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East Going West?: The Promise of Assured Supply Laws in Modern Real Estate Development, 43 J. Marshall L. Rev. 319 (2010)

Lincoln L. Davies

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EAST GOING WEST?: THE PROMISE OF ASSURED SUPPLY LAWS IN MODERN REAL ESTATE DEVELOPMENT

LINCOLN L. DAVIES*

Introduction.....	319
I. Assured Supply Law Rationales.....	324
A. The Growth Lens.....	327
B. The Water Lens.....	331
C. The Sustainability Prism.....	334
II. Assured Supply Benefits and Costs	338
A. Benefits	338
B. Costs.....	341
C. From West to East?.....	343
III. Assured Supply Roadblocks	345
A. Water (+Water Rights) = Assured Supply	346
B. Regulated Riparianism.....	350
C. Assured Supply Adaptation.....	352
IV. Toward an Eastern Future?.....	353
Conclusion	357

INTRODUCTION

The East may have something to learn from the West. Traditionally, eastern water law and western water law have been distinct. Eastern water law has functioned effectively as tort law,¹ with landowners appurtenant to water bodies entitled to use that water—but only so long as their use was reasonable: non-disruptive of others’ consumption or methods of utilization.² If demand outstripped supply, all users took a proportional hit, or

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1. Christine A. Klein et al., *Modernizing Water Law: The Example of Florida*, 61 FLA. L. REV. 403, 406 (2009). When referring to “water law” in this Article, I mean water quantity regulation, not water quality determinations, such as under the Clean Water Act, 33 U.S.C. § 1251 (2006), and the Safe Drinking Water Act, 42 U.S.C. § 300 (2006).

2. *E.g.*, *Mason v. Hoyle*, 14 A. 786, 791 (Conn. 1888); *Hoover v. Crane*, 106 N.W.2d 563, 565 (Mich. 1960). Of course, even in the East, water rights are property rights, protected as a compensable taking in some circumstances. *See generally Hensley v. City of Columbus*, 433 F.3d 494 (6th Cir. 2006).

what was deemed reasonable going forward was reassessed according to a well-established set of factors.³ Western water law, by contrast, has functioned effectively as property law,⁴ with those first in time allowed to claim first right—but only so long as they actually put the water to beneficial use: did not hoard title for later use.⁵ When demand outstripped supply, those lower on the ladder had to cede way for those who began diverting for beneficial uses earlier.⁶

That was the traditional view. But the landscape is shifting. Increasingly, commentators point to the growing merger of eastern and western water law.⁷ By moving to a comprehensive permit system, the East's tort-based system of "riparianism" has begun to look more like the West's property-informed rubric.⁸ Water permits look more like usufructuary water rights than nuisance doctrine. The West, likewise, has begun to mimic the East. By incorporating and giving teeth to doctrines such as waste, western water rights have become infused with concepts similar to the East's tort-based scheme.⁹ Limited western water rights lose some

3. RESTATEMENT (SECOND) OF TORTS § 850A cmt. j (1979); e.g., *Michigan Citizens for Water Conservation v. Nestle Waters North America, Inc.*, 709 N.W.2d 174 (Mich. App. 2005). There are very few reported cases in which competing reasonable uses are irreconcilable and one or the other must be discontinued. E.g., *Taylor v. Tampa Coal Co.*, 46 So.2d 392 (Fla. 1950).

4. Klein, *supra* note 1, at 406.

5. A. DAN TARLOCK ET AL., *WATER RESOURCE MANAGEMENT: A CASEBOOK IN LAW AND PUBLIC POLICY* 161-62 (5th ed. 2002); Janet C. Neuman, *Beneficial Use, Waste, and Forfeiture: The Inefficient Search for Efficiency in Western Water Law*, 28 ENVTL. L. 919, 923 (1998). See generally A. Dan Tarlock, *The Law of Equitable Apportionment Revisited, Updated, and Restated*, 56 U. COLO. L. REV. 381 (1985).

6. Robert Jerome Glennon & Thomas Maddock III, *In Search of Subflow: Arizona's Futile Effort to Separate Groundwater from Surface Water*, 36 ARIZ. L. REV. 567, 568-69 (1994). "The 'Colorado doctrine,' which governs water allocation in Alaska, Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming, does not recognize riparian rights; the 'California doctrine,' which holds sway in California, Kansas, Nebraska, North Dakota, Oklahoma, Oregon, South Dakota, Texas, and Washington, allows riparian rights to coexist with prior appropriative rights. . . ." Hope M. Babcock, *Reserved Indian Water Rights in Riparian Jurisdictions: Water, Water Everywhere, Perhaps Some Drops for Us*, 91 CORNELL L. REV. 1203, 1207 n.17 (2006).

7. E. Donald Elliott, *The Evolutionary Tradition in Jurisprudence*, 85 COLUM. L. REV. 38, 84-85 (1985). See generally, e.g., Richard F. Ricci et al., *Battles Over Eastern Water*, 21 NAT. RESOURCES & ENV'T 38 (2006); Eric L. Garner, *The Convergence of Western and Eastern Water Law*, 9 CAL. WATER L. & POL'Y REP. 11, 254 (1999); Christopher L. Len, *Synthesis—A Brand New Water Law*, 8 U. DENV. WATER L. REV. 55 (2004).

8. See Joseph W. Dellapenna, *Developing a Suitable Water Allocation Law for Pennsylvania*, 17 VILL. ENVTL. L.J. 1, 49-50 (2006) (describing the system of regulated riparianism as containing elements of eastern and western water law).

9. Cf. Steven J. Shupe, *Waste in Western Water Law: A Blueprint for*

of their property sheen for the sake of a reasonableness patina. Thus, the convergence of eastern and western water law begins.¹⁰

Perhaps just as important, other transformations have begun at the same time that water law in the main has started to change.¹¹ One such shift is the increasing interconnection of land use planning and water regulation.¹² Although a logical

Change, 61 OR. L. REV. 483, 486-95 (1982) (comparing how the West has mirrored water rights concepts from the East). Anti-waste rules in prior appropriation might be considered similar to the principle of correlative rights in riparianism. Both limit property rights in water. Craig Anthony Arnold, *Water Privatization Trends in the United States: Human Rights, National Security, and Public Stewardship*, 33 WM. & MARY ENVTL. L. & POL'Y REV. 785, 806-07 (2009). For more on waste, see generally COLO. REV. STAT. § 37-92-103(3) (1990); Janet Neuman, *Beneficial Use, Waste, and Forfeiture: The Inefficient Search for Efficiency in Western Water Use*, 28 ENVTL. L. 919, 928-33, 946-60, 978-95 (1998); Sandra Zellmer, *The Anti-Speculation Doctrine and Its Implications for Collaborative Water Management*, 8 NEV. L.J. 994 (2009). Compare *Tulare Irrigation Dist. v. Lindsay-Strathmore Irrigation Dist.*, 45 P.2d 972 (Cal. 1935) (assessing benefits and costs of water use), with *State Dep't Ecology v. Grimes*, 852 P.2d 1044 (Wash. 1993) (also applying the doctrine of waste).

10. Elliott, *supra* note 7, at 84-85. See generally Ricci, *supra* note 7; Garner, *supra* note 7; Len, *supra* note 7.

11. See generally Robert W. Adler, *Addressing Barriers to Watershed Protection*, 25 ENVTL. L. 973 (1995) (commenting on developments in watershed protection); Reed D. Benson, "Adequate Progress," or Rivers Left Behind? *Developments in Colorado and Wyoming Instream Flow Laws Since 2000*, 36 ENVTL. L. 1283 (2006) (tracing the evolution of instream flow laws in some western states); Barbara Cosens, *Water Dispute Resolution in the West: Process Elements for the Modern Era in Basin-Wide Problem Solving*, 33 ENVTL. L. 949 (2003) (evaluating how negotiation can be used to solve basin-wide water disputes); Harrison C. Dunning, *Revolution (and Counter-Revolution) in Western Water Law: Reclaiming the Public Character of Water Resources*, 8 FORDHAM ENVTL. L.J. 439 (1997) (discussing the reemergence of the public nature of water resources in the West); Noah D. Hall, *Toward a New Horizontal Federalism: Interstate Water Management in the Great Lakes Region*, 77 U. COLO. L. REV. 405 (2006) (proposing a new system for environmental and water policy in the Great Lakes region); A. Dan Tarlock, *Putting Rivers Back in the Landscape: The Revival of Watershed Management in the United States*, 6 HASTINGS W.-NW. J. ENVTL. L. & POL'Y 167 (2000) (addressing watershed management); see also Donald D. MacIntyre, *The Prior Appropriation Doctrine in Montana: Rooted in Mid-Nineteenth Century Goals—Responding to Twenty-First Century Needs*, 55 MONT. L. REV. 303, 326 (1994) (discussing state water inventories); Eric Ryan Potyondy, *Sustaining the Unsustainable: Development of the Denver Basin Aquifers*, 9 U. DENV. WATER L. REV. 121, 136-37 (2005) (evaluating groundwater consumption limitations).

12. See generally, e.g., ENVIRONMENTAL LAW INSTITUTE, WET GROWTH: SHOULD WATER LAW CONTROL LAND USE? (Craig Anthony Arnold ed., 2005); Mary Jane Angelo, *Integrating Water Management and Land Use Planning: Uncovering the Missing Link in the Protection of Florida's Water Resources?*, 12 U. FLA. J.L. & PUB. POL'Y 223 (2001); Ellen Hanak & Margaret K. Browne, *Linking Housing Growth to Water Supply: New Planning Frontiers in the American West*, 72 J. AM. PLAN. ASS'N 154 (2006); Dennis J. Herman, Note,

assumption is that land and water planning should have been long intertwined, this assumption does not hold. Rather, land use regulation and water governance historically have been disconnected.¹³ Whether this is a consequence of the overall fragmentation of environmental law,¹⁴ embedded presumptions that promote growth,¹⁵ or something else, the truth remains. As Professor Dan Tarlock and Lora Lucero have observed, “Water supply and land-use planning are disconnected because they have historically been, and currently remain, the separate responsibility of different levels of government.”¹⁶ Federal and state entities govern “water resources and [are] primarily motivated by . . . economic efficiency. On the other hand . . . , cities and counties have been the planners and regulators of our land resources and have been motivated primarily by . . . preventing nuisances. A very dumb process has evolved by default, not by design.”¹⁷

Now, however, that historical disconnect is breaking down. New movements in the law are inching land and water regulation closer together.¹⁸ One of the foremost examples is “assured supply” or “assured water supply” laws—mandates that require developers

Sometimes There Is Nothing Left to Give: The Justification for Denying Water Service to New Customers to Control Growth, 44 STAN. L. REV. 429 (1992); Kevin M. O'Brien & Barbara Markham, *Tale of Two Coasts: How Two States Link Water and Land Use*, 11 NAT. RESOURCES & ENV'T 3 (1996); Adam Strachan, Note, *Concurrency Laws: Water as a Land-Use Regulation*, 21 J. LAND RESOURCES & ENVTL. L. 435 (2001); A. Dan Tarlock & Lora A. Lucero, *Connecting Land, Water, and Growth*, 34 URB. LAW. 971 (2002); A. Dan Tarlock & Sarah B. Van de Wetering, *Growth Management and Western Water Law: From Urban Oases to Archipelagos*, 5 HASTINGS W.-NW. J. ENVTL. L. & POL'Y 163 (1999).

13. Tarlock & Lucero, *supra* note 12, at 972.

14. See WILLIAM H. RODGERS, JR., ENVIRONMENTAL LAW 59-60 (2d ed. 1994) (discussing the fragmentation of environmental law); see generally Lincoln L. Davies, *Alternative Energy and the Energy-Environment Disconnect*, 46 IDAHO L. REV. 473 (2010); Robert L. Fischman, *The Divides of Environmental Law and the Problem of Harm in the Endangered Species Act*, 83 IND. L.J. 661, 662 (2008); Elizabeth Fisher et al., *Maturity and Methodology: Starting a Debate About Environmental Law Scholarship*, 21 J. ENVTL. L. 213, 219 (2009); Robert V. Percival, *Regulatory Evolution and the Future of Environmental Policy*, 1997 U. CHI. LEGAL F. 159, 190 (1997); Amy J. Wildermuth, *Is Environmental Law a Barrier to Emerging Alternative Energy Sources?*, 46 IDAHO L. REV. 509 (2010); cf. Todd S. Aagaard, *Environmental Law as a Legal Field: An Inquiry in Legal Taxonomy*, 95 CORNELL L. REV. 221 (2001) (examining the field as a whole).

15. David H. Getches, *The Metamorphosis of Western Water Policy: Have Federal Laws and Local Decisions Eclipsed the States' Role?*, 20 STAN. ENVTL. L.J. 3, 60 (2001); A. Dan Tarlock, *The Future of Prior Appropriation in the New West*, 41 NAT. RESOURCES J. 769, 781-82 (2001).

16. Tarlock & Lucero, *supra* note 12, at 972.

17. *Id.*

18. See generally *supra* note 12.

to show that there is sufficient water available before a new land development may go forward.¹⁹ Assured supply laws bridge water and land use regulation by putting back together in the law topics that are intrinsically connected in nature.²⁰ Land planning should consider its impact on water, because land use changes water availability. Water planning, likewise, should assess land considerations, because land use relies on water availability.

Although some eastern jurisdictions have begun taking action on the assured supply front, these laws remain overwhelmingly western. As one recent study showed, nine of the eleven most western states in the contiguous United States have adopted some form of assured supply law.²¹ The only exceptions: Idaho and Utah, and even there, localities have filled in some of the gaps.²² By contrast, only two eastern states have enacted assured supply laws comparable to western measures: Florida and Vermont.²³

This should not be surprising. The West is markedly more arid than the East, with cities like Phoenix and Los Angeles receiving eight and thirteen inches of rain per year, while cities like Chicago and Baltimore take in thirty-six and forty-two inches of precipitation per year.²⁴ The West also has been the nation's engine of growth for the recent past, boasting seven of the ten fastest growing states from 1990 to 2000.²⁵ The West's assured supply laws have been adopted largely in response to this wave of change, as states struggled with natural population booms, an influx of people from other regions, and the concomitant strain on resources—including water.

But the tables may be turning. The East, too, has begun to grow rapidly. The pain of sprawl is as acute there as anywhere. And the specter of climate change looms over the region's

19. See generally Lincoln L. Davies, *Just a Big, "Hot Fuss"? Assessing the Value of Connecting Suburban Sprawl, Land Use, and Water Rights Through Assured Supply Laws*, 34 *ECOLOGY L.Q.* 1217 (2007).

20. *Id.* at 1269-70.

21. Bobbie Klein & Douglas Kenney, *The Land Use Planning, Water Resources and Climate Change Adaptation Connection: Challenges and Opportunities*, *Western Water Assessment*, at 1, 3, http://wwa.colorado.edu/water_management_and_drought/Land%20use%20water%20final.pdf (last visited Mar. 9, 2010).

22. *Id.* at 4-5.

23. See discussion *infra* Part IV (outlining current assured supply laws in the East).

24. U.S. Census Bureau, *Normal Monthly and Annual Precipitation—Selected Cities*, tbl. 381, <http://www.census.gov/compendia/statab/2010/tables/10s0381.xls> (last visited Mar. 22, 2010) [hereinafter *Normal Precipitation*].

25. See *CensusScope*, *United States Population Growth Ranking: States Ranked by Rate of Population Growth, 1990-2000*, http://www.censuscope.org/us/rank_popl_growth.html (last visited Mar. 22, 2010) (ranking all fifty states, and the District of Columbia, in terms of percent growth).

historically abundant water supplies, which are becoming increasingly tight even absent the threat of global ecosystem transformation.²⁶

The question thus presents itself: Should the East follow the West's example of adopting assured supply laws? Does the East have something to learn from the West?

For The John Marshall Law School's timely Eleventh Annual Kratovil Conference on Real Estate Law and Practice, *Water as a Resource: Impact on Real Estate Ownership, Development, and Land Use Policy*, this Article broaches this inquiry. It asks whether the West's relatively unique, and increasingly ubiquitous, assured supply mechanism should be translated more broadly into the East.

The Article breaks this query down into four subparts. Part I briefly surveys the reasons why western states have enacted assured supply laws, and then assesses whether those rationales translate to the East. Part II outlines the benefits and costs of assured supply laws, with an eye to whether assured supply laws' net benefits would be useful for eastern states. Part III then examines potential obstacles to importing a western water law device into an eastern water law system, namely, the region's divergent water law systems. Finally, Part IV concludes with a brief assessment of the nascent state of assured supply law in the East, and some initial suggestions of policy considerations that eastern lawmakers may want to weigh before enacting assured supply laws of their own.

I. ASSURED SUPPLY LAW RATIONALES

States adopt assured supply laws for many reasons. Legislators, lobbyists, and interest groups that agitate for these measures carry a heavy slate of rationales for their enactment. The laws, they urge, help the environment, stop sprawl, enhance planning, and level the playing field for homebuyers and sellers.²⁷

26. See discussion *infra* Part I.B (describing emerging water conflicts in the East).

27. See, e.g., Tracey Kaplan, *New Law Links Water Supply to OK of Large Housing Tracts*, SAN JOSE MERCURY NEWS, Oct. 10, 2001, at 19A (reporting that proponents of California's assured supply law believed it would conserve water and help address the impacts of drought); John Roszkowski, *Planning for Growth with Water in Mind*, ELM LEAVES (Elmwood Park, Ill.), July 26, 2006 (stating that one proposed solution to problems of water scarcity in the outlying suburbs of Chicago is a permitting process); David Snyder, *A New Direction in Water Law: Frederick Ordinance Resembles Western U.S. Approach*, WASH. POST, Sept. 23, 2002, at B1 (explaining proposed water-use reforms in Maryland); see also Davies, *supra* note 19, at 1230-31 (commenting on the benefits that assured supply laws provide); Lincoln L. Davies, *Assured Water Supply Laws in the Sustainability Context*, 3 GOLDEN GATE U. ENVTL. L.J. (forthcoming 2010).

They simply make for more prudent living. As supporters of California's law asserted in favor of its enactment, "approving new development faster than new water supplies are developed puts existing customers at risk during future droughts."²⁸

That the rationales offered for assured supply laws are so divergent is telling, because the way the laws function is relatively uniform—at least in structure. The typical assured supply law works in three parts. First, a developer seeking to build a new subdivision or other project makes its application to the local planning board or other agency charged with pertinent approval authority. Second, as part of its overall review of the application, the planning authority evaluates information provided on whether there will be sufficient water to supply the development. Often, this information is submitted by water officials or utilities, although some laws anticipate that the developer itself will present the information. Finally, the planning authority determines whether the development may proceed, taking the question of water availability into account.²⁹

Nevada's law exemplifies this structure. Developers seeking to subdivide land begin the process by filing a "tentative map" with the local planning commission.³⁰ In reviewing the tentative map, the planning board must consider numerous factors, including the "availability and accessibility of utilities," the "availability of water which meets applicable health standards and is sufficient in quantity for the reasonably foreseeable needs of the subdivision," and "[e]nvironmental and health laws and regulations concerning water and air pollution, . . . facilities to supply water, [and] community or public sewage disposal."³¹ While the land commission retains discretion for how precisely to deal with this information, it cannot approve the "final map" for the subdivision absent credible evidence from water officials that there will be a sufficient water supply available. "A final map presented for filing must include a certificate by: . . . [the] Division of Water Resources of the State Department of Conservation and Natural Resources, showing that the final map is approved . . . concerning water quantity."³²

California's law is similar. It too follows the three-step process of application, evaluation, and approval only with adequate water. The law requires that, before a city or county may "approve, conditionally approve, or disapprove" a proposed

28. CAL. BILL ANALYSIS, ASSEMBLY COMM. ON WATER PARKS AND WILDLIFE, S.B. 221, 2001-2002 Regular Sess., at 6 (2001).

29. See Davies, *supra* note 19, at 1248-50, 1257-62 (explaining California's assured supply law).

30. NEV. REV. STAT. § 278.330 (2008).

31. NEV. REV. STAT. § 278.349(3)(a)-(c).

32. NEV. REV. STAT. § 278.377(1)(b).

subdivision, it must “include . . . a requirement that a sufficient water supply be available.”³³ In California, a “sufficient water supply” is not necessarily determined by state-level water officials, but rather, is a water source that will both “meet the projected demand associated with the proposed subdivision” and be “available during normal, single-dry, and multiple-dry years within a 20-year projection.”³⁴ Nevertheless, the presumption in California is that the applicable public water system will assess whether there is sufficient water³⁵ and will do so based on its most recent, full-scale urban water management plan.³⁶ It is only if the public water system fails to respond to the request for water information—or indicates that it will not be able to serve the new development—that the land use agency will look elsewhere for water supplies.³⁷

At their core, assured supply laws thus function as a threshold check against improvident decisions. They aim to prevent land planners from letting development through if there are insufficient resources to support it.³⁸ They hope to ensure that homebuyers purchase residences that come with the amenities they naturally expect.³⁹ They attempt to avoid developers foisting onto the rest of society their projects’ costs, whether those costs manifest as strains on existing residents’ water supply, environmental impacts from water transfers to new developments, or otherwise.⁴⁰ In short, assured supply laws aim to put the “smart” of smart growth into planning too: “smart planning for smart growth.”⁴¹

33. CAL. GOV'T CODE § 66473.7(b)(1).

34. CAL. GOV'T CODE § 66473.7(a)(2).

35. See CAL. GOV'T CODE § 66473.7(b) (stating that the legislative body of a city or county must determine if a sufficient water supply is available).

36. CAL. GOV'T CODE § 66473.7(c)(1). Under California law, an urban water management plan, or UWMP, “shall describe and evaluate sources of supply, reasonable and practical efficient uses, reclamation and demand management activities.” CAL. WATER CODE § 10615 (2010). “The components of the plan may vary according to an individual community,” but it must “address measures for residential, commercial, governmental, and industrial water demand management” and set forth “a strategy and time schedule for implementation.” *Id.* Plans must be updated at least every five years. CAL. WATER CODE § 10621(a).

37. CAL. GOV'T CODE § 66473.7(b)(3)-(4).

38. Davies, *supra* note 19, at 1235-37.

39. *Id.* at 1231-32.

40. See *id.* at 1232 (noting that developers “reap unjust profits” when they are able to hide the price of water rights during initial property sales transactions).

41. Arnold, *supra* note 12, at 1, 3-7. See generally ROBERT H. FREILICH, FROM SPRAWL TO SMART GROWTH (1999); Joel B. Eisen, *Brownfields Development: From Individual Sites to Smart Growth*, 39 ENVTL. L. REP. NEWS & ANALYSIS 10, 285 (2009); John R. Nolon, *Golden and Its Emanations: The Surprising Origins of Smart Growth*, 23 PACE ENVTL. L. REV. 757 (2006).

Because assured supply laws are adopted for many reasons, there are just as many ways to view them. Scholars typically have characterized these laws from two perspectives: (1) as bridges helping break down the historic disconnects between land and water planning,⁴² and (2) as environmental regulatory tools that deliver a number of benefits outweighing their costs.⁴³ In assessing whether assured supply laws should be used more heavily in eastern states, it matters how the laws are viewed. Based on the rationales typically given for the adoption of assured supply laws, this Part delineates three lenses through which the laws can be examined and concludes that, no matter how they are seen, there is reason to import assured supply laws from West to East.

A. *The Growth Lens*

A key reason states have begun adopting assured supply laws is to help grapple with the rapid growth the West has faced over the last two decades. Indeed, the West's latest "boom cycle" has been so transformative that one set of commentators recently termed it a transition from "urban oases to archipelagos"—a virtual explosion of urban landscapes across the region.⁴⁴

The West is no longer an Eastern and European colony. It has become a classic example of modern, if not post-modern, globally integrated, service, information and manufacturing economy. Today . . . , the West is growing for the very reasons people were originally deterred from settlement of the region—its harsh climate and rugged, often bleak, non-European landscape. The "New West's" "commodities" include its climate, mountain and desert wilderness areas, scenery, free-flowing rivers and open spaces, combined with the public and private infrastructure to support what millions perceive as a high quality of life.⁴⁵

It was on this background that the West began adopting assured supply laws. Worried about what such an expanding population would mean for its resource base when the region was already so arid, policymakers turned to their toolkits. Assured supply laws became part of the answer.

To be sure, the West had reason to worry. Of the top five fastest growing states in the nation from 1990 to 2000, the West boasted all five.⁴⁶ And of the ten fastest growing states during the same period, the West was home to seven.⁴⁷ For many states, there was no comparison. Places like Nevada and Arizona posted growth rates that were, for lack of a better term, off the charts: sixty-six

42. See generally *supra* note 12.

43. See generally Davies, *supra* note 19.

44. Tarlock & Van de Wetering, *supra* note 12, at 163.

45. *Id.* at 163-64.

46. CensusScope, *supra* note 25.

47. *Id.*

percent and forty percent, respectively.⁴⁸ Other western states were not far behind.⁴⁹ Indeed, only three western states in the continental United States experienced growth rates lower than ten percent during the 1990s: North Dakota, South Dakota, and Wyoming.⁵⁰ Las Vegas—both the epicenter and symbol of western growth—epitomized the trend. Change was so fast in that part of the Nevada desert that some observers deemed roadmaps “almost useless” because they were out of date before they could go to print.⁵¹ “Houses are thrown together and occupied even before the streets outside them are paved or the sidewalks poured.”⁵²

What came with all this growth was not just a linear increase in resource consumption. The booming West was also the sprawling West. And sprawl, as always, brought an exponential demand on resources—including, especially, ever-precious water.⁵³ Westerners already used water more heavily than other states, in no small part because water use does not go as far in arid regions. With sprawl, however, the effect is exacerbated because so much water goes to propping up water-intensive landscaping techniques for single family homes.⁵⁴ There is a reason why the natural landscape of Phoenix is more red rock than Kentucky bluegrass. Nonetheless, the West is profligate in its water use. In 1990, when the region’s population explosion was about to burst, national per capita water consumption was 185 gallons-per-day.⁵⁵ Yet four of the five heaviest users in the nation were in the arid states farthest west of the Continental Divide: Nevada at 344 gallons-per-day, Utah at 308, Idaho at 262, and Wyoming at 260 gallons-

48. *Id.*

49. See Tarlock & Van de Wetering, *supra* note 12, at 163 (“From 1990 to 1995, ten of the nation’s fifty fast growing countries (including the fastest) were in one state, Colorado.”).

50. See CensusScope, *supra* note 25 (noting growth rates for North Dakota, South Dakota and Wyoming of .53%, 8.45% and 8.86%, respectively).

51. Trip Gabriel, *From Vice to Nice: The Suburbanization of Las Vegas*, N.Y. TIMES, Dec. 1, 1991, at 68.

52. *Id.*

53. Craig Anthony (Tony) Arnold, *Privatization of Public Water Services: The States’ Role in Ensuring Public Accountability*, 32 PEPP. L. REV. 561, 590 (2005); American Rivers et al., *Paving Our Way to Water Shortages: How Sprawl Aggravates the Effects of Drought* (2002), available at, <http://www.smartgrowthamerica.org/DroughtSprawlReport09.pdf>; Holly Jo Franz et al., *An Insatiable Thirst: The Impact of Water Law on Sprawl in the West*, 15 NAT. RES. & ENV’T 228, 228-29 (2001).

54. See Ellen Hanak et al., *Myths of California Water—Implications and Reality*, 16 HASTINGS W.-NW. J. ENVTL. L. & POL’Y 3, 19 (2010) (noting that, for California, “outdoor water use averages over forty percent of residential water use, and increases with hotter climates, larger lot sizes, and a greater proportion of single-family homes”).

55. FLORIDA STATE UNIV., PROGRAM FOR ENVIRONMENTAL POLICY AND PLANNING SYSTEMS, STRATEGIC ASSESSMENT OF FLORIDA’S ENVIRONMENT 278-79 (1995), available at <http://www.pepps.fsu.edu/safe/pdf/sc1.pdf>.

per-day.⁵⁶ Sprawl could only make this worse.

The sprawl, in fact, was real. From 1970 to 1990, the West posted three cities to the national list of those most quickly urbanizing land.⁵⁷ In the ensuing decade, from 1990 to 2000, essentially every large city in the West converted land to urban space at a rate faster than its population was growing.⁵⁸ Given western cities' growth rates, this was quite remarkable. There are many ways to define sprawl,⁵⁹ but there can be little doubt that urbanization outstripping such rapid growth is a strong indicator of the trend.

Assured supply advocates relied heavily on this spate of growth and the plague of sprawl to push proposed laws to enactment. The Sierra Club called assured supply laws a "Legal Tool[] for Stopping Sprawl."⁶⁰ Other environmentalists deemed water "something that could limit the sprawl."⁶¹ And the *Sacramento Bee*, discussing California's assured supply measure, deemed it "turn[ing] water into a chess piece in the debate over growth."⁶²

In the context of western assured supply laws moving East, the question thus shifts: If the West has dominated national growth in recent years, do assured supply laws have utility elsewhere?

The answer is straightforward. Looking at assured supply laws through the lens of growth makes it quite clear that these measures should have currency on both sides of the Continental Divide. Growth is dynamic, not static. And it has changed quite substantially in the decade since the West's booming 1990s.

Although the West has long dominated population growth, that picture has started to change. From 2000 through 2009, the United States Census Bureau estimated that four of the top ten fastest growing states were no longer in the West but in the East:

56. *Id.*

57. Sprawl City, How Bad Is Sprawl?, <http://www.sprawlcity.org/hbis/index.html> (last visited Mar. 22, 2010).

58. William Fulton et al., *Who Sprawls Most? How Growth Patterns Differ Across the U.S.*, BROOKINGS INSTITUTION: SURVEY SERIES, July 2001, at 6-7, available at <http://www.brookings.edu/es/urban/publications/fulton.pdf>.

59. See, e.g., Jackie Cutsinger et al., *Verifying the Multi-Dimensional Nature of Metropolitan Land Use: Advancing the Understanding and Measurement of Sprawl*, 27 J. URB. AFFAIRS 235, 248 (2005) (outlining various indices of sprawl); George Galster et al., *Wrestling Sprawl to the Ground: Defining and Measuring an Elusive Concept*, 12 HOUSING POL'Y DEBATE 681, 687-98 (2001) (presenting "a conceptual definition of sprawl based on eight distinct dimensions of land use patterns: density, continuity, concentration, clustering, centrality, nuclearity, mixed uses, and proximity").

60. Dale Kasler, *Private Water Sales Are Paving Way for Growth*, SACRAMENTO BEE, Sept. 22, 2002, at A1.

61. *Id.*

62. *Id.*

Florida, Georgia, North Carolina, and South Carolina.⁶³ The trend is little different when it comes to numbers rather than percentages. There were only eight states in the Union that grew by 800,000 people or more during these years, but again, four of them were squarely in the East: Florida, Georgia, North Carolina, and South Carolina.⁶⁴ It should not be surprising, then, that when denominating the largest urban areas in the United States—“megapolitans,” or “clustered networks of metropolitan areas that exceed 10 million total residents (or will . . . by 2040)”⁶⁵—six of the nation’s ten lie in the East, while only four are in the West.⁶⁶

So too from the perspective of sprawl: the East is a major player. Although it was clear over the last two decades that western cities were sprawling, the East was as well. Look closer at the data, and the trend becomes apparent. On the lists of the nation’s most “sprawling” and most “sprawl-threatened” cities, eastern cities dominate.⁶⁷ While western cities urbanized land rapidly from 1970 to 1990, those that did so most rapidly were heavily eastern. The top five, in order, were Atlanta, Houston, New York City, Washington, D.C., and Philadelphia.⁶⁸ More recently, the Sierra Club’s 1998 assessment of the situation also put eastern cities as more sprawling than their western counterparts. For large cities, the top five were, again, Atlanta, and then St. Louis, Washington, D.C., Cincinnati, and Kansas City.⁶⁹ Minneapolis, Ft. Lauderdale, and Chicago—note, all in the East—also received this dubious distinction.⁷⁰

Thus, to the extent that sprawl or, more appropriately,⁷¹ growth gives reason for the adoption of assured supply laws, the

63. U.S. Census Bureau, Population Division, National and State Population Estimates: Cumulative Estimates of Resident Population Change for the United States, States, and Puerto Rico: April 1, 2000 to July 1, 2009, <http://www.census.gov/popest/gallery/maps/Maps-state2009.xls> (last visited Mar. 23, 2010).

64. *Id.*

65. Robert E. Lang & Dawn Dhavale, *Beyond Megalopolis: Exploring America’s New “Megapolitan” Geography*, METROPOLITAN INSTITUTE AT VIRGINIA TECH CENSUS REPORT SERIES 05:01, May 2005, at 1, available at <http://america2050.org/pdf/beyondmegalopolislang.pdf>.

66. *Id.*

67. *Sprawl City*, *supra* note 57; Sierra Club, 1998 Sierra Club Sprawl Report: 30 Most Sprawl-Threatened Cities, <http://www.sierraclub.org/sprawl/report98/cities.asp> (last visited Mar. 23, 2010).

68. See *Sprawl City*, *supra* note 57 (rounding out the list: Dallas, Tampa, and Minneapolis).

69. Sierra Club, *supra* note 67.

70. *Id.*

71. Assured supply laws are unlikely to stop sprawl. See discussion *infra* Part II.B. Thus, even though assured supply laws are sometimes advocated for on these grounds, the more appropriate rationale is growth, not sprawl. Indeed, focusing on sprawl as a rationale for the laws could actually backfire. Davies, *supra* note 19, at 1275-78.

West does not stand alone. The rationales often given for enactment of the laws in that region apply in the East as well.

B. *The Water Lens*

“Water wars”—the term used to apply only in the arid western United States, where water “runs uphill to money”⁷² and the “whiskey is for drinking; water is for fighting over.”⁷³ Not so anymore. Increasingly on this front too, the East is treading in the West’s path.

The fact that water is so scarce in the West clearly informed the region’s adoption of assured supply laws.⁷⁴ If water is not a worry—if the prospect of more bodies means little more than increased economic opportunity—the assured supply mechanism is superfluous, or at least appears so. Prudent investors know how to turn down projects short of necessary amenities,⁷⁵ just as prudent planners know when resources are becoming more limited.⁷⁶ Absent limited water, cause for new measures breaking down traditional regulatory silos to account for water scarcity would seem unlikely.

Lack of water, indeed, is part of what helped drive such widespread enactment of assured supply laws.⁷⁷ The American West is famously dry. Dealing with a scarcity of water is woven into the region’s cultural fabric. “Water has an emotional and symbolic meaning for the West that transcends its commodity value.”⁷⁸ From the testy negotiations of the Colorado River Compact to the construction of massive manmade lakes serving as reservoirs,⁷⁹ from the battles of fish-versus-electricity to the

72. See, e.g., Robert Haskell Abrams, *Broadening Narrow Perspectives and Nuisance Law: Protecting Ecosystem Services in the ACF Basin*, 22 J. LAND USE & ENVTL. L. 243, 263 (2007) (noting the adage).

73. Mark Twain typically is given credit for this maxim. See, e.g., Mark Twain Quotations, Newspaper Collections, & Related Resources, <http://www.twainquotes.com/WaterWhiskey.html> (last visited Mar. 23, 2010) (citing quote).

74. See Davies, *supra* note 19, at 1230-31 (discussing supply laws).

75. *Id.* at 1230-34; Robert H. Abrams, 19th Century Rules for the 21st Century: Linking Land Development to Assured Water Supply 9 (Feb. 23, 2006) (unpublished manuscript presented at the American Bar Association’s 24th Annual Western Water Law Conference, on file with author).

76. Davies, *supra* note 19, at 1233-34.

77. *Id.* at 1225-27, 1230-31, 1247-50.

78. LEE BROWN & HELEN INGRAM, *WATER AND POVERTY IN THE SOUTHWEST* 187 (1987).

79. See generally, e.g., Robert W. Adler, *Revisiting the Colorado River Compact: Time for a Change?*, 28 J. LAND RESOURCES & ENVTL. L. 19 (2008); Steven W. Carothers, *Decommissioning Glen Canyon Dam: The Key to Colorado River Ecosystem Restoration and Recovery of Endangered Species?*, 42 ARIZ. L. REV. 215 (2000); Rick L. Gold, *Dividing the Pie—Dealing with Surplus and Drought: Examining the Colorado River Compact of 1922*, 28 J.

doctrine of prior appropriation itself,⁸⁰ water dilemmas pervade western politics and law.⁸¹

When Arizona adopted the first assured supply requirement as part of its Groundwater Management Act of 1980,⁸² the reason why was largely water-centric: not the state's concern about homes having enough, but rather, the desire to tap into federal funding for the massive Central Arizona Project, which provided a way to extract the Colorado River's liquid gold.⁸³ Likewise for California, drought was what helped push its bills through.⁸⁴ If the state were not subject to repeated water shortages, S.B. 221, California's assured supply law, might not have become reality.⁸⁵ And the list goes on.⁸⁶

So when the question of whether assured supply laws also should be used in the East is posed, it is only natural to inquire whether water is actually a problem for that part of the United States as well. For a long time, the answer has been a resounding "no." The mantra of the East has not been "whither water?" but "water, water everywhere." After all, the region's natural precipitation dwarfs the West's: fifty inches per year for Atlanta to Boise's twelve; forty-three inches per year for Raleigh to Reno's seven.⁸⁷ The very basis of riparianism, indeed, is that there will be

LAND RESOURCES & ENVTL. L. 71 (2008); Scott K. Miller, *Undamming Glen Canyon: Lunacy, Rationality, or Prophecy?*, 19 STAN. ENVTL. L.J. 121 (2000); Patrick Schiffer et al., *From a Colorado River Compact Challenge to the Next Era of Cooperation Among the Seven Basin States*, 49 ARIZ. L. REV. 217 (2007).

80. See generally, e.g., Phillip M. Bender, *Restoring the ELWHA, White Salmon, and Rogue Rivers: A Comparison of Dam Removal Proposals in the Pacific Northwest*, 17 J. LAND RESOURCES & ENVTL. L. 189 (1997); Reed D. Benson, *Dams, Duties, and Discretion: Bureau of Reclamation Water Project Operations and the Endangered Species Act*, 33 COLUM. J. ENVTL. L. 1 (2008).

81. See generally, e.g., SARAH F. BATES ET AL., *SEARCHING OUT THE HEADWATERS: CHANGE AND REDISCOVERY IN WESTERN WATER POLICY* (1993); NORRIS HUNDLEY, *WATER AND THE WEST: THE COLORADO RIVER COMPACT AND THE POLITICS OF WATER IN THE AMERICAN WEST* (2009).

82. Groundwater Management Act, Ariz. Laws 4th Spec. Sess., ch. 1 (codified as amended at ARIZ. REV. STAT. ANN. §§ 45-401 to -704 (1980)).

83. Robert Jerome Glennon, *"Because That's Where the Water Is": Retiring Current Water Uses to Achieve the Safe-Yield Objective of the Arizona Groundwater Management Act*, 33 ARIZ. L. REV. 89, 90-91 (1991). See generally Robert Jerome Glennon, *Coattails of the Past: Using and Financing the Central Arizona Project*, 27 ARIZ. ST. L.J. 677 (1995).

84. Davies, *supra* note 19, at 1247-48.

85. *Id.*

86. See, e.g., Lora A. Lucero, *Water and the Disconnects in Growth Management*, 31 URB. LAW. 871, 880-81 (1999) (explaining the methods the New Mexico legislature took to require sufficient water supplies in new subdivisions); Strachan, *supra* note 12, at 452 (discussing how courts have found that preventing water shortages are "in the interest of the general welfare").

87. *Normal Precipitation*, *supra* note 24.

ample water.⁸⁸ That is why the doctrine assumes that consumption can be ratcheted down rather than cut out for some users entirely; there is still enough to go around.

The hard fact, however, is that riparianism's presumptions no longer hold. In the twenty-first century, the East is now the battleground for its own water wars.⁸⁹ Perhaps most notable is the continuing dispute over the Apalachicola-Chattahoochee-Flint ("ACF") River Basin that feeds Atlanta, Alabama, and Florida,⁹⁰ but there are others as well. From the need for a western-style interstate compact for the Great Lakes to fights over water flows in the Catawba and Yadkin-Pee Dee Rivers from North Carolina to South Carolina,⁹¹ water availability no longer is a problem common only in the western United States.

The ACF controversy alone should be proof that times have changed. That an area marked by "rivers, swamps, marshes and high humidity and heavy thunderstorms" can serve as the epicenter for what many are calling "one of the biggest water wars in the United States in the last 30 years" is telling indeed.⁹² Yet it is the natural byproduct of the very reason that states and localities adopt assured supply laws in the first place. As David Feldman of the University of Tennessee recently observed, "rapid population growth and urbanization" have subjected eastern rivers to levels and kinds of demands they have not faced before.⁹³ "So [now,] the same water that Atlanta has to use for its municipal water supply is the water that upstream users need to support recreation and flood control, and downstream users need the support agriculture, urban growth and a very lucrative fishing industry [At some point, s]omebody is going to have to

88. C. Grady Moore, *Water Wars: Interstate Water Allocation in the Southeast*, 14 NAT. RESOURCES & ENV'T 5, 6 (1999).

89. See generally, e.g., Thomas L. Sansonetti & Sylvia Quast, *Not Just a Western Issue Anymore: Water Disputes in the Eastern United States*, 34 CUMB. L. REV. 185 (2003).

90. See generally, e.g., Kenneth S. Gould, *An Introduction to Water Rights in the Twenty-First Century: The Challenges Move East*, 25 U. ARK. LITTLE ROCK L. REV. 3, 4 (2002); Claire McClintic, Note, *A River Runs Through It: What States Along the Missouri River Can Learn About Water Allocation from Conflict in the ACF River Basin*, 16 MO. ENVTL. L. & POL'Y REV. 201 (2009); Ricci, *supra* note 7.

91. See generally David Franck, *Water Transfer Between North and South Carolina: An Option for Policy Reform*, 45 NAT. RESOURCES J. 441 (2005); Hall, *supra* note 11; Tim Jones, *Great Lakes Key Front in Water Wars: Western, Southern States Covet Midwest Resource*, CHI. TRIB., Oct. 28, 2007, at C1; J.B. Ruhl, *Equitable Apportionment of Ecosystem Services: New Water Law for a New Water Age*, 19 J. LAND USE & ENVTL. L. 47 (2003); Mark Squillace, *Rethinking the Great Lakes Compact*, 2006 MICH. ST. L. REV. 1347.

92. Emily Yellin, *Alabama, Florida and Georgia Fight Crucial Water War*, N.Y. TIMES, Mar. 2, 2000, at A14.

93. *Id.* (quoting Feldman).

blink . . . ”⁹⁴

The problem is that it is likely only going to get more difficult to blink. With climate change bearing down, water supplies are almost certain to shift.⁹⁵ While some areas, including the Southeast, may get more water—to the point of increased flooding—others will certainly get less.⁹⁶ The almost inevitable result is both (1) a mismatch of timing, supply, and demand and (2) less room for error in water planning.⁹⁷ The prospect of such a changed waterscape has been projected to be dramatic enough that some scholars have noted the possible federalization of what long has been states’ domain: water law.⁹⁸ As one recent study concluded, “The Southeast United States may be one of the most vulnerable regions in the United States to climate change,” in part because of lost precipitation in some areas of the region.⁹⁹

All this should make one thing very clear: The days of the West standing alone as the part of the country subject to recurrent drought are over. The East is vulnerable now too, and the “modern” water “wars” that its states are fighting as a consequence are in all likelihood merely “harbingers of future disputes.”¹⁰⁰ If the East is not yet at a place where water constraints make assured supply laws appropriate, it is on its way there.

C. The Sustainability Prism

If growth and water are monochromatic lenses through which assured supply laws can be seen, sustainability is a multidimensional prism.¹⁰¹ Although assured supply advocates

94. *Id.*

95. *See, e.g.*, Jens Hesselbjerg Christiansen et al., *Regional Climate Projections*, in CLIMATE CHANGE 2007: THE PHYSICAL SCIENCE BASIS 850 (Susan Solomon et al. eds., 2007).

96. *Id.*

97. *See generally* Robin Kundis Craig, *Climate Change, Regulatory Fragmentation, and Water Triage*, 79 U. COLO. L. REV. 825 (2008); Brian E. Gray, *Global Climate Change: Water Supply Risks and Water Management Opportunities*, 14 HASTINGS W.-NW. J. ENVTL. L. & POL’Y 1453 (2008); Noah D. Hall, *Climate Change and Great Lakes Water Resources: Avoiding Future Conflicts with Conservation*, 31 HAMLINE L. REV. 639 (2008); Kathleen A. Miller, *Climate Change and Water in the West: Complexities, Uncertainties and Strategies for Adaptation*, 27 J. LAND RESOURCES & ENVTL. L. 87 (2007).

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

99. STRATUS CONSULTING, CLIMATE CHANGE IMPACTS IN THE SOUTHEASTERN UNITED STATES 1 (2010), available at http://community.csc.noaa.gov/climateadaptation/index.php?option=com_docman&task=doc_downLoad&gid=461&Itemid=32.

100. Stephen E. O’Day et al., *Wars Between the States in the 21st Century: Water Law in an Era of Scarcity*, 10 VT. J. ENVTL. L. 229, 265 (2009).

101. Davies, *supra* note 27.

typically do not express their desire for these laws in the precise terms of sustainable development, assured supply measures clearly militate in its direction. These laws seek to limit development to circumstances where there will be sufficient resources—namely, water—for the development going forward. That is the very concept of sustainability: development that does not strain resources beyond their limits, measured on a long-term basis.¹⁰²

Although some have criticized sustainability, or “sustainable development” as it is often called, as simply a refurbished or watered-down version of traditional conservation,¹⁰³ there is more to the concept. Unlike historical environmental protection, which typically focuses solely on the environment (often in narrow terms of risk mitigation and public health), sustainability is much broader.¹⁰⁴ It shares environmental law’s ultimate aim of “regulat[ing] activities that occur in the here and now to temper their potentially tragic consequences for the there and then,” and then goes further.¹⁰⁵

Scholars typically phrase sustainability’s goals in terms of a “triple bottom line,” or the “three Es”: environmental protection, economic development, and equity.¹⁰⁶ That is, while traditional environmental protection sees social and economic aspects of problems as separate and distinct from the environmental components, sustainability views them as indelibly woven together.¹⁰⁷ Rather than pulling at one thread of the fabric, it seeks to take in the whole. “[A]n environmental crisis, a

102. See generally, e.g., HERMAN E. DALY, *BEYOND GROWTH: THE ECONOMICS OF SUSTAINABLE DEVELOPMENT* (1997); PRESIDENT’S COUNCIL ON SUSTAINABLE DEVELOPMENT, *SUSTAINABLE AMERICA: A NEW CONSENSUS FOR THE FUTURE* (1996); WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT, *OUR COMMON FUTURE* (1987).

103. See, e.g., EDITH BROWN WEISS ET AL., *INTERNATIONAL ENVIRONMENTAL LAW AND POLICY* 45 (2d ed. 2007) (“[s]ome have argued that the term sustainable development is oxymoronic (how can development, as change, be sustainable), or so general as to be meaningless.”); cf., e.g., Robert W. Benson, *The Threat of Trade, the Failure of Politics and Law, and the Need for Direct Citizen Action in the Global Environmental Crisis*, 15 *LOY. L.A. INT’L & COMP. L.J.* 1, 12 (1992) (calling Agenda 21 “watered down” and “unenforceable”).

104. J.B. Ruhl, *Sustainable Development: A Five-Dimensional Algorithm for Environmental Law*, 18 *STAN. ENVTL. L.J.* 31, 40 (1999).

105. Richard Lazarus, *Human Nature, the Laws of Nature, and the Nature of Environmental Law*, 24 *VA. ENVTL. L.J.* 231, 239 (2005).

106. Ben Boer, *Institutionalizing Ecologically Sustainable Development: The Roles of National, State, and Local Governments in Translating Grand Strategy into Action*, 31 *WILLAMETTE L. REV.* 307, 318 (1995); John C. Dernbach, *Sustainable Development: Now More Than Ever*, in *STUMBLING TOWARD SUSTAINABILITY* 45, 45 (John C. Dernbach ed., 2002).

107. C. Lee Campbell & Walter W. Heck, *An Ecological Perspective on Sustainable Development*, in *PRINCIPLES OF SUSTAINABLE DEVELOPMENT* 47 (F. Douglas Muschett ed., 1997).

development crisis, an energy crisis. They are all one . . . Ecology and economy are becoming ever more interwoven—locally, regionally, nationally, and globally—into a seamless net of causes and effects.”¹⁰⁸ Professor J.B. Ruhl refers to this as sustainable development’s five-dimensional “algorithm”: the need to maximize environmental protection, economic development, and equitable considerations, simultaneously, over both space and time.¹⁰⁹

Obviously, any concept as multi-layered as sustainable development poses many challenges. It is extremely malleable, so it may mean many different things to many people.¹¹⁰ It invokes the concept of economic development in the same breath as environmental protection, and thus, by putting the ideas under the same umbrella, may force compromise from baseline levels of environmental protection that already exist.¹¹¹ It is fuzzy. It is vague. It may even create a connotation that its three core principles are always in conflict, when often they are not.¹¹² These are just the tip of the sustainable development criticism iceberg.

Despite the critiques, however, there are good reasons for pursuing sustainability as a policy objective, through sustainability law. Environmental law has been criticized for years as too fragmented, too piecemeal, too short-sighted, too narrow.¹¹³ New law rooted in sustainability would move beyond those critiques by reaching more broadly, by seeing resource consumption as it is: connected to all aspects of society—to the production of wealth, the distribution of it, the maintenance of the ecosystems that allow for production in the first place—not just one of these aspects.¹¹⁴

108. WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT, *supra* note 102, at 4-5.

109. Ruhl, *supra* note 4, at 39.

110. See, e.g., David R. Hodas, *The Role of Law in Defining Sustainable Development: NEPA Reconsidered*, 3 WIDENER L. SYMP. J. 1, 15 (1998) (“It is much easier to identify practices that are not sustainable than to define what sustainable development is.”); Barbara Stark, *Sustainable Development and Postmodern International Law: Greener Globalization?*, 27 WM. & MARY ENVTL. L. & POL’Y REV. 137, 151-54 (2002) (“The substantive content of [the Brundtland Report’s original] definition, as many commentators have observed, remains ambiguous.”).

111. E.g., ERIC T. FREYFOGLE, *WHY CONSERVATION IS FAILING AND HOW IT CAN REGAIN GROUND* 81 (2006).

112. *Id.*; see also, e.g., Andera Ross, *Why Legislate for Sustainable Development? An Examination of Sustainable Development Provisions in UK and Scottish Statutes*, 20 J. ENVTL. L. 35, 55 (2008) (“Indeed, in 1996, Fowke and Prasad identified at least 80 different, often competing or contradictory, definitions of sustainable development.”).

113. See *supra* note 14 (listing sources for discussions of the fragmentation of environmental law).

114. NATHALIE J. CHALIFOUR ET AL., *LAND USE LAW FOR SUSTAINABLE DEVELOPMENT* (2006); DOUGLAS FISHER, *THE LAW AND GOVERNANCE OF WATER RESOURCES: THE CHALLENGE OF SUSTAINABILITY* (2010); MARIE-

The question, then, is whether assured supply laws can help promote these goals, whether they can help move land and water regulation beyond their traditional, narrow silos to a broader regulatory vision. In a recent article, I took an initial assessment of this question and found assured supply laws a somewhat mixed bag from the sustainability perspective.¹¹⁵ Assured supply laws make great strides for sustainability, on one hand, by moving the law closer to a future-looking model that weighs current decisions always in light of later effects.¹¹⁶ They also implement the very kind of minimum environmental protection baseline—sufficient water or no development—that sustainability calls for,¹¹⁷ although they perhaps could go further than they do.¹¹⁸ On the other hand, assured supply laws zero in on only one aspect (water) of a mere third (the environment) of sustainability's multi-prolonged attack.¹¹⁹ For this reason alone, the laws might most fairly be seen as nudging the ball toward the sustainability law goal line rather than delivering a game-changing pass.¹²⁰

That said, to the extent that assured supply laws promote the development of sustainability law—to the extent they might help make society more sustainable—it bears asking whether that likelihood differs from West to East. The answer hinges largely on the need for society to become more sustainable, a need that certainly varies from one region to the next but that persists nationwide nevertheless.¹²¹ From the assured supply law perspective more specifically, the answer depends primarily on background problems with water availability. It is already clear the direction the East is heading on that front.¹²²

CLAIRE CORDONIER SEGGER & ASHFAQ KHALFAN, *SUSTAINABLE DEVELOPMENT LAW: PRINCIPLES, PRACTICES, AND PROSPECTS* (2005); John C. Dernbach, *Toward a National Sustainable Development Strategy*, 10 *BUFF. ENVTL. L.J.* 69, 83 (2003); J. William Futrell, *Defining Sustainable Development Law*, 19 *NAT. RESOURCES & ENV'T* 9, 9 (2004); J.B. Ruhl, *Law for Sustainable Development: Work Continues on the Rubik's Cube*, 44 *TULSA L. REV.* 1, 2 (2008).

115. Davies, *supra* note 27.

116. *Id.*

117. *Id.*

118. *Id.*

119. *Id.*

120. *Id.*

121. *See generally, e.g.*, WILLIAM R. BLACKBURN, *THE SUSTAINABILITY HANDBOOK: THE COMPLETE MANAGEMENT GUIDE TO ACHIEVING SOCIAL, ECONOMIC AND ENVIRONMENTAL RESPONSIBILITY* (2007); JOHN C. DERNBACH, ET AL., *STUMBLING TOWARD SUSTAINABILITY* (John C. Dernbach ed., 2002); THE WORLDWATCH INSTITUTE, *STATE OF THE WORLD 2010: TRANSFORMING CULTURES: FROM CONSUMERISM TO SUSTAINABILITY* (2010).

122. *See discussion supra* Part I.A-B.

II. ASSURED SUPPLY BENEFITS AND COSTS

Even if the same rationales for adopting assured supply laws in the West exist in the East, an additional inquiry is necessary. Will assured supply laws have the same value in the East as they do in the West? Part of this question must be answered based on whether the laws can actually work in the East, a topic taken up in Part III. But absent problems on that front, there is no reason to think that assured supply laws will not benefit eastern states just as they do western jurisdictions.

A. Benefits

Prior scholarship has cast assured supply laws' benefits into five categories. The laws appear to (1) protect consumers, (2) make planning more holistic at the project level, (3) foster greater coordination among land and water planners at more general levels, (4) improve the legal system for allocating water rights by sending earlier signals about potentially infringing uses, and (5) incentivize greater water conservation.¹²³ A brief explanation is in order.

Initially, one might think that, from a consumer protection perspective, assured supply laws are redundant. After all, both prudent investors and cognizant land planners should be expected to take an issue as obvious as water into account.¹²⁴ Moreover, even absent such un-coerced protection, the common law should serve to guard against problems of inadequate water. Courts—including those in the East—have long held that there is an implied warranty of habitability that allows for suit if a home is not equipped with basic amenities.¹²⁵ That implied covenant extends to water supplies.¹²⁶ As the Vermont Supreme Court held in *Willard v. Parsons Hill Partnership*, “[I]t is obvious . . . that failure to provide potable water to a housing project would be a breach of the implied warranty of habitability.”¹²⁷ Thus, even absent an assured supply law, a homebuyer who rationally believes that her new property will have sufficient water has a way to correct the problem if it does not. Arguably at least, then,

123. Davies, *supra* note 19, at 1265-65.

124. *Id.* at 1233-34; Abrams, *supra* note 75, at 2.

125. See, e.g., *Kellogg Bridge Co. v. Hamilton*, 110 U.S. 108, 116 (1884) (establishing that where a buyer relies on words of a seller or manufacturer, an implied warranty that reasonably relates to the purpose for which it was created will exist).

126. *Mazurek v. Nielsen*, 599 P.2d 269, 270 (Colo. App. 1979); *Lyon v. Ward*, 221 S.E.2d 727, 729 (N.C. App. 1976); *McDonald v. Mianeki*, 386 A.2d 1325, 1328-35 (N.J. Super. 1978); *Jeanguneat v. Jackie Hames Constr. Co.*, 576 P.2d 761, 762 (Okla. 1978); *Willard v. Parsons Hill P'ship*, 882 A.2d 1213, 1221-22 (Vt. 2005).

127. *Willard*, 882 A.2d at 1222.

there is no need for the assured supply law; it is just red tape and unnecessary administrative expense on the front end, risking only to slow development down.¹²⁸

The problem is that, empirically, this argument appears to be wrong. Assured supply laws do protect consumers because homes are built with inadequate water stock.¹²⁹ Areas of Arizona not subject to that state's assured supply requirement may be the most egregious. A recent survey showed that thirty-five percent of building applications in those areas lacked adequate water.¹³⁰ Likewise, numerous instances of proposed construction with insufficient water have been caught, or challenged, by assured supply mechanisms in jurisdictions from Oregon to California. Summit County, Utah, for instance, adopted an assured supply law of its own because a new development faced inadequate water after the fact.¹³¹ It may seem remarkable in this modern day that construction could go forward absent an assurance of water, but this is the reality.

Assured supply laws thus have consumer protection value.¹³² Indeed, if this is not their most significant benefit, it is a core one. Suit based on implied covenants is a safety net. But assured supply laws render the need for the net more remote. Especially given how expensive, uncertain, and time-consuming litigation can be, this benefit is significant. Assuring that there is water beforehand almost always should be more efficient than a contentious dispute to resolve the problem after.

This type of efficiency from consumer protection also highlights assured supply laws' second and third benefits: improved planning at both the project scale and at a broader level.¹³³ The more holistic nature of planning induced by assured supply laws at the project level should be plain. If land planners typically have not considered water supplies, adding that question to the mix makes their efforts more complete. Holistic planning is more effective. It is more accurate, more efficient, and more resilient.¹³⁴ Given the history of disconnecting land use and water planning, combining these activities in assured supply laws is an important step. The need to correct this traditional disconnect, in fact, is the reason why there was room for assured supply laws in

128. Davies, *supra* note 19, at 1233-34; Abrams, *supra* note 75, at 2.

129. Davies, *supra* note 19, at 1265-68.

130. Shaun McKinnon, *State's Rural Growth Taxing Water Supplies*, ARIZ. REPUBLIC, June 26, 2005, at 1A.

131. Davies, *supra* note 19, at 1266-67; Strachan, *supra* note 12, at 452.

132. Davies, *supra* note 19, at 1265-67.

133. *See id.* at 1269-73 (parsing several benefits of holistic planning).

134. Angelo, *supra* note 12, at 225; Arnold, *supra* note 12, at 23; Davies, *supra* note 19, at 1236-38; Richard B. Stewart, *A New Generation of Environmental Regulation?*, 29 CAP. U. L. REV. 21, 28-30 (2001).

the first place.¹³⁵

Assured supply laws' other planning benefit is less obvious. It is that by pushing land planners to consider water, they may begin coordinating more closely with water officials and, as a consequence, both sets of plans may become more integrated and robust—separate and apart from any planning benefits specific to the proposed project.¹³⁶ A number of assured supply laws clearly promote this goal. California's law, for instance, creates a presumption of sufficiency for assured supply assessments that rely on local water providers' urban water management plans.¹³⁷ Nevada and Arizona's laws likewise direct developers to obtain approval from their states' respective water experts before going forward with development.¹³⁸ By doing so, these laws encourage the flow of information both ways. Indeed, there is qualitative evidence that assured supply laws can and do promote planning synergies among land use and water officials in ways that would not otherwise occur.¹³⁹

The fourth benefit of assured supply laws is less obvious still, but nevertheless real. It is a legal efficiency benefit. By requiring developers to demonstrate that they have adequate water before their projects can go forward, assured supply laws throw early light on potentially infringing uses of others' water rights.¹⁴⁰ That is, they send a signal to other water rights holders that a new development may impact their ability to use the same water in the future. Obviously, this kind of informational signal does not create a new or stronger cause of action to protect one's water rights. But it does mean that the likelihood of challenge sooner than later increases, potentially preventing more costly litigation about how to allocate water consumption after the fact.

Finally, assured supply laws tend to promote water conservation.¹⁴¹ They do this by internalizing costs. To illustrate, consider two developers. Developer A faces no assured supply requirement but is confident that sufficient water will exist for his development. Developer B, on the other hand, is subject to an assured supply law and thus must prove adequate water before building. She has an incentive to conserve, while Developer A does not, even if there will be adequate water for both developments. Why? The assured supply law gives Developer B reason to

135. See discussion *supra* Part I.A.

136. Davies, *supra* note 19, at 1237-38.

137. CAL. WATER CODE §§ 10615, 10621, 10635 (2009); CAL. GOV'T CODE § 66473.7(a)(2) (2009).

138. ARIZ. REV. STAT. ANN. § 11-806.01(B) (2010); NEV. REV. STAT. ANN. § 278.377(1)(b) (2009).

139. Davies, *supra* note 19, at 1269-70.

140. *Id.* at 1271-72.

141. *Id.* at 1243, 1279.

conserve because if she can demonstrate that less water will be needed for her development, she can forego the cost of acquiring a new water supply (or as large of one).¹⁴² The prudent developer should always make that choice if conservation is less expensive than water purchases, and there is evidence that efficiency is often cheaper than new supplies. Thus, states with assured supply requirements also have seen developers becoming more conservation-minded, due at least in part to these laws.¹⁴³

B. Costs

Assured supply benefits do not come without costs. Perhaps foremost on the minds of these laws' opponents are the risks of increased home prices. This risk is real. One recent study showed that the presence of assured supply requirements can increase home prices by roughly one to four percent—or \$400 to \$8,000 per home—depending on the jurisdiction.¹⁴⁴ The study's authors thus concluded: "Reviewing water availability before approving new subdivisions can help protect communities from unforeseen water shortages, but if it is too restrictive, it can drive up home prices."¹⁴⁵

It is questionable, however, whether increased home prices can actually be considered a cost of assured supply laws, even if it is a factor policymakers should take into account in designing the laws. To begin, the price increases in question are not particularly large, and often are comparable to or less than other facility concurrency charges that have been widely adopted in recent years.¹⁴⁶ Economically, moreover, concurrency laws, like assumed supply measures, do not actually create a new cost of doing business but rather force developers to internalize what would otherwise be a negative externality: the shifting of the burden of acquiring new water stock from the entity who stands to benefit from the activity to either the local government or the homebuyer herself.¹⁴⁷ It is no surprise that this kind of cost-internalization spurs the real estate community to oppose these laws. But whether such cost-internalization cuts into developers' profit margins or is borne by the new homeowners is a separate question

142. *Id.* at 1243.

143. *Id.* at 1279.

144. Ellen Hanak & Margaret K. Browne, *Linking Housing Growth to Water Supply: New Planning Frontiers in the American West*, 72 J. AM. PLAN. ASS'N 154, 156, tbl. 2 (2006).

145. *Id.* at 163-64.

146. *Id.* at 160.

147. Davies, *supra* note 19, at 1286; see also ELLEN HANAK, WATER FOR GROWTH: CALIFORNIA'S NEW FRONTIER 53 (2005) ("Regulation protects . . . consumers from an investment loss, because home values would fall once the [water] problem" manifested after the purchase).

from whether the internalization is appropriate. In any case, as assured supply measures create clear consumer protection, planning, and other benefits, small cost increases in the subdivision approval process would seem well justified.¹⁴⁸

There are, however, other costs associated with assured supply laws. Admittedly, these costs are more ancillary than direct, but they are at least worth noting. One is the risk that assured supply laws will backfire. To the extent that assured supply advocates hope these laws will stunt sprawl, their hopes appear misplaced. Assured supply laws say nothing about sprawl. They make water an issue and they can limit overall growth in areas where there is insufficient water. But the laws impose no mandate whatsoever on the type, density, or spatial structure of developments.¹⁴⁹ Those are the factors that dictate sprawl—not water availability.¹⁵⁰

Worse, assured supply laws could actually exacerbate sprawl if they are not designed correctly.¹⁵¹ Imagine a state—say, Idaho—that decides to adopt a “voluntary” assured supply law (that is, a law that allows counties to decide whether to invoke the requirement or not). Because assured supply requirements add to both the monetary and administrative costs of building, this creates a marginal incentive, all else equal, to build in a non-assured supply jurisdiction than in a county that has adopted an assured supply requirement.¹⁵² It is, of course, possible that counties facing the most growth may be most keen on adopting these laws. If, however, those counties prefer growth, a situation that pushes sprawl out rather than hemming it in may result: a city center—Boise, for instance—that demands a water showing surrounded by less development-dense jurisdictions that do not.

Two other costs of assured supply laws may manifest, both tied to advocacy for these laws. First, given the political capital often necessary to pass these laws, adoption of assured supply laws create the risk of “symbolic assurance”: instilling a public perception that the problem the laws seek to address are solved when, in fact, they are not.¹⁵³ This is, undoubtedly, a risk with any law, but when the rationales for assured supply requirements

148. Davies, *supra* note 19, at 1265-67.

149. *Id.* at 1274-78.

150. *Id.*

151. *Id.*

152. *Id.* at 1275-76; see also HANAK, *supra* note 147, at 60-62. But see Ellen Hanak & Ada Chen, *Wet Growth: Effects of Water Policies on Land Use in the American West*, 47 J. REGIONAL SCI. 97, 101-06 (2007).

153. Abrams, *supra* note 75, at 8-9. The term originated in other contexts. See John P. Dwyer, *The Pathology of Symbolic Legislation*, 17 ECOLOGY L.Q. 233, 281 (1990); James A. Henderson, Jr., & Richard N. Pearson, *Implementing Federal Environmental Policies: The Limits of Aspirational Commands*, 78 COLUM. L. REV. 1429, 1451 (1978).

emphasize general environmental protection objectives such as sprawl control so heavily, and the measures' real benefits lie elsewhere, the risk is quite real. Professor Buzz Thompson has observed: "[R]eformers would be better off focusing their attention on the environmental problems themselves rather than on land use decisionmaking, which constitutes only one of a number of forces placing pressure on the nation's water resources."¹⁵⁴ Relatedly, poorly designed assured supply laws open themselves up to criticism by their opponents (or opponents of property regulation generally) that environmental law has run amuck. So far, this cost does not appear particularly troublesome, but it does speak to how proponents of assured supply laws may want to consider advocating for new measures going forward.¹⁵⁵

C. From West to East?

There is little reason to think that the net benefits of assured supply laws would not apply in the East as well as the West. As long as water scarcity is a problem, assured supply laws have work to do. And, increasingly, water scarcity is a problem in the East—or at least parts of it.¹⁵⁶ This trend should only accelerate as growth does.

Thus, the benefits that assured supply laws offer should give added weight for using these laws on both sides of the Continental Divide. Protecting consumers is a good thing whether in Nevada or New Hampshire. Assured supply laws do that.¹⁵⁷

Likewise, improved planning and water conservation matter irrespective of geography. Obviously, water conservation, like assured supply-based consumer protection, has greater effect where water is scarce, and that may well factor into which eastern states take the assured supply plunge first. The Southeast is facing severe water shortages; other parts of the East are not yet. Assured supply laws should be more appropriate first in places where water is in short supply than in those where it continues to remain ample. Nevertheless, conservation always has economic benefits, and it may have ancillary advantages from changing culture as well—even before water constraints take hold.¹⁵⁸

Planning benefits, moreover, do not hinge at all on water scarcity or availability. More information, especially pertinent information, can always help planners craft better designs, and

154. Barton H. Thompson Jr., *Water Management and Land Use Planning: Is It Time for Closer Coordination?*, in *WET GROWTH*, *supra* note 12, at 95, 110.

155. Davies, *supra* note 19, at 1273-74.

156. See discussion *supra* Part I.B.

157. See discussion *supra* Part II.A.

158. Davies, *supra* note 19, at 1279.

this is one of the key benefits of assured supply laws.¹⁵⁹ They give land planners more water information and water planners more land data. That kind of administrative cross-pollination should improve agency decision making whether planners are anticipating drought or flood.¹⁶⁰

Indeed, it is precisely for this reason that planners in general have begun in recent decades to increasingly integrate land use trends in their water plans. As a 2006 study showed, although “[s]tate water plans vary greatly in focus, depth, and breadth,” a number of states now use some kind of integrated water planning process that “recognizes the true spatial, ecosystem, and institutional dimensions of the planning problems and their interactions.”¹⁶¹ This trend is not just limited to the dry West. Eastern states have joined in too. “Although the wetter eastern states do not suffer from the same scope of water scarcity as the west, some eastern states have also begun attempting to link land use and water planning.”¹⁶² The reason is obvious. Good water planning necessitates understanding land use, and good land planning demands knowledge of water trends.¹⁶³ Assured supply laws help on both fronts—whether in the East or the West.

Where western-style assured supply laws might seem to have somewhat less eastern currency is in their bolstering of the water rights system. Water consumption in the East is not based on rights per se, but reasonableness, so why employ this benefit of the laws as a reason for borrowing from western water law? As an initial matter, this may be the weakest of all the assured supply benefits, so muting its effect from one jurisdiction to the next should not necessarily diminish the reasons for using assured supply measures. Further, while riparianism does not rely on water rights as such, that does not mean that assured water supply laws still would not send the same signals about overuse and over-allocation that they send in western states. Whether the back-end mechanism for dealing with any disputes that arise are rooted ultimately in property law, tort, or some combination thereof is a separate matter from whether a competing user receives advance notice to invoke that enforcement mechanism.

Assured supply laws’ costs, moreover, should not be necessarily greater in the East than the West. Those costs hinge

159. See discussion *supra* Part II.A.

160. Davies, *supra* note 19, at 1269-70.

161. WARREN VIESSMAN & TIMOTHY D. FEATHER, STATE WATER RESOURCES PLANNING IN THE UNITED STATES 6, 9 (2006).

162. Klein, *supra* note 1, at 451.

163. See generally WET GROWTH, *supra* note 12; Linda A. Malone, *The Necessary Interrelationship Between Land Use and Preservation of Groundwater Resources*, 9 UCLA J. ENVTL. L. & POL’Y 1 (1990); Sarah J. Meyland, *Land Use & the Protection of Drinking Water Supplies*, 10 PACE ENVTL. L. REV. 563 (1993).

mostly on policy design—not location.¹⁶⁴ Whether an assured supply mandate is likely to exacerbate sprawl depends on the law's universality: whether it applies uniformly rather than in checkerboard fashion.¹⁶⁵ On a state level, that is determined by how the legislature writes the law, not the geographic location of the state where it is adopted. At a regional level, perhaps there are more opportunities for cross-state dissonance in the East than the West, simply because eastern states tend to be smaller than in the West. But this too is not a risk the East shares alone. Portland, Oregon sits on the Washington state border, just like Newark, New Jersey is on New York's. Similarly, for the risks of symbolic assurance and environmental backlash, these potential costs have very little if anything at all to do with geography. They are driven by how seriously a state takes water, and how assured supply law advocates champion the bills.¹⁶⁶

In short, not only do the same reasons for adopting assured supply laws appear increasingly common in the East as well as in the West, the utility of these laws should translate across geography. Assured supply laws have benefits in the West. They should in the East too.

III. ASSURED SUPPLY ROADBLOCKS

Another question remains. Having established that the motives for adopting assured supply laws—and the benefits of using them—apply beyond the West, there is the problem of whether assured supply laws would actually work in the East. Because eastern states historically have used a much different system of water law—riparianism rather than prior appropriation—this disconnect in legal systems could derail the importation of assured supply laws. Eastern assured supply laws *should* be useful, but they *in fact* might not be.

As it turns out, this risk, while not immaterial, should have more to do with how eastern assured supply laws are designed than whether they can properly function. By the end of the twentieth century, many eastern states had transitioned away from pure riparianism to systems of regulated riparianism that, for assured supply purposes, render eastern states sufficiently similar to western jurisdictions. Indeed, the fact that at least two eastern states have adopted assured supply laws confirms that these laws are not entirely out of place east of the 100th meridian.¹⁶⁷

164. See Davies, *supra* note 19, at 1279-89 (discussing five potential design elements of assured supply laws).

165. *Id.*

166. *Id.*

167. See discussion *infra* Part IV.

Eastern assured supply laws will, however, need to take the unique features of regulated riparianism into account. The eastern versions of this land use tool cannot merely be replicas of the western models. Legal adaptation will be key.

A. *Water (+ Water Rights) = Assured Supply*

To contextualize how traditional eastern water law may pose a barrier to assured supply laws, it is necessary to understand how eastern water law differs from western water law. Both inform the operation of assured supply requirements.

Western states, founding their water law on a rugged history of mining speculation and land exploitation, long have employed a system coined "prior appropriation." Eastern states, by contrast, traditionally have used a system of water law referred to as "riparianism." Prior appropriation and riparianism differ in a number of ways, but perhaps most significantly on two fronts: (1) in the kind of interests they create in water, and (2) how they treat those interests when water becomes scarce.

Prior appropriation is "as close to a private property system as we are likely to achieve," while traditional riparianism is effectively a "common property system."¹⁶⁸ That is, prior appropriation treats water much like personal property. The property is clearly defined; the owner knows the quantity, time, place, and manner of use that attaches to the right.¹⁶⁹ He can use it, transfer it, sell it—or buy more rights, if he needs more. Because access to the water is a transferrable right, it is portable: not attached to land.¹⁷⁰ As a general proposition, water acquired earlier is more valuable because junior rights are subservient to those who came first, senior rights-holders.¹⁷¹

Riparianism, conversely, yields less clearly defined rights because the doctrine starts with the proposition that the right of use is common across landowners.¹⁷² That is, "riparian rights attach to land," not to users.¹⁷³ Thus, all landowners that are

168. Joseph W. Dellapenna, *Adapting Riparian Rights to the Twenty-First Century*, 106 W. VA. L. REV. 539, 593 (2004).

169. Joseph W. Dellapenna, *Special Challenges to Water Markets in Riparian States*, 21 GA. ST. U.L. REV. 305, 314-15 (2004); Sandra B. Zellmer & Jessica Harder, *Unbundling Property in Water*, 59 ALA. L. REV. 679, 696-99 (2008).

170. 2 WATERS AND WATER RIGHTS § 11.03(a), 11-20 (Robert E. Beck & Amy K. Kelley eds. 1991) (2008).

171. See, e.g., Olen Paul Matthews et al., *Marketing Western Water: Can a Process Based Geographic Information System Improve Reallocation Decisions?*, 41 NAT. RESOURCES J. 329, 335 (2001) (addressing the appropriation system and temporal priority, stating "the earlier the priority, the more valuable the right").

172. 1 WATERS AND WATER RIGHTS, *supra* note 170, at § 8.03(b)(2), 8-62.

173. Samantha K. Olson & Erin K.L. Mahaney, *Searching for Certainty in a*

appurtenant to the water body have the right to reasonably use the water.¹⁷⁴ This concept of reasonableness dictates who can use water, and how, in times of scarcity.¹⁷⁵ It assures, in short, “each riparian an equal claim to use the water, with a court allocating water in disputes in a way that maximizes the social benefit of the use . . . while minimizing the harm caused by one user to the others.”¹⁷⁶ This determination is necessarily contextual; it is driven by the facts of the specific case.¹⁷⁷

Both prior appropriation and riparianism have pros and cons. Prior appropriation creates greater certainty, because rights are set in advance rather than subject to reopening anytime someone makes a competing use of the resource.¹⁷⁸ Prior appropriation, however, incentivizes waste, both by encouraging hoarding and by spurring on speculative uses that could otherwise go to more socially optimal consumption.¹⁷⁹ For a system that governs water use in the desert, this is ironic indeed.

Riparianism has the advantage of adaptability. As social values shift, so too can the way water is used.¹⁸⁰ Water allocations,

State of Flux: How Administrative Procedures Help Provide Stability in Water Rights Law, 36 MCGEORGE L. REV. 73, 76 (2005).

174. See, e.g., *Anaheim Union Water Co. v. Fuller*, 88 P. 978, 979-81 (Cal. 1907) (stating that a property owner with intervening or adjoining land that comes into contact with a body, river, or stream of water has a right to such a resource).

175. See, e.g., *Jones v. Oz-Ark-Val Poultry Co.*, 306 S.W.2d 111, 115 (Ark. 1957); Steven T. Miano & Michael E. Crane, *Eastern Water Law: Historical Perspectives and Emerging Trends*, 18 NAT. RESOURCES & ENV'T 14, 16 (2003). But cf. Dellapenna, *supra* note 8, at 11 (noting that pro rata sharing in times of scarcity “is not always possible,” and thus, “choices must be made to cut off one user altogether so that another riparian might continue to use the water.”).

176. Dellapenna, *supra* note 8, at 10.

177. “What is reasonable will change with every significant change of circumstance.” “1 WATERS AND WATER RIGHTS, *supra* note 170, at § 9.01, 9-13; see also, e.g., Klein, *supra* note 1, at 408 (observing that riparian rights cannot be determined in advance and must be examined through individual litigation after one landowner challenges another landowner’s rights).

178. Reed D. Benson, *So Much Conflict, Yet So Much in Common: Considering the Similarities Between Western Water Law and the Endangered Species Act*, 44 NAT. RESOURCES J. 29, 51-52 (2004).

179. A. DAN TARLOCK, LAW OF WATER RIGHTS AND RESOURCES §§ 5:02-:03 (1989); Richard Ausness, *Water Rights, the Public Trust Doctrine, and the Protection of Instream Uses*, 1986 U. ILL. L. REV. 407, 407 (1986).

180. Joseph W. Dellapenna, *The Law of Water Allocation in the Southeastern States at the Opening of the Twenty-First Century*, 25 U. ARK. LITTLE ROCK L. REV. 9, 36-37 (2002). The counterargument, of course, is that prior appropriation does this on its own, by markets without government intervention. See, e.g., Ben F. Vaughan IV & Peter M. Emerson, *Protecting the Edwards Aquifer: An Efficient and Ecological Alternative*, in WATER MARKETING: THE NEXT GENERATION 167, 176-77 (Terry L. Anderson & Peter J. Hill eds., 1997) (explaining how states, specifically those in arid regions dealing with scarcity of water, manage resources such as groundwater

unlike in prior appropriation, are not tied up in property rights granted in a bygone age.¹⁸¹ The fact that riparian rights are so malleable, however, is precisely why the system is arguably “not well adapted to [the] needs of the coming century.”¹⁸² Riparianism’s pliability creates a water system that is vague, unpredictable, and fragmented.¹⁸³ One never knows in advance what a court will find to be a reasonable use, and piecemeal judicial decisions are a poor substitute for holistic resource administration.¹⁸⁴

From an assured supply perspective, it is riparianism’s vagueness and unpredictability that is most troubling. The very purpose of the assured supply law is to make certain that there is enough water for the development and to *assure* the supply. But if, as is the case under riparianism, the amount of water that is available is subject to change at any given moment, the assured supply mechanism is gutted. Granted, riparianism’s indeterminateness may be mitigated by aspects of the doctrine that give precedent to domestic and industrial uses,¹⁸⁵ but even those cannot erase the problem altogether. Assured supply laws demand a definite supply over a long timeframe, and riparianism prevents that.

Riparianism’s inherent indeterminacy, however, need not necessarily undo assured supply laws for the East. First, while the riparianism doctrine’s cloudiness is certainly greater than prior appropriation’s, it has no monopoly on the market. Prior appropriation is indefinite too. Water rights in the West are notoriously over-appropriated.¹⁸⁶ In part, this has led to the very problem that assured supply laws, in part, seek to address: “paper water,” or assertions of legal entitlement to water that is not actually available.¹⁸⁷ Moreover, the earliest claims to water in the

differently based upon societal and regional circumstances).

181. See Dellapenna, *supra* note 180, at 37-38 (discussing ways eastern states deal with managing water allocations).

182. Dellapenna, *supra* note 168, at 552; see also Robert H. Abrams, *Replacing Riparianism in the Twenty-First Century*, 36 WAYNE L. REV. 93, 98-99 (1989).

183. Ling-Yee Huang, *Fifth Amendment Takings and Transitions in Water Law: Compensation (Just) for the Environment*, 11 U. DENV. WATER L. REV. 49, 56-57 (2007); see, e.g., Dellapenna, *supra* note 180, at 16-17 (explaining weaknesses of riparian rights).

184. Dellapenna, *supra* note 180, at 16-17.

185. See Robert E. Beck, *Use Preferences for Water*, 76 N.D. L. REV. 753, 766-67 (2000) (discussing statutes that indicate preference for certain uses, including “sustaining life”).

186. Cosens, *supra* note 11, at 970 n.98.

187. See Frank B. Titus, *On Regulating New Mexico’s Domestic Wells*, 45 NAT. RESOURCES J. 853, 854 (2005) (explaining that New Mexico measures “the right to get and use ‘wet’ water” and discussing the concept of water rights and priority dates referred to as “paper water”).

West predate the administrative mechanisms for recording them, thus exacerbating any other uncertainty that already exists in the system.¹⁸⁸ “These and other shortcomings of appropriative rights become more pronounced when less water remains unappropriated and with the growing recognition of the importance of nonconsumptive uses of water.”¹⁸⁹ In other words, the fact that assured supply laws can function in a prior appropriation system that is at least somewhat nebulous should be evidence that the laws can function in other environments where water rights are uncertain: the East.

Indeed, the inherent disconnect between “legal” and “real” water in any resource management system highlights another reason why riparianism should not defeat use of assured supply laws east of the Mississippi River. The assured supply assessment comes in two parts. The first part is assuring that there is legal title to the water. But the second, more important part is assuring that there will be an actual supply.¹⁹⁰ Certainly ambiguous title undermines the perfect functioning of any assured supply law. If, however, planning is good enough to predict with accuracy that sufficient water will be available, then that is all the assured supply law really needs. Who owns title matters less than whether a development will overburden natural supplies. In many ways, the question of who owns title functions in the background of assured supply assessments. Water plus water rights may be a perfectly assured supply, but water alone is often considered enough. This is because, at its core, the assured supply is more of a planning device than a legal tool.¹⁹¹ The assured supply mechanism uses the mantle of the law to give its innovation teeth, but its ultimate objective is not to improve water rights. It is to send a two-way signal about what water is needed and what is

188. Janet C. Neuman & Keith Hirokawa, *How Good Is an Old Water Right? The Application of Statutory Forfeiture Provisions to Pre-Code Water Rights*, 4 U. DENV. WATER L. REV. 1, 5-7 (2000).

189. Dellapenna, *supra* note 8, at 24.

190. See discussion *supra* Part I (emphasizing benefits of having assured supply laws and explaining why certain areas utilize those laws).

191. Davies, *supra* note 27. Compare, e.g., CAL GOV'T CODE § 66473.7(d)(1) (2008) (“When the written verification . . . relies on projected water supplies that are not currently available to the public water system . . . , the written verification . . . shall be based on all of the following elements, to the extent each is applicable: (1) Written contracts or other proof of valid rights to the identified water supply”), with MONT. CODE ANN. § 76-3-622(1) (“[T]he subdivider shall submit to the governing body . . . the information listed in this section for proposed subdivisions that will include new water supply or wastewater facilities. The information must include: . . . unless cisterns are proposed, evidence of adequate water availability: (i) obtained from well logs or testing of onsite or nearby wells; (ii) obtained from information contained in published hydrogeological reports; or (iii) as otherwise specified by rules adopted by the department of environmental quality . . .”).

available, to planners on both sides of the land-water equation.

In any event, for assured supply purposes at least, the uncertainty of traditional riparianism may be grossly overstated from the modern day reality.

B. Regulated Riparianism

Riparianism in eastern states is not what it once was. Although the traditional common law doctrine continues to play a heavy role, the legal landscape has changed. Today, seventeen states have adopted a modified hybrid form of riparianism that Professor Joseph Dellapenna has aptly coined "regulated riparianism."¹⁹²

Regulated riparianism dramatically changed how water is managed in the East. The doctrine is neither traditional riparianism nor prior appropriation, but rather, a combination of the two.¹⁹³ The central feature of this system is the comprehensive administrative granting of permits for water use.¹⁹⁴ In this way, regulated riparianism is similar to prior appropriation: Before an entity can withdraw water, it must gain an entitlement to do so. That entitlement, however, is unlike the prior appropriation water right that turns on priority of use. Instead, it is akin to traditional riparianism because the water administrator weighs a number of factors to ensure that the proposed use is reasonable.¹⁹⁵ Moreover, the permit is not indefinite because most state statutes set the permit terms between three and twenty years.¹⁹⁶ Like prior appropriation, the permitted use is also subject to ramping back by administrators in times of drought. Such rationing typically occurs either on a first-filing (like prior appropriation) or pro rata (like

192. Joseph W. Dellapenna, *Owning Surface Water in the Eastern United States*, 6 PROC. E. MINERAL L. FOUND § 1.03[3] at 1-34 (1985). These states include Alabama, Arkansas, Connecticut, Delaware, Florida, Georgia, Iowa, Kentucky, Maryland, Massachusetts, Michigan, Minnesota, New Jersey, New York, North Carolina, Virginia, and Wisconsin. Dellapenna, *supra* note 168, at 584-85.

193. See Judith V. Royster, *Winters in the East: Tribal Reserved Rights to Water in Riparian States*, 25 WM. & MARY ENVTL. L. & POL'Y REV. 169, 189 (2000) (indicating that regulated riparianism introduced "quantification" and "some measure of temporal priority" into eastern water laws). Generally, water regulation in the Great Lakes states is based not just on regulated riparianism but also on the Great Lakes compact, which imbues ecosystem protection. Hall, *supra* note 11, at 426-35.

194. Dellapenna, *supra* note 8, at 48.

195. See Kevin E. Regan, *Balancing Public Water Supply and Adverse Environmental Impacts Under Florida Water Law: From Water Wars Towards Adaptive Management*, 18 J. LAND USE & ENVTL. L. 123, 161-63 (2003) (discussing standards used in Florida to determine if a permit should be granted).

196. Dellapenna, *supra* note 8, at 50.

traditional riparianism) basis.¹⁹⁷

For assured supply laws, regulated riparianism matters. Compared to traditional riparianism, the relative certainty that water permits provide should allow for a more secure assurance of water in a greater number of cases. Although the regulated riparianism water permit is still not entirely definite, because it is both short-term and subject to rationing, it is a clear improvement over a water right that is uncertain at all times—especially from the perspective of a system that seeks certainty. Regulated riparianism thus might be seen as a bridge mechanism for assured supply laws. The laws should be able to function in traditional riparian states, but their integration into the eastern system of water law should be much cleaner in states that use comprehensive permitting systems under regulated riparianism. As Professor Dellapenna has observed, regulated riparianism “has significant advantages for water users because they know . . . whether their use is reasonable; they cannot be caught unaware by a judicial decision that wipes out their investment without a penny of compensation.”¹⁹⁸

Indeed, the reason that assured supply laws fit more cleanly with regulated riparianism goes beyond the comparative certainty the system offers. The goals of assured supply laws and regulated riparianism align. Assured supply laws are very much about sending signals—signals to homebuyers, to planners, to water rights holders. Likewise, regulated riparianism is all about communicating demands for water, so that planners can make better decisions. “A major purpose of the regulated riparianism permit system is to assure the gathering of necessary information to enable planning to occur on an on-going basis.”¹⁹⁹ That kind of information gathering, which is the very foundation for more holistic planning, is exactly what assured supply laws aim at too. This is why features of regulated riparianism, such as the typical requirement that permit-holders pay a fee, mesh so well with assured supply laws. Those laws seek to force water users—mainly developers—to internalize the costs of their water use.²⁰⁰ Regulated riparianism, at least in part, already does that.

Thus, assured supply laws should be able to function in both traditional and regulated riparian states. The laws should be able to do so in a cleaner manner in those states that have adopted permit-based systems often referred to as regulated riparianism, although, even there, some modifications to western-style assured supply laws may be necessary to move these laws east.

197. Dellapenna, *supra* note 168, at 590.

198. *Id.* at 587.

199. Dellapenna, *supra* note 8, at 54.

200. See discussion *supra* Part II.B.

C. Assured Supply Adaptation

Stating with precision how assured supply laws should best translate to the East is a difficult proposition: Both water law and water availability vary from state to state, and thus, so too must assured supply laws, and the necessity for the laws. Indeed, even for states that have adopted regulated riparianism, diversity is the rule, not the exception. There is a model regulated riparianism code, but only some states come close to following it.²⁰¹ Nevertheless, a few basic principles for adapting assured supply laws to the East emerge.

First, the adaptation must vary across state lines. Assured supply laws in traditional riparian states will necessarily differ from those in regulated riparianism states. In the former, the assured supply law will by necessity center more on the supply than the legal entitlement.²⁰² Granted, this will render the assured supply law almost entirely a planning mechanism. Assured supply assessments will have to tier off broader water plans, not legal “rights” to consumption. That is, however, also the case for many western states; many western assured supply laws say little to nothing about legal title to water, but rather, focus on planning assessments to determine whether water will actually flow. Regulated riparian states, on the other hand, can back up such planning appraisals with a second layer of certainty—consumptive use permits. Obviously permits cannot replace planning. But at the least, they will remove some of the indeterminacy that might otherwise persist.²⁰³

Second, assured supply laws in regulated riparianism states will need to take into account the length of the state’s water permits. One reason some states have shorter permits is flexibility. It allows for the shifting of water supplies to higher valued uses on a more rapid basis.²⁰⁴ Assured supply laws, however, look not for change, but for stability. A new subdivision

201. THE REGULATED RIPARIAN MODEL WATER CODE: FINAL REPORT OF THE WATER LAWS COMMITTEE OF THE WATER RESOURCES PLANNING AND MANAGEMENT DIVISION OF THE AMERICAN SOCIETY OF ENGINEERS (Joseph W. Dellapenna ed., 2003).

202. Dellapenna, *supra* note 8, at 47-48 (citing FLA. STAT. ANN. §§ 373.012-.202, 373.203-.619 (2010); GA. CODE ANN. §§ 12-5-20 to 12-5-31, 12-5-43 to 12-5-53, 12-5-90 to 12-5-107 (2010); MINN. STAT. ANN. §§ 103G.001-.315 (2009); MISS. CODE ANN. §§ 51-3-1 to 51-3-55 (2010); N.C. GEN. STAT. §§ 143-215.11-.22K (2010)).

203. *Cf. supra* notes 183-184 and accompanying text (describing the unpredictable nature of a riparianism water system).

204. See FRANK E. MALONEY ET AL., A MODEL WATER CODE: TEXT AND COMMENTARY 173-77 (1972) (explaining that establishing a permit term of short duration is the easiest way to “avoid the undesirable effects of inflexibility in the transfer of water rights while retaining adequate security.”).

needs water for much longer than the three years that some state water permits last.²⁰⁵ It may be true that, as a practical matter, water administrators tend not to ratchet back consumption from permittees with large withdrawal entitlements, even in permit renewal years. Nevertheless, the very risk of such reductions makes regulated riparianism jurisdictions more like traditional riparianism states for assured supply purposes. The shorter the permit period, the more uncertainty remains. Thus, to the extent that eastern states adopting assured supply requirements view these laws as an integral part of their land-water regulatory regime, either their planning must become more robust or their assured supply objectives must become more synchronized with their water permitting scheme. Otherwise, newly adopted assured supply laws may be more cautionary than salutary.²⁰⁶

Finally, moving assured supply laws to the East must necessarily be an iterative process. The process of trial and error is bound to yield lessons that allow for one state to learn from another, and to build those lessons into their assured supply laws. Eastern water law, moreover, is continuing to evolve. For instance, as more states shift from traditional riparianism to permitting systems,²⁰⁷ their assured supply laws will need to shift too. Transporting any legal tool into a new environment is never easy. Western assured supply laws, nonetheless, should have an important role to play in the East, both for how they manage land and growth and for how they grapple with water. Still, eastern states that adopt assured supply laws should keep in mind that they may have as much to learn from each other in that process as they do from their counterparts in the West.

205. *Cf. supra* note 196 and accompanying text (indicating that some state water permits may only last for three years).

206. Davies, *supra* note 19, at 1279-83; *see also* 2 WATERS AND WATER RIGHTS, *supra* note 170, at § 9.05(b) (“Without real planning, one is hard put to justify any claim that regulated riparian statutes promise rational management in place of the haphazard controls that preceded the introduction of regulated riparianism.”); Jeremy Nathan Jungreis, “Permit” Me Another Drink: A Proposal for Safeguarding the Water Rights of Federal Lands in the Regulated Riparian East, 29 HARV. ENVTL. L. REV. 369, 410 (2005) (stating that the lack of a sound federal policy on water rights management in the East is problematic); Olivia S. Choe, *Appurtenancy Reconceptualized: Managing Water in an Era of Scarcity*, 113 YALE L.J. 1909, 1939 (2004) (describing the benefits of long term plans).

207. *See* Dellapenna, *supra* note 168, at 552 (noting that of those state formerly using riparian rights, about half have now adopted regulated riparianism).

IV. TOWARD AN EASTERN FUTURE?

Western assured supply laws, besides their growing prevalence, are perhaps most remarkable for their diversity. They range in their application, their aggressiveness, and their interconnectedness with other land and environmental planning measures.²⁰⁸ Most are embedded within broader subdivision planning statutes, although Arizona's statute was adopted originally to help address groundwater depletion problems.²⁰⁹ To give just some picture of the difference among these laws: Washington's statute applies to virtually every home in the state,²¹⁰ while California's brings within its grasp only subdivisions of 500 or more homes,²¹¹ Nevada's law applies statewide,²¹² but Arizona uses its assured supply law to restrict growth only within certain heavily populated metropolitan areas.²¹³

From this quite substantial body of law, there should be a wealth of lessons for eastern states considering assured supply laws of their own.²¹⁴ Unfortunately, comprehensive data on assured supply performance, as noted, is sparse.²¹⁵ The leading empirical study focused on California,²¹⁶ and a 2007 article I wrote combined quantitative and qualitative evidence across states.²¹⁷ Both showed that assured supply laws in fact deliver the benefits they offer, but neither was an exhaustive assessment of assured supply law performance across states, regions, and policy design. Some still doubt that assured supply laws are as effective at improving areas beyond consumer protection, such as planning and conservation, as they attest to be. Absent more definitive evidence, it thus remains unclear where, precisely, on the efficacy scale the laws actually fall.

208. Davies, *supra* note 19, at 1279-92.

209. See generally, e.g., Desmond Connall, *A History of the Arizona Groundwater Management Act*, 1982 ARIZ. ST. L.J. 313 (1982); Robert Jerome Glennon, "Because That's Where the Water Is": Retiring Current Water Uses to Achieve the Safe-Yield Objective of the Arizona Groundwater Management Act, 33 ARIZ. L. REV. 89 (1991); Jon L. Kyl, *The 1980 Arizona Groundwater Management Act: From Inception to Current Constitutional Challenge*, 53 U. COLO. L. REV. 471 (1982).

210. WASH. REV. CODE § 19.27.097(1) (2007).

211. CAL GOV'T CODE § 66473.7(a)(1) (2008).

212. NEV. REV. STAT. ANN. § 278.377(1)(b) (2007).

213. See ARIZ. REV. STAT. ANN. §§ 32-2181(F), 45-108 (2006) (distinguishing between "active management areas," where populations are higher, from those areas outside "active management areas").

214. Davies, *supra* note 19, at 1279-92.

215. See *id.* at 1265 (explaining that assured supply laws are so new in many areas that comprehensive data is not available); see also discussion *supra* Part II.

216. HANAK, *supra* note 147.

217. Davies, *supra* note 19, at 1265-78.

Examination of western assured supply laws, however, does point to at least some factors that eastern policymakers may want to consider in crafting laws of their own. Most significantly, the array of existing western assured supply laws exposes a design matrix on which eastern laws could be framed. There are at least five key design characteristics to be taken into account: (1) the assured supply law's universality, or whether it applies statewide or only in some jurisdictions, (2) its granularity, or whether it applies to all new development or only large subdivisions, (3) its compulsoriness, or whether it is mandatory or voluntary, (4) its stringency, or whether it requires hard proof or future water or accepts merely a promised supply, and (5) its interconnectedness, or how well it is integrated with broader water and environmental planning regimes in the state.²¹⁸ As a general rule, assured supply laws that are compulsory, stringent, universal, granular, and interconnected should better perform than those that are not.²¹⁹

On top of these standard design factors, the contrast of traditional and regulated riparianism reveals at least three other considerations that may matter for eastern assured supply laws: their fit into the state's water law framework, the duration of consumptive use permits in regulated riparian states, and the need to adapt over time.²²⁰ The first of these factors should be particularly important, because it dictates at the threshold whether eastern assured supply laws will be designed to demand both clear legal entitlement and an adequate supply, or simply rigorous planning. As noted, either should work, but the former should help with the law's stringency: how, and how well, the assured supply mechanism guarantees that water will be there in the future.²²¹

Although assured supply laws are increasingly pervasive in the West, movement in the East has been slower. Two states—Florida and Vermont—have what might be termed full-fledged assured supply laws. Their statutes restrict development based on water availability, and thus, appear to take water supply seriously.²²² Other eastern states, however, also have begun inching closer to this type of assured supply requirement. Taken as a whole, these nascent eastern assured supply efforts might be put into three basic categories.

218. *Id.* at 1279-90.

219. *Id.* at 1229.

220. See discussion *supra* Part III.C.

221. *Id.*

222. FLA. STAT. ANN. § 163.3180(2)(a) (2009); 10 VT. STAT. ANN. § 6086(a)(2); Strachan, *supra* note 12, at 436-39; see also Klein, *supra* note 1, at 451 (recognizing that some eastern states have linked land use and water planning); Noah D. Hall, *Protecting Freshwater Resources in the Era of Global Water Markets: Lessons Learned from Bottled Water*, 13 U. DENV. WATER L. REV. 1, 39-42 (2009) (outlining recent changes to Vermont's water regulation).

The first includes requirements, like Florida's and Vermont's, that are quite similar to western assured supply laws in their effort to integrate land and water planning. These are "western-style" or "traditional" assured supply laws.

The second, intermediate category comprises laws that facially demand water supplies but, in practice, likely operate on the assumption that the public water supplier will handle any water questions. Thus, this category might be referred to as "hybrid" assured supply laws because their reliance on public water utilities effectively makes them as much facility concurrency mandates as water supply restrictions. Indeed, those laws that push the water question entirely to the water utility without involving the land planning agency send a weaker planning signal than traditional assured supply laws. They tend not to bring land and water planners closer together, but rather, simply add another box to the checklist of items that land authorities routinely punch before approving development. As the New Jersey law states, "[a]n ordinance requiring approval by the planning board of either subdivisions or site plans . . . shall include . . . [p]rovisions ensuring . . . [a]dequate water supply, drainage, shade trees, sewerage facilities *and other utilities* necessary for essential services to residents and occupants" ²²³

The third category of eastern assured supply efforts are voluntary, or perhaps "incremental," measures. Rather than actually requiring a demonstrated water supply, these laws encourage the consideration of water in land planning. In some cases, in fact, they do not even go that far. They merely authorize localities to assess water availability. The Tennessee statute is a good example. It states that local subdivision regulations "may" seek to limit "scattered or premature subdivision of land as would involve danger or injury to health, safety or prosperity by reason of the lack of water supply, drainage, transportation or other public services."²²⁴ Such laws are certainly positive. But the anemic signals they send on the importance of integrating water and land planning hardly are sufficient to deem them full-fledged assured supply requirements.

No doubt, the eastern assured supply measures adopted to date do not represent a revolution of land planning for the region. They are more exception than rule—and the majority of the exceptions are more hortatory than prescriptive. Still, if assured supply laws are going to move eastward, if the nation rather than a single region is going to begin changing how it deals with growth, the transformation must start somewhere. Assured supply laws themselves are no cure-all. They address only one part of one

223. N.J. STAT. ANN. 40:55D-38(b)(3) (2010) (emphasis added).

224. TENN. CODE ANN. § 13-3-403(a) (2010).

strand of the complex problem that is land, water, and growth. They do, however, begin the process of grappling with these thorny subjects and, as a result, may help point the way toward a new future for land governance. If eastern states begin to enact and implement assured supply laws, it may be that by going West, part of the path toward a new, eastern future may be found as well.

Table 1: Eastern Assured Supply Measures

Traditional	Hybrid	Incremental
Florida ²²⁵ Vermont ²²⁶	New Jersey ²²⁷ New York ²²⁸ Oklahoma ²²⁹	Maryland ²³⁰ Pennsylvania ²³¹ Tennessee ²³² Virginia ²³³ West Virginia ²³⁴

CONCLUSION

As we enter the next decade, the face of the nation is changing. At last century's end, the arid American West, famous for its striking landscapes, fierce independence, and wide open spaces, in many ways dominated the scene. It was the epicenter of the new economy, a boom region where growth was the rule. Western states adopted many tactics to deal with this change. One of the ways the region started grappling with its massive growth—and the strain on resources that came with it—was by adopting assured water supply laws that attempt to limit growth to areas where water is sufficient.

Now, as tables turn and parts of the East face growth on the same order as the West saw in recent years, a natural question is whether assured supply laws might be right for that region too. At first blush, it would seem there are obstacles in the way to

225. FLA. STAT. ANN. § 163.3180(2)(a) (2009).

226. 10 VT. STAT. ANN. § 6086(a)(2) (2010).

227. N.J. STAT. ANN. 40:55D-38(b)(3) (2010).

228. N.Y. STAT. ANN. PUB. HEALTH § 1116(2).

229. 27A OKLA. STAT. ANN. § 2-6-403(B)(1)(a) (2009). The Oklahoma law arguably is a mix between a traditional assured supply requirement and a hybrid one. It requires a water supply for new development, but only outside city limits.

230. MD. CODE § 9-206(b); 66B Md. Code § 10.01(a); Philip J. Tierney, *Maryland's Growing Pains: The Need for State Regulation*, 16 U. BALT. L. REV. 201, 234 (1987).

231. 53 PA. STAT. ANN. § 10503 (2009).

232. TENN. CODE ANN. § 13-3-403(a) (2010).

233. The Virginia statute is specific to "mountain ridge construction." VA. CODE ANN. § 15.2-2295.1(D) (2010).

234. W. VA. CODE ANN. § 8A-5-7(b)(6) (2009).

importing a western water law mechanism to the opposite side of the 100th Meridian: the relative abundance of water, the potential for benefits to go unrealized, the eastern water law system itself. Yet on closer examination, it appears that these obstacles should be more speed bump than roadblock. Although still generally wetter than the West, the East increasingly faces water dilemmas—a trend only likely to become exacerbated in the face of climate change. The benefits of assured supply laws translate regardless of geography, depending more on policy design than location. And while the eastern system of water law will mean that assured supply laws will function differently in this region than in the West, the doctrines of riparianism and regulated riparianism should not prevent use of the mechanism.

Some eastern states, in fact, have already begun down the path blazed by their western counterparts. Florida and Vermont have adopted statewide assured supply laws, and eight other states have enacted intermediate measures pushing them in the same direction. As states gain experience with these laws, as water constraints and growing pains continue to press, eastern states will have much to learn from each other. In the meantime, the East may have much to learn from the West.