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Managing Agricultural Water Use During Drought: An Analysis of Contemporary Policies Governing Georgia's Flint River Basin

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Managing Agricultural Water Use During Drought: An Analysis of Contemporary Policies Governing Georgia's Flint River Basin¹

Mark Masters, Ronald Cummings, Brigham Daniels,
Kristin Rowles, and Douglas Wilson²

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I. Introduction

If you were to ask Georgia's agricultural water users about the security of their right to use water, you would find that the conventional wisdom among these users is that their water rights are secure. While some agricultural water users may gripe about the additional hassle caused by recent changes to Georgia's water law, most users likely believe that these changes have not impacted the security of their water rights. In fact, a substantial number of these users may even hold the view that because the state has issued them a use permit, the changes to the law have, if anything, increased the security of their water rights.

Those who follow Georgia water law closely, however, would likely characterize the changes made over the past two decades quite differently. A close examination of Georgia's water law indicates that considerable confusion and uncertainty have been introduced into the legal regime, particularly in the case of the thirsty Flint River Basin. The changes have complicated water rights at a time when pressure on Georgia's water resources is growing, increasing the need for certainty.

This article takes a closer look at some of the changes made to Georgia water law, focusing on how these changes impact the Flint River Basin. This survey paints a picture of laws that are often ambiguous, confusing, and fraught with uncertainty. The central question raised is whether the tenure of an agricultural user's permit correlates with the security of that water user's claim to water. The perception of many agricultural water users, particularly those with grandfathered permits, is that tenure is highly correlated with the security of the water right, with the first round of permitting (for uses initiated prior to July 1, 1988) seen as the most secure and the later rounds of permitting seen as increasingly tenuous.

¹ An earlier version of this article was published by the Georgia Water Planning and Policy Center as Water Policy Working Paper 2007-001 and is available at http://www.h2opolicycenter.org/pdf_documents/water_workingpapers/WP2007-001_final.pdf (last visited June 30, 2009).

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A casual reading of Georgia law seems to harmonize with the agricultural water users' lay understanding. Legislation enacted by the Georgia General Assembly in 1988, 2003, and 2006, in essence, creates different "classes" of agricultural water use permits. In 1988, the General Assembly placed farmers who had acquired their water use permits based on use prior to July 1, 1988 and submitted applications to the Georgia Environmental Protection Division (EPD) prior to July 1, 1991 into a distinct tenure from subsequent permittees.³ These permits are commonly known as "grandfathered" permits, but we refer to them as "Tenure 1" permits. There are some major distinctions between Tenure 1 and subsequent permits. First, Tenure 1 permits were granted by EPD on the basis of a user's equipment capacity, as opposed to the reasonable use criteria applied to subsequent tenures of permits.⁴ However, as discussed below, the meaningfulness of this distinction is unclear and even problematic. Second, in the Flint River Basin, all Tenure 1 permit holders qualify to participate in the drought abatement program created by the Flint River Drought Protection Act.⁵

A second class of permits, which we refer to as "Tenure 2," are permits based on use initiated after July 1, 1988 and on applications submitted to the EPD prior to December 1, 1999. The only difference between Tenure 2 and Tenure 1 permits is that limits to water use under a Tenure 2 permit are based on a "reasonableness" criterion, a multifactor weighing test left largely to the EPD's discretion.⁶ In the Flint River Basin, Tenure 2 permit holders, like Tenure 1 permit holders, are eligible to participate in the drought abatement program created by the Flint River Drought Protection Act.⁷

A moratorium on the issuance of new agricultural water use permits between December 1, 1999 and March 20, 2006 created a third class of permits. During the moratorium period, the EPD received 1,134 permit applications for water use involving the irrigation of approximately 96,219 acres.⁸ The EPD has been reviewing and processing the backlog applications since the moratorium was lifted. Legislative amendments to Georgia's water

³ It is important to note that, particularly for Georgia's groundwater users, it is not entirely clear what the actual limits of their rights were prior to 1988. In some instances, it appears that Georgia groundwater users had absolute dominion over their groundwater resources, limited only by their ability to get it out of the ground. In other instances, particularly in the case of a strong hydrological connection between groundwater and surface water, it appears that groundwater users were limited by a reasonableness standard. This issue is discussed in further detail in the Appendix to RONALD CUMMINGS, ET AL., *MANAGING AGRICULTURAL WATER USE DURING DROUGHT: AN ANALYSIS OF CONTEMPORARY POLICIES GOVERNING GEORGIA'S FLINT RIVER BASIN*, Water Policy Working Paper 2007-001 (2007) *available at*

http://www.h2opolicycenter.org/pdf_documents/water_workingpapers/WP2007-001_final.pdf . This may prove quite important in future litigation because it could alter how a reviewing court treats grandfathered permit holders.

⁴ GA. CODE ANN. § 12-5-31(a)(3) (surface water); § 12-5-105(a) (groundwater).

⁵ *Id.* § 12-5-31(h) (surface water); § 12-5-97(a) (groundwater). The details of the Flint River Drought Protection Act are addressed in Section IV.

⁶ *Id.* § 12-5-31(e)-(g) (surface water); § 12-5-96(d) (groundwater).

⁷ *Id.* § 12-5-31(h) (surface water); § 12-5-97(a) (groundwater).

⁸ GA. DEPT OF NAT. RES., ENVIRONMENTAL PROTECTION DIVISION, *FLINT RIVER REGIONAL WATER DEVELOPMENT AND CONSERVATION PLAN*, 33, 41 (Mar. 20, 2006), *available at* <http://www1.gadnr.org/frbp/Assets/Documents/Plan22.pdf> (last visited June 30, 2009).

laws adopted during the moratorium period affect all backlog permits equally, regardless of the date of the application.

Three such amendments are of particular interest. First, participation in the Flint River Drought Protection Act's acreage reduction program (a voluntary program providing financial incentives to farmers who agree not to irrigate) is denied to all permit holders with applications submitted to the EPD after December 1, 1999. Second, for all permits issued after July 1, 2003, an amendment provided that permit holders may not use water until a state-approved water meter is installed on permitted pumps.⁹ This provision does not distinguish between the application submission date and the permit issuance date, but it is reasonable to assume that it applies to all backlog permits since all are issued after July 1, 2003.¹⁰ Additionally, groundwater users who receive backlog permits have a special obligation to file annual reports documenting their water use to the state.¹¹

As an aside, there is an additional distinction between backlog permits and Tenure 1 and 2 permits which should be kept in mind in later discussions of how permits are treated during drought. Tenure 1 and 2 permits were issued with little or no consideration given as to the location of the proposed withdrawal. In considering backlog applications, however, the EPD plans to give considerable attention to the locations of proposed withdrawals, especially in sub-areas that are considered "vulnerable" to low flow conditions during drought.¹² Thus, EPD may in the future deny some backlog permit applications that would have been approved had they been submitted prior to December 1, 1999.

A third legislative amendment makes a distinction between backlog permits with applications submitted to the EPD before and after December 31, 2002. For permit holders that submitted applications to the EPD after December 31, 2002, the permit holder must pay the costs for the required water use meter. Thus, we divide backlog permits into two Tenure classes. Tenure 3 permits are those backlog permits for which applications were received by the EPD prior to December 31, 2002 and, therefore, not subject to the meter payment requirement. Tenure 4 permits are backlog permits where applications were received by the EPD after December 31, 2002 and permit holders must pay for their meters.

The final class of permits, Tenure 5, are those for which applications were submitted after March 20, 2006. In addition to all the restrictions imposed on Tenure 4 permit holders, Tenure 5 permits are subject to a 25-year term and a permit application fee.¹³ In addition, the EPD may revoke Tenure 5 permits if use does not begin within two years of the user receiving the permit.¹⁴

⁹ GA. CODE ANN. § 12-5-31(m.1)(2)(D).

¹⁰ It is not clear how this provision will be enforced. It would be very difficult to determine if a well has been used before a meter is installed. Moreover, the code is silent as to what agency has enforcement responsibility for this provision – the EPD or the Georgia Soil and Water Conservation Commission, which coordinates the well meter program.

¹¹ GA. CODE ANN. § 12-3-105(b).

¹² Flint River Plan, *supra* note 8, at § I.B.

¹³ GA. CODE ANN. § 12-5-31(a)(3) (surface water); § 12-5-105(a) (groundwater).

¹⁴ *Id.* § 12-5-31(k)(6.1) (surface water); § 12-5-105(b)(2) (groundwater).

The major conditions imposed on permits with different “tenures” are presented below in Table 1. After reviewing the information in Table 1, it becomes clear that Tenure 1 permit holders are given preferential treatment in terms of all permit characteristics. Additionally, the later a permit is received, the more encumbered a permit becomes.

Table 1: Permit Characteristics of Different Permit Tenures*

	Tenure 1 Pre-7/1/88	Tenure 2 7/1/88 – 12/1/99	Tenure 3 12/1/99 – 12/31/02	Tenure 4 12/31/02 – 4/20/06	Tenure 5 Post-4/20/06
Standard used for EPD’s permitting decision	Pumping capacity	Reasonable use	Reasonable use	Reasonable use	Reasonable use
Annual reporting required	No	No	Surface: No GW: Yes	Surface: No GW: Yes	Surface: No GW: Yes
May be required to pay for meter	No	No	No	Yes	Yes
Can initiate use prior to meter installation	Yes	Yes	No	No	No
\$250 application fee	No	No	No	No	Yes
25-year term on permit	No	No	No	No	Yes
Permit revocable for non-use	No	No	No	No	Yes, if initial use doesn’t begin within 2 years
Qualifies for Flint River Basin Drought Protection Act’s program	Yes	Yes	No	No	No

* Dates refer to date application received by the EPD.

While in many respects a permit’s tenure seems to control the degree to which a permittee is restricted, the discussion that follows illustrates that the clear lines seemingly drawn by the law may evaporate when scarcity sets in, the very time that water users desire certainty the most. This looming uncertainty is highlighted by focusing on two questions of central importance:

Question 1: *Can the EPD modify, revoke, or in any way alter water use permits during periods of drought?*

Question 2: *Does the tenure of a permit affect the permit holder’s vulnerability to any such modification or revocation?*

A close examination of three sets of laws and regulations is necessary to put these questions in proper perspective. Thus, Section II begins with an overview of relevant sections of existing laws, other than the Flint River Drought Protection Act, which is discussed separately in Section IV. Section III examines EPD policies, especially those associated with the agency's recently completed Flint River Basin Regional Water Development and Conservation Plan. Section IV describes pertinent provisions of the Flint River Drought Protection Act, with particular attention given to the EPD's rules for implementing the irrigation-reduction auction. Concluding remarks are offered in Section V, wherein suggestions are offered for alternative means by which the state might design an equitable method for reducing agricultural water use during periods of drought.

II. Implications of Georgia Water Law for the "Status" of Permits

This section focuses on the laws that govern the EPD's ability to reduce agricultural water use in times of drought or other circumstances that lead to water scarcity. In doing so, however, this section does not consider instances in which a drought has been declared by the EPD and thereby activated the Flint River Drought Protection Act. That act will be discussed in detail in Section IV. Rather, this section attempts to answer the two questions described above, under conditions when the Drought Protection Act is *not* invoked. First, can the state modify or revoke an agricultural water use permit? Second, if so, does the tenure status of a permit matter in any such action?

As explained above, many of Georgia's agricultural water users may believe that EPD has no such power and that the more senior the tenure of a permit, the more secure the permit holder's water rights are. And in fact, a review of Georgia's water law produces very few code provisions that contradict this perception. However, as discussed below, at least one code provision regarding surface water permits and a similar provision regarding groundwater permits appears to allow the EPD to modify and revoke water use permits. These code provisions provide such a substantial loophole that they cast a great deal of uncertainty onto the security of existing users' water rights.

Before turning to the issue of the EPD's power to modify and revoke permits to make way for new permittees, it is important to note that the legislature has provided the EPD the power to revisit permits to protect the health and safety of Georgians or otherwise respond in times of crisis or emergency. In the context of surface water, for example, the Georgia Code gives the director of the EPD the power to "revoke, suspend, or modify a permit for any other good cause consistent with the health and safety of the citizens of this state."¹⁵ Similarly, the legislature has provided the EPD some power to restrict use during times of emergency.¹⁶ While the purpose of these exceptions is understandable, the lack of clarity about what exactly the EPD should do is somewhat troubling for those seeking more certainty about water rights. For example, how specifically should the agency modify or revoke rights once it has found that water use threatens the public health or that an emergency is looming? It is unclear how a permit holder's tenure plays into the probability that the EPD will ask any particular user to cut back when the agency uses its authority provided by either of these provisions.

¹⁵ *Id.* § 12-5-31(k)(8).

¹⁶ *Id.* § 12-5-31(l).

However, as alluded to above, the General Assembly has created a much more substantial loophole. With respect to surface water, the EPD Director “may suspend or modify a farm use permit if he should determine through inspection, investigation, or otherwise that the quantity of water allowed under the permit *would prevent other applicants from reasonable use of surface waters for farm use.*”¹⁷ A very similar provision is found in the context of Georgia’s groundwater law.¹⁸ Taken literally, these provisions of the code appear to give the Director the power to revoke, suspend, or modify *any* existing farm use permit in order to “make room” for new applicants seeking permits to exercise their riparian rights. In isolation, these provisions seem to make a permit holder’s tenure *irrelevant*. Perhaps equally troubling for Georgia water users seeking security in their water rights is that the code is silent as to how the EPD should implement this provision.

To appreciate the implications of this provision in the code, consider the following hypothetical example. Suppose there are three farmers with water use permits within a given watershed. Acreage irrigated by each and the date at which the permit was acquired are as follows:

Farmer A (1988)	3,000 acres
Farmer B (1998)	1,000 acres
Farmer C (2006)	2,000 acres

The water use by Farmers A, B, and C exhausts water supplies in the watershed, especially during drought. Farmer D, a riparian owner in the watershed, wishes to initiate the irrigation of 3,000 acres. Because the three farmers are using all the available water, the EPD Director would have to conclude that use by Farmers A, B, and C prevents this “other applicant” from reasonable use of available surface waters. Can the Director suspend or modify the exist permits to allow a new applicant reasonable use of the surface waters? The answer depends on the intent of the Georgia General Assembly and whether other legal safeguards are intended to govern the EPD decision.

With respect to legislative intent, how should the EPD evaluate “reasonable use” for new permit applications, such as Farmer D’s? Is the application by Farmer D for 3,000 new acres “reasonable”? And, if not, what constitutes a “reasonable” request? From the perspective of existing water users, understanding what uses are reasonable is important because it would allow them to at least venture a guess as to whether their existing rights to use water are vulnerable to applications submitted by prospective rival users.

As one might suspect, grasping for hard and fast rules when weighing reasonableness is difficult because it is context-specific. In fact, the Georgia legislature did not even attempt to draw a clear line that can help users make reliable forecasts about how “reasonable” a use is. Rather, in determining what constitutes a “reasonable” request, the Georgia legislature relies on a multi-factor approach that includes a broad range of categories. Examples of these categories illustrate their diversity. The legislature instructed the EPD to consider, among other things, the number of users of the water resource; the physical

¹⁷ *Id.* § 12-5-31(k)(7) (emphasis added).

¹⁸ *See id.* § 12-5-105(b)(3).

limits of the resource; the value of proposed use; and, the all-encompassing varying circumstances of each case.¹⁹ This broad and open analysis should make incumbent water users feel at least somewhat vulnerable that somewhere down the road some prospective user will find a way to trump the rights of some existing users, possibly himself included.

What happens if the EPD deems a request by a new user to be “reasonable.” For example, in our hypothetical, if the EPD allots water to Farmer D, who then among Farmers A, B, and C, gives up water, by how much, and why? Does the EPD apply the same criteria to exiting water users as it does to the new user when it considers making room for other users? Does the permit tenure of existing users matter in this analysis? Do Tenure 1 permits receive any protections against the threat of future users? Or, are all users treated equally?

For example, if the EPD grants Farmer D water for 3,000 acres, which over-allocates the watershed, does each farmer (A, B, and C) give up equal shares of 1,000 acres? In that scenario, Farmer B would be out of business. Alternatively, do Farmers A, B, and C give up acreage that is proportional to their existing share (A gives up 50%; B gives up 16.6%; C gives up 33.3%)? Finally, does tenure matter and if so, how much? For instance, do D’s needs require that Farmers B and C go out of business, leaving Farmer A, the senior permit holder, unaffected? Or, is there no magic formula and instead the EPD has great latitude to make decisions about who gives up what?

Admittedly, this hypothetical example was designed to simplify how some alternative scenarios might play out. However, the importance of the questions raised by this hypothetical is only amplified by the numerous potential water users found in most of Georgia’s water basins. The dismal, yet increasingly foreseeable, situation characterized above leaves existing permit holders facing enormous uncertainty as to the long-term security of their rights to use water. This uncertainty exists even if an irrigator holds a Tenure 1 permit to irrigate lands the way he has for decades.

As unpredictable as the law governing the EPD’s ability to modify and revoke existing permits seems, the uncertainty of the law is only compounded when read in relation to other statutory provisions. Arguably, other provisions of the code pertaining to the EPD’s authority to issue new permits appear to undercut some of the force of the EPD’s ability to modify or revoke existing permits. For example, in evaluating what constitutes a reasonable use, the EPD must also consider factors that point in the direction of protecting existing users. For example, in consideration of new permits for agricultural water users, the EPD must weigh “the extent of any injury or detriment caused or expected to be caused to other water users,”²⁰ “the prior investments of any persons in lands,”²¹ and in the case of surface water, the EPD must heed the mandate that “granting of [a new] permit shall not have unreasonably adverse effects upon other water uses in the area, including potential as well as present use.”²²

¹⁹ *Id.* § 12-5-31(e)-(g) (surface water); § 12-5-96(d) (groundwater).

²⁰ *Id.* § 12-5-31(e)(7) (surface water); § 12-5-96(d)(7) (groundwater).

²¹ *Id.* § 12-5-31(e)(9) (surface water).

²² *Id.*

Similarly, another section of the Georgia Code provides that EPD “shall take into consideration the extent to which any withdrawals . . . are reasonably necessary . . . to meet the applicant’s needs and shall grant a permit which shall meet those reasonable needs; provided, however, that the granting of such permit *shall not have unreasonably adverse effects upon other water uses in the area.*”²³

The code provision that perhaps most challenges the notion that the EPD could modify or revoke existing permits is the following: “In the event two or more competing applicants or users qualify equally [under the Code’s reasonability criteria] . . . the director is authorized to grant permits to applicants *or modify the existing permits of users* . . . on a prorated or other reasonable basis . . . ; provided, however, *the director shall give preference to an existing use over an initial applicant.*”²⁴ Viewed in isolation, this section seemingly leads to the conclusion that the EPD cannot make room for other prospective users.

So, at least in isolation, these provisions of the Georgia Code create a confusing and seemingly contradictory picture. In fact, the state of the law may seem so blurry that water users may be tempted to throw up their hands at this point. Unfortunately, neither the EPD attempting to administer the law nor the courts attempting to interpret it have the luxury of walking away from the law just because it is confusing.

All is not lost, however. The legislature has made clear that in interpreting its statutes, one should “look diligently for the intention of the General Assembly.”²⁵ One method for doing so, particularly when the law is confusing, is to “attempt to gather the legislative intent from the statute as a whole.”²⁶ The goal, in this context, is to make the seemingly contradictory laws “harmonize and to give a sensible and intelligent effect to each part.”²⁷

Given the lack of agency decisions and court rulings, one can only speculate regarding how the seemingly contradictory statutory commands discussed above may be interpreted in the future. However, a reasoned guess is possible. While the most sensible reading of Georgia water law suggests that that law conflicts with itself and does not make much sense, the EPD and any reviewing court have to find a way to harmonize the laws passed by the legislature, if possible. Thus, these contradictory commands should be parsed to assure that each of the provisions remains true to the admittedly vague principle of “reasonableness” that Georgia water law embraces.²⁸ When the principle of reasonableness is kept in mind, the legislature seems to be requiring that the EPD make room for new users to the extent that it is reasonable, with part of this analysis requiring that, all else being equal, the EPD give preference to existing users.

Given this reading of the law, it appears that in determining whether a new user can supplant an existing user, the General Assembly gave the EPD a great deal of discretion to

²³ *Id.* § 12-5-31(g) (surface water) (emphasis added).

²⁴ *Id.* § 2-5-31(f) (surface water) (emphasis added).

²⁵ *Id.* § 1-3-1.

²⁶ *Sikes v. State*, 268 Ga. 19 (1997).

²⁷ *Footstar, Inc. v. Liberty Mut. Ins. Co.*, 281 Ga. 448, 453 (2006) (citing *Vollrath v. Collins*, 272 Ga. 601, 603-604 (2000)).

²⁸ For a more detailed analysis, see Cummings, *supra* note 3, at Appendix A.

make judgment calls. Indeed, it is customary in Georgia to give great weight to the interpretation adopted by the administrative agency charged with enforcing the statute, when the agency's interpretation "reflects the meaning of the statute and comports with legislative intent."²⁹ Because the legislature provided a great number of factors for the EPD to weigh with little instruction of how much weight to give each factor, the legislature left the EPD a lot of room to chart the course for Georgia water law. The lack of guidance, however, only adds to the uncertainty facing Georgia farmers holding agricultural water use permits.

Returning to the two questions posed earlier, much uncertainty exists about the extent to which the EPD can and will make room for future users at the expense of present water users. With regards to the status of permits and the relevance of tenure, whether in a drought or not, only ambiguous answers can be gleaned from the Georgia code. Some sections suggest water rights are stable, while others suggest rights can be modified. EPD appears to have the authority to determine tradeoffs in allocation, so long as it at least considers each of the factors dictated by the legislature. Nothing in the code, however, suggests that holders of Tenure 1 permits have any sort of preferred status vis-à-vis later tenured permits in the event that the EPD wishes to reduce agricultural water use during a period of drought or issue new permits.

This observation contradicts the belief of many water users that Georgia water law somehow protects Tenure 1 permits. While permit holders of other tenures bear more burdens in applying for and maintaining their permits, nothing in the code would seemingly justify the notion that Tenure 1 permits are protected from modification as the EPD makes allocation decisions when addressing drought conditions.³⁰

It can be argued that the ambiguities and inconsistencies noted above reflect gaps in the state's water laws as they relate to the notion of riparian rights, particularly that of reasonable use. In 1848, the Georgia Supreme Court clearly rejected the "natural flow" theory of riparian rights in favor of the "reasonable use" theory.³¹ Under the natural flow theory, "[e]ach riparian owner on a waterbody is entitled to have the water flow across the land in its natural condition, without alternation by others of the rate of flow, or the quantity or quality of the water."³² The rationale for the Court's adoption of the reasonable use theory of riparian rights is spelled out in *Price v. High Shoals Mfg. Co.*³³

If the general rule that each riparian owner could not in any way interrupt or diminish the flow of the stream were strictly followed, the water would be of but

²⁹ Schrenko v. DeKalb County School Dist., 276 Ga. 786, 791 (2003).

³⁰ However, it may not matter that this issue is not addressed directly in the code if a reviewing court were to find that the Tenure 1 are qualitatively different than other tenures of permits. A court may, in reviewing the law, determine that Tenure 1 permits are protected from modifications flowing from allocation decisions. There are plausible interpretations of Georgia law that could justify such a finding. Of course, other interpretations of Georgia law might undermine such a finding.

³¹ Henrick v. Cook, 4 Ga. 241 (1848).

³² 1 WATERS AND WATER RIGHTS § 7.02(c) (Amy K. Kelly ed., repl. vol. 2007).

³³ 64 S.E. 87 (1909).

little practical use to any proprietor, and the enforcement of such rule would deny, rather than grant, the use thereof.³⁴

The Georgia Supreme Court reaffirmed its preference for reasonable use in a 1980 case involving irrigation, *Pyle v. Gilbert*.³⁵ The Supreme Court made clear in *Pyle* that “each riparian proprietor is entitled to a reasonable use of the water, for domestic, agricultural and manufacturing purposes, provided, that in making such use, he does not work a material injury to other proprietors.” The Georgia Supreme Court, however, provided little in the way of specifics as to what constituted a “material injury” or the competing demands of Georgia’s many water users should be balanced. Indeed, the *Pyle* court, in remanding the case to a lower court, simply said that the lower court should be “looking always to see if, insofar as injunctive relief is concerned, all the uses of the creek and pond can be accommodated.”³⁶

And what if they cannot? A trial court grappling with this issue made the following observation: “Water rights are becoming more and more important with advancing techniques for its withdrawal and use, and there is a need for the courts or the legislature, or both, to further amplify and clarify equitable water rights between parties, particularly as those rights apply to irrigation.”³⁷ We whole-heartedly agree. In addition, the EPD could be included, along with the courts and the legislature, as a party capable of providing water users with that much needed clarity.

In summary, there is uncertainty and ambiguity as to whether the state can modify or revoke an agricultural water use permit under existing statutes. Further, it is also unclear how the tenure status of a permit matters in such an action. Worse yet, water users are left with an indefinite understanding of their real rights to water when they need it most, under drought conditions.

III. Flint River Basin Regional Water Development and Conservation Plan

This section focuses on EPD’s plan for the Flint River Basin. All regional water plans are required by law to be consistent with the statewide water plan, which was to be presented by the EPD to the Georgia Water Council on June 28, 2007.³⁸ The requirement for statewide planning had little impact on the development of the Flint River Basin Regional Water Development and Conservation Plan (Flint Plan),³⁹ however, because the Flint Plan was finalized on March 20, 2006. The Georgia Comprehensive Statewide Water Management Plan was approved on January 8, 2008, so adjustments to the Flint Plan may need to be made in the future.

³⁴ *Id.* at 88.

³⁵ 245 Ga. 403 (1980).

³⁶ *Id.* at 411.

³⁷ *Id.* at 404 n.3.

³⁸ Detailed information about the Georgia statewide planning process is available at <http://www.georgiawatercouncil.org/>.

³⁹ GA. DEPT OF NAT. RES. ENVIRONMENTAL PROTECTION DIVISION, FLINT RIVER BASIN REGIONAL WATER DEVELOPMENT AND CONSERVATION PLAN (Mar. 20, 2006) available at <http://www1.gadnr.org/frbp/Assets/Documents/Plan22.pdf> (last visited June 11, 2009).

The Flint Plan incorporates the results of significant hydrological modeling of the Flint River Basin, with particular attention given to two, “vulnerable” sub-basins: Ichawaynochaway⁴⁰ and Spring Creek.⁴¹ As a very general statement, the Flint Plan calls for new conservation measures and aggressive management of water resources, measures which could result in significant cut-backs. The Flint Plan suggests that the EPD plans to reduce irrigated acreage in these basins during periods of drought with reliance on the drought protection auction. For example, the Flint Plan states that “some parts of the lower [Flint River Basin (the sub-basins noted above)] have already reached their drought-year ‘safe yield.’ If more withdrawal permits are issued for the lower [Flint River Basin], more aggressive drought-year management strategies will have to be employed, mostly (if not exclusively) in those parts of the Basin closest to their safe yield.”⁴² Furthermore,

If irrigation is decreased during a drought year by 20% of current use in Ichawaynochaway Creek and Lower Flint River⁴³ sub-basins, critical low-flow criteria will be met. If irrigation is decreased during a drought year in the Spring Creek sub-basin by 20%, it is assumed this will have a beneficial affect [sic] on water levels and stream ecology even though critical low-flow criteria may not be met.⁴⁴

Not surprisingly, the inconsistency and uncertainties noted are found in the Flint Plan. In the plan’s discussion of how EPD purports to follow several statutory requirements, the EPD makes the following statements, among others:

- “All legitimate requests for farm use permits must be granted in the [Flint River Basin] once the Plan is adopted.”
- “EPD may issue permits for less than the amount requested by the permit applicant.”
- “In issuing new permits, EPD may decrease the permitted withdrawal amounts of all other permitted users including ‘grandfathered’ permits.”
- “EPD may initiate provisions of the Flint River Drought Protection Act during severe drought years in an effort to maintain critical stream flow.”
- “EPD cannot revoke permits for non-use once initial use has commenced.”⁴⁵

While the EPD’s cursory listing of Georgia’s statutory requirements does not provide much in the way of concrete details, it does highlight what appear to be guiding principles and a glimpse at how the EPD will treat permit holders during times of drought. The Flint Plan suggests that the EPD fully anticipates that permit holders will give way to new applicants if an applicant proposes a use that is more “legitimate” than those holding permits. However, where that line will be drawn and what makes one use of water more “legitimate”

⁴⁰ USGS Hydrologic Unit Code (HUC) 03130009.

⁴¹ USGS Hydrologic Unit Code (HUC) 03130010.

⁴² Flint River Plan, *supra* note 8, at § 2.5.

⁴³ In this case, the Flint Plan refers to the Lower Flint sub-basin, USGS HUC 03130008. However, elsewhere in the plan, the “Lower Flint River Basin” refers to the lower portion of the entire Flint Basin including sub-basins Ichawaynochaway, Spring Creek, Kinchafoonee-Muckalee, Lower Flint, and Middle Flint.

⁴⁴ Flint River Plan, *supra* note 8, at § 2.8(4).

⁴⁵ *Id.* at 52.

than another is left unsaid. At least in some respects then, these guiding principles raise more questions than they answer and compound the uncertainty of rights that exists in the code.

These principles provide a general, albeit undefined, trajectory of the EPD's intention to reduce the rights of incumbent users in times of scarcity. Like the statutory provisions, the Flint Plan includes other text that introduces even more confusion into the mix. Notwithstanding the EPD's observation that "more aggressive management strategies" may be required with the increase in water use permits in the Flint River Basin and the assertion that Georgia law allows the EPD to decrease the permitted withdrawal amount of *all* existing permitted users, the plan states that

In considering new and existing applications for both ground-water and surface-water withdrawals, EPD will evaluate the effect of the proposed water use on existing users and stream flow, and issue the new permit in such a way that the new permit will not adversely impact stream flow or the water available to existing users.⁴⁶

Taken literally, this language would require the EPD to refuse permit requests that impact current users. It is hard to square this language with the seemingly contradictory statutory requirement, noted in the plan by the EPD, to make room for new permits by decreasing "permitted withdrawal amounts of all other permitted users including 'grandfathered' permits."⁴⁷ This contradiction makes it very difficult to say what the EPD's plan actually is. It also seems to increase the legal risk that a court will find the Flint Plan legally impermissible. If the plan was ever challenged in court, the EPD would likely be given much deference, but this internal conflict would not particularly help the EPD's case.⁴⁸

Additional provisions in the Flint Plan that water users may find relevant include the following:

- The EPD will no longer issue permits for proposed Floridan aquifer irrigation wells that are within 0.25 miles of another user's well (unless hydrogeologic evaluation indicates that the proposed well will not cause excessive drawdown in the other's well).
- Regardless of their location, all proposed Floridan aquifer wells will be evaluated for their effect on nearby streams and springs. Proposed irrigation wells that would draw from the Floridan aquifer within 0.5 miles of an in-channel spring or stream exhibiting a demonstrable connection with the Floridan aquifer will not be permitted if evaluation indicates that, for the stream reach closest to the

⁴⁶ *Id.* at 32.

⁴⁷ *Id.* at 52.

⁴⁸ A discussion about the deference paid to agencies administering the Legislature's commands can be found in Cummings, *supra* note 3, at Appendix A, Section II. The Working Paper also discusses plausible outcomes of a court attempting to interpret these seemingly conflicting provisions of the Flint Plan.

proposed well, the well would lower the Floridan aquifer water level to below the average stream state or decrease the discharge of the spring.

- In addition to restrictions on end-guns and other conservation requirements, newly issued surface water withdrawal permits in Spring Creek and Ichawaynochaway sub-basins are required to have low-flow protection plans, requiring a complete cessation of irrigation when discharge at the withdrawal location falls below 25% of the average annual discharge as calculated at the point based on the period of record for the nearest downstream continuous flow gauge, plus a prorated portion of the permitted amount of downstream users. While the Plan states that affected individuals will be notified by the EPD via e-mail or phone call when these conditions exist, the Plan also requires that the permit conditions be followed regardless of whether the permittee has been contacted by the EPD or not.⁴⁹

As a part of the EPD's mandate to establish a "reasonable system of classification," the Flint Plan establishes three categories of small (HUC-12) watersheds. Such watersheds are relevant to the EPD's permitting actions and management plans. "Where necessary, and/or where data are available, permitting and management decisions will take into account site-specific conditions and local stream impacts down to a HUC-12 watershed scale."⁵⁰ These HUC-12 based areas are classified as follows:

Capacity Use Areas: includes watersheds in the Spring Creek Sub-Basin in which hydrologic models indicate decreased baseflow of more than 5 cubic feet per second (cfs) in any month of a drought year, more than 10 cfs in Ichawaynochaway Creek Sub-Basin, and more than 30 cfs in the Lower Flint Sub-Basin.

Restricted Use Areas: includes watersheds in Spring Creek where hydrologic models indicate decreased baseflow of 1-5 cfs in any month of a drought year, 1-10 cfs in Ichawaynochaway Creek Sub-Basin, and 3-30 cfs in the Lower Flint River Sub-Basin.

Conservation Use Areas: includes watersheds in which hydrologic models indicate decreased baseflow of less than 1 cfs in any month of a drought year in Spring Creek and Ichawaynochaway Creek Sub-Basins and less than 3 cfs in the Lower Flint River Sub-Basin.

The area classifications are designed to assist in targeting management actions within the watershed, including the suspension of water withdrawals. The relevance of these provisions is discussed in the next section.

In summary, the EPD's plan for the Flint River Basin echoes and adds to the statutory provisions concerning water management. Moreover, it compounds the uncertainty about the security of water rights and how future water management actions will affect existing and future water users, especially in the Flint River Basin.

⁴⁹ It seems to us that this provision will be very difficult to implement and/or enforce.

⁵⁰ Flint River Plan, *supra* note 8, at 30.

IV. The Flint River Drought Protection Act

The Georgia General Assembly enacted the Flint River Drought Protection Act during the 2000 legislative session and revised it during the 2006 legislative session. The basic purpose of the Act was to provide the EPD with a mechanism for reducing acreage under irrigation in the Flint River Basin during periods of severe drought. The Flint River Drought Protection Act has several key features. First, in order to activate the statutory provisions of the Act, the Director of the EPD must declare a “severe drought” for the upcoming summer by the first of March.⁵¹ In making this finding, the Director can rely on historical, mathematical, and meteorological indicators. Second, if the Director declares a drought, then he or she must also determine the acreage that must be taken out of irrigation to protect the Flint River.⁵² Third, the Director then oversees an “auction-like” process designed to reduce use of the Flint River in accordance with EPD’s previous acreage reduction determination. The auction is a voluntary program wherein farmers agree to not irrigate for the balance of that year in exchange for a given amount of money (per acre).⁵³ Fourth, if the Director is unable to acquire the target acreage in the auction, permitted irrigation may be involuntarily suspended for the year on a last-in/first-out basis; i.e., permits with the most recent issuance date would be suspended first, with the EPD then working backwards through the permit application dates until the target acreage reduction is achieved.⁵⁴

Funding for the Act, which is critical both for the auction and for the involuntary suspensions as set forth by the Act, is “guaranteed” only through the following statement of legislative intent:

The General Assembly intends for the total maximum balance of the unexpended drought protection funds during any fiscal year not to exceed \$30 million. In the event the total balance of unexpended drought protection funds at the end of a fiscal year is less than \$5 million, it is the intent of the General Assembly that the total balance of unexpended drought protection funds be replenished to at least \$10 million *at the earliest possible time*.⁵⁵

The EPD issued a number of rules that added some detail to the basic structure of the Flint River Drought Protection Act.⁵⁶ Perhaps the most fundamental addition to the Act were the rules that determine eligibility for participation in the auction⁵⁷ and the rules that exclude

⁵¹ GA. CODE ANN. § 12-5-546(a).

⁵² *Id.* § 12-5-546(b).

⁵³ *Id.*

⁵⁴ *Id.* § 12-5-547.

⁵⁵ *Id.* §12-5-541 (emphasis added). Given the potentially high costs of implementing the auction and Georgia’s increasingly urban population, it is simply not clear what fund replenishment “at the earliest possible time” might mean to the growing number of legislators representing these urban areas.

⁵⁶ GA. COMP. R. & REGS. Chapter 319-3-28 (Flint River Drought Protection).

⁵⁷ *Id.* 391-3-28.05(b).

permittees who applied for permits after December 1, 1999 from potential involuntary suspension.⁵⁸

This exclusion has dramatic potential implications for Tenure 1 farmers. Only farmers with pre-December 1, 1999 application dates are subject to the auction proceedings and, more importantly, involuntary suspension of their irrigation permits. This exclusion appears to detract from the legislative intent of the Act, which was to provide protection to farmers with more senior tenures of permits. Instead, under the EPD rules, Tenure 1 permittees are protected from involuntary reductions in irrigated acreage only to the extent that they can be accommodated by focusing involuntary reductions on permittees with application dates between July 1, 1988 and December 1, 1999.

The first auction under the Act was held in March 2001. That summer, more than 33,000 acres of Lower Flint River Basin were voluntarily suspended. During the 2002 auction, approximately 41,000 acres were voluntarily suspended. Since the lifting of the permit moratorium in March 2006, new withdrawal permits have been and are being issued. Processing the backlog of over 1,100 permit applications that accumulated during the moratorium could result in new permits for up to 100,000 irrigated acres.⁵⁹ In addition, the EPD may now consider applications for new permits. In the Flint River Basin, both the backlog permits and the newly issued permits are excluded from involuntary suspension or revocation due to over-allocation or drought under the Act.⁶⁰ As new withdrawals are permitted, the protection that the last-in/first-out provision of the Drought Protection Act provides to Tenure 1 permittees becomes severely limited.⁶¹

The EPD has also issued a number of rules that flesh out how it might target particular areas in the Flint River Basin in order to meet its water management objectives. These rules allow it to target “affected areas” for auction, specifically providing that it can focus on specific watersheds and groundwater permits “within 3 miles adjacent to the Flint River or its tributaries where . . . withdrawals may directly decrease stream flow.”⁶² This focused approach, while perhaps smart from a policy standpoint, only increases the possibility that more senior tenured permittees will be affected by future EPD involuntary suspensions.

As discussed above in Section III, the EPD has stated the agency’s intention in the Flint River Plan to reduce withdrawals during a drought by 20% in the “vulnerable sub-basins” of the Ichawaynochaway and Spring Creek. To appreciate how the EPD’s approach may impact water users, some data has been compiled for illustrative purposes in Tables 2

⁵⁸ *Id.* 319-3-28.09 (read in light of “Permittee” as defined in 319-3-29.02).

⁵⁹ Flint River Plan, *supra* note 8, at 41, Table 1.1.

⁶⁰ GA. CODE ANN. § 12-5-543(b)(1)(A) provides that only permits with application dates prior to December 1, 1999 can participate in the Drought Protection auction. Note, however, that outside of the Drought Protection Act, new permits (Tenure 5) for surface water use in the Spring Creek and Ichawaynochaway Creek sub-basins are interruptible without compensation (*see* Flint River Plan, *supra* note 8, at 35), and it would seem that restrictions on new groundwater permits for taking water from the Floridan aquifer will be much more restrictive than in the past. *Id.* at 23.

⁶¹ Due to the dramatic change the exclusion of new permittees has created for implementation of the Flint River Basin Drought Protection Act, it might not hold up if challenged in court. This issue is addressed in additional detail in Cummings, *supra* note 3, at 52-57.

⁶² GA. COMP. R. & REGS. 391-3-28.05(a).

through 6.⁶³ As Table 2 shows, Ichawaynochaway has 394 surface water permits with 62,429 permitted acres and 468 groundwater permits with 63,691 permitted acres. The EPD's Flint River Plan and subsequent rule changes give particular emphasis to concern with water use within a 3-mile "buffer" along Ichawaynochaway Creek. Surface and groundwater acreage included in this 3-mile buffer and acreage in the three area classifications (Capacity Use, Restricted Use, and Conservation Use) are also provided in the table. As Table 3 shows, Spring Creek has 96 surface water permits with 12,897 permitted acres and 1,077 groundwater permits with 137,055 permitted acres.

Table 2: Water Use Permits: Ichawaynochaway Sub-Basin

	Total Number of Permits	Permitted Acreage
Surface water	394	62,429
Surface water, within 3-mile buffer	285	49,430
Capacity	15	1,265
Restricted	11	6,209
Conservation	259	41,956
Groundwater	468	63,691
Groundwater, within 3-mile buffer	296	38,849
Capacity	70	7,229
Restricted	7	590
Conservation	219	31,030

Table 3: Water Use Permits: Spring Creek Sub-Basin

	Total Number of Permits	Permitted Acreage
Surface water	96	12,897
Surface water, within 3-mile buffer	85	11,210
Capacity	8	703
Restricted	9	1,030
Conservation	68	9,477
Groundwater	1,077	137,055
Groundwater, within 3-mile buffer	1,000	127,427
Capacity	261	31,340
Restricted	291	36,105
Conservation	448	50,082

It is unclear whether the EPD's stated policy of reducing withdrawals in these two sub-basins by 20% during periods of drought refers to total permitted acreage or only to acreage within the 3-mile buffer zone. If the 20% reduction were based on total acreage, the EPD would need to retire 25,224 acres in Ichawaynochaway and 29,990 acres in Spring Creek for a total of 55,214 acres. If the 20% reduction was limited to lands within the 3-mile buffer, the EPD would need to retire 17,656 acres in Ichawaynochaway and 27,727 acres in Spring Creek for a total of 45,383 acres. It is interesting to note that during the 2002 auction, only 8,277 of Ichawaynochaway's 49,430 permitted surface water acreage and 3,013 of Spring Creek's 11,210 permitted surface water acreage in the 3-mile buffer zone were voluntarily

⁶³ Data shown were compiled using ESRI ArcGIS based on the agricultural water withdrawal permit database as of December 2006. The data were made available to the authors by the Georgia EPD. Given the dynamic nature of the database involved, it is anticipated that some minor changes have occurred in the numbers since the analyses were performed.

suspended. Thus, the acquisition of more than 45,000 acres in these sub-basins is likely to require prices well in excess of the \$150.00/acre offer price used in the 2002 auction.

If the area classifications are not relevant, the EPD could obtain its targeted acreage entirely from surface permits.⁶⁴ However, if suspension decisions are based on the classifications, the implications for Tenure 1 permittees are substantial. Consider, for example, the Ichawaynochaway Creek Sub-Basin.⁶⁵ Virtually all surface water permits in the Capacity and Restricted Use areas and more than 85% of surface water permits in the Conservation Use areas are Tenure 1 permits.⁶⁶ Obtaining targeted acreage solely from surface water would necessarily require that large acreages of Tenure 1 permits be voluntarily or involuntarily suspended. With the addition of groundwater permits, as shown in Tables 4 through 6, the bulk of permits in the Capacity and Restricted Use area classifications, those most likely to be suspended, are still in the hands of Tenure 1 farmers. Similar conditions are found in the Spring Creek Sub-Basin. As a result, the bulk of permits to be retired, either voluntarily through the auction or involuntarily suspended, would have to come from Tenure 1 farmers.

Table 4: Ichawaynochaway: Auction-eligible Permits within Capacity Use Classification.

	Permits Within 3-mile Buffer							
	Surface water				Groundwater			
Year permit issued	number of permits	acreage	cumulative acreage	% total	number of permits	acreage	cumulative acreage	% total
1988					1	103	103	1
1989	5	284	284	22	2	162	265	4
1990	4	338	622	49	12	1,237	1,502	21
1991	1	99	721	57	12	1,313	2,815	39
1992	5	544	1205	100	24	2,692	5,507	76
1993			1205	100			5,507	76
1994			1205	100			5,507	76
1995			1205	100	1	154	5,661	78
1996			1205	100			5,661	78
1997			1205	100	1	50	5,711	79
1998			1205	100			5,711	79
1999			1205	100	1	114	5,825	81
2000			1205	100	13	1,184	7,009	97
2001			1205	100	2	165	7,174	99
2002			1205	100	1	55	7,229	100
2003			1205	100			7,229	100

⁶⁴ It seems reasonable to assume that the EPD would look first to surface permits given that their retirement would have a larger and more certain effect on surface water supplies than the suspension of groundwater permits.

⁶⁵ Note that Tables 4 through 6 assume that EPD would seek to attain a 20% reduction in permitted withdrawals only within the 3-mile buffer.

⁶⁶ It is important to note that grandfathered permits include those for which applications were submitted prior to July 1, 1991 and were based on water use that had taken place prior to July 1, 1988. Tables 4 through 6 list the issuance date of permits, but not the application date. Application date data were not available. The EPD had a backlog of applications of Tenure 1 permits which took several years to process. For the purposes of this analysis, we estimate that most permits issued in 1995 or before are Tenure permits, but it is possible that some were issued even later than 1995.

Table 5: Ichawaynochaway: Auction-eligible Permits within Restricted Use Classification

	Permits Within 3-mile Buffer							
	Surface water				Ground water			
Year permit issued	number of permits	acreage	cumulative acreage	% total	number of permits	acreage	cumulative acreage	% total
1988								
1989	6	4,719	4719	76				
1990			4719	76	1	57	57	10
1991	2	1,306	6025	97	6	533	590	100
1992	1	103	6128	99			590	100
1993			6128	99			590	100
1994			6128	99			590	100
1995			6128	99			590	100
1996			6128	99			590	100
1997			6128	99			590	100
1998			6128	99			590	100
1999			6128	99			590	100
2000	2	81	6209	100			590	100
2001			6209	100			590	100
2002			6209	100			590	100
2003								

Table 6: Ichawaynochaway: Auction-eligible Permits within Conservation Use Classification.

	Permits Within 3-mile Buffer							
	Surface water				Ground water			
Year permit issued	number of permits	acreage	cumulative acreage	% total	number of permits	acreage	cumulative acreage	% total
1988	11	2,293	2293	5	13	2,554	2,554	8
1989	82	14,292	16585	40	35	6,115	8,669	28
1990	45	6,374	22959	55	33	5,437	14,106	45
1991	75	11,403	34362	82	58	7,259	21,365	69
1992	7	905	35267	84	17	2,145	23,510	76
1993	2	473	35740	85			23,510	76
1994	2	668	36408	87	1	101	23,701	76
1995	3	483	36891	88	1	187	23,888	77
1996	1	44	36935	88	1	182	24,070	78
1997	1	150	37085	88	2	188	24,258	78
1998	2	230	37315	89	3	400	24,718	80
1999			37315	89	2	215	24,993	80
2000	22	3,832	41147	98	43	5,176	30,109	97
2001	2	412	41559	99	5	526	30,635	99
2002	3	346	41905	100	4	389	31,024	100
2003	1	51	41956	100	1	6	31,030	100

Georgia law is silent on the question as to what will happen in the event that a drought is not declared on March 1, but in fact occurs after that date. There are no provisions for a post-March 1 declaration that would trigger an acreage reduction auction. In such a

scenario, if the EPD finds that acreage reduction is required to protect the river, involuntary suspension would seem to be their only recourse. That possibility raises a number of questions. Whose acreage would be suspended? What procedures would be adopted by the EPD in implementing any required suspensions in the absence of the Drought Protection Act process? If a drought is not declared, the EPD might rely on its more general authority to modify permits, discussed above in Section III. If so, that leaves water users with substantial uncertainty.⁶⁷

V. Conclusion

At the beginning of this article, two questions of paramount importance to Georgia's farming sector were posed. First, can the EPD modify, revoke, or in any way alter water use permits during periods of drought? Second, does the tenure of a permit affect the permittee's vulnerability to any such modification or revocation? State law, EPD regulations, and case law provide only ambiguous answers to these questions.

Permittees may not have the clear rights to water that they believe that they have. Their rights are riddled with legal uncertainties. A dilemma is emerging in the Georgia water law regime. As the state tries to comport with the principles of riparian rights, conditions of scarcity, such as during a drought, make such a commitment untenable. Existing laws leave the EPD in a "damned if they do; damned if they don't" position. The EPD faces a certain amount of litigation risk no matter how it attempts to reconcile the laws of the state with respect to water use management. Moreover, as conditions of scarcity become more frequent, the risk of litigation will only increase.

This article does not advocate the adoption of a prior appropriation system for the state of Georgia. Nor does it in fact advocate any particular solution to the uncertainties found in Georgia's water law. However, it calls for support for the clarification of the law to reduce uncertainty about future access to water for permit holders. The riparian doctrine, *as traditionally applied*, is not well suited for guiding water use under conditions of scarcity. Modifications are needed to clarify the rights and responsibilities of permittees during periods of drought or pronounced demand. The state needs to rationalize its water laws in order to eliminate inconsistencies in its current laws and to clarify legislative intent as to how water resources are to be managed. Under the current framework, too much is left to chance and is almost virtually certain to lead to costly and protracted litigation.

⁶⁷ It is important to note that in addition to the uncertainty raised by the statutory and regulatory language, any number of the provisions of the Drought Protection Act, such as those related to a farmer's property right in a permit, may be subject to challenge in the courts. The basis for such a challenge could be a provision of the Georgia Constitution which does not permit amendment of laws of general application by "special" laws. Article VI, ¶ IV(a) of the Constitution states that "Laws of a general nature shall have uniform operation throughout this state and no local or special law shall be enacted in any case for which provision has been made by an existing general law, except that the General Assembly may by general law authorize local governments by local ordinance or resolution to exercise police powers which do not conflict with general laws." A reviewing court relying on this provision could find that at least portions of the Flint River Drought Protection Act are "special" laws, which cannot amend more general laws such as Georgia's surface water and groundwater laws.

Along these lines, Georgia may wish to consider the need to quantify the amount of water that a permittee is entitled to withdraw. To date, agricultural withdrawal permits in Georgia have not specified this amount. Other riparian states, such as Oregon and Texas, have taken such action when they began to grapple with conditions of scarcity, similar to what Georgia is now experiencing.⁶⁸ In these states, riparians property owners were given a fixed amount of time to provide documentation of their water use over the previous four-to-five years, and these data were used to quantify their riparian rights. Existing permits issued by the EPD already specify the acreage that can be irrigated under the permit. Therefore, to implement this recommendation an additional datum simply needs to be added to the permit. Quantified rights under a water use permit offers several advantages, including supporting the EPD in reducing water use during a drought on an (arguably) “fair” basis. For example, all users could be required to reduce water use by 10% of their permitted amount. These limits would be enforceable once the state’s program to install meters on all agricultural wells, which is projected to be completed in 2009, comes on-line.

In conclusion, several closely related questions are posed that can help facilitate discussion among policymakers and stakeholders in the state. Responses to these questions could help to guide the development of substantive improvements in the state’s water laws.

- 1) *Should the state continue to allow expansion of irrigated acreage in basins like the Flint River Basin where over-appropriation (during periods of drought) is already a reality?*

If yes, then the state would be well advised to initiate plans for how they might respond to the likelihood of litigation claiming the state’s abrogation of its obligations to downstream states. If no, the state would benefit from the provision of explicit guidance to the EPD as to restraints on the issuance of new permits.

- 2) *Closely related to the above, do we want a system wherein any riparian owner can obtain a right to water use, even if this means that existing water users must reduce their established use?*

If yes, then the law needs to provide more explicit guidance on how existing permits can be modified to accommodate new users. Should each permit holder, regardless of permitted acreage, cede the same amount of water which will, in total, offset the water use of the new permit application? Is the reduction pro-rated on a per-permitted-acre basis? Does the tenure of a permit affect the amount of reduction required; i.e., does the holder of a permit issued in the 1980s give up the same or a lesser amount that the holder of a permit issued in the 1990s? Is there a limit on the riparian claim of a new applicant; i.e., can a new applicant assert a riparian claim for water required to irrigate thousands of acres? Will compensation be given to existing permit holders pushed aside for new users?

⁶⁸ See RONALD G. CUMMINGS, NANCY A. NORTON, AND VIRGIL A. NORTON, GEORGIA WATER PLANNING AND POLICY CENTER, ENHANCING IN-STREAM FLOWS IN THE FLINT RIVER BASIN: DOES GEORGIA HAVE SUFFICIENT POLICY TOOLS?, Water Policy Working Paper #2001-002 (Sept. 2001), available at http://www.h2opolicycenter.org/pdf_documents/water_workingpapers/2001_002.pdf (last visited June 30, 2009).

If no, then existing provisions that require that the EPD issue new permits for irrigation and sections of the law cited above that require modification of existing permits to accommodate new applicants should be changed.

- 3) *Should the state give any sort of preferential treatment to different tenures of permits; i.e., does a farmer who has had a permit for twenty-plus years have the same standing in any acreage reduction scheme as one who acquired a permit later? Related to this question, should holders of permits obtained after December 1, 1999 be excluded from the Flint River Drought Protection Act irrigation suspension auction and provisions for the involuntary suspension of permits?*

If the answer to the first question is yes, then explicit language to this effect in Georgia's water laws would resolve ambiguity created by conflicting requirements to accommodate new users and to protect existing permit holders. If the answer is no, then explicit language to this effect would remove a great deal of uncertainty from Georgia's water laws.

- 4) *Similarly, should the law provide more explicit guidance as to how the EPD should attain irrigation reductions when the Drought Protection Act is not invoked but drought conditions exist (i.e., when a drought is not declared by March 1 and severe drought conditions follow or if acreage reductions attained voluntarily by auction under the Act later prove to be inadequate)?*

If yes, then the law should provide specific guidelines for the identification of farmers whose permits may be suspended. It must make clear whether the tenure of a permit "counts" in this regard. If the answer is no, then, it would still be helpful if at least the rules used by the EPD were made more explicit. Prior to adoption, any rule changes should be fully debated by affected stakeholders.

- 5) *Should the state begin the process of quantifying amounts of water use allowed under an issued water use permit?*

If yes, then policymakers should give consideration to the process that they wish the EPD to follow in quantifying permitted water use. If no, then, obviously, no action is required.

While considering these important questions, policymakers must also consider the external context for these concerns. In this case, the external context tends to further muddy the waters. First, federal laws add a new layer of complexity and uncertainty. The continuing conflict among Georgia, Alabama, and Florida concerning waters in the Appalachian-Chattahoochee-Flint Basin (ACF) could result in federal actions, such as an equitable apportionment action, that could unpredictably affect water resource allocation in the region. The federal Endangered Species Act is also relevant given the presence of multiple federally listed species in the watershed, including endangered freshwater mussels and Gulf sturgeon. Other possible challenges to the rights of Georgia water users could arise based on the Clean Water Act or provisions of state common law, such as the public trust doctrine. In significant respects, those watching developments in Georgia water law are waiting for the proverbial "other shoe" to drop and potentially turn Georgia's treatment of water rights completely on its head. A potential interstate challenge to Georgia's

management of the Flint Basin or the larger ACF based on federal law adds additional uncertainty to Flint Basin permittees rights to use water.

Second, Georgia is currently developing a new statewide water plan to guide its management of water resources across the state. The draft plan was presented to the Georgia Water Council in the summer of 2007, and passed by the state legislature during its 2008 session. The plan suggests a number of new policies for water resource management in the state. Perhaps the most significant with respect to the issues discussed in this article is the proposal to manage watersheds based on “consumptive use assessments,” which aim to allocate available water to various users, in-stream flows, downstream needs, and assimilative capacity with clear numerical targets. Additionally, the plan proposes the use of regional entities to coordinate water management planning at the sub-state level. A shift to regional management of watersheds could significantly change water policy in this state, but it also might not. Until the details of implementation are known, the impact is uncertain. Thus, the new statewide plan could change the direction of current state water policy, and therefore, while the plan and its implementation details are still incomplete, water users face additional uncertainty over how future water management and allocation policies will affect them.

Georgia water policy is at a crossroads. This article is offered as a starting point for assessing the current water statutes and regulations that affect agricultural water users in Georgia. This analysis suggests that the current policies are confusing, even contradictory. Moreover, they do not appear to be up to the task of addressing current conditions of scarcity, and they create uncertainty for permit holders over what actual rights they have to water to support their farm operations.

Georgia is currently endeavoring to develop revised policies to manage water resources in the state. As it does, discussion of these issues should be central. If the state does not address these issues soon, it will face decisions that are more difficult and choices that are more constrained, and if it waits too long, decisions may be made for it in a court of law.