## SENATE STAFF ANALYSIS AND ECONOMIC IMPACT STATEMENT

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

BILL:		CS/SB 2316				
SPONSOR:		Communication & Public Utilities Committee and Senator Atwater				
SUBJECT:		Water Supply				
DAT	E:	April 14, 2003	REVISED:			
	ANALYST		STAFF DIRECTOR	REFERENCE	ACTION	
1.	Molloy		Kiger	NR	Fav/1 amendment	
2.	Wiehle	<u> </u>	Caldwell	CU	Fav/CS	
3.	'	<u> </u>		AGG		
4.				AP		
5.						
6.						
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# I. Summary:

The bill requires the Department of Environmental Protection to create a water conservation guidance manual containing a menu of water conservation measures from which public water supply utilities may select in developing a comprehensive, goal-based water conservation program tailored for their individual service areas that is effective and does not impose undue costs or burdens on customers. The bill provides for content of the manual. The manual is to provide for different levels of complexity and expected levels of effort in conservation programs depending on the size of the utility, however, all utilities are expected to have at least one basic program on specified subjects.

Regional water supply plans would be required to identify any water reservation rules adopted and to include an analysis, developed in cooperation with DEP, of areas or instances in which variance provisions may be used to create water supply development or water resource development projects, with specified limitations.

Water management districts are encouraged to implement water resource development projects as expeditiously as possible and to give priority funding to alternative water supply development projects that are contained in an adopted regional water supply plan. They are also encouraged to establish a revolving loan fund to promote the development of alternative water supplies.

A water management district may require the use of reclaimed water in lieu of surface or groundwater when it is environmentally, economically, and technically feasible.

The DEP Secretary is authorized to grant a variance from phosphate reclamation or mining reclamation requirements for reclamation projects providing water supply development or water resource development consistent with approved regional water supply plans if regional water

resources are not adversely affected. A variance may be granted from the mitigation requirements when a project provides an improvement in water availability and does not cause adverse impacts to the water resources. DEP is authorized to grant variances to accommodate reclamation that provides for water supply development or water resource development, appropriate stormwater management, improved wildlife habitat, recreation, or a mixture thereof, provided that regional water resources and public health and safety are not adversely affected.

The bill provides that the Legislature encourages the development of incentive-based programs to implement water reuse, and provides that the results of reuse feasibility studies will govern permitting decisions for reuse facilities, and permitting decisions for CUPs issued for the use of reclaimed water

DEP is authorized to make deposits to financial institutions that earn less than the prevailing rate for US Treasury securities with corresponding maturities to enable below-market interest loans to certain entities. The cap on the issuance of bonds by the Florida Water Pollution Control Finance Authority to fund projects under the Clean Water State Revolving Fund is removed.

The bill provides for a feasibility study for the augmentation of groundwater supplies in South Florida through the discharge of reclaimed water into canals for transport and subsequent reuse. Last, the bill provides that nothing in the feasibility study can be used to alter the Comprehensive Everglades Restoration Program (CERP) or the implementation of the federal Water Resource Development Act (WRDA) of 2000.

This bill substantially amends ss. 373.0361, 373.0831, 373.1961, 373.250, 373.536, 378.212, 378.404, 403.064, 403.1835, and 403.1837 of the Florida Statutes. It also creates unnumbered sections of the Florida Statutes.

#### II. Present Situation:

#### **Florida Water Use Facts:**

An average of 150 billion gallons of rain falls each year in Florida, and another 26 billion gallons of water flows into the state, mostly from rivers originated in Georgia and Alabama. Nearly 107 billion gallons (70%) of the rain returns to the atmosphere through evaporation and plant transpiration in a process called evapotranspiration. Each day in Florida, 2.7 billion gallons of water are incorporated into products or crops, consumed by humans or livestock, or otherwise removed from the immediate environment through other consumptive users. The remainder, 66 billion gallons of water, flows out to the ocean through rivers or streams, or seeps into the ground to recharge the Floridan aquifer. Though the state averages over 50 inches of rain in a year, population growth is not stagnant. The resource that is supplying 16 million residents now will have to supply more than 21 million residents by the year 2020.

## **Current Law:**

#### **Constitution and Statutes**

In Art. II, s. 7, the Florida Constitution establishes a state policy of "conserving and protecting" Florida's natural resources. The State Constitution requires that state law make adequate

provision for the "abatement of air and water pollution ... and for conservation and protection of natural resources." In s. 373.016, F.S., the Legislature declares that the waters of the state are among its most basic resources, and that this resource has not been conserved or fully controlled.

In 1972, the Legislature enacted the Florida Water Resources Act, which created the five water management districts and provided the then Department of Natural Resources with the "power and responsibility to accomplish that conservation, protection, management and control of the waters of the state ... through the delegation of powers to the various districts." Even then, water conservation concerns were noted. During the 1972 Regular Session, the League of Women Voters addressed the House Natural Resources Committee, and in a written statement said:

We support national policies and procedures which promote comprehensive long-range planning for conservation and development of water resources and improvement of water quality. The League agrees with many conservationists throughout our state that the most serious problem facing Florida today is that of the diminishing water supply.

### **US Environmental Protection Agency**

In 1998, the US EPA issued guidelines for water conservation plans for public water systems. The EPA said that the states could, if they wanted, require water systems to submit a water conservation plan that met EPA guidelines or any other guidelines as a condition of receiving a loan under the Drinking Water State Revolving Loan Fund. The guidelines provide information on water conservation measures such as universal metering, water accounting and loss control, water-use audits, retro-fitting, reuse and recycling, and water-user regulation. The DEP rules did not include conservation measures in the state's Drinking Water SRF Program, but those rules are being revised to include the promotion of water conservation measures.

#### Florida Department of Environmental Protection

The DEP is required, under chapter 373, F.S., to "take into account cumulative impacts on water resources and manage those resources in a manner to ensure their sustainability," and to protect those water resources by requiring the use of water from other sources, including "all naturally occurring water sources and all alternative water sources, including but not limited to ... conservation ...."

Florida law requires that the Water Resources Implementation Rule serve as part of the Florida Water Plan. As part of the rule, the DEP has included a water conservation element to provide that the "overall water conservation goal of the state shall be to prevent and reduce wasteful, uneconomical, impractical, or unreasonable use of water resources. Conservation of water shall be required unless not economically or environmentally feasible." The rule provides the water management districts with guidance to establish conservation goals, and directs the districts to establish efficiency standards for urban, industrial, and agricultural demands through restrictions against inefficient irrigation, imposition of year-round irrigation restrictions, and promotion of water-conserving rate structures.

In 2002, the DEP began developing the "Florida Water Conservation Initiative" to respond to numerous concerns, including the end of a severe drought, future supply concerns, and the emergence of new technologies for water conservation.

### **Water Management Districts**

In 1992, the South Florida Water Management district adopted rules that imposed specific water conservation requirements on public water supply utilities and associated local governments, on commercial/industrial users, on landscape and golf course users, and on agricultural users. For individual water use permits to be acquired, all users must comply with the requirements depending on the user groups.

The St. Johns River Water Management District has a Water Conservation Rule that provides for year-round irrigation restrictions. The rule, which has been in place since 1991, applies to all users in the district that use water outdoors whether the source is a private well or a water supply utility. The District also has additional restrictions in place for portions of Brevard, Lake, Marion, Orange and Polk counties, and for all of Seminole and Volusia counties. These areas have not received enough rainfall to ease the water deficit caused by the recent drought.

The Southwest Florida Water Management District's Governing Board recently approved proposed changes to the District's "Year Round Conservation Measures" rule with mandatory measures applicable during times of "no water shortage" through water conservation practices and water conserving devices. Users with access to more than one source of water must use the least limited of the sources, irrigation is restricted, and landscape irrigation is limited.

The Suwannee River Water Management District is home to at least 250 identified springs, five major river systems, and numerous lakes. According to the District, most of these systems are in relatively good conditions, and an adequate water supply is available to meet existing and future District needs. The District does not have a special "water conservation rule."

Last, the Northwest Florida Water Management District does not have a "water conservation rule" but does, like all four other districts, have requirements for declaring water shortages and for designating water resource caution areas. Within the District, Santa Rosa, Okaloosa and Walton counties have been declared water resource caution areas where freshwater resources are experiencing, or are expected to experience within the next 20 years, significant or widespread reductions in fresh water levels and salt water intrusion.

## **Florida Water Conservation Initiative:**

The Florida Water Conservation Initiative, started more than two years ago, represents the efforts of the DEP, the five water management districts, the Department of Agriculture & Consumer Services, the Public Service Commission, and individuals representing all facets of water users or producers. Six work groups were created and in April 2002, the final initiative was issued with recommendations to assist in identifying and prioritizing changes that could result in the statewide conservation of water. The three top recommendations in priority order from each of the six work groups are as follows:

**Agriculture**: Cost share incentives to promote water conservation, more mobile irrigation labs to improve best management practices, increased rainfall harvesting and recycling of irrigation water.

**Landscaping:** Design and adopt state irrigation design and installation standards, expand and coordinate current education and outreach programs, and establish statewide training and certification programs.

**Water Pricing:** Phase in conservation rate structures, require drought rates, consider the use of market principles in the allocation of water.

**Industrial/Commercial/Institutional:** Consider establishing a "Conservation Certification" program, consider a range of financial and regulatory incentives and alternative supply credits, consider cooperative funding for the use of alternative technologies.

**Indoor Water Use:** Replace inefficient toilets, retrofit inefficient plumbing fixtures, provide incentives to retrofit inefficient homes.

**Reuse of reclaimed water:** Encourage metering and volume-based rate structure for reclaimed water service, expand education and outreach, facilitate seasonal reclaimed water storage.

(Please see *Water Conservation Interim Project*, Committee on Natural Resources, Florida House of Representatives, 2002-2004 Session, for information contained in Present Situation section of this analysis)

# III. Effect of Proposed Changes:

**Section 1** creates an unnumbered section of the statutes relating to water conservation. The bill provides legislative findings such as that the Legislature encourages the development and use of water conservation measures that are effective, flexible, and affordable.

To further these findings, the Department of Environmental Protection (DEP) is required to create a "water conservation guidance manual" containing a menu of water conservation measures from which public water supply utilities may select in developing a comprehensive, goal-based water conservation program tailored for their individual service areas that is effective and does not impose undue costs or burdens on customers. The manual must promote statewide consistency in the approach to utility conservation, while maintaining appropriate flexibility. The manual may contain measures such as water conservation audits, informative billing, ordinances requiring low-flow plumbing fixtures or efficient landscape irrigation, rebate programs for the installation of water-saving plumbing or appliances, measures to promote the more effective and efficient reuse of reclaimed water, and programs to apply utility profits generated through conservation and drought rates to additional water conservation programs or water supply development. The manual must state that it is the responsibility of the appropriate utility to determine the specific rates it will charge and that the role of the department or water management district is confined to review of those rate structures to determine whether they encourage water conservation. The manual is to provide for different levels of complexity and

expected levels of effort in conservation programs depending on the size of the utility. However, all utilities are expected to have at least one basic program in individual metering, to the extent feasible as determined by the utility, water accounting and loss control, cost of service accounting, information programs on water conservation, and landscaping water efficiency programs.

The manual must be developed no later than June 15, 2004, and adopted by rule no later than December 15, 2004. The department is to develop the manual in consultation with interested parties, including, at a minimum, representatives from the water management districts, three utilities that are members of the American Water Works Association, two utilities that are members of the Florida Water Environment Association, a representative of the Florida Chamber of Commerce, representatives of counties and municipalities, and representatives of environmental organizations.

Once DEP adopts the manual by rule, the water management districts may apply it in the review of water conservation requirements for obtaining a permit. Public water supply utilities can choose to comply with standard water conservation requirements for obtaining a CUP, or may choose to develop a comprehensive program based on the options in the manual, so long as certain requirements are met.

**Section 2** amends s. 373.023, F.S., to add new requirements for contents of regional water supply plans. Such plans would be required to identify any water reservation rules adopted and to include an analysis, developed in cooperation with DEP, of areas or instances in which variance provisions may be used to create water supply development or water resource development projects, with the limitation that within boundaries of a regional water supply authority in the Southwest Florida Water Management District, those parts of the water supply development component of the regional water supply plan which deal with or affect public utilities and public water supply must be developed jointly by the authority and the district for those areas served by the authority and its member governments. The section also prohibits the use of the regional water supply plan, or any of its components, as criteria for the review of CUPs, unless the plan or component has been adopted by rule.

**Section 3** amends s. 373.0831, F.S., relating to water resource development and water supply development projects. Water management districts are encouraged to implement water resource development projects as expeditiously as possible. The section also directs the water management districts to issue 20 year CUPs, and to give priority funding to alternative water supply development projects that are contained in an adopted regional water supply plan.

**Section 4** amends s. 373.1961, F.S., relating to water production, to encourage the water management districts to establish a revolving loan fund to promote the development of alternative water supplies.

**Section 5** amends s. 373.250, F.S., to provide that a water management district may require the use of reclaimed water in lieu of surface or groundwater when it is environmentally, economically, and technically feasible.

**Section 6** amends s. 373.536, F.S., to require that a water management district's work program provide additional information relating to water resource development programs.

**Section 7** amends s. 378.212, F.S., to provide that the DEP Secretary may grant a variance from the phosphate reclamation or mining reclamation requirements of chapter 378, F.S. for reclamation projects providing water supply development or water resource development consistent with approved regional water supply plans if regional water resources are not adversely affected. A variance may be granted from the mitigation requirements of part IV of chapter 373 when a project provides an improvement in water availability and does not cause adverse impacts to the water resources.

**Section 8** amends s. 378.404, F.S., to give DEP the power to grant variances to accommodate reclamation that provides for water supply development or water resource development, appropriate stormwater management, improved wildlife habitat, recreation, or a mixture thereof, provided that regional water resources and public health and safety are not adversely affected.

**Section 9** amends s. 403.064, F.S., to establish the Legislature's encouragement of the development of incentive-based programs to implement water reuse and to provide that the results of reuse feasibility studies will determine the feasibility of providing reclaimed water for reuse for CUP permits issued under chapter 373, F.S.

**Section 10** amends s. 403.1835, F.S., to authorize the DEP to make deposits to financial institutions that earn less than the prevailing rate for US Treasury securities with corresponding maturities to enable below-market interest loans to certain entities.

**Section 11** amends s. 403.1837, F.S., to remove the cap on the issuance of bonds by the Florida Water Pollution Control Finance Authority to fund projects under the Clean Water State Revolving Fund.

Section 12 establishes legislative findings that groundwater levels within specific areas identified in the Lower East Coast Regional Water Supply Plan approved by the SFWMD can benefit from augmentation, and that the direct or indirect discharge of reclaimed water into canals and the aquifer for transport and subsequent reuse may provide an environmentally acceptable means to augment water supplies and enhance natural systems. It establishes the Legislature's recognition that water quality and water quantity issues must be better understood and resolved, and that the co-location of enclosed conduits for conveyance of water for reuse should be explored for cost savings. It requires that the DEP, in consultation with the SFWMD and other entities, including local governments and local utilities, conduct a feasibility study on these issues. Preliminary reports must be issued by the DEP for public comment by November 1, 2003. Written reports on the findings must be submitted by the DEP to the Governor and the appropriate substantive committees of the Legislature by January 31, 2004. Nothing in this section can be used to alter the purpose of the CERP or the implementation of WRDA 2000.

**Section 13** provides that the bill will take effect upon becoming a law.

### IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

# V. Economic Impact and Fiscal Note:

A. Tax/Fee Issues:

None.

# B. Private Sector Impact:

Public and private utilities will incur some initial costs due to provisions of the bill requiring the development of water conservation programs.

Consumptive use permit applicants may see some financial benefit in development of alternative water supply projects which are eligible to receive longer-term consumptive use permits, and priority consideration for funding from the revolving loan fund being created in this bill.

Some consumers will pay more for water if a public or private utility implements water conservation rates or drought rates.

Beneficiaries of water created or supplied by water resource development projects funded through the revolving loan fund authorized in the bill will ultimately pay for the costs of those projects as the end users of the water being created or supplied.

# C. Government Sector Impact:

The South Florida Water Management District anticipates no fiscal impact from the provisions of this bill. However, provisions of the bill specifically require that the district participate in a study, with the DEP and other agencies, to consider the feasibility of augmenting groundwater by discharging reclaimed water into canals for transport and subsequent reuse in South Florida.

All five water management districts may incur some initial costs in the startup of the revolving loan fund authorized in the bill for water resource development projects. Also, revisions to regional water supply plans are required under the bill

The DEP can expect to incur some costs in developing the water conservation guidance manual in consultation with representatives from the water management districts, public water supply utilities, domestic wastewater utilities, environmental and community organizations, business organizations, and cities and counties.

VI.	Technical Deficiencies:				
	None.				
VII.	Related Issues:				
	None.				
VIII.	Amendments:				
	None.				
	This Senate staff analysis does not reflect the intent or official position of the bill's sponsor or the Florida Senate.				