



Protecting the Common Waters of the Great Lakes Basin
Through Public Trust Solutions

**BEFORE THE MICHIGAN DEPARTMENT OF NATURAL RESOURCES,
DEPARTMENT OF AGRICULTURE AND
RURAL DEVELOPMENT,
AND DEPARTMENT OF ENVIRONMENTAL QUALITY**

**COMMENTS ON AQUACULTURE FISH FARMING IN THE GREAT LAKES AND
TRIBUTARIES OF MICHIGAN**

Submitted by

James M. Olson

President

**FLOW (For Love of Water)
Great Lakes Water Law & Policy Center
Traverse City, Michigan**

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OVERVIEW

Aquaculture –often in the form of networks of enclosed pens that exclusively occupy a large area of surface water and underlying bottomlands—raises substantial legal, environmental, aquatic resource, and water use impact issues. Specifically, the use of public waters and bottomlands for the occupancy and operation of concentrated fish production raises a number of grave concerns, including: (1) exclusion of public access and other uses for and by primarily private persons for purposes, (2) likely impacts from wastes and nutrient loading, (3) escaped fish pumped with antibiotics, and (4) interference with or impairment of rights of boating, fishing, swimming, drinking water, and other forms of paramount public uses that are protected by the public trust doctrine.

By definition concentrated aquaculture or fish farms that occupy surface and deeper water areas and/or occupy or are anchored or supported by bottomlands of the Great Lakes are subject to the common law public trust doctrine. Accordingly, any decision involving enclosed, pen concentrated fish-farming operations must be reviewed by the framework, principles and standards set forth under the public trust doctrine.

This comment outlines the public trust framework critical to any state decision involving aquaculture in the Great Lakes and connected navigable waterways.¹

I. The Common Law Public Trust Doctrine’s Principles, Standards, Solemn Duties and Framework Apply to Proposed Pens or Fenced Concentrated Fish-Farming or Aquaculture in the Great Lakes and Tributary Navigable Waters.

By definition concentrated aquaculture or fish farms that occupy surface and deeper water areas and occupy or are anchored or supported by bottomlands of the Great Lakes are subject to the common law public trust doctrine. The public trust doctrine applies to all bottomlands and waters of the Great Lakes up to the ordinary high-water mark, whether by common law² or statute – the Great Lakes Submerged Lands Act (GLSLA).³

¹ The scope of these threshold comments does not address additional legal framework, because the public trust law and the MEPA questions are primary and controlling. FLOW’s research on other applicable federal and state laws and central scientific and likely pollution and substantive issues is continuing. FLOW reserves the right to comment on these and related matters in the future.

² *Illinois Central Railroad v. Illinois*, 146 US 387 (1892); *Obrecht v National Gypsum Co.*, 361 Mich 399 (1960); *Glass v. Goeckel*, 703 N.W.2d 58, 64–65, 73–74 (Mich. 2005); Joe Sax, The Public Trust Doctrine in Natural Resource Law, 68 Mich L. Rev. 41 (1970); James M. Olson, All Aboard: Navigating the Course for Universal Adoption of the Public Trust Doctrine, 15 Vt. J. Env. L. 148-151 (2014). All eight Great Lakes states recognize these public trust protected uses, which cannot be

In the states, the doctrine also protects public trust waters and bottomlands, and aquatic and water related resources and public uses, from conduct or activities on land or tributary waters that impact navigable public trust waters.⁴ They can occupy near shore or offshore areas 5 to 20, even 500, acres in size, including the water column, and in some instances bottomlands used to anchor or support the pens and network of structures.

This occupancy and the operation of concentrated fish production, which is classified as private agriculture use, is substantially the same as land-based farm feeding animal production operations, including concentrated feed operations or “CAFOs.” Pen aquaculture maximizes growth of its animals in as short a term as possible. Because of the cooler water temperatures, aquaculture in the Great Lakes is confined to a narrow range of fish species – rainbow trout and salmon – to satisfy the growing demand for moderate to high-end restaurant markets.

Pen aquaculture anywhere on the Great Lakes or surface waters of inland lakes and rivers necessarily excludes public access and uses. It is critical to distinguish between upland, or private land farming, traditionally owned by title of private persons and entities, and the common, public waters and bottomlands of navigable waters like the Great Lakes. As described in more detail below, the sovereign and property title to navigable lakes and

impaired or subordinated to private uses; private riparian uses on navigable waters are those connected to use and enjoyment of riparian land, such as docks, wharves, fishing, drinking and domestic water, irrigation for growing food, and commercial use of water, so long as it is reasonable. While private uses are not property rights, the right to use is subject to ‘reasonableness’ and the public trust and protected uses in the navigable water. Maude Barlow and James Olson, Report to the International Joint Commission on the Principles of the Public Trust Doctrine, *supra*, at 8-25, 28-31; see also James Olson, *All Aboard*, *supra*, at 151-163. Along with the states, Canada and the provinces recognize in some form that water is public or held by the Crown in trust to assure navigation, boating and fishing (distinct from exclusive occupation of public waters for private fish-farming operations. *Id.* pp. 164-166.

3 Hereafter “GLSLA.” MCL 324.32501 et seq.; *Id.*, *Glass v. Goeckel*. The same is true for the provinces of Canada. *Queen v. Meyers* [1853] 3 U.C.P. 305, 357 (Can.) (the right of the crown or sovereign is paramount to private uses: “Great Lakes and streams which are in fact navigable ... must be regarded as vested in the Crown in trust for the public uses for which nature intended them – that the Crown, as the guardian of public rights, is entitled to prosecute [for the removal of impairment or obstruction] ... which it is bound to protect and preserve for public use.”

4 *Audubon v. Superior Court*, 33 Cal. 3d. 419, 434, 437 (1983); While not necessary for the scope of these comments regarding navigable public trust waters and bottomlands, the scope of the doctrine extends to nonnavigable streams use or impacts that feed navigable waterways, expanded the purpose of the doctrine to the “preservation of water’s function as natural habitat.” *Id.* “An important purpose of the public trust over bodies of water is to protect habitat for wildlife.” *Id.*; Jack Tuholske, *Trusting the Public Trust: Application of the Public Trust Doctrine to Groundwater Resources*, 9 Vt. J. Env. L. 189 (2008); *Kauai Springs Inc. v. Planning Comm. of the County of Kaua’i*, 324 P.2d 951 (Haw. 2014).

streams, and the lands beneath them, vested in each state on admission to statehood. Michigan obtained title on admission to the United States in 1837, so on that date took title to waters of the Great Lakes and bottomlands to the ordinary high water mark on the shore. The title is subject to a public trust imposed on government in favor of citizens, who are legal beneficiaries of the trust. The trust places an affirmative duty on each state to protect the trust waters, bottomlands, and special public uses, and as will be seen there are principles that prohibit any authorization, conveyance, use, lease, or other occupancy of these waters and lands except in narrow, circumstances defined by fairly stringent standards. In other words, distinct from police power regulation of private upland uses, such as agriculture, the Great Lakes as public trust waters and bottomlands are public and subject to a very discrete set of rules that respect and protect this public trust in perpetuity.

On top of the public trust limitations on occupancy and use of the public trust waters and lands, agricultural fish-pen operations and production have been shown to result in significant likely impacts from large volumes of fish-food and associated untreated animal waste that result in high nutrient (phosphorous) loading, which would exacerbate the growing devastation and impacts from farm runoff and waste treatment facilities in Lake Erie and areas of Lake Huron and Lake Michigan. In addition, pen aquaculture carries with it escaped fish pumped with antibiotics, and interference with rights of boating, fishing, swimming, and other forms of paramount public uses that are protected by the public trust doctrine.

The basic principles of the public trust doctrine are described below:

a. The Story of *Illinois Central Railroad v. Illinois*

In the late 1800s, Illinois Central Railroad persuaded the Illinois legislature to deed nearly a square mile of Lake Michigan for a showcase industrial beachhead for its operations. Not long after a newly elected legislature, emboldened from a continuing outcry from Chicago voters over the conveyance of Great Lakes waters and bottomlands, rescinded the deed. The state attorney general sent notice to the company that the deed had been nullified and to return it. The company responded with a firm “no,” the deed was authorized by the legislature, signed and delivered; the property belonged to the railroad.

Not surprisingly, after a state and federal lawsuits, the case ended up in the U.S Supreme Court, which agreed with the State of Illinois. Conveyed or not, the deed was void because the state did not have the authority to convey Lake Michigan and its bottomlands

in the first place. Why? Because all of the Great Lakes, their connecting waters, and navigable lakes and streams in the states are owned by the state, from admission on statehood, were subject to a public trust which forbids transfers, alienation and subordination of the surface waters and bottomlands of the Great Lakes for primarily private purposes.

The Supreme Court characterized these waters and bottomlands as a “title held in trust for the people of the state, that they may enjoy the navigation of waters, carry on commerce over them, and have liberty of fishing therein free from the obstruction or interference of private parties.”⁵

“The trust devolving upon the State for the public, and which can only be discharged by the management and control of the property in which the public has an interest, cannot be relinquished by a transfer of the property.”⁶

Nearly a century later, the Illinois Supreme Court rejected a transfer of public trust property to a steel company that was managed by the Chicago Park District on the grounds that it was primarily a private purpose. Moreover, incidental economic benefits such as taxes and jobs did not satisfy the public purpose requirement under the public trust doctrine standards articulated in the *Illinois Central Railroad* case.⁷

b. The Story of Michigan’s *Obrecht v. National Gypsum Company*

In the late 1950s, after the passage of the Great Lakes Submerged Lands Act, a major industrial dock was allowed to be constructed far out into Lake Huron for loading and unloading ships in connection with an industrial mining operation. In 1960, the Michigan Supreme Court, noting the decision was a “forerunner” over the treasured inland seas known as the Great Lakes, ruled that the private industrial dock had been authorized contrary to the rule in *Illinois Central Railroad*. The Michigan Court adopted the principles in *Illinois Central Railroad*, holding (1) that generally that the dock could not be authorized by the state because the state did not have authority to relinquish control, lease or transfer the waters and bottomlands of Lake Huron for private industrial

⁵ 146 US 452.

⁶ 146 US at 460. The only exception to the rule against alienation or transfer is where there is (1) a predominant public purpose and (2) no substantial, meaning material, impairment of the public trust water, natural resources, or protected public trust uses. 146 US at 455-456; *Obrecht v National Gypsum Co*, 361 Mich 399 (1960).

⁷ *People ex rel Scott v Park District*, 360 E2d 773 (1976).

purposes⁸ unless (2) the legislature expressly authorized it and the proposed or existing use or transfer was determined on the facts to constitute (a) a primarily private purpose, and (b) would not substantially impair or significantly harm or interfere with the public trust waters, natural resources, or public trust uses.

c. Public Trust Principles in Michigan

As characterized by the Michigan Supreme Court in a dispute over private or public control of a trout stream, “[W]hen Michigan entered the union of States, she became vested with the same qualified title that the United States had; that these waters and the soil under them passed to the State in its sovereign capacity, impressed with a perpetual trust to secure to the people their rights of navigation, fishing, and fowling.”⁹

As noted above, public trust lands and waters cannot be exclusively controlled or occupied for primarily private purposes or operations to the exclusion of the public from its access or enjoying any one of the protected trust uses. Protected public uses include navigation, boating, hunting and fishing, swimming, and drinking water, and these protected public trust uses are paramount to any lawful and reasonable riparian uses, and exclusive to any other nonriparian uses. The public trust extends to the entire surface of a lake or stream and the lands beneath then,¹⁰ and the trust also protects fish and fish habitat and other valuable aquatic natural resources in these public trust waters or on the bottomlands.¹¹

Further, “trifling impacts” is no justification for finding no impairment, because cumulative or precedential effect, if a single project is authorized, must be considered as part of the impairment analysis.¹² The Michigan Supreme Court rejected a developer’s argument that filling a few lots was de minimis in relation to the whole of Lake St. Clair and the Great Lakes, and ruled “[a]pplication of the [de minimis] doctrine . . . may involve making it equally so elsewhere. In total consequence, the state’s trust interests . . . public rights could be affected to an extent . . . considerably more than a trifling matter.”¹³

In addition, the public value of public trust waters, bottomlands, natural resources and public uses are presumed; anyone seeking to alter, use, control, or occupy these public

⁸ *Obrecht*, supra.

⁹ *Collins v Gerhardt*, 237 Mich 38, 45-46, 211 NW 115 (1926).

¹⁰ *Michigan v. Broedell*, 112 N.W.2d 517, 518-519 (Mich. 1965).

¹¹ *People v Babcock*, 38 Mich App 336 (1972).

¹² *Broedell*, supra; *Hixon v. Pub. Serv. Comm’n*, 146 N.W.2d 577, 589 (Wis. 1966).

¹³ *Id.*

trust waters has the burden of proof showing no public value, and no material impairment. Courts have readily imposed a burden of proof on the person proposing the use or transfer of a public trust resource.¹⁴ The burden is based on the government's duty to ensure there is no improper alienation or impairment, and the fact that the public value of public trust waters or resources is presumed to be substantial or immeasurable.¹⁵

Finally, the duty on the state to affirmatively protect these waters, bottomlands, natural resources and ecosystem, and public trust uses is "solemn" and "perpetual." In North Dakota, the Supreme Court ruled that this duty included a duty to evaluate and establish a long term water plan to ensure no impairment of water resources under the state's public trust responsibility. In Michigan, courts have imposed a procedural duty to ensure that public trust standards or principles have been met based on duly recorded findings of fact.¹⁶

In summary, the following common law public trust standards and principles apply:

- (1) No alienation, transfer, lease, deed, occupancy agreement for use and control for primarily private purposes.
- (2) Even if primary public purpose, there can be no alienation, transfer, lease, occupancy, deed or permit for public trust purpose unless it is established based on consideration of substantial evidence that there will be no material impairment to public trust waters, natural resources, and/or public trust uses.
- (3) There is a stringent "solemn" affirmative duty to protect the public trust waters, lands, natural resources, and public trust uses, and this includes consideration of all effects, necessity, alternatives, of a proposed project.
- (4) The burden of proof is on the applicant or person regarding public trust and no impairment standards.
- (5) De minimus or "trifling impact" arguments do not apply to public trust

¹⁴ *Grosse Isle Twp v Dunbar & Sullivan Dredging Co.*, 167 N.W.2d 311, 316 (Mich. Ct. App. 1969) (holding that substantial public value of navigable waters for public use is presumed); *In re Water Use Applications (Waihole II)*, 93 P.3d 643, 657-658 (Haw. 2004).

¹⁵ *Obrecht*, 105 N.W.2d at 149-151; *Ill. Cent. R.R. Co. v. Illinois*, 146 U.S. 387 (1892). This is akin to the precautionary principle, in that it would require, as a result of the nature of the public trust itself, a denial of the application to use until adequate information was submitted to establish no violation of the basic public trust principles would occur.

¹⁶ *United Plainsmen Ass'n v. Water Conservation Comm'n*, 247 N.W.2d 457 (N.D. 1976).

questions when it comes to purpose and impairment; in other words, precedent and cumulative effects of precedent must be considered.

II. Proposed Pens or Fenced Concentrated Fish-Farming or Aquaculture in the Great Lakes and Tributary Navigable Waters Violate the Public Trust Principle Against Alienation, Subordination, Transfer, or Exclusive Control and Occupancy for a Private Purpose.

The substantive nature and purpose of proposed pen/enclosed fence and occupancy farming of the service waters of the Great Lakes and bottomlands constitutes an alienation, transfer, occupancy, control for a primarily private purpose. Therefore, the state cannot and should not entertain authorization of and/or allowance of if a statute is passed, for private fish-farming and aquaculture in the Great Lakes.

In addition, the Great Lakes Submerged Lands Act does not authorize this type of control or occupancy for private purposes and operations because the proposed conduct is not a lawfully recognized riparian use, and only a riparian owner can request authority and approval of projects that fall within recognized exercise of riparian rights on or in the Great Lakes. Fish farming and concentrated aquaculture operations are not riparian uses, and upland options exist for constructing, controlling, and growing or producing fish. Fish farming is agricultural production, not a recognized fishing or riparian and public trust use. Moreover, the Great Lakes Submerged Lands Act, even if deemed to authorize an application for aquaculture, authorizes only riparians, with the requirement of consent by adjoining riparians and the local community in which the land and waters are located.¹⁷

¹⁷ MCL 324.32501 et seq.