

Numeric Nutrient Standards

Summary

The Environmental Protection Agency (EPA) is proposing “numeric water quality criteria” (standards) pertaining to nutrient concentrations to protect aquatic life (and designated uses) in lakes and streams within Florida.

Background

EPA’s Summary

“EPA has proposed water quality standards in the State of Florida that would set a series of numeric limits on the amount of phosphorus and nitrogen pollution, also known as “nutrients” that would be allowed in Florida’s lakes, rivers, streams, springs and canals. This proposed action seeks to improve water quality, protect public health, aquatic life and the long term recreational uses of Florida’s waters, which are a critical part of the State’s economy. The proposed standards comply with the terms of a January 2009 EPA determination under the Clean Water Act that numeric nutrient standards are needed in Florida and an August 2009 consent decree between EPA and the Florida Wildlife Federation.”

For more detail see the following links:

<http://www.epa.gov/waterscience/standards/rules/florida/>

<http://www.dep.state.fl.us/water/wqssp/nutrients/index.htm>

[UF – IFAS Document “A Guide to EPA’s Proposed Numeric Nutrient Water Quality Criteria for Florida”](http://edis.ifas.ufl.edu/pdffiles/SS/SS52800.pdf)

<http://edis.ifas.ufl.edu/pdffiles/SS/SS52800.pdf>

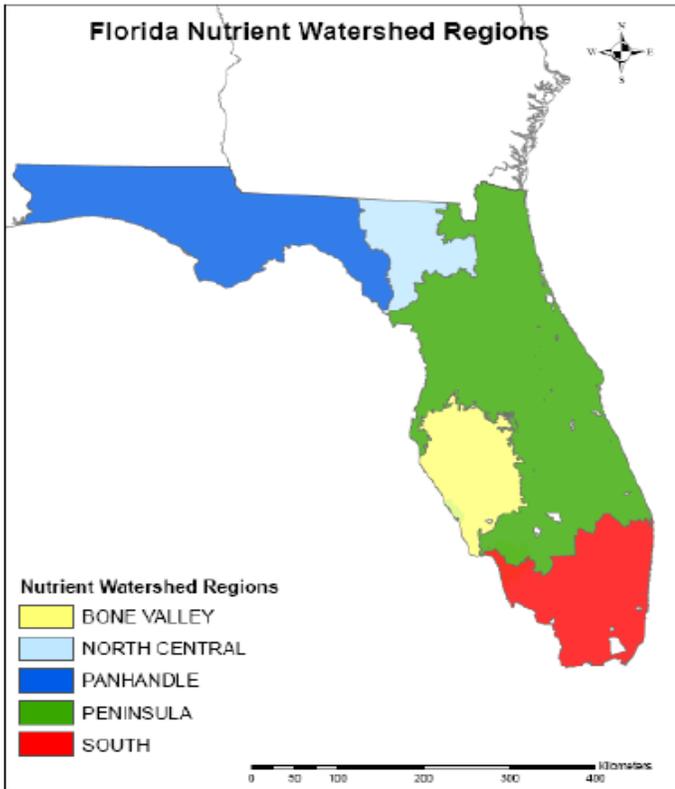
History

In 1998 EPA encouraged states through its “National Strategy for the Development of Regional Nutrient Criteria” to adopt numeric nutrient water quality criteria to help restore and protect impaired water bodies. In 1999 the Florida Legislature adopted the “Florida Watershed Restoration Act” (FWRA) or Total Maximum Daily Loads (TMDL) law to address water quality issues in the state. The FWRA designated the Florida Department of Environmental Protection (FDEP) as the lead agency responsible for administering this law with cooperation from other agencies. The Florida Department of Agriculture and Consumer Services (FDACS) was designated as the lead agency for working with the agriculture industry. Since 1999 FDEP has adopted more than 100 TMDLs including a TMDL for the Suwannee and Santa Fe Rivers as well as a number of springs. The TMDL for the Suwannee Basin Rivers and springs was set at 0.35 parts per million (p.p.m.) Nitrate-Nitrogen.

For more information see the following DEP link:

<http://www.dep.state.fl.us/water/tmdl/>

EPA Proposed Standards Summary



Clear streams and springs

(3) *Criteria for springs, spring runs, and clear streams.* The applicable nitrate-nitrite criterion is 0.35 mg/L as an annual geometric mean not to be surpassed more than once in a three year period, nor surpassed as a long-term average of annual geometric mean values. In addition to this nitrate-nitrite criterion, criteria identified in paragraph (c)(2) of this section are applicable to clear streams.

Geographic Area	Total Phosphorus (mg/L)		Total Nitrogen (mg/L)	
	IPV	DPV (Default)	IPV	DPV
Panhandle Nutrient Region	0.043	0.12	0.824	0.24 - 0.91
North Central Nutrient Region	0.359	0.12	1.479	0.55 - 0.78
Peninsular Nutrient Region	0.107	0.12	1.205	0.30 - 1.00
Bone Valley Nutrient Region	0.739	0.12	1.798	0.56 - 1.05
South Florida Nutrient Region (Chl <i>a</i> of 4.0 ug/L)	0.042	N/A	1.6	N/A

IPV – Instream Protective Value

DPV – Downstream Protective Value

Issues (as identified by Michael Sole, Secretary FDEP 2/5/10 legislative committee)

- “The EPA proposed criteria do not reflect a true relationship between nutrient enrichment and the biological health of Florida’s surface waters”
- On average 80% of Florida’s most pristine rivers/streams will be deemed impaired based on downstream protection values
- Requires remediation actions that are not necessary
- Demands development of site specific alternative criteria to correct flaws in criteria methodology
- Potential to cause harm to economically important biological resources (i.e. oyster beds)
- Conventional municipal wastewater technology (EPA, 2008) cannot achieve EPA proposed criteria
- Existing technology for agriculture cannot achieve EPA proposed criteria
- Compliance will force an investment of billions of dollars without environmental benefit

EPA Public Hearings

EPA will be holding a series of public workshops in Florida regarding its proposed numeric nutrient criteria for Florida streams and rivers as follows:

February 16, 2010

Holiday Inn Capitol East
1355 Apalachee Parkway
10 a.m.-12 p.m.
1p.m. – 5 p.m.
7 p.m.-10 p.m.

February 17, 2010

Crowne Plaza Orlando
7800 Universal Boulevard
1 p.m.-6:30 p.m.
7:30 p.m.-10 p.m.

February 18, 2010

Holiday Inn Palm Beach Airport
1301 Belvedere Road
12 p.m. - 5 p.m.
6 p.m.-10 p.m.

DEP Public Hearing

February 23, 2010

Wyndham Orlando Resort
International Drive
8:30 a.m. – 12:30 p.m.
DEP will address questions raised by the public.