



ADVANCING PUBLIC TRUST SOLUTIONS
TO SAVE THE GREAT LAKES

SUBMISSION TO THE INTERNATIONAL JOINT COMMISSION

**COMMENTS ON THE LAKE ERIE ECOSYSTEM PRIORITY (LEEP)
REPORT: SCIENTIFIC FINDINGS AND POLICY
RECOMMENDATIONS TO REDUCE NUTRIENT LOADINGS AND
HARMFUL ALGAL BLOOMS**

SUBMITTED BY:
FLOW (“FOR LOVE OF WATER”)
JAMES M. OLSON AND ELIZABETH R. KIRKWOOD

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SUMMARY AND PURPOSE

This comment on the International Joint Commission's Lake Erie Ecosystem Priority ("LEEP") Draft Summary Report (August 2013) explains how public trust principles—long recognized in the Great Lakes and their connecting and tributary waters—embody adaptive and dynamic solutions to address non-point source pollution and reduce nutrient loadings, harmful algal blooms, and related impacts or conditions. Courts in both the United States and Canada have adopted these legal principles of the public trust doctrine, which provide a valuable decision-making tool or method for evaluating and selecting iterative or dynamic solutions to conditions leading to water impairment, nutrient runoff, and harmful algal blooms in the Great Lakes.

Nutrient runoff and subsequent harmful algae blooms not only pose threats to water quality and ecosystems, but they affect private and public use and enjoyment of the waters including swimming, boating, fishing, shipping, and drinking water. Based on our analysis and evaluation to date, FLOW submits that the sound application of public trust principles by the IJC and enforcement and/or monitoring by government agencies would: (1) enhance the application of adaptive management and other controls to address phosphorous and related impacts and conditions, and (2) assure the long-term integrity of both the quality and quantity of these waters, public and private uses, and the ecosystem.

FLOW recommends that the IJC include public trust standards in its regulatory recommendations in order to enforce nutrient runoff limitations and to hold non-point polluters accountable for the consequences of their actions in consideration of their violation(s) of the protected uses under the public trust. FLOW also recommends including public trust principles as an ultimate backstop to enforce the IJC's proposed analogous Clean Water Act Total Maximum Daily Load ("TMDL") program to reduce phosphorous loading and related nutrient runoff throughout the basin.

In sum, what this unprecedented ecological and systemic crisis underscores is that we need a comprehensive overarching policy framework like the public trust and commons that targets non-point source pollution.

I. BACKGROUND ON THE LAKE ERIE ECOSYSTEM PRIORITY (LEEP)

In the 1960's and 1970's, Lake Erie experienced a serious ecological disaster when enormous harmful algae blooms ("HABs") overtook the lake's western basin. The slimy green algae excrete toxins that result in closed beaches, threatened drinking water, and harmed wildlife. The HABs occupied the warmer, shallower areas of the lake, and their decay created hypoxia in the cooler, deeper areas of the lake, effectively creating a massive "dead zone" that choked out fish species while at the same time creating conditions for accelerated algae proliferation (known as internal loading). The combination of excessive nutrients, especially phosphorus from municipal sewage treatment plants and household detergents, and warm temperatures in Lake Erie caused this excessive nutrient enrichment, known as eutrophication.

In response to this ecological crisis, the United States and Canadian governments enacted the 1972 Great Lakes Water Quality Agreement ("GLWQA") where both nations committed to restoring and maintaining the chemical, physical, and biological integrity of their shared boundary waters. The same year, the U.S. enacted the Clean Water Act ("CWA"), which primarily targeted point source discharges to improve water quality standards. As a result of these landmark water pollution control laws, dramatic reductions in the amounts of phosphorus discharged into Lake Erie and its tributaries. Drip irrigation and no-till cropping agricultural practices also helped reduce phosphorus loading. And by the 1980s, HABs were nearly eradicated in Lake Erie.

Then, in 2011, Lake Erie experienced its largest HAB in history, with algae masses three times bigger than ever before seen—spanning more than 5,000 square kilometers (1,930 square miles). A quarter of Lake Erie—the size of Rhode Island and Delaware combined—was labeled a "dead zone" as a result of HABs that proliferated from urban, industrial, and agricultural phosphorus runoff near Toledo since 2002.

While the causes are complex, scientists identify two significant reasons for this renewed calamity: (1) increased phosphorous—particularly dissolved reactive phosphorous ("DRP")—"loading" into the lake from both point and non-point sources of runoff and through the atmosphere, and (2) climate change causing more intense weather events like heavy precipitation and floods, further exacerbating nutrient runoff. However, other variables including invasive species exacerbate the effects and confound the solutions to this complex problem.

The magnitude of modern-day HABs is unprecedented; this calls for new and commensurate remedies to couple with and improve upon the existing regulations and institutions in place. Accordingly, the International Joint Commission, consistent with its jurisdiction, as outlined by the Boundary Waters Treaty of 1909 and the GLWQA, established the Lake Erie Ecosystem Priority ("LEEP") in 2012 to guide research and action addressing the science, socio-economic, and regulatory causes of and solutions for HABs. The goals of the LEEP Report are: (1) to have measurably reduced dissolved reactive phosphorous loads and algae; (2) to have a better understanding of causes and controls; and (3) to have an adequate monitoring system in place.

Overall, the draft LEEP report findings focus on understanding the myriad and interrelated causes of nutrient runoff, and recommends solutions tailored to particular land uses, including: (1) agricultural “hot spots” like the Maumee River breadbasket, (2) non-point sources from smaller-scale, disparate agricultural areas, and (3) diffuse urban land use activities creating non-point sources of pollution. The LEEP report groups its 15 recommendations into four categories: (1) setting phosphorous reduction targets for Lake Erie, (2) reducing phosphorous loading into Lake Erie from agricultural sources, (3) reducing phosphorous loading into Lake Erie from urban sources, and (4) strengthening research and monitoring in the Lake Erie basin.

II. LEGAL AND POLICY FRAMEWORK

The International Joint Commission (“IJC”) is governed by the authority of the Boundary Waters Treaty of 1909, the Great Lakes Water Quality Agreement, and its own Guiding Principles. Throughout its institutional history, the IJC has studied and made seminal decisions and recommendations that address and control pollution of the Great Lakes boundary waters. In making these decisions, the IJC has followed and emphasized its mandate to ensure the integrity of the ecosystem of the Great Lakes, applying both lake-wide and watershed-based approaches.

As described below, the courts of both the United States and Canada have recognized the common law responsibility and limitations on government and others under the common law principles of the public trust doctrine.¹ The common law of both countries prohibits alienation, subordination and/or interference, or harm to certain basic public rights that use and depend on the integrity of navigable waters for protected uses such as navigation, fishing, boating, swimming, or other forms of recreation. As an incident to these protected uses, it follows that the quality of the water, environment, and ecosystem that the uses depend on is also protected by this public right or public trust in water.

A. BOUNDARY WATERS TREATY OF 1909²

The Boundary Waters Treaty of 1909 (“BWT”) prohibits pollution of the Great Lakes on either side of the international boundary, and the IJC has the authority to protect public and existing uses and interests from harm or interference.

- Article III of the BWT prohibits new “uses, obstructions, or diversions affecting the natural level or flow of boundary waters” on either side of the international boundary, except by authority of both Canada and the United States and the approval of the IJC.
- Article IV authorizes the IJC to protect boundary waters from “pollution... on either side to the injury of the other.”
- Like the public trust or public rights in water doctrines, under Article VIII, IJC decisions must follow an order of precedence for the following uses: domestic and sanitary purposes, navigation, hydroelectric power, and irrigation. However, this order of preference “*shall not apply to or disturb any existing uses of boundary waters on either side of the boundary.*”

¹ In Canada, the doctrine has only recently gained attention; its principles have always existed but

² <http://www.ijc.org/rel/agree/water.html>

- The IJC may implement protective or remedial measures and may condition such measures on provisions for protection against injury or compensation for injury of “any interests on either side of the boundary.”

Specifically, for purposes of this comment, it follows that the recognition of the legally protected interest of citizens who use the waters of the Great Lakes under the public trust or public rights in waters doctrines for the public uses mentioned above have an “interest” and “existing use” that is not to be disturbed or injured.

B. IJC GUIDING PRINCIPLES³

The IJC has adopted and added a set of Guiding Principles to apply to its decision-making process such that it can anticipate and prevent disputes between the two countries, and assist in the protection of flows, levels, and the environment. To further achieve its dispute resolution role, the IJC has adopted a principle to follow the “concept of sustainable development,” an “ecosystem approach” as required by the GLWQA, sound science, and the “precautionary principle... in the absence of scientific consensus where prudence is essential to protect the public welfare.”

C. 2012 GREAT LAKES WATER QUALITY AGREEMENT⁴

The IJC administered the Great Lakes Water Quality Agreement (“GLWQA”) of 1972, amended in 1978, 1983, and 1987; it has been in effect for 41 years. In September 2012, Canadian Environment Minister Peter Kent and the United States’ Environmental Protection Agency (“EPA”)’s Administrator Lisa Jackson signed the new 2012 GLWQA. Under the 2012 GLWQA, both countries have reaffirmed and agreed, through the continued assignment of functions to the IJC, to protect, enhance, and prevent further pollution of the waters and the Great Lakes ecosystem on a lake-wide and watershed basis, and to address emerging threats from several sources or pathways, including surface water, groundwater, and runoff.⁵

Maintaining and restoring the integrity of the waters remains the central purpose of the 2012 GLWQA, but the new GLWQA adopts a number of findings, purposes and principles to meet the challenges of complex systemic threats facing the waters and ecosystem of the Great Lakes and their tributaries and ecosystems. These threats include nutrient runoff, invasive species, climate change, air contamination, habitats and fish, wetlands, near-shore waters and uses, among many others.

- The parties reaffirm their rights and obligations under the BWT, particularly the obligation not to pollute the boundary waters, but impliedly including the regulation of flows and levels. The IJC has clear authority to address pollution (quality) and flows and levels (quantity) given the BWT’s obligation not to pollute and avoid material impacts on flows and levels, and the GLWQA’s objective to prevent degradation to the integrity of ecosystem waters.

³ http://www.ijc.org/en/Guiding_Principles

⁴ http://www.ijc.org/en/Great_Lakes_Water_Quality

⁵ Reaffirmations, pp. 1-2, 2012 GLWQA.

- A new and important focus is on near-shore water quality for drinking water and recreation, both of which are recognized in the BWT and under the public trust or rights of public use doctrines in both countries.
- The parties have expressly reaffirmed that the BWT implicitly recognizes the “inherent natural value” of the Great Lakes ecosystem, and the goal or vision to manage and protect the uses and enjoyment of these waters and their ecosystem for “present and future generations.”
- “Sustainability” and “incorporating a multi-generational standard of care” to address needs (this would appear to include threats) to enhance the ability of “future generations to meet their needs” is also a recognition of a generational obligation of trusteeship similar to the trust recognized by public trust and public’s rights in waters.
- The “precautionary principle” and related principle of “prevention – anticipating and preventing pollution and other threats” place the burden on those who would cause or threaten material harm or interference with public uses and rights in Great Lakes and tributary waters.

Based on the above, it is reasonable to conclude that the public trust⁶ is embedded in the BWT and GLWQA. As such, the public trust offers a holistic framework for addressing systemic threats from multiple pathways caused by phosphorous or nutrient pollution, like the “dead zones” from massive algae blooms. Moreover, the public trust doctrine strengthens and enhances international, national, state and local efforts to respond to the devastating impacts of nutrient discharges and runoff into the Great Lakes and their tributaries.

D. PUBLIC TRUST PRINCIPLES

Public trust principles can be traced from Rome to the present, through both civil law systems, like in France and Spain, to the common law systems of both Canada and the United States. As a result, generally the waters of the Great Lakes are owned held in the public domain in the name of the Crown in Canada and in the sovereign state in the United States, in trust for the benefit and welfare of their citizens.

In 1892, the United States Supreme Court in *Illinois Central Railroad Co. v. Illinois* ruled that all of the Great Lakes were subject to the public trust doctrine and a navigational servitude in favor of the federal government. Today, the courts in all eight Great Lakes states in the United States and the two Canadian provinces surrounding this water basin have recognized the public trust doctrine, either expressly by naming the Great Lakes and the connected or tributary waters subject to a public trust, or through application of the public’s paramount right and use of public or navigable waters. More recently, the Canadian courts have begun to recognize the potential for public trust principles, and several Canadian water law and policy experts have urged the adoption of public trust principles by the courts or the provincial governments.

⁶ “Public trust” (as described by United States courts) includes paramount rights of public use of waters held in trust (as described by Canadian courts).

The basic public trust principles that apply to navigable waters like the Great Lakes, connecting waters, and tributary waters are summarized as follows:

1. Public trust waters and protected uses cannot be alienated by government and may never be transferred or controlled for private purposes; that is, a public purpose is required.
2. The governments and private third persons or parties cannot materially interfere with or impair the recognized public uses protected by the public trust or public rights in navigable water – navigation, fishing, boating, swimming, and the ecosystem and aquatic life on which these uses depend.
3. Governments have a duty (in some cases an affirmative one) to account for proposed uses or conduct before either are approved; this means there must be adequate information and findings that assure the first two principles above will not be violated.

Government has a continuing duty to determine that there will be no impairment or harm to the flows, levels, quality, and integrity of public trust waters, uses, and ecosystem before it approves or denies a governmental or private action. This duty requires the collection of data and information necessary for long-term planning sufficient to satisfy the solemn and perpetual trust responsibility, and affected interests and citizens as beneficiaries can institute administrative or judicial actions, as a last resort, to enforce public trust duties or apply public trust limitations that protect the integrity of the whole.

It is evident that these principles are wholly consistent with and would strengthen the decisions, references, recommendations and other actions under the BWT and GLWQA. The remainder of this comment demonstrates how public trust principles would buttress the collaborative efforts of the IJC and its key boards, federal, and state, local governments, and other stakeholders to significantly reduce the phosphorous loads and harmful algal blooms and restore the water quality in Lake Erie and other affected areas in the Great Lakes Basin.

III. THE APPLICATION OF PUBLIC TRUST PRINCIPLES WILL PROVIDE TOOLS AND STANDARDS TO REGULATE NON-POINT SOURCES OF POLLUTION PRIMARILY RESPONSIBLE FOR NUTRIENT LOADING, HARMFUL ALGAL BLOOMS AND DEAD ZONES

What is happening in Lake Erie underscores the need to supplement our important federal environmental command-and-control laws because the systemic nature of nutrient loading and harmful algae blooms is simply overwhelming the capacity of our point source pollution laws to regulate non-point sources of pollution. While there is no silver bullet to remedy this complex social, economic, and ecological problem, the IJC should consider incorporating the existing legal authority of the public trust doctrine to supplement and target non-point source pollution.

The advantage of adopting and applying public trust principles to manage the waters of the Great Lakes is that these principles provide more comprehensive protection for managing—and responding to—the severe impacts of excessive nutrient loading and HABs than only relying on point source regulations, limited non-point regulations, and

voluntary and incentive measures. The public trust doctrine also can serve to level the playing field and address the “unevenness across Lake Erie jurisdictions”⁷ because it is an existing source of legal authority in the eight Great Lakes states and similar in the two Canadian provinces. Therefore, it can be applied uniformly by state agencies who are trustees and by citizens to enforce compliance with phosphorus reduction loading standards. Lastly, public trust principles can address climate change concerns that further compound the challenges of nutrient loading by lowering water levels, elevating water temperatures, and contributing to the proliferation of HABs and increased nutrient loading.

This section demonstrates how the public trust principles as enumerated in Section II.D further the LEEP goal to have a better understanding of causes and controls and to measurably reduce dissolved reactive phosphorous loads and algae. The public trust can provide a larger context for the IJC to better evaluate the complex social, economic, and scientific factors that affect the scope of Lake Erie’s ecological imbalance. Integrating the public trust into the LEEP policy recommendations, for example, will provide a legal strategy that gives socio-economic concerns a great voice and role in this debate because this doctrine prioritizes protected public uses of fishing, swimming, recreational use, commerce, shipping and drinking water. Public trust principles also can complement a basin-wide adopted TMDL by providing enforceable criteria and standards for non-point sources of pollution from both agricultural and urban sources. This is one missing link in our current regulatory framework. Thus, the benefits of the public trust principles are clear: they can serve to provide an enforceable limit on all types of actions (both point and non-point sources) that cause algae blooms and materially impair the waters and the protected public uses.

A. Recommendation to Apply the Public Trust Doctrine to Protect Public Trust Uses as a Substantive Basis for Governments and Affected Citizens to Direct Research, Understanding, and Controls for Limiting Phosphorous and Other Nutrients that Cause Algae Blooms.

Because protected public trust uses are often at the core of actual or threatened serious social and economic impacts from algae blooms, public trust principles provide a practical and understandable legal control to guide decision-making and reduce phosphorous and other nutrient loading.

In 2010, citizens in the United States and Canada watched in disbelief as the BP Deepwater Horizon oil rig exploded and spilled over 200 million gallons of crude oil in the Gulf of Mexico for 87 days straight. The devastating harm that followed harmed and crippled wildlife, habitat, fishing, and tourism throughout the Gulf of Mexico coastline. Commentators questioned how this disaster could even happen, and linked the impacts on fishing, boating, tourism and recreation, and the ecosystem that sustains the economy and life in the region.

The same impact can be said for the algae blooms the size of Delaware and Rhode Island in the western and central basins of Lake Erie in 2011. Beach closing and fish kills were documented across these basins and along the shore. Whether the Gulf of Mexico or

⁷ Lake Erie Ecosystem Priority Report, IJC, at 55 (August 2013).

Lake Erie in the Great Lakes region, the harm and impact to water itself is what interferes with and impairs valuable social and economic private and public activities and uses.

Most regulatory permit standards and systems in the past 50 years have controlled point discharges and, to a degree, non-point discharges. But the more recent threats to bodies of water have been larger in magnitude, more widespread, and driven by systemic and macro forces. Despite current regulatory controls, we have witnessed the worse algae bloom on record in the history of the Great Lakes.

Until now regulatory controls have focused more on what limits are imposed on activities on land to minimize what is allowed to go into the water—through various media and single or combined causes—and less from the standpoint of water and what is causing harm to its aquatic resources and highly valued public and private uses. In doing so, the recognition that the water of Lake Erie and the Great Lakes are common to all human and natural activities and communities has been lost. This is not to say the threat and harm to these activities, uses, and communities have been ignored. It is simply that as a society we have not taken advantage of the legal recognition that water is a common resource, and that navigable waters like the Great Lakes are impressed with public trust and held by governments as trustees for the benefit of protecting their rights of navigation, boating, fishing, swimming, bathing, and many forms of recreation along the shore.

If regulatory controls are centered on protecting these Great Lakes waters and public trust uses from interference or impairment, and this standard was adhered to, then the IJC and governments—as well as citizens, property owners, and communities—would have a means to bring about change that would conform the limitations imposed to protect these public trust uses and the water resources that support them. That is to say, there would be a means to work “upstream” throughout the tributaries and land within a watershed to foster and bring about a reduction in the quantity phosphorous and other nutrients that end up in Lake Erie and cause such sweeping impacts. All activities and uses that contribute to algae blooms would be limited by the existing core legal principle that the public trust or right of public in navigable waters prohibits government or other persons from subordinating or interfering with navigation, boating, fishing, swimming, recreation, and the wildlife, habitat and waters – the basis of these core social and economic uses and benefits that are protected by the public trust or public rights in water.

FLOW submits that if public trust waters and uses serve as the baseline of protection, then other specific regulatory controls and measures regulating land-use runoff or discharges into water will be supported by a catch-all “public trust” standard to measure the efficacy of these specific efforts.

EXAMPLE: THE MONO LAKE CASE⁸

⁸ Nat’l Audubon Soc’y v. Superior Ct. of Alpine Co. (Mono Lake), 658 P.2d 709 (Cal. 1983); see also Cent. for Biological Diversity v. FPL Group, 83 Cal. Rptr. 3d 588 (Cal. Ct. App. 2008).

In the 1970s, in a quest to divert water for its municipal water supply, the City of Los Angeles tapped into a non-navigable stream tributary to Mono Lake, a popular, pristine, and important lake for habitat, wildlife, and recreation. The diversion dropped water levels and devastated the ecosystem and public uses of the Lake. Ultimately, the California Supreme Court rejected the diversion because the upstream activity subordinated and impaired the public trust in the navigable waters of Mono Lake. Over the narrower pleas of the City, the court ruled that the public trust did not apply to upstream activities in non-navigable water that harmed the public trust. The court shifted the focus of the public trust from the location of the upstream or up-watershed activity—the diversion—to the location and degree of impairment or loss of public use and public trust or navigable waters and their related aquatic resources.

PUBLIC TRUST AND ALGAE BLOOMS IN LAKE ERIE

Based on monitoring and scientific data collected as identified in the LEEP report, it can be readily acknowledged that the algae blooms in Lake Erie and elsewhere are the result of a number of human activities and land uses, principally sewage wastes, storm water overflows, and agricultural and residential fertilizers, particularly those loading DRP into the waters. A look at a map of the fish-shaped Lake Erie Basin (Figure 2-1 in the draft LEEP Report) shows the numerous river watersheds that flow into Lake Erie. The combination of crowded population centers along the shore and the large farming region that extends inland into Ohio, Indiana, and Michigan sets the stage for applying public trust principles to Lake Erie and its nutrient loading and HAB problems. This picture underscores the inextricable connection between activities that affect the tributaries that flow into tributaries and Lake Erie and impair public uses, water quality, aquatic life and habitats, and the ecosystem. Thus, once the focus is on the public trust waters and trust uses, the baseline or umbrella standard that protects these waters and uses can be used to pinpoint the relationship and causation of specific activities or sources of phosphorous the systemic harm across the lake and its basins and shoreline. Further, no matter what specific land or other regulations may apply, the principle is applied evenly to all activities, so that any activity found to contribute to the impairment of public trust waters and uses, like beach closings, fish kill, impaired boating, and swimming, can be controlled to protect the whole.

By adhering to public trust protections as a unifying principle or standard, there is a context for measuring the effectiveness and propriety of other activities or land use practices that interfere with public uses of Lake Erie. No matter what the standard for BMPs, TMDLs, or other control measures, the final inquiry, based on the umbrella public trust standards, is whether the public trust uses and waters and related natural resources are protected from significant harm or impairment. If not, the duty and responsibility to address the threats, harms, and require modification of behavior and activities is triggered.

If the IJC, both through the “pollution” clause of the BWT and the 2012 GLWQA, adopts a public trust principle and standard, then the IJC, staff, governments, states, communities, and citizens will receive significant benefits. Even in the absence of incomplete information or study or agreement on a specific control, such as TMDLs, the

public trust provides a legally enforceable mechanism while these more specific issues are resolved. As described in the LEEP Report, algae blooms and “dead zones” and beach closings will be more frequent and widespread given the larger context of climate change and extreme weather and storms events. The LEEP report conclusion is inescapable; the matter is serious, the causes are basically known (although more information must be gathered), and the time for action is immediate. The public trust principles or standards provide a fundamental, forceful, and even-handed framework from which to study, measure, control and protect Lake Erie and the other Great Lakes from the uncertainty of systemic threats as the IJC moves forward in the coming decade.

The other benefit of adopting or using a public trust approach or standard is that it brings into the dialogue and decision-making the water, the fish, the natural resources, and the public whose use and enjoyment of these waters is paramount. This in turn embraces the reality that Lake Erie and its watershed or basin is a single ecosystem, and that the public has a fundamental legal right to be present, participate, and assure that the public trust is respected for current and future generations.

This framework does not mean there cannot be balancing, but it does mean that continued harm or interference to protected public trust waters, natural resources, and public trust uses cannot be tolerated. In the short term, various interests may be balanced; however, in the long term, the integrity of the water’s quantity and quality cannot be compromised. In short, all stakeholders—including the IJC, federal agencies in both countries, state governments as trustees, cities, businesses, and citizens as legal beneficiaries of the public trust—have a fundamental right to insist that the public trust interests in the waters and their habitats and ecosystem are sustained for present and future generations.

***B. Recommendation to Strengthen IJC’s Phosphorus Reduction Target:
Develop a Basin-Wide TMDL for Lake Erie and Apply Public Trust
Principles to Create Enforceable Non-point Standards.***

To set a phosphorus reduction target, the LEEP report makes an important and strategic recommendation to develop a cleanup plan for the western and central basins of Lake Erie, involving all relevant states and federal agencies and applying a framework analogous to the CWA’s TMDL process. A TMDL is the maximum amount of a pollutant that can legally be discharged daily into a water body from a combination of point sources, or waste load allocations (“WLA”), and non-point sources, or load allocations (“LA”), without violating water quality standards.⁹ Thus, a total TMDL represents an apportionment of nutrient loading from both point and non-point sources.

To initiate this critical and complex effort, the IJC should draw on lessons learned from EPA’s regulatory model in developing a federal TMDL on phosphorus and nitrogen for the tidal segments of the Chesapeake Bay in partnership with six U.S. states and the District of Columbia. On September 13, 2013, a federal judge rejected a legal challenge to the Chesapeake Bay TMDL, ruling that “the framework established by the Bay

⁹ Clean Water Act § 303(d)(1)(C); 33 U.S.C. § 1313(d)(1)(C); 40 C.F.R. § 130.2(i) (2013); For a clear explanation on TMDLs, see also Kilbert, K., Tisler, T., & Hohl, M.Z. (2012). *Legal Tools for Reducing Harmful Algal Blooms in Lake Erie*. *University of Toledo Law Review*, 44(69), 69-122.

Partnership in developing the Bay TMDL is consistent with” applicable law and that “EPA did not unlawfully infringe on the Bay states' rights” because the CWA “envision[s] a strong federal role for ensuring pollution reduction.”¹⁰ Because non-point sources are the primary sources of pollutants to the Bay, this regime shift to regulate non-point source pollution on a watershed/ecosystem basis is essential to restoring the Bay’s health.

While TMDLs serve an important role in regulating non-point sources, they also have considerable limitations as conceived by the CWA. For example, even for states that have developed approved programs, there is no requirement that the states take enforcement action against non-point sources that fail to comply with best management practices.¹¹ Moreover, there are no enforcement mechanisms to require states to enforce TMDLs or plans to regulate non-point sources.¹²

In combination with traditional command-and-control regulatory pollution standards like TMDL standards for phosphorus and nitrogen, the public trust sets outer limits on acceptable pollution inputs, and demands protection of both the resource and protected public uses, like drinking water, fishing, navigation, boating, and ecological values. Assuming that Michigan, Ohio, Ontario, EPA and Environment Canada engage in a TMDL planning process, develop Watershed Implementation Plans (“WIPs”), and also incorporate public trust principles, all parties to this basin-wide TMDL/Public Trust framework could enforce potential non-point source violations, relying on the public trust legal standards. In other words, if non-point sources fail to meet basin-wide TMDL numeric standards, parties can rely on the public trust’s impairment prohibition as a basis for demanding compliance. In this way, public trust principles serve as an ultimate backstop to quantitative standards articulated as TMDLs. Closed beaches, dead fish, and toxic waters are all evidence of violations of both TMDL and public trust standards. Finally, while the CWA’s enforcement mechanisms are primarily limited to point source violations, the common law of the public trust provides citizens an enforceable cause of action to demand non-point source compliance.

IV. CONCLUSION

FLOW commends the IJC for both its thorough scientific and policy recommendations to reduce phosphorus and nutrient loadings and harmful algal blooms in Lake Erie. Forty years ago, we collectively responded to the threats of algal blooms in Lake Erie with targeted and strong water pollution control legislation that addressed these major point sources. With the return of these algal blooms now, however, we are witnessing the limits of our command-and-control laws, and we are recognizing that both the magnitude and the source of this problem are different, primarily stemming from non-point sources of agricultural and urban pollution. Given these important differences, we know that our strategy must be multi-faceted to successfully reduce nutrient loadings and harmful algae blooms.

¹⁰ *American Farm Bureau Federation v. EPA*, Case No. 11-cv-0067

http://www.epa.gov/reg3wapd/pdf/pdf_chesbay/BayTMDLCourtDecision91313.pdf

¹¹ *Natural Resources Defense Council v. EPA*, 915 F.2d 1314 (9th Cir. 1990).

¹² *American Wildlands v. Browner*, 260 F.3d 1192, 1197 (10th Cir. 2001).

Our comments, thus, urge the IJC to consider incorporating the existing legal authority of the public trust doctrine to supplement and target non-point source pollution as part of its LEEP Report recommendations. By adopting public trust principles, the IJC will strengthen the proposed policy recommendations because:

- Point source regulations, limited non-point regulations, and voluntary and incentive measures are not adequately and comprehensively addressing the nature and scope of this complex ecosystem problem.
- Public trust principles provide a comprehensive framework and ultimate backstop to protect the integrity of the water (both quality and quantity) *and* the protected public use and enjoyment of the waters, including swimming navigation, shipping, fishing, recreational uses, and drinking water.
- The ancient yet enduring ideas of the public trust and commons exist all eight Great Lakes states and a similar concept in the two Canadian provinces.
- These principles can be uniformly applied in all jurisdictions and help overcome overlapping and fragmented authority issues.
- These principles afford protection to socio-economic concerns of fishing, swimming, recreational use, commerce, shipping and drinking water, and allow these protected public users to have a role in preserving our common waters.
- Public trust principles also can complement a basin-wide adopted TMDL by providing enforceable criteria and standards for non-point sources of pollution from both agricultural and urban sources.
- Citizens can use the common law of the public trust to enforce non-point source compliance with phosphorus reduction loading standards.
- These principles can address climate change concerns related to low water levels, elevated water temperatures, and increased nutrient loading.
- The final recommendations will offer a model solution for other affected areas in the Basin, including Green Bay and Saginaw Bay, which are currently experiencing unprecedented nutrient runoff and “dead zones.”
- The public trust is an affirmation of the duty of the governments to protect the people’s common heritage of our Great Lakes.

In sum, the benefits of the public trust principles are clear: they can serve to provide an enforceable limit on all types of actions (both point and non-point sources) that cause algae blooms and materially impair the waters and the protected public uses. FLOW believes that if the IJC is armed with public trust standards, its overall decision-making will better ensure the long-term protection of Lake Erie and its watershed-based ecosystem for the benefit of all citizens.

Long-term solutions to protect Lake Erie and the Great Lakes will demand intense cooperation and collaboration. We look forward to continuing to participate in this collective process to protect 20 percent of the world’s fresh water. We thank you for your consideration of our views.

Respectfully submitted,



James M. Olson
Chair



Elizabeth R. Kirkwood
Executive Director