

*The Illinois Chapter of the  
American Fisheries Society*  
founded 1963



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DEC 07 2004

STATE OF ILLINOIS  
Pollution Control Board

December 8, 2004

Illinois Pollution Control Board  
100 West Randolph  
Suite 11-500  
Chicago, Illinois 60601-3286

R04-26

PC#3

Dear Sir/Madam:

The American Fisheries Society was founded in 1870 and is the world's largest and oldest organization of professional fisheries biologists and aquatic resource scientists. The Illinois Chapter represents more than 250 fisheries and aquatic scientists within the State of Illinois. Our members include a diverse cross section of professionals from regulatory agencies, research institutions, universities, and private consulting firms. The Chapter has the expressed mission "to support the conservation and stewardship of the fisheries and aquatic ecosystems in Illinois by promoting professional excellence in fisheries science, management, and education." We recognize that the fisheries and overall aquatic biodiversity of Illinois are dependent on high quality water supplied by natural hydrologic cycles.

The Chapter wishes to express its support for the proposal currently before the Illinois Pollution Control Board (IPCB) to impose a 1 mg/l interim monthly average limit on phosphorus from new or expanded discharges in excess of 1 mgd. We commend the Illinois Environmental Protection Agency (IEPA) for their submittal of this new standard. As fisheries professionals, we concur that it has positive implications for Illinois' aquatic ecosystems and, in particular, its stream biota.

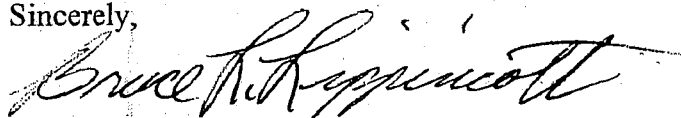
As the "limiting factor" for plant growth in most freshwater environments, phosphorus is often a major determinant of primary productivity in Illinois' lakes, rivers and streams. When it occurs in excessive amounts (due to anthropogenic sources such as wastewater or industrial effluent), this nutrient can trigger significant algal blooms in waterways. Aside from aesthetic impacts, such growth can lead to wide diurnal oxygen fluctuations (and eventual die-offs) which exert considerable stress on aquatic life, leading to massive fish kills in extreme cases. According to IEPA's 2004 *Illinois Water Quality Report*, nutrients (including phosphorus) were cited as a potential cause of impairment for 2588 miles of Illinois streams out of an assessed total of 15,069 miles.

For these reasons, the regulation of phosphorus effluent in our state's lotic systems is long overdue. According to USEPA's 1986 National Criteria Document, streams should not exceed 0.1 mg/l in order to avoid excessive algal growth. While the proposed effluent standard of 1.0 mg/l would still allow this level to be exceeded in smaller streams with relatively little assimilative capacity, the magnitude of nutrient enrichment experienced by Illinois' effluent receiving waters would be significantly less than what is presently experienced.

From a statutory standpoint, this new standard would help achieve the "fishable, swimmable" goals of the Clean Water Act. It would address the anti-degradation requirements of state law relative to aesthetics, pH and dissolved oxygen (each of which is affected by excessive algae growth). Moreover, the standard is realistically achievable; it has been in force since the 1970's on Great Lakes tributary streams with positive effects on Lake Michigan's aquatic life.

It is therefore in the best interest of the ecological, recreational and aesthetic values of Illinois rivers and streams to enact the proposed standard. The Illinois Chapter of the American Fisheries Society strongly urges IPCB to adopt IEPA's recommendations regarding phosphorus in their entirety. Thank you for your consideration of these comments on an issue so vital to the health of our state's aquatic ecosystems.

Sincerely,



Bruce L. Lippincott, President  
Illinois Chapter  
American Fisheries Society.

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Pollution Control Board

**Fax**

**From: Bruce L. Lippincott**

**To: ILPCB; Proposed phosphorus regulation**

**Fax Number: 312-814-3669**

**Total Number of Pages: 3**

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If you have questions regarding this transmission, call: Lawler, Matusky & Skelly  
Engineers LLP @ 815-334-9511.

**Message:**

**The Illinois chapter of the American Fisheries Society respectfully requests that its  
letter concerning this matter be added to the case file.**

**Thank you**