Water: The Choices: Water Law and Policy” Conference
November 8, 2012

Numeric Nutrient Criteria
Florida and Beyond

Susan Parker Bodine
Barnes & Thornburg
202-371-6364
susan.bodine@btlaw.com
**Clean Water Act 101**

- States adopt designated uses for water bodies (i.e. fishable, swimmable) and adopt criteria to protect those designated uses. Together these constitute state water quality standards.

- EPA has authority to approve or disapprove state water quality standards.

- Most states have adopted narrative standards for nutrients (i.e., nutrients cannot exceed levels that will cause harm to the aquatic ecosystem).

- EPA has approved those narrative state standards.
Excessive Nutrients

Grand Lake St. Mary’s, OH
Arkansas Narrative Standard

- **Reg. 2.509 Nutrients**

  Materials stimulating algal growth shall not be present in concentrations sufficient to cause objectionable algal densities or other nuisance aquatic vegetation or otherwise impair any designated use of the waterbody. Impairment of a waterbody from excess nutrients are dependent on the natural waterbody characteristics such as stream flow, residence time, stream slope, substrate type, canopy, riparian vegetation, primary use of waterbody, season of the year and ecoregion water chemistry. Because nutrient water column concentrations do not always correlate directly with stream impairments, impairments will be assessed by a combination of factors such as water clarity, periphyton or phytoplankton production, dissolved oxygen values, dissolved oxygen saturation, diurnal dissolved oxygen fluctuations, pH values, aquatic-life community structure and possibly others. However, when excess nutrients result in an impairment, based upon Department assessment methodology, by any established, numeric water quality standard, the waterbody will be determined to be impaired by nutrients.
Pressure to adopt numeric nutrient standards

- Environmental groups and EPA enforcement officials feel that narrative standards are too vague.

- It is hard to bring a citizen suit alleging violation of a narrative standard. Actual water quality data would be needed.
EPA goal to set numeric nutrient standards

• In 1998, EPA adopted a national nutrient strategy that set a goal that states would develop numeric nutrient criteria by the end of 2001 (later pushed back to 2004).

• States attempted to meet that goal but found nutrients to be very different from toxics:
  – A healthy aquatic ecosystem needs nutrients.
  – There is no threshold level that causes harm.
  – The effects of nutrients are very site-specific.
Litigation over failure to meet a goal

• The Florida Wildlife Federation and others alleged that the goal set in the 1998 policy constituted a determination by EPA that numeric nutrient criteria in Florida are “necessary” to meet the requirements of the Clean Water Act.

• Section 303(c) of the Act authorizes EPA to set federal criteria where determines it is “necessary to meet the requirements of this Act.”

• Rather than litigate the issue, in January 2009 EPA made this determination relating to Florida.

• EPA then entered into a consent decree with the environmental groups agreeing to issue federal numeric nutrient criteria for Florida in two phases under court-ordered deadlines.
Phase I: Lakes and Flowing Waters

- Florida had spent $20 million collecting data on nutrient effects on Florida waters and could not find a cause and effect relationship between nutrients in rivers and streams and water quality.

- EPA also failed to do so:

  - “…EPA analyzed stressor-response relationships in Florida streams based on available data, but…did not find sufficient scientific support for their use in the derivation of numeric nutrient criteria for Florida streams. More specifically, EPA was not able to demonstrate a sufficiently strong correlation between the biological response indicators…and TN or TP concentrations. …” – Preamble, EPA Proposed Nutrient Criteria Rule

- Nonetheless, EPA signed a final rule for lakes and flowing waters on November 14, 2010.
Litigation over Phase I

- Multiple challenges filed by the State of Florida and the Florida Department of Agriculture and Consumer Services (FDACS), cities, counties, environmental groups, and industry.

- FDACS cost estimate:
  - $902 million to $1.605 billion annual costs to the agriculture industry.
Backlash Against EPA’s Actions

• Effective coalition in Florida.

• Congressional Pressure.

• State water agencies protest.

• EPA response: On March 16, 2011, EPA issued a “framework” whereby states would develop numeric nutrient criteria under a work plan and a schedule to be approved by EPA. EPA promises flexibility and promises a longer schedule if a state agrees to reduce nonpoint source loadings.

  – “States need room to innovate and respond to local water quality needs, so a one-size-fits-all solution to nitrogen and phosphorus pollution is neither desirable or necessary.”

  – “The timetable reflected in the State’s criteria development schedule can be a flexible one provided the state is making meaningful near-term reductions in nutrient loadings to state waters while numeric criteria are being developed.”
FL Petition to Withdraw Federal Criteria

- FL petitioned EPA to withdraw its January 2009 rulemaking and to cease its rulemaking for coastal waters, citing the “Nutrient Framework.”

- EPA response to FL:
  - Still need numeric nutrient criteria.
  - Will repeal federal criteria only if FL adopts “protective criteria sufficient to address the concerns underlying our determination and rule.”
Florida Alternative Nutrient Rule

– Intended to replace EPA rule

– Bipartisan support

– State rule used water-specific biology, before determining a water body is impaired.

– Federal Rule goes into effect January 6, 2013. EPA has not yet approved the state rule.

– Consent decree requires Phase II federal rule to be proposed by November 30, 2012, and be finalized by September 30, 2013.
District Court opinion, overturning the federal criteria in part

- Decided February 18, 2012.

- EPA set Florida streams criteria based on a background, “reference stream” method.

- Judge Hinkle: EPA streams criteria are invalid
  
  - “There is a substantial difference...between a criterion designed to identify a *harmful increase* in a nutrient level, on the one hand, and a criterion designed to identify *any increase* in a nutrient level, on the other hand. ...”

EPA still pushing numeric nutrient criteria

- EPA's 2012 Office of Water National Program Guidance still requires states to develop numeric nutrient criteria.
  - The final guidance includes as part of its performance measures, the expectation that in 2012, 49 numeric water quality standards for total nitrogen and total phosphorus for all waters within the State or Territory will be proposed by States and Territories or by EPA, and 42 will be adopted by States and Territories and approved by EPA, or promulgated by EPA.
EPA tracking progress toward state adoption of numeric nutrient criteria

– http://www.epa.gov/nandppolicy/progress.html
**ENGO Petition and Lawsuit for Federal Criteria throughout the Mississippi River Basin**

- In July 2008, 13 environmental non-governmental organizations (ENGOs) petitioned EPA to set numeric nutrient standards for the entire Mississippi River Basin and establish TMDLs for the waters that would be considered impaired based on those new standards.

- On July 29, 2011, EPA denied the petition.

- On March 26, 2012, EPA told Bill Northey (ID Sec. of Agriculture):
  
  “Let me assure you that the Agency's decision to list the Louisiana coastal segments does not signal a departure from our thinking when we denied the petition from thirteen organizations for rulemaking in the MARB and the northern Gulf of Mexico. That petition requested that the EPA develop and promulgate numeric nutrient water quality criteria for all navigable waters in all 50 states where criteria did not already exist, and to establish TMDLs for nitrogen and phosphorus throughout the MARB. As the Agency indicated in the petition denial, it is our long-standing policy, consistent with the CWA, that states should develop and adopt standards in the first instance. The EPA uses its own rulemaking authority only in cases where it disapproves a new or revised standard or affirmatively determines that new or revised standards are needed to meet CWA requirements.”

- In March 2012 the ENGOs sued EPA
Next?
Questions?

Susan Parker Bodine
Barnes & Thornburg
202-371-6364
susan.bodine@btlaw.com