

THE FAILINGS OF ALABAMA WATER LAW

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INTRODUCTION

Policy makers in Alabama have been engaged in discussions for almost three decades¹ about how Alabama's water law should be improved. But no significant changes have been made in the way the State manages its water resources.² A persistent theme in the hesitation to adopt water-policy legislation is that we require more study of our water resources before we can take action.³

Our water-policy problems, however, have very little to do with the nature of our water resources and everything to do with our legal regime. And the problems with our legal regime are clear and easily understood: Alabama uses nineteenth-century common law to govern its water resources, and that common law is inadequate to deal with twenty-first-century water uses.⁴ The common law that governs Alabama's surface water—riparian doctrine—prohibits uses of water off riparian tracts of land, rendering unlawful many existing diversions of water that serve municipal, agricultural, commercial, and industrial purposes.⁵ The common law that governs Alabama's groundwater—the “American reasonable use rule”—is almost as restrictive, prohibiting export of groundwater that would harm overlying landowners.⁶ Both doctrines also render legal uses of water uncertain: riparian landowners are always vulnerable to lawsuits arguing that existing uses have become unreasonable, and American reasonable use doctrine provides no rule to resolve competing uses among overlying landowners, leaving such owners to compete with their neighbors for who can dig the deepest well.⁷

These legal problems are unaffected by assessments of our water resources: regardless of the answers to questions such as how much surface and groundwater we have, how much water is currently or could be diverted from our rivers and streams, and how much water is currently or could be pumped from our aquifers, these legal problems exist and render unlawful many existing uses of water.⁸ These problems also inhibit

1. Current efforts to improve Alabama water policy arguably began in 1989, when Governor Guy Hunt created the Alabama Water Resources Study Commission. THE ALA. WATER RES. STUDY COMM'N, WATER FOR A QUALITY OF LIFE: AN EXECUTIVE SUMMARY 4 (1990) [hereinafter WATER FOR A QUALITY OF LIFE].

2. See *infra* notes 102–114, 129–133 and accompanying text.

3. E.g., ALA. WATER AGENCIES WORKING GRP., MAPPING THE FUTURE OF ALABAMA WATER RESOURCES MANAGEMENT: POLICY OPTIONS AND RECOMMENDATIONS 2 (2014) [hereinafter MAPPING THE FUTURE].

4. See *infra* notes 31–163 and accompanying text.

5. See *infra* notes 41–114 and accompanying text.

6. See *infra* notes 115–133 and accompanying text.

7. See *infra* notes 93–97, 125–127 and accompanying text.

8. See *infra* notes 213–223 and accompanying text.

Alabama's efforts to create economic growth,⁹ deal with increasing population,¹⁰ protect the state's world-class environmental resources,¹¹ and address the consequences of drought in a changing climate.¹² And adopting a legislative solution to those problems likewise does not depend on assessments of water quantities and uses: while such assessments would be essential information for day-to-day management of Alabama's water resources, such information is far too detailed to have any meaningful effect on the content of a statute that would remedy the problems caused by current common law.¹³

All this might not matter if delay were costless. But our ongoing failure to regulate our water resources has significant direct and collateral consequences. Alabama's current common law regime directly inhibits industrial and agricultural activity because economic actors must make investment decisions without any certainty as to the availability of water.¹⁴ Those who are using water sensibly but unlawfully under the current common law regime are vulnerable to lawsuits challenging those uses.¹⁵

Collaterally, our failure to regulate may harm our interests, primarily in interstate litigation over water resources. State-versus-state litigation is heard by the United States Supreme Court.¹⁶ The Court exercises its jurisdiction over state-versus-state disputes "sparingly"¹⁷ and refuses to help states whose water problems are caused by "lax administration."¹⁸ All but one of Alabama's neighbors have adopted comprehensive statutes to

9. MAPPING THE FUTURE, *supra* note 3, at 10.

10. *E.g.*, *id.* at 13.

11. *E.g.*, R. SCOT DUNCAN, SOUTHERN WONDER: ALABAMA'S SURPRISING BIODIVERSITY (2013).

12. *E.g.*, SUJOY B. ROY ET AL., EVALUATING SUSTAINABILITY OF PROJECTED WATER DEMANDS UNDER FUTURE CLIMATE CHANGE SCENARIOS (2010).

13. *E.g.*, U.S. Environmental Protection Agency, *The Basics of the Regulatory Process*, <https://www.epa.gov/laws-regulations/basics-regulatory-process> (last visited March 2, 2017) ("Laws often do not include all the details needed to explain how an individual, business, state or local government, or others might follow the law. The United States Code would not tell you, for example, what the speed limit is in front of your house. In order to make the laws work on a day-to-day level, Congress authorizes certain government agencies - including EPA - to create regulations.").

14. *See infra* notes 140–147 and accompanying text.

15. *See infra* notes 54–64, 117 and accompanying text.

16. While water conflicts can be resolved in the lower courts, *see, e.g.*, *In re Tri-State Water Rights Litig.*, 639 F. Supp. 2d 1308 (M.D. Fla. 2009), *rev'd and vacated sub nom. In re MDL-1824 Tri-State Water Rights Litig.*, 644 F.3d 1160 (11th Cir. 2011), any lawsuit by one state against another must begin and end in the United States Supreme Court, *see* U.S. CONST. art. III, § 2; 28 U.S.C. § 1251(a) (2012).

17. *United States v. Nevada*, 412 U.S. 534, 538 (1973); *see also* *New York v. New Jersey*, 256 U.S. 296, 309 (1921) ("Before this court can be moved to exercise its extraordinary power under the Constitution to control the conduct of one state at the suit of another, the threatened invasion of rights must be of serious magnitude and it must be established by clear and convincing evidence.").

18. *Colorado v. New Mexico*, 467 U.S. 310, 321 (1984).

regulate their water resources while Alabama has not,¹⁹ putting us at a disadvantage in interstate litigation. Indeed, both Georgia and Florida have accused each other of such failings in their current Supreme Court case involving the Apalachicola–Flint–Chattahoochee basin,²⁰ and Florida has apparently lost that case – or it will if the Supreme Court affirms the Special Master’s report.²¹

Some have argued that a second collateral effect arises from our failure adequately to regulate our water resources: that, because of those failings, the United States Environmental Protection Agency (EPA) may invade our state’s control of our rivers and streams.²² It is true that EPA has been asked to take over our water-*quality* permitting program, given the lack of funds provided to and according lack of regulatory enforcement provided by the Alabama Department of Environmental Management.²³ But EPA has declined those invitations.²⁴ Moreover, the Clean Water Act expressly preserves state power over water allocation.²⁵ Thus, as discussed in more

19. While Tennessee, like Alabama, still largely uses the common law to resolve water resources disputes, MARY R. ENGLISH & ROY ARTHUR, *STATEWIDE WATER RESOURCES PLANNING: A NINE-STATE STUDY 2* (Tennessee Advisory Commission on Intergovernmental Relations ed., 2010), available at https://www.tn.gov/assets/entities/tacir/attachments/Statewide_Water_Resources.pdf, our other neighbors have adopted comprehensive regulatory statutes. FLA. STAT. ANN. § 373.013 (West 2006); GA. CODE ANN. 12-5-90 (2014); MISS. CODE ANN. § 51-3-1 (2016).

20. Dan Chapman, *Tipping Point in Water War?*, ATLANTA J.-CONST., <http://specials.myajc.com/georgia-water-war/> (last visited Feb. 8, 2017) (writing that, in the current Supreme Court litigation, “Georgia’s lawyers . . . have requested hydrologic flow levels of the Apalachicola River dating to 1975 in hopes of showing Florida’s poor stewardship of the river. Florida, meanwhile, seeks the number of well permits issued to southwest Georgia farmers to prove lax regulation by Georgia.”).

21. Report of the Special Master, *Florida v. Georgia*, 2017 WL 656655 (U.S. Feb. 16, 2017) (No. 142, Orig.). In original jurisdiction cases, the Supreme Court usually delegates the process of receiving evidence, holding hearings, and drafting an initial report to special masters. *See generally*, e.g., Anne-Marie C. Carstens, *Lurking in the Shadows of Judicial Process: Special Masters in the Supreme Court’s Original Jurisdiction Cases*, 86 MINN. L. REV. 625 (2002). The Court would then typically accept the Special Master’s report, *id.* at 656-57, though it may also issue a different opinion based on the record assembled by the Master, *see Colorado v. New Mexico*, 467 U.S. 310, 317 (1984) (“[T]he ultimate responsibility for deciding what are correct findings of fact remains with us.”) or remand to the Master for further proceedings, *see Kansas v. Colorado*, 514 U.S. 673 (1995).

22. E.g., Paul Hollis, *Alabama Moving Closer to Comprehensive Water Policy*, SOUTHEAST FARM PRESS (July 23, 2013), <http://www.southeastfarmpress.com/equipment/alabama-moving-closer-comprehensive-water-policy> (paraphrasing the General Counsel of the Geological Survey of Alabama, who said at a symposium that Alabama may be vulnerable to federal control over water use through EPA if the state does not regulate water use). The General Counsel’s presentation in turn relied on statements made by the Director of the Alabama Department of Environmental Management. *See* Bennett L. Bearden, Chair, Ala. Water Agencies Working Grp., *Alabama Water Policy Update: The Alabama Water Agencies Working Group* (Feb. 13, 2013), www.bipac.net/ma_alabama/Bearden.ppt.

23. E.g., Ben Raines, *ADEM Running Out of Funding May Have to Turn Over Water Enforcement to EPA*, BIRMINGHAM NEWS, June 28, 2012, 2012 WLNR 14019960; Thomas Spencer, *ADEM’s Clean Water Act Enforcement Faces Crackdown*, BIRMINGHAM NEWS, Oct. 3, 2010, 2010 WLNR 20299309.

24. William L. Andreen, *Alabama Water Law*, in *WATERS AND WATER RIGHTS AL-14 to -18* (Amy K. Kelley ed., 3d ed. 2017).

25. 33 U.S.C. § 1251(g) (2012).

detail below,²⁶ our failure to regulate our own water resources—while a problem for many other reasons—is not a reason to worry that the EPA might interfere with Alabama’s management of its own water resources.

Alabama’s common law of water resources cannot deal with today’s problems, and Alabama’s failure to manage its water resources causes both direct and collateral harms. Detailed assessments of our water resources are unnecessary precursors to adopting legislation that fixes these problems. Why, then, have we not yet acted? Paradoxically, part of the answer may be the abundance of Alabama’s water resources: we have so much water²⁷ that few have been motivated to challenge current unlawful uses of water. Without such challenges, the need to fix the common law does not appear pressing. But the best time to develop a comprehensive solution to the failings of Alabama’s water law is when there is no emergency.

Optimally, and as discussed below,²⁸ the state legislature would adopt the Regulated Riparian Model Water Code.²⁹ At a minimum, the legislature must adopt a statute that (1) eliminates the on-tract restrictions of the riparian and reasonable use doctrines, (2) permits interbasin transfers of water, (3) protects the instream flows needed by our ecosystems, and (4) empowers an agency to coordinate these uses. Any statute that provides for off-tract use and/or interbasin transfers must at the same time provide for environmental protections.³⁰

The Article proceeds as follows. Part I provides a detailed description of Alabama’s surface and groundwater common law. Part II assesses the problems that result from our continued reliance on the common law. Part III describes the various (and so far ineffective) efforts made in the state since the late 1980s to develop and adopt meaningful changes to Alabama’s water-resources policy. Part IV concludes by arguing that continued study is unneeded and that we should adopt the Model Code without delay.

26. See *infra* notes 174–183 and accompanying text.

27. Approximately ten percent of the fresh surface water in the continental United States flows through the State of Alabama. James E. Hairston et al., *Water Resources in Alabama*, ENCYCLOPEDIA ALA., <http://www.encyclopediainalabama.org/article/h-1645> (last visited Dec. 22, 2016).

28. See *infra* Part IV.B.

29. REGULATED RIPARIAN MODEL WATER CODE (Am. Soc’y of Civil Eng’rs ed., 1997).

30. E.g., Lee P. Breckenridge, *Maintaining Instream Flow and Protecting Aquatic Habitat: Promise and Perils on the Path to Regulated Riparianism*, 106 W. VA. L. REV. 595, 597 (2004) (“A statutory formulation . . . that gives strong attention to quantifying and securing offstream uses without providing comparable quantification and protection of instream needs can put the ecological integrity of watersheds at risk . . .”). For this reason, we should reject bills that approach the problem piecemeal, such as the one recently introduced in the Alabama Legislature to authorize certain off-tract uses without an accompanying instream flow policy. See S.B. 255, 2017 Reg. Sess. (Ala. 2017), alisondb.legislature.state.al.us/ALISON/SearchableInstruments/2017RS/PrintFiles/SB255-int.pdf; Mary Sell, *Public Hearing Set for Irrigation Bill*, TIMES DAILY (Mar. 5, 2017) (noting that Senate Bill 255 does limit withdrawals based on the total average flow of the river at its mouth, but further noting that this limitation fails to take into account seasonal flow variation and seasonal irrigation needs).

I. THE CURRENT LAW GOVERNING USE OF SURFACE AND GROUNDWATER

Alabama is a common law state.³¹ The common law may be altered by constitutional provision or statute, but without such alteration, Alabama's law is that existing in the United Kingdom at the time of the American Revolution, as altered by subsequent Alabama judicial precedent.³² The Alabama Supreme Court has made clear that "[t]he common law is not static, but is constantly undergoing change, and extension, to meet changing conditions, due to the ever expanding business and social fabric."³³

Thus, in the absence of a constitutional provision or statute providing otherwise, Alabama follows the common law to determine legal rights to the waters of the state. And, as the Alabama Supreme Court stated in 1995, there is no constitutional provision or statute providing otherwise: "Alabama does not have an agency devoted to the conservation and management of its water resources. In the absence of statutory authority, [water-resources] disputes . . . must be decided by the courts, applying common law and equitable principles."³⁴

Alabama does define the "waters of the state" by statute:

A quantity of any spring, brook, creek, stream, river, pond, swamp, lake, reservoir, impoundment, sound, tidal estuary, bay, waterway, aquifer, or any other body or accumulation of water, surface water, or ground water, public or private, natural or artificial, that

- a. is contained within the borders of this state;
- b. flows through or to this state or any portion thereof; or
- c. borders upon this state or any portion thereof, including those portions of the Gulf of Mexico over which this state has jurisdiction.³⁵

While this definition suggests that all Alabama waters are regulated together, in fact the relevant legal regime differs depending on the nature of the water resource. First, water resources law focuses on freshwater, not

31. ALA. CODE § 1-3-1 (1999) ("The common law of England, so far as it is not inconsistent with the Constitution, laws and institutions of this state, shall, together with such institutions and laws, be the rule of decisions, and shall continue in force, except as from time to time it may be altered or repealed by the Legislature.").

32. *E.g.*, *Nelson v. McCrary*, 60 Ala. 301, 309 (1877) ("The principle is well settled, that English statutes, passed before the emigration of our ancestors, so far as consistent with our institutions and government, unless repealed, constitute a part of the common law prevailing in the States of a common origin."); *Barlow v. Lambert*, 28 Ala. 704, 707 (1856) ("[T]he common law . . . is part and parcel of the law of this State.").

33. *Woodmen of the World Life Ins. Soc'y v. Guyton*, 194 So. 655, 658 (Ala. 1940).

34. *Martin v. City of Linden*, 667 So. 2d 732, 739 (Ala. 1995).

35. ALA. CODE § 9-10B-3(19) (2001).

saltwater.³⁶ Second, freshwater is regulated under multiple regimes: water in natural streams and rivers (surface water³⁷), as well as flowing underground water,³⁸ is regulated separately from groundwater.³⁹ Despite repeated suggestions to regulate surface water and groundwater resources together,⁴⁰ Alabama law still treats them separately. Accordingly, in this Part, I discuss surface-water law separately from groundwater law.

A. Surface Water

To understand rights in surface water in Alabama, it is necessary to outline how one acquires a right to water, what the nature of that right is, and whether any statutory enactments alter the right. This Subpart considers these issues in turn.

1. Acquiring a Right to Surface Water

Under the common law, the right to use water from a surface-water body is typically acquired by owning property riparian to that water body.⁴¹

36. Michael Pappas, *Unnatural Resource Law: Situating Desalination in Coastal Resource and Water Law Doctrines*, 86 TUL. L. REV. 81, 108 (2011) (discussing how saltwater has “traditionally fallen outside of” water resource doctrines).

37. I use the term “surface water” to refer to water flowing in natural streams and rivers, as is typical in discussions of water resources under the common law. See A. DAN TARLOCK, *LAW OF WATER RIGHTS AND RESOURCES* § 2.4 (2013). Under Alabama case law, however, “surface water” is technically diffuse water flowing across the surface of land due to precipitation or runoff, and such water is distinguished from water that has reached a defined natural channel. See *Barber Pure Milk Co. v. Young*, 81 So. 2d 324, 327 (Ala. 1954). The Alabama Water Resources Act (“Act”), moreover, defines “surface water” as “[w]ater upon the surface of the earth, whether contained in bounds created naturally or artificially or diffused.” ALA. CODE § 9-10B-3(17).

38. *Henderson v. Wade Sand & Gravel Co.*, 388 So. 2d 900, 901 (Ala. 1980) (“In the eastern United States, the rules as to usage of underground waters have varied according to whether the waters were classified as ‘percolating water’ or as an underground stream. The general rule is that ‘where a subterranean stream flows in a distinct, permanent, well-known and defined channel, it is governed by the same rules as apply to a natural watercourse on the surface.’” (citation omitted)).

39. As just noted, the common law typically treats flowing groundwater (i.e., underground streams) separately from percolating groundwater (i.e., water filling the spaces between particles of soil). See RESTATEMENT (SECOND) OF TORTS, ch. 41, topic 4, intro. note (AM. LAW INST. 1979) (“Most ground water usable by man is found in the interstices of sand, gravel, porous sandstone or fractured and partially dissolved limestone.”). The Act, however, defines groundwater as “[w]ater in a saturated zone or stratum beneath the surface of land or water, *whether or not flowing through known and definite channels.*” ALA. CODE § 9-10B-3(12) (emphasis added).

40. See *WATER FOR A QUALITY OF LIFE*, *supra* note 1, at 10 (suggesting that the legislature make clear that “ground waters and surface waters of the state of Alabama are integrally connected and are not to be considered as separate in any action by the State or by any city, county, or local agency”).

41. *Mobile Docks Co. v. City of Mobile*, 40 So. 205, 207 (Ala. 1906) (“Riparian rights are not common to the citizens at large, but exist as incidents to the right of the soil itself adjacent to the water. In such ownership they have their origin.” (emphasis omitted) (quoting *McCarthy v. Murphy*, 96 N.W. 531 (Wis. 1903))); *Eufaula Water Co.*, 6 So. 78, 79 (Ala. 1889) (“[E]very riparian owner of lands, through which streams of water flow, has a right to the reasonable use of the running water, which is a private right of property. The right is one annexed and incident to the freehold, being a real

A parcel is riparian if a body of water forms a boundary of the property, if a stream flows over the property, or if a lake or other static water body is present within the property.⁴² The riparian “has no property in the water itself, but a simple usufruct while it passes along.”⁴³

Under the common law, then, the way to acquire rights to divert water from a body of water is to purchase property riparian to that body of water.⁴⁴ One may purchase an entire existing riparian tract, or a riparian owner may sell off a portion of her property. So long as the new tract is itself riparian to the body of water, it is a riparian tract and its owner has riparian rights.⁴⁵ The number of riparian users on a body of water may therefore increase—sometimes dramatically, if a large property is subdivided into many tracts that all have riparian boundaries. If the new tract is *not* riparian, however, it loses its riparian character, and its owner has no right to use water from the nearby body of water.⁴⁶ In this case, the number of acres considered riparian shrinks (though, in most eastern states, if those acres are reunified with the riparian acres to reconstitute the original riparian tract, the entire parcel again becomes riparian⁴⁷). In a pure common law state, such as Alabama, the key action is the land purchase: no permit or license is required to divert.⁴⁸

One question that arises is whether parcels can be combined so as to increase the number of acres considered riparian. At least one water-law text states that this possibility has been definitively rejected in the case law,⁴⁹ though some early courts permitted acreage to be added to an already riparian parcel so that riparian acreage was expanded.⁵⁰ The Restatement

or corporeal hereditament, in the nature of an easement . . .”); *see also* De Bardeleben Coal Co. v. Cox, 76 So. 409, 411 (Ala. Ct. App. 1917) (holding that coal company lacked riparian rights because it lacked title to streambank).

42. *Mobile Docks Co.*, 40 So. at 207 (“The rights which a riparian proprietor has, with respect to the water, are entirely derived from his possession of the land abutting’ thereon.” (emphasis omitted) (quoting *Potomac Steamboat Co. v. Upper Potomac Steamboat Co.*, 109 U.S. 672, 683 (1906))).

43. *Stein v. Burden*, 24 Ala. 130, 135 (1854) (quoting 3 Kent’s Com. 439).

44. 3 HERBERT THORNDIKE TIFFANY, *THE LAW OF REAL PROPERTY* § 722 (3d ed. 1939) (“[T]he right of the owner of riparian land to the natural flow of water in a stream along the land is a corporeal hereditament, incident and annexed to the land, and which passes on transfer thereof as a part and parcel of it”).

45. *Id.*

46. *Id.*

47. *See* BARTON H. THOMPSON, JR. ET AL., *LEGAL CONTROL OF WATER RESOURCES: CASES AND MATERIALS* 32 (5th ed. 2013). However, in some states, particularly in the West, once acres lose their riparian character, they cannot regain it, even if the parcel is reunified under a common owner. *Id.*

48. *See* *Martin v. City of Linden*, 667 So. 2d 732, 739 (Ala. 1995) (“Alabama does not have an agency devoted to the conservation and management of its water resources.”).

49. THOMPSON ET AL., *supra* note 47, at 32 n.11 (while “some courts and treatise writers” have historically supported “the increase in size of a riparian tract by the acquisition of additional land contiguous to it, even though the added land had [always] been non-riparian,” this approach has since been uniformly rejected).

50. *Clark v. Allaman*, 80 P. 571 (Kan. 1905); *Jones v. Conn*, 64 P. 855 (Or. 1901).

(Second) of Torts takes issue with the common law approach, noting that there is no reason in the humid eastern United States to prevent the expansion of a riparian tract.⁵¹ Alabama courts have apparently never addressed this question. Because the dominant common law rule is that riparian parcels may *not* be expanded by the purchase of contiguous additional acres,⁵² it is extremely likely that an Alabama court would reject such an effort to expand riparian property.⁵³

As discussed below, water diverted from the neighboring body of water may only be used on the riparian tract.⁵⁴ Riparian common law does not permit the sale of the water rights separate from the property itself.⁵⁵ However, under the Alabama cases, if a riparian purports to convey water rights to a non-riparian, another riparian challenging that conveyance may enjoin the export of the water only if he can show “special damage.”⁵⁶ Thus, a non-riparian may be able to obtain the water by paying only nominal damages to the complainant;⁵⁷ the non-riparian runs the risk, however, that the complainant *can* show the special damage and thus enjoin the use.

The only other way a non-riparian may obtain the right to divert surface water from any surface-water body is through “prescription.” Prescription is “[t]he acquisition of title to a thing (esp. an intangible thing such as the use of real property) by open and continuous possession over a statutory period.”⁵⁸ If a non-riparian openly diverts surface water for a sufficiently lengthy period, and no riparian challenges that unlawful

51. RESTATEMENT (SECOND) OF TORTS §843 cmt. d (AM. LAW INST. 1979) (the rule rejecting expansion of riparian acreage makes sense only in “western states that have a dual system of riparian rights and prior appropriation and in which the appropriation system [see *infra* note 87] is more suitable to full development of arid land”; “[t]hese artificial limitations are not needed or desirable when riparian law provides the principal basis of development [That law is] designed to be utilitarian and to broaden opportunities for water development. Accordingly, the definition of riparian land in this Section rejects these limitations.”). It is worth noting that the Restatement also rejects the on-tract limitation followed by traditional common law riparianism. *Id.* at ch. 41, topic 3, intro. note; see *infra* note 219 and accompanying text.

52. See *supra* note 45–50 and accompanying text.

53. See, e.g., *Wehby v. Turpin*, 710 So. 2d 1243, 1246–47, 1249 (Ala. 1998) (“This issue is one of first impression in Alabama. Therefore, we must examine the law of other jurisdictions to gain a better understanding of the origins and evolution of littoral or riparian rights. Most jurisdictions appear to adhere to the so-called common law rule. . . . We are bound to follow the majority common law rule . . .”).

54. See *infra* notes 98–101 and accompanying text.

55. E.g., *Irving’s Ex’rs v. Burgess & Town Council of Borough of Media*, 10 Pa. Super. 132, 145 (1899) (“[T]he riparian right is not an absolute ownership of the water of the stream. . . . The riparian owner could not sell the water to a non-riparian owner” (quoting *Rudolph v. Pa. R.R. Co.*, 186 Pa. 541 (1898))), *aff’d sub nom. Irving’s Ex’rs v. Burgess of Borough of Media*, 45 A. 482 (Pa. 1900).

56. *Ulbricht v. Eufala Water Co.*, 6 So. 78, 79 (Ala. 1889).

57. *Id.*

58. *Prescription*, BLACK’S LAW DICTIONARY (10th ed. 2014).

diversion, the non-riparian acquires the right to continue the diversion.⁵⁹ It is unclear how long a non-riparian must continue his unlawful diversion for prescription to create a water right: some cases suggest that the prescriptive period is currently twenty years;⁶⁰ some cases, as well as an opinion of the former Attorney General of Alabama, put the period at ten years.⁶¹

Once a non-riparian has diverted a quantity of water for the relevant period of time, the use of that quantity of water cannot be challenged by a riparian, even if the use could successfully have been enjoined before the expiration of the prescriptive period.⁶² However, prescription protects only those uses that have continued for the entire prescriptive period.⁶³ Thus, if the non-riparian has expanded his diversion during the prescriptive period, that expansion can be enjoined.⁶⁴

2. *Nature of the Surface-Water Right*

What water rights come with the ownership of riparian land? Early cases followed the traditional English “natural flow” doctrine, under which no riparian owner could diminish the quality or quantity of water flowing in a stream, and any riparian owner could sue those who interfered with the natural flow: “It is a legal right of every riparian proprietor, to have the stream flow through his land in its natural channel, without obstruction, or

59. *E.g.*, *Ulbricht v. Eufaula Water Co.*, 6 So. 78, 79 (Ala. 1889) (“[T]he undisturbed enjoyment or continuation of [unlawful] acts, without the consent of the owner, [can] ripen into evidence of a right to do them.”).

60. *E.g.*, *City of Mountain Brook v. Beatty*, 295 So. 2d 388, 392 (Ala. 1974) (“In Alabama the prescriptive period is 20 years.”); *Stein v. Burden*, 24 Ala. 130, 148 (1854) (analogizing prescriptive rights in water to adverse possession of land, which has a statute of limitations of twenty years). It is worth noting that the *Beatty* case involved a prescriptive right to drainage, not a prescriptive right to a diversion of water. *See Beatty*, 295 So. 2d at 402.

61. Water Rights—Prescriptive Period, Ala. Op. Atty. Gen. No. 2012-79 (2012), 2012 WL 3689602 (opinion letter issued by Luther Strange); *e.g.*, *Cobia v. Ellis*, 42 So. 751, 752–53 (Ala. 1906) (stating that ten years was the relevant statute of limitations for a suit to enjoin “wrongful diversion of water”).

62. *Ulbricht*, 6 So. at 78–79. Because prescription cuts off the ability of a riparian to challenge an unlawful use of water, courts do not require a riparian to show that she is harmed by a non-riparian’s diversion in order to bring a lawsuit challenging that diversion as unlawful. *Id.* at 79. Instead, the court resolves the challenge but (if the riparian wins) may stay any injunction of the non-riparian diversion until such time as the riparian can show that the diversion has become harmful. *Id.*

63. *See id.* at 79–80.

64. *Wright & Rice v. Moore*, 38 Ala. 593, 598 (1863) (“If the dams which existed ten years before the disturbance alleged in the complainants’ bill, produced a reflux upon the defendants’ land, then there might be a prescriptive right to that extent; but an increase of the reflux, by an additional elevation, within ten years, would be an unauthorized invasion of another’s right.”); *see also*, *e.g.*, *Stephens Ranch & Livestock Co. v. Union Pac. R. Co.*, 161 P. 459, 461 (Utah 1916) (“[A]fter a prescriptive right or easement has been acquired by a dominant owner the means of diversion used by him may not be changed or enlarged so as to materially increased the flow of water to the detriment of the servient owner.”).

interruption, or even an alteration of its level.”⁶⁵ However, due to the natural flow doctrine’s anti-developmental implications,⁶⁶ both legislatures⁶⁷ and courts⁶⁸ had permitted some departures from the strict doctrine.

In *Ulbricht v. Eufaula Water Co.*,⁶⁹ decided in 1889, the Alabama Supreme Court departed from the natural flow doctrine, suggesting that it would adopt a new rule that had evolved in other common law states. Under that new approach, a riparian owner has the right to use the waters of the stream, even if that use results in perceptible diminution of the quantity and/or quality of water in the stream, so long as that use is “reasonable.”⁷⁰ The Alabama Supreme Court has suggested that natural flow doctrine had become qualified by “the limitation . . . that each of such proprietors is entitled to a reasonable use of the water for domestic, agricultural, and manufacturing purposes.”⁷¹

At the same time, however, the Court stated that the diversion at issue was “rendered unlawful by the fact that it is for an extraordinary or artificial use, and is not restored to its *natural* channel, where it is accustomed to *flow*.”⁷² It is unclear whether the Court was disturbed by the use itself (which would be prohibited by natural flow doctrine) or by the

65. *Wright*, 38 Ala. at 596; *Stein v. Burden*, 29 Ala. 127, 129 (1856) (“[H]e may use the water while it runs over his lands, but he cannot unreasonably detain it, or give it another direction; and he must return it to its ordinary channel when it leaves his estate.” (emphasis omitted) (quoting 3 Kent’s Com. 439)); *Stein v. Burden*, 24 Ala. 130, 139–40 (1854) (“It is well settled, that each proprietor, bounded by a water course not navigable, has a right to the use of the water in its natural flow; each may retain it, as it passes through his lands, but cannot divert it. . . . The proprietor is entitled to the whole momentum of the fall; any diversion of the water, however small, abstracts a portion of his rights; and for this he may maintain an action, without proving any special or appreciable damage.”); *Hendricks v. Johnson*, 6 Port. 472, 496 (Ala. 1837) (“By the rules of the common law, all proprietors of lands have precisely the same rights to waters flowing through their domains, and one can never be permitted so to use the stream, as to injure or annoy those who are situated on the course of it either above or below him.”).

66. *Cf. Drake v. Lady Ensley Coal, Iron & R.R. Co.*, 14 So. 749, 751 (Ala. 1894) (“[A]s a rule, every one must so enjoy his own property as not to offend his neighbor’s equal right to enjoy his own unmolested. But this rule cannot be enforced, in its strict letter, without impeding rightful progress, and without hindering industrial enterprise.”).

67. *Hendricks*, 6 Port. at 497–98 (under the common law, “the instances were rare, in which mills could be erected without subjecting their owners to [legal] consequences which might prove ruinous,” and thus the Mississippi Territory (Alabama’s predecessor) in 1811 adopted “an act to encourage the building of public mills, and directing the duties of millers”).

68. *Lewis v. Stein*, 16 Ala. 214, 219 (1849) (recognizing the right of the defendant to construct and maintain a mill, thus impeding the natural flow of the stream, but noting that “the rights of those below him forbade him so to construct it as to render the water impure, or to corrupt or injure its quality” (emphasis omitted)).

69. 6 So. 78 (Ala. 1889).

70. *Id.* at 79.

71. *Id.*

72. *Id.* at 591.

defendant's export of the water altogether (something that would be forbidden under either the natural flow or riparian doctrines⁷³).⁷⁴

By 1893, however, Alabama had clearly abandoned the natural flow doctrine and replaced it with the riparian doctrine:

It is certainly true that owing to the wants, if not the necessities, of the present age,—of agriculture, of manufactures, of commerce, of invention, and of the arts and sciences,—some changes must be tolerated in the channels in which water naturally flows, and in its adaptation to beneficial uses. Reasonable diminution of its quantity, in gratifying and meeting customary wants, has always been permitted. So, its temporary detention for manufacturing purposes, followed by its release in increased volume, is a necessary consequence of its utilization as a propelling force. Nor must we shut our eyes to the tendency—the inevitable tendency—of these and other uses, in which water is an indispensable element, to detract somewhat from its normal purity.⁷⁵

Alabama riparian doctrine follows this approach to the present day.⁷⁶

Under the common law riparianism, any riparian owner has the right to make reasonable use of the waters of the stream.⁷⁷ A riparian is generally not liable to another for subsistence uses: “[A] riparian proprietor has the right to consume even the whole of the water of a stream, if absolutely necessary for the wants of himself and family.”⁷⁸

However, so-called “artificial” uses—those that are *not* “natural” subsistence uses—must be adjusted among riparians.⁷⁹ In other words, the

73. See *supra* note 65, *infra* notes 98–101, and accompanying text.

74. See, e.g., Andreen, *supra* note 24, at AL-1 (describing *Ulbricht* as “beg[inning] the journey towards the reasonable use doctrine”).

75. *Tenn. Coal, Iron & R.R. Co. v. Hamilton*, 14 So. 167, 170 (Ala. 1893).

76. *E.g.*, *Cove Properties, Inc. v. Walter Trent Marina, Inc.*, 702 So. 2d 472, 475 (Ala. Civ. App. 1997); *Crommelin v. Fain*, 403 So. 2d 177, 184 (Ala. 1981); *Beaunit Corp. v. Ala. Power Co.*, 370 F. Supp. 1044, 1051 & n.9 (N.D. Ala. 1973); *Elmore v. Ingalls*, 17 So. 2d 674, 674–76 (Ala. 1944); *Jones v. Tenn. Coal, Iron & R.R. Co.*, 80 So. 463, 464 (Ala. 1918). *But see* *Cent. of Ga. Ry. Co. v. Champion*, 49 So. 416, 416 (Ala. 1909) (stating, in a case involving alteration of stream flow by a railroad bridge, “[t]he law is well settled in this state, as well as elsewhere, that a landowner through whose lands a stream of water flows has a right to have the water to course or flow from his land according to nature”).

77. *Ulbricht*, 6 So. at 79.

78. *Stein v. Burden*, 24 Ala. 130, 146 (1854) (citation omitted); see also *Crommelin*, 403 So. 2d at 184.

79. *Jones*, 80 So. at 464 (“Such proprietor has the right to the extraordinary or artificial use of the stream and its waters, provided that by the use of such water it is not forced back or unreasonably or improperly precipitated on the lands of adjacent proprietors, and after its use it is restored to its natural channel without unreasonable or material diminution before it leaves the land of persons diverting or subjecting it to artificial uses, and provided, further, it is not so polluted as to unreasonably, injuriously,

right of a riparian owner to make artificial use of the waters of the stream is limited by the correlative rights of other riparians to make similar use of the stream.⁸⁰ Thus, a riparian owner may not so diminish the flow of a stream, or so pollute it, that it harms the ability of other riparians to make their own reasonable uses of the water.⁸¹

Competing artificial uses are evaluated using only a test of reasonableness.⁸² While the Restatement (Second) of Torts gives a number of factors that go into a reasonableness inquiry,⁸³ most riparian jurisdictions give little guidance for conducting the inquiry. The following quotation from an Arkansas case is illustrative:

When one lawful use of water interferes with or detracts from another lawful use, then a question arises as to whether, under all the facts and circumstances of that particular case, the interfering use shall be declared unreasonable and as such enjoined, or whether a reasonable and equitable adjustment should be made, having due regard to the reasonable rights of each.⁸⁴

A court investigating the relative reasonableness of competing uses “undertake[s] a polycentric process that, at the very least, strains the capacity of courts to act in the traditional mode of disinterested umpire.”⁸⁵

A riparian gains no special rights to water by being the first to use it,⁸⁶ in contrast to the prior appropriation doctrine in the western United States.⁸⁷ Instead, a riparian right can exist inchoate: a riparian who has never used the waters of the stream may initiate a new use of the water; at that point, other riparians must adjust to that use, so long as it is

or materially affect its ordinary and extraordinary use by the proprietor of the land into which the unused waters flow by its accustomed channel.”)

80. *Ulbricht*, 6 So. at 79 (the right “must be enjoyed with reference to the similar rights of other riparian proprietors. It is therefore a qualified, and not an absolute, right of property”).

81. *Tenn. Coal, Iron & R.R. Co. v. Hamilton*, 14 So. 167, 169–70 (Ala. 1893) (“Any diversion or obstruction of the water, which substantially diminishes the volume of the stream . . . or which defiles and corrupts it to such a degree as essentially to impair its purity, and prevent the use of it for any of the reasonable and proper purposes to which running water is usually applied, such as irrigation, the propulsion of machinery, or consumption for domestic use, is an infringement of the right of other owners of land through which a water course runs . . .”).

82. *Jones*, 80 So. at 464.

83. RESTATEMENT (SECOND) OF TORTS § 850A (AM. LAW INST. 1979).

84. *Harris v. Brooks*, 283 S.W.2d 129, 134 (Ark. 1955).

85. 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, 14 (2002).

86. *Hendricks v. Johnson*, 6 Port. 472, 496 (1837) (rejecting party’s claim that he had “acquired prior right to the use of the stream”).

87. See generally TARLOCK, *supra* note 37, § 5.30 (under the prior appropriation system, “[w]ater rights are ranked in the order that the right was acquired”).

reasonable.⁸⁸ Cases in other states do sometimes implicitly protect existing uses,⁸⁹ though Alabama cases have allowed significant disturbance of existing uses by new riparian uses.⁹⁰ (As discussed below, the possibility exists that the Alabama Water Resources Act alters this common law rule, although the Act also disavows any intent to alter common law rights.⁹¹)

Riparians therefore have no certainty of right: while a riparian will always be able to use *some* quantity of water (unless the body of water runs dry⁹²), no specific quantity of water is ever guaranteed.⁹³ An existing use may become sufficiently unreasonable over time that the riparian is required to reduce the amount of water diverted.⁹⁴ For example, while in the past it might have been reasonable to practice flood irrigation, today such enormous uses of water might be unreasonable (and pivot or drip irrigation would be considered reasonable).⁹⁵ Or another riparian may initiate use of the water where no use has been made before, leading to an adjustment of all riparian withdrawals to accommodate the new use.⁹⁶ Even if a riparian had previously litigated water uses with neighboring riparians, the judgment in that litigation can be rendered obsolete by changed circumstances (whether from changed climate, new riparian uses, or evolution of technology).⁹⁷

88. *Crommelin v. Fain*, 403 So. 2d 177, 184 (Ala. 1981) (requiring one riparian's long-standing use of the water of a stream to be cut back to accommodate a newly initiated use by another riparian on the same stream); *Ulbricht v. Eufaula Water Co.*, 6 So. 78, 80 (Ala. 1889) ("The mere non-user of a water-power by a riparian owner will not operate to impair his title, or confer any right thereto on another."). *But see* RESTATEMENT (SECOND) OF TORTS § 850A cmt. k (contending that courts applying the reasonableness test do, in fact, give preference to existing uses over new uses).

89. *E.g.*, *Taylor v. Tampa Coal Co.*, 46 So. 2d 392 (Fla. 1950); *Hoover v. Crane*, 106 N.W.2d 563 (Mich. 1960). The Restatement of Torts adopts this approach. RESTATEMENT (SECOND) OF TORTS § 850A.

90. *Crommelin*, 403 So. 2d at 184.

91. *See infra* notes 108–110 and accompanying text.

92. This may be caused by drought, or, on a small stream, by an upstream user exhausting the stream for subsistence uses, *see supra* note 78 and accompanying text.

93. 94 C.J.S. *Waters* § 814 (2016) ("The quantity of water that a riparian owner is entitled to depends on such factors and varies with the volume of water in the stream and the needs of other riparian proprietors." (footnote omitted)).

94. *See* RESTATEMENT (SECOND) OF TORTS § 850A cmt. h, illus. 5.

95. *Id.* cmt. h.

96. *Id.* Because the riparian right exists even if it goes unused, *see supra* note 88 and accompanying text, and because new riparian tracts can be created by the subdivision of existing riparian tracts, *see supra* note 45 and accompanying text, it is quite easy for new users to begin to divert.

97. *E.g.*, *Smith v. Stanolind Oil & Gas Co.*, 172 P.2d 1002 (Okla. 1946) ("The common law of riparian rights as to the use of water by riparian owners is not a doctrine of fixed rights. . . . [J]udgments and decrees [from riparian jurisdictions] can usually be regarded as res judicata only so long as the conditions upon which they were rendered remain the same." (quoting *In re Water Rights in Silvie's River*, 237 P. 322, 357 (Or. 1925))).

Use of water from surface-water bodies is restricted to riparian land and to the watershed of the relevant water body.⁹⁸ Thus, a riparian may not divert water for use off-tract, nor may a riparian convey the right to use water to a non-riparian for use on a non-riparian tract.⁹⁹ If a riparian owns a piece of property, a portion of which is located outside the watershed of the river or lake, the riparian may not divert water from the neighboring water body onto those acres (or, at least, if the riparian does make such a diversion and a neighbor notices, that diversion can be enjoined by a court).¹⁰⁰ One result of this rule is that municipalities owning riparian property may not export water from that property for use in public water systems.¹⁰¹

3. *Statutory Overlay*

The Alabama Legislature added a statutory component to water-resources law in 1993 when it enacted the Alabama Water Resources Act.¹⁰² The Act makes clear that it is not intended to change existing common law regarding existing or future riparian rights to water.¹⁰³ Instead, its main purpose is to create a statewide administrative body to gather quantitative information about water use in Alabama and to provide mechanisms to deal with certain limited situations of water shortage.¹⁰⁴ Under the Act, several categories of users¹⁰⁵ must submit “declaration[s] of beneficial use” detailing their water usage to the Office of Water Resources

98. Water—Riparian Rights, Ala. Op. Atty. Gen. No. 2000-226 (2000), 2000 WL 33310729 (opinion letter issued by Bill Pryor); *see also* Andreen, *supra* note 24, at AL-2 (“[T]he cases assume that water can be used only on riparian lands and generally cannot be conveyed off the premises for use on non-riparian lands.”); *Mobile Docks Co. v. City of Mobile*, 40 So. 205, 207 (Ala. 1906) (“Riparian rights are . . . incidents to the right of the soil itself adjacent to the water.” (emphasis added)).

99. *Irving’s Ex’rs v. Burgess & the Town Council of Media*, 10 Pa. Super. 132, 145 (1898), *aff’d sub nom. Irving’s Ex’rs v. Burgess of Borough of Media*, 45 A. 482 (Pa. 1900).

100. TARLOCK, *supra* note 37, § 3.51.

101. H. A. W., Annotation, *Waters: Right of Municipality, as Riparian Owner, to Use of Water for Public Supply*, 141 A.L.R. 639 (1942) (“[A] municipality, as a riparian owner merely, has no right to divert or abstract the waters of a stream for the purposes of public water supply.”); *see* Stein v. Burden, 24 Ala. 130 (1854).

102. Water Resources Act, No. 93-44, 1993 Ala. Laws 78 (codified at ALA. CODE §§ 9-10B-1 to -30 (2001)).

103. ALA. CODE § 9-10B-27 (2001).

104. William S. Cox, III, *An Introduction to the Alabama Water Resources Act*, 55 ALA. LAW. 176, 177 (1994).

105. The Act requires reporting of water use by public water systems (as defined by the Act); those who actually divert, withdraw, or consume more than 100,000 gallons of surface or groundwater water per day; and irrigators with the capacity to divert, withdraw, or consume more than 100,000 gallons of surface or groundwater per day. ALA. CODE § 9-10B-20. The Act also authorizes the identification of additional user categories by regulations promulgated by the Office of Water Resources. *Id.*

(OWR), an entity created by the Act.¹⁰⁶ OWR does not evaluate the described use or make choices among uses, as a permitting agency would; instead, OWR is obliged to issue a “certificate of use” after determining that a declaration of beneficial use has been “properly submitted.”¹⁰⁷

Confusingly, however, a declaration of beneficial use “shall establish that the proposed diversion, withdrawal, or consumption of such water shall not interfere with any presently known existing legal use of such water.”¹⁰⁸ Presumably, then, an applicant who has not made the required showing has not complied with the requirements for submitting a declaration of beneficial use, and OWR could not issue a certificate of use. Such a requirement would, however, be in serious tension with riparian common law, which does not make temporal priority a factor in balancing riparian uses.¹⁰⁹ The Act states that “[n]othing contained in this chapter shall change or modify existing common or statutory law with respect to the rights of existing or future riparian owners concerning the use of the waters of the state.”¹¹⁰ It is thus difficult to see how OWR can comply with both mandates.

Conditions on permit holders may be imposed in certain circumstances. If the OWR completes a “critical use study”¹¹¹ concluding that water supply is insufficient to meet water needs in a particular area, the Alabama Water Resources Commission (another entity created by the Act¹¹²) may designate that area a “capacity stress area.”¹¹³ Once that designation has been made, conditions or limitations may be imposed through a rulemaking process on those in the capacity stress area with certificates of use.¹¹⁴

106. *Id.* §§ 9-10B-20, -4.

107. *Id.* § 9-10B-20(e) (“The Office of Water Resources *shall* issue a certificate of use to any person required to submit a declaration of beneficial use upon the submission of a declaration of beneficial use.” (emphasis added)); Water—Riparian Rights, Ala. Op. Atty. Gen. No. 2000-226 (2000), 2000 WL 33310729 (opinion letter issued by Bill Pryor) (OWR “has discretion in determining whether [a] declaration of beneficial use is, in fact, properly submitted”). Regulations require those who submit declarations of beneficial use to state the “basis of legal right to use the water to be diverted,” *see* Ala. Admin. Code § 305-7-10-.02(1)(h), and to demonstrate that the filer is making “a lawful, reasonable and beneficial use of water,” *see* Ala. Admin. Code § 305-7-10-.02(2)(b). While this arguably gives OWR a basis upon which to deny certificates of use to those applicants whose diversions are illegal, on the ground that such applications are not “properly submitted,” *see* Andreen, *supra* note 24, at AL-11 to -12, it is unclear whether OWR has ever used this argument to justify denying a certificate of use.

108. *Id.*

109. *See supra* notes 86–90 and accompanying text.

110. ALA. CODE § 9-10B-27.

111. *Id.* §§ 9-10B-3(7), -21.

112. *Id.* § 9-10B-12.

113. *Id.* §§ 9-10B-3(3), -21. A capacity stress area is “[a]n area of the state designated by the commission pursuant to this chapter where the commission determines that the use of the waters of the state, whether ground water, surface water, or both, requires coordination, management, and regulation for the protection of the interests and rights of the people of the state.” *Id.* § 9-10B-3(3).

114. *Id.* § 9-10B-22.

Although there have been severe droughts in Alabama since 1993, a capacity stress designation has never been made.

B. Groundwater

As with surface water, groundwater rights in Alabama are determined by three questions: how one acquires a right to water, what the nature of that right is, and whether any statutory enactments alter the right.

1. Acquiring a Right to Groundwater

Alabama's common law of groundwater, like that of surface water, confers rights based on property ownership.¹¹⁵ Those who own land overlying an aquifer have the right to extract and use that groundwater on the overlying tract.¹¹⁶ To obtain groundwater rights, then, one must purchase an existing overlying tract or a new overlying tract created by the subdivision of an existing tract. One Alabama case suggests in dicta that groundwater rights could also be acquired by prescription.¹¹⁷

Unlike the riparian doctrine, however, groundwater doctrine does not prohibit the off-tract use of water.¹¹⁸ It is possible to export groundwater for use on a non-overlying tract if one purchases an overlying parcel from which to export or, presumably, if one bargains with an overlying owner for access to her tract for pumping. Export of water for use on a non-overlying tract will be enjoined, however, if that export harms the water rights of an overlying landowner. In *Martin v. City of Linden*, the plaintiff (an overlying landowner) sued the city for its proposed export of water for municipal use fifteen miles away on land that did not overlie the aquifer.¹¹⁹ The city's plan to drill a permanent well and build a pipeline to export the groundwater was enjoined because the court found that the city's pumping would cause a deterioration in the quality of the plaintiff's water.¹²⁰

115. *Cf. Martin v. City of Linden*, 667 So. 2d 732, 738 (Ala. 1995).

116. *See Adams v. Lang*, 553 So. 2d 89 (Ala. 1989).

117. *Louisville & Nashville R.R. Co. v. Higginbotham*, 44 So. 872, 874 (Ala. 1907).

118. *Martin*, 667 So. 2d at 737 (“We agree with the City that this potential harm [regarding the drawdown effect to the overlying landowner’s well as a result of the City’s drilling] is not sufficient to warrant the issuance of an injunction, because the [the overlying landowner] has an adequate remedy at law, and the City has offered to pay for any damage or new equipment and drilling needed by the plaintiff.” (emphasis omitted)).

119. *Id.* at 734.

120. *Id.*

2. *The Nature of the Groundwater Right*

Alabama originally inherited from England an approach to groundwater known as the “rule of capture” or “rule of absolute . . . ownership,” under which overlying landowners can pump as much groundwater as they wish, for whatever purpose they wish, and those whose own use of the groundwater is harmed thereby have no legal remedy.¹²¹ In 1936, the Alabama Supreme Court replaced the rule of capture with the American reasonable use rule.¹²² One should not read too much into the word “reasonable,” however:

“[R]easonable” was used in a very special and restricted sense. A waste of water or a wasteful use of water was unreasonable only if it caused harm, and any nonwasteful use of water that caused harm was nevertheless reasonable if it was made on or in connection with the overlying land.¹²³

Thus, an overlying landowner’s extraction of groundwater is essentially unlimited, so long as the water is used non-wastefully for something beneficial.¹²⁴ In other words, as between overlying landowners, there is no liability for harm caused by the non-frivolous use of water.¹²⁵ Thus, in *Adams v. Lang*, where both the plaintiff and the defendant owned land overlying the aquifer, the Alabama Supreme Court refused to hold the defendant liable, even though his groundwater pumping harmed the plaintiff’s artesian well, because the defendant was pumping the groundwater to farm catfish, a beneficial use.¹²⁶ As noted above, however, when groundwater is exported, liability will lie against the exporter if an overlying landowner can show that the export harms her.¹²⁷

It should be noted that Alabama applies a different rule when groundwater is pumped, not for beneficial use, but *incidental* to another activity on the overlying owner’s land. For example, when groundwater is pumped to dewater a mine, the pumper is not pumping to *use* the groundwater but instead to eliminate it so that he can proceed with his

121. *Henderson v. Wade Sand & Gravel Co.*, 388 So. 2d 900, 901–02 (1980).

122. *Id.* at 901 (citing *Sloss–Sheffield Steel & Iron Co. v. Wilkes*, 165 So. 764 (Ala. 1936) and *Sloss–Sheffield Steel & Iron Co. v. Wilkes*, 181 So. 276 (Ala. 1938)).

123. RESTATEMENT (SECOND) OF TORTS ch. 41, topic 4, intro. note (AM. LAW INST. 1979).

124. *See Adams v. Lang*, 553 So. 2d 89, 92 (Ala. 1989).

125. RESTATEMENT (SECOND) OF TORTS ch. 41, topic 4, intro. note (“As between persons using the water on the overlying land, the American rule made no apportionment among users and gave no protection to their wells and springs. If the water was withdrawn for the purpose of making a beneficial use of or on the land from which it was taken, no liability was incurred for resulting harm to an adjoining landowner.”).

126. *Adams*, 553 So. 2d. at 92.

127. *See supra* notes 119–120 and accompanying text.

mining activities. When such pumping interferes with another landowner's beneficial use of the groundwater, the rule of decision is that of *nuisance* law, not of reasonable use.¹²⁸

3. *Statutory Overlay*

The Alabama Water Resources Act, discussed above, governs groundwater use as well as surface-water use.¹²⁹ The Act requires water-use reporting by certain statutorily defined users of groundwater.¹³⁰ And the Act permits conditions to be imposed on permit holders when the OWR completes a “critical use study”¹³¹ and the Alabama Water Resources Commission designates a “capacity stress area.”¹³² While the Act specifically preserves the common law governing surface water, that provision refers only to “riparian land owners.”¹³³ Thus, it is possible that the Act does not protect rights in groundwater in the same way that it protects rights in surface water.

II. PROBLEMS WITH THE EXISTING LAW

As the discussion above makes clear, the common law is flawed, and the Alabama Water Resources Act does not do anything to cure those flaws. These flaws are harmful, as this Part will demonstrate.

A. *Flaws in Common Law Doctrine*

Alabama follows common law riparian doctrine for surface water¹³⁴ and the common law American reasonable use rule for groundwater,¹³⁵ the Water Resources Act imposes some additional limits only when a capacity

128. *Henderson v. Wade Sand & Gravel Co.*, 388 So. 2d 900 (Ala. 1980).

129. ALA. CODE § 9-10B-3(19) (2001) (defining “waters of the state” to include “[a] quantity of any . . . aquifer, or any other body or accumulation of water, surface water, or ground water, public or private, natural or artificial”).

130. The Act requires reporting of water use by public water systems (as defined by the Act): those who actually divert, withdraw, or consume more than 100,000 gallons of surface water or groundwater per day; and irrigators with the capacity to divert, withdraw, or consume more than 100,000 gallons of surface or groundwater per day. *Id.* § 9-10B-20.

131. *Id.* §§ 9-10B-3(7), -21.

132. *Id.* § 9-10B-3(3), -21. A capacity stress area is “[a]n area of the state designated by the commission pursuant to this chapter where the commission determines that the use of the waters of the state, whether ground water, surface water, or both, requires coordination, management, and regulation for the protection of the interests and rights of the people of the state.” *Id.* § 9-10B-3(3).

133. *Id.* § 9-10B-27 (“Nothing contained in this chapter shall change or modify existing common or statutory law with respect to the rights of existing or future riparian owners concerning the use of the waters of the state.”).

134. *See supra* notes 41–101 and accompanying text.

135. *See supra* notes 115–128 and accompanying text.

stress designation has been made.¹³⁶ Under the common law, water from a surface-water body may be used only on a tract of land contiguous with that water body,¹³⁷ and, while water may be exported to tracts that do not overlie an aquifer, that export will be enjoined if an overlying landowner can show she is harmed thereby.¹³⁸ The only exception to these rules is prescription.¹³⁹

There are at least four significant problems with Alabama's common law of water resources. First, water rights are uncertain: even if one is a riparian or overlying landowner, the quantity of water one may divert is not guaranteed, rendering investments uncertain and planning for the future difficult. Second, litigation is required to adjust uses, which makes adjustments expensive, time-consuming, and unpredictable. Third, while riparian common law gives preference to individual subsistence rights, the common law does not create any other hierarchy of uses, something most critics correctly find untenable. Finally, the on-tract restrictions of both riparian and American reasonable use doctrine are unduly restrictive (though arguably environmentally beneficial). I will discuss each issue in turn.

1. Uncertainty of Right

The riparian right, as the discussion in Part I.A makes clear, comes with no guarantee of a particular quantity of water.¹⁴⁰ Because the riparian right is correlative, a riparian's current use may become unreasonable as circumstances change. Moreover, because a riparian retains the right to use water from the neighboring water body, even if she has never used water before, a new use may be instituted at any point, and other users must adjust. Finally, because the test for riparian uses is the extremely flexible "reasonableness" test, it can be difficult to determine whether a use considered reasonable at one time and place is a good predictor of reasonableness of other, similar uses.

Uncertainty for groundwater use comes from two sources. First, as between overlying landowners, there is no rule that tells us how to resolve conflicts between competing uses.¹⁴¹ Thus, one overlying owner could initiate pumping that causes his neighbor's wells to dry up; the common

136. See *supra* notes 111–114 and accompanying text.

137. See *supra* notes 98–101 and accompanying text.

138. See *supra* notes 118–120 and accompanying text.

139. See *supra* notes 58–63, 117 and accompanying text. As noted above, prescriptive rights in surface water are well known; prescriptive rights in groundwater are conceptually available but have not, apparently, been litigated.

140. See *supra* notes 86–97 and accompanying text.

141. See *supra* notes 124–126 and accompanying text.

law imposes no liability and thus no protection for the neighbor's investments in his wells. Second, an exporter of groundwater is always in a tenuous situation: should his pumping begin to cause harm to any overlying landowner—whether that harm is caused by drawing down the aquifer or by diminishing the aquifer's quality¹⁴²—an injunction of that pumping will lie.¹⁴³

Under both the riparian and American reasonable use doctrines, then, water rights are uncertain. Uncertainty has significant individual and social costs.¹⁴⁴ As Professor Thompson has explained, uncertainty “makes it difficult to plan and manage activities,” “raises the chance that people will make the wrong decision[s],” “impose[s] psychological costs,” and causes “people [to] take [steps] to avoid or reduce the risks of uncertainty [that] are also costly to themselves and to society.”¹⁴⁵ While the costs of uncertainty may not always exceed the costs of rendering property rights definite,¹⁴⁶ the uncertainty of both riparianism and the reasonable use rule for groundwater seem sufficiently problematic to justify a new approach.¹⁴⁷

2. *Need to Litigate*

Under both the riparian doctrine and the American reasonable use rule, conflicts among uses are resolved by litigation. While a putative user of water could bring a declaratory judgment action to determine water rights before making investments in infrastructure and the like, such lawsuits are rare and difficult to pursue.¹⁴⁸ Instead, most users proceed with

142. The harm in the *Martin* case, for example, was that Mrs. Martin's water quality would have been affected by the City's proposed pumping. See *Martin v. City of Linden*, 667 So.2d 732, 737 (Ala. 1995). The *Martin* Court noted that it would not be enough to justify enjoining the City's export if Mrs. Martin's complaint had been solely that she was being forced to drill a deeper well; so long as both the exporter and the overlying landowner would then have adequate water supplies, the costs incurred to drill a deeper well could be redressed by a damages judgment. *Id.*

143. See *supra* notes 119–120 and accompanying text.

144. Barton H. Thompson, Jr., *Uncertainty and Markets in Water Resources*, 36 MCGEORGE L. REV. 117, 120–22 (2005).

145. *Id.*

146. E.g., Stewart E. Sterk, *Property Rules, Liability Rules, and Uncertainty About Property Rights*, 106 MICH. L. REV. 1285 (2008).

147. See generally Robert H. Abrams, *Charting the Course of Riparianism: An Instrumentalist Theory of Change*, 35 WAYNE L. REV. 1381 (1989).

148. Depending on the body of water at issue, the class of defendants to a declaratory judgment action may number in the thousands. The City of Virginia Beach, for example, brought a class action declaratory judgment against “all owners of riparian lands on the Roanoke River below the Roanoke Rapids Dam.” See THOMPSON ET AL., *supra* note 47, at 117 (providing an edited version of the complaint in *City of Va. Beach v. Champion Int'l Corp.*, Civ. 84-10-N (D. Va. 1984)). The Roanoke River flows 220 kilometers from the dam to the Albemarle Sound, see ANA MARIA GARCIA, U.S. DEP'T OF THE INTERIOR, EFFECTS OF FLOOD CONTROL AND OTHER RESERVOIR OPERATIONS ON THE WATER QUALITY OF THE LOWER ROANOKE RIVER, NORTH CAROLINA 3 (2012), <https://pubs.usgs.gov/sir/2012/5101/pdf/2012-5101.pdf>, and comprises many hundreds of parcels, see

construction and operation under the shadow of litigation that might be brought in the future by other riparian owners. Such litigation may result in an injunction of some portion of the riparian's use, rendering a concomitant portion of the riparian's investments fruitless.

And even apart from the outcome produced, litigation is expensive and time-consuming.¹⁴⁹ The inherently flexible nature of the "reasonableness" test means that water-rights judgments may well be one-time-use only: a subsequent lawsuit involving some of the same parties may nevertheless produce very different results.¹⁵⁰ Litigation (unless the plaintiff has pursued a declaratory judgment) is necessarily retrospective, curing damages already caused and/or enjoining activities that have already been invested in.

3. *No Hierarchy of Uses*

Apart from the riparian doctrine's preference for natural (i.e., subsistence) uses,¹⁵¹ the riparian doctrine gives no preference for any use over any other use. There is no automatic preference, for example, for municipal water supply over recreational uses. Indeed, riparian common law makes no provision at all for municipal uses, preventing cities and towns from diverting water for municipal supply.¹⁵² Nor does the American reasonable use rule give a preference for any particular uses: as between overlying landowners, the rule of the biggest and deepest pump applies, and as between overlying and non-overlying owners, the overlying owner wins if she shows harm.¹⁵³

Yet most policy makers would probably agree that some uses of water are more important than other uses of water. Providing reliable water supply to the citizens of a state and providing reliable flow for power generation, for example, are arguably more important uses than water for industrial or commercial purposes. And, indeed, most states that have

Statewide Parcels for North Carolina, N.C. ONE MAP, <http://www.nconemap.com/ParcelsforNorthCarolina.aspx> (last visited Mar. 7, 2017). The scope of the defendant class in such an action gives a sense of the difficulty in litigating these issues.

149. *E.g.*, Jonathan T. Molot, *The Feasibility of Litigation Markets*, 89 *IND. L.J.* 171, 174 (2014) ("By rendering litigation unduly expensive, time-consuming, and burdensome, the pretrial process may lead parties to forego their rights or settle cases based on expense and delay, rather than on the merits.")

150. *See supra* note 97 and accompanying text.

151. *See supra* notes 78–79 and accompanying text.

152. *See supra* notes 100–101 and accompanying text.

153. *See supra* notes 124–127 and accompanying text.

altered the riparian common law by statute have included, at a minimum, a mandate for preferring municipal water supply over competing uses.¹⁵⁴

4. *On-Tract Restriction*

Riparian common law limits the use of diverted surface water to the riparian tract.¹⁵⁵ The American reasonable use doctrine prohibits export of groundwater when export harms overlying landowners.¹⁵⁶ Yet there is no reason to expect that riparian or overlying land is the best location for productive use of water. Indeed, given the vagaries of topography and the metes and bounds of lots, riparian land might well be hilly and rocky, while non-riparian land might be the most arable. And if one of the best uses of water is to provide municipal supply, the on-tract restriction directly prevents that use, because diversion of water into a municipal system necessarily moves water off-tract.¹⁵⁷ Thus the on-tract and anti-export limitations of the common law operate to prevent eminently sensible uses of surface and groundwater.

One benefit of the on-tract and in-watershed restrictions, however, is that they necessarily keep water in the relevant stream or lake. While the water is kept in a stream or lake for the benefit of downstream or neighboring riparians, the water provides serious incidental benefits to many entities. Animals, plants, and ecosystems benefit from the continued flow of water. Thus, any effort to relax on-tract restrictions must come with equal effort to protect instream flows.

B. *Inadequacy of Existing Regulatory Mechanisms*

The Alabama Water Resources Act, as noted above, is not a regulatory statute that creates a permitting system regulating water use.¹⁵⁸ Instead, it creates largely an information-gathering agency, one that has little ability to enforce even these information-providing requirements.¹⁵⁹ The Act itself gives OWR almost no enforcement power: for example, the statute does not empower OWR to enter private property to confirm reported water uses or to investigate water users who fail to report under the Act.

154. *E.g.*, ARK. CODE ANN. § 15-22-217(d) (2016); MD. CODE ANN. ENVIR. § 5-502(d) (LexisNexis Supp. 2016); MINN. STAT. ANN. § 103G.261 (West 2009); VA. CODE ANN. § 62.1-242 (2014).

155. *See supra* notes 98–100 and accompanying text.

156. *See supra* notes 118–120 and accompanying text.

157. *See supra* note 101 and accompanying text.

158. *See supra* notes 102–114, 129–133 and accompanying text.

159. *See supra* notes 104–107 and accompanying text.

The Act does give OWR the authority to make capacity stress designations.¹⁶⁰ But the Act itself says almost nothing about how to determine what conditions must exist to justify the designation of a capacity stress area, nor does it outline a procedure for making a capacity stress designation or for returning an area to its pre-stress status. And, despite these statutory lacunae, OWR has not adopted gap-filling rules. What's more, capacity stress designation is always a reaction to an existing problem, applying only when water resources are so low that a basin is already under stress.¹⁶¹ If OWR may make capacity stress designations only when water problems have emerged, it has no ability to prevent those problems from emerging in the first place, no matter how inevitable they are absent intervention.

Finally, even if OWR exercised its meager powers to the fullest, the Act specifically states that it does not affect existing riparian rights.¹⁶² Thus, the common law really is the governing law for Alabama's water resources. And, as noted above, the common law is seriously flawed.¹⁶³

C. Collateral Consequences of Failures to Act

In addition to the direct failings of Alabama's common law water-resources policy, our failure to adopt comprehensive regulation has at least one serious collateral consequence: failing to regulate puts us at a marked disadvantage in interstate water-resources litigation. In this Section, I also show that worries about EPA intervention in Alabama water policy are unfounded.

1. Interstate Water-Resources Litigation

The United States Supreme Court is the court of first instance in suits between states: the United States Constitution gives the Supreme Court original jurisdiction over suits between or among states,¹⁶⁴ and this is the one head of the Court's original jurisdiction that Congress has not made concurrent with the lower courts.¹⁶⁵ It has been said that suits between states replace war¹⁶⁶ as a mode of problem solving. Accordingly, the

160. ALA. CODE § 9-10B-20 (2001).

161. *See id.* §§ 9-10B-3(3), -21.

162. *Id.* § 9-10B-27.

163. *See supra* notes 134–157 and accompanying text.

164. U.S. CONST. art. III, § 2.

165. 28 U.S.C. § 1251(a) (2012).

166. *E.g.*, *Mississippi v. Louisiana*, 506 U.S. 73, 77 (1992) (“The model case for invocation of this Court’s original jurisdiction is a dispute between States of such seriousness that it would amount to *casus belli* if the States were fully sovereign.” (quoting *Texas v. New Mexico*, 462 U.S. 554, 571 n.18 (1983))).

Supreme Court exercises its original jurisdiction over state-versus-state disputes “sparingly.”¹⁶⁷

A prudential standard has thus been developed to make sure that a state-versus-state dispute rises to the level of importance to justify the Court’s intervention. As Chief Justice Rehnquist explained in *Mississippi v. Louisiana*:

Chief Justice Fuller wrote nearly a century ago that our original “jurisdiction is of so delicate and grave a character that it was not contemplated that it would be exercised save when the necessity was absolute.” Recognizing the “delicate and grave” character of our original jurisdiction, we have interpreted the Constitution and 28 U.S.C. § 1251(a) as making our original jurisdiction “obligatory only in appropriate cases,” and as providing us “with substantial discretion to make case-by-case judgments as to the practical necessity of an original forum in this Court.”¹⁶⁸

To implement these limitations, the Court imposes a heightened standard of injury on states who invoke its original jurisdiction. “Before this court can be moved to exercise its extraordinary power under the Constitution to control the conduct of one state at the suit of another, the threatened invasion of rights must be of serious magnitude and it must be established by clear and convincing evidence.”¹⁶⁹

This heightened standard has been applied in “equitable apportionment” cases—those cases that allocate shared waters among states—to include a requirement that states have helped themselves before they ask the Court for help: “No State can use its lax administration to establish its claim to water.”¹⁷⁰ The Court has also said that its exercise of jurisdiction rests in part on “the seriousness and dignity of the claim.”¹⁷¹

These rules would apply to litigation in the Supreme Court over, for example, the Apalachicola–Flint–Chattahoochee and Alabama–Coosa–Tallapoosa basins. The worry is that Alabama’s failure to take steps to better manage its resources will lead the Court to find that Alabama must not have suffered the kind of substantial injury that justifies equitable apportionment, that Alabama’s “lax administration” will vitiate its claim to

167. *United States v. Nevada*, 412 U.S. 534, 538 (1973).

168. 506 U.S. at 76 (first quoting *Louisiana v. Texas*, 176 U.S. 1, 15 (1900); then quoting *Illinois v. City of Milwaukee*, 406 U.S. 91, 93 (1972); and then quoting *Texas v. New Mexico*, 462 U.S. 554, 570 (1983)).

169. *New York v. New Jersey*, 256 U.S. 296, 309 (1921) (citation omitted).

170. *Colorado v. New Mexico*, 467 U.S. 310, 320–21 (1984).

171. *Illinois v. City of Milwaukee*, 406 U.S. 91, 93 (1972).

a share of regional waters, and that Alabama's claim will lack the "seriousness and dignity" required to invoke the Court's jurisdiction.

Indeed, Georgia and Florida have made such accusations against the other in their current case before the Court.¹⁷² The Special Master has recently released his Report in the matter, and Florida was unable to meet its heavy burden under the equitable apportionment doctrine.¹⁷³ It is difficult to imagine Alabama escaping unscathed from arguments critical of its water management failures.

2. *EPA Intervention*

Some have also suggested that our failure to adopt serious water-policy regulation leaves us open to an EPA effort to exert direct control over Alabama water-resources policy.¹⁷⁴ Such worries are overwrought.

It is true that EPA has regulated the flows of water *into* a body of water as a means to help control water quality under the federal Clean Water Act.¹⁷⁵ But EPA has not regulated the flows of streams themselves.¹⁷⁶ While limiting flows into a stream would have some effect on the quantity of water in that stream, such limitations are a far cry from asserting the power to interfere with state water-resources policy. Moreover, it is unclear that such proxy regulation is permissible under the text of the Clean Water Act, so that even the minor effect of such regulations on state water-resources policy may well vanish.¹⁷⁷

172. Chapman, *supra* note 20 (in the current Supreme Court litigation, "Georgia's lawyers . . . have requested hydrologic flow levels of the Apalachicola River dating to 1975 in hopes of showing Florida's poor stewardship of the river. Florida, meanwhile, seeks the number of well permits issued to southwest Georgia farmers to prove lax regulation by Georgia").

173. This is not, however, because Florida had failed to show injury: the Master noted that "there is little question that Florida has suffered harm from decreased flows." Report of the Special Master, *supra* note 21, at 31. However, because the U.S. Army Corps of Engineers manages the Chattahoochee River and could not be made a party to the suit, see United States' Amicus Curiae Brief in Opposition to GA's Motion to Dismiss, Docket No. 66, Florida v. Georgia, Orig. No. 142 (U.S. Mar. 11, 2015), Florida could not show that any injury it had suffered was redressable by an order from the Court that would not bind the Corps, Report of the Special Master, *supra* note 21 at 69.

174. See Hollis, *supra* note 22.

175. E.g., Kyle Robisch, Comment, *The Future of Proxy Total Maximum Daily Loads After Virginia Department of Transportation v. EPA*, 67 VAND. L. REV. EN BANC 171 (2014) (discussing EPA practice of implementing total maximum daily loads of pollutants in water bodies under Clean Water Act by regulating, as a proxy for the pollutants themselves, the incoming flow of the water containing the pollutants).

176. William L. Andreen, *No Virtue Like Necessity: Dealing with Nonpoint Source Pollution and Environmental Flows in the Face of Climate Change*, 34 VA. ENVTL. L.J. 255, 291 (2016) ("Although EPA has at times encouraged states to bridge the divide between water quality and water quantity, it has done little more than exhort states to act").

177. The only case to address proxy TMDLs thus far found them unlawful under the Clean Water Act. See Va. Dep't of Transp. v. EPA, No. 1:12-CV-775, 2013 WL 11085508 (E.D. Va. Jan. 3, 2013); see also, e.g., Dave Owen, *Urbanization, Water Quality, and the Regulated Landscape*, 82 U. COLO. L. REV. 431, 463 (2011) (noting that "the legality of impervious cover TMDLs is debatable").

Similarly, while some have argued that EPA should take over Alabama's water quality program, thus divesting the Alabama Department of Environmental Management of its authority to enforce the Clean Water Act,¹⁷⁸ EPA has expressly declined to take such action, and courts have affirmed EPA's decision not to intervene.¹⁷⁹ Indeed, EPA appears largely to wish to *help* Alabama keep its water-quality authority.¹⁸⁰ Finally, the Clean Water Act itself recognizes that states are the regulators of water quantity.¹⁸¹ Indeed, Congress has reinforced that recognition through amendments to the Act.¹⁸² Accordingly, EPA has resisted efforts to push it into the water-quantity arena.¹⁸³ There seems to be little reason to worry that EPA will oust Alabama from its sovereign authority over its waters.

None of this detracts, however, from the serious consequences of our failure to regulate for Supreme Court litigation, economic development, drought management, ecosystem protection, and future growth.

III. EFFORTS TO CHANGE ALABAMA WATER LAW

Alabama's efforts to develop a statewide water policy first started in the early 1990s, prompted by "three droughts during the 1980s, falling groundwater levels around metropolitan areas, saltwater intrusion along the Gulf Coast, and a disagreement with the Army Corps of Engineers over proposed increases in Georgia's withdrawal of water from the Chattahoochee and Coosa Rivers."¹⁸⁴ In 1989, Governor Guy Hunt created the Alabama Water Resources Study Commission to study and report upon Alabama's water issues;¹⁸⁵ the Commission's report, *Water for a Quality of*

178. *E.g.*, Raines, *supra* note 23; Spencer, *supra* note 23.

179. Kent Faulk, *Appeals Court Won't Revoke ADEM Powers 16 Environmental Groups Want State Agency Stripped of Permitting Ability*, HUNTSVILLE TIMES (Dec. 6, 2015), 2015 WLNR 36114990 ("Environmental groups filed petitions asking EPA to begin the process of withdrawing ADEM's authority to issue the permits, alleging 26 program deficiencies, according to the court opinion. EPA responded in April 2014 with interim findings. It found 22 of the alleged deficiencies did not warrant taking back that authority from ADEM. While EPA expressed 'significant concerns' about the other four allegations, it deferred a decision and stated it would work with ADEM and allow the state agency to address the concerns before deciding whether to begin the process of withdrawing permitting authority.").

180. *Id.*; *see also* EPA Region 4 Stakeholder Comments to the Alabama Water Agencies Working Group (Nov. 2012) (expressing, for example, the regional EPA office's willingness to "work with the AWAWG and member agencies to provide technical support of the state's efforts").

181. 33 U.S.C. § 1370(2) (2012).

182. *Id.* § 1251(g) (added to the Clean Water Act of 1977, Pub. L. No. 95-217, § 5(a), 91 Stat. 1567, 1575).

183. Andreen, *supra* note 176, at 291–92.

184. Andreen, *supra* note 24, at AL-10. *See also* WATER FOR A QUALITY OF LIFE, *supra* note 1, at iii, 1.

185. *Id.* at iii.

Life, was published in 1990.¹⁸⁶ The Commission recommended a number of changes to Alabama law.¹⁸⁷ The Alabama Legislature subsequently enacted, and the Governor signed into law, the Alabama Water Resources Act.¹⁸⁸ As noted above, the Act is largely toothless.¹⁸⁹

Given the failings with the Alabama Water Resources Act, Alabama's water policy issues remain largely unaddressed. During the 1990s and 2000s, tensions flared between Alabama, Florida, and Georgia over their shared water resources.¹⁹⁰ The three states attempted to negotiate an interstate compact to resolve competing claims to the Apalachicola–Flint–Chattahoochee basin waters;¹⁹¹ Alabama and Georgia also negotiated over the Alabama–Coosa–Tallapoosa waters.¹⁹² While compacts were created to establish frameworks for negotiating allocation of these interstate waters, the negotiations came to naught, and the compacts expired.¹⁹³ Further stress came from recurrent droughts: in the late 1990s, the state experienced a severe drought;¹⁹⁴ drought recurred in the mid-2000s.¹⁹⁵ Birmingham saw its second-driest summer since 1900 in 2011.¹⁹⁶

In recognition of these continuing water-policy problems, Governor Robert Bentley convened the Alabama Water Agencies Working Group (AWAWG) in 2011 and again in 2012.¹⁹⁷ The AWAWG includes representatives of OWR, the Department of Environmental Management, the Geological Survey, the Department of Conservation and Natural Resources, and the Department of Agriculture and Industries.¹⁹⁸ The AWAWG was asked to create a statewide database of water resources,

186. *Id.*

187. *Id.* at 7–13.

188. Water Resources Act, No. 93-44, 1993 Ala. Laws 78 (codified at ALA. CODE §§ 9-10B-1 to -30 (2001)).

189. *See supra* notes 102–114 and accompanying text.

190. *E.g.*, 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 (2009).

191. *See generally In re Tri-State Water Rights Litig.*, 639 F. Supp. 2d 1308 (M.D. Fla. 2009), *rev'd and vacated sub nom. In re MDL-1824 Tri-State Water Rights Litig.*, 644 F.3d 1160 (11th Cir. 2011).

192. *See id.* at 1335 n.16.

193. Alabama–Coosa–Tallapoosa River Basin Compact, Pub. L. No. 105-105, 111 Stat. 2233 (1997); Apalachicola–Chattahoochee–Flint River Basin Compact, Pub. L. No. 105-104, 111 Stat. 2219 (1997). The Apalachicola–Chattahoochee–Flint Compact expired in 2003 when the commission created by the Compact did not vote to extend its expiration. *See* 111 Stat. at 2224. The Alabama–Coosa–Tallapoosa Compact expired in 2004 for the same reason. *See* 111 Stat. at 2238.

194. Dave Bryan, *Recent Rains Helping, but Farmers Wary of Coming Months*, MOBILE REG., June 6, 2001, at B12.

195. William Thornton, *We're Out of the Drought: Metro-Area Rainfall Above Normal in 2008*, BIRMINGHAM NEWS, Dec. 19, 2008, at 1A.

196. Jeff Hansen, *Arid August Widens Drought*, BIRMINGHAM NEWS, Sept. 2, 2011, at 1A.

197. ALA. WATER AGENCIES WORKING GRP., WATER MANAGEMENT ISSUES IN ALABAMA 1 (2012), <http://www.adem.alabama.gov/programs/water/waterforms/WaterIssueReport.pdf>.

198. MAPPING THE FUTURE, *supra* note 3, at 11, 110–12.

meet with stakeholders, and recommend a statewide water-resources plan by December 1, 2013.¹⁹⁹

The AWAAG's report, *Mapping the Future of Alabama Water Resources Management: Policy Options and Recommendations*, was issued by the Governor in 2014.²⁰⁰ Rather than recommend a concrete plan, the AWAAG instead spelled out a process by which further information could be gathered, more stakeholders could contribute, and more options could be considered.²⁰¹ The AWAAG thus suggested a four-track process: Technical, Focus Area Panels (FAPs), Stakeholder Outreach, and Process Support.²⁰² This process would result in an initial statewide water management plan and, to ensure the success of that plan, an ongoing "adaptive implementation process."²⁰³

Five FAPs were suggested by the AWAAG, charged with addressing particular issues:

- a Riparian and Other Legal Issues FAP would address whether current law was adequate to address Alabama's water resource needs, and, if not, what amendments should be made to the Alabama Water Resources Act to address those needs;²⁰⁴
- a Certificates of Use, Permitting, and Interbasin Transfers FAP would address whether OWR's current certificate-of-use program is adequate and whether action should be taken to allow interbasin transfers (transfers of water from one river basin to another, something forbidden under the common law);²⁰⁵
- an Instream Flows FAP would define instream flow (which the AWAAG defined as water that must remain in a river or stream to meet public health, economic, environmental, and downstream needs) and suggest ways in which Alabama law needs to be changed to accommodate such flows.²⁰⁶

199. *Id.*

200. Press Release, The Office of Ala. Governor Robert Bentley, Governor Bentley Releases Alabama Water Resources Management Policy Report (Apr. 17, 2014), <http://governor.alabama.gov/newsroom/2014/04/governor-bentley-releases-alabama-water-resources-management-policy-report/>.

201. *MAPPING THE FUTURE*, *supra* note 3, at 25–30.

202. *Id.* at 25–28.

203. *Id.* at 6.

204. *Id.* at 27.

205. *Id.* at 28.

206. *Id.* at v, 28.

- a Conservation, Efficiency, and Reuse FAP would address water conservation and reuse issues, especially with regard to public water utilities;²⁰⁷ and
- a Local and Regional Planning FAP would assess the roles of Alabama's state, regional, and local water-policy entities under current law and suggest the optimal level of decision-making and input for various water-policy issues.²⁰⁸

Governor Bentley created the FAPs as described in the AWAAG report, staffing the panels with volunteers from all areas of Alabama water policy.²⁰⁹ The FAPs met with the Governor and the AWAAG in early fall 2015 to receive their charges, all of which were in line with the AWAAG recommendations described above.²¹⁰ The FAPs met throughout 2016.

Stakeholder outreach also occurred: the AWAAG hosted a stakeholder meeting on April 5, 2016, in Auburn.²¹¹ At the meeting, updates were provided from the AWAAG and the various FAPs.²¹² As of this writing, no reports have issued from any FAP.

Unfortunately, the AWAAG's progress so far has been slow. No legislation has been recommended to the Governor or the legislature, and the FAP process does not seem to have produced any concrete advances.

IV. POTENTIAL SOLUTIONS

A. *More Study is Unnecessary*

OWR is currently conducting an assessment of Alabama's surface-water resources.²¹³ The Geological Survey of Alabama is currently conducting an assessment of Alabama's groundwater resources.²¹⁴ Both

207. *Id.* at 27–28.

208. *Id.* at 27.

209. Letter from Robert Bentley, Ala. Governor, to author (July 7, 2015) (on file with author).

210. Governor Robert Bentley, Address to Focus Area Panels, Sept. 3, 2015.

211. *Alabama Water Agencies Working Group*, ADECA, <http://adeca.alabama.gov/Divisions/owr/awawg/Pages/default.aspx> (last visited Feb. 7, 2017).

212. *Alabama Water Agencies Working Group Stakeholder Meeting*, ADECA (Apr. 5, 2016), adeca.alabama.gov/Divisions/owr/awawg/Documents/AWAAGStakeholderAgenda_20160405.pdf.

213. Marlon Cook, *Groundwater Management and Policy in Alabama: How Much is Enough?*, ALA. DEP'T OF ENVTL. MGMT. (2016), <http://www.adem.state.al.us/misc/gwconf2016/GWConf-MCook.pdf>.

214. *Id.*; *Groundwater Assessment Program – Current Projects*, GEOLOGICAL SURVEY OF ALA., <http://www.gsa.state.al.us/gsa/groundwater/currentprojects> (last visited Feb. 11, 2017).

assessments were expected to be completed by December 31, 2016,²¹⁵ but as of this writing have not been completed.²¹⁶

Some policy makers have suggested that any policy changes should wait for completion of the currently ongoing assessments of surface and groundwater resources.²¹⁷ And, it is true, there is information that we do not currently have. For example, a capacity stress designation depends on knowing what water levels a basin experiences when it is *not* stressed and what levels are required for ecosystems to flourish.²¹⁸ Yet Alabama does not have sufficient data on these baseline and ecological levels, and it is thus very difficult to ascertain when a basin moves from unstressed to stressed levels.

But note the context in which this problem emerges: OWR needs the data to be able to perform a capacity stress analysis. The Alabama Legislature itself did not require that data *to assign to OWR the task of designating capacity stress areas*. Likewise, our current water management problems can be addressed legislatively without the detailed data that the assessments will provide: the legislature need only create a statutory framework within which an agency would operate; only that agency needs the data to act appropriately within the statutory framework.

In an argument that does not simply counsel delay but instead argues against any new statute, some suggest that litigation alone could achieve the desired changes. The Restatement (Second) of Torts, for example, states a modern common law rule of riparianism that removes the on-tract limitation.²¹⁹ Were Alabama courts to adopt the Restatement approach to riparian doctrine, the argument goes, the on-tract limitation would be lifted. A similar approach could change groundwater doctrine. It is not clear that Alabama courts would adopt this approach, however. In addressing questions of first impression, Alabama courts catalog the approaches taken in other common law states and choose the majority approach.²²⁰ The Restatement has not been adopted by a majority of common law

215. Cook, *supra* note 213.

216. See GEOLOGICAL SURVEY OF ALA., *supra* note 205 (“Research is currently being conducted throughout the state to complete the statewide assessment.”).

217. See MAPPING THE FUTURE, *supra* note 3, at 2.

218. See generally ALA. CODE §§ 9-10B-3(3), -21 (2001).

219. RESTATEMENT (SECOND) OF TORTS § 855 cmt. b (AM. LAW INST. 1979) (“[A] nonriparian use that can be accommodated with riparian uses and causes no substantial harm to them can be reasonable despite its nonriparian character.”).

220. See, e.g., *Wehby v. Turpin*, 710 So. 2d 1243, 1246–47, 1249 (Ala. 1998) (“This issue is one of first impression in Alabama. Therefore, we must examine the law of other jurisdictions to gain a better understanding of the origins and evolution of littoral or riparian rights. Most jurisdictions appear to adhere to the so-called common law rule. . . . We are bound to follow the majority common law rule . . .”).

jurisdictions.²²¹ It thus is at least possible, and may be probable, that an Alabama court would reject the Restatement as too seldom adopted to constitute a majority common law rule. In addition, court decision-making in general is usually after the fact (occurring only after investments have been made and harm suffered), ad hoc and inconsistent (resulting in unfairness when like cases are treated as unlike), and inefficient (costing a lot in attorney's fees and taking a long time to obtain results); litigation around water rights specifically is highly unlikely to address the systemic aspects of water policy, including the desirability of prioritizing some uses over others²²² and the need to consider instream flows and other ecosystem needs.²²³

As explained exhaustively above, the current common law regime cannot meet our twenty-first-century needs. Those problems are clear and can be addressed now. Continuing to postpone action is costly, and litigation will not solve our problems. The better approach, then, is legislative action.

B. We Need a Comprehensive Water-Resources-Policy Statute

I have argued thoroughly in an earlier volume of this Law Review that Alabama should adopt the Regulated Riparian Model Water Code.²²⁴ I continue to believe that adopting such a statute is the best approach, for a number of reasons. Without recapitulating the entire argument, I will highlight several considerations that compel the adoption of the Code or something very like it.

First, any legislation must recognize the hydrologic connections between surface and groundwater, something the common law ignores. Doing so would bring Alabama's water law "into line with contemporary knowledge, and with scientific reality."²²⁵ Failing to do this risks failure of regulation: if groundwater pumping affects surface flows, and surface-water diversions affect groundwater levels, continuing to treat the two as separate resources means that permits for surface water could allow harms to groundwater and vice versa.²²⁶

221. Joseph W. Dellapenna, *The Evolution of Riparianism in the United States*, 95 MARQ. L. REV. 53, 84 n.169 (2011) ("Thus far, courts in 18 reported cases have referred to the *Restatement (Second)* regarding riparian rights; nearly all were general references that did not play a major role in the decision.").

222. See *supra* Part II.A.3.

223. See *supra* note 30.

224. Heather Elliott, *Alabama's Water Crisis*, 63 ALA. L. REV. 383 (2012). See *supra* Part II.A.3.

225. Joseph L. Sax, *We Don't Do Groundwater: A Morsel of California Legal History*, 6 U. DENV. WATER L. REV. 269, 270 (2003). See *supra* note 30.

226. Cf., e.g., *City of Albuquerque v. Reynolds*, 379 P.2d 73 (N.M. 1963).

Second, any legislation should simultaneously remove the traditional on-tract and in-watershed restrictions of the common law and impose protections for instream flow and other public considerations. Transfers off-tract and out of watershed allow water to be used in places where it is needed, rather than only on riparian or overlying land. And requiring the agency to consider social and environmental issues before authorizing a permit prevents transfers that would harm localities, economies, or ecosystems.²²⁷

Third, legislation should create a permitting system under which an agency assesses the reasonableness of a use *before* a permit issues, rather than only in post hoc litigation.²²⁸ Rejecting a permitting agency means leaving water-resource decisions to courts and thus losing investments and productivity when existing uses are enjoined.

Relatedly, administrative permits remove some of the uncertainty inherent in common law water-resources doctrine.²²⁹ As noted above, common law rights are unstable, and new circumstances or new uses can always jeopardize existing uses.²³⁰ But permitting systems can give statutory priority to existing uses, thus protecting investments and capital.²³¹ And a new statutory scheme need not dislocate existing water uses: Alabama could grandfather in existing uses²³²—both those authorized by the common law, and those currently in existence even if unlawful—to reduce the costs of transition to the permitting system (including reducing the risk of takings litigation²³³).

227. For this reason, the piecemeal approach that would be taken by current Senate Bill 255 is unacceptable; lifting the common law's on-tract restrictions without concomitant protections for instream flows is too dangerous. *See supra* note 30.

228. Joseph W. Dellapenna, *Developing a Suitable Water Allocation Law for Pennsylvania*, 17 VILL. ENVTL. L.J. 1, 49–50 (2006).

229. A. Dan Tarlock, *Water Law Reform in West Virginia: The Broader Context*, 106 W. VA. L. REV. 495, 516–18 (2004).

230. *See supra* Part II.

231. FLA. STAT. ANN. § 373.223(1)(b) (West Supp. 2016) (requiring consumptive use permit applicants to demonstrate, *inter alia*, that “the proposed use of water . . . [w]ill not interfere with any presently existing legal use of water”).

232. *Id.* § 6R-1-03.

233. *See, e.g., In re Waters of Long Valley Creek Stream Sys.*, 599 P.2d 656, 669 (Cal. 1979) (interpreting state water code “as not authorizing the [state water board] to extinguish altogether a future riparian right, [but permitting] the [b]oard [to] make determinations as to the scope, nature and priority of the right”).

CONCLUSION

Alabama currently has a nineteenth-century common law system inadequate to address twenty-first-century issues. The Code “offers a model for the twenty-first century,”²³⁴ and it is one we should adopt.

234. Robert E. Beck, *The Regulated Riparian Model Water Code: Blueprint for Twenty First Century Water Management*, 25 WM. & MARY ENVTL. L. & POL'Y REV. 113, 115 (2000).