



ENVIRONMENTAL LAW
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Legal Approaches to Addressing Lake Erie HABs

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Presentation Outline

- HABs and the Clean Water Act
- Overview of past and current ELPC litigation
- TMDL Requirements and Opportunities
 - NPDES Permitting for CAFOs
- How to help: gather data

The Problem

- Phosphorus pollution fueling overgrowth of photosynthetic bacteria
- Particularly, dissolved reactive phosphorus (DRP) roughly a/k/a soluble reactive phosphorus (SRP)
- 90% coming from agriculture
- Hazardous algae blooms in western Lake Erie, growing dead zone in central Lake Erie
- Annex 4 of Great Lakes Water Quality Agreement: 40% reductions in total P (dissolved and particulate P) and in DRP
 - Spring load reductions for western Lake Erie HABs
 - Annual reductions for central Lake Erie dead zone

Federal Clean Water Act Framework (1)

- Goal: “restore and maintain the chemical, physical and biological integrity of the Nation's waters”; make waters of the United States drinkable, fishable, and swimmable
- Bars discharge of pollutants to waters of the United States from any “point source” without a permit under the National Pollution Discharge Elimination System (NPDES)
- “Point source” means “any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft.”
- “Nonpoint source” not defined in Act; means anything that doesn't meet “point source” definition
- U.S. EPA charged with administering NPDES program but can delegate to states, as in OH

Federal Clean Water Act Framework (2)

- States must establish water quality standards and designate desired uses for each water body
- Water bodies not meeting designated uses despite implementation of NPDES program are “impaired”
- States must establish “total maximum daily load” (TMDL) for pollutants causing impairment
- States must prepare bi-annual “integrated report” (a/k/a “Section 303(d) list”) identifying impaired waters and and priority ranking for TMDL preparation “taking into account” severity of pollution and designated uses
- States must submit water quality standards, 303(d) lists, and TMDLs to U.S. EPA; U.S. EPA must approve or disapprove within deadlines; if U.S. EPA disapproves, it must prepare the document itself

TMDL Requirement

- TMDL must be established at a level to remediate the impairment
- TMDL = Load Allocations (pollution from NPDES-permitted point sources) + Wasteload Allocations (pollution from nonpoint sources) + Margin of Safety
- Ohio Administrative Code also requires “implementation plan” for TMDLs
- U.S. EPA Guidance requires TMDL submissions to include:
 - Identification of Waterbody, Pollutant of Concern, Pollutant Sources and Priority Rankings
 - Applicable WQS and Numeric Water Quality Target.*
 - Loading Capacity.*
 - Load Allocations and Waste Load Allocations.*
 - Margin of Safety.*
 - Consideration of Seasonal Variation.*
 - Reasonable Assurance for PS/NPS.
 - Monitoring Plan to Track TMDL Effectiveness.
 - Implementation Plan.
 - Public Participation.
 - *= required by applicable regulation

CWA Enforcement

- **Suits under CWA**
 - Citizen suits vs. NPDES permit violators
 - Suits vs. U.S. EPA for failing to perform non-discretionary duty
- **Suits under Administrative Procedure Act (APA)**
 - APA applies to administrative agencies under all federal statutes that require discretionary action
 - Allows suit vs. agency for exercising discretion in manner that is “arbitrary or capricious or contrary to law”

ELPC First Lawsuit

- Ohio failed to designate open waters of western Lake Erie impaired in 2016 Integrated Report
- ELPC and others objected, pointing to obvious reality + Michigan designation
- U.S. EPA failed to approve or disapprove within statutory deadline
- ELPC sued under CWA for failure to discharge non-discretionary duty: to approve or disapprove 2016 Integrated Report
- U.S. EPA then approved 2016 Integrated Report despite defect, mooting case

ELPC Second Lawsuit (1)

- APA claim based on U.S. EPA wrongful approval of 2016 Integrated Report that failed to designate Lake Erie open waters as “impaired” – approval was “arbitrary and capricious and contrary to law”
- Day before summary judgment brief due, U.S. EPA withdrew approval, again trying to moot case
- Ohio prepared “revised” 2016 Integrated Report finally listing Lake Erie open waters “impaired” but no immediate commitment to prepare TMDL
- i.e., U.S. EPA and Ohio gave in, but still tried to evade TMDL responsibility

ELPC Second Lawsuit (2)

- ELPC asked to file amended complaint with new claim under CWA based on failure to commit to do TMDL
- Under CWA, U.S. EPA must do its own TMDL if it disapproves state TMDL; but what if state just fails/refuses to do TMDL?; could leave statute toothless
- “constructive submission” fills gap: if state “unambiguously refuses” to submit TMDL, that is a “constructive submission” of no TMDL, which U.S. EPA must reject, triggering its obligation to prepare federal TMDL
- Court accepted constructive submission doctrine (over U.S. EPA objection) but found it hadn’t been triggered yet; denied motion to amend

ELPC Third Lawsuit (1)

- Ohio 2018 Integrated Report listed Lake Erie open waters as "impaired" but ranked Lake Erie "low" priority for TMDL because it was pursuing alternatives, including Annex 4 process
- U.S. EPA approves 2018 Integrated Report
- ELPC sued, representing itself and Lake Erie Advocates
- Two claims:
 - APA: approval of 2018 IR was arbitrary & capricious and contrary to law
 - CWA: "low" priority ranking and other statements by Ohio displayed "clear and unambiguous refusal" to do TMDL; that created a constructive submission of no TMDL, triggering U.S. EPA obligation to do TMDL itself
- Lucas County Board of Commissioners file parallel suit, consolidated with ELPC suit

ELPC Third Lawsuit (2)

- U.S. EPA moved to dismiss case, arguing "constructive submission" is legally invalid and Ohio hadn't displayed "clear and unambiguous refusal" to do TMDL
- October 2019: court denies motion to dismiss
- February 2020: Ohio does about face: says it will prepare TMDL ; U.S. EPA says that voids case
- Summer 2020: oral arguments on summary judgment
- No court decision
- Settlement discussions begin

ELPC Third Lawsuit (3)

- September 2021: mediation before Judge Polster in Cleveland, including State of Ohio
- Agreement in principle re: main relief: preparation of TMDL by date certain; if Ohio doesn't do it, U.S. EPA must step up
- Disputes re: details
- Convene again with Judge Polster in March 2022 and settlement back on track
 - Ohio must release TMDL for public comment by 12/31/22
 - Ohio must submit final TMDL to U.S. EPA by 6/30/23
 - U.S. EPA has 90 days to approve or disapprove
 - U.S. EPA has six months to do its own TMDL if it disapproves or if Ohio misses deadline to submit
- If TMDL is inadequate and U.S. EPA approves anyway, new claim under APA

Potential Flaws in TMDL

- Focus on total P vs. DRP
 - Excuse offered (DRP sorbs to particles in-stream) doesn't add up
- Bad modeling for load allocation; lack of data
- Failure to require NPDES permits for all point sources, including CAFOs, and tighten standards to meet load allocation
- Inadequate implementation plan
- Failure to provide “reasonable assurances” of reductions

NPDES Permits for CAFOs - Overview

- CWA includes CAFOs in definition of “point source” -- should require NPDES permits
- CAFO: “animal feeding operation” or AFO – animals confined at least 45 days/year on land where crops are not grown – that either: (a) has at least 700 dairy cows or equivalent (“Large CAFO”); or (b) meets legal definition of “Medium CAFO” or “designated” as a CAFO by agency
- “Medium CAFO” – AFO with 200-699 dairy cows or equivalent that discharge to waters of the state through “ditch, flushing system, or other man-made device”

NPDES Permits for CAFOs - Overview

- Two limitations:
 - Permit required only if CAFO actually discharging; likelihood of discharge insufficient (*Pork Producers* case)
 - Agricultural runoff exception: runoff from manure “applied in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization of nutrients”
- Following *Pork Producers*, EPA changed rules; CAFOs must get NPDES permits only if caught or admit to discharging
- Some states require NPDES permits anyway (MI, WI); others don't
- Ohio: requires only Permits to Install/Operate; administered by OH Dept. of Ag

NPDES Permits for CAFOs – Should be Required in WLEB

- ELPC letter to OH EPA 3/2/22
- Main points:
 - WLEB former swamp; tiles everywhere
 - Dairy and most hog AFOs use liquid waste systems
 - Some liquid waste applied to tiled fields unavoidably gets into tiles via preferential flow paths
 - Tiles drain into waters of the state – AFOs applying liquid waste are actually discharging
 - No “agricultural utilization of nutrients” that flow straight into tiles
 - Especially true for fields with enough phosphorus to grow crops
 - Bottom line: CAFOs are actually discharging and ag stormwater runoff exemption does not apply

NPDES Permits for CAFOs – Consequences

- New Large CAFOs applying for ODA permits also need NPDES permits from OH EPA
- Existing Large CAFOs must apply for NPDES permits from OH EPA
- New and existing medium AFOs – currently unpermitted/unregulated – meet legal definition of “Medium CAFO” and must get NPDES permits if applying liquid waste on tiled fields
- CAFO NPDES permit limits must be tightened to meet TMDL load allocations
 - Limits on rate of application, including tying to agronomic need
 - Limits on timing of application, including re; weather
 - Limits on liquid content of waste
 - Stricter monitoring requirements
- OH EPA must investigate pollution under R.C. 6111.05
- If OH EPA fails: (a) TMDL will be defective; (b) delegation of NPDES permitting authority will be improper

Other Legal Sources/Approaches

- Ohio “distressed watershed” law
- GLWQA Annex 4
- New legislation and regulations (state or federal)

How to Help

- Test the water – take samples from tile outlets draining into roadside ditches and streams
- Learn from groups in MI – including Environmentally Concerned Citizens of South Central MI
- Establish violations of existing law and support theory requiring NPDES permits for CAFOs