federal regulation in a certain area is so pervasive that it is clear, either by express language or by implication, that lawmakers intended for the federal government to occupy that entire field of regulation.⁵²

BLM makes clear in the 2013 proposal that it does not intend to be the sole regulator of shale gas development on public lands (and thus will not field preempt) but rather intends to create a backstop regulation that will not preempt more stringent state laws.⁵³ States are therefore free to impose additional requirements beyond those in BLM's rules, and existing state law that is more stringent is not affected by BLM rules.

Furthermore, the 2013 proposed rule adds a provision allowing states or tribes to apply for variances from the BLM rule for operational activities and technology standards, such as monitoring and testing.⁵⁴ If BLM approves a variance on the grounds that it meets or exceeds the agency's standards, compliance with the specific state or tribal rule would satisfy the BLM rule.

BLM does not, however, address in the proposal the fact that there could be areas where the state rule is different from the BLM rule but not necessarily more or less stringent (and a variance is not applied for or granted). In those cases, where the two rules directly conflict so that an operator could not simultaneously comply with both, the BLM rule presumably would preempt the state rule. In this respect, BLM rules are different from those imposed by private landowners who obviously have no authority to alter state law requirements. Whether such conflicts actually might occur in practice is unclear, however. In our analysis of a selection of regulatory elements below, we have not identified any.

Preemption on Indian lands is a bit different, as the Constitution grants Congress full authority to control tribal affairs and limit their powers. Nonetheless, because of the long-existing policy of recognizing tribal autonomy, federal regulation of oil and gas de-

^{51.} See Gibbons v. Ogden, 22 U.S. 1 (1824).

^{52.} See, e.g., Rice v. Santa Fe Elevator Corp., 331 U.S. 218 (1947).

^{53.} BLM concluded that the rule would not require a Federalism Assessment under Executive Order 13132 because it "would not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government." 78 Fed. Reg. 31,669. A Federalism Assessment includes identifying the additional costs and burdens on the states, such as the likely sources of funding and the ability of the states to fulfill the purposes of the policy and identifying the extent to which the policy affects the states' ability to discharge their traditional functions. Exec. Order No. 12,612, 52 Fed. Reg. 41,685 (Oct. 26, 1987).

^{54.} Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. 31,636, 31,660-61 (proposed May 24, 2013) (to be codified at 43 C.F.R. § 3162.3-3(k)).

velopment on Indian lands has been seen by some as overstepping boundaries of tribal sovereignty.⁵⁵ In fact, some argue that BLM lacks statutory authority to regulate oil and gas on Indian lands at all because Congress excluded Indian lands in its definition of public lands under BLM jurisdiction.⁵⁶

However, there is an apparent need for regulation of oil and gas development on Indian lands. Unlike state regulations, tribal laws governing oil and gas production are generally vague or non-existent. For example, the legal code for the Blackfeet Indian Reservation in Montana requires approval by a board for "extraction" and "oil wells" but has no codified regulations for oil and gas drilling in general or for fracking in particular.⁵⁷

The position of the tribes appears to be mixed. Some Native American advocates pushed for an opt-out provision for tribes with their own regulations, which BLM refused to include in either version of the proposed rule.⁵⁸ Other tribes appear to support federal regulation. For example, Wind River Indian Reservation in Wyoming includes in its legal code a provision emphasizing the importance of compliance with various federal environmental acts and especially BLM's rules for onshore oil and gas development.⁵⁹

Given the overlap between state (and tribal) regulations and BLM rules and the ability of states to regulate more stringently, the substantive significance of BLM's proposal in practice depends on the degree to which it imposes requirements beyond those under existing law. BLM rules will provide additional environmental protection only if they are more stringent than those imposed by states or restrict operator behavior in areas not addressed by state rules at all.

It is important to note, however, that it is possible for BLM rules to impose additional procedural burdens even if they do not impose additional substantive requirements beyond those under existing state law. For example, BLM could require operators to undergo a separate permit process with identical (or weaker) standards than states or to submit documents in different formats than states require. Such procedural burdens should not be ig-

^{55.} See Tom Fredericks & Andrea Aseff, When Did Congress Deem Indian Lands Public Lands?: The Problem of BLM Exercising Oil and Gas Regulatory Jurisdiction in Indian Country, 33 ENERGY L.J. 119 (2012), available at http://felj.org/sites/default/files/docs/elj331/14-119-fredericks_and_aseff-problem_of_blms_indian_country_oil_and_gas_jurisdiction.pdf.

^{56.} Id.

^{57.} Blackfeet Tribal Law & Order Code, Ch. 12, \S 3.03, available at http://narf.org/nill/Codes/blackfeetcode/blkftcode12land.htm.

^{58.} See Mike Soraghan & Ellen M. Gilmer, Revised Interior Rule Loops in Industry-Favored FracFocus, ENERGYWIRE (Feb. 8, 2013), available at http://eenews.net/stories/1059976058.

^{59.} SHOSHONE & ARAPAHO LAW & ORDER CODE tit. X, $available\ at\ http://narf.org/nill/Codes/shoshonearapaho/title_xi.pdf.$

nored—they impose costs on operators without any direct environmental or public health benefit.

B. Areas of Concurrent State Regulation and BLM Rules

In order to ascertain the extent to which BLM's 2013 proposal would require operators to take measures beyond those in current state laws, we look at regulations in six states with large percentages of federally owned mineral rights and potential shale gas development—California, Colorado, Montana, New Mexico, Utah, and Wyoming—and compare these regulations with the BLM rules. Most of the state-level data are drawn from our 2013 report, The State of State Shale Gas Regulation.⁶⁰ That report detailed regulations in thirty-one states across twenty-five regulatory elements that span the shale gas development process. In comparing state rules with BLM's proposal, we look at eleven regulatory elements,⁶¹ excluding those that are generally regulated by another federal agency or are relevant only at the state level.⁶² For a few elements covered by BLM's rules, we provide additional detail on state regulations beyond that included in the report. The elements reviewed in this section include the following:

- building setback restrictions;
- water setback restrictions;
- casing and cementing restrictions;
- testing of casing and cementing, including mechanical integrity tests (MITs) and cement evaluation or bond logs (CELs or CBLS);
- wastewater storage options (pits or tanks);
- pit liner requirements;
- wastewater transportation tracking;
- accident reporting:
- well idle time limits;
- temporary abandonment time limits; and
- frack fluid disclosure rules.

^{60.} See Richardson et al., supra note 6.

^{61.} In *The State of State Shale Gas Regulation*, readers will find four casing and cementing regulatory elements. In the discussions in this paper, these are aggregated into one category for convenience purposes. *See* Richardson et al., *supra* note 6.

^{62.} For example, air quality regulation generally falls under EPA authority; BLM therefore did not regulate venting and flaring of gas in its proposal. Severance tax rates and the number of state-level regulatory agencies are also irrelevant to BLM's proposal.

Even within these elements, there are limits on our ability to make meaningful comparisons between state and BLM rules. BLM may lack legal authority to regulate some elements fully. The agency might also regulate informally via its case-by-case approval process. More generally, we do not have data on enforcement or effectiveness of BLM or state regulations. This limits our ability to make any claims about relative or absolute quality of regulations in practice.

The following subsections discuss each regulatory element in both state regulations and BLM's rules, including the 2013 proposal. The next section presents a general and statistical comparison.

1. Setback Restrictions

BLM's 2013 and 2012 proposals do not impose setback restrictions, required minimum distances between wells, and other features believed to merit protection, such as buildings or water sources. Though setback restrictions from buildings and water are common in state regulations across the country, of the six western states we examine here, only half have such regulations.⁶³

While there is no evidence to suggest that setback restrictions are outside BLM jurisdiction, the agency may have other reasons for leaving out setback restrictions. BLM land generally has far lower building density than non-BLM land,⁶⁴ so setback rules might be less necessary. Where setback restrictions are beneficial, BLM might add them to its otherwise standard terms for oil and gas leases.⁶⁵ For example, Wayne National Forest in Ohio requires analyses by the Forest Service to determine whether setback restrictions should be added to specific fracking leases for the purpose of protecting objects of historic or scientific interest, or sensitive habitat and wildlife.⁶⁶ Deciding whether and to what extent to include setbacks based on conditions at the lease site is akin to case-by-case permitting.

^{63.} See Richardson et al., supra note 6, at 25.

^{64.} For example, in 2012, there were only 149 buildings on Wyoming BLM-managed federal lands, 678 buildings on California BLM lands, 215 buildings on New Mexico BLM lands, and 18 buildings on BLM lands in all of the eastern states combined. See U.S. DEP'T OF THE INTERIOR, BUREAU OF LAND MGMT., PUBLIC LAND STATISTICS 250 (2012), available at http://blm.gov/public_land_statistics/pls12/pls2012.pdf.

^{65.} A standardized BLM oil and gas lease form can be found online at *Offer To Lease And Lease Oil And Gas*, U.S. DEP'T OF THE INTERIOR, BUREAU OF LAND MGMT., available at http://blm.gov/pgdata/etc/medialib/blm/noc/business/eforms.Par.71287.File.dat/3100-011.pdf.

^{66.} FOREST SERVICE, USDA, WAYNE NATIONAL FOREST LAND AND RESOURCE MANAGEMENT PLAN app. H, available at http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5387924.pdf.

2. Casing and Cementing

The 2013 proposal defaults to Onshore Order No. 2⁶⁷ for casing and cementing rules. According to Onshore Order No. 2, casing and cementing programs "shall be conducted as approved to protect and/or isolate all usable water zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals." In addition, casing depth is to be determined based on "all relevant factors," including the presence or absence of hydrocarbons, fracture gradients, usable water zones, formation pressures, lost circulation zones, and other minerals. No specific requirements are given. We classify this type of regulation as a performance standard.

In contrast, all six western states regulate casing and cementing depth with command-and-control regulations.⁷¹ Regulations in four of the states impose requirements on cement composition.⁷² All six states also regulate cement circulation: all require surface casing to be cemented fully to the surface, and four of the six impose requirements on circulation in intermediate and production casing as well.⁷³

While the casing and cementing rules in Onshore Order No. 2 provide a large amount of flexibility, they are inherently less transparent because of the lack of specific standards. BLM's performance standards are therefore not necessarily less stringent than state command-and-control rules (and could in practice be more stringent), but it is difficult to ascertain exactly what is expected of operators on federal and Indian lands. As a result, it is unclear to us (and perhaps also to operators) whether compliance with a particular state (or tribal) rule is adequate to meet those standards.

Onshore Order No. 2 was issued in 1988, well before the shale gas development boom. However, new information can alter what BLM determines is adequate to satisfy the performance standards it imposes. This illustrates the flexibility of a performance standard approach.

^{67.} Onshore Order No. 2, Drilling Operations, 43 C.F.R. § 3160 (1988).

^{68.} Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. $31,636,\,31,661$ (proposed May $24,\,2013)$ (to be codified at 43 C.F.R. \S 3160).

^{69.} Onshore Order No. 2, Drilling Operations, 43 C.F.R. § 3160 (1988).

^{70.} Id.

^{71.} Richardson et al., supra note 6, at 33.

^{72.} Id. at 34.

^{73.} Id. at 35-38.

3. Casing and Cementing Testing

BLM requires mechanical integrity tests (MITs) before fracking operations begin and every five years thereafter.⁷⁴ All six of the western states require MITs, and four of them require testing at five-year intervals.⁷⁵

Colorado, Montana, and Wyoming require logging to ensure that casing is properly bound to cement, and New Mexico requires such logging in certain counties.⁷⁶ Colorado and New Mexico, in the counties where logging is required, specifically require CBLs.⁷⁷ Similar to BLM's more general CEL requirement, Wyoming and Montana require CBLs or other "acceptable" or "equivalent" methods.⁷⁸ California and Utah do not require logging.⁷⁹

Wyoming requires logging results as part of its approval-to-drill process, and Colorado requires logging results thirty days after the setting of production casing in the form of an "interval report" to ensure compliance with approved drilling plans. ⁸⁰ In contrast, BLM would not require CEL results until thirty days after fracking is completed, unless monitoring indicates a problem with the casing. ⁸¹

4. Frack Fluid Disclosure

As noted above, BLM would require operators to use FracFocus (or an equivalent method) to fulfill the requirement to report frack fluids after completing operations.⁸² Colorado, New Mexico, and Montana also require disclosure after operations take place,⁸³

^{74.} Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. \S 31,636, 31,647 31,653 (proposed May 24, 2013) (to be codified at 43 C.F.R. 3162.3-3(c)(3)(i), 3162.3-3(f)).

^{75.} N.M. CODE R. § 19.15.26.11 (LexisNexis 2008); Colo. CODE REGS. § 404-1:326(a) (2013); Mont. Admin. R. 36.22.1416 (2011); 4 Wyo. Code R. § 7(d) (LexisNexis 2008); Utah Admin. Code R. 649-5-5 (2013); Cal. Code Regs. tit. 14 § 1724.10(j) (2011).

^{76.} COLO. CODE REGS. \S 404-1:317(o) (2013); MONT. ADMIN. R. 36.22.1416(3) (2011); 4 WYO. CODE R. \S 7(f)(iii) (LexisNexis 2010); N.M. CODE R. \S 19.15.39.9, 19.15.39.10 (LexisNexis 2008).

^{77.} Colo. Code Regs. § 404-1:317(o) (2013); N.M. Code R. § 19.15.39.9, § 19.15.39.10 (Lexis Nexis 2008).

^{78. 4} Wyo. Code R. § 7(f)(iii) (Lexis Nexis 2010); Mont. Admin. R. 36.22.14.18(3) (2011).

^{79.} Cal. Code Regs. tit. 14 § 1722 (2011); UTAH ADMIN. CODE R. 649 (2013).

^{80. 4} Wyo. Code R. § 7(f)(iii) (LexisNexis 2010); Colo. Code Regs. § 404-1:317(o) (2013); Colo. Code Regs. § 404-1:308B (2013).

^{81.} Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. \S 31,636, 31,651-52 (proposed May 24, 2013) (to be codified at 43 C.F.R. \S 3162.3-3(e)(1), (4)).

^{82.} Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. § 31,636, 31,656 (proposed May 24, 2013) (to be codified at 43 C.F.R. 3162.3-3(i)).

^{83.} Colo. Code Regs. \S 404-1:205A(b)(2) (2012); N.M. Code R. \S 19.15.16.19(b) (LexisNexis 2008); Mont. Admin. R. 36.22.1015 (2011).

whereas Wyoming requires disclosure beforehand, as part of the approval process.⁸⁴ Colorado and Montana require submission to FracFocus.⁸⁵ California and Utah currently lack disclosure rules.⁸⁶ Given that operators on federal lands will also be subject to state rules, a BLM rule requiring disclosure only after fracking is completed would not affect operators in the four states that require pre-fracking disclosure but would be important in states without any disclosure rules.

All four states with disclosure rules (Colorado, Montana, New Mexico, and Wyoming) and BLM ask for disclosure of chemical names and Chemical Abstracts Service (CAS) numbers, ⁸⁷ additive types and the concentration or maximum concentration of each chemical used in the additives, the total concentration or maximum total concentration of each chemical in frack fluids, and the total volume of water or frack fluid used. ⁸⁸ Trade secret exemptions are permitted by all four states and BLM. ⁸⁹ However, Colorado and Montana mandate that trade secret information be released to healthcare professionals if they sign a confidentiality agreement, or in the case of emergency situations, without the confidentiality agreement. ⁹⁰ BLM, New Mexico, and Wyoming do not have such rules.

BLM declined to revise the rule⁹¹ to follow several states (in addition to Colorado and Montana) that require limited disclosure of trade secrets under certain circumstances.⁹² BLM claims that the Federal Trade Secrets Act makes it a crime to release trade

^{84. 3} Wyo. Code R. § 45(d) (LexisNexis 2010).

^{85.} Colo. Code Regs. § 404-1:205A(b)(2) (2012); Mont. Admin. R. 36.22.1015 (2011).

^{86.} CAL. CODE REGS. tit. 14 (2011); UTAH ADMIN. CODE R. 649 (2013).

^{87.} CAS numbers are unique numerical identifications assigned by the Chemical Abstracts Service to all chemicals described in open scientific literature.

^{88.} Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. § 31,636, 31,656 (proposed May 24, 2013) (to be codified at 43 C.F.R. 3162.3-3(i)); COLO. CODE REGS. § 404-1:205A(b)(2) (2012); MONT. ADMIN. R. § 36.22.1015; N.M. CODE R. § 19.15.16.19 (LexisNexis 2008); 3 WYO. CODE R. § 45(d) (LexisNexis 2010).

^{89.} Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. \S 31,636, 31,659 (proposed May 24, 2013) (to be codified at 43 C.F.R. 3162.3-3(j)); 3 WYO. CODE R. \S 45(f) (LexisNexis 2010); N.M. CODE R. \S 36.22.1016 (LexisNexis 2008); COLO. CODE REGS. \S 404-1:205A(b) (2012); MONT. ADMIN. R. \S 36.22.1016 (2011).

^{90.} Colo. Code Regs. \S 404-1:205A(b)(5) (2012); Mont. Admin. R. \S 36.22.1016 (2011).

^{91.} Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. 31,636 (proposed May 24, 2013) (to be codified at 43 C.F.R. § 3160) at 98-99.

^{92.} At least six states (Colorado, Montana, Arkansas, Ohio, Pennsylvania, and Texas) have rules requiring operators to release trade secret information to health professionals. In four of the states (Colorado, Montana, Pennsylvania, and Texas), confidentiality agreements must be signed unless there is an emergency situation, and in the remaining two states (Ohio and Arkansas), confidentiality agreements are not required. See MATTHEW MCFEELEY, NATURAL RES. DEF. COUNCIL, STATE HYDRAULIC FRACTURING DISCLOSURE RULES AND ENFORCEMENT: A COMPARISON (2012), available at http://nrdc.org/energy/files/Fracking-Disclosure-IB.pdf.

secret information even under such circumstances.⁹³ However, comments submitted in response to BLM's 2012 proposal gave detailed legal explanations of why the act does not prevent disclosure of trade secrets to health professionals, or perhaps at all.⁹⁴ Furthermore, courts have emphasized that the act was not meant to prevent agencies from promulgating rules requiring disclosure, but to "forestall casual or thoughtless divulgence—disclosure made without first going through a deliberative process with an opportunity for input from concerned parties." BLM authority to require disclosure of trade secrets therefore remains ambiguous.

5. Wastewater/Fluid Storage

As explained above, BLM's 2013 and 2012 proposals do not require tanks for storage of any fluids, but they do require the use of (at a minimum) single-lined pits for flowback and other wastewater storage; BLM reserves the discretion to require additional measures to protect against leakage. BLM rules would not restrict types of fluids that can be stored in pits. Four of the western states also allow lined pit storage for all fluids. However, New Mexico requires an application to use a pit, which must include operating and maintenance procedures, a closure plan, and a hydrogeological report. Montana also restricts the type of fluids that can be stored in pits, and many other states restrict the circumstances under which pits can be used or the types of fluids they can store. However, we will be a stored in pits and many other states restrict the circumstances under which pits can be used or the types of fluids they can store.

Comments in response to the 2012 proposal requested BLM to require double-lined pits or tanks for some or all fluids. ¹⁰⁰ In the 2013 proposal, BLM claims that single-lined pits and tanks "reasonably protect land and water" and are in keeping with the American Petroleum Institute's recommended practices for handling

^{93.} Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. 31,636, 31,660 (proposed May 24, 2013) (to be codified at 43 C.F.R. § 3160).

^{94.} See, e.g., NATURAL RES. DEF. COUNCIL, COMMENTS ON PROPOSED RULE ON OIL AND GAS; WELL STIMULATION, INCLUDING HYDRAULIC FRACTURING, ON FEDERAL AND STATE LANDS (2012), available at http://sierraclub.org/pressroom/downloads/BLM-comments-9-10-12.pdf

^{95.} CNA Fin. Corp. v. Donovan, 830 F.2d 1132, 1141 (D.C. Cir. 1987).

^{96.} Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. 31,636, 31,655-56 (proposed May 24, 2013) (to be codified at 43 C.F.R. § 3162.3-3(h)).

^{97.} See Richardson et al., supra note 6, at 50-51.

^{98.} N.M. CODE R. § 19.15.17.9(B)(4) (2013).

^{99.} See, e.g., 225 ILL. COMP. STAT. ANN. 732/1-75 (West 2013) (allowing pits for temporary storage only in the event that flowback is more than anticipated; see also MICH. ADMIN. CODE R. 324.407 (2006) (limiting the type of wastewater that can be stored in pits and requires tanks if drilling is located in a residential zone).

^{100.} Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. $31,636,\,31,655$ (proposed May 24, 2013) (to be codified at 43 C.F.R. § 3160).

completion fluids.¹⁰¹ BLM did, however, request an evaluation on the costs of requiring flowback fluids to be stored in tanks.¹⁰² Other commenters argued that the fluid storage regulation was repetitious with state rules (a claim generally made regarding the BLM proposal).¹⁰³ But according to BLM, its pit liner requirement would "compel only six additional lined pits per year," because most of the states where BLM manages oil and gas resources already require pit liners.¹⁰⁴

6. Wastewater Transportation Tracking

In choosing not to revise the 2012 proposal to include more information on wastewater transportation plans as requested by some commenters, BLM pointed to Onshore Order No. 7,¹⁰⁵ which requires an operator to submit a copy of the disposal facility's permit and, where wastewater will travel over federal or Indian lands off the lease site, a BLM right-of-way authorization.¹⁰⁶ The proposal leaves out comprehensive record-keeping of wastewater transportation, which many states require.¹⁰⁷

Colorado, Utah, and New Mexico have record-keeping requirements, and New Mexico also requires a permit for wastewater transportation. While some aspects that are typically included in record-keeping, such as the location of the disposal facility, are required by Onshore Order No. 7, many other aspects are left out, including dates of pickup and delivery, the type of fluid being transported, and a requirement to hold on to transportation records for a specified period of time. 109

However, BLM may have had a good reason for leaving out such record-keeping. Wastewater transportation by means of vehicles using interstate highways is regulated by the Department of Transportation (DOT)¹¹⁰ and is outside the jurisdiction of BLM¹¹¹—

^{101.} Id.

^{102.} Id.

^{103.} Id.

^{104.} Id. at 31,666

^{105.} Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. 31,636, 51,655-56 (proposed May 24, 2013) (to be codified at 43 C.F.R. § 3160).

^{106.} Onshore Order No. 7, Disposal of Produced Water, Section III.B., 43 C.F.R. § 3160 (1993)

^{107.} See Richardson et al., supra note 6, at 57-58.

^{108.} See id.; see also UTAH ADMIN. CODE § 649-9-11 (2013) (updated after the RFF study came out).

^{109.} Onshore Order and Gas Order No. 7, Disposal of Produced Water, 43 C.F.R. § 3160 (1993).

^{110. 49} C.F.R. Subt. B, Ch. I (2011).

^{111. &}quot;Equipment and vehicles using interstates and highways must be licensed and follow Department of Transportation procedures for transporting wastewater. These procedures are outside of BLM's jurisdiction." U.S. DEP'T OF THE INTERIOR, BUREAU OF LAND

while drilling occurs on federal lands, transportation may not. While BLM could have created more stringent regulations for tracking wastewater transportation on public lands, jurisdiction would shift to the DOT whenever interstate highways were used. Wastewater transported on state or private roads would fall within the jurisdiction of the state and would also be outside of BLM's jurisdiction.

7. Accident Reporting

Existing BLM rules require operators to notify BLM when "undesirable events occur," which may include accidental spills or releases of hydrocarbon fluids, produced water, hydraulic fracturing flowback fluids, or other substances. Notification is required within twenty-four hours for accidents considered major. The majority of all states with shale gas development have specific maximum time limits for accident reporting, with California being the only state of the six analyzed here that does not have such requirements. Montana requires reporting immediately, and the remaining four require reporting within twenty-four hours. 114

8. Well Idle and Temporary Abandonment

Most states, including all six western states analyzed, put specific time restrictions on how long a well can be left idle until it must be put back into operation, converted to a waste disposal well, plugged and abandoned, or in many states, temporarily abandoned. These regulations prevent operators from allowing wells to fall into disrepair. BLM did not address idle time or temporary abandonment in its 2013 or 2012 proposals, nor are these addressed in Onshore Order No. 2. Well idle time and time limits vary widely across states. Four of the western states (Colorado, New Mexico, Utah, and Wyoming) allow temporary abandonment, during which an operator may continue to leave a well idle but

MGMT., REFERENCE No. 3100/(UT-922000), PROTEST TO THE INCLUSION OF CERTAIN PARCELS IN THE FEBRUARY 19, 2013 COMPETITIVE OIL AND GAS LEASE SALE (Feb. 15, 2013) available at http://www.blm.gov/pgdata/etc/medialib/blm/ut/lands_and_minerals/oil_and_gas/february_20130.Par.41810.File.dat/Living%20Rivers%20Protest%200213%202-15-13% 20508.pdf.

^{112.} U.S. DEP'T OF THE INTERIOR, GEOLOGICAL SURVEY CONSERVATION DIV., NTL-3A, NOTICE TO LESSEES AND OPERATORS OF ONSHORE FEDERAL AND INDIAN OIL AND GAS LEASES, REPORTING OF UNDESIRABLE EVENTS, available at http://blm.gov/pgdata/etc/medialib/blm/wo/MINERALS_REALTY_AND_RESOURCE_PROTECTION_/energy/oil_and_gas.Par.86049.File.dat/NTL3A.pdf.

^{113.} Id.

^{114.} See Richardson et al., supra note 6, at 71-72

^{115.} Id. at 67-71.

must generally take certain measures to reduce the risk of damage or contamination. 116

C. Overall Comparisons

The simplest comparison of existing state and proposed BLM rules is a tally of the regulatory elements we analyze for the states and BLM. This gives some sense of the breadth of BLM's regulatory posture compared with state regulations. Figure 1 shows the total number of elements regulated by California, Colorado, Montana, New Mexico, Utah, Wyoming, and BLM. Of the elements in our analysis, Colorado and New Mexico regulate all eleven in some fashion. Under its 2013 proposal and existing rules, BLM would regulate seven elements. Only California among the six states analyzed would regulate fewer.

Table 1 shows each element and how it is regulated by each state, existing BLM regulations, and the 2013 proposal, including the regulatory tool used. This shows two notable differences between BLM rules and the state rules, which were also explained in more detail above. First, BLM neither has nor proposes to add requirements for idle time or temporary abandonment, which are regulated in some way by all six states. Second, all six states have command-and-control regulations addressing various aspects of casing and cementing, whereas BLM has performance standards.

The table also shows that existing BLM rules do not appear to impose significant substantive requirements on operators in these states, at least for the elements in our analysis—though, as noted, determining the effective stringency of BLM casing and cementing performance standards is difficult. State command-and-control rules for casing and cementing could be stringent enough to satisfy BLM performance standards for casing and cementing. Since, like BLM, four of the states require accident reporting within twenty-four hours and a fifth requires reporting immediately, BLM regulation impacts operators in only one of the six states we considered—California, where accident reporting is not required.

BLM's 2013 proposed rule is more stringent than the rules in certain states in only three areas, also shown in Table 1. First, BLM rules would ensure that pit liners are to be used on federal and Indian lands in the three states that do not already require them generally. Second, the BLM rule would add frack fluid disclosure requirements on federal and Indian lands in both California and Utah. Finally, a BLM rule would require operators to record

integrity tests in CELs on federal and Indian lands in California, Utah, and Montana, and it would require more frequent tests (MITs) in California and Utah.

Figure 1. Number of Regulated Elements

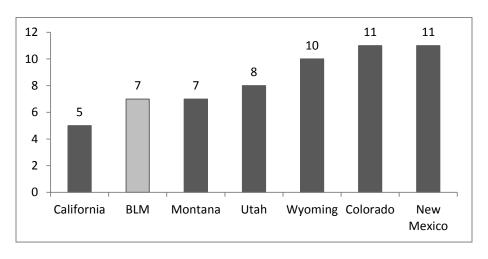


Table 1. Comparison of BLM Proposed and Previous **Existing Rules to State Rules**

Frack fluid dis- closure		Disclosure after fracking	Disclosure after fracking	
		Dise		
Idle time abandon-ment ment ment sandard standard		6 mths.	Perfor- mance standard	
Idle time	300 mths.	6 mths.	12 mths.	
Accident report- ing		24 hrs.	0 hrs.	
Waste- Pit water liners ¹¹⁹ transport track- ing ¹²⁰		5 yrs.		
Pit liners ¹¹⁹		24 mil.		
Pits / tanks	Allow and regulate pits	Allow and regulate pits	Tanks required for some fluids	
Testing of casing/ cement-ing //s		MIT every 5 yrs., CBL	MIT every 5 yrs.	
Casing / cementing 117 cement- cementing 118 cement- ing 118 Surface circulation, inter. / prod. cement type cement type		Surface circulation, inter. / prod. circulation, water table	Surface circulation, cement type	
Water set- backs		Yes		
Build- ing set- backs		500 ft.		
Regulatory body	California	Colorado 500 ft.	Montana	
Regu	91st2			

"Surface circulation" refers to requiring the outer layer of casing to be cemented to the surface, "inter./prod. circulation" refers to requiring intermediate and production casing and for it to be cemented to the surface or other depth, and "water table" refers to requiring casing and cementing to a certain depth below the water table.

¹¹⁸. MIT refers to Mechanical Integrity Test; CBL refers to cement bond log; CBL refers to cement evaluation log.
¹¹⁹. The heading refers to the minimum thickness of the liner. BLM requires liners but has no thickness rule.
¹²⁰. The heading refers to the minimum period of time that records must be kept.

The heading refers to the minimum period of time that records must be kept.

91st2 5 5 2 >			22 P	MJ8 995
New Mexico	Utah	Wyoming	BLM 2013 pro- posed rule	BLM existing rules
Yes		350 ft.		
Yes		350 ft.		
Surface circulation, inter. / prod. circulation	Surface circulation, cement type	Surface circulation, inter. / prod. circulation, cement type, water table		Performance standard
CBL in some counties	MIT, CBL, or other acceptable method	MIT every 5 yrs., CBL or other acceptable method	MIT every 5 yrs., CEL	(testing pressure is less than the 2013 proposed MIT)
Tanks required for some fluids	Allow and regulate pits	Allow and regulate pits	Allow and regulate pits	Allow and regulate pits
20 mil.	40 mil.	Perfor- mance standard	Yes	
5 yrs.	6 yrs.			Only facility permit and right- of-way authori- zation
24 hrs.	24 hrs.	24 hrs.		24 hrs.
12 mths.	60 mths.	12 mths.		
60 mths.	60 mths. 12 mths.	24 mths.		
Disclosure after fracking		Disclosure before fracking	Disclosure after fracking	

No evidence of regulation

Addressed in permit

Performance standards

Command-and-control

V. CONCLUSIONS

The federal government controls access to oil and gas resources on thirty-six million acres of federal and Indian lands (and private lands for which the federal government retains subsurface rights) across twenty-four states. This makes BLM, as administrator and steward of these lands, the largest single player in unconventional development and, in effect, the largest regulator. With its 2012 and 2013 proposals, BLM set out to update rules not revised in decades to better address risks imposed by the rapid expansion in unconventional development driven by hydraulic fracturing and horizontal drilling technologies.

Whether BLM achieved that goal remains a subject of debate. The 2013 proposed rule contains significant changes that generally make the rule less restrictive than the 2012 proposal. In some cases, lack of BLM authority means that the breadth of the rule appears limited in comparison with state rules. For a crucial part of the development process—casing and cementing—BLM's rules are not updated at all, though existing rules are framed as performance standards that appear sufficiently flexible to address any additional risks imposed by unconventional development.

Comparing BLM's proposal with existing state rules reveals that in a few states and regulatory areas, operators would face additional requirements on federal lands. For example, BLM rules would require use of lined pits and disclosure of frack fluids in those states that do not impose similar requirements. Generally, however, BLM rules do not appear to impose significant requirements beyond existing state regulations, at least across the regulatory elements we analyzed and in those states with large federal landholdings. Moreover, in some regulatory areas (notably setback requirements), states generally have requirements whereas BLM does not.

Nevertheless, it is important to remember that, like the states, BLM may place additional requirements on operators during the permitting process as a condition of approval. And like a landowner, it might also add lease terms that go beyond the requirements in the regulations. Moreover, BLM might enforce its regulations more (or less) consistently or effectively than states do.

Critics of BLM's proposal have claimed that it either is inadequate to protect the public and the environment on federal lands or is unnecessary and burdensome. Given the background of state regulation, a better measure may be whether each component of the proposal provides meaningful additional protections. Based on our analysis, BLM's proposal does fill some apparent gaps in state

regulation but does not significantly deviate from the prevailing set of requirements under state law.

Indeed, industry critics allege that BLM's proposal unnecessarily duplicates state rules. Unless BLM imposes costly new procedural requirements, there is little downside to such federal rules that duplicate state rules for the most part and impose additional requirements only in states that leave certain practices unregulated. BLM's resources therefore are probably best focused on those areas either where some states have failed to regulate a risk that BLM considers significant or where the consequences of development are greater on public lands. Advocates of stronger regulation thus would be better off advocating for such things as greater requirements for flowback/wastewater containment so as to better protect pristine surface waters, rather than criticizing BLM's decision not to include setback restrictions from buildings, which state law may already address adequately. Generally, BLM appears to be following this model.

Alternatively, however, some argue that federal rules should not merely fill gaps in state regulations or address special risks, but rather serve as a model for strong, effective regulations. If one holds this view, than a comprehensive, internally consistent set of regulations is important. Limitations on BLM's jurisdiction, resources, and expertise make this task difficult, however.

DISTRIBUTED ENERGY AND NET METERING: ADOPTING RULES TO PROMOTE A BRIGHT FUTURE

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Abstract: The combination of falling prices for solar technology and an environmentally conscious regulatory landscape provide an opportunity for distributed energy—energy produced on the rooftops of homes and businesses—to expand rapidly in the United States. The success of solar energy positions many state governments in the middle of a tug-of-war between large solar developers. who sell and lease distributed energy systems, and public utilities who stand to lose customer-demand with every new distributed energy system installed. Most "customer-generators"—customers who receive electricity from the utility and also send electricity back to the grid from rooftop solar panels—may not pay the utility for their use of the utility's transmission grid. To add fuel to the fire, generous net metering programs throughout the country reimburse customer-generators for the electricity they contribute to the grid at retail rates. These rates include charges for generating, transmitting, and distributing the electricity to customer houses. While retail rate net metering programs encourage renewable growth, they probably reflect a range of services beyond that of the actual electricity that the customer-generator contributes to the grid.

Commitments at both the state and federal levels demonstrate the growing value attributed to renewable energy and likely warrant subsidy and incentives to promote distributed renewables. But the most common system for subsidization—net metering—is flawed as it operates today. This Essay identifies the shortcomings of the "rough justice" that pervades current service structures and net metering programs offered to customer-generators in many states. It suggests that these programs are inappropriate mechanisms for allocating the value of distributed renewable energy's nonfinancial

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benefits because they lack transparency. Having identified these problems, this Essay proposes a basic framework of mechanisms available to states to allocate distributed renewable energy's costs and benefits in a transparent manner while also maintaining sufficient incentives to ensure future growth.

Experts suggest that distributed solar technology will spread exponentially over the next few years; consequently, states should deal with these issues now. Waiting may result in significant misallocation of the costs and benefits of distributed renewable energy, as well as difficulties with grid operation.

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I. Introduction

Distributed energy (DE) encompasses any means of generating and feeding energy into the distribution side of the grid. A generator is considered "distributed" because it is sited at or near the point of energy consumption and delivers energy directly into the distribution grid. In contrast, utilities provide the vast majority of the country's electricity via large-scale power plants called "central generators." Utilities typically site these plants far from the consumer, and energy delivery occurs via a central transmission and distribution networks. Although public utilities have dominated the U.S. electricity system for more than half a century, distributed energy, and the sale of energy back to large public utilities through "net metering" is rapidly growing.

Net metering is a service provided by a utility to its customer if the customer generates electricity via on-site generation.⁵ Under a net metering service, a utility installs a "retail bidirectional meter" that measures the flow of electricity to and from a customer who has installed DE.⁶ When the customer demands more electricity than her generator produces—for example, on a cloudy, humid, summer day when the air conditioner is running but the sun is not shining—the meter runs forward.⁷ When the customer generates more electricity than she demands, the meter runs backwards.⁸ If the customer generates more electricity than she demanded during a billing period, then the utility may compensate her at the end of the period.

Rates for this "net excess generation" vary widely by state and provide a point of contention in net metering regulation.⁹ On one side, some states reimburse the customer generator at the retail rate for her net excess generation.¹⁰ This scheme values all of the electricity that the customer-generator generates on site at the retail rate she pays for delivered electricity, at least up to the quantity she demanded during the billing period.¹¹ The retail rate

^{1.} Tim Lindl, Letting Solar Shine: An Argument to Temper the Over-the-Fence Rule, 36 Ecology L.Q. 851, 853 (2009).

^{2.} *Id*.

^{3.} *Id*.

Id.

^{5.} ARIZ. ADMIN. CODE § R14-2-2302 (2014).

^{6.} Steven Ferrey, Virtual "Nets" and Law: Power Navigates the Supremacy Clause, 24 Geo. Int'l Envil. L. Rev. 267, 273 (2012).

^{7.} *Id*.

^{8.} *Id*.

^{9.} Id. at 274.

^{10.} *Id*.

^{11.} Id. at 273.

reflects a host of components including, but not limited to, the costs to the utility associated with generation, transmission and distribution infrastructure maintenance, and taxes.¹² On the other side, some states compensate the customer at a much lower avoided cost rate, which values the electricity based on the costs that the utility would have incurred had it delivered the electricity to the customer.¹³

Recent developments in photovoltaic (PV)—a method of converting sunlight directly to energy using semiconductors—efficiency, coupled with generous subsidies from the federal government and state governments, have sparked a wave of DE installations in the United States. ¹⁴ To illustrate the impact, as of January 2009, only 900 DE solar systems were installed on Arizonan homes. ¹⁵ By June 2013, a flyover would reveal over 18,000 residential DE solar systems. ¹⁶ Over ninety-eight percent of the customers in Arizona with DE take service under net metering plans. ¹⁷

DE's strong growth in states such as California and Arizona raises questions of economic viability from its most natural opponents, public utility companies. ¹⁸ In Arizona's net metering struggle, both publicly traded solar corporations—the companies selling distributed energy systems—and the states' public utilities claim to champion the Arizona customer and the environment. ¹⁹ Solar

^{12.} Ferrey, supra note 6, at 273.

^{13.} Travis Bradford & Anne Hoskins, *Valuing Distributed Energy: Economic and Regulatory Challenges* 16 (Apr. 26, 2013) (working paper) (on file with Princeton Roundtable).

^{14.} See Steven Ferrey, Alternative Energy in a Spaghetti Western: Clint Eastwood Confronts State Renewable Energy Policy, 32 UTAH ENVTL. L. REV. 279, 283 (2012) [herein-after Spaghetti Western] (suggesting that the federal government primarily offers tax credits and incentives for renewable energy, while states offer incentives through Renewable Portfolio Standards and net metering); see also Samuel Farkas, Third-Party PPAs: Unleashing America's Solar Potential, 28 J. LAND USE & ENVTL. L. 91, 94-95 (2012) (suggesting that federal and state incentives are some of the most important catalysts for photovoltaic distributed energy).

^{15.} See Application of Arizona Public Service Company for Approval of Net Metering Cost Shift Solution, No. E-01345A (2013) [hereinafter APS Application], available at http://azenergyfuture.com/getmedia/df0f8290-f772-4621-ab32-fc1ff9bb58e9/NetMeteringProposal FilingtoACC_130712.pdf/ (Arizona Public Service, Arizona's largest public utility, proposed a change in the rate structures for customer-generators based on an alleged cost resulting from the combination of DE, net metering, and retail rate reimbursement for excess DE energy).

^{16.} Id.

¹⁷ *Id*

^{18.} Id.; see also John Schwartz, Fissures in G.O.P. as Some Conservatives Embrace Renewable Energy, N.Y. TIMES, Jan. 25, 2014, http://nytimes.com/2014/01/26/us/politics/fissures-in-gop-as-some-conservatives-embrace-renewable-energy.html?_r=1 (discussing how the battle over distributed energy and net metering recently united Tea Party conservatives and Sierra Club members in a unique alliance against utilities).

^{19.} APS Application, supra note 15.

corporations claim to save customer-generators from the utilities' excessive electricity rates while also protecting the environment; utilities claim to protect the conventional customer while also offering reliable service for all customers. To be sure, neither side acts as the rate payers' Robin Hood;²⁰ capturing the positive externalities associated with net metering to maximize shareholder profits plays into the motives of each side because both are composed primarily of publicly traded corporations.²¹ Rooftop solar energy threatens publicly-held utility monopolies.²² As DE grows, every extra kilowatt-hour (kWh) produced by a customer-generator is one less kWh from which the utility supplier can derive a profit.²³ Thus utilities oppose DE because "actions that lead to conservation, appliance efficiency gains, and local generation all penalize utility profits."24 On the other side, slowed DE growth reduces publicly traded solar companies' returns to their investors. With the recent boom in distributed PV—a subset of DE—Wall Street investment banks have invested in the solar corporations immersed in this battle.²⁵ In much the same way that a utility increases profits with every kWh sold, a reduction in the growth rate of solar installations entails fewer sales and implies lower returns on equity for solar investments. The two groups of entities remain diametrically opposed over the issues of DE and net metering in most areas.

The issue here appears to be twofold on the surface, but this Essay argues that a single concept underlies both. First, both sides question whether retail rate reimbursement for net metered electricity fairly compensates customer-generators. Solar corporations

^{20.} Ryan Randazzo, APS, Ad Campaign Attacking Solar Firms May Be Tied, AZ CENTRAL, July 12, 2013, http://azcentral.com/business/consumer/articles/20130710aps-adcampaign-attacking-solar-firms-may-be-tied.html (explaining that APS funded conservative group's campaign for utility support alongside billionaire oil tycoons, the Koch brothers); see also Christopher Martin, Goldman Sachs to Finance \$500 Million for SolarCity Roofs, BLOOMBERG (May 16, 2013), http://bloomberg.com/news/2013-05-16/goldman-sachs-to-finan ce-500-million-in-solarcity-roofs.html (explaining that the return on investment in rooftop solar installations is so high that wall street investment banks are investing hundreds of millions of dollars with the publicly traded solar corporations in Arizona's markets).

^{21.} Brian M. McCall, The Corporation as Imperfect Society, 36 DEL. J. CORP. L. 509, 511 (2011) (explaining that publicly traded corporations exist to maximize the wealth of shareholders).

^{22.} Marilyn A. Brown & Sharon Chandler, Governing Confusion: How Statutes, Fiscal Policy, and Regulations Impede Clean Energy Technologies, 19 STAN. L. & POL'Y REV. 472, 485 (2008).

^{23.} *Id*. 24. *Id*. at 482.

^{25.} Josh Hutheson, Solar City Goldman Sachs Deal Highlights Solar's Investment Appeal, Seeking Alpha (July 11, 2013), http://seekingalpha.com/article/1544862-solar-citygoldman-sachs-deal-highlights-solars-investment-appeal (Goldman Sachs entered a financing agreement to fund \$500 million for DE projects).

worry this reimbursement structure fails to adequately pay customer-generators for the services they provide to the utility, especially during peak hours. Homes with rooftop solar panels in warm climates provide extra electricity to the grid when electricity is in high demand—when the sun is shining brightly and air-conditioning use is high. And utilities question whether allowing customer-generators to take service under traditional usage-based rate schedules shifts costs to traditional customers. ²⁶ Customer-generators use the grid to sell excess electricity back to the utility provider, and they rarely pay for these grid services, perhaps shifting grid costs to traditional customers. These issues create uncertainty and tension between utilities and solar proponents because both sides "believe they are providing benefits to the other without adequate compensation." ²⁷

This Essay focuses on distributed energy and net metering as they relate to regulated utilities and state public utility commissions (PUCs), which establish the rates electric utilities may charge their customers. It ultimately contends that many current net metering regulations fail to accurately and transparently value the costs that utilities bear in serving customer-generators and the value of energy that customer-generators put into the distribution grid. Furthermore, this Essay suggests that an array of changes in the way customer-generators take service from public utilities and sell electricity back to utilities can solve this transparency issue before it becomes unmanageable.²⁸

States can achieve this transparency goal by directing customers who install DE to take service under time-of-use rate schedules, ²⁹ which charge a customer different rates based on whether a customer's demand for electricity at any point in time coincides with high or low demand across the system. ³⁰ Benefits would also arise by requiring reimbursement to customer-generators for all energy exported to the grid based on an avoided-cost pricing model—the money the utility would have had to pay another generator for generically generated electricity ³¹—using adjustable DE caps to

^{26.} See generally APS Application, supra note 15.

^{27.} Bradford & Hoskins, supra note 13, at 16.

^{28.} See Kristin Bluvas, Distributed Generation: A Step Forward in United States Energy Policy, 70 Alb. L. Rev. 1589, 1605 (2007) (suggesting that rapidly implementing DE could cause reliability and predictability problems).

^{29.} See Brown, supra note 22, at 483 (explaining that time-of-use rates vary the price of electricity based on the actual cost of generation and delivery and thus allow customers to receive price signals associated with the cost of service).

^{30.} Id.

^{31.} See Bradford & Hoskins, *supra* note 13, at 5 (describing avoided-cost pricing as the cost a utility avoids incurring due to the presence of electricity provided by the customer-generator or Qualified Facility).

help avoid system malfunctions and to ensure that DE can be easily interconnected to the grid.³² Finally, providing all subsidies and incentives for DE upfront gives potential investors in renewable energy sufficient confidence in their return on investment.

Part II provides a brief description of the regulated utility industry to provide context for the DE and net metering issues, and Part III describes how utilities conventionally provide electricity to customers. Part IV examines the issues created by DE, net metering, and the potential growth of both. Part V considers and refutes solutions suggested in current debates by concerned parties and examines a few DE and net metering regulations. Finally, Part VI proposes a system of mechanisms that may provide transparency in net metering regulation.

II. DEVELOPMENT OF THE REGULATORY LANDSCAPE SURROUNDING ENERGY

Before beginning an assessment of the issues surrounding DE and net metering, one should have at least a rudimentary understanding of the historical trends that led to the modern landscape of electric utility law. The history of electricity generation and delivery, and the law governing electricity, strongly influences the current system in which state public utility commissions regulate DE and its growth. While the federal government exercises jurisdiction over electricity in interstate commerce through the Federal Energy Regulatory Commission,³³ state and municipal governments provide the majority of regulation pertaining to distributed energy and net metering.

A. National Energy Regulation

The twentieth century ushered in the era of electrification in the United States.³⁴ At the outset, small generation and transmission system owners and operators provided electricity to the public.³⁵ As demand for electricity grew and pioneers innovated in generation and transmission technology, large electricity companies purchased central generation plants and the transmission and

^{32.} See Shannon Baker-Branstetter, Distributed Renewable Generation: The Trifecta of Energy Solutions to Curb Carbon Emissions, Reduce Pollutants, and Empower Ratepayers, 22 VILL. ENVTL. L.J. 1, 14 (2011) (describing a renewable energy cap as a regulatory mechanism that limits the amount of electricity that a utility must take from a customergenerator).

^{33. 42} U.S.C. § 7134 (2012).

^{34.} Bluvas, *supra* note 28, at 1591.

^{35.} Id.

distribution networks from small privately owned providers.³⁶ These electric companies grew into vertically integrated utilities, meaning they controlled generation, high voltage bulk transmission, and low voltage distribution to customers.³⁷ In response to vertical integration, in 1935, Congress gave the Federal Power Commission (FPC) jurisdiction over electric energy in interstate commerce and the related wholesale rates and transactions.³⁸

In the wake of the energy crisis of the 1970s, in which access to foreign fuel was limited and energy prices were high, Congress enacted the Public Utilities Regulatory Policies Act (PURPA) to promote domestic electricity generation and competition within the generation industry.³⁹ PURPA requires that investor owned utilities (IOUs) allow small non-utility generators, otherwise known as qualified facilities (QFs), to use their transmission systems to deliver electricity to the IOU's customers.⁴⁰ PURPA encourages renewable energy generation by requiring IOUs to purchase a QF's energy at the IOU's incremental or avoided cost.⁴¹ It also created a new federal agency, the Federal Energy Regulatory Commission (FERC), which assumed the FPC's role regulating wholesale energy rates.⁴² Anything that does not fit into the limited scope of the FERC's authority to regulate interstate electricity and wholesale rates falls under state regulation.

The FERC does not recognize rooftop DE as a qualified facility for purposes of PURPA.⁴³ As a result, rooftop solar installations at issue in net metering almost always fall outside of the FERC's jurisdiction.⁴⁴ Unless the customer-generator conducts a sale of electricity for resale in interstate commerce⁴⁵ or controls a transmission facility,⁴⁶ jurisdiction over rooftop DE falls squarely within a

^{36.} See id. at 1591 (recounting that by 1930, sixteen companies owned seventy-five percent of U.S. generators).

^{37.} Id.

^{38. 16} U.S.C. § 824 (2012).

^{39.} Public Utilities Regulatory Act of 1978, Pub. L. No. 95-617, 92 Stat. 3117.

^{40. 16} U.S.C. § 824a-3 (2012).

^{41.} See infra text accompanying notes 227-228.

^{42.} Energy Policy Act of 2005, 42 U.S.C. \S 15801 (2012); see also supra text accompanying note 40.

^{43.} See Baker-Branstetter, supra note 32 (citing Kevin A. Kelly, Fed. Energy Regulatory Comm'n, Testimony before U.S. Senate Subcomm. on Energy 1, 4 (May 7, 2009), available at http://energy.senate.gov/public/index.cfm/files/serve?File_id=1c996f30-bef1-cfa2-bb69-4094ee5fbe85 (explaining how FERC interpreted FPA to limit number of local distribution facilities that could obtain generator interconnections).

^{44.} Id. at 13.

^{45.} Id.

^{46.} See Amy L. Stein, Reconsidering Regulatory Uncertainty: A Path Forward for Energy Storage, 41 FLA. St. U. L. Rev. (forthcoming 2014) (suggesting that FERC may exercise jurisdiction over energy storage devices if it chooses to recognize them as facilities of interstate transmission).

state's jurisdiction. The Energy Policy Act (EPAct),⁴⁷ provides potential federal influence, however, requiring a state to *consider* providing net metering if a state's customer requests such service.⁴⁸ The FERC decides how and whether to implement the federal net metering policy because it is charged with implementing both PURPA and the EPAct. In 2006, the FERC declined to enforce the net metering portion of the EPAct.⁴⁹ The FERC held that its ability to enforce EPAct provisions was discretionary.⁵⁰ In exercising this discretion, the FERC found that Congress left the power to enforce net metering issues squarely within the power of each state.⁵¹

B. State Energy Regulation

While the FERC regulates electricity in interstate commerce and wholesale sales of electricity,52 states control intrastate aspects of electricity markets and transactions. Historically, vertically integrated utilities operated as natural monopolies within a service area defined by the state's public utility commission.⁵³ Some states have weakened aspects of these monopolies through restructuring. For example, a restructured state may require competitive generation, while leaving transmission and distribution to monopolistic regulation. In a completely restructured electric utility industry, the state would require public utilities to commercially separate all of their services.⁵⁴ As of 2010, sixteen states had partially restructured their electrical utility industries, largely in response to rising electricity prices.⁵⁵ But many states have not restructured their utility industries at all. These states maintain traditional vertically integrated models, in which states approve the rates that utilities may charge customers in their service areas. Because traditionally regulated markets allow utilities to recoup the cost of service besides a reasonable return on invest-

^{47.} Energy Policy Act of 2005, 16 U.S.C. § 15801 (2012).

^{48. 16} U.S.C. § 2621(d)(11) (2012).

^{49.} Wahl v. Allamakee-Clayton Elec. Coop., 115 FERC. ¶ 61,318, 62,136 (2006).

^{50.} Id. at 62,137.

⁵¹ *Id*

^{52. 16} U.S.C. §§ 824-825r (2012).

 $^{53.\,\,}$ Energy Antitrust Handbook: A Guide to the Electric and Gas Industries, A.B.A. 7 (2002).

^{54.} David G. Pettinari, You Can't Always Get What You Want—Will Two Recent State Court Decisions Tarnish the Political Promise of Electricity Industry Deregulation?, 76 U. Det. Mercy L. Rev. 501, 506 (1999).

^{55.} Status of Electricity Restructuring by State, U.S. ENERGY INFORMATION ADMIN. (Sept. 2010), http://eia.gov/electricity/policies/restructuring/restructure_elect.html.

ment,⁵⁶ they plainly demonstrate the phenomena this Essay aims to investigate.

Arizona maintains a traditional regulated utility market,⁵⁷ and much of the controversy regarding DE and net metering occurs within the state.⁵⁸ In light of these considerations, Arizona and its utility regulations constitute a prime example for introducing the substance of net metering. In order to capture the most holistic outlook and to more thoroughly explore the challenges of net metering, however, this Essay considers various state and municipal net metering regulations in Part IV.

1. Regulation in the Utility Industry

As electricity developed in Arizona in the early 1900s, a few large public utilities arose and provided service as IOUs.59 Each IOU delivers electricity to a specified service area, or "footprint," under a "certificate of convenience and necessity." 60 Customers within the footprint may only buy electricity from the designated provider, creating a monopoly for the utility. 61 To ensure the monopoly treats its captive customers fairly, Arizona's constitution gave the Arizona Corporation Commission (ACC) jurisdiction to regulate public utilities within the state.⁶² In exchange for receiving a service area of captive customers, public utilities in Arizona must provide non-discriminatory, reliable service to anyone who wants electricity within the footprint. 63 For example, consider someone within the utility's footprint who wants to build a house atop a desolate mountain. The utility must provide service and charge unbiased rates for electricity delivered to the customer regardless of the high cost of the utility to serve the customer. The

^{56.} Melissa Powers, Small Is (Still) Beautiful: Designing U.S. Energy Policies to Increase Localized Renewable Energy Generation, 30 Wis. INT'L L.J. 595, 652 (2012).

^{57.} Phelps Dodge Corp. v. Ariz. Elec. Power Coop., 83 P.3d 573, 606 (Ariz. Ct. App. 2004) (holding that competitively set electric rates violate Arizona's constitution); see also Comm'n Inquiry into Retail Electric Competition, Docket No. E-00000W-13-0135, (Oct. 7, 2013) (closing docket on deregulation of Arizona's electric utility industry in favor of maintaining regulation), available at http://images.edocket.azcc.gov/docketpdf/0000148279.pdf.

^{58.} See generally APS Application, supra note 15 (reviewing Arizona Public Service's request to alter the net metering rules that impact its customers); but see Barbara Vergetis Lundin, Arizona Reaches Net Metering Middle Ground, FIERCEENERGY (Nov. 19, 2013), http://fierceenergy.com/story/arizona-reaches-net-metering-middle-ground/2013-11-19 (discussing the Arizona Corporation Commission's adoption of a temporary solution to the net metering debate; the ACC found evidence of a cost shift between DE and traditional customers and customer-generators will pay a fixed fee per kWh to support grid maintenance).

^{59.} APS Application, supra note 15.

^{60.} Ariz. Admin. Code § R14-2-202 (2014).

^{61.} Id. § R14-2-208.

^{62.} ARIZ. CONST. art. XV, § 2.

^{63.} Ariz. Admin. Code § R14-2-208 (2014).

cost of providing expensive service to rural customers is mitigated by the cheaper cost of providing service to urban customers.

Arizona utilities charge customers for electric service under "just and reasonable" rate schedules.⁶⁴ The ACC approves a utility's retail rates based on the utility's cost of providing service and a "fair" rate of return on the capital investments associated with providing service.⁶⁵ The ACC reevaluates each IOU's rates in periodic rate cases.⁶⁶ The cost of providing service includes fuel for generating electricity, amortized capital, maintaining high voltage transmission systems and low voltage distribution systems, and metering. The reasonable rate of return usually hovers between nine and eleven percent.⁶⁷

2. Renewable Energy and Net Metering Requirements

Besides regulating electricity rates, Arizona encourages certain types of electricity generation through legislation and regulation. Arizona's Renewable Energy Standard Tariff (REST) requires Arizona utilities to meet fifteen percent of their energy generation needs by renewable means by 2025.68 Moreover, thirty percent of the renewable energy needed to meet a utility's REST must be acquired by distributed energy resources. 69 The utilities meet these requirements by using their own renewable central generation units or by acquiring renewable energy credits (RECs) from eligible resources.⁷⁰ According to the ACC, a REC is "the unit created to track kWh derived from an Eligible Renewable Energy Resource or kWh equivalent of Conventional Energy Resources displaced by Distributed Renewable Energy Resources."71 Utilities may meet REST requirements using RECs acquired in previous years, but once the utility applies a REC, it is "retired" and may not be used again.72

Because of the FERC's deference to the states regarding net metering, Arizona completely controls net metering within its borders. The ACC defines net metering as a service "under which electric energy generated by or on behalf of that Electric Utility Customer from a Net Metering Facility and delivered to the Utility's

^{64.} Id. § R14-2-105.

^{65.} *Id*.

^{66.} Id.

^{67.} Powers, supra note 56, at 652.

^{68.} ARIZ. ADMIN. CODE § R14-2-1804 (2014).

^{69.} Id. § R14-2-1805.

^{70.} Id. § R14-2-1804.

^{71.} Id. § R14-2-1801(N).

^{72.} Id. § R14-2-1804(D).

local distribution facilities may be used to offset electric energy provided by the Electric Utility to the Electric Utility Consumer during the applicable billing period."73 When the customer's generator produces more energy than the customer demands, the energy is delivered to the distribution network. This energy is called "export energy" because the energy is exported from the customer to the grid for use by the utility in serving other customers.⁷⁴ When the customer's generator produces less energy than the customer demands, energy is delivered to the customer via the distribution network. The customer's export energy offsets the energy she used during the applicable billing period.⁷⁵ Hence the customer only pays for the "net" energy provided by the utility. 76 If the customer's energy generation exceeded the quantity he took from the utility during the billing period, the utility will credit him for the difference.⁷⁷ Arizona law directs the utility to credit the customer based on the rate applicable under the customer's rate schedule.⁷⁸ The customer receives credit based on the retail rate he pays for electricity from the utility. Arizona law mandates that a customer's maximum generating capacity for purposes of net metering cannot exceed 125% of the customer's total connected load;⁷⁹ meaning that the customer's installed DE solar system can be sized to produce twenty-five percent more energy than he uses during the year.

As of January 2012, thirty states have adopted renewable portfolio standards (RPSs) that, like Arizona's REST, require public utilities to meet statutory or regulatory renewable energy goals. An RPS requires a utility to obtain a specific proportion of its energy from renewable sources by a certain future date. Some RPSs require that a specific portion of the required renewable energy come from distributed sources. For example, Arizona set its renewable energy goals such that its utilities must meet 15 percent of their energy needs by renewable means by 2025. Also, utilities must meet 30 percent of that requirement with energy procured from distributed sources. Public utilities meet their goals by acquiring renewable energy certificates (RECs). A REC represents

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73. Id. § R14-2-2302.
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^{74.} APS Application, supra note 15.

^{75.} Ariz. Admin. Code \S R14-2-2306(D) (2014).

^{76.} Id. § R14-2-1601.

^{77.} Id. § R14-2-2306.

⁷⁸ *Id*

^{79.} Id. § R14-2-2302.

^{80.} Farkas, supra note 14, at 96.

^{81.} Id.

^{82.} ARIZ. ADMIN. CODE § R14-2-1804(B) (2014).

^{83.} Id. § R14-2-1805(B).

^{84.} Farkas, supra note 14, at 96.

the environmental attributes of the power produced by renewable generators, and may be sold separately from the actual kWhs harnessed by the generator.⁸⁵

REC issues can arise regarding net metered electricity when neither the laws of a state nor a power purchase agreement clearly identify the REC's owner.⁸⁶ In an instance of uncertain owner identification, two parties may claim title to a REC.⁸⁷ Dual claiming of RECs can lead to "double counting," or recognizing two distinct owners of a single REC property right arising from a single generation event.⁸⁸ In an instance where a REC is assigned to a utility and simultaneously claimed by a third party, a sale of the third party's claim to the utility to satisfy its REST requirement constitutes double counting of that REC.⁸⁹ In this scenario, the utility reduces its compliance requirement by twice the renewable energy that actually displaced conventional generation.⁹⁰ A policy that purports to value a kWh generated by renewable means, in part because of the environmental attributes of the generator, may create a claim to the REC by the buyer of that kWh.⁹¹

The historical development of electricity and its regulation at the state and federal level lead to an interesting situation. Current legislative and regulative trends require historically vertically integrated electricity companies to incorporate renewable (and often distributed renewable) generators into their mix of generation resources. While these laws undeniably promote public policy goals for renewable generation, as we will see, they may do so at the cost of grid reliability and unsuspecting traditional non-generating utility customers.

III. CONVENTIONAL GENERATION, TRANSMISSION, AND DISTRIBUTION

The regulatory structure that applies to utilities influences how utilities generate, transmit, and distribute electricity, as they must provide electricity in the full quantity demanded by customers. This reliability requirement, combined with additional RPS directives for acceptable fuel sources, cause IOUs to maintain a host of generation technologies to meet customer electricity de-

^{85.} Telephone Interview with Robin Quarrier, Chief Counsel, Center for Resource Solutions (Nov. 11, 2013) [hereinafter Quarrier Interview]; Farkas, *supra* note 14, at 96.

^{86.} Spaghetti Western, supra note 14, at 291.

^{87.} Quarrier Interview, supra note 85.

^{88.} Id.

^{89.} *Id*.

^{90.} Id.

^{91.} Id.

mand. Central generation technologies can be grouped by "ramping" ability. Ramping refers to the change in output over time necessary to get a generator up to a speed such that it produces useable electricity. IOUs build, maintain, and run generators with relatively slow ramping ability to meet the service area's base power demand and subsequently run them for months at a constant generation rate. These "base load" technologies are the most economically efficient generators and meet the minimum energy requirements that customers demand twenty-four hours a day at the lowest possible operating cost. It

Utilities must meet "peak demand" requirements for a few hours every day, when demand fluctuates rapidly. Successfully meeting peak power demand requires generators that ramp up and down within minutes.⁹⁵ To meet peak demand, utilities often bring single-phase natural gas turbines online. While these generators are the easiest to control because of minimal ramping time, they are also the most economically and environmentally inefficient generators in a utility's arsenal.

Finally, IOUs incorporate large renewable energy generators into their portfolios. ⁹⁶ Renewable generators traditionally supply energy on an instantaneous ramping basis because their technology immediately transforms the fuel (typically the sun or wind) into useable electricity. Consequently, utilities must use the energy as renewable generators provide it and must plan efficiently around the weather. ⁹⁷ In contrast to traditional renewables, Arizona's Solana Solar Plant is the country's first large scale solar plant capable of storage. ⁹⁸ Solana will provide power for over 70,000 residents and maintain the ability to store energy for up to six hours via a molten salt storage device. ⁹⁹

^{92.} Managing Large-Scale Penetration of Intermittent Renewables MITEI (Apr. 20, 2011), https://mitei.mit.edu/publications/reports-studies/managing-large-scale-penetration-intermittent-renewables [hereinafter MIT Symposium].

^{93.} *Id*. at 10.

⁹⁴. See id. (discussing that coal and nuclear generators provide the majority of base load generation).

^{95.} Spaghetti Western, supra note 14, at 287.

^{96.} Solana - A Giant Step Towards Sustainable Energy in Arizona, HARMON SOLAR, http://harmonsolar.com/solar-business/solana-%E2%80%93-a-giant-step-towards-sustainable-energy-in-arizona/ (last visited June 1, 2014) [hereinafter Solana Essay].

^{97.} See MIT Symposium, supra note 92, at 8.

^{98.} Solana Essay, supra note 96.

^{99.} Id.

IV. REGULATORY ISSUES SURROUNDING DE AND NET METERING

The recent rapid growth of DE installations gave rise to utility concerns regarding a cost shift from customer-generators to traditional customers. This growth poses potential threats to grid reliability because of the contrasting characteristics of conventional utility-owned generation and DE. Total

A. Cost Shifting Under Current Net Metering Regulation

The concerns over cost shifting arise primarily from the convergence of two factors. First, customer-generators primarily take service under usage-based rates.¹⁰² And second, most customer-generators receive retail rate reimbursements for the excess energy they export to the distribution grid.¹⁰³ California has recently considered this cost shifting issue in depth.¹⁰⁴ California's customer-generators take service primarily under usage-based rates, and IOUs reimburse customers for excess net generation at retail rates.¹⁰⁵

Solar customer-generators use the grid while their solar panels are not gathering energy from the sun. ¹⁰⁶ But because they only pay for power that exceeds the amount generated by their rooftop panels, utility revenues decrease if customer-generators take power under a usage-based rate. ¹⁰⁷ Utilities argue that because the usage-based rates combine infrastructure costs with energy costs, customer-generators avoid paying the infrastructure costs associated with delivering their energy. ¹⁰⁸ Further, they claim that traditional customers bear the costs associated with infrastructure when the regulated utility increases its rates as a function of its costs to generate and deliver electricity. ¹⁰⁹

With high aspirations for renewable generation, California's ratepayers and utilities are prone to feel the effects of any cost-

^{100.} Baker-Branstetter, supra note 32, at 20.

^{101.} See generally MIT Symposium, supra note 92.

^{102.} See generally ENERGY DIVISION, CALIFORNIA PUBLIC UTILITIES, CALIFORNIA NET ENERGY METERING (NEM) DRAFT COST EFFECTIVENESS EVALUATION (2013) [hereinafter CPUC STUDY].

^{103.} Id.

^{104.} Id.

^{105.} See Cal. Pub. Util. Code § 2821-2829(g) (West 2014).

^{106.} Baker-Branstetter, supra note 32, at 20.

^{107.} Id.

^{108.} APS Application, supra note 15, at 2.

^{109.} Id.

shifting phenomenon first. The California legislature established the country's most ambitious Renewable Energy Portfolio Standard (RPS), requiring utilities to procure thirty-three percent of their generation needs by renewable means by 2020.¹¹⁰ The possibility of cost-shifting due to usage-based rates and net metering programs prompted California's legislature to closely examine the issue.

1. The California Public Utility Commission Report

The California Public Utility Commission (CPUC) conducted an expansive study of the economic impacts of net metering in response to questions regarding the economic viability of retail rates for net metering customers. ¹¹¹ The CPUC's study found that California's current net metering policy (which allows customergenerators to take service under usage-based rates and compensates customer-generators for export energy at retail rates) ¹¹² will cost California's traditional customers \$1.1 billion by 2020. ¹¹³

The CPUC conducted a cost-benefit analysis to determine the cost shift from customer-generators to traditional customers, ¹¹⁴ followed by a cost-of-service analysis to determine whether customer-generators pay their share of utility costs. ¹¹⁵ It also analyzed the estimated reduction in customer-generator contribution towards public purpose programs resulting from DE use. ¹¹⁶ The CPUC's resulting report only attempts to quantify the economic impacts of DE and net metering on the ratepayers and explicitly states that it does not try to quantify the non-economic benefits of DE. ¹¹⁷

a. The CPUC Cost Benefit Analysis

If the customer-generator's bill savings exceed reduction in utility costs associated with that customer's DE usage, then there is a net cost. 118 A "net cost" ensures that the utility's extra costs of

^{110.} See CAL. Pub. Util. Code § 399.11 (West 2014) (requiring a greater percentage of energy procurement from renewable sources than any other state); but see ARIZ. ADMIN. Code § R14-2-1805(B) (2014) (requiring Arizona's utilities to procure thirty percent of their renewable portfolio from distributed generation).

^{111.} Assemb. B. 2514, 2012 Leg. (Cal. 2012); Decision Regarding Calculation of the Net Energy Metering Cap, Cal. Comm. D. 12-05-036 (May 24, 2012).

^{112.} S.B. 594, 2012 Leg. (Cal. 2012).

^{113.} CPUC STUDY, supra note 102.

^{114.} Id.

^{115.} Id.

 $^{116.\} Id.$

^{117.} Id.

^{118.} Id.

providing service are shifted to traditional customers.¹¹⁹ This shortfall constitutes the exact "cost shift" that utilities claim takes place under retail rate net metering regulations.¹²⁰ The CPUC suggests its "all DE energy produced study" best reflects the actual cost shift, but recognizes that the unpredictability of the surrounding factors yields a less accurate estimate.¹²¹ The CPUC performed cost-benefit analyses at three important stages: the present level of DE penetration, the level of DE penetration necessary to meet California's RPS goals, and the level of penetration that satisfies California's Export Energy Cap.¹²²

Under California's current net metering policy, the CPUC found a net cost under each scenario it considered. On the lower end, the cost shift ranged from \$75 million by 2020 for the current deployment of DE, considering only the cost shifted due to export energy reimbursement. On the upper end, the CPUC expects a cost shift of \$1.1 billion to traditional customers by 2020 when considering the net cost of all DE produced and assuming DE installations continue at expected rates, eventually reaching the five percent cap. 123 The CPUC found that sixty-six percent of the cost shift occurred because of residential DE systems, though they currently only comprise forty-four percent of installed DE. 124 This phenomenon occurs because of the differences between commercial and residential rate structures. 125 California's residential net metering customers typically take service under usage-based rates. 126 California's typical commercial customer takes service under time-ofuse (TOU) based rates. 127 The CPUC concluded that "[blecause [DE] systems tend to reduce net energy consumption by a greater percentage than they reduce peak demand, residential [customergenerators] tend to experience greater bill savings than commercial customers."128

^{119.} Id.

^{120.} *Id*.

^{121.} *Id*.

^{122.} Assemb. B. $510,\,2010$ Leg. (Cal. 2010) (raising aggregate limit of Net Metered systems from 2.5% to 5% of Customer Peak Demand).

^{123.} CPUC STUDY, supra note 102.

^{124.} Id.

^{125.} Id.

^{126.} *Id*.

^{127.} Id.

^{128.} Id.

b. The CPUC Total Cost of Service Analysis

In its Total Cost of Service analysis, the CPUC report compares the customer-generator's bill to the utility's cost to provide service to that customer. ¹²⁹ In contemplating this analysis, one must keep the regulated utility rate construction in mind. To review, a rate approved by the state commission will reimburse a utility based on the cost to provide service plus a return, which typically hovers around ten percent. ¹³⁰ In a world with no cost shifting, every customer's bill would reflect 110% of the utilities cost to provide service. ¹³¹

The usage-based rate yielded bills that averaged 154% of cost of service for residential customer-generators before they installed DE systems. This occurred because under the usage-based rate, those customers used significantly more energy than other customers. But after a DE installation, the same customer's bill reached only eighty-eight percent of the cost of service on average. To summarize, the study concluded that the average customer-generator went from paying significantly more than the cost of service before a DE installation to significantly less than cost of service after a DE installation.

2. Opposing Views

Solar advocates voice strong criticisms of the CPUC study. 135 The advocates emphasize that the assembly member who initiated and directed the specific nuances of the study worked as an executive at one of the state's largest utilities. 136 According to the advocates, the study neglects many of the benefits that solar provides, including a reduction in future transmission infrastructure needs and reductions in fuel costs. 137 The CPUC study does not consider California Assembly Bill 327, which may change the rate structures for customer-generators and consequently completely alter

^{129.} Id.

^{130.} Id.

^{131.} Id.

^{132.} *Id*.

^{133.} Id.

^{134.} *Id*.

^{135.} Herman K. Trabish, New California Net Metering Study Appears to be DOA, GREENTECH MEDIA (Sept. 30, 2013), http://greentechmedia.com/articles/read/new-california-net-metering-study-appears-doa.

^{136.} See id. (suggesting that Assembly member Steven Bradford worked as an executive for the Southern California Edison utility company for 12 years prior to joining the assembly).

^{137.} Id.

the trajectory of DE growth.¹³⁸ Advocates also stress that the CPUC's contention that the current regulations benefit California's wealthy customers at the expense of the poor relies on old data.¹³⁹ Essentially, the CPUC report used data compiled before DE system costs significantly dropped.¹⁴⁰ As a result, the report does not reflect the current cross-section of customer-generators that now includes many lower income customers.¹⁴¹

B. Unintended Consequences of DE Growth

While solar DE continues to grow, rapid growth of DE could create reliability and predictability problems. He accuse electricity moves nearly instantaneously across transmission and distribution lines, grid operators constantly balance the supply to meet the demands of the customers connected to the system. He power supply is temporarily deficient to meet customer demand, then blackouts occur. He

The variability and intermittency of DE output may pose significant threats to grid reliability while also diminishing the emission reduction benefits typically associated with solar generation. Variability refers to the inconsistent nature of renewable generation in relation to electricity demand. Intermittency refers to the limited control that utilities exercise over DE electrical input to the grid, and the imperfect predictability of DE output because of its reliance on weather.

^{138.} See id. (discussing that Cal. Assemb. B. 327 requires the CPUC to adopt a uniform rate structure for customer-generators which affects all customer-generators who take service after July 1, 2017, or alternatively, when utilities meet their mandated net metering caps under California law—the CPUC has not yet released a rate structure).

^{139.} Id.

^{140.} Id.

^{141.} Id.

^{142.} See Virginia Lacy, The Calm Before the Solar Storm, RENEWABLE ENERGY WORLD.COM (May 27, 2013), http://renewableenergyworld.com/rea/news/article/2013/05/the-calm-before-the-solar-storm (discussing the early successes of retail-rate net metering programs but warning that the programs do not account for the probable impact of integrating distributed renewables into the grid); see also Baker-Branstetter, supra note 32, at 7 (suggesting that as DE continues to overrun central generation, significant problems may arise but noting that most states have not reached this level of DE penetration); Bluvas, supra note 28, at 1605 (suggesting that rapidly implementing DE could cause reliability and predictability problems).

^{143.} See Spaghetti Western, supra note 14, at 280-81.

^{144.} See id. (discussing a recent blackout in Texas that occurred because wind farms suddenly stopped producing electricity due to an unexpected drop in wind speed).

^{145.} MIT Symposium, supra note 92, at 7.

^{146.} Id.

^{147.} Id.

The unpredictable nature of cloud cover and its ability to immediately halt electricity production from DE units causes challenges for utility system operators to balance customer electricity demand with generation. 148 This characteristic of DE ensures that it brings an unparalleled level of intermittency to the conventional transmission and distribution grid. 149 Even with perfect operation, the ability to manage generation to meet demand needs in the presence of exponential DE growth is stifled by the physical constraints of modern central generation. 150 The relatively slow ramping ability of central generators, as compared to DE, coupled with the intermittency and variability of DE, may provide difficulty in reliable grid operations. 151 Utilities' most economic and environmentally efficient base load plants ramp slowly and operate inefficiently if operated at partial capacity. 152 As a result, DE growth causes utilities to use their fastest ramping and hence most inefficient plants to mitigate variability and intermittency issues. 153 This phenomenon reduces the emission benefits of DE while simultaneously reducing the utility's ability to run efficiently and profitably and will require a new level of balance and management of generation and transmission. 154

While variability and intermittency of renewable DE poses a significant threat, DE brings positive impacts aside from the obvious potential reduction in fossil fuel reliance. ¹⁵⁵ As DE grows, clusters of renewable generators in close proximity can form "micro grids" to shield the customers in that area from localized threats such as natural disasters, terrorist attacks, or generation fail-

^{148.} See Spaghetti Western, supra note 14, at 280-81 (suggesting that growth in solar DE will require utilities to maintain more peaking generators on standby because of the unpredictable characteristics of solar generation).

^{149.} Id. at 285.

^{150.} Id. at 286; see also MIT Symposium, supra note 92, at 8.

^{151.} Spaghetti Western, supra note 14, at 286.

^{152.} MIT Symposium, supra note 92, at 8.

^{153.} See Spaghetti Western, supra note 14, at 286.

^{154.} See id. (discussing the necessity of running inefficient gas turbines at partial load to serve as backup supply when renewable generation suddenly dips); see also Powers, supra note 56, at 653.

^{155.} See Baker-Branstetter, supra note 32, at 2 (discussing reductions in transmission and distribution maintenance costs, decreased energy loss due to shorter transmission distances, and using DE as a form of backup power supply); see also Steven Ferrey, Nothing But Net: Renewable Energy and the Environment, MidAmerican Legal Fictions, and Supremacy Doctrine, 14 DUKE ENVIL. L. & POL'Y F. 1, 5 (2003) (discussing the benefits of distributed renewable generation); but see Spaghetti Western, supra note 14, at 287 (suggesting that the intermittent nature of current renewable generation technologies make them useless as backup supply).

^{156.} Kari Twaite, Monopoly Money: Reaping the Economic and Environmental Benefits of Microgrids in Exclusive Utility Service Territories, 34 Vt. L. Rev. 975, 977 (2010).

ure.¹⁵⁷ For example, micro grids operating during Hurricane Sandy maintained isolated pockets of electricity in light of widespread outages.¹⁵⁸ DE can also decrease the need for transmission system upgrades.¹⁵⁹ Because DE is sited at or near the load, it reduces strain on transmission system.¹⁶⁰ In a similar manner, DE reduces line losses associated with distant transmission between central generation units and customers.

Whether the combination of usage-based rates and retail reimbursement for export energy cause a cost shift from customergenerators to traditional customers remains hotly debated. Regardless of whether a cost shift occurs, the intensity of debate suggests a lack of transparency surrounding the issue. Also, if the retail rate paid for export energy reflects the non-pecuniary value of DE, then the debate demonstrates that this "rough justice" fails to transparently convey that value. Second, if in light of the integrated nature of generation and transmission in traditional state-regulated markets, the rapid introduction of distributed energy poses a risk of physically disrupting energy distribution.

V. SOLUTIONS TO THE DE AND NET METERING ISSUES

Because the FERC lacks jurisdiction to regulate intrastate aspects of electricity (and net metering is inherently an intrastate issue), states and municipalities control net metering regulation. This section discusses some of the prominent state and municipal net metering regimes and focuses on Arizona because of its recent open docket on the issue.

A. Arizona's Docket on Net Metering

The Arizona Corporation Commission (ACC) recently opened a docket at the request of Arizona's largest public utility, Arizona Public Service (APS), to consider revamping the state's current net metering regulations. Arizona's public utilities and solar proponents submitted briefs to the ACC regarding the issue.

^{157.} Bluvas, *supra* note 28, at 1597.

^{158.} Michael T. Burr, $Game\ Changes,\ 151\ Pub.\ Util.$ Fort. 32, 36 (2013).

^{159.} Id. at 1604.

^{160.} Id.

^{161.} See generally APS Application, supra note 15; but see Docket No. E-01345A-13-0248 (Dec. 5, 2013), available at http://edocket.azcc.gov/Default.aspx?SEARCH=E-01345A-13-0248 (closing the docket and implementing a rate rider to function as a demand charge while also suggesting that such significant changes in a rate structure should take place in a rate case which will not occur until 2016).

1. APS's Net Metering Proposal

APS's Net Metering Proposal requires customers who install DE to take service under an existing TOU rate. 162 A TOU rate, as opposed to a usage-based rate, accounts for the rate at which the customer uses energy. Under a TOU, a meter measures the energy used over a certain interval of time and records the peak usage. 163 For example, consider two customers that both use 2400 kilowatts (kW) of energy per day. Customer A uses 100 kW per hour for twenty-four hours, while customer B uses 300 kW per hour but only eight hours per day. Under a usage-based rate, customers A and B will pay equivalent bills. Under a TOU rate, customer B pays three times as much as customer A. Implementing a TOU rate purports to relieve the extra strain that customer-generators impose on the transmission and distribution grid when their DE stops generating energy and they simultaneously begin to take power from the utility around 6 p.m. (which coincides with peak power demand). Besides implementing a time-of-use rate, APS's Net Metering Proposal retains net metering and compensation for export energy at retail rates.

APS's Net Metering Proposal grandfathers existing customergenerators under their existing plans. Grandfathering attempts to keep customers already invested in residential DE systems from going underwater on their DE leases or creating prohibitively long returns on DE purchases. The grandfathering arrangement would only extend for twenty years and would not be transferrable. 164

2. APS's Bill Credit Proposal

Under APS's Bill Credit Proposal (BCP), the net metering regime would disappear. Instead, customer-generators would be charged for all energy used as though it came from the utility's central generation. Customer-generators would receive a bill credit for all of the energy that their DE produces as if it were all delivered to the distribution grid. Instead of compensating the customer-generator at a retail rate, APS proposes crediting the customer based on "the forward market at Palo Verde with ad-

^{162.} APS Application, supra note 15, at 12.

^{163.} Understanding Your Electricity Charges: What is a Demand Charge?, PACIFIC POWER (last visited June 1, 2014), https://www.pacificpower.net/bus/ayu/uyec/index.html.

^{164.} APS Application, supra note 15.

^{165.} Id.

^{166.} Id.

^{167.} Id.

justments."¹⁶⁸ Like the Net Metering Proposal, the BCP also proposes grandfathering current net metering customers under their current rates.

3. Opposition to APS Proposals

The solar advocacy group, Tell Utilities Solar Won't Be Killed (TUSK), submitted a letter to the ACC regarding APS's request to alter its rate structures for net metering customers. ¹⁶⁹ TUSK argues that net metering is not a subsidy, while the APS's monopoly on competition is a subsidy. ¹⁷⁰ The group argues that the capital recovery mechanisms, which allow the utility to recover its costs through retail rates, function as subsidies. ¹⁷¹ Among other things, the letter questions whether small businesses within APS's service territory should disproportionately absorb the costs associated with delivering energy to rural sites, whether APS should get tax breaks related to decommissioning its nuclear facilities, and whether APS's monopolization over its service area is a subsidy. ¹⁷²

4. The Residential Utility Consumer Office Proposal

The Residential Utility Consumer Office (RUCO) also proposed a solution to the ACC regarding the DE and net metering issue. ¹⁷³ RUCO proposed a fixed monthly charge based either on the capacity of a DE system, or alternatively as a flat rate regardless of the system's capacity. ¹⁷⁴ Like the APS plans, the RUCO plan grandfathers existing customer-generators for twenty years, ultimately maintaining the rates of any customer-generator that installed before the plan becomes effective. ¹⁷⁵ RUCO also believes that locking in new customers under their fixed charge for twenty years will provide stability for customer and third-party investment. ¹⁷⁶ The plan suggests that the fixed charge can increase slowly until "rooftop solar is essentially a break even proposition for non-solar resi-

^{168.} Id

^{169.} Barry Goldwater Jr., Open Letter to the Arizona Corporation Commission, Docket No. E-01345A-12-0290 (May 7, 2013), available at http://dontkillsolar.com/site/files/An%20 Open%20letter%20to%20the%20Arizona%20Corporation%20Commission.pdf?r=full.

^{170.} Id.

^{171.} Id.

^{172.} Id

^{173.} Press Release, Residential Util. Consumer Office, RUCO Announces Remedy to Net Metering Controversy (Oct. 30, 2013), available at http://azruco.gov/press_room/net_meteringpr.pdf.

^{174.} Id.

^{175.} Id.

^{176.} Id.

dential ratepayers in the long run."177 RUCO identifies that a near-term cost shift that must be mitigated.178

B. Lack of Transparency in Arizona's Proposed Solutions

While APS's Net Metering Proposal increases transparency by requiring customer-generators to take service under TOU rates, it maintains retail rate compensation for export energy. Because retail rate compensation for export energy hides the intrinsic value of renewable energy within the rate, it constitutes an imperfect solution to the issue.

The Bill Credit Proposal obfuscates customer transmission use. It does so by representing that a customer-generator's grid use parallels her electricity use. Under the Bill Credit Proposal, the customer would pay a retail rate for a hundred percent of the energy she consumes. To recap, retail rates reflect, among other things, infrastructure costs to deliver electricity from the central generators to the customer. If a customer-generator receives a portion of her power from the DE on her roof, she inherently does not use the grid to the extent that the retail rate reflects. The Bill Credit Proposal attempts to under-compensate the customergenerator by crediting her for all of her DE production at a rate "based on the forward market at Palo Verde." 179 This measure fails to provide the customer with the value she confers upon the utility because her energy will allow the utility to avoid producing energy via a peaking generator. The cost associated with peaking generation is considerably greater than energy from Palo Verde, a base load hub.

The TUSK letter fails to propose a solution to the net metering issue while drawing attention to the utility subsidies. While TUSK makes a strong argument in favor of restructuring the utility industry, it points to the underlying functions of the traditionally regulated market. As outlined earlier, one of the hallmarks of regulation is that the utility operates as a monopoly within its service area. The regulated utility provides indiscriminate service to customers within its service territory subsidizing rural customers at the cost of urban customers. TUSK's argument fails because these "subsidies" are generally accepted mechanisms that facilitate

^{177.} Id.

^{178.} Id.

^{179.} APS Application, supra note 15.

^{180.} See Ariz. Admin. Code §§ R14-2-203, R14-2-208 (2014).

service in regulated markets; thus TUSK's point really only argues for deregulation, not that non-discriminatory service is a subsidy hidden from the eyes of ratepayers. In contrast, the potential cost shift between customer-generators and traditional customers is not an understood function of the regulated industry.

Finally, the RUCO solution shifts the "rough justice" ¹⁸¹ that plagues net metering in Arizona into a new form. RUCO recognizes a cost shift, but implements a solution that maintains status quo, except for a flat charge to help compensate traditional customers for the value of renewable. Like the APS proposals, the RUCO solution fails to bring transparency to the situation.

C. Net Metering Regulations in Other Jurisdictions

While net metering issues persist in the United States and abroad, an extensive review of the law is beyond the scope of this Essay. Instead, this section will consider a few mechanisms recently adopted around the United States to deal with DE and net metering.

1. Austin Energy's Value of Solar Plan

In 2012, the City of Austin approved Austin Energy's Value of Solar Tariff (VOST).¹⁸² The approach switches from net metering to a policy that measures a customer-generator's total energy consumption separately from her DE output.¹⁸³ Austin automatically enrolls its customer-generators in the plan, which bills a customer for her total energy consumption. Rather than "netting" the customer's export energy against her energy consumption, the customer receives a bill credit for the total energy her DE produced during the billing period.¹⁸⁴

The VOST values the non-financial aspects of distributed renewable energy based on an algorithm rather than on a retail or wholesale rate. The algorithm incorporates avoided fuel costs of the utility, avoided capital costs of new generation construction, avoided transmission and distribution costs, fuel price hedging values, and the environmental benefits of renewable energy. The

^{181.} Bradford & Hoskins, supra note 13, at 16.

^{182.} Austin Energy Solar Rate Rider, Ordinance No. 20120607-055 (June 7, 2012), available at http://austintexas.gov/edims/document.cfm?id=171787.

^{183.} Id.

^{184.} *Id*.

^{185.} Id.

^{186.} Id.

City of Austin amends its value yearly to reflect current economic and non-economic values associated with DE. 187

Austin Energy's VOST attempts to allocate value to renewable energy within its reimbursement rate for export energy. While the VOST garners acceptance from both solar advocates and utilities alike, the VOST may not work in other jurisdictions, which are not so "weird." The characteristics of Austin's coop-owned utility and local governance regarding rates may uniquely situate the city to utilize such a plan. Is In addition, the VOST runs into the same problem (though maybe not as severely) as other jurisdictions trying to correctly reimburse customer-generators for export energy. Like the "rough justice" provided by retail rate reimbursement, Is VOST's use of an algorithm to determine the value of export energy strips the ratepayers' input and understanding relating to the municipality's value of renewable energy.

2. Idaho Nixes Service Charges

Early in 2013, Idaho Power requested approval from IPUC to significantly alter its net metering policy. The alterations included doubling the allowable generation capacity for net metering customers, while also increasing service charges and decreasing the retail rates for net metering customers.¹⁹¹

Idaho Power contended that increasing service charges would better reflect the cost of service for net metering customers, ultimately avoiding a cost shift. The service charge proposition aimed to increase the charge for basic service by 400 percent for net metering customers. The retail rate reduction would balance out the increase in the service charge, while also reimbursing customergenerators for their energy at a reduced rate.

The IPUC found that cost shifting occurs under the current net metering policy. 192 It also recognizes that because of the intricacies of implementing a new policy regarding net metering, the issue should be fully vetted to identify the problems and determine the

^{187.} Id.

^{188.} See Annie Lappe, Austin Energy's Value of Solar Tariff: Could It Work Anywhere Else?, GREENTECH MEDIA (Mar. 8, 2013), http://greentechmedia.com/articles/read/austinenergys-value-of-solar-tariff-could-it-work-anywhere-else.

^{189.} Id.

^{190.} Bradford & Hoskins, *supra* note 13, at 16.

^{191.} See Most of Idaho Power Net Metering Proposals Denied, IPC-E-12-27, Order No. 32846 (July 3, 2013), available at http://www.puc.idaho.gov/press/130703_IPCnetmeterfinal.pdf.

^{192.} Id.

correct solution.¹⁹³ The IPUC found that these issues would be handled better in the utility's next rate case.¹⁹⁴ On the other hand, the IPUC granted Idaho Power's request to provide bill credit for a customer-generator's export energy to replace the current practice of paying customers.¹⁹⁵ In reaching this final consideration, the IPUC considered that net metering is intended to encourage customers to use small-scale, local renewable energy, rather than encouraging individuals to become "wholesale power providers."¹⁹⁶

3. Virginia Incorporates Feed-in-Tariffs and Standby Charges

In Virginia, customer-generators enter a power purchase agreement with their energy supplier or utility if the customer takes service under her utility's net metering policy.¹⁹⁷ Under Virginian law adopted in 2011, a utility can incorporate standby charges into its rates for customer-generators who install over ten kilowatts of solar DE.¹⁹⁸ Also, the legislation expands the amount of net metered DE that a customer may install to ten kilowatts.¹⁹⁹ To put the law into perspective, the average residential DE installs four kilowatts.²⁰⁰ Hence the Virginia legislation allows the customer to install a system nearly five times the size of an average install but requires the customer to pay the utility for continued access to the grid for the little bit of energy used when the sun is not shining and for backup service.

Besides standby charges, recently a Virginian utility adopted feed-in-tariffs (FITs) for its photovoltaic customer-generators.²⁰¹ A FIT is a policy mechanism that reimburses a customer-generator at a specified rate for the electricity she feeds into the distribution grid based on the electricity's generation characteristics.²⁰² For instance, under a FIT, a utility may compensate a customer feeding in electricity generated by a geothermal process under a different

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193. Id.
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^{194.} Id.

^{195.} Id.

^{196.} Id.

^{197. 20} VA. ADMIN. CODE § 5-315-50 (2014).

^{198.} Id.

^{199.} Id.

^{200.} Pricing PV Systems and Financing, Go Solar California (last visited June 1, 2013), http://gosolarcalifornia.ca.gov/solar basics/pricing financing.php.

^{201.} See Virginia Electric and Power Co., Case No. PUE-2012-00064 (Mar. 22, 2013), available at https://www.scc.virginia.gov/newsrel/e_dvpsolarfin_13.pdf.

^{202.} Feed-in Tariff: A Policy Tool Encouraging Deployment of Renewable Electricity Technologies, U.S. ENERGY INFO. ADMIN., (May 30, 2013), http://eia.gov/todayinenergy/detail.cfm?id=11471 [hereinafter $EIA\ Essay$].

rate schedule than a customer generating and feeding in electricity from a photovoltaic array.

In contrast to the retail rate reimbursement associated with the net metering programs at issue in Arizona, Virginia's FIT compensates photovoltaic customers at approximately 150% of the retail rate. Virginia's customer-generators own the RECs associated with their photovoltaic generation. The utility must purchase the customer-generator's RECs only if the customer elects to sell the whole REC when the parties enter into a power purchase agreement. Otherwise, the customer retains the REC and may sell it to whomever she wants, whenever she wants.

In its final order, the State Corporation Commission stated, "the evidence in this record indicates that any avoided cost benefits provided by customer-generators, at least in terms of the transmission and distribution grid, are insufficient to pay for their proportionate share of the grid." ²⁰⁷

While FITs promote renewable energy in a transparent manner, they act as a performance-based incentive rather than an upfront incentive.²⁰⁸ This means that the monetary value associated with a DE install depends on the actual production in kWhs of the generator. Absent other up front incentives, performance-based incentives may prevent the long-term certainty of return necessary to attract investment in DE.

VI. RECOMMENDATIONS

Expert projections indicate that DE installations will triple between 2012 and 2016.²⁰⁹ The National Renewable Energy Laboratory (NREL) suggests that the majority of customers will find DE cheaper than utility provided energy by 2016 regardless of net metering rate regulation.²¹⁰ In consideration of the preceding factors, addressing net metering cost-shift concerns is critical to both public policy and the perception of a state's renewable energy goals.²¹¹

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203. Id.
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^{204. 20} Va. Admin. Code § 5-315-50 (2014).

^{205.} Id.

^{206.} Id.

^{207.} Virginia Electric and Power Co., PUE-2011-00088 (Nov. 23, 2011).

^{208.} EIA Essay, supra note 202.

^{209.} Bradford & Hoskins, supra note 13, at 5 (citing Eric Wesoff, Record US Solar PV Installations of 1.2 GW in Q4: GTM Research, GREENTECH MEDIA (Dec. 12, 2012), http://greentechmedia.com/articles/read/Record-US-Solar-PV-Installations-of-1.2-GW-in-Q4-GTM-Research.

^{210.} Paul Denholm & Robert M. Margolis, Evaluating the Limits of Solar Photovoltaics (PV) in Traditional Electric Power Systems, 35 ENERGY POLICY 2852, 2853 (2007).

^{211.} Baker-Branstetter, supra note 32, at 17.

Throughout the last decade, retail rate net metering programs assisted significant DE growth in sunny states notwithstanding the uncertain nature of value implications. Because net metering, the regulated activity, occurred at relatively insignificant volumes, interested parties did not bother to inquire about a cost-shift or consider whether retail rates implicitly valued the pecuniary benefits of solar energy. But as photovoltaic technology rapidly reduces the costs associated with DE installation, volumetric expansion of such installations threatens to render the retail rate mechanism a liability to both the utility and the ratepayer. 213

The CPUC report calls into question whether the combination of usage-based rates for customer-generators and retail rate compensation for export energy (used in both Arizona and California) shift costs. ²¹⁴ Regardless of whether a cost shift actually occurs, the divergence in opinions demonstrates that the answer is hazy. Net metering regulations that promote transparency can benefit utility customers. ²¹⁵ First, all customer-generators currently participating in a net metering plan should keep that plan if they wish. Second, TOU-based rate schedules for customer-generators can flatten demand curves while simultaneously silencing utility complaints regarding inequities in transmission system maintenance or cost shifting. ²¹⁶ Third, a net metering policy that values export energy based on a dynamic long term avoided cost pricing model separates the non-pecuniary value of solar from actual export energy while also negating the possibility of a cost shift.

A. Time-of-Use Rates

Altering either the rate plans or export energy compensation available to customers with existing DE installations could put thousands of Arizona's customer-generators underwater with regard to their DE systems. ²¹⁷ The combination of generous retail rate compensation for export energy coupled with the ability to stay on usage-based rate plans enabled thousands of Arizonans to install DE. As a result, lawmakers should take care in implementing a solution.

^{212.} Lacy, supra note 142.

^{213.} Id.; see generally Hannah J. Wiseman, Remedying Regulatory Diseconomies of Scale, 94 B.U.L. Rev. 235, 241 (2014) (suggesting that the volumetric expansion of a long-regulated activity creates a regulatory void, excess of regulation, which lawmakers often fail to address in a timely manner).

^{214.} CPUC STUDY, supra note 102.

^{215.} Bluvas, *supra* note 28, at 1608.

^{216.} Id. at 1606.

^{217.} APS Application, supra note 15, at 13-14.

States should require customer-generators to take service under the TOU rates. Currently, most customer-generators take service under usage-based rates.²¹⁸ Unlike usage-based rates, which block price signals from reaching the customer, TOU rates transparently signal the cost to the customer.²¹⁹ For example, during periods of peak power consumption, utilities run peaking plants to meet demand. These inefficient plants cost more to run and as such, electricity generated by them should fetch a higher rate.²²⁰ However, usage-based rates prevent this cost signal by charging a flat rate for electricity regardless of when the customer receives it.²²¹

Under the typical usage-based rate schedule, a utility reimburses its customer-generator for export energy at a flat rate, regardless of whether the customer exports the energy on-peak or off-peak.²²² Because renewable generators typically produce energy during on-peak hours, a TOU rate reimburses them at a higher rate.²²³ TOU rates alleviate utility complaints regarding the recovery of costs associated with maintaining transmission facilities and standby generation because it aligns charges with transmission system use.²²⁴

As renewable mandates ensure greater penetration of DE into utility portfolios and DE efficiency grows, intermittent renewable generation will impact intermediate and base load generator operation. ²²⁵ But as TOU rates flatten load curves, their use can diminish the operational difficulties that could become a reality as DE use grows.

B. Valuing Export Energy

The CPUC report provides evidence that reimbursing customer-generators for export energy at retail rates contributes to a cost shift borne by traditional customers.²²⁶ While the potential to reduce fossil fuel generation necessitates a transition to renewables, the CPUC report calls retail rate structures into question.

^{218.} CPUC STUDY, supra note 102.

^{219.} Brown, *supra* note 22, at 483.

^{220.} Id.

^{221.} Id.

^{222.} Id.

^{223.} See id. (discussing how usage-based rates strip customer-generators of the inherent value of their export energy when they are compensated via usage-based rates); see also Bluvas, supra note 28, at 1599 (suggesting that under time-of-use rates customer-generators can avoid paying the higher prices of energy at peak demand by using their DE).

^{224.} Bradford & Hoskins, supra note 13, at 12.

^{225.} MIT Symposium, supra note 92, at 10.

^{226.} See generally CPUC STUDY, supra note 102.

1. Avoided-Cost Pricing

Under retail rate net metering, the utility must set a customer-generator's export energy directly against the energy provided by the utility, and the customer receives credit based on the current retail rate. Changing the reimbursement scheme for export energy can help to alleviate the potential for cost shifting. ²²⁷ Per this suggestion, if the customer used more energy than her DE produced during a given billing period, then she would pay based on her TOU-based rate. But if her DE generator produced more energy than she took from the utility during that billing period, then the utility provides her credit towards her bill based on the costs her generation allowed her to avoid.

PURPA established the avoided cost rate of compensation to ensure that utilities purchase energy from QFs at fair prices.²²⁸ While many methods exist to quantify avoided costs, PURPA rates provide a model that reflects avoided fuel costs, avoidance of additional generation capacity (including capital costs), and any cost savings from avoided line loss.²²⁹

Utilities should credit customer-generators for export energy rather than profiting from its resale, 230 but the rates paid for export energy should provide a revenue stream to the customer-generator that does not attempt to compensate for the non-pecuniary value of renewable energy. The CPUC report, along with its staunch reactions from the solar industry, demonstrate that retail rate compensation for export energy creates confusion because it masks some non-pecuniary value of renewable energy within the kWh. Avoided cost reimbursement increases transparency because it strips the non-pecuniary value of renewable energy from its current position within the confines of the kWh. 231

2. A Long-Term Dynamic Pricing Model

Export energy should be valued at avoided cost rates based on a long-term dynamic pricing model. Using short-term pricing re-

^{227.} Baker-Branstetter, supra note 32, at 21.

^{228. 16} U.S.C. § 824a-3 (2012).

^{229.} Id.

^{230.} Baker-Branstetter, supra note 32, at 21.

^{231.} See Bradford & Hoskins, supra note 13, at 8 (discussing the difficulty of valuing the non-pecuniary benefits of renewable energy but suggesting that separating the pecuniary from non-pecuniary value increases transparency); but see Baker-Branstetter, supra note 32, at 21 (suggesting that utilities may abuse avoided cost valuation for export energy without proper PUC oversight).

duces the certainty of economic return on investment for those investing in DE.²³² A long-term pricing model provides the security to facilitate lower interest rates for third-party lending, and customer purchases.²³³

While long-term pricing of export energy stimulates investment, a dynamic pricing model will account for the impending broad penetration of DE into the energy supply. 234 Experts forecast that DE installations will triple by 2016.²³⁵ This increase in DE generation will eventually overrun peaker generators and begin to replace the energy delivered by base load generators.²³⁶ Base load generators are designed to run at a steady pace for extended periods of time. Running these generators at partial capacity and cycling up and down to facilitate the intermittent generation of renewables will require costly retrofits and upgrades to existing generators.²³⁷ The uncertainty of the impacts associated with forecasted DE penetration requires a flexible approach to pricing that can adjust to fluctuations in the actual value of export energy to utilities. This model allows both the customer and the utility to adjust to unpredictable fluctuations in export energy value without undue risk.

C. Increasing Upfront Incentives

Without incentives, most electricity customers cannot afford the upfront costs of installing DE systems.²³⁸ Transitioning to the proposed net metering regulations in this Essay would undeniably strip DE of its non-pecuniary value as a renewable resource. As a result, states should allocate upfront incentives and subsidies for DE installation that accurately reflect the non-pecuniary value currently found within retail rates. Removing the value of solar from its current position (embedded in customer-generator's rates and export energy compensation) provides ratepayers with a transparent view of the state's commitment to renewable energy. Instead of building the value of renewable energy into complex

^{232.} Bradford & Hoskins, supra note 13, at 8.

^{233.} Id.

^{234.} Id.

^{235.} Id. at 5.

^{236.} Id. at 8.

²³⁷ Id. at 10

^{238.} Baker-Branstetter, *supra* note 32, at 7 (suggesting that the retail rate incentives for DE are a primary factor in facilitating DE growth); *but see* Margolis, *supra* note 210 (suggesting that innovations in solar technology will soon make DE economically feasible, regardless of subsidies and incentives).

rates that the average ratepayer will never understand, upfront incentives demonstrate the state's renewable energy policies.

D. Adjustable DE Cap

Experts predict an explosion in DE growth regardless of subsidies and incentives because of expected efficiency gains in photovoltaic technology. 239 Extensive DE penetration implies that intermittent renewable generators will soon begin replacing intermediate-load and eventually base-load central generation.²⁴⁰ Managing the rate that customers implement DE will allow IOUs to integrate these intermittent generators successfully.²⁴¹ Most states offering net metering plans cap the total capacity of installed DE at the point which utilities must offer net metering. 242 Under a DE cap, a utility need not offer reimbursement for export energy if that utility already accepts the proportion of distributed energy to central generation required by its cap.²⁴³ By implementing a cap and reevaluating the effects of DE penetration annually, states can control the rate of DE penetration and match that rate with the utility's ability to absorb the DE without undue management and infrastructure costs.²⁴⁴

E. Impact on RECs

The solution in this Essay suggests reimbursing customergenerators at avoided cost rates. Valuing export energy based on an avoided cost model is one policy that should bar the utility from asserting adverse claims to the renewable attributes of the energy.²⁴⁵ Under this proposal, a utility's only legitimate claim to the REC arises from a transaction independent of the purchase of the kWh because the customer-generator's net metering reimbursement reflects only the value of the electricity provided to the

^{239.} Bradford & Hoskins, supra note 13, at 4.

^{240.} Id. at 11.

^{241.} Baker-Branstetter, supra note 32, at 20.

^{242.} Id. at 14.

^{243.} Id.

 $^{244.\} See\ id.$ at 19 (suggesting that caps are effective management tools to control DE growth).

^{245.} Quarrier Interview, *supra* note 85; *see also Am. Ref-Fuel Co.*, 105 FERC ¶ 61004, 61007 (2003) (holding that a utility purchasing energy from a qualified facility in a whole-sale market at avoided cost rates does not also receive the REC associated with the energy, rather the kWh purchased from the QF does not retain the qualities or attributes of the generator that produced them).

utility.²⁴⁶ The transparency of this model helps avoid at least one instance that could embody REC double counting that can occur when a state requires its utilities to purchase export energy at retail rates based on an assumption of the renewability of the export energy.²⁴⁷ As a result, customer-generators would enjoy a stronger voluntary market in which to sell the RECs associated with their DE, and utilities would not get the opportunity to double count RECs towards their renewable energy portfolio standards.²⁴⁸

F. Efficient Storage May Alleviate Concerns

The domestic energy storage market is expected to double each year for the next five years.²⁴⁹ According to forecasters, the need to integrate more variable and intermittent resources into the grid stands as the primary motivation driving energy storage development.²⁵⁰ If small-scale energy storage becomes economically viable, it can alleviate many of the disputes inherent in net metering law.

Effective storage could alleviate the intermittent flow of electricity that currently makes solar energy a liability to the grid. ²⁵¹ By storing electricity rather than exporting it, customer-generators can flatten the demand curve before exacerbating its fluctuations. Also, storage may ease the disagreement over export energy valuation. If the utility never pays the customer-generator for export energy, then valuing the pecuniary benefits of the electricity becomes a moot issue. While storage may resolve the majority of the issues surrounding DE and net metering, the quarrel over maintaining the transmission and distribution grid will likely remain without some regulatory variation. Because customer-generators will still need access to traditional utility services as backup if an emergency occurs—or even just a stint of cloudy days—utilities will still need to maintain traditional generation, transmission, and distribution networks. To remedy this issue, states could im-

^{246. 105} FERC ¶ at 61007; see also Ida Martinac, Considering Environmental Justice in the Decision to Unbundle Renewable Energy Certificates, 35 GOLDEN GATE U. L. REV. 491, 511-12 (2005) (suggesting that utilities argue against "unbundling" the REC from the kWh because the customer-generator receives a windfall when the utility pays the customer an inflated rate for the kWh that does not carry the REC attributes and then must purchase the REC separately in the compliance market to satisfy its RPS).

^{247.} Quarrier Interview, supra note 85.

^{248.} Id.

^{249.} U.S. Energy Storage Market Forecast to Exceed \$5 Billion in 2014, CLIMATE CHANGE BUS. J. (Dec. 5, 2013), http://climatechangebusiness.com/U.S._Energy_Storage_Market_Forecast_to_Exceed.

^{250.} Id.

^{251.} Bradford & Hoskins, supra note 13, at 8.

plement either the TOU rate structure previously mentioned in this Essay or simple service charges.

VII. CONCLUSION

While the discussion here focuses on the net metering policy within Arizona, the implications apply universally. Arizona's climate guarantees it will stay at the forefront of solar issues, and thus it serves as an ideal case study for renewable generation issues. But the growing efficiency of renewables coupled with societal shifts towards environmental awareness ensures these issues will become prominent elsewhere. Many states implement net metering programs that compensate customer-generators at retail rates and will face similar issues soon.

This Essay promotes removing incentives and subsidies for the benefits of solar from customer utility rates. Severing renewable subsidies from rate structures can eliminate any potential cost shift and promote transparency in the utility industry. Transparency is promoted by clearly defining the beneficiaries of renewable energy incentives and subsidies. States can do this by placing new customer-generators on TOU-based rate schedules, reimbursing them via avoided cost pricing models for export energy, closely monitoring DE caps, and reallocating financial incentives upfront.

By implementing these suggestions, states can quell utility concerns and thus eliminate distributed energy's biggest opponent. With proper growth management, DE can bolster reliability by providing micro grids while also reducing fossil fuel dependence and positively impacting the environment. Finally, it is imperative that state public utility commissions handle net metering issues now to prevent the potentially negative fiscal and reliability impacts and promote the sustainable use of a valuable natural resource.