

Water Issues
White Paper

Georgia Water Law: The Way Forward

Prepared for the Comprehensive State Water
Plan Joint Study Committee

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Introduction

The primary focus on this paper is on the allocation of water to direct private and public consumptive uses, with a secondary focus on the private law dimensions of water quality issues. This paper does not address the public regulation of water quality, public or private rights of access, or the drawing of boundaries along, in, or under waterbodies.

Changing technologies and growing populations already stress existing legal regimes for the management of water resources. On top of this, there is little reason for doubt that today the planet is undergoing significant, even alarming climate change. In the past such global climate changes had dramatic effects on water resource availability with disastrous consequences for many human communities. For example, North Africa was transformed from humid grasslands and forests into the Sahara Desert by the retreat of the glaciers at the end of the last ice age. Today's climate changes can be managed without such disastrous consequences for present day communities only if there are major reforms to existing water law regimes at the local, national, and international levels. In particular, water resources must be treated as public property rather than as common or private property, and water must be managed at the drainage basin level rather than according to national boundaries that largely ignore rational water management criteria. Care must be given to decentralizing decision-making and to the use economic incentives insofar as possible, without, however, mistaking economic incentives for markets. The public nature of water resources precludes true markets as a significant management tool.

Riparian and Appropriative Rights

Traditionally such concerns as outlined above have not been of much concern in a "humid" eastern state like Georgia, where water supply nearly always exceeded even local demand. This was reflected in the regime of riparian rights. In contrast, to the west of Kansas City, water shortage was chronic, resulting a very different body of water allocation law being applied in western states, known as appropriative rights. Today, even without severe, record-breaking droughts such as Georgia has recently experienced, Georgia water demand now regularly approaches or exceeds water supply. The continuing urbanization and suburbanization of Georgia—like other states, including those to the west of Kansas City—confronts state water allocation law with the fundamental problem of how to reallocated water to meet new, usually urban and suburban, needs without depriving existing users of their waters.

Evaluating the utility of any system of water allocation is complex, and must be multi-dimensional. At the least, one must consider:

1. the initial allocation scheme;
2. the protection of the public interest in waters;
3. whether the system encourages economic uses and discourages uneconomic uses;
4. how the system rations water during scarcity;
5. the extent to which it allows or impedes the transferability of water rights;

6. on what principle it contains the service area (the area within which a water right must be used); and
7. how the system impacts on distributive equity.

Common-law riparian rights perform poorly on all of these measures. Riparian rights, which originated in the eastern United States early in the nineteenth century, limited the right to use water to those who owned land adjacent to a surface water source. (“Riparian” derives from the Latin word *ripa*, meaning a stream bank.) Originally, riparian rights were often understood as giving each riparian landowner the right to receive the natural flow of the water source without material alteration in quantity or quality by the uses of other landowners. By the end of the nineteenth century, this theory was giving way to a theory that each riparian landowner was entitled to make a reasonable use of the water as it passed over or along the riparian land. “Reasonableness” is a relative concept, decided by comparing the social utility of one use against another. One could never predict how a court would make this decision, especially as courts gave little or no weight to whether a use began earlier than another. Even if one sued and one, the decision only would stand so long as none of the relevant variables changed—any one of which could change at almost any time. Riparian rights only worked if water was more plentiful than demand, and broke down completely in state after state when water became relatively scarce. The result was a classic “tragedy of the commons.”

Applying the foregoing criteria to the operation of riparian rights, one finds that water is allocated to land adjacent to the water source without any concern as to whether that land is the most suitable place (whether in economic terms or otherwise) to use the water. The inefficiencies of private litigation does little to encourage economic uses or to discourage uneconomic uses even during times of scarcity. What rationing does occur is either based upon *pro rata* sharing or upon the unpredictable and unstable estimations of judges acting without adequate information and without relevant expertise. In this, as in the containment of the service area to riparian (or to overlying land for groundwater), the result nearly always ignores the marginal utility of water. The resulting uncertainties alone are sufficient to explain why market transactions have always been rare and fragile in riparian rights states. Finally, although the “reasonable use” theory allows consideration of the public interest and distributive equity in theory, this is done, at best, on a hit or miss basis.

Many people have argued that appropriative rights perform better in most respects, but on close examination that does not appear to be correct. The most salient failing of appropriative rights is that it rewards wasteful over-appropriation in order to capture future rents. In other words, a negative cost to society—the waste of water—is a benefit to the individual water user by allowing that user to appropriate a larger share of the scarce water available. Even in the driest of western states, much or all of the perpetual water shortage would disappear if policies were enacted that eliminated the “negative social cost” effect of appropriative rights.

Appropriative rights do provide enhanced security for those with early priority dates, but only at the cost of exaggerating the insecurities of those with later priority dates. In times of drought, senior users are fully protected, but junior users face complete loss of access to water even when their seniors receive only small benefits from the junior’s loss. In doing this, the system of water rights completely ignores the marginal utility of water. As for markets, these have never functioned on a large scale under appropriative rights and particularly they have not func-

tioned to change, in any basic way, when, where, and how water is used. In effect, appropriative rights tend to freeze water usage patterns in the form in which they first formed. Even the highly praised California Water Bank turns out on close examination to be state management masquerading as a market. Finally, appropriative rights have featured the giving of important public property rights away to private ownership, generally largely to those who are already wealthy. Freeing up true markets for water would likely only accentuate this problem. In any event, there are strong legal reasons why appropriative rights cannot be imported into an eastern state.

Regulated Riparianism

A third system of water allocation law, called regulated riparianism, is based upon the following principles:

1. Water is a public good.
2. Water is an ambient resource.
3. Water sources must be conjunctively managed.
4. Water management must be integrated to include related resources.
5. Water must be made subject to economic incentives.

Regulated riparianism has been enacted in about 18 states, and has been the subject of a Regulated Riparian Model Water Code drafted under the auspices of the American Society of Civil Engineers. The following summary description of regulated riparianism is based on the common core of principles found from examining the regulated riparian statutes and the Regulated Riparian Model Water Code.

The most fundamental departure from common law riparian rights found in regulated riparian statutes is the requirement that, generally with only limited exceptions, no water is to be withdrawn from a water source without a permit from the state within which the withdrawal occurs. Permits determine the rights of water users, not the riparian nature of the use, yet the criterion by which permit applications are judged is whether the proposed use is a “reasonable use” of the water. The criterion of “reasonable use,” however, is applied very differently than at common law. The most important difference is that an administering agency decides before a use begins whether the use is reasonable, both in terms of general social policy and in terms of the effects of the proposed use on other permitted uses. The administering agency is charged to make the permit subject to conditions designed to protect other lawful users and public values. The statutes often contain preferences for certain classes of uses. Temporal priority has been accorded only a strictly limited role in the permit process. Nor are the traditional preferences for riparian land continued: Uses on non-riparian land are no longer unreasonable *per se*; often one of the principle motives of the enactment of a regulated riparian statute was to authorize the use of water on non-riparian land. Finally, in many states, permits are issued only for a period of time (3-20 years) so that when the permit expires the question of the continued reasonableness of the use can be reexamined.

Regulated riparian statutes contain elaborate enforcement provisions, including support for alternative dispute resolution and the administrative resolution of disputes among permit holders. While users are sometimes required to pay fees to the agency for the permits based on the amount of water they will use, these fees cannot be considered payment for the water itself. This

is clearly so when the fees are a set, uniform charge irrespective of the nature of the use or the amount of water used. Even when the fee is variable, however, it is set according to the presumed ability of the user to pay, rather than according to the value which could be created through use of the water. The Regulated Riparian Model Water Code breaks new ground in this respect, requiring water use fees that to some extent reflect the use value of the water.

Such extensive statutory requirements are based on a state's police power to regulate water withdrawal and use in order to protect the public health, safety, and welfare. Still, fear of the political (if not the legal) repercussions of so radically interfering with traditional rights in water has led many state legislatures to exempt some large classes of users (usually agricultural) who were using water when the new statute came into effect from the permit requirement, thus introducing a significant temporal element. A more sophisticated solution to this problem is to guarantee existing users an initial permit, thereafter subject to renewal on the same terms as any other permit—except that renewal is preferred over a proposed new use unless the new use is demonstrably “more reasonable” than the existing use. This approach limits any absolute temporal preference to a single permit cycle. Users who refuse to apply for a permit within a short period of time can be conclusively presumed to have abandoned their claim.

Regulated riparian statutes create mechanisms for long-term planning and for otherwise providing for the public interest in the waters of the State. One of the major purposes of regulated riparian permits is to assure the gathering of the necessary information to enable such planning to occur on an on-going basis. The Regulated Riparian Model Water Code would establish a particularly comprehensive statewide data system. The administering agency also is usually given broad discretion particularly for planning for and dealing with crises brought on by extreme water shortages. The agency can incorporate conditions into the permits based on its plans. The administering agency also is often authorized to adopt restrictions on users should the agency's plans prove inadequate to an actual shortage notwithstanding any inconsistency with a permit. There is in fact some evidence that actual administering agencies prefer to use temporal priority or *pro rata* sharing as least likely to provoke litigation or other difficulties for the agency. This, however, sabotages the scheme of regulated riparianism, based as it is on expert appraisal of which uses will best serve the needs of society.

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. Regulated riparian water codes deal with these problems very differently from how they are dealt with in western states. First, the management of water allocation and water quality issues are usually vested in a single agency charged to integrate the consideration and permitting of uses in light of both sets of policies. Second, the regulated riparian codes usually provide that the agency is to define and protect some minimum flow, whether an historic average low flow, the amount necessary for the preservation of certain kinds of wildlife, or the amount necessary to protect human health or well-being. In a few states whole streams may be withdrawn from private uses except for those uses existing before the transition to the new system of law. There may be provisions authorizing yet other kinds of conditions designed to protect aesthetic or ecological concerns.

Regulated riparianism has certain as yet unsolved problems, relating both to the protection of private values and to the furtherance of public values. Two problems relate to private values:

security of investment, and the transfer of water to higher valued uses. Investment security would appear to be a problem if the time period of a permit is too short, leaving too little time for the initial cost of a project to be recovered before the permit expires. Additional uncertainty could arise when the administering agency has the power, as is often the case, to modify permits in light of new developments, such as unforeseen water shortages. In the actual operation of regulated riparian systems, however, neither sort of uncertainty seems to have caused significant difficulties. If anything, administering agencies might be accused of being too sensitive to the fears of large institutional investors in water. Permits are seldom flatly denied renewal, although new and more stringent conditions are sometimes attached at the time of renewal, while administering agencies have consulted with major water users in crafting responses to water emergencies.

Usually in existing regulated riparian statutes there is no express provision for the transfer of water rights or permits between potential users. The Regulated Riparian Model Water Code actually charges the administering agency to encourage market transfers of water in various ways. Given the dearth of markets under appropriative rights, however, it remains unclear whether much of a market could develop to facilitate the transfer of water used under regulated riparian permits to higher valued uses. Theoretically, one purpose of the regulated riparian system is to enable the administering agencies to force such transfers through the non-renewal of permits. In practice, however, the agencies free up less water through the renewal process than the theory would suggest because the agencies prefer to tighten conditions on existing uses rather than to deny renewals outright. Non-renewal of permits will remain an infrequent and cumbersome device unless the state is willing to create a good deal of investment insecurity.

This leads to the bottom line: Is such a system worth its costs? Clearly there will be significant financial costs in administering a regulated riparian system, and the tendency of government bureaucracies to replicate their errors throughout the state is another substantial cost. Yet given the increasing failure of traditional riparian rights (a common property system) to cope with the needs of modern societies, and the only slightly better performance of appropriative rights (as close to a private property system as we are likely to achieve), there seems little choice but to move to a regulated riparian system (a public property system). Regulated riparianism is not a perfect system, but it would appear to be the best suited to the cultural, economic, legal, hydrologic, and political settings of eastern states.

Water Allocation in Georgia—Surface Water

For more than a century, Georgia was formally committed by statute to what has been described by the Justice Harold Hill, Jr., as “a version of the natural flow theory of riparian rights doctrine as modified by a reasonable use provision.” *Stewart v. Bridges*, 249 Ga. 626, 292 S.E.2d 702 (1982); *Pyle v. Gilbert*, 245 Ga. 403, 265 S.E.2d 584 (1980). This self-contradictory description derives from OCGA §§ 44-8-1 (adopting the natural flow theory), 51-9-7 (adopting the reasonable use theory while reiterating the natural flow theory). In fact, as is true in all states committed to riparian rights, Georgia courts applied the reasonable use theory when they had to make a choice. As discussed above, the reasonable use theory suffers from serious defects. Georgia courts, however, could do little to remedy these defects. Georgia courts remained committed to ignoring temporal priorities in deciding the reasonableness of water usage. This is shown not only in classic riparian rights disputes, but also in the coolness of Georgia’s courts to claims of prescriptive rights. *See, e.g., Brown v. Tomlinson*, 246 Ga.513, 272 S.E.2d 258 (1980). Georgia

courts have, however, made some limited efforts to accommodate the idea of markets to Georgia riparian rights. *Pyle v. Gilbert*, 245 Ga. 403, 265 S.E.2d 584 (1980). Apparently all that a buyer acquired was the right to claim a reasonable use of the common pool resource. Markets do not appear to have become a major activity in Georgia.

Georgia's Law of Ground Water

In Georgia, like most states, the law of ground water allocation was treated very differently from the law of surface water allocation. *City of Atlanta v. Hudgins*, 193 Ga. 618, 19 S.E.2d 508 (1942). Courts and legislatures indicated that they could not determine the facts relating to ground water usage and thus they retreated into the proposition that the owner of land held “absolute ownership” of percolating water in the ground, although they held only riparian rights in the rare case in which a court found an “underground streams.” Georgia’s courts limited the theory of absolute ownership in instances where they found that the water was withdrawn “maliciously”—for the purpose of hurting another landowner. Georgia’s courts also found that landowners could be liable for creating a private nuisance through pollution of the groundwater. *Tri-County Investment Group, Ltd. v. Southern States, Inc.*, 231 Ga. App. 632, 500 S.E.2d 22 (1998); *Hoffman v. Atlanta Gas Light Co.*, 206 Ga. App. 727, 426 S.E.2d 387 (1992). Notwithstanding these limitations, the Georgia law of ground water created the same sort of tragedy of the commons as did riparian rights for surface water.

In most other states, as the knowledge of how ground water behaves has become perfected, courts or legislatures have abandoned the absolute ownership theory in favor of a reasonable use theory, a “correlative rights” theory, an appropriative rights theory, or a regulated riparian approach. Only a few states, however, have address the problem of the need to manage surface and ground water conjunctively. Until the Georgia General Assembly set about to establish a permit system—a regulated riparian system—for groundwater, Georgia courts continued to adhere to the modified rule of absolute ownership outlined above.

The Public Trust

There appears to be no case in Georgia applying the public trust doctrine to water rights in the state. The public trust theory originally applied to the lands beneath navigable waters. Today, it is often applied, at least in western states, to the waters themselves as well as to related resources. *National Audubon Soc’y v. Superior Court*, 33 Cal. 3d 419, 658 P.2d 709, *cert. denied sub nom City of Los Angeles v. National Audubon Soc’y*, 464 U.S. 977 (1983). By that theory, “public waters”—basically navigable waters and their tributaries—are owned by the state in trust for the public. Today, the public trust purposes include:

1. commerce;
2. navigation;
3. fishing;
4. recreation; and
5. ecological needs.

A few courts appear to have applied the public trust even to protect aesthetic concerns.

The public trust doctrine has rarely been applied to water rights in a state that follows the riparian tradition. Generally, while the public trust doctrine invalidates actions by the legislative or executive branch that do not serve trust purposes, courts usually approach such questions by balancing the asserted public trust interest against other public and private interests to determine whether the legislative or executive branches have acted improperly. *In re Water Use Permit Applications*, 94 Haw. 97, 9 P.3d 409 (2000). As courts are already engaged in balancing under riparian theory, the public trust theory would seem to add little directly to water allocation decisions. What it does do is justify the legislature in enacting broad regulatory statutes to protect the public trust interest in the waters of the states. Georgia's legislature has done so in several statutes.

Georgia's Regulated Riparianism

Over the past 40 years, the Georgia General Assembly has enacted a broad range of statutes that regulate various aspects of water use in the state. Two address directly the allocation of water to particular uses through the requirement of permits for the use of water—*The Ground Water Use Act of 1972*, OCGA §§ 12-5-90 to 12-5-107, and a 1977 amendment to the *Georgia Water Quality Protection Act of 1964*, OCGA § 12-5-31. These statutes impose similar permit systems on water users, with the first applying to users of groundwater and the second to users of surface water. The core of both statutes is a requirement that any user who withdraws or impounds more than 100,000 gallons per day from a water source in the state must have a permit to do so issued by the Environmental Protection Division of the Department of Natural Resources. OCGA §§ 12-5-31(a)(1), 12-5-96. Applications for permits are to be evaluated according to the same criteria or reasonableness as applied under common law riparian rights. OCGA §§ 12-5-31(e), (g), 12-5-96. The duration of permits is to be determined by the Director of the Division, generally within upper and lower limits of 10 to 50 years. OCGA §§ 12-5-31(h), 12-5-97. Modifications to permits are allowed only if approved by the Director. OCGA §§ 12-5-31(i), (k), 12-5-97. The Director can issue emergency orders in appropriate cases. OCGA §§ 12-5-31(l), 12-5-102.

These complex statutes represent a good beginning towards an adequate regulated riparian system. They establish in law the public nature of water and provide a mechanism for managing water resources consistent with the public trust as well as with promotion of private welfare. Several major problems survive, however, under the statutes in their present state. The most important problems that persist under the Georgia statutes are:

1. the failure to manage surface and ground waters conjunctively;
2. the near complete exemption of farm uses from the operation of the permit system, OCGA §§ 12-5-31(a)(3), 12-5-105;
3. the silence regarding uses on non-riparian lands at all and near silence regarding mention of interbasin and interstate transfers, OCGA §§ 12-5-31(h);
4. the lack of provision for public or local participation in decision-making;
5. the failure to implement economic incentive systems to promote the efficient use of water resources; and
6. the failure to displace unequivocally the common law of surface and ground water allocation.

Given the growing pressure on water resources within the state as well as the obligation to share common water resources with neighboring states, a more effective system of water allocation law is needed in Georgia. Enacting a more effective regulated riparian statute would probably withstand constitutional challenge. Such challenges have failed in every other state where they have been brought. *State v. Braun*, 378 A.2d 640 (Del. 1977); *Village of Tequesta v. Jupiter Inlet Corp.*, 371 So.2d 663 (Fla.), *cert. denied*, 444 U.S. 965 (1979); *Iowa Natural Resources Council v. Van Zee*, 261 Iowa 1287, 158 N.W.2d 111 (1968); *Crookston Cattle Co. v. Minnesota Dep't of Natural Resources*, 300 N.W.2d 769 (Minn. 1981); *Omernik v. State*, 64 Wis. 2d 6, 218 N.W.2d 734 (1974). These statutes are reasonable regulations of property rights, not a taking of them. Even if they are seen as more directly interfering with private property than that suggests, these statutes express the state's own property interest under the public trust doctrine. There is little room for a successful challenge on takings grounds. If the statute is carefully drafted, challenges based on due process, equal protection, or interstate commerce are equally likely to fail.