

Water Shortages

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I. Introduction

This article summarizes Florida's system for equitable distribution of available water resources during drought events. The review will summarize theoretical underpinnings, associated laws, implementing rules, and linkages with the certainty concept.

II. Legal Theory and Implementation Program

A. *Certainty Concept*

Water, by nature, is a transient resource, which can merely be captured and used for a length of time as it is subject to the vagaries of Mother Nature. Water users seek certainty or a reduction in risk of their water supply being interrupted for any reason, including drought. Water law systems attempt to resolve the issues of certainty. Three kinds of certainty exist: legal, tenure and physical certainty. *See* Frank E. Maloney, Richard C. Ausness & J. Scott Morris, *A Model Water Code with Commentary* 158 (1972) [hereinafter *MWC*]. The latter is relevant to water shortages. Physical certainty concepts in water law address the status of water rights in changing weather conditions, particularly droughts. Common law rights in western, prior appropriation states reduced uncertainties associated with drought events by granting priority to the "first in time" user. The senior user's full water rights were preserved while those of subsequent users were eliminated. *See id*; *see also* 2 Robert E. Beck & Amy K. Kelley, *Waters and Water Rights* § 12.03(e) (3d ed. 2009). Conversely, Florida's system for water shortages is based upon equitable distribution of available supplies among all users. This equitable distribution of water in light of drought events begins in the permitting scheme and is further implemented in water shortage plans. Additionally, the South Florida Water Management District ("SFWMD") recently adopted rules linking minimum flow and level criteria ("MFL") with implementation provisions in both its consumptive use permitting program and water shortage plan.

In the permitting realm, water is allocated to users based upon its physical availability in a specified level of drought. Some droughts are worse than others. The permitting system makes assumptions as to the severity of rainfall deficit to allocate sufficient “make-up” water to satisfy demands. For example, a drought that has a rainfall deficit so extreme that, statistically, it can be expected to occur only once every one hundred years is more severe than a drought whose rainfall deficit would occur once every ten years. Supplemental water allocations to meet demands in extreme, 100-year drought events would involve huge quantities of water. If permitted, these quantities of water would become the protected water right of existing legal users. If users acquired rights to such large quantities of water to insulate themselves from the impacts of extreme drought events, then their physical certainty of supply would be assured. However, few users would be able to access water since Florida’s law prohibits unmitigated interference with legally existing users. § 373.223(1)(b), Fla. Stat. A balance between user desire for certainty of supply, risk of impacts from drought events, and the number of water users who can acquire water rights is created via the assumptions relating to drought contemplated in the permitting scheme. Once a significant drought event occurs, Florida’s Water Shortage Plan provisions may be triggered.

B. *Theories Behind Florida’s Equitable Scheme of Water Shortage Allocation*

During a severe drought in 1972, the Florida Legislature adopted Chapter 373 of the Florida Statutes, which creates a unique and innovative means of allocating water resources. Water resource planning is a theme that pervades this landmark statute. The legislature required water management districts to adopt water shortage plans as an integral part of Florida’s water allocation scheme. *Id.* § 373.246. A companion statute, Section 373.175, was also adopted. Legal scholars have assessed the differences between these two statutes and the potential reasons for two statutory provisions. *See* Frank E. Maloney, Sheldon J. Plager, Richard C. Ausness & Bram D.E. Canter, *Florida Water Law* 244 (1980). Section 373.246 is based upon section 2.09 of MWC. Review of the MWC commentary and agency rules reveals the multifaceted purpose of this statute.

1. *USER KNOWLEDGE*

First, the water management districts are required by Section 373.246, Florida Statutes, to adopt water shortage plans. Four of the five water management districts have adopted water shortage plans. The plans are found in Chapters 40-A, C, D, & E of the Florida Administrative Code; the districts generally use consistent numbering for the rules contained within the various plans. The Suwannee River Water Management District has a water shortage plan that has not yet been promulgated. Users are able to refer to the water shortage plan provisions to determine the level of restriction in a given drought condition which will apply to their use class. Knowledge of potential restrictions enables users to prepare themselves for such circumstances thereby increasing their physical certainty. For example, citrus growers may refer to the restrictions and notice that highly efficient irrigation systems are not restricted. *See, e.g.*, Fla. Admin. Code R.

40E-21.551. Thus, a grower may opt for installation of a highly efficient irrigation system to avoid or minimize drought restrictions.

2. *EQUITABLE DISTRIBUTION OF AVAILABLE WATER*

Implementation of water shortage plans enables the districts to equitably apportion available supplies among all legal users while protecting the water resources. Equal treatment of all users evens the economic implications of use restrictions.

3. *MINIMIZING ECONOMIC IMPACT*

The water shortage plans identify use classes, which classify each permitted user with similar users. *See, e.g.*, Fla. Admin. Code R. 40D-21.511. Restriction of an entire class of users is anticipated so that individual projects are generally not singled out. However, a given project may be restricted via the emergency water shortage order provision found at Section 373.246(7), Florida Statutes. The restrictions of the water shortage plans impact all use classes such as domestic self-supply, irrigation, golf course, public water supply, agricultural, dewatering, etc. Even those users that are exempt from permitting (domestic self-supply) are subject to water shortage restriction. Specific restrictions consider the unique needs of each use class in an attempt to equitably minimize the economic, social, and health related impacts of drought cutbacks.

C. *Florida's Water Shortage Plans*

1. *CLASSIFICATION SYSTEM*

Each user is classified according to its use type. Further, each user's source and method of withdrawal are classified. Source classes are divided into surface and groundwater. District rules identify the location of surface water use basins and ground water sources. Method-of-withdrawal classes are also established by rule. *See, e.g.*, Fla. Admin. Code RR. 40D-21.531, 40D-21.541, 40D-21.571. For example, surface water users are classified by identification of pump usage or gravity flow. In this manner, like users are grouped for equitable implementation of restrictions.

2. *EVALUATING WATER CONDITIONS*

The districts monitor and evaluate water conditions. Comparisons between current and historical data assist in determining whether estimated present and anticipated available water supply within a source class will be sufficient to meet the estimated present and anticipated demands of the users and whether serious harm to the water resource may occur. A series of technical factors help evaluate both the supply and demand components. *See, e.g.*, Fla. Admin. Code R. 40C-21.221. Additionally, SFWMD's Water Shortage Plan requires consideration of established MFLs such that drought restrictions may be imposed to accomplish a shared adversity between users and natural resources. Fla. Admin. Code R. 40E-21.221(3)(d).

3. *WATER SHORTAGE DECLARATION AND RESTRICTIONS*

If a district governing board expects either *serious harm* to the water resources or insufficient water is or will be available to meet demands, the board may declare a water shortage for the affected source class. In the SFWMD Plan, reference is made to MFL criteria or “triggers” to help evaluate the potential for serious harm to the water resources and impose the appropriate phase of water use cutbacks to minimize the potential for serious harm. Estimates of the percent reduction in demand required to match available supply are used to identify which phase of drought restriction is implemented. *See, e.g.*, Fla. Admin. Code R. 40C-21.251. For example, phase one restrictions require golf course users to restrict irrigation of fairways and roughs on the first nine holes of the course to the hours of 12:01 A.M. to 8:00 A.M. on Monday, Wednesday, and Saturday. Phase two restrictions reduce the available irrigation days to Wednesday and Saturday. *See, e.g.*, Fla. Admin. Code RR. 40E-21.521(3)(e)2., 40E-21.531(3)(e)2. Thus, a gradual progression in severity of restriction is implemented through increasing phases. Once a water shortage is declared, the districts notify permitted users of the restrictions both by mail and publication in area newspapers. *See, e.g.*, Fla. Admin. Code R. 40E-21.291.

4. *MONITORING OF CONDITIONS AND ENFORCEMENT OF WATER SHORTAGE RESTRICTIONS*

Continuing assessment of supply, demand and resource impacts occurs through assessment of resource data. Restrictions may be modified or lifted as conditions warrant. *See, e.g.*, Fla. Admin. Code R. 40C-21.291(4).

5. *LOCAL GOVERNMENT ASSISTANCE*

Generally, the water management districts seek the cooperation and assistance of state and local government resources in the enforcement of water shortage restrictions. Law enforcement officers are asked to “ticket” violators. § 373.609, Fla. Stat. (2013). Some districts, in an effort to enhance coordination, have encouraged local government to adopt water shortage ordinances that parallel district restrictions. Many local governments have implemented such ordinances.

6. *VARIANCES*

The water shortage plans universally provide an opportunity for particular users to request a variance from an executive director and governing board. Application contents and conditions for issuance of a variance from water shortage restrictions are stated in water management district rules. Procedures for review of variance applications are expedited. Generally, the rules provide a ten-day review time after which staff must make its recommended agency action. If the application requires immediate action, staff may present the application to the executive director for temporary action, with governing board concurrence to follow. Otherwise, the variance applications are presented at the district monthly meetings. *See, e.g.*, Fla. Admin. Code RR. 28-104, 40E-21.275.