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ASCE STANDARD

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# Regulated Riparian Model Water Code

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## PREFACE

The Model Water Code Project of the American Society of Civil Engineers (ASCE) was begun in 1990 under the direction of Professor Ray Jay Davis of the Brigham Young University School of Law. Its purpose was to develop proposed legislation for adoption by state governments for the allocation of water rights among competing interests and the resolution of other quantitative conflicts over water. Professor Davis enlisted the active aid of a large number of engineers, lawyers, and others interested in improving the administration of water allocation laws in the states of the United States. Input was procured from engineers engaged in working with water in many different ways: government administrators working with water from a variety of perspectives; lawyers representing development interests or environmental interests; business people representing a wide spectrum of industries; academics from disciplines including civil engineering, economics, hydrology, law, and political science; environmental activists; and just plain folks. Several dozen people from such varied backgrounds gave detailed critiques of the drafts of the project. Many of these people also attended two or more meetings per year, during which the drafts were discussed in detail. Probably each person who contributed to this project could pick at least a few points as to which he or she thinks the end products could be improved—the end products are not any single person's efforts, interests, or conclusions. Those involved in the project agree that, overall, the end products are carefully balanced to represent a coherent body of law that would markedly improve the law of water allocation as presently found in many States. (The term "State" is used throughout this Code to refer to a state of the United States, and not to states in the international sense, although such states might also find much of use in this project.)

Originally, the hope was to prepare a single Model Water Code appropriate for any or every State. Although there has been notable convergence among the water laws of eastern and western States over recent decades, there continues to be more divergence than convergence, a divergence that will almost certainly continue for many years. It proved impossible to craft a single Code appropriate for all the States. In the end, two Model Water Codes were prepared—the Regulated Riparian Model Water Code and the Appropriative Rights Model Water Code—reflecting the different needs and legal traditions of eastern and western States. In part because of the decision, made fairly late in the drafting process, to prepare two Model Water Codes, the project remained unfinished when Professor Davis retired from Brigham Young University. In August 1995, Professor Joseph W. Dellapenna of the Villanova University School of Law succeeded Professor Davis as director of the project. Professor Dellapenna had chaired the working group that drafted the regulated riparian version of the Model Water Code. The Regulated Riparian Model Water Code was approved as ASCE Standard 40-03 in 2003. The Appropriative Rights Model Water Code is still being developed into a standard. The original goal is reflected in that each Code contains as much language identical to that in the other Code as possible. A legislature considering revising its water laws should examine both Model Codes.

To understand why two complete, separate Model Water Codes proved necessary requires some understanding of the path by which States east of Kansas City created a highly administered regulatory approach to water allocation within the State, a path quite different from the path followed in the States

west of Kansas City. States to the west of Kansas City experimented with private property systems that coalesced into the doctrine of appropriative rights. States to the east of Kansas City continued to adhere to the common property model of common law riparian rights. See Joseph Dellapenna, *Riparianism*, in *WATERS AND WATER RIGHTS* chs. 6-10 (5 vols., Amy Kelley ed., 2015) ("Dellapenna"), § 6.01(b). Although based on the ideal of sharing, riparian rights proved less than helpful whenever demand for water began to outstrip supplies. The Pacific Coast States and the High Plains States (from North Dakota to Texas) eventually abandoned riparian rights in favor of appropriative rights, although these States were unable to abolish riparian rights completely through inability or unwillingness to compensate the owners. See *id.* §§ 8.01, 8.02. As a result, the States with a dual system combine the worst features of both bodies of law, unsuitable to the more hydrologically developed eastern States. Even Mississippi, the only eastern State to adopt a dual system (in 1955), abandoned it in 1985 in favor of what in this Code is called "regulated riparianism." See *id.* § 8.05 to 8.05(b). Alaska was the latest western State to switch from riparian rights to appropriative rights. Alaska's legislature purported to abolish riparian rights, although no court has yet considered whether this succeeded. At this time, therefore, one must conclude that the question of whether Alaska is a "pure" appropriative rights State or is, in fact, a dual system State has to be regarded as unresolved. See *California-Oregon Power Co. v. Beaver Portland Cement Co.*, 295 U.S. 142 (1935); Dellapenna, § 8.02.

As eastern States have become disenchanted with common-law riparian rights, they have not embraced appropriative rights. Instead, eastern States developed a highly regulated system of water administration based on riparian principles that could best be described as a system of public property. Regulatory antecedents to regulated riparianism go back to colonial times in several States. See Dellapenna, §§ 9.01, 9.02. Initially, the transition from extremely limited regulatory intervention to more or less comprehensive regulation resulted from incremental changes in earlier systems rather than a conscious design to revolutionize the system of water rights. As a result, there is disagreement over when to date the emergence of the first true regulated riparian system. Nor is there a fully agreed name for the new system, although regulated riparianism appears to be about as succinctly descriptive as one can hope. Suggested alternative names have serious defects. "Eastern permit systems" or the like tells us nothing about the nature of the legal regime, and leave one more open to the charge that the new system has taken rather than regulated pre-existing property rights. "Non-temporal priority permit systems" is more immediately descriptive than "regulated riparianism" but it is rather too much to expect people to say frequently and also leaves more room for the allegation that property was taken by the legislation. The name "regulated riparianism" emphasizes both that the administrative permit process proceeds on essentially riparian principles and that the new system is a regulation of rather than a taking of the older riparian rights. *Id.* § 9.01. As a result, the name "regulated riparianism" has gained a general acceptance. See, e.g., *City of Waterbury v. Town of Washington*, 802 A.2d 1102 (Conn. 2002) (holding that Connecticut has enacted a regulated riparian system).

The transition to the true regulated riparian system first occurred by 1933 when Maryland enacted a fully regulated system,

although the realization that something truly new in water law had emerged did not occur for another few decades. *See* Dellapenna, ch. 9. The emergence of a new form of water law was missed because the regulatory system was not introduced as a radical revision of the water law of a particular state. In most States, it emerged gradually through a process of small legislative interventions that eventually, and cumulatively, did fundamentally change the water law of the State. As a result, it is sometimes difficult to determine precisely when, in a particular state, the transition from riparian rights to regulated riparianism occurred. In several States, it is still unclear whether the law would better be described as still basically riparian rights with limited legislative interventions or as regulated riparianism. As of 2015, 17 States had enacted a regulated riparian system for surface waters, generally including underground water sources as well. Two other States apply a regulated riparian system to underground water sources only. Several States have not actually implemented the regulated riparian statutes on the books, and in several others the limitations on the reach of regulatory authority allow serious questions as to whether those States truly have enacted a regulated riparian statute. With those caveats in mind, the states are:<sup>1</sup>

Maryland (1933)  
 Minnesota (1937)  
 Iowa (1957)  
 Wisconsin (1957)  
 Delaware (1959)  
 New Jersey (1963)  
 Kentucky (1966)  
 Florida (1972)  
 North Carolina (1973)\*\*\*  
 Georgia (1977)\*\*\*\*  
 New York (1979)\*  
 Connecticut (1982)  
 Illinois (1983)\*\*  
 Arkansas (1985)\*  
 Massachusetts (1985)\*\*\*  
 Mississippi (1985)  
 Hawaii (1987)  
 Virginia (1989)\*\*\*\*  
 Alabama (1993)\*  
 Michigan (2006)  
 South Carolina (2010)\*\*\*\*

In addition, the unusual arrangements of the Delaware River Basin Compact and the Susquehanna River Basin Compact create a regulated riparian system in those basins (stretching across four and three States, respectively) under interstate supervision or management. *See id.* § 9.06(c)(2). In addition, the unusual arrangements of the Delaware River Basin Compact and the Susquehanna River Basin Compact create a regulated riparian system in those basins (stretching across four and three States respectively) under interstate supervision or management. *See id.* § 9.06(c)(2); Joseph Dellapenna, *The Delaware and Susquehanna River Basins*, in 6 *WATERS AND WATER RIGHTS* 137-47 (1994 replacement vol.).

<sup>1</sup> The asterisks indicate:

\* Less completely developed or implemented than for other regulated riparian States.  
 \*\* Applicable to underground water only and requiring permits in capacity use areas only.  
 \*\*\* Applicable to critical management areas only.  
 \*\*\*\* This date refers to the adoption of a regulated riparian statute that applies to surface water sources. These states had adopted similar statutes for groundwater earlier (South Carolina, 1969; Georgia, 1972; Virginia, 1973).

One might add a few examples of regulated riparian systems in western States. As indicated in the foregoing chart, Hawaii has enacted such a statute for water in that state, although Hawaii does not really share the western legal tradition generally or particularly regarding water. *See* Joseph Dellapenna, *Related Systems of Water Law*, in *WATERS AND WATER RIGHTS* § 10.1(c). The Arizona Groundwater Management Act of 1980, as well, perhaps, as some other western statutes relating to groundwater, also seems more in the regulated riparian mode than in the appropriative rights mode for surface sources in the same state. *ARIZ. REV. STAT. ANN.* §§ 45-401 to 45-655. These statutes, although adopting the sort of public management approach characteristic of regulated riparian statutes, operate against a background of appropriative rights and have some notably different features from otherwise similar statutes found in eastern States or Hawaii. Therefore, the western statutes are seldom referred to in the Regulated Riparian Model Water Code.

The most fundamental departure from common law riparian rights found in regulated riparian statutes is the requirement that, with few exceptions, no water is to be withdrawn from a water source without a permit issued by the State within which the withdrawal occurs. Such a requirement is based on a State's police power to regulate water withdrawal and use in order to protect public health, safety, and welfare. Regulated riparian statutes allocate the right to use water not on the basis of temporal priority but on the basis of whether the use is "reasonable" (or substitute terms such as "beneficial," "reasonable-beneficial," or "equitable"). The statutes also usually abolish common-law restrictions based on the location of the use and require periodic review of the continuing social utility of the permits. Finally, the statutes create mechanisms for long-term planning and for otherwise providing for the public interest in the waters of the State. *See* Dellapenna, §§ 9.03 to 9.05. This Regulated Riparian Model Water Code follows this pattern for the allocation of the waters of a State. Although recognizing the necessity of integrating water allocation with regulations designed to protect water quality, it does not attempt to exhaust the latter field. The Code does address the difficult question of multijurisdictional transfers of water, whether across a water basin boundary or across a state line. *See* Dellapenna, § 9.06.

Today, the main threats to the availability of water in eastern States, both as to quantity and as to quality, are not pollution or withdrawal, but the physical and ecological transformation by human intervention of water sources and the lands on or in which the sources are found. Dams not only "withdraw" water, they disrupt temperature and nutrient patterns on which rivers depend for their ecological diversity, as does the "straightening" of a river. Repeated withdrawals of water from water sources both deplete the quantity of water remaining and alter the waste assimilative and other natural aspects of the water source, often to the detriment of potential users—human and non-human. Sediments from farms suffocate many small forms of aquatic life. Vacationers who cut trees to improve the view from summer homes may erode stream banks or lakeshores. As a result, the stream then carries more sediment and becomes wider, shallower, and warmer, making the water unfit for many important organisms and for many significant uses. The Regulated Riparian Model Water Code addresses only direct use of the water. It does provide some provisions for the coordination of the regulation of all human activity relevant to the waters of the State, but it does not address directly human activities other than direct uses that, often unintentionally, despoil the waters of the State.

## ACKNOWLEDGMENTS

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The Water Regulatory Standards Committee comprises individuals from many backgrounds, including consulting engineering, law, research, and those in the construction industry, education, government, design, and private engineering. Work on this standard began in 1995 and incorporates information developed by the former Water Laws Committee of the Society as described in the preface. Those individuals who served on the Water Regulatory Standards Committee in the drafting of ASCE Standard 40-03 were:

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## NOTE: FORM AND SOURCES

A few words about the form of this Code and how that form reflects the goals of the drafters. The Code follows the form commonly used today in the drafting of proposed uniform state laws under the auspices of the National Conference of Commissioners of Uniform Laws. That form consists of statutory language in boldface that a legislature could enact with or without change. This language is arranged in sections, generally consisting of a single sentence, for ease of citation. The numbering of the sections consists of three parts, indicating the chapter of the Code, the part of the chapter, and the sequential numbering of each section within that part. Each section in this Code also contains an "R" to distinguish it from sections in the Appropriate Rights Model Water Code (denominated "A"). For example, § 2R-2-02 means section 2 of Part 2 of Chapter 2 of the Regulated Riparian Model Water Code. Each section necessarily is optional in that a state legislature, even if it were to decide to enact the bulk of this Code, could delete or change any particular section. Nonetheless, the drafters of this Code strove to create a complete, comprehensive, and well-integrated statutory scheme for creating or refining a regulated riparian system of water law capable of dealing with the water management problems of the twenty-first century. The drafters have concluded that nearly every section of this Code is necessary to achieve that goal. Several sections (§§ 2R-2-22, 3R-1-03, 4R-4-01 to 4R-4-08, 5R-4-09, and 5R-5-03), however, are specifically denominated

"optional." This indicates that the drafters considered that these sections might not be necessary or appropriate to the needs of a particular state. These sections, therefore, merit special consideration should any legislature consider enacting this Regulated Riparian Model Water Code. A coherent and workable Code would still result were all of the "optional" sections to be omitted.

This Code refers to the latest *ASCE Policy Statements* and to certain common references. *ASCE Policy Statements* typically are updated every three years and should be consulted for changes occurring after this document is completed. For the eastern tradition of water law, the central source is Joseph Dellapenna, *Riparianism* ["Dellapenna"], in *WATERS AND WATER RIGHTS* chs. 6–10 (5 vols., Amy Kelley, ed., 1991) ["WATER AND WATER RIGHTS"]. Other standard sources are FRANK MALONEY, RICHARD AUSNESS, AND J. SCOTT MORRIS, *A MODEL WATER CODE* (1972) ["MALONEY, AUSNESS, AND MORRIS"]; LEONARD RICE AND MICHAEL WHITE, *ENGINEERING ASPECTS OF WATER LAW* (1987) ["RICE AND WHITE"]; JOSEPH SAX, BARTON THOMPSON, JR., JOHN LESHY, AND ROBERT ABRAMS, *LEGAL CONTROL OF WATER RESOURCES* (4th ed. 2006) ["SAX et al."]; GREGORY WEBER, JENNIFER HARDER, AND BENNETT BEARDEN, *CASES AND MATERIALS ON WATER LAW* (9th ed. 2014) ["WEBER, HARDER, AND BEARDEN"]. To simplify citation throughout, these standard references are cited only in the form indicated in brackets after the reference.