

CONSTITUTIONAL CHALLENGES TO MICHIGAN'S DEBALLASTING LAW*

JOEL T. BOWERS
WAYNE STATE UNIVERSITY LAW SCHOOL

I. INVASIVE SPECIES IN THE GREAT LAKES

A. *ANS and Michigan: Great Lakes – Great Danger*

There is no question that the Great Lakes are Michigan's most valuable natural resource.¹ In the last one hundred years this resource has come under attack from invasive species.² Non-native species like the zebra mussel, the round goby, Eurasian ruffe, and others are currently wreaking havoc on the Great Lakes' commerce and biodiversity.³ Because oceangoing vessels frequently discharge their infected ballast water in Great Lakes ports,⁴ new non-native aquatic nuisance species (ANS) are invading the Great Lakes at a rate of one every six and a half months.⁵ The Great Lakes are now infested with as many as 182 non-native species, Seventy percent of which have been introduced in the last 30 years from the ballasts of oceangoing vessels.⁶

The costs of ANS to the Great Lakes region are incredible. Zebra mussels alone, which attached themselves to vessels and the intake pipes of industrial and utilities facilities, are blamed for \$2 billion in damages since their introduction in the 1980s.⁷ Yearly, the Great Lakes spends upward of the \$30 million controlling zebra mussels.⁸ Furthermore the cost to Great Lakes fishery from the Eurasian ruffe is estimated at \$119 million annually.⁹ One expert estimates the overall yearly economic loss in the Great Lakes due to ANS at a staggering \$5 billion.¹⁰ If that wasn't enough new ANS introductions like the "bloody" mysis shrimp,¹¹ and

Viral Hemorrhagic Septicemia (VHS)¹² seriously threaten the Great Lakes fishery valued at \$4.5 billion annually.¹³

B. Failed Federal Attempts at Prevention

There are two federal regimes equipped to address the ANS ballast introductions in the Great Lakes, the Clean Water Act (CWA) and the National Aquatic Nuisance Control and Prevention Act¹⁴ Despite this federal legislation, new introductions of invasive species continue to harm the Great Lakes.¹⁵

1. The CWA of 1972

In 1972, Congress passed amendments to the Federal Water and Control Act of 1948, which became known as the Clean Water Act (CWA).¹⁶ The Act's first words explain Congress' goal of "restoration and maintenance of chemical, physical, and *biological* integrity of the nation's waters."¹⁷ Under the CWA, Congress mandated that all "point sources"¹⁸ of pollution must obtain a National Pollution Discharge Elimination System (NPDES) permit prior to discharge into navigable waters.¹⁹ The CWA's definition of a "point source" includes any "vessel" from which pollutants are or may be discharged.²⁰ Moreover, according to the statute, "biological material" qualifies as "pollution."²¹ Given this foundation, the CWA seems well-equipped to regulate ballast discharges in the Great Lakes, as ANS are merely unwanted "biological material," therefore qualifying as "biological pollution."

However, the CWA has not been used to curb the ballast introductions of invasive species because the Environmental Protection Agency (EPA), which is charged by the CWA with promulgating regulations,²² exempted ballast water from NPDES permit requirements.²³

While the federal government has yet to use the CWA to regulate ballast discharge, the conflict between the language of the Act and the EPA regulation has been the source of recent litigation.²⁴

2. The Non-Indigenous Aquatic Nuisance Prevention and Control Act of 1990 (NANPCA) and the National Invasive Species Act of 1996 (NISA)

Congress did not specifically address ballast water introductions of invasive species until zebra mussels and the Eurasian ruffe became a problem in the Great Lakes in the late 1980's.²⁵ Under increased political pressure from the region,²⁶ Congress passed the Non-indigenous Aquatic Nuisance Species Act of 1990 (NANPCA).²⁷ NANPCA chief purpose is to prevent introductions of aquatic invasive species in the Great Lakes.²⁸ NANPCA charges the Coast Guard with the promulgation of ballast water regulations.²⁹ Together with the statute itself, these regulations form the current regime for preventing ballast introductions of invasive species in the Great Lakes. Under NANPCA's program, vessels with ballast tanks seeking entrance into the Great Lakes from outside the Exclusive Economic Zone (EEZ)³⁰ are subject to certain ballast discharge rules.³¹

These rules require qualifying ships to implement one of the following ballast water control practices: (1) carry out an exchange of ballast water outside the EEZ (200 miles or more from shore) in water more than 2000 meters such that any ballast tank that will be discharged in the Great Lakes has a minimum salinity level of 30 parts per thousand;³² (2) retain the contents of ballast tanks for the duration of the Great Lakes journey;³³ or (3) use an alternative method of ballast water management approved by the Coast Guard.³⁴

This first alternative, the exchange requirement, is the heart of current regime because it is the only viable option for oceangoing vessels entering the Great Lakes.³⁵ The second

alternative, retaining ballast throughout the Great Lakes journey, is a safety exemption for those ships who could not conduct a mid-ocean exchange because rough seas made an exchange too dangerous.³⁶ However, as a practical matter, ships avoid this option because if they retain their ballast for the duration of their Great Lakes voyage they are limited in the amount of cargo they can export from Great Lakes ports.³⁷ The third alternative is presently not an option because the Coast Guard has yet to approve an environmentally sound alternative method of ballast management.³⁸

In 1996, Congress amended and reauthorized NANPCA with the National Invasive Species Act (NISA).³⁹ With NISA, Congress sought to apply NANPCA's Great Lakes ballast management regulations to the entire nation with some important variations.⁴⁰ However, NISA did little to change ballast regulations in the Great Lakes. In fact, there has been virtually no change in Great Lakes regulatory regime since the Coast Guard promulgated mandatory rules in 1993.⁴¹

The current regulations leave an administrative loophole large enough to steer a barge through.⁴² Ships entering the St. Lawrence Seaway are not subject to the current regulations if they declare they have "no ballast on board" (NOBOB). A ship's captain need even not prove that the ship's ballast tanks are completely empty to take advantage of this NOBOB exception; she need only state that she has pumped the ballast tanks to the point at which they can be pumped no lower.⁴³ Yet a ship's pumps can rarely, if ever, expel all of the ballast water and sediment from the ship's tanks.⁴⁴ As a result, ships carrying tons of unregulated slop (mixed sediments and water) enter the Great Lakes each year.⁴⁵

Although there are a number of reasons that NISA has been unsuccessful in attaining its stated purpose, there are at least two fundamental problems with NISA's exchange

requirement.⁴⁶ First, mid-ocean exchange is ineffective in removing ANS from ships' ballasts.⁴⁷ Second, as previously mentioned, the statute's NOBOB loophole exempts the majority of oceangoing vessels operating in the Great Lakes from regulation.⁴⁸

In theory, mid-ocean ballast exchanges could eliminate most, if not all, ANS from vessel hulls.⁴⁹ However, certain structural limitations prevent ships from performing complete and effective exchanges.⁵⁰ Most vessels are constructed with internal steel structures that support the hull.⁵¹ These large beams or "longitudinals" obstruct the free flow of ballast water within a ship's tanks, creating pockets of both water and sediments that the ships' pumps cannot reach.⁵² Even when an oceangoing vessel executes a "full" exchange, these pockets of residual water, which may contain ANS, are never expelled from the ship.⁵³ Indeed, one 1991 study performed by the Canadian government ascertained that mid-ocean exchange was only 67% effective in eliminating organisms in vessel ballasts.⁵⁴ More recent studies have showed exchange to be slightly more effective but results varied greatly with ship design.⁵⁵ Given these shortcomings it is certain NISA's exchange requirement does not provide adequate protection for the Great Lakes.

If the exchange requirement itself suffers from serious weaknesses, it is only made worse by the NOBOB exception. Ordinarily ships headed for the Great Lakes sail with little or no ballast because they are fully loaded with cargo.⁵⁶ As a result, most of the oceangoing ships that enter the Great Lakes declare "no ballast on board."⁵⁷ These NOBOBs, who are exempt from NISA's requirements, comprise over ninety percent of ships entering the St. Lawrence Seaway.⁵⁸ Despite the NOBOB declaration, the "empty" ballast tanks of these vessels still carry on average 157.7 metric tons of sediment and water in their hulls.⁵⁹

Typically, NOBOBs follow a predictable circuit during their Great Lakes journey.⁶⁰ First, the ship enters the Great Lakes and delivers all or most of its cargo at its first port.⁶¹ Having lightened its load, the ship will take on fresh water ballast from the Great Lakes before steaming to its next Great Lakes port.⁶² This recently ballasted fresh water mixes with the ship's residual saltwater ballast and sediment.⁶³ Once the ship has reached its final Great Lakes port, it will purge all or most of the residual slop mixture back into the Great Lakes before it loads cargo for the trip home.⁶⁴ In an average year, 360 to 540 NOBOBs journey through the Great Lakes, leaving behind several thousand tons of residual ballast and potentially millions of invasive organisms.⁶⁵ NISA's exchange regime and NOBOB loophole continue to leave the Great Lakes vulnerable.

C. Michigan's GLANSCA – State ANS Prevention

Seventeen years after Congress passed NANPCA, and fourteen years after the Coast Guard instituted the mandatory Great Lakes exchange requirements for oceangoing ships, ANS ballast introductions in the Great Lakes continue to be a problem.⁶⁶ Frustrated with NISA's failure, Michigan enacted its own ballast control law in 2005, the Great Lakes Aquatic Nuisance Species Coalition Act (GLANSCA).⁶⁷

1. GLANSCA's Provisions

GLANSCA seeks to stop ballast introductions of invasive species with five basic provisions. GLANSCA: (1) requires the Michigan Department of Environmental Quality (DEQ) to facilitate the "Great Lakes Aquatic Nuisance Coalition" between other Great Lakes states to prohibit ANS ballast introductions;⁶⁸ (2) provides that unauthorized ballast discharges are prima facie evidence of a violation of Michigan's overall water pollution statute;⁶⁹ (3)

requires all oceangoing vessels stopping at Michigan ports to obtain a permit;⁷⁰ (4) requires permit applicants to show they will not discharge ANS into Michigan waters, or if they discharge ballasts, that the effluent will be treated by environmentally sound technology and methods to prevent ANS introductions;⁷¹ (5) allows the DEQ to promulgate rules to implement the statute's permit provisions.⁷²

Michigan DEQ recently issued a draft permit identifying ballast treatment methods adequate to satisfy GLANSCA's prohibition against ANS discharge.⁷³ The four methods identified by the document include treatment with, (1) hypochlorite, (2) chlorine dioxide, (3) ultraviolet (UV) radiation, and (4) deoxygenation.⁷⁴ For each of the treatment methods, the DEQ prescribes effluent limitations and monitoring requirements to ensure that ballast contents have been sufficiently exposed to the applicable treatment to guarantee ANS destruction.⁷⁵

2. GLANSCA and the CWA/NPDES Approach

With GLANSCA, Michigan legislators have attempted to place Great Lakes ANS prevention back into the CWA/NPDES framework.⁷⁶ As previously mentioned, the CWA has not been used to regulate ballast water discharges because EPA regulations exempt ballast water discharges from NPDES permit requirements.⁷⁷ Pursuant to the CWA provision that requires that states administer NPDES permits,⁷⁸ Michigan's DEQ issues permits to point source dischargers under part thirty-one of the state's Natural Resources and Environmental Protection Act (NREPA).⁷⁹ GLANSCA amends the NREPA by requiring oceangoing vessels to obtain a permit before discharging ballast into Michigan waters.⁸⁰ GLANSCA places ballast water discharges squarely within the CWA/NPDES framework because GLANSCA amends the NREPA to regulate ballast_discharging vessels like any other point source polluter within the state.⁸¹

GLANSCA's treatment of ballast water, as point source pollution, is clearly contrary to EPA regulations which exclude ballast discharges from the NPDES requirements.⁸² This issue was recently litigated in *Northwest Environmental Advocates v. United States Environmental Protection Agency*.⁸³ Some six years before Michigan enacted GLANSCA, a number of environmental groups⁸⁴ on the west coast filed a petition with the EPA requesting that it repeal 40 C.F.R. § 122.3(a).⁸⁵ Plaintiffs argued that the regulation was incompatible with the CWA, which did not exempt non-military ballast discharges from permit requirements.⁸⁶ In 2003, the EPA denied this request, and plaintiffs filed a complaint in federal district court, in the Northern District of California.⁸⁷

Plaintiffs argued that the EPA exemption violated the intent of Congress expressed in the plain language of the CWA, and that the EPA's denial of its petition was "arbitrary and capricious."⁸⁸ In its defense, the EPA argued that in the thirty years since it promulgated 40 C.F.R. § 122.3(a), Congress had acquiesced to the EPA's interpretation of the CWA.⁸⁹ The court, however, granted the plaintiffs' motion for summary judgment, holding that the EPA had not, in accordance with the Supreme Court's standard, established "overwhelming evidence [of congressional] acquiescence."⁹⁰ The court explained that ballast water legislation⁹¹ passed since Section 122.3(a) was promulgated did not provide "overwhelming evidence of acquiescence" to the EPA's interpretation because these laws each contain savings clauses preserving CWA provisions.⁹² In granting relief for the plaintiffs, the court ordered the EPA to repeal 40 C.F.R. § 122.3(a).⁹³ The court's invalidation of 40 C.F.R. § 122.3(a) has cleared an obstacle so that Michigan could regulate ballast discharges under the CWA framework.

II. CONQUERING CONSTITUTIONAL OBSTACLES

GLANSCA’s critics claim that the law runs afoul of the Constitution. More specifically, representatives of the shipping industry assert that federal laws preempt state attempts to regulate ballast discharge and that GLANSCA’s permit provision place an undue burden on interstate commerce contrary to the Commerce Clause.

A. Federal Preemption

1. Three Forms of Federal Preemption

The Supremacy Clause dictates that federal laws supplant any contrary state laws.⁹⁴ The question of whether a state law is contrary to federal law is one that hinges upon congressional intent.⁹⁵ In the course of federal preemption doctrine, the Supreme Court has defined three ways congressional intent may invalidate state laws – express preemption, implied or field preemption, and conflict preemption.⁹⁶ Express preemption, as its plain meaning suggests, occurs when Congress explicitly prohibits state lawmaking in a given area.⁹⁷ When a state law is preempted by implied or field preemption, a court determines that Congress intended to “occupy an entire field of regulation,” and thus states are prevented from legislating in that “field.”⁹⁸ Finally, conflict preemption occurs when “compliance with both a state law and federal law is impossible”⁹⁹ or when the state law impedes the “full purpose and objectives of Congress.”¹⁰⁰

A review of the two federal statutes that could preempt GLANSCA – the CWA and NANPCA - reveals that neither contain any explicit preemption language. What is more, these statutes carry state-action savings clauses, which either encourage or allow state regulation.

2. Implied Field Preemption, Conflict Preemption and State-action Savings Clauses

Four cases, *Huron Portland Cement Co. v. City of Detroit*,¹⁰¹ *Dixy Lee Ray v. Atlantic Richfield Co.*,¹⁰² *Chevron v. Hammond*¹⁰³ and *Locke v. U.S.*¹⁰⁴ are particularly relevant to the issue of GLANSCA’s preemption. Each deals with competing state and federal maritime laws.

In *Huron*, the appellant, Huron Portland Cement Company, challenged a Detroit smoke abatement ordinance, contending that the “comprehensive system of [maritime] regulation enacted by Congress” preempted the local regulation.¹⁰⁵ The Detroit ordinance, aiming to improve air quality, set maximum standards for ship boiler emissions.¹⁰⁶ When the Huron Portland Cement Company continued to operate two ships which exceeded this standard, the city sought to prosecute the company in spite of the fact that the Coast Guard inspected and certified the ships’ boilers.¹⁰⁷

The *Huron* Court ultimately held that the maritime regulatory regime enacted by Congress did not preempt the Detroit ordinance because the federal and local laws did not share the same purpose.¹⁰⁸ In other words, no real conflict existed. The Court reasoned that the scope of the federal ship inspection statutes was limited to vessel and navigation safety,¹⁰⁹ while the Detroit ordinance sought to eliminate air pollution, a traditional exercise of state police power.¹¹⁰

*Ray v. Atlantic Richfield Company*¹¹¹ is a more recent maritime preemption case. In *Ray*, the Court scrutinized the State of Washington’s Tanker Law which, among other things, required that tankers adhere to certain design standards, including double hull construction.¹¹² Atlantic Richfield, an oil transport company, challenged the law’s provisions on grounds that the Ports and Waterways Safety Act (PWSA) preempted Washington from regulating tanker design.¹¹³ The court explained that PWSA was primarily enacted to protect navigable waters and their marine environments from tanker oil spills.¹¹⁴ Pursuant to this goal, Title I of the PWSA regulates tanker traffic and operation in ports, while Title II of the act is chiefly concerned with tanker construction and design requirements.¹¹⁵ The Court reasoned that, unlike in *Huron*, the Washington Law and Title II of the PWSA share the same purpose— namely, protecting navigable waters from oil spills through design regulations.¹¹⁶ The Court concluded that PWSA

preempted the Washington law's tanker design provision because it frustrated the Congressional objective of the PWSA to "effect a 'reasonable and uniform set of rules and regulations concerning ship construction.'"¹¹⁷

A third case, *Chevron v. Hammond*,¹¹⁸ is especially relevant to GLANSCA because in it, the Ninth Circuit evaluated an Alaskan deballasting law.¹¹⁹ In *Chevron*, the plaintiff oil company challenged an Alaskan law prohibiting tankers from discharging ballast water stored in the ship's oil cargo tanks, arguing that the state law was preempted by Coast Guard regulations authorized by the PWSA.¹²⁰ The Alaskan law required ships holding this kind of oily ballast to use on-shore pumping facilities that could process the tainted water.¹²¹ The Ninth Circuit held that the PWSA did not preempt the Alaskan deballasting prohibition.¹²² Relying on *Ray*, the court reasoned that because the state statute did not impose design requirements on tankers, it did not interfere with Congress' intent to remain the sole author of ship design regulations.¹²³ The court further reasoned that Congress did not intend to "fill the field" regarding ballast pollution regulation because the CWA and other federal statutes encourage states to concurrently regulate water quality.¹²⁴ Finally, the court reasoned that even though the Alaskan Statute and the PWSA share a similar purpose, no actual conflict exists because the Alaskan statute does not prohibit some action required by the PWSA.¹²⁵ That is, while Coast Guard regulations allow the discharge of oily ballast water in Alaskan territorial waters, the regulations and the PWSA do not demand it.¹²⁶

The Supreme Court heard its most recent maritime federal preemption case when it decided *U.S. v. Locke* in 2000.¹²⁷ In *Locke*, whose facts are similar to those in *Ray*, the plaintiffs, a trade association of oil tanker operators challenged a Washington State law governing tanker operation, equipment, and design on grounds it was preempted by long-standing federal maritime

law.¹²⁸ The court emphasized that maritime regulation has usually fallen within the ambit of federal legislation.¹²⁹ The Court held that when “state laws ... bear upon national and international maritime commerce ... there is no beginning assumption that concurrent regulation by the state is a valid exercise of police power.”¹³⁰ Ultimately, the Court decided that the federal maritime regime set forth by the Ports and Waterway Safety Act (PWSA) and other laws preempted the Washington tanker law.¹³¹ The Court explained that the “savings clause” contained in the Oil Protection Act of 1990,¹³² did not indicate Congressional intent to allow states to enact their own maritime design and operation laws because the OPA savings clause was contained in the Title I of the PWSA, a portion of the law limited to oil spill liability.¹³³ The court reasoned that had congress intended the savings clause to protect the broader range of state maritime laws it would have placed the clause within Title II of the PWSA – the portion of the law dedicated to ship design, equipment, and operation.¹³⁴ Simply put, the *Locke* court held that the savings clause at issue could not reach beyond the title of the law containing it.¹³⁵

Taken together, *Huron*, *Ray*, and *Chevron*, and *Locke* bring to light several important points regarding GLANSCA. First, the PWSA, which announces Congress’ intent to fill the field of ship design, must be considered in the GLANSCA preemption calculus. Second, the court will not find preemption, either implied field preemption or conflict preemption, unless the federal and state legislation at issue share a similar purpose. Third, even when state and federal statutes share a purpose, courts are reticent to preempt state laws unless an actual conflict occurs. Fourth, depending on the scope of a state-action “savings clause” contained in a federal statute, such a clause normally indicates that congress left the field open to state regulation.¹³⁶

3. Preemption by the Federal Maritime Inspection and Design Regulations and NANPCA

According to GLANSCA’s permit requirement, the DEQ will not grant an oceangoing vessel a permit to discharge ballast unless the “operator . . . will use environmentally sound technology and methods . . . to prevent discharge of aquatic nuisance species.”¹³⁷ Because this provision could force oceangoing vessel owners to change their vessel’s ballast design or install ballast treatment technology,¹³⁸ this provision potentially places GLANSCA within the ambit of federal maritime inspection and design regulation laws. But given the court’s holdings in *Huron* and *Ray*, the federal maritime inspection and regulation laws should not preempt GLANSCA because these laws and GLANSCA do not share a sufficiently similar purpose. While Title II of the PWSA, the portion that regulated mandatory equipment and design for oil tankers, and GLANSCA both seek to protect the marine environment, the scope of each law is different.¹³⁹ Title II of the PWSA aims to prevent environmental damage caused by accidental spills from *tankers* delivering oil or other hazardous cargoes, while GLANSCA seeks to prevent the introduction of ANS from *any vessel*, which, as a standard operating procedure, discharges ballast into Michigan waters of the Great Lakes.

Since the Court decided *Ray* in 1978, Congress repealed or revised large portions of Title II of the PWSA.¹⁴⁰ The fact remains, however, that the tanker equipment, design, and construction regulations that replaced Title II of the PWSA should not preempt GLANSCA because, like Title II, their objectives are distinguishable from GLANSCA’s. Despite the inapplicability of federal tanker laws, Congress has passed more general maritime legislation, which dictates that the Secretary of Homeland Security shall promulgate regulations concerning the design and equipment of most ships, including Great Lakes vessels.¹⁴¹ Yet the primary concern of these federal provisions is “safety of individuals and property on board vessels,” not

the biological integrity of the Great Lakes.¹⁴² Once again, these ship design regulations and GLANSCA have distinct purposes.

In relation to federal inspection, design, and equipment provisions, GLANSCA looks remarkably similar to the Detroit smoke abatement ordinance in *Huron*. Like that ordinance, GLANSCA is a local law aimed at environmental health, rather than navigation safety. Given these different purposes, GLANSCA should be safe from preemption by the federal inspection regime, even if GLANSCA requires vessels to use “environmentally sound” equipment to treat ballast water.¹⁴³

Nor is it the case that GLANSCA strictly requires the use of “environmentally sound technology” as the only condition to ballast permitting.¹⁴⁴ According to Section 3112(6), the treatment of ballast water with “environmentally sound technology or methods” is an alternative requirement. In the absence of such “technology,” the vessel will qualify for a permit if the operator can show she will not discharge any ballast at all.¹⁴⁵ In this way, Section 3112(6) is not properly a “design” requirement.

If GLANSCA is preempted by federal legislation, preemption must directly stem from NISA, which specifically deals with ballast water management. With NISA, however, Congress authorized and even encouraged individual states to implement ballast water management programs to control invasives.¹⁴⁶ Congress could not have intended to occupy the field of ANS ballast regulation because it intended that states would implement their own laws to curb invasive species introduction.¹⁴⁷ It is important to note that *Locke* is clearly distinguishable on this point. Unlike the savings clause at issue in *Locke*,¹⁴⁸ NISA’s savings clause appears in the body of the Act.¹⁴⁹ Unlike the PWSA in *Locke*, NISA’s savings clause cannot be limited by context because congress did not separate NISA into different titles. Thus, it is apparent that

NISA's savings clause modifies its entire text and therefore insulates the gamut of state ANS ballast legislation, including GLANSCA, from federal preemption.

Furthermore, the CWA suggests that Congress did not intend to limit invasives regulation to the federal purview. As the court proclaimed in *Chevron*, the CWA welcomes states to regulate water quality within their borders.¹⁵⁰ In language similar to that used in NISA, Congress stipulated in the CWA that states may enact their own water quality standards as long as they are more stringent than those mandated by the federal government.¹⁵¹ Thus, the CWA provides further evidence that Congress did not mean to field preempt state invasives regulation.

Moreover, even if NISA and GLANSCA share a common purpose of preempting ANS through ballast regulation, courts should be reluctant to invalidate GLANSCA because it presents no real conflict with NISA. As was the case with the Alaskan statute in *Chevron*,¹⁵² GLANSCA does not actually conflict with NISA because oceangoing vessels can comply with both laws. That is to say, ships can follow NISA's exchange protocols when entering the Great Lakes and still adhere to GLANSCA's permit provision if they stop in Michigan ports. Thus, in the face of a field or conflict preemption challenge, GLANSCA should prevail.

B. GLANSCA and the Commerce Clause

GLANSCA should success in the face of a Commerce Clause claim for several reasons: first, because ballast should not be considered an article of commerce; second, because GLANSCA only places an incidental burden on interstate commerce; third because GLANSCA is not a "discriminatory" state law and finally because even if the court finds GLANSCA "discriminatory," it should withstand strict scrutiny.

1. Ballast Water as an Article of Commerce

Traditionally, states have been unsuccessful in avoiding dormant Commerce Clause scrutiny by arguing that the object of the questioned state legislation is not an article of interstate commerce.¹⁵³ Indeed, the Court in *City of Philadelphia v. New Jersey*¹⁵⁴ held that “[a]ll objects of interstate trade merit Commerce Clause protection; none is excluded by definition at the outset.”¹⁵⁵ In both the *Philadelphia v. New Jersey* and *Fort Gratiot Sanitary Landfill v. Michigan Dept. of Natural Res.*,¹⁵⁶ the Court held that solid waste is an article of commerce despite its lack of inherent value.¹⁵⁷ Following the court’s reasoning in *Philadelphia* and *Fort Gratiot*, any attempt to exempt ballast water from Commerce Clause protection on grounds that it is a valueless entity is likely to fail.

However, ballast water may be distinguishable from solid waste in another respect. In the solid waste disposal industry, the waste itself is collected, transported, and then buried in landfills. Ballast water, on the other hand, is not the object of the Great Lakes shipping industry but rather a sort of side effect, an incidental tool used to balance ships on their journey through the seas. In this way, ballast water is not a proper “object” of commerce. Nor is it the case that Michigan’s GLANSCA is a veiled attempt to regulate Great Lakes trade, as GLANSCA would be completely unnecessary if oceangoing ships did not carry with them the threat of invasive species within their hulls.

2. *GLANSCA and Commerce Cause Discrimination*

In both *Maine v. Taylor* and *Fort Gratiot Sanitary Landfill*, the Court held that the state laws in question were indeed discriminatory.¹⁵⁸ Michigan’s GLANSCA is distinguishable from each in that it does impose more than an incidental burden on interstate commerce.

In *Taylor*, the Court held that a Maine law prohibiting the importation of all out-of-state baitfish was facially discriminatory because it “restrict[ed] trade in the most direct manner

possible.”¹⁵⁹ GLANSCA, on the other hand, is evenhanded. It is neutral on its face because its permit regulation applies to all oceangoing vessels using Michigan ports, regardless of whether those ships originate in Michigan, another state, or a foreign nation.¹⁶⁰

The Court in *Fort Gratiot Sanitary Landfill* did not focus on the distinction between those laws that discriminate on their face and those laws that result in a discriminatory effect.¹⁶¹ Nevertheless, the Court held that Michigan’s Solid Waste Management Act (SWMA)¹⁶² discriminated against interstate commerce because it isolated local waste producers from out-of-state competition and because Michigan did not “identif[y] any reason, apart from its origin, why solid waste coming from outside . . . should be treated differently. . . .”¹⁶³ The Court reasoned that because out-of-state and in-state garbage are fungible, SWMA could not legitimately penalize the latter while protecting the former.

GLANSCA is distinguishable from SWMA on several grounds. First, GLANSCA cannot be characterized as a protectionist measure in the sense that Michigan seeks to isolate itself from Great Lakes invasive species at the expense of other states. As its name suggests, GLANSCA aims to establish a Great Lakes coalition among the other Great Lakes states to combat aquatic nuisance species.¹⁶⁴ Implicit in Michigan’s ballast water regulations is the realization that without similar action from the other eight Great Lakes states (and two Great Lakes Canadian provinces) preventing the introduction of invasives will be impossible. Because Michigan shares the Great Lakes Basin with several states and Canada, it is unthinkable that the state could isolate itself from aquatic nuisances by adopting a law that applies only to oceangoing vessels operating in Michigan ports.

Second, unlike solid waste, there is good reason to treat the ballast contents of oceangoing vessels differently from ships that operate exclusively within the Great Lakes.

GLANSCA does not regulate oceangoing vessels *because* they originate out-of-state. Rather GLANSCA regulates these ships because they have ballast that may contain harmful aquatic nuisance species. While the origins of these ships are linked to their danger as carriers of invasive species, the fact remains the GLANSCA does not seek to regulate every ship originating from the ocean, only those with potentially dangerous ballast contents.

3. *GLANSCA and the Incidental Burden/Balancing Test*

The Court pointed out in *Taylor* that those laws that incidentally burden interstate commerce are invalid only if the burden they impose is “clearly excessive in relation to . . . putative local benefits.”¹⁶⁵ On this issue, both *Huron* and *Ray* are helpful. In *Huron*, the Court held that the Detroit ordinance which imposed criminal sanctions against the plaintiff for operating his ships’ boilers that exceeded maximum emissions standards, did not impose an “undue” burden on interstate commerce.¹⁶⁶ Moreover, in *Ray*, the Court held that the Washington law that required tug escorts for certain oil tankers, did not create more than an incidental burden on the flow of interstate commerce because cost of tug escort was minimal compared to the cost of the oil.¹⁶⁷ While the Court in both *Huron* and *Ray* did not explicitly apply the incidental burden test, it is apparent that each held that the local law in question did not offend the Commerce Clause because the legitimate purpose of the law outweighed the burden placed on interstate commerce.

As in *Ray*, and *Huron*, GLANSCA should also satisfy this balancing test. GLANSCA is aimed at a highly important, legitimate local concern - the health of the Great Lakes. Furthermore, GLANSCA’s permit requirement imposes no larger burden on vessels, than the local laws did in *Huron* and *Ray*. In fact, the burden imposed by the smoke abatement ordinance

in *Huron* is identical to the burden inflicted by GLANSCA. Each controls the operation of ships for the health of the environment.

4. *GLANSCA and Strict Scrutiny*

In the event that a court found GLANSCA discriminatory, Michigan would still have the opportunity to preserve the law. State laws that discriminate against interstate commerce, either facially or in practical effect, are subjected to strict scrutiny. According to the Court in *Taylor*, these laws are invalid unless a state “demonstrate[s] both that the statute ‘serves a legitimate local purpose,’ and that this purpose could not be served as well by available nondiscriminatory means.”¹⁶⁸

The Court’s analysis in both *Fort Gratiot Sanitary Landfill* and *Taylor* is instructive on this point. In *Fort Gratiot Sanitary Landfill*, the Court struck down Michigan’s SWMA because the State could not show that the legislation served a legitimate local purpose that could not be served by a nondiscriminatory alternative.¹⁶⁹ The Court reasoned that Michigan could preserve space in its landfills without burdening interstate commerce by simply restricting the quantity of waste a landfill could accept every year.¹⁷⁰ In this respect, GLANSCA is distinguishable from SWMA, because its stated goal of eliminating the ballast introductions of ANS, is one which cannot be achieved by less restrictive means.¹⁷¹

Taylor sheds light on this “least restrictive means” requirement. In all relevant respects, the purpose of the Maine law is identical to that of GLANSCA. In both cases the states seek to protect the state’s waters and aquatic wildlife from harmful nuisance species. The *Taylor* Court held that preventing the introduction of baitfish parasites into Maine waters was a legitimate governmental purpose that could not be achieved by any available nondiscriminatory alternative.¹⁷² Given its similarity to the Maine law, GLANSCA must prevail, especially in light

of the fact that GLANSCA is far less burdensome to interstate commerce than Maine's strict prohibition on out-of-state baitfish. Thus, even if courts found that GLANSCA placed a direct burden on interstate commerce, GLANSCA should survive strict scrutiny.

* Portions of the following paper have been reproduced from Joel T. Bowers, *Little Leviathans: Michigan's Battle Against Invasive Species in the Great Lakes*, 52.3 WAYNE L. REV. (forthcoming 2007).

¹ If Michigan's moniker, "The Great Lakes State" left any doubt, a number of facts support the Great Lakes' supremacy in Michigan. With the longest shore on America's "Fourth Coast," Michigan has more large water coastline than any other state except Alaska. Letter from Jennifer M. Granholm, Governor of Michigan, to the Michigan Legislature, 5 (Jan. 20, 2004), available at <http://www.ecobizport.com/WaterMsgGov0120.pdf> (last visited Feb. 5, 2006). Michigan borders four of the five Great Lakes. Because the state is surrounded by these huge water bodies, it is no surprise that in 2004, Michigan was only second to Florida in total number of registered boats (near 1 million vessels). Terry Tomalin, *With More Boats, Stay Off Grass*, ST. PETERSBURG TIMES, Feb. 3, 2006 available at http://www.sptimes.com/2006/02/03/Gulfandbay/With_more_boats__stay.shtml (last visited Feb. 10, 2006). Furthermore, Michigan is hydrologically unique as it is the only state which falls entirely within the Great Lakes basin. That is to say, virtually every drop of precipitation that falls on Michigan soil eventually makes its way to the Great Lakes. Noah D. Hall, *Toward a New Horizontal Federalism: Interstate Water Management in the Great Lakes Region*, 77 U. COLO. L. REV. 405, 430 (2006).

² Counterattack: Great Lakes Panel Targets Aquatic Nuisance Species, Great Lakes Panel on Aquatic Nuisance Species, available at <http://glc.org/ans/counter> <http://glc.org/ans/counterattack.html> (last visited April, 4, 2007).

³ *Attorney General Cox Demands Timely Ballast Water Regulations*, US STATES NEWS, Sept. 6, 2005, available at 2005 WLNR 14211683.

⁴ *Id.* For those readers unfamiliar with the maritime term, "ballast water" refers to the water that ships pump into their hulls to balance both vessel and cargo. An unbalanced load will cause a ship to list dangerously to one side. Vessels can compensate by taking-on water in ballast tanks opposite the cargo. Once oceangoing ships deliver their cargo to Midwestern ports, they often discharge their ballast water into the Great Lakes. See generally David Garton, *The Challenge of Treating Ballast Water*, TWINE LINE, Mar./Apr. 1998, at 5.

⁵ Dan Egan, *Deadline Set for Ballast Regulation*, MILWAUKEE JOURNAL SENTINEL, Sept. 19, 2006, at 1, available at <http://www.jsonline.com/story/index.aspx?id=500674> (last visited April 4, 2007).

⁶ *Id.*

⁷ *Id.*

⁸ Letter from Jennifer M. Granholm, Governor of Michigan, to the Michigan Legislature, *supra* note 1, at 3.

⁹ Patty Birkholz, *Don't Water Down State's New, Tighter Ballast Rules*, DETROIT FREE PRESS, Mar. 11, 2007, at 1, available at <http://www.freep.com/apps/pbcs.dll/article?AID=/20070311/OPINION>.

¹⁰ See Gene Shabath, *Fishing Industry Suffers as Lakes Shift*, DETROIT NEWS, Aug. 14, 2005, at 11.

¹¹ The “bloody” mysis shrimp is a voracious eater of zooplankton and competes with native shrimp and fish hatchlings, See Mike Lafferty, *Tiny Shrimp is Newest Threat to Great Lakes*, THE COLUMBUS DISPATCH, Mar. 18, 2007, (page unavailable online).

¹² VHS, a fish virus that causes spontaneous hemorrhaging in fish organs, is killing species of all kinds in the Great Lakes, Michelle York, *Deadly Virus Threatens Lake Ontario Fish*, TORONTO STAR, August 5, 2006, at 1, *available at* http://www.waterkeeper.ca/content/fish/deadly_virus_threatens_lake_on.php.

¹³ Jennifer Nalbone, *On Eve of New Shipping Season, Great Lakes Remain Unprotected from Aquatic Invasive Species*, Great Lakes United Press Release, Mar. 24, 2007. While the fishery itself is estimated at 4.5 billion annually, the total economic impact of the fishery on the region may be as high as \$7 billion annually. *Id.*

¹⁴ Clean Water Act (CWA) of 1971, 33 U.S.C. §§ 1251-1263, 1265-1270, 1273, 1274, 1281-1301, 1311-1326, 1328-1330, 1341-1346, 1361-1377, 1381-1387 (2003); National Invasive Species Act (NISA), 16 U.S.C. §§ 4701-4751 (Supp. II 1997). As this brief will later discuss, other federal statutes like the Ports and Waterways Safety Act (PWSA) of 1972 are relevant to the issue of ballast management in controlling invasive species, albeit in a merely ancillary manner. 33 U.S.C. §§ 1221-1232a (1972).

¹⁵ Dan Egan, *Troubled Waters; the St. Lawrence Seaway; Noxious Cargo: Loop Hole in Ballast Law Lets Invasive Species In*, MILWAUKEE JOURNAL SENTINEL, Oct. 31, 2005, at 1.

¹⁶ 33 U.S.C. §§ 1251-1263, 1265-1270, 1273, 1274, 1281-1301, 1311-1326, 1328-1330, 1341-1346, 1361-1377, 1381-1387 (2003).

¹⁷ 33 U.S.C. § 1251(a) (2002) (emphasis added).

¹⁸ A “point source” is any discharge “through a discrete and confined conveyance, such as a pipe, ditch or channel. In contrast, a nonpoint source produces a diffuse and unconfined discharge, such as overland runoff from a farm or paved surface.” ZYGMUNT J.B. PLATER ET AL., ENVIRONMENTAL LAW AND POLICY: NATURE, LAW AND SOCIETY 620 n.1 (3d ed. 2004). The CWA’s primary mechanism controls point-source pollution into navigable waters. *See Id.*

¹⁹ *See Northern Plains Res. Council v. Fidelity Exploration & Dev. Co.*, 325 F.3d 1155, 1160 (9th Cir. 2003) (holding that all point source discharges into navigable waters are prohibited without a NPDES permit). *See generally*, 33 U.S.C. § 1342 (establishing the framework for the NPDES). The CWA’s NPDES regime is an exercise in Cooperative Federalism. While the CWA grants the EPA oversight authority and the power to promulgate guidelines and pollution standards for the NPDES program, the states are actually charged with the permitting responsibilities. 33 U.S.C. § 1342(b). These state permitting programs are commonly referred to as State Pollution Discharge Elimination Systems, or SPDESs.

²⁰ 33 U.S.C. § 1362(14).

²¹ 33 U.S.C. § 1362(6) (“The term pollutant means dredged soil, solid wastes, [or] *biological materials*. . .”) (emphasis added).

²² 33 U.S.C. § 1251(d) (“Except as otherwise provided in this chapter, the Administrator of the Environmental Protection Agency (hereinafter in this chapter called ‘Administrator’) shall administer this chapter”).

²³ *See* 40 C.F.R. § 122.3(a). The text of the Coast Guard regulations reads, “Any discharge of sewage from vessels, effluent from properly functioning marine engines, laundry, shower, and galley sink wastes, *or any other discharge incidental to the normal operation of a vessel.*” *Id.*

(emphasis added). Although the CWA itself never suggests the EPA should make such a broad exception for all “incidental” vessel discharges, it does exclude from its definition of pollution “sewage from vessels or a discharge incidental to the normal operation of a vessel of the Armed Forces.” 33 U.S.C. § 1362(6)(A). The similarity between the “Armed Forces” exception in the CWA and the language used in 40 C.F.R. § 122.3(a) suggests that the EPA simply (and incorrectly) applied the limited “Armed Forces” exclusion in the Act to all vessels.

²⁴ See *Northwest Env'tl. Advocates v. United States Env'tl. Protection Agency*, No. C 03-05760 SI, 2005 WL 756614 (N.D. Cal. Mar. 30, 2005) (granting plaintiffs motion for summary judgment and ordering the EPA to 40 C.F.R. § 122.3(a), because the regulation’s exclusion of ballast water discharge from the NPDES conflicts with the clear language of the CWA). This case plays an important role in the development of Michigan’s GLANSCA. See *infra* § I, C.

²⁵ See Non-indigenous Aquatic Nuisance Prevention and Control Act (NANPCA) of 1990, 16 U.S.C. § 4701(a)(3), (b)(10) (Supp. II 1997) (as amended by the National Invasive Species Act of 1996). In the statute’s “findings” section, Congress recounted the proliferation and damage caused by the ruffe and the zebra mussel. *Id.* One of the stated purposes of the NANPCA is control and eradication of the zebra mussel. *Id.*

²⁶ See *Timeline for Ballast Management Policy in the U.S.*, Northeast Midwest Institute, available at http://www.nemw.org/ballast_timeline.htm (last visited Nov. 15, 2005) (“1989: zebra mussel infestation create[d] political will in [the] Great Lakes region to establish ballast management restrictions”).

²⁷ Non-indigenous Aquatic Nuisance and Control Act (NANPCA) of 1990, 16 U.S.C. §§ 4701-51 (Supp. II 1997) (amended by the National Aquatic Species Act of 1996).

²⁸ *Id.* at § 4701(b). Legislator’s likely established the prevention of the introduction of ANS as NANPCA’s first priority because once introduced in the Great Lakes controlling the spread of ANS is practically futile. See Eric Reeves, *Analysis of Laws & Policies Concerning Exotic Invasions of the Great Lakes: A Report Commissioned by the Office of the Great Lakes*, Michigan Department of Environmental Quality, Mar. 15, 1999, at 86, available at http://www.deq.state.mi.us/documents/deq_water_great_lakes_aquatics_exotic2.pdf (last visited April, 4 2005).

²⁹ 16 U.S.C. §§ 4711(b)(1).

³⁰ The Exclusive Economic Zone (EEZ) is the area seaward 200 miles from the U.S. and Canadian shoreline. 33 C.F.R. § 151.1504 (1993).

³¹ 33 C.F.R. §§ 151.1500-151.1516 (1993) (stating the Coast Guard ballast regulations for ships entering the Great Lakes).

³² *Id.* at § 151.1510(a)(1). The Coast Guard’s salinity standard is an evidentiary one. If a ballast tank has been filled with fresh water, after an 85 percent exchange with ocean water, the contents of the tank should register salinity at 30 parts per thousand. Thus a ship which meet the salinity standard can be assumed to have made a mid-ocean ballast exchange. See Reeves, *supra* note 28, at 47.

³³ 33 C.F.R. at § 151.1510(a)(2).

³⁴ *Id.* at § 151.1510(a)(3).

³⁵ As a practical matter, ships will rarely choose to retain ballast throughout their Great Lakes voyage. A ship retaining ballast cannot carry as much cargo on its trip exiting the Great Lakes. Thus, a vessel has a vested economic interest in emptying its ballast tank before taking-on cargo.

³⁶ See Reeves, *supra* note 28, at 60.

³⁷ An empty, ballast-free vessel can carry more cargo than one with ballast because an empty vessel can dedicate its entire weight capacity to its cargo.

³⁸ The U.S. Coast Guard has yet to approved any alternative on-ship ballast management methods yet. See Workshop: Approval for Experimental Shipboard Installation of Ballast Water Treatment, 71 Fed. Reg. 10546, 10546 (Mar. 1, 2006).

³⁹ National Invasive Species Act of 1996 (NISA), 16 U.S.C. §§ 4701-51 (Supp. II 1997) (amending and reauthorizing the Non-indigenous Aquatic Nuisance Prevention and Control Act of 1996).

⁴⁰ Unlike the Great Lakes regulations which are mandatory, the national guidelines are merely voluntary. *Id.* at § 4711(c) (stating the “[v]oluntary national guidelines”). Also, NISA’s national guidelines contain a safety exemption that nearly swallows the rule. “[A] vessel that does not exchange ballast water on the high seas . . . [because the master decides it is unsafe to do so]. . . shall not be restricted from discharging ballast water in any harbor.” *Id.* at § 4711(k). For purposes of this Note, “NISA” will be used to refer to the provisions set forth in both NANPCA and NISA.

⁴¹ See 33 C.F.R. § 151.1500-151.1514 (1993) (promulgating regulations for Great Lakes ballast management); Ballast Water Management for Vessels Entering the Great Lakes That Declare No Ballast on Board, 70 Fed. Reg. 51,831 (Aug. 31, 2005) (to be codified at 33 C.F.R. pt. 151) [hereinafter *Ballast Water Management for NOBOBs*]. The Coast Guard declaration states:

[T]he Great Lakes Ballast Water Management Program that became effective on May 10, 1993 (58 FR 18330) has remained unchanged, with the exception that all vessels equipped with ballast water tanks that enter and operate between ports in the Great Lakes must now submit their reporting forms to the National Ballast Information Clearinghouse as of August 13, 2004 (69 FR 32864).

Supra, *Ballast Water Management for NOBOBs* at 51,831.

⁴² The “no ballast on board” (NOBOB) loophole is neither a function of language found in NISA nor found in the Coast Guard regulations, but rather an enforcement choice made by the Coast Guard. See *Reeves*, *supra* note 28, at 46 n.71 and accompanying text (explaining that while the language of NISA sought to reach all vessels with ballast tanks including NOBOBs, the Coast Guard “still does not have an operational plan to regulate the NOBOBs” that have “unpumpable slop” in their ballast tanks).

⁴³ See *Reeves*, *supra* note 28, at 45 n.70 and accompanying text (stating that the Coast Guard has not subjected NOBOBs to the management regime and that “[a]s a matter of custom, mariners considered themselves to be in this status [the NOBOB status] if the pumps lost suction and could not pump anything else out, even though, in fact, excepting only a vessel that has just come out of a shipyard, there is no such thing as a true “NOBOB”).

⁴⁴ Bioinvasive Researcher, David Reid, likens this phenomena to a straw in a coke can, “You can suck nearly all of the Coke out of the can but a tiny bit remains that the straw can’t get. That’s what happens on the salties.” Deb Price, *Invasive Species Hitch Ride on Big Ships*, DETROIT NEWS, Aug. 14, 2005, at 10Z.

⁴⁵ See *Reeves*, *supra* note 28, at 17 (citing a 1991 Canadian study, which estimated that each NOBOB carries an average of 157.7 metric tons of mixed water and sediment).

⁴⁶ See *Reeves*, *supra* note 28, at 49-58. *Reeves* also explains two other problems with NISA’s exchange regime. *Id.* The first relates to safety: Mid-ocean exchanges are dangerous to ship and crew because they invariably place stress on a ship’s hull. *Id.* at 52. Hull stress varies on the average freighter depending on size, shape, weight, and age of the vessel. *Id.* While hull stress is

a problem usually attributed to large ships, the shape of ships small enough to enter the St. Lawrence Seaway may make them especially vulnerable. *Id.* at 53. The Seaway's locks are so narrow that the ships typically entering the Great Lakes are ten times as long as they are wide. *Id.* A 1996 Canadian Report warned that these ships have a history of cracking in the North Atlantic and that the added stress of a ballast exchange might exacerbate hull stress. Reeves, *supra* note 28, at 53. Certainly, ballast exchange can put ship and crew in danger. *Id.* Reeves also points out problems with the Coast Guard's salinity standard, arguing that it inadequately measures the extent to which a vessel has performed an effective mid-ocean ballast exchange. *Id.* at 57-58.

⁴⁷ Reeves, *supra* note 28, at 47.

⁴⁸ *Id.*

⁴⁹ *Id.* If vessels were designed to expel *all* of the ballast water originating from foreign freshwater ports, it is conceivable that mid-ocean exchange might prevent ANS introductions in the Great Lakes. *Id.*

⁵⁰ *Id.* at 50.

⁵¹ *Id.*

⁵² See Reeves, *supra* note 28, at 50.

⁵³ See *id.*

⁵⁴ *Id.* at 56.

⁵⁵ See Thomas Johengen, *Assessment of Transoceanic NOBOB vessels and Low-Salinity Ballast Water as Vectors for Non-indigenous Species Introductions to the Great Lakes*, Final Report (Ann Arbor, MI: NOAA – Great Lakes Environmental Research Lab, 2005) at xiii-xiv.

⁵⁶ See Reeves, *supra* note 28, at 56. Of course, shippers want to maximize profits by loading their vessels as full as possible; because ships have a finite weigh capacity, the more ballast the ship holds the less cargo it will be able carry. *Id.*

⁵⁷ *Id.*

⁵⁸ See Johengen, *supra* note 55, at iii.

⁵⁹ See Reeves, *supra* note 28, at 17.

⁶⁰ See Ballast Water Management for NOBOBs, *supra* note 52, at 51,831-51,833 (explaining how the typical NOBOB voyage ends in discharge of potentially infected ballast); See also Reeves, *supra* note 28, at 17-18.

⁶¹ See *id.*

⁶² *Id.*

⁶³ *Id.*

⁶⁴ *Id.*

⁶⁵ See Reeves, *supra* note 28, at 14 (reporting that every year oceangoing “salties” make between 400 and 600 trips through the Great Lakes). Given that ninety percent of these ships are NOBOBs, NOBOBs make between 360 and 540 trips through the Great Lakes yearly. *Id.*

⁶⁶ See Egan, *Troubled Waters*, *supra* note 5, at 1.

⁶⁷ MICH. COMP. LAWS ANN. §§ 324.3103-04 (2005); MICH. COMP. LAWS ANN. § 324.3112 (2005).

⁶⁸ MICH. COMP. LAWS ANN. § 324.3104(2).

Id.

⁶⁹ See MICH. COMP. LAWS ANN. § 324.3112(1) (“A person shall not discharge any waste or waste effluent into the waters of this state unless the person is in possession of a valid permit from the department”).

⁷⁰ See MICH. COMP. LAWS ANN. § 324.3112(6).

⁷¹ *Id.*

⁷² MICH. COMP. LAWS ANN. § 324.3103(2) (2005) (“The department shall enforce this part and may promulgate rules as it considers necessary to carry out its duties under this part”).

⁷³ See State of Michigan, Dept. of Environmental Quality, *Ballast Water Control General Permit Port of Operations and Ballast Water Discharge*, Permit No. MIG140000, Oct. 11, 2006, available at <http://www.deq.state.mi.us/documents/deq-water-npdes-generalpermit-MIG140000.pdf/>

⁷⁴ *Id.*

⁷⁵ *Id.*

⁷⁶ MICH. COMP. LAWS ANN. § 324.3112(6). GLANSCA amends part thirty one, the portion of Michigan’s Natural Resources and Environmental Protection Act (NREPA) which regulates point source discharges pursuant to the CWA. *Id.*

⁷⁷ See 40 C.F.R. § 122.3(a) (1993). For a discussion of the EPA’s exemption of ballast water discharge from the CWA, see *supra* note 19 and accompanying text.

⁷⁸ 33 U.S.C § 1342(b) (2006). See also *supra* note 18 (discussing states’ responsibility in administering the CWA).

⁷⁹ See MICH. COMP. LAWS ANN. §§ 324.3112(1) (“[A] person may not discharge any waste or waste effluent into the waters of this state unless the person is in possession of a valid permit from the department [of Environmental Quality]”).

⁸⁰ MICH. COMP. LAWS ANN. § 324.3112(6).

⁸¹ *Id.*

⁸² See 40 C.F.R. § 122.3(a) (1993).

⁸³ *Nw. Env’tl. Advocates v. U.S. Env’tl. Prot. Agency*, No. C 03-05760 SI, 2005 WL 756614, at *1 (N.D. Cal. Mar. 30, 2005).

⁸⁴ The plaintiffs in this case were Northwest Environmental Advocates, the Ocean Conservancy and Waterkeepers - Northern California, and San Francisco Baykeepers and Deltakeepers. *Id.* at *1.

⁸⁵ *Id.* at *2.

⁸⁶ *Id.*

⁸⁷ *Id.*

⁸⁸ *Nw. Env’tl. Advocates*, 2005 WL 756614, at *2.

⁸⁹ *Id.* at *8.

⁹⁰ *Id.* at *12. The district court applied the acquiescence standard set forth in *Solid Waste Agency of N. Cook County v. U.S. Army Corp of Engineers*. *Id.* In *Solid Waste*, the Supreme Court invalidated the Army Corp of Engineer’s long-standing “Migratory Bird Rule,” because it conflicted with the CWA. 531 U.S. 159, 169 (2001).

⁹¹ *Nw. Env’tl. Advocates*, 2005 WL 756614, at *11. Both the NANPCA/NISA and the Act to Prevent Pollution from Ships (APPS) have been passed since the promulgation of 40 C.F.R. § 122.3(a). Both laws regulate ballast water discharges. *Id.*

⁹² *Id.* at *11-12 (stating that both NANPCA/NISA and the APPS expressly indicate that their provisions do not supersede the CWA).

⁹³ *Id.* at *13 (the EPA has yet to repeal 40 C.F.R. § 122.3(a), and it has not yet appealed the court’s opinion issued on March 30, 2005).

⁹⁴ U.S. CONST art. VI, § 2. The Supremacy Clause reads:

This Constitution and the Laws of the United States which shall be made in the pursuance thereof; and all Treaties made, or which shall be made, under the

Authority of the United States, shall be the supreme Law of the Land; and the Judges in every state shall be bound thereby, any Thing in the Constitution or Laws of any State to the Contrary notwithstanding.

Id.

⁹⁵ *Gade v. Nat'l Solid Wastes Mgmt. Ass'n*, 505 U.S. 88, 92 (1992) (“whether a certain state action is pre-empted by federal law is one of congressional intent. “The purpose of Congress is the ultimate touchstone”). *See also* *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230 (“the historic police powers of the States [are] not to be superseded by the Federal Act unless that was the clear and manifest purpose of Congress.”).

⁹⁶ *See Michigan Cannery & Freezers Ass'n, Inc. v. Agric. Mktg. & Bargaining Bd.*, 467 U.S. 461, 469 (2004) (describing the three kinds of preemption). *See generally* GEOFFREY R. STONE ET AL., *CONSTITUTIONAL LAW* 324-329 (4th ed. 2001).

⁹⁷ *Michigan Cannery*, 467 U.S. at 469.

⁹⁸ *Id.*

⁹⁹ *Id.*

¹⁰⁰ *Id.*

¹⁰¹ *Huron Portland Cement Co. v. City of Detroit*, 362 U.S. 440 (1960).

¹⁰² *Dixy Lee Ray v. Atlantic Richfield Co.*, 435 U.S. 151 (1978).

¹⁰³ *Chevron v. Hammond*, 726 F.2d 483 (9th Cir. 1984).

¹⁰⁴ *U.S. v. Locke*, 529 U.S. 89 (2000).

¹⁰⁵ *Huron*, 362 U.S. at 441-42.

¹⁰⁶ *Id.* at 441.

¹⁰⁷ *Id.*

¹⁰⁸ *See id.* at 446 (“[w]e conclude that there is no overlap between the scope of the federal ship inspection laws and that of the municipal ordinance here involved. For this reason we cannot find that the federal inspection legislation has pre-empted local action”).

¹⁰⁹ *Id.* at 445.

¹¹⁰ *Id.*

¹¹¹ 435 U.S. 151 (1978).

¹¹² *Id.* at 154-61.

¹¹³ *Id.* at 156.

¹¹⁴ *Id.* at 161.

¹¹⁵ *Id.*

¹¹⁶ *Id.* at 166.

¹¹⁷ *Ray*, 435 U.S. at 165-66, 168.

¹¹⁸ 726 F.2d 483 (9th Cir. 1984).

¹¹⁹ *Id.*

¹²⁰ *Id.* at 485-86.

¹²¹ *Id.* at 486.

¹²² *Id.*

¹²³ *Id.* at 487.

¹²⁴ *Chevron*, 726 F.2d at 489-91.

¹²⁵ *See id.* at 498.

¹²⁶ *Id.*

¹²⁷ *Locke*, 529 U.S. 89 (2000).

¹²⁸ *Id.* at 89.

¹²⁹ *Id.* at 108

¹³⁰ *Id.*

¹³¹ *Id.* at 112.

¹³² *Id.* at 105. The OPA of 1990 amended portions of the PWSA.

¹³³ *Locke*, 529 U.S. 89, 105 (2000).

¹³⁴ *Id.*

¹³⁵ *Id.*

¹³⁶ *Id.*

¹³⁷ MICH. COMP. LAWS ANN. § 324.3112(6) (2005).

¹³⁸ The “environmentally sound technology” referred to in Section 3112(6) likely means either a ballast filtration system and or an apparatus that treats the ballast contents with chemicals or UV light, which would kill any ANS hitchhikers. *Id.* Such “technology” would entail the installation of new equipment on oceangoing Great Lakes vessels and might require a redesigned ballast system within the ships’ hulls.

¹³⁹ In *Ray*, the Court ascertained that Title II of the PWSA was, in part, designed to protect the “marine environment.” 435 U.S. at 165. As part of Michigan’s comprehensive law to regulate point source discharges, GLANSCA is similarly aimed at protecting water quality and marine ecology. *See* MICH. COMP. LAWS ANN. §§ 324.3103, 324.3104, 324.3112 (2005).

¹⁴⁰ The relevant portions of Title II of the PWSA, contained in 46 U.S.C. 391(a), have largely been repealed or revised by several subsequent statutes. The current regulations for vessels carrying dangerous, bulk, and liquid cargoes can be found in 46 U.S.C. §§ 3701-3719 (2005).

¹⁴¹ *See* 46 U.S.C. § 3301 (2005) (subjecting virtually all larger vessels operating in U.S. waters to Coast Guard inspection, including “seagoing motor vessels,” “seagoing barges,” and “*Great Lakes barges*”) (emphasis added). For all “vessels subject to inspection, the Secretary [of Homeland Security] will prescribe regulations [for] . . . (1) the design, construction, alteration, repair, and operation of those vessels, including superstructures, hulls, fittings, equipment, appliances, propulsion machinery auxiliary machinery, boilers, unfired pressure vessels, piping, electric installations, and accommodations for passengers and crew . . .” 46 U.S.C. § 3306(a).

¹⁴² *See* 46 U.S.C. § 3306(a) (2005).

¹⁴³ MICH. COMP. LAWS ANN. § 324.3112(6) (2005). The Michigan DEQ could also sidestep the “design” pitfall by using technology-based limitations similar to CWA/NPDES’s approach. With the CWA’s NPDES, the EPA sets performance standards for “point source” dischargers called technology-based effluent limitations (TBELs). *See* ZYGMUNT J.B. PLATER ET AL., *supra* note 18, at 620-21. To derive its TBEL standards, the EPA assesses the best economically achievable water pollution control available to the polluter. *Id.* at 621. In this way, the NPDES does not compel “point source” polluters to use a particular technology. Rather, it sets a standard attainable by a particular technology, then allows the polluter to decide how it will achieve that standard. The Michigan DEQ could apply this same, results-oriented approach to enforce GLANSCA. Rather than require particular ship designs or equipment, the DEQ could find the best available technology for ballast treatment and derive a water quality standard from that technology. When enforcing that standard, Michigan could not be said to have imposed a “design” requirement on ships.

¹⁴⁴ MICH. COMP. LAWS ANN. § 324.3112(6) (2005).

¹⁴⁵ *Id.*

¹⁴⁶ 16 U.S.C. § 4725 (1997). The section of NISA which permits state action states:

All actions taken by Federal agencies in implementing the provisions of section 4722 of this title shall be consistent with all applicable Federal, State, and local environmental laws. Nothing in this chapter shall affect the authority of any State ... to adopt or enforce control measures for aquatic nuisance species...

Id.

¹⁴⁷ *Id.* However, one could argue that, read literally, NISA's savings clause only permits states "to adopt and enforce control and eradication measures" for ANS; that it does not authorize states to "prevent" ANS introduction. *See Reeves, supra* note 28, at 83-87. Although, when dealing with introductions of invasive species, there is no logical distinction between "control" and "prevention." Given the proliferation of ANS, like the zebra mussel, it is apparent that in the Great Lakes there is no "control" beyond prevention. *See id.* at 86.

¹⁴⁸ *Locke*, 529 U.S. 89, 105 (2000).

¹⁴⁹ NISA's saving clause can be found in the middle of the NANPCA/NISA at 16 U.S.C. § 4725. The clause is positioned between the Act's section on "State aquatic nuisance species management plans" and its section regarding "International cooperation." *Id.* at § 4724 and § 4726.

¹⁵⁰ *Chevron*, 726 F.2d at 489-91.

¹⁵¹ 33 U.S.C. § 1370 (1971). This portion of the CWA provides that: "[N]othing in this chapter shall (1) preclude or deny the right of any State ... to adopt or enforce (A) any standard or limitation respecting discharges of pollutants, or (B) any requirement respecting control or abatement of pollution; except that if an effluent limitation ..." *Id.*

¹⁵² *Chevron*, 726 F.2d at 498-500. *See Reeves, supra* note 28, at 82. *See e.g.*, *Berman Enterprises Inc. v. Jorling*, 793 F. Supp. 408, 415-16 (E.D. N.Y. 1992) (holding that "*Ray*. . . only invalidated state provisions where there was an actual conflict between state and federal law.")

¹⁵³ *City of Philadelphia v. N. J.*, 437 U.S. 617, 622 (1978).

¹⁵⁴ *Id.*

¹⁵⁵ *Id.*

¹⁵⁶ 504 U.S. 353 (1992).

¹⁵⁷ *Id.* at 359; *City of Philadelphia*, 437 U.S. at 622-23.

¹⁵⁸ *Fort Gratiot Sanitary Landfill*, 504 U.S. at 359; *Maine v. Taylor*, 131 U.S. 131, 138 (1986).

¹⁵⁹ *Taylor*, 477 U.S. at 137.

¹⁶⁰ MICH. COMP. LAWS ANN. § 324.3112(6) (2005) ("[a]ll oceangoing vessels engaging in port operations in this state shall obtain a permit from the department").

¹⁶¹ *Fort Gratiot Sanitary Landfill*, 504 U.S. at 361.

¹⁶² MICH. COMP. LAWS ANN §§ 299.401-299.437 (1991).

¹⁶³ *Fort Gratiot Sanitary Landfill*, 504 U.S. at 361.

¹⁶⁴ MICH. COMP. LAWS ANN. § 324.3104(2) (2005).

¹⁶⁵ *Taylor*, 477 U.S. at 138 (quoting *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 142 (1970)). In determining what is an incidental burden, *Taylor* provides little support because the court in that case found that Maine law created a heavy burden on interstate commerce. *Id.*

¹⁶⁶ *Huron*, 363 U.S. at 448. Unfortunately, the *Huron* court provided little in the way of reasoning when it concluded that the Detroit smoke ordinance did not offend the Commerce Clause. *See id.*

¹⁶⁷ *Ray*, 435 U.S. at 179-80. As was the case in *Huron*, the court in *Ray* did not offer a robust explanation as to why the Washington tug escort requirement adhered to the strictures of the Commerce Clause. *See id.*

¹⁶⁸ *Id.* (quoting *Sporhase v. Nebraska ex rel. Douglas*, 458 U.S. 941, 957 (1982)).

¹⁶⁹ *Fort Gratiot Sanitary Landfill*, 504 U.S. at 366-67.

¹⁷⁰ *Id.* at 367.

¹⁷¹ The failure of NISA's exchange requirement provides strong support for the assertion that less restrictive programs cannot achieve GLANSCA's goal.

¹⁷² *Taylor*, 477 U.S. at 151-52.