

The Florida Senate
BILL ANALYSIS AND FISCAL IMPACT STATEMENT

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

Prepared By: The Professional Staff of the Environmental Preservation and Conservation Committee

BILL: SB 1090

INTRODUCER: Senators Dean and Lynn

SUBJECT: Numeric Nutrient Water Quality Criteria

DATE: April 12, 2011

REVISED: _____

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	Uchino	Yeatman	EP	Pre-meeting
2.			CA	
3.			BC	
4.				
5.				
6.				

I. Summary:

The bill prohibits the Department of Environmental Protection (DEP), the water management districts (WMDs) and local government entities from implementing federal numeric nutrient criteria. The bill does not limit the ability of the WMDs, or any state, regional, or local governmental entity to apply for permits and carry out water quality improvement programs.

The bill authorizes the DEP to adopt numeric nutrient criteria for a particular surface water body or group of surface waters if such a process is necessary to protect the water body. The bill also designates DEP-adopted nutrient Total Maximum Daily Loads (TMDLs) that were approved by the Federal Environmental Protection Agency (EPA) as of December 6, 2010, as site-specific numeric nutrient water quality criteria.

This bill creates an unnumbered section of law.

II. Present Situation:

Water Quality Standards for Surface Waters in Florida

Water quality standards (WQS) are the foundation of the water quality-based pollution control program mandated by the Clean Water Act (Act). The Act establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality

standards for surface waters.¹ The Act governs all “waters of the United States” and activities that impact those waters. “Waters of the United States” are defined as:²

- All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- All interstate waters including interstate wetlands;
- All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:
 - Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
 - From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 - Which are used or could be used for industrial purposes by industries in interstate commerce;
- All impoundments of waters otherwise defined as waters of the United States under this definition;
- Tributaries of waters identified in the preceding bullets;
- The territorial sea; and
- Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in the preceding bullets.

Waste treatment systems, including treatment ponds or lagoons designed to meet the Act’s requirements (other than cooling ponds as defined in 40 CFR 423.11(m)) are not waters of the United States. The definition also expressly excludes prior converted cropland.

The Act requires states or the EPA to establish WQS for pollutants flowing into surface waters and prohibits the discharge of any pollutant from a point source, such as a pipe, man-made ditch, or large animal feeding operation, into navigable waters without a National Pollutant Discharge Elimination System (NPDES) permit. In Florida, the water quality of surface waters is primarily regulated through Florida’s implementation of the Act. The Act provides incentives to Florida to adopt Act-compliant WQS and administer the federal NPDES program on behalf of the EPA.³

¹ Applicable water quality standards for purposes of the Act are the minimum standards which must be used when the Act and regulations implementing the Act refer to water quality standards, for example, in identifying impaired waters and calculating TMDLs under section 303(d), developing NPDES permit limitations under section 301(b)(1)(C), evaluating proposed discharges of dredged or fill material under section 404, and in issuing certifications under section 401 of the Act. 40 CFR 131.21

² 40 CFR 230.3(s).

³ Under the U.S. Constitution, the Federal Government cannot compel states to enact legislation or take executive action to implement federal regulatory programs. However, Congress often offers funding as an incentive for states to do so. Congress may also create a “potential preemption” structure in which states must regulate the activity under state law according to federally approved standards, or have state regulation pre-empted by federal regulation. The Act utilizes these techniques. In addition, a state agency in Florida must have legislative authorization to implement a federal law. The Florida Department of Environmental Protection receives federal funds to administer the NPDES permitting program in the state.

Under the Act, states adopt water quality standards for their navigable waters and review and update those standards at least every three years. States determine WQS for surface waters in three steps:

- Part one is establishes the designated uses for each water body, which may be for drinking, recreation and aquatic life propagation, or agricultural and industrial purposes;
- Part two is establishes water quality criteria, which can be either a numeric or narrative standard that defines the amount of pollutant a water body can contain without impairing the designated use; and
- Part three is establishes an anti-degradation policy to maintain and protect existing uses and high quality waters.

The Act requires states to submit WQS to the EPA for review and approval.⁴

The EPA Administrator must “promptly prepare and publish” proposed regulations setting forth a revised or new WQS for the navigable waters involved if a revised or new WQS submitted by the state is determined by the Administrator not to be consistent with the applicable requirements, or in any case where the Administrator determines that a revised or new standard is necessary to meet requirements of the Act.⁵

The Administrator must promulgate any new or revised standards not later than ninety days after publication of the proposed standards, unless prior to such promulgation, the state adopts a revised or new WQS which the Administrator determines to be in accordance with the Act. After promulgation by the EPA, however, the promulgated rules become the state’s WQS until such time as the EPA withdraws the promulgation, again by rule.⁶ This may occur if the state proposes and the EPA approves the state’s submission.

The Act also requires that states identify impaired waters not meeting established WQS. In such instances, a state establishes a total maximum daily load (TMDL), for those impaired waters. A TMDL is a value of the maximum amount of a pollutant that a body of water can receive and still meet WQS.⁷ To enforce TMDLs, water quality-based effluent limitations must be developed and incorporated into NPDES permits for point sources. Each TMDL represents a goal that is implemented by adjusting pollutant discharge requirements in the individual NPDES permits, along with the implementation of nonpoint source controls, such as Best Management Practices

⁴ This section of the Act represents the “potential preemption” structure previously mentioned. Apart from receiving federal funds to assist the state in meeting water quality standards approved by the EPA, the state retains local control over its water quality programs, and provides to its NPDES applicants something the federal structure lacks – administrative deadlines for the agency to approve or deny a permit application.

⁵ The Act, s. 303(a)(3)(C).

⁶ Pursuant to 40 CFR 131.21(c), if the EPA finalizes a proposed rule, the EPA promulgated WQS would be applicable WQS for purposes of the Act until EPA withdraws the federally-promulgated standard. Withdrawing a federal standard would require rulemaking by the EPA pursuant to the requirements of the Administrative Procedure Act (5 U.S.C. 551 et seq.).

⁷ Generally, the pollutant of concern and a numeric water quality target are, respectively, the chemical causing the impairment and the numeric criteria for that chemical (e.g., chromium) contained in the water quality standard. The TMDL expresses the relationship between any necessary reduction of the pollutant of concern and the attainment of the numeric water quality target. Guidelines for Reviewing TMDLs Under Existing Regulations Issued in 1992, are found at: <http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/final52002.cfm> (last visited Apr. 6, 2011).

(BMPs).⁸ State-established TMDLs and NPDES water quality-based effluent limitations are submitted to the EPA for approval. The EPA may adjust the criteria on either if the federal agency determines the standard does not comply with the Act.

The threshold limit on pollutants in surface waters (Florida's surface WQS on which TMDLs are based) are set in administrative rule. The state's impaired waters rule contains a table that catalogues over 100 substances, including subparts, with numerical thresholds for surface water classifications, including fresh and marine waters.⁹ Generally, a pollutant is expressed in a numerical threshold (e.g., 11mg/L, or 11 milligrams per liter) because certain chemicals (e.g., Benzene, Lead, Mercury), have threshold concentrations above which adverse biological damage is a scientific certainty.

The EPA and the Florida Department of Environmental Protection (DEP) executed a Memorandum of Understanding in 2007 delineating the state and federal agencies' mutual responsibilities in the DEP's administration of the federal NPDES program (the approved program). Pursuant to the memorandum, the EPA acknowledges that the DEP has no veto authority over an act of the Florida Legislature. The EPA reserves the right to initiate procedures for withdrawal of the state NPDES program approval in the event the state legislature enacts legislation or issues any directive which substantially impairs the DEP's ability to administer the NPDES program or to otherwise maintain compliance with NPDES program requirements. If the approved program were withdrawn, entities requiring a NPDES permit for activities relating to wastewater, stormwater, construction, industry, pesticide application, power generation and some agricultural activities would need to acquire both federal and state permits independent of one another.

The memorandum anticipates situations when the EPA resumes authority over an individual permit and instances when DEP-submitted NPDES permits are disapproved by the EPA until the DEP adjusts the permit conditions to include EPA conditions on the permit. If the permit is issued by the DEP, the permit holder may seek an administrative challenge in the Florida Division of Administrative Hearings. If the permit is issued by the EPA, the permit holder may seek a federal appeal; however, in the interim, the permit holder would be required to comply with the federal permit.

Nutrients and Water Quality

Nutrients, such as nitrogen and phosphorus, are substances that are needed by organisms to live and grow. In aquatic systems, these nutrients feed the growth of bacteria, algae and other organisms. Nitrogen and phosphorus are essential to the production of plant and animal tissue. Phosphorus is essential to cellular growth and respiration. The DEP has relied on a narrative criterion (described in its impaired waters rule as "an imbalance in natural populations of flora or fauna") for many years because nutrients are unlike any other pollutant regulated by the Act.

⁸ When a water body is classified as impaired, Florida law also authorizes the DEP to adopt a Basin Management Action Plan, or BMAP, for that particular water body. A BMAP is designed to reduce the pollutant concentrations to meet the TMDL. Strategies may include: educational programs, permit limits on wastewater facilities, best management practices, conservation programs, and financial assistance.

⁹ Rule 62-302.530, F.A.C.

Natural sources of nitrogen and phosphorus are the atmosphere, soils and the decay of plants and animals. Unnatural sources include sewage disposal systems (wastewater treatment facilities and septic tanks), overflows of storm and sanitary sewers (untreated sewage), agricultural production and irrigation practices stormwater runoff.

Excessive amounts of nutrients may result in harmful algal blooms, nuisance aquatic weeds and alteration of the natural community of plants and animals. Dense, harmful blooms of algae can also cause human health problems, fish kills, problems for water treatment plants and generally impair the aesthetics and tastes of waters. Growth of nuisance aquatic weeds tends to increase in nutrient-enriched waters, which can impact recreational activities. Increased algal production as a result of increased nutrients can alter plant communities, which affects natural systems.

As such, the derivation of specific numeric nutrient criteria to complement the narrative standard is very complex.¹⁰ Since nutrients are essential to life, a balance must be maintained to provide adequate nutrients to sustain aquatic life while not providing excessive nutrients which alter the aquatic ecosystem through species shifts. Each water body can have very different and unique nutrient requirements. To develop thresholds at which a healthy aquatic environment can be sustained, it is best to establish a reliable measure of the biological condition of the water body.¹¹

History of Florida's Development of Numeric Nutrient Criteria

In recognition of the need to more proactively address impairment of state waters due to nutrients, the DEP implemented a detailed, EPA-approved plan for the development of numeric nutrient criteria. The DEP recently proposed revisions to the WQS Rule, 62-302 of the Florida Administrative Code (F.A.C.) and the Impaired Waters Rule, 62-303, F.A.C., to establish numeric nutrient criteria for lakes and streams. The DEP selected the “dose-response” approach (investigating the effects of nutrients on biological communities) as the primary method for the development of scientifically defensible numeric nutrient criteria and has invested significant resources in:

- the development of biological assessment tools,
- the documentation of minimally disturbed reference conditions,
- the collection of large amounts of water quality and nutrient data, and
- conducting a variety of studies to link nutrients to adverse effects on valued ecological attributes.

This process has required extensive methods development, staff training and Quality Assurance oversight to ensure the defensibility of the resulting products. The elements of this development

¹⁰ The development of protective nutrient criteria is immensely more complicated than that for toxic substances. It must be recognized that nutrients should not be regulated at levels that are artificially lower than those concentrations required for normal ecosystem functioning. If humans were to reduce nutrients below the levels that natural aquatic systems are accustomed to, adverse biological effects (disruption of trophic dynamics, loss of representative taxa) would occur. This would be counter to the Act charge in Section 101 to “protect the physical, chemical, and biological integrity” of the state’s waters and, coincidentally, against Florida law, which prohibits DEP from conducting remediation for natural conditions. Ideally, nutrients should be managed in a range of concentrations with some consideration of a margin of safety on both the upper and lower bounds of the range. Source: *Draft Technical Support Document – Development of Numeric Nutrient Criteria for Florida Lakes and Streams*, http://www.dep.state.fl.us/water/wqssp/nutrients/docs/tsd_nutrient_crit.docx (last accessed Apr. 6, 2011).

¹¹ *Id.* at 11.

and assessment process to date include such components as habitat assessment for streams and lakes, benthic invertebrate indices for streams and lakes, a vegetation index for lakes and a periphyton index for streams. These activities represent significant investments in staff time and contractual services, with recent and planned funding associated with nutrient criteria development in Florida totaling nearly \$20 million dollars.¹²

While the approved plan called for adoption of the criteria by the end of 2010, DEP accelerated its efforts to adopt numeric nutrient criteria in response to the EPA's January 14, 2009, determination that numeric nutrient water quality criteria are necessary in Florida to implement the Act. As part of a settlement agreement with EarthJustice, discussed later in this analysis, the EPA was obligated to promulgate numeric nutrient criteria for Florida streams and lakes by a date certain, unless the EPA approved criteria proposed by the DEP prior to that date.¹³ The DEP did not formally propose alternative criteria to the EPA prior to the final promulgation by the EPA, and the EPA established numeric nutrient criteria for lakes, streams, rivers and springs, effective March 6, 2012.

Development of the DEP Plan

The DEP started developing numeric nutrient criteria nearly ten years earlier. In 1999, the DEP's Division of Water Resource Management initiated the implementation of a watershed approach for surface water protection patterned after EPA guidance (EPA, 1991, 1995), including the prioritization of water bodies for TMDL development.¹⁴ The DEP drew guidance from the EPA's *Nutrient Criteria Technical Guidance Manual: Rivers and Streams* (Buck et al., 2000), which describes three general approaches for the development of numeric nutrient criteria for streams: the "observed dose-response relationship," the "reference site" methodology and the "all streams" approach. The observed dose-response methodology establishes a cause-effect relationship between nutrients and valued ecological attributes and is linked to maintaining designated uses. The DEP Plan refers to this option as the preferred methodology.¹⁵

¹² The DEP's *Florida Numeric Nutrient Criteria History and Status Summary*. This document, and other documentation of nutrient criteria study results, including statistical analyses and interpretation, are found at: <http://www.dep.state.fl.us/water/wqssp/nutrients/> (last visited Apr. 6, 2011).

¹³ The determination letter established a schedule for criteria development, with criteria for lakes and streams due by January 14, 2010, and criteria for estuaries due by January 14, 2011. Due to approved extensions of time, the due dates were extended. The EPA numeric nutrient criteria for Florida's inland waters (except for south Florida) will be effective March 6, 2012. The EPA will propose numeric nutrient criteria for Florida's estuaries, flowing waters in south Florida (including canals), and the downstream protection values for flowing waters into estuaries on or before November 14, 2011. The deadline for promulgating a final rule is August 15, 2012.

¹⁴ Pursuant to the Act, s. 304(a), the EPA publishes and periodically revises guidance documents to accurately reflect the latest scientific knowledge on the effects of pollution on life and the environment.

¹⁵ The DEP Plan implemented this approach as a quantified translation of its narrative criteria in two ways. For point sources (e.g., wastewater facilities discharging to surface waters), the DEP interpreted the narrative criterion on a site-specific basis and established numeric permit limits for nutrients. To better address nutrient impairment from nonpoint (non-regulated) sources, the DEP revised the Impaired Waters Rule to include numeric nutrient impairment thresholds. Criteria utilize trophic state indices. For streams, Chapter 62-303.351(2), F.A.C., denotes an imbalance if annual mean chlorophyll *a* concentrations are greater than 20 ug/l or if data indicate annual mean chlorophyll *a* values have increased by more than 50% over historical values for at least two consecutive years. For lakes, the criteria were dependent upon lake color and variations of the TSI over time.

The thresholds in the chosen option helped to expedite the assessment of Florida's waters, but they were set for variables that measure the response to nutrient over enrichment, rather than concentrations of nutrients. The DEP Plan expressed support for the reference site approach, although that option does not definitively demonstrate that exceeding the threshold established by the distribution of reference sites results in harm (impairment) to the aquatic life in a particular water body. Multiple factors can strongly influence the expression of biological responses to nutrients across water bodies, such as water velocity, residence time, availability of the other nutrient, presence of grazers, availability of light (due to tree cover and/or water transparency) and availability of suitable habitat. The DEP found that additional stressors (e.g., degraded habitat, unfavorable hydrology) often influence biological impairments more than the actual concentration of nutrients at a given point. The DEP discounted option three, the all-streams approach, as having limited defensibility in the state.

Pursuant to the Act, there are three paths to develop protective numeric criteria (40 CFR 131.11). Numeric criteria may be established based upon (1) EPA-published Section 304(a) guidance, or (2) 304(a) guidance modified to reflect site-specific conditions, or (3) by use of other scientifically defensible methods. The DEP drew from EPA guidance documents and its experiences and fashioned a methodology which incorporated site-specific verifications. In 2002, the DEP submitted to the EPA its initial *DRAFT Numeric Nutrient Criteria Development Plan*. The DEP and the EPA reached mutual agreement on the plan on July 7, 2004.¹⁶ The DEP revised its plan in September, 2007, to reflect an evolved strategy and technical approach. The EPA again consented to the revised plan on September 28, 2007.¹⁷ From 2002 through 2009, the DEP conducted 22 meetings with a group of scientists, experts and representatives from state and local governments, which constituted the Nutrient Technical Advisory Committee (TAC).

Comparing the DEP's Plan with the EPA Final Rule

The DEP's EPA-approved 2007 Plan and the 2009 Plan do not differ in conceptual approach. The 2009 Plan, however, demonstrated refinement in several areas. For instance, the 2007 Plan also classified lakes by color (or lack thereof), but did not incorporate alkalinity, as does the 2009 Plan. The 2009 Plan also incorporated refinements in its stream assessment to develop a final nutrient standard for spring runs. The DEP kept the 2007-established schedule for completing the nutrient rule by the end of 2010.

Florida's Rivers and Streams

For rivers and streams, the DEP determined there was insufficient robust data to develop a scientifically-defensible method establishing a cause-effect relationship between nutrients and

¹⁶ The DEP's *Florida Numeric Nutrient Criteria History and Status Summary*. The DEP's approach conceptualized establishing ecological sub-regions as a starting point for regionalization efforts it saw as necessary to establish nutrient criteria.

¹⁷ The DEP's 2007 Plan utilized EPA guidance and proposed the development of regional nutrient criteria for streams based upon the "reference site" approach to determine nutrient characteristics at minimally-disturbed, biologically healthy sites. The Florida-derived bioassessment methods, the Stream Condition, Lake Condition, and Lake Vegetation Indices, were also considered. Additionally, DEP began using a rapid periphyton survey methodology for streams in early 2007 and initiated the development of phytoplankton and periphyton indices for lakes and streams, respectively. The EPA's 2007 letter memorializing the mutual agreement with the DEP may be accessed here: <http://www.dep.state.fl.us/water/wqssp/nutrients/docs/epa-092807.pdf> (last visited Apr. 6, 2011).

biological health endpoints. EPA guidance states that the next best plan involves a reference site distributional approach. The EPA recommends setting criteria based on an inclusive distribution of values obtained from reference sites in a designated ecoregion (based on climate and geology, etc.).¹⁸ The DEP expanded this approach by identifying streams that were minimally affected by human disturbance and nutrients and by documenting the existence of “full aquatic life full use support” (using Stream Condition Index methods).¹⁹ According to published EPA guidance, reference reaches may be identified for each class of streams within a state based on best professional judgment. The DEP expanded beyond the EPA’s best professional judgment approach regarding selection of reference streams and developed an extremely rigorous, multi-step process to ensure that the sites eventually selected truly represented minimal human disturbance and full designated use support.

The DEP’s Nutrient Benchmark Site Distributional Approach for nutrient criteria development includes the following:

- Use of the 90th percentile of nutrient concentrations (75th percentile for Bone Valley streams) derived from a distribution of minimally disturbed streams is inherently protective of aquatic life, including biota inhabiting downstream waters; and
- Documentation of healthy biological communities directly demonstrates that aquatic life uses are fully met within the associated range of nutrients.

The DEP noted one disadvantage of using the benchmark approach: it does not identify the specific nutrient levels at which biological impairment occurs. For this reason, it cannot be concluded on its face that adverse effects on aquatic life actually occur at concentrations above these values. Therefore, the DEP’s methodology included a multi-step verification process which culminated with an extensive field examination process.

The criteria listed in the tables below express annual geometric means that cannot be exceeded more than once every three years.

Numeric Criteria for Florida Streams Total Phosphorus (mg/L)			
Nutrient Watershed Region	EPA	DEP	
		75 th %	90 th %
Panhandle West	0.06	0.043	0.069
Panhandle East	0.18	0.066	0.101
North Central	0.30	0.216	0.322
Peninsula	0.12	0.088	0.116
West Central	0.49	0.415	0.559

¹⁸ A memorandum from the Director of the EPA’s Office of Science and Technology, Geoff Grubbs (2001), indicated that states are allowed the flexibility to develop and adopt nutrient criteria other than those currently proposed by EPA for water body types in specific Nutrient Ecoregions which were aggregated from Level III (EPA, 1998). As proposed, the EPA criteria recommendations that would include Florida do not fully reflect localized conditions or specific water body designated uses within the state. The DEP Plan proposes to undertake activities to develop criteria for lakes, streams, estuaries, coastal waters (and wetlands) within the state, based on state-specific, subregional data. Upon issuance of §304(a) Ecoregional Nutrient Criteria Recommendations, and since that time, EPA has encouraged states to refine their approach where possible in order to reflect more state-specific data and conditions. DEP Plan, pages 1, 2.

¹⁹ Florida Dep’t of Environmental Protection *Draft Nutrient Criteria Technical Support Document*, p. 98.

Numeric Criteria for Florida Streams – Total Nitrogen (mg/L)			
Nutrient Watershed Region	EPA	DEP	
		75 th %	90 th %
Panhandle West	0.67	0.63	0.82
Panhandle East	1.03	1.13	1.73
North Central	1.87	1.13	1.73
West Central	1.65	1.13	1.73
Peninsula	1.54	1.13	1.73

Florida's Lakes

As previously stated, according to the DEP, the most comprehensive and scientifically defensible approach to developing numeric nutrient criteria for surface waters is to establish cause-effect relationships between nutrients (stressors) and valued ecological attributes. Chapters 9 and 10 of the DEP's *Nutrient Criteria Technical Support Document* provides justification for use of chlorophyll *a* as an indicator of designated use support, primarily as a measure of excessive algal growth, which can result in imbalances of natural populations of flora or fauna. Additionally, the Lake Vegetation Index (LVI) is a direct assessment of the floral community and can therefore be used to demonstrate use support.

The DEP evaluated responses in both chlorophyll *a* and the LVI to total phosphorus (TP) and total nitrogen (TN) concentrations. Lakes were initially categorized based on color categories previously adopted in Florida's impaired waters rule. Lakes with color less than or equal to 40 platinum cobalt units (PCU) were categorized as clear and lakes with color greater than 40 PCU were categorized as colored. Based upon recommendations from the Nutrient TAC, the DEP evaluated whether there were any differences in the relationships between nutrients and chlorophyll *a* in clear lakes with specific conductance values above and below 100 µmhos/cm.²⁰ The specific conductance threshold was designed to capture lakes that receive input from calcareous aquifer sources, which naturally contain higher levels of phosphorus than do lakes that receive most of their water from (low conductivity) rainfall.

²⁰ Conductivity is a measure of the ability of water to pass an electrical current. Conductivity in water is affected by the presence of inorganic dissolved solids such as chloride, nitrate, sulfate, and phosphate anions (ions that carry a negative charge) or sodium, magnesium, calcium, iron, and aluminum cations (ions that carry a positive charge). Organic compounds like oil, phenol, alcohol, and sugar do not conduct electrical current very well and therefore have a low conductivity when in water. Conductivity in streams and rivers is affected primarily by the geology of the area through which the water flows. Streams that run through areas with clay soils tend to have higher conductivity because of the presence of materials that ionize when washed into the water. Ground water inflows can have the same effects depending on the bedrock they flow through. Discharges to streams can change the conductivity depending on their make-up. A failing sewage system would raise the conductivity because of the presence of chloride, phosphate, and nitrate; an oil spill would lower the conductivity. The basic unit of measurement of conductivity is the mho or siemens. Conductivity is measured in micromhos per centimeter (µmhos/cm) or microsiemens per centimeter (µs/cm). Distilled water has a conductivity in the range of 0.5 to 3 µmhos/cm. The conductivity of rivers in the United States generally ranges from 50 to 1500 µmhos/cm. Studies of inland fresh waters indicate that streams supporting good mixed fisheries have a range between 150 and 500 µmhos/cm. Conductivity outside this range could indicate that the water is not suitable for certain species of fish or macroinvertebrates. Industrial waters can range as high as 10,000 µmhos/cm. Source: <http://water.epa.gov/type/rs/monitoring/vms59.cfm>.

Color primarily affects lake response to nutrients by limiting light at very high color levels, but color is also an indirect indication of the source of the water reaching the lake. High water color (> 40 PCU), which is imparted from breakdown of natural leaf litter, indicates that a lake is influenced by surface water runoff from forests and wetlands and would contain higher natural nutrient levels than a rainfall driven system. Low color lakes (< 40 PCU) derive their water primarily from rainfall, unless high alkalinity is also present, meaning higher phosphorus Floridan aquifer groundwater influences the system.

After dividing lakes into categories of color and alkalinity, the DEP determined statistically strong, dose-response relationships between nutrients and chlorophyll *a* (an indicator of algal biomass or primary productivity). The DEP then used multiple lines of evidence, including paleolimnology, fisheries success, expert opinion, lack of harmful algal blooms and user perception to determine chlorophyll *a* levels that would be protective of designated uses. The DEP concluded that a chlorophyll *a* level of 20 micrograms per liter (ug/L) would protect human and aquatic life uses in both colored lakes and in clear, high alkalinity lakes. For clear, low alkalinity lakes, the protective chlorophyll *a* threshold was set at 9 ug/L.

Because algal response is influenced by factors other than nutrients (grazing, macrophyte nutrient uptake, water retention time), the DEP contends the most scientifically defensible strategy for managing nutrients within the range of uncertainty is to verify a biological response prior to taking management action. If data demonstrate that a given lake is biologically healthy and does not experience excess algal growth (e.g., < 20 µg chlorophyll *a*/L in a colored lake or high conductivity clear lake) despite having nutrient concentrations within the range of uncertainty, then no nutrient reductions are needed.

Lakes Criteria					
Lake Type	DEP Response (Chl-a ug/L)	EPA Response (Chl-a ug/L)	Stressor	DEP	EPA
Clear/Low Alkalinity	9	6	TP (mg/L)	0.015 - 0.043	0.01 (0.01 – 0.03)
			TN (mg/L)	0.85 - 1.14	0.51 (0.51 – 0.93)
Clear/High Alkalinity	20	20	TP (mg/L)	0.030 - 0.087	0.03 (0.03 – 0.09)
			TN (mg/L)	1.0 - 1.81	1.05 (1.05 – 1.91)
Colored	20	20	TP (mg/L)	0.05 - 0.157	0.05 (0.05 – 0.16)
			TN (mg/L)	1.23 - 2.25	1.27 (1.27 – 2.23)

Florida's Spring Runs

Similar to the methods being used to establish numeric nutrient criteria for lakes and streams, the DEP utilized multiple lines of evidence taken from the results of different types of research as well as empirical data available from various monitoring programs to develop nitrate criteria for

clear streams, including spring runs. The DEP focused on developing nitrate-nitrite criteria for springs and clear streams (< 40 PCU), rather than phosphorus, for four distinct reasons:

- Increases in nitrate-nitrite concentrations are nearly omnipresent in areas where anthropogenic loading to the land's surface has occurred.
- Once in the ground water, de-nitrification is negligible and nitrate-nitrite appears to be transported as a conservative solute.
- Although Florida's geology is naturally rich in phosphorus, there does not appear to be a trend of increasing phosphorus concentrations in spring discharges. While nitrate-nitrite concentrations have increased significantly in most spring discharges, phosphorus concentrations have remained relatively constant over the past 50 years.
- Since springs are naturally rich in phosphorus, the majority of Florida springs are likely to have been historically nitrogen limited.

Through extensive laboratory experiments, in situ field surveys, TMDL development activities for the Wekiva River and Rock Springs Run, studies and using data derived from nutrient gradient studies of Rapid Periphyton Survey (algal responses to nutrients and other variables), the DEP derived a 0.35 mg/L nitrate-nitrite criterion for spring runs.²¹ At monthly concentrations below 0.35 mg/L, the DEP obtained high confidence (95% Confidence Interval) that adverse responses will not be observed. The EPA's Final Rule criteria threshold established for spring runs is identical to the DEP's threshold.

Site Specific Alternative Criteria for Florida Waters

Nutrient dynamics are complex and the impacts are site-specific. There will always be cases where statewide criteria are over-protective for specific water bodies. To address this possibility, the DEP developed rule language for a new process for developing Site Specific Alternative Criteria (SSAC) for nutrients. This new "Type III" SSAC process would require a demonstration that the SSAC is fully protective of designated uses based on the Stream Condition and Lake Vegetation indices, for streams and lakes, respectively. Under the draft rule, a Type III SSAC would be adopted if two spatially and temporally independent biological health assessments indicated that the existing nutrient regime supported healthy biota. To ensure the SSAC is also protective of downstream waters, the DEP also added a requirement that all downstream waters attain water quality standards related to nutrients.

The DEP Plan included previously adopted nutrient TMDLs²² as SSAC, because the TMDLs:

- Establish site specific and sensitive responses to nutrient enrichment for a particular area;
- Use data appropriate for a site specific assessment;
- Establish a protective endpoint equivalent to numeric criteria; and

²¹ During the development of the TMDL for these water bodies, protective nutrient concentration targets were derived using periphyton and water quality data collected from the Suwannee River and two tributaries, the Withlacoochee River and Santa Fe River (Hornsby et al. 2000). These data were considered applicable to the Wekiva River and Rock Springs Run since the Suwannee River is heavily influenced by spring inflow, and in the absence of anthropogenic inputs, the algal communities would be expected to be generally similar in composition to those in the Wekiva River and Rock Springs Run. Florida Dep't of Environmental Protection, *Nutrient Criteria Technical Support Document*, Chapter 4.

²² See Rule 62-304, F.A.C.

- Reflect geographically explicit protective conditions and are more appropriate than a statewide criterion because it would be counter-productive for statewide nutrient criteria to supersede the TMDL.

The DEP designed the recommended revisions to the Impaired Waters Rule, 62-303, F.A.C., to implement the proposed revisions to the WQS Rule, 62-302, F.A.C. The revisions would have allowed the DEP to assess waters for nutrient impairment using the numeric nutrient criteria in addition to the current narrative nutrient impairment thresholds in the Impaired Waters Rule, and to assess waters for biological impairment using the new Stream Condition and Lake Vegetation indices' thresholds. Both rules are still in draft stages.²³

The EPA did not include Florida's water bodies with previously-approved nutrient TMDLs as SSAC under the Final Rule. As such, the DEP will be required to submit the TMDLs again to the EPA for consideration as SSAC under the Final Rule.

Downstream Protection of Florida Waters

The DEP could discern no defensible method to quantitatively describe the maximum nutrient concentrations allowed for the protection of downstream waters. According to the DEP, there exists no adequate, statewide calibrated model that could be used to numerically determine, without great uncertainty, protective nutrient loads for downstream lakes or estuaries. With no scientifically defensible solution to reply upon, the DEP proposed a narrative statement to ensure downstream waters protection.

The EPA did not include Florida's downstream protection methodology in the final rule. Instead, the EPA promulgated an equation to adjust in-stream total phosphorus criteria to protect downstream lakes.

The EPA's final rule proposes an alternative regulatory approach the state may consider if meeting numeric criteria for certain water bodies is unattainable; re-designation of water use. Pursuant to the Act, states establish water quality standards (WQS) in three steps:

- Establish designated uses for each water body, which may be for drinking, recreation and aquatic life propagation, or for agricultural and industrial purposes;
- Establish water quality criteria, which can be either a numeric or narrative standard that defines the amount of pollutant a water body can contain without impairing the designated use; and
- Establish an anti-degradation policy to maintain and protect existing uses and high quality waters.

In 2009, the DEP began to refine the current system of designated uses, primarily because certain engineered water systems that were designed for flood control or as conveyances to treatment areas are currently designated as Class III waters, for aquatic life and recreation purposes. The DEP amended its water classification rule, effective August 5, 2010, creating a sub-class of Class III waters. Pursuant to 62-302.400(5), F.A.C.:

²³ See Surface Water Draft Rules at http://www.dep.state.fl.us/water/rules_dr.htm (last visited Apr. 6, 2011).

Class III-Limited surface waters share the same water quality criteria as Class III except for any site specific alternative criteria that have been established for the water body under Rule 62-302.800, F.A.C. Class III-Limited waters are restricted to waters with human-induced physical or habitat conditions that prevent attainment of Class III uses and do not include water bodies that were created for mitigation purposes. “Limited recreation” means opportunities for recreation in the water are reduced due to physical conditions. “Limited population of fish and wildlife” means the aquatic biological community does not fully resemble that of a natural system in the types, tolerance and diversity of species present. Class III-Limited waters are restricted to:

- (a) Wholly artificial water bodies that were constructed consistent with regulatory requirements under Part I or Part IV of Chapter 373, Part I or Part III of Chapter 378, or Part V of Chapter 403, F.S.; or
- (b) Altered water bodies that were dredged or filled prior to November 28, 1975. For purposes of this section, “altered water bodies” are those portions of natural surface waters that were dredged or filled prior to November 28, 1975, to such an extent that they exhibit separate and distinct hydrologic and environmental conditions from any waters to which they are connected.

Rulemaking will be necessary to re-assign any water body to the new sub-class. No specific water body has been yet classified as Class III-Limited.

Snapshot Comparison of the EPA’s Final Rule and the DEP Plan

In general, the quantitative values promulgated by the EPA for lakes and streams were similar to those in the DEP’s Numeric Nutrient Criteria Plan. The value reached for springs was identical. In key areas related to implementation, however, there are significant differences in the two approaches.

- The DEP’s multi-tiered approach (numerical criteria with follow-up biological assessment) was not adopted by the EPA. The DEP demonstrated that some water bodies with nutrient thresholds that exceed the value of undisturbed reference waters have healthy biota and do not need restoration. The DEP’s intent was to have “biological confirmation” that nutrient concentrations above the numeric standard actually resulted in biological impairment of the water body.
- The EPA rejected the DEP’s approach to protect downstream lake values by using the narrative criteria. Instead the EPA promulgated an equation to adjust in-stream total phosphorus criteria to protect downstream lakes. This will likely result in more stringent instream values.
- The EPA did not accept Florida’s existing nutrient TMDLs as meeting the Act’s WQS under the rule, even though the TMDLs have already been approved by the EPA. As a result, the DEP must re-establish to the EPA that water bodies with approved TMDLs comply with provisions of the Act.

Cost of Compliance with the Final Rule

The fiscal impact of the EPA’s rule on industrial dischargers, municipal wastewater and urban stormwater facilities, agriculture and the regulatory agencies is unclear. EPA-generated

annualized cost estimates to achieve the numeric criteria (\$135-\$206 million) differ dramatically from estimates provided by the DEP (\$5.7 - \$8.4 billion). The difference in cost estimates is largely due to the different baselines utilized by the two entities. The EPA based its cost estimates on the difference between the EPA's heightened criteria and the draft DEP criteria. A study commissioned by the Florida Water Environment Association Utility Council in November, 2010, estimates that wastewater utilities alone will spend between \$24 billion and \$51 billion in capital costs for additional wastewater treatment facilities and incur increases in annual operating costs between \$4 million and \$1 billion to comply with the federal numeric nutrient criteria. According to the commissioned study, the EPA's cost estimate inadequately accounted for existing baseline conditions, failed to address all direct costs and did not consider all indirect costs to businesses and the public, including the costs of uncertainty. If the EPA enforces "end-of-pipe" criteria (requiring all discharger effluent levels to be at or below the federally-promulgated standards), the total annual costs could range from \$3.1 to \$8.4 billion (based on the estimated fifth and ninety-fifth percentile of costs). Even if the EPA enforces criteria to less strict BMPs and Limit of Technology standards in which effluent is not at or below the federal standard, then the annual costs could range from \$1.0 to \$3.2 billion (based on the estimated fifth and ninety-fifth percentile of costs in this scenario).

Because the numeric nutrient criteria is water body-specific, the expected costs for compliance will be largely site-specific and contingent upon the level of impairment. The EPA only just published guidance documents detailing how the rule is to be implemented and cost estimates have not yet been updated.

In a letter dated March 10, 2011, U.S. Senator Bill Nelson asked the EPA to commission an independent third-party review to analyze the EPA and other stake holders' cost estimates of implementing federal numeric nutrient criteria in Florida. He asked that the EPA Administrator, Lisa Jackson, consider entities such as the National Academies of Science [sic] or the state university system to conduct the review. Administrator Jackson replied on April 6, 2011, stating that she has initiated a review process with the National Academy of Sciences (one branch of the National Academies). In the letter, Administrator Jackson sets no timetable for completion of the review.²⁴ The completed review should give private and public stakeholders a better idea of the fiscal impact of the federally promulgated rule.

The EPA is Sued over Florida's Narrative Criteria

On July 17, 2008, five environmental groups (the Florida Wildlife Federation, Sierra Club, Conservancy of Southwest Florida, Environmental Confederation of Southwest Florida and St. Johns Riverkeeper) sued the EPA, alleging failure on the part of the federal agency to comply with the Act. These groups initially alleged that the EPA's 1998 National Strategy for the Development of Regional Nutrient Criteria was a necessity determination, pursuant to s. 303(c)(4)(B) of the Act, requiring the EPA to promulgate numeric nutrient rules for Florida. Their amended complaint asserted the 1998 Clean Water Action Plan, coauthored with the U.S. Department of Agriculture, was the necessity determination. The EPA initially defended the suit

²⁴ Bruce Ritchie, *Federal agency agrees to have outside party review cost of new water rules*, FLORIDA TRIBUNE, Apr. 8, 2011, available at <http://fltrib.com/federal-agency-agrees-have-outside-party-review-cost-new-water-rules> (last visited Apr. 12, 2011). For copies of the actual letters, see also, http://static-lobbytools.s3.amazonaws.com/press/38460_independent_review_of_cost_of_federal_water_quality_standards.pdf.

and contested the plaintiffs' arguments. However, in an EPA internal memorandum from December, 2008, the writer warned that a judicial finding in favor of the plaintiffs could result in the EPA being required to promulgate numeric nutrient rules for the other 49 states. The internal memorandum proposes a strategy to avoid this possibility: if the EPA issues a s. 303(c)(4)(B) necessity determination, that may be used as a basis to settle the lawsuit and request a dismissal from the court.²⁵

On January 14, 2009, the EPA placed the DEP on formal notice that numerical criteria for nutrients were necessary for compliance with the Act. This notice triggered a deadline of one year for the EPA to develop numeric nutrient criteria for Florida's surface waters and 24 months to develop numeric criteria for coastal waters, unless the state proposed criteria acceptable to the EPA before final promulgation. On August 19, 2009, the EPA entered into a consent decree to settle the lawsuit filed by the five environmental groups. The EPA committed to propose numeric nutrient standards for inland waters (lakes and flowing waters), as well as for estuarine and coastal waters, by certain dates.²⁶ The DEP did not formally submit numeric nutrient criteria to the EPA before the deadline.

In drafting the proposed rule, the EPA had the benefit of more than seven years of DEP data and analysis, DEP's nutrient plans, as well as technical support documentation. The DEP maintained contact with the EPA while the EPA formulated the proposed rule.

On January 14, 2010, EPA Administrator Jackson signed the EPA's rule proposing numeric nutrient criteria for Florida's fresh waters. Ten months later, on November 14, 2010, Administrator Jackson signed the final rule adopting numeric nutrient criteria for Florida's fresh waters. On December 6, 2010, the EPA published its final administrative rule. Fifteen months from the publication date, the established numeric water quality standards for nutrients in Florida's inland lakes and flowing waters take effect.

Legal Challenges to the EPA's Final Rule

Several parties, representing the environment, state and local governments, water utilities, wastewater, stormwater, agriculture and fertilizer industries, have challenged the EPA-promulgated numeric nutrient rules in federal court.²⁷ With the exception of the challenge filed

²⁵ Only 15 months earlier, the EPA agreed with Florida's methodology and plan to finalize numeric nutrient rules by the end of 2010. The DEP was not a party to the lawsuit, however, several groups representing utilities, local governments, and agriculture in the state intervened.

²⁶ The EPA numeric nutrient criteria for Florida's inland waters (except for south Florida) will be effective March 6, 2012. The EPA will propose numeric nutrient criteria for Florida's estuaries, flowing waters in south Florida (including canals), and the downstream protection values for flowing waters into estuaries on or before November 14, 2011. The deadline for promulgating a final rule is August 15, 2012.

²⁷ The State of Florida v. Jackson, Case No. 03:10-cv-503-RV-MD; The Mosaic Company, Inc., v. Jackson, Case No. 03:10-cv-506-RV-EMT; The Fertilizer Institute v. U.S. EPA, Case No. 03:10-cv-507-RS-MD; CF Industries, Inc., v. Jackson, Case No. 03:10-cv-513-MCR-MD; Destin Water Users, Inc., South Walton Utility Co., Inc., Emerald Coast Utilities Authority, City of Panama City, Okaloosa County Board of County Commissioners v. Jackson, Case No. 03:10-cv-532-MCR-EMT; Florida League of Cities, Inc., and Florida Stormwater Association, Inc., v. Lisa P. Jackson, Case No. 3:11-cv-11; Florida Pulp and Paper Association Environmental Affairs, Inc., Southeast Milk, Inc., and Florida Fruit and Vegetable Association v. Lisa Jackson, Case No. 3:11-cv-47-MCR/EMT; Florida Wildlife Federation v. EPA, Case No. 04:10-cv-511-SPM-WCS (filed prior to promulgation); Florida Wildlife Federation v. Jackson, Case No. 04:08-cv-324-RH-WCS (filed before the issuance of the Determination Letter).

by environmental groups, the complaints share a common theme; that the EPA's actions are arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law; in excess of statutory jurisdiction, authority, or limitations, or short of statutory authority; or without observance of procedures required by law.²⁸ EarthJustice, representing the environmental groups, is challenging the portion of the Final Rule providing a watershed approach to Site Specific Alternative Criteria.

The legal challenges were filed in federal courts located in Tallahassee and in Pensacola, Florida. To date, the Pensacola cases were transferred to Tallahassee and may be consolidated. The EPA has not yet established which documents will comprise the administrative record for the case.

III. Effect of Proposed Changes:

Section 1 of the bill creates an unnumbered section of law. It prohibits the DEP, the WMDs and local governmental entities from implementing or giving any force or effect to the federally-promulgated EPA numeric nutrient criteria (EPA criteria), in any program administered by the DEP. However, the bill does not limit the ability of the WMDs or any state, regional, or local governmental entity to:

- apply for pollution discharge permits;
- comply with the conditions of such permits, including NPDES permits; or
- implement best management practices, source control or pollution abatement measures for water quality improvement programs as provided by law.

The bill authorizes the DEP to adopt numeric nutrient criteria for a particular surface water or group of surface waters. The DEP may do so if it determines that such criteria are necessary to protect aquatic life reasonably expected to inhabit those waters. The DEP is authorized to adopt site-specific criteria. Such site-specific criteria:

- must be based on objective and credible data and studies showing a cause and effect relationship between nutrient levels and biological responses;
- may be expressed in terms of concentration, mass loading, waste load allocation, load allocation and surrogate standards; and
- may be supplemented by narrative statements.

The bill declares that numeric nutrient TMDLs, which are approved by the EPA, constitute site-specific numeric nutrient criteria. The site-specific criteria are:

- not effective if the EPA disapproves, approves in part, or conditionally approves the criteria, unless ratified by the Legislature;
- subject to the establishment and implementation of TMDLs contained in s. 403.067, F.S.; and
- amenable to challenges under s. 120.56(3), F.S., the Administrative Procedures Act (APA).

Once site-specific criteria are approved, they may be modified by DEP rule in accordance with the Environmental Regulation Commission (ERC). The modifications must be based on objective and credible data, studies and reports.

²⁸ Citing 5 U.S.C. s. 706(2)(A)(C) and (D).

Lastly, the bill clarifies that it does not derogate or limit county and municipal home rule authority.

Section 2 provides an effective date of July 1, 2011.

Other Potential Implications:

The DEP is the primary agency responsible for implementing Act programs in Florida, including the NPDES and TMDL programs.²⁹ For the purpose of NPDES permitting, “waters of the state” are synonymous with “waters of the United States.” This means that every water body in the state that is receiving treated wastewater, reclaimed water, stormwater runoff, etc., is affected by the EPA Rule, as is every Type III water body (fishable, swimmable) that fails to meet the WQS for its intended use.

If, under the bill, the DEP is restricted from implementing federally-promulgated criteria, the EPA may withdraw its approval for the state to implement some regulatory programs. If this occurs, both point source and some non-point dischargers will need to acquire both state and federal water quality permits.³⁰

Additionally, the phrase, “give any force or effect” has the potential to be broadly interpreted so that the DEP, a WMD or any local government entity may be in violation of this section of law if it takes the federally promulgated rule into consideration when developing a rule, ordinance, etc. It is unclear how local governments may rectify the provision prohibiting them from implementing or giving any force or effect to the federal rules and the provision allowing for continued home rule authority.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

²⁹ 33 U.S.C. s. 1342 provides for the TMDL program. 33 U.S.C. s. 1313 addresses surface waters that are not “fishable, swimmable” by requiring states to identify the waters and to develop total maximum daily loads for them, with oversight from the EPA. As such, TMDLs can play a key role in watershed management. Each state must identify waters at risk and establish TMDLs to protect those waters. This includes identification of needed load reductions within a watershed from agricultural producers and other nonpoint sources. These load reductions are to be achieved through nonpoint source programs established under Act s. 319 and the Coastal Zone Act Reauthorization Amendment s. 6217.

³⁰ Typically, the EPA does not regulate non-point sources of pollution. However, polluted stormwater runoff is commonly transported through Municipal Separate Storm Sewer Systems (MS4s), from which it is often discharged untreated into local water bodies. To prevent harmful pollutants from being washed or dumped into an MS4, operators must obtain a NPDES permit and develop a stormwater management program. See http://cfpub1.epa.gov/npdes/stormwater/munic.cfm?program_id=6 (last visited Apr. 11, 2011).

C. Trust Funds Restrictions:

None.

V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

The bill contains no additional costs for the private sector other than those it already bears to comply with the numerous water quality regulatory programs administered by federal, state and local governments. If the EPA revokes much of Florida's delegation to implement federal WQS, private entities would have to apply for federal and state permits independently of each other. This would add considerable time and expense to permit processing.

C. Government Sector Impact:

The process laid out in the bill for the DEP to adopt site-specific numeric nutrient criteria will take considerable time and add significant expense to implement. According to the DEP, it is exceptionally difficult to establish objective data establishing a quantitative amount of nutrient that flowing water bodies may accept without exhibiting an imbalance of flora or fauna based on a cause and effect relationship between nutrient levels and biological responses. However, the DEP is not required to adopt site-specific numeric nutrient criteria.

The bill's impact on local governments is unclear.

VI. Technical Deficiencies:

None.

VII. Related Issues:

Pursuant to state law regarding adoption of a TMDL for a water body, the DEP coordinates public and private entities. The parties determine the information required, accepted methods of data collection and analysis and quality control/quality assurance requirements. The TMDL is adopted pursuant to the DEP Secretary's rulemaking authority and is subject to administrative challenge under the APA. Subsequently, the TMDL is submitted to the EPA for review and approval. According to the DEP, there are 135 nutrient TMDLs in effect in Florida.

Under the bill, DEP-developed nutrient TMDLs that were approved by the EPA before December 6, 2010, are designated as site-specific nutrient water quality criteria. According to the DEP, all 135 nutrient TMDLs were EPA-approved on or before December 6, 2010, which, if the bill is enacted, will result in 135 site-specific criteria. The bill provides the site-specific criteria

are not effective if the EPA disapproves, approves in part, or conditions approval. The DEP must adopt the site-specific criteria in administrative rule because the bill subjects the statutorily-created criteria to s. 120.56(3), F.S., the APA provision for an invalid rule challenge. If challenged, the proposed site-specific criteria are ineffective pending resolution of the administrative action.³¹ Therefore, the TMDL criteria, previously subject to administrative rule challenge, may now be subject to an additional administrative challenge, this time as site-specific criteria.

After site-specific criteria are adopted by rule, the DEP may submit the criteria to the EPA for consideration. If the EPA responds with anything less than an unqualified approval, the criteria are no longer effective as site-specific criteria, unless the Florida Legislature ratifies the rule.³² If the EPA approves the criteria, any subsequent modification of site-specific criteria require the review and approval of the ERC. This layer of review is in addition to any administrative challenge that may follow promulgation.

Pursuant to s. 120.541(3), F.S., proposed rules which will have an adverse economic impact of more than \$1 million over 5 years must be submitted to the Legislature for ratification before rules may take effect. The DEP rules are likely to meet or exceed this threshold. Two exceptions exist: the adoption of emergency rules pursuant to s. 120.54(4), F.S., or the adoption of federal standards pursuant to s. 120.54(6), F.S. Neither exception appears to apply.

VIII. Additional Information:

A. Committee Substitute – Statement of Substantial Changes:
(Summarizing differences between the Committee Substitute and the prior version of the bill.)

None.

B. Amendments:

None.

This Senate Bill Analysis does not reflect the intent or official position of the bill's introducer or the Florida Senate.

³¹ Subsection (14) of s. 403.067, F.S., provides: In order to provide adequate due process while ensuring timely development of total maximum daily loads, proposed rules and orders authorized by this act shall be ineffective pending resolution of a s. 120.54(3), s. 120.56, s. 120.569, or s. 120.57, F.S., administrative proceeding. However, the department may go forward prior to resolution of such administrative proceedings with subsequent agency actions authorized by subsections (2)-(6), provided that the department can support and substantiate those actions using the underlying bases for the rules or orders without the benefit of any legal presumption favoring, or in deference to, the challenged rules or orders.

³² Legislative ratification of rules has not proven to be an automatic process. On February 23, 2006, Florida's Environmental Regulation Commission approved an amendment to the DEP's wetland delineation rule. According to DEP, this rule change was in response to legislative direction in HB 759 in the 2005 Session to streamline State and Federal permitting programs and was included in the department's October 3, 2005 report to the Legislature required by HB 759. The rule amendment changes the status of gallberry and slash pine from being indicators of upland areas to being neutral. Under chapter 373, F.S., the rule amendment does not become effective until formally ratified by the Florida Legislature. Despite successive bill filings in 2006, 2007, and 2009, the Legislature has not ratified the rule amendment.