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CASE WESTERN RESERVE UNIVERSITY SCHOOL OF LAW

MEMORANDUM FOR THE UNITED STATES COAST GUARD

Issue: Ballast water regulation in the Great Lakes

Prepared by Erin James, J.D. Candidate, 2015 Spring Semester

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ACRONYMS

BWM: Ballast Water Management

CWA: Clean Water Act

EPA: Environmental Protection Agency

GLANSCA: Great Lakes Aquatic Nuisance Species Coalition Act

IMO: International Maritime Organization

NANPCA: Nonindigenous Aquatic Nuisance Species Control Act

NPDES: National Pollutant Elimination Discharge System

NISA: National Invasive Species Act

I. INTRODUCTION AND SUMMARY OF CONCLUSIONS

A. Issue

Studies of ballast water leave no question of its devastating effects on the environment, particularly in the Great Lakes region of the United States. In response, many states have made ballast water regulatory efforts in order to decrease damage from invasive species in their waters. The United Nations and United States government have already created laws addressing ballast water. This paper will address state laws and what treaties these laws violate. In addition, this paper will examine which U.S. Constitutional provisions are challenged by this type of regulation. In an attempt to fully answer the questions provided, the questions are reordered. In addition the questions are broken up into four topic areas: (1) state ballast water laws and compliance with international laws and treaties; (2) state ballast water laws and potential U.S. Constitutional challenges; (3) a brief explanation of ballast water laws including whether New York's new law presents any challenges to treaties; and (4) U.S. and public vessel compliance with state ballast water laws and the enforcement of state ballast water laws (state's recourse if vessels refuse to comply). The summary of conclusions reflects those changes. *

B. Summary of Conclusions

- A state may enact ballast water regulations that apply to all vessels, foreign and domestic, transiting state waters. However, state laws are more stringent than international laws.
- 2. This type of regulatory effort challenges the Supremacy clause, and the Commerce Clause (more specifically the Dormant Commerce

- Clause) of the U.S. Constitution; nevertheless because Congress has not regulated this "field," these laws do not pose an actual conflict.
- **3.** Recently New York (following other Great Lakes states) passed laws regulating water transporters. At this time it does not appear that any international or bi-national treaties are violated by such regulation.
- 4. U.S. public vessels or military vessels are required to comply with state ballast water regulation because Congress intended for states to create their own ballast water laws because when it created the Clean Water Act, it left room for states to create their own standards. These laws apply to all vessels through the National Pollutant Elimination Discharge System permit system.

II. FACTUAL BACKGROUND

A. Ballast water definition.

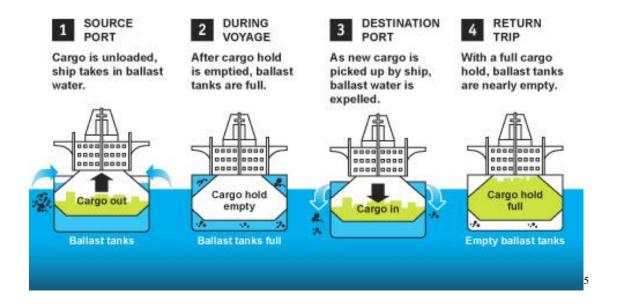
Ballast water is water taken from a ship's port (whether it be ocean water or sea water) and is stored in the ballast tanks of ships in order to keep the ship stable in water.

The amount of water a ship holds is dependent upon the cargo that the ship is carrying. A variety of animals, and organisms are in the water. When ships release the water at port,

^{*}Can a state enact ballast water regulations that apply to all vessels, foreign and domestic, transiting state waters? Looking specifically at the recent laws that New York passed, what, if any, international or bi-national treaties are violated by such a regulation? What U.S. Constitutional provisions are challenged by this type of regulatory effort? What is the state's recourse for a vessel that refuses to comply?

Recently, the state of Minnesota enacted regulations governing the inspection of vessels for aquatic nuisance species. Are U.S. public vessels or military vessels required to comply with this provision? What, if any, constitutional issues exist with the state adopting laws impacting interstate commerce?

these species are also released into a new environment. With no natural predators, these species thrive. There are many ways in which ballast water is managed. However, the most common method is called ballast water exchange.² This method involves a vessel en route to another port that will release the "lower salinity costal water" and replace it with ocean water with a "higher salinity." The exchange is executed 200 miles from the shore. This method is known as "open ocean exchange." Many countries, including the United States, are experiencing effects of ballast water from disease outbreaks due to over population of non-native species. As a result, new technology is needed to combat the potentially dangerous consequences of ballast water.⁴



¹ See Julie A. Aquino, *Navigating in Uncertain Waters: 2006 Update on the Regulation of Ballast Water Discharge in the United States*, 1 Pitt. J. Envtl Pub. Health L. 101, 103 (2006).

² See *id.* at 106.

³ See *id*.

⁴ See generally Rebecca S. Robison, Comment, *Bringing the Floating Polluters to Port:* Why the Minnesota Pollution Control Agency has a Nondiscretionary Duty to Regulate

B. The Great Lakes' battle with invasive species because of ballast water.

The Great Lakes region is one of the regions most impacted by invasive species due to ballast water.⁶ In the 1980s, zebra mussels were released in the Great Lakes region; the population of these striped sea creatures grew rapidly. In 1996, Congress found that damage did not only affect the Great Lakes, but surrounding areas, and that damage is estimated at five billion dollars.⁷ Yearly estimates of controlling the Zebra mussel are more than thirty million dollars.⁸ In response, Congress enacted the Clean Water Act aimed at fixing the problem.⁹ Yet, ballast water still remains an issue today because invasive species are still transported.

The Great Lakes have experienced irreversible injury because of ballast water discharge in their waters. For example, a new virus known as the "Ebola virus of fish" is causing fish to die off in droves. ¹⁰ In addition, the Asian Carp is poised to ravage the fishing industry of the Great Lakes if it is not controlled. Peter Annin stated that "if

Ballast Water Discharge in Lake Superior and How to Avoid Impermissible Extraterritorial, Effects, 31 Hamline L. Rev. 773, 778 (2008) (explaining that "The best management strategies are therefore those that seek to prevent the introduction of invasive species.")

⁵ Center for research on Aquatic Bio-invasions. http://bioinvasions.org/mediaresources

⁶ See Julie A. Aguino, *Navigating*, 1 Pitt. J. Envtl Pub. Health L. 101, 104 (2006).

⁷ *Id*.

⁸ See Joel T. Bowers, *Constitutional Challenges to Michigan's Deballasting Law*, American Bar Association 1 (2007). http://apps.americanbar.org/environ/committees/lawstudents/writingcompetition/2007/Wayne%20State/Bowers%20Paper.pdf

⁹ 33 U.S.C. § 1251- 1387 (Clean Water Act).

¹⁰ See Julie A. Aguino, 1 Pitt. J. Envtl Pub. Health L. 101, 104 (2006).

[Asian carp] get into the Great Lakes, [it] will change the Great Lakes' multi-billion dollar fishing industry."¹¹ There are no natural predators for the Asian Carp in North America, and the females lay roughly "half a million eggs each time they spawn."¹²

C. Legal background of ballast water regulation internationally, and nationally.

1. International Regulation

The United Nations Conference on Marine Pollution (Conference) held in 1973 was the first time that the international community addressed ballast water issues. ¹³ As a result, the Conference asked the World Health Organization to research the dissemination of epidemic disease in ballast water. ¹⁴ In 1989, the International Maritime Organization (IMO) enacted ballast water management regulation. ¹⁵ The member states including Australian, Canada and the United States were requested to follow these rules. In 1993, a study conducted by Australia showed that few countries had implemented the rules. ¹⁶

In 2004, the IMO's Marine Environmental Protection Committee (MEPC) drafted guidelines about ballast water management and control. The IMO eventually adopted

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¹¹ Kyle H. Landis-Marinello, Noontime Dumping: Why States Have Broad Discretion to Regulate Onboard Treatments of Ballast Water, 106 Mich. L. Rev. 135, 138 (2007) quoting Peter Annin, Keynote address at the University of Michigan Law School's Environmental Law Society Symposium: the Great Lakes: Reflecting the Landscape of Environmental Law (Sept. 29, 2006).

¹² National Wildlife Federation, *Asian Carp Threat to Great Lakes*, (2015). http://www.nwf.org/wildlife/threats-to-wildlife/invasive-species/asian-carp.aspx

¹³See Aquino, 1 Pitt. J. Envtl Pub. Health L. 101, 112 (2006).

¹⁴ *Id*.

¹⁵ See Aquino, 1 Pitt. J. Envtl Pub. Health L. 101, 112 (2006).

¹⁶ *Id*.

these guidelines and replaced the previous guidelines. The IMO required all ratifying members to comply with the directives, including open ocean exchange.¹⁷ In addition, all vessels are required to create a ballast water management plan.¹⁸ Included in the plan must be a report detailing when ballast water is collected and when it is discharged at the reception facility.¹⁹ It has yet to come into force.²⁰ The Convention will require all vessels to execute a plan for ballast water and sediment.²¹ The Convention will become law twelve months after thirty states ratify it.²² In addition, the United States and Canada are working in cooperation with the North American Commission for Environmental Cooperation, the Great Lakes Commission, and the International Joint Commission to address ballast water discharge.²³ With the increasing number of ballast waste

¹⁷ *Id.*, open ended exchange is explained in the previous section.

¹⁸ *Id*.

¹⁹ International Convention for the Control and Management of Ships' Ballast Water and Sediments (2004).

²⁰ See Aquino, 1 Pitt. J. Envtl Pub. Health L. 101, 112 (2006).

²¹ *Id*.

²² International Convention for the Control and Management of Ships' Ballast Water and Sediments (2004).

²³ See Aquino, 1 Pitt. J. Envtl Pub. Health L. 101, 113 (2006).

²⁴ *Id*.

Additionally, the performance standard of the IMO is comparable to the Coast Guard's standard. ²⁵

2. Federal Regulation

The Clean Water Act (CWA) of 1972 makes it illegal to discharge any pollutant from a "point source." A "point source" includes ships or other "floating craft," and a pollutant refers not only to chemicals, but biological materials such as organisms found in ballast water. ²⁷ In addition, the National Pollutant Discharge Elimination System (NPDES), created in 1972 through section 401 of the CWA, is a strategy for the discharge of pollutants. ²⁸ Under this system, a vessel must secure a permit before discharging ballast water. ²⁹ Although the EPA has the power to enforce the CWA, it has used language in 40 C.F.R. § 122.3(a) to exempt ballast water from NPDES stipulations; this exemption ensures that vessels containing ballast water do not have to follow NPDES standards. ³⁰

In 1990, Congress passed the Non-indigenous Aquatic Nuisance Prevention and Control Act (NANPCA). This law provides that all ships must discharge ballast water more than 200 nautical miles away from any shore in the United States.³¹ In addition,

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²⁵ See Julie Palakovich Carr, *Turning the Tide on Aquatic Invaders*, AIBS Washington Watch, (2009). http://www.aibs.org/washington-watch/washington_watch_2009_11.html. ²⁶ 33 U.S.C. § 1311(a), (b).

²⁷ *Id.* at § 1362(6), (14).

²⁸ *Id.* at § 1342, see also Aquino, 1 Pitt. J. Envtl Pub. Health L. 101, 109 (2006).

²⁹ See Constitutional Challenges, 2 (2007).

³⁰ See Aguino, 1 Pitt. J. Envtl Pub. Health L. 101, 109 (2006), 40 U.S.C. § 122.3(a).

³¹ 33 C.F.R. § 151.1510(a)(2).

NANPCA requires all ships to install ballast water management systems (BWMS) that have been approved by the Coast Guard.³² Later, in 1996 Congress passed the National Invasive Species Act (NISA). This law is an amendment to the NANPCA in order to apply ballast regulations to all vessels including foreign vessels.³³ NISA makes it clear that the Coast Guard has the authority to regulate ballast water along any coast surrounding the United States.³⁴

Despite the federal regulations, the Great Lakes are still vulnerable to invasive species through ballast water because there is an exemption for ships passing through any state's waters to declare No Ballast on Board (NBOB) if they enter through the St.

Lawrence Seaway. Consequently, unregulated ballast water enters the Great Lakes. A ship's captain can state that ballast tanks have been pumped already and cannot be pumped anymore without having to show proof to authorities. For this reason, states are creating their own regulation for ballast water.

³² *Id.* at § 151.1510(a)(3).

³³ 16 U.S.C § 4701- 4751, See also 33 C.F.R. § 151.2000(d), and 33 C.F.R. 2.36.

³⁴ 33 C.F.R. 151.2075(c) states that "[v]essels with installed ballast water management systems are subject to Coast Guard inspection. Every vessel must have a sampling port(s) designed and installed in accordance with 46 CFR 162.060-28(f) and (f)(2) at each overboard discharge point."

³⁵ Joel T. Bowers, *Little Leviathans: Michigan's Battle Against Invasive Species in the Great Lakes*, 52 Wayne L. Rev. 1249, 1258 (2006).

³⁶ *Id*.

³⁷ See supra note 4, at 790.

As previously stated, the federal government has enacted laws to address the problems caused by ballast water. The EPA has the authority to regulate water quality standards of one state when applying it to another state's laws. ³⁸ Under federal law, the Coast Guard is mandated with the duty of regulating ballast water in the Great Lakes. Ships entering 200 miles from the border of the U.S. must perform ballast exchange that is pre-approved by the Coast Guard.

In 2004, the Coast Guard codified mandatory guidelines for ballast water management in 33 C.F.R pt. 151.³⁹ There are three stipulations in the law: (1) any ship carrying ballast water must file a report with the Coast Guard twenty-four hours before entering the United States, which must include the details of the ship's ballast water management; (2) every ship carrying ballast must have a ballast water management plan for that specific ship; (3) if a ship operates more than 200 miles from the border of the U.S. must implement one of three forms of ballast water management.⁴⁰ These forms of ballast water management include:

- (a) An entire ballast water exchange at least 200 nautical miles from the shore of the U.S.,
- (b) Keep the ballast water onboard of the ship, or
- (c) Utilize different environmentally friendly method that has been approved by the Coast Guard.⁴¹

III. LEGAL DISCUSSION

³⁸ See *Arkansas v. Oklahoma*, 503 U.S. 91 (1992).

³⁹ See supra note 1, at 111.

⁴⁰ *Id*.

⁴¹ *Id*.

A. Conclusion #1: State ballast laws are applicable to international standards and treaties.

The shipping industry operates globally; therefore it makes sense that the global community has created laws and treaties. 42 However, states are impelled to control invasive species because of impairment at the local level. 43

As previously stated, several states have already passed ballast water laws. In 2005, Michigan, the first state in the Great Lakes to pass ballast water regulation, passed the Great Lakes Aquatic Nuisance Species Coalition Act (GLANSCA). This act requires all ocean bound ships to buy a permit certifying that any ballast release from the vessel will be treated according to Michigan's standards. 44 Minnesota is considering a similar law requiring "ocean going" vessels to acquire a permit issued by the state controlling the discharge of ballast water at ports in Lake Superior. 45 The Ohio EPA requires vessels to have a ballast water treatment system that is in compliance with the International Maritime Organization before it can get the certification of the NPDES permit. 46 Currently, California's ballast water law is "almost a thousand times more stringent than the IMO standards." By the year 2020 no vessel will be allowed to discharge ballast

⁴² See Robison, 31 Hamline L. Rev. 773, 784 (2008).

⁴³ See *Id.* at 785.

⁴⁴ See *Id.* at 790, see also MICH. COMP. LAWS ANN. § 324.3112 "[A]ll oceangoing vessels...shall issue a permit for an ocean going vessel only if applicant can demonstrate that the ocean going vessel will not discharge ballast water...that the operator of the vessel will utilize environmentally sound technology and methods, as determined by the department, that can be used to prevent the discharge of aquatic species."

⁴⁵ See Id. at 791.

⁴⁶ Cory Hebert, Ballast Water Management: Federal, States, and International Regulations, 37 S.U.L. Rev. 315, 329 (2010).

water that contains living organisms in the state.⁴⁷ The shipping industry is concerned that the "regulatory burden" may be too heavy if each state creates its own ballast water regulation.⁴⁸

B. Conclusion #2: State Ballast regulation potentially challenges the U.S. Constitution.

Although there are constitutional concerns about state ballast water laws, the language of NISA and the CWA "expresses an intent for states to be involved in ballast water and invasive species regulation." Additionally, as far as the CWA is concerned, Congress's aim was for states to demand more control. Generally, state ballast laws challenge potentially two constitutional principles: (1) the doctrine of the supremacy clause, and (2) the dormant commerce clause. 51

1. Conclusion #2 part a: The Supremacy Clause does not preempt state ballast water laws.

The supremacy clause of the U.S. Constitution declares that federal laws are "the supreme law of the land.⁵² A state law is preempted by the supremacy clause when (1) congress expressly states that the state law is preempted, (2) when a federal law explicitly

⁴⁷ Julie Palakovich Carr, *Turning the Tide on Aquatic Invaders*, AIBS Washington Watch, (2009).

⁴⁸ *Id*.

⁴⁹ See Aquino, 1 Pitt. J. Envtl Pub. Health L. 101, 111 (2006).

⁵⁰ *Id*.

⁵¹ See Kyle H. Landis-Marinello, 106 Mich. L. Rev. 135 (2007).

⁵² See *Id.*, U.S. Const. art. VI., § 2.

states that congress has occupied the field, or (3) the state law conflicts with federal law.⁵³

In *U.S. v. Locke*, a trade association of oil tanker operators brought a suit against the State of Washington.⁵⁴ The trade association contended that Washington's Port and Waterways Safety Act of 1972 (PWSA) (law governing tanker operation, equipment, and design) was preempted by a federal maritime statue.⁵⁵ The Washington law created stricter standards for tankers (including size limitations), and extensive treatment for oil spills.⁵⁶ The Court ruled 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."⁵⁷ The Court also discussed the "saving clause" (exception) of the Federal Oil Protection Act (OPA). The Court stated that the OPA "permit(s) States to impose liability or requirements "relating to the discharge, or substantial threat of a discharge, of oil."⁵⁸ The Court held that the savings clause was not evidence of Congress's intention to allow state laws such as the PWSA.⁵⁹

⁵³ English v. Gen. Elec. Co., 110 S. Ct. 2270 (U.S. 1990).

⁵⁴ U.S. v. Locke, 529 U.S. 89 (2000).

⁵⁵ *Id*.

⁵⁶ *Id.* at 90.

⁵⁷ *Id.* at 108.

⁵⁸ U.S. v. Locke, 529 U.S. at 108.

⁵⁹ *Id.* at 105

Presently, Congress has not explicitly stated through any statutes that it intends to preempt state ballast water regulation. Congress has done the opposite. 60 In the Non-indigenous Invasive Species Act (NISA), Congress incorporated a "savings clause." 1 This clause identified state's right to pass ballast water regulation in their waters. 1 It states that "states maintain primary responsibility for abating pollution in their jurisdictions; they have *authority* to establish and *administer their own systems* and to set standards *stricter than the federal ones*." (emphasis added). 1 This means that Congress intentionally did not preempt state ballast water laws when it passed the Clean Water Act but intended to work in compliance with state laws to regulate ballast water.

When Congress passed the NISA, and the Non-indigenous Aquatic Prevention and Control Act (NANPCA) that is when Congress began to occupy the field of ballast water regulation. ⁶⁵ Congress will usually establish its occupation of a field through all-inclusive federal regulation. Congressional occupation will trigger field preemption of state laws. However, this happens when there is a necessity for consistency at the federal level, and the federal ballast water laws do not qualify for field preemption because there

⁶⁰ Cory Hebert, 37 S.U.L. Rev. 315, 335 (2010).

⁶¹ *Id.* at 335.

⁶² *Id*.

^{63 33} U.S.C. § 1342(b)

⁶⁴ See *id*.

⁶⁵ Hebert, 37 S.U.L. Rev. at 335.

is not need for consistency.⁶⁶ This is further explained in *Chevron U.S.A.*, *Inc. v. Hammond*.

In *Chevron* the Ninth Circuit held that even though Congress passed the CWA, its intent concerning ballast water regulation was to be "a collaborative federal/state effort rather than an exclusively federal one." The Chevron court also stated that environmental regulation is "particularly suited" to local domain, and there was no need for uniformity in the area of environmental regulation. When Congress passed the CWA it intended for states to pass their own ballast water laws through the NPDES permit system. This system allows states to create their own stricter permit standards under the federal system. Hence the holding in *Chevron* establishes that Congress has not expressly preempted the field of ballast water regulation.

The Court has found preemption of a state law "when it is impossible for a private party to comply with both state and federal requirements, or where state law "stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress." A question of the ability to comply with state and federal regulation occurs

⁶⁶ *Id*.

⁶⁷ 726 F.2d 483, 489 (9th Cir. 1984).

⁶⁸ *Id.* at 488, see also at 489: "Thus in the CWA Congress has clearly expressed its intent to allow the states to take an active role in abating water pollution.", and Cory Hebert, 37 S.U.L. Rev. 315, 336 (2010).

⁶⁹ See Cory Hebert, 37 S.U.L. Rev. 315, 329 (2010).

⁷⁰ English v. Gen. Elec. Co. , 110 S. Ct. 2270 (U.S. 1990).

when a state law is less strict than a federal law.⁷¹ With that being said, generally state ballast water laws are more restrictive than federal law.⁷²

Great Lakes ballast water regulation provides an example of the potentiality to adhere to both state and federal law. The Coast Guard requires the following in regards to vessels entering the Great Lakes: (1) ballast water must be exchanged at least 200 miles away from shore, or (2) the ballast water must be treated with "an alternative environmentally sound method [.]"⁷³ A ship will be in compliance with state regulation and Coast Guard regulation by performing an open ocean exchange, and then treating the water according to state directive.⁷⁴

In *Fednav, Ltd. v. Chester*, vessel owners challenged Michigan ballast water regulation on the grounds that it violated the Supremacy Clause of the Constitution.⁷⁵ The Michigan state regulation required ship owners to obtain a permit that certified that the owner agreed to use one of four ballast water treatment methods before discharging any ballast water.⁷⁶ The court ruled that the Michigan statue was not negated "by the doctrine of conflict preemption" because the plaintiffs failed to prove that dual compliance was

⁷¹ See Hebert, 37 S.U.L. Rev. 315, 337 (2010).

⁷² See *id.* at 338, and 337 eg. Alaskan ballast water regulations; oil tankers are in compliance of Coast guard regulations because they satisfy Alaskan law.

⁷³ *Id.* at 337.

⁷⁴ *Id.*, see also Landis-Marinello, 106 Mich. L. Rev. 135, 166 (2007).

⁷⁵ Fednav Ltd. v. Chester, 505 F. Supp. 2d 381, 388 (E.D. Mich. 2007).

⁷⁶ See Cory Hebert, 37 S.U.L. Rev. 315, 339 (2010), see also *Fednav Ltd.*, 505 F.Supp. 2d at 389 ("[T]he four MDEQ approved methods of treating ballast water: '(1) hypochlorite, (2) chlorine dioxide, (3) ultra violet light radiation proceeded by suspended removal, and (4) deoxygenation."').

unfeasible.⁷⁷ Therefore, based on this reasoning, state ballast water laws do not conflict with the supremacy clause of the U.S. Constitution. This is possible because vessels can comply with both state and federal ballast water laws at the same time since state laws generally go beyond the standards of the CWA, and Coast Guard standards.

2. Conclusion #2 part b: State ballast water laws do not discriminate under the Dormant Commerce Clause.

The Commerce Clause of the United States Constitution states, "Congress shall have power. . . [to] regulate commerce . . . among the several states[.]" U.S. courts have interpreted the Commerce Clause to include a dormant feature that does not allow states to unjustly burden or discriminate against interstate commerce. The Supreme Court designated a two-part test to determine if a state's law violates the Dormant Commerce Clause. First, the court will decide whether the state law discriminates against interstate commerce. Second, the court will assess whether that burden is excessive. 81

Considering first step, the court will determine whether the law "regulates evenhandedly with only 'incidental' effects on interstate commerce, or discriminates against interstate commerce."⁸² If the law is found to be discriminatory, it is invalid and

⁷⁷ *Fednav Ltd.*, 505 F. Supp. 2d at 396.

⁷⁸ U.S. Const. art. I § 8, cl. 3.

⁷⁹ See *Oregon Waste Sys.*, *Inc. v. Dept. of Envtl. Quality of State of Or.*, 511 U.S. 93, 98 (1994).

⁸⁰ *Id*. at 99.

⁸¹ See Cory Hebert, 315, 332 (2010).

⁸² See *Oregon Waste Sys.*, 511 U.S. 93, 98.

nondiscriminatory laws will be upheld because "the burden imposed on such commerce is clearly excessive in relation to the putative local benefits." 83

The Sixth Circuit pointed out that there are three ways in which a state statute can discriminate against out-of-state commerce: (1) facially, (2) purposefully, or (3) in practical effect.⁸⁴ State ballast water regulation will most likely have no other purpose than to protect a state's water from invasive species. It is plausible that this purpose will not discriminate against out-of—state interests⁸⁵ Some may argue that state ballast water laws are facially discriminatory, however examination of these laws will reveal that there is no preference for in-state goods.⁸⁶ In a dormant commerce clause analysis, the primary concern is that the state law will benefit its own citizens at the expense of out-of state citizens.⁸⁷ The state's own residents are regulated, they carry most of the expense and burden under these types of laws. In addition, since the shipping industry will be forced to take cost effective measures, state ballast water regulation will benefit society as a whole. As a result, ballast water laws will likely be upheld under dormant commerce clause analysis.⁸⁸

83 *Id*.

⁸⁴ Am. Bev. Ass'n v. Snyder, 735 F.3d 362, 367 (6th Cir. 2013).

⁸⁵ See Kyle H. Landis-Marinello, 106 Mich. L. Rev. 135, 142-143 (2007).

⁸⁶ See *id*. at 143.

⁸⁷ *Id*.

⁸⁸ See *Id*.

A state's law is facially challenged under the dormant commerce clause if the state's law focuses primarily on whether something originated in state or out-of-state. ⁸⁹ In general, state ballast water laws, such as those in Michigan, focus on what vessels do rather than where the vessel originated. ⁹⁰ For example, the Michigan statute states: "Oceangoing vessel" means a vessel that operates on the Great Lakes or the St. Lawrence waterway after operating in waters outside of the Great Lakes or the St. Lawrence waterway."

There is no differentiation between in-state ships and out-of state-ships because both the Great Lakes and St. Lawrence waterways border other states beyond Michigan. Additionally, this statute equally burdens vessels that function in-state and out-of-state. Furthermore, the term "oceangoing" is not a substitute for in-state and out-of-state ships. More precisely, it is a way to restrict ships that may bring noninvasive species (through ballast water) into the controlling sate.

State ballast water regulation does not provide a "benefit [to] in-state producers at the expense of out-of-state interests." That was the Supreme Court's concern in *Oregon*

⁸⁹ See *Id*.

⁹⁰ See *Id.* at 144.

⁹¹ MICH. Comp. Laws Serve. § 324.3101(p).

⁹² See Kyle H. Landis-Marinello, 106 Mich. L. Rev. 135, 143 (2007).

⁹³ *Id.* at 144.

⁹⁴ *Id*.

⁹⁵ *Id*.

Waste Sys., Inc. v. Dept. of Envtl. Quality of State of Or. ⁹⁶ State ballast water laws do not create a preference for in-state shipping (discriminating against out-of state shipping) because they create obstacles for exporters originating in the state. ⁹⁷ Many ships discharge ballast water when loading, not when unloading cargo because the ship needs the water to sustain its balance. Once the ship is fully loaded, discharge of ballast water will occur. ⁹⁸

It could be argued that ballast water regulation affects out-of-state exporters.⁹⁹ However, this argument fails because state ballast water laws ultimately affect vessels that are loading more cargo than what they are unloading. If a vessel unloads cargo at a port and then loads cargo of the same weight, then it does not need to discharge any ballast water. Therefore, importers are encouraged to bring larger loads into the regulating state.¹⁰⁰

Once the court determines that a statute is non-discriminatory, it will examine the second part of the test of the dormant commerce clause. ¹⁰¹ In *Pike v. Bruce Church Inc.*, the Supreme Court designated the *Pike* test for non-discriminatory statute. ¹⁰² Under the

⁹⁶ See Oregon Waste Sys., 511 U.S. at 99.

⁹⁷ See Kyle H. Landis-Marinello, 106 Mich. L. Rev. 135, 144 (2007).

⁹⁸ See *Id*.

⁹⁹ eg. ". . . if shippers decided to avoid ports where they could not load cargo[.]", *id.* at 146.

¹⁰⁰ *Id.* at 146-147.

¹⁰¹ Cory Hebert, Ballast Water Management: Federal, States, and International Regulations, 37 S.U.L. Rev. 315 (2010).

¹⁰² 397 U.S. 137, 142 (1970).

Pike test, a statute will be upheld "unless the burden imposed on such commerce is clearly excessive in relation to the putative local benefits." ¹⁰³ If there is a "legitimate local purpose" then "the burden will be tolerated." (word omitted). ¹⁰⁴

Under this test, state ballast water regulation would most likely be upheld because the cost of cutting off "ocean going commerce" in the Great Lakes (around \$fifty-five million a year) is outweighed by the putative benefits of controlling invasive species (around \$five billion a year). Therefore, it is probable that state ballast laws would likely pass the *Pike* test because there is a legitimate purpose in this type of regulation.

C. Conclusion # 3: State ballast water laws such as those in New York; do not violate any international, or national law (an examination of state regulation).

New York's Department of Environmental Conservation (DEC) recognized that federal regulation was insufficient in protecting against nonindigenous species. ¹⁰⁶ In a press release the DEC stated that the proposed EPA regulation could "be strengthened to better protect against the harms associated with aquatic invasive species and take advantage of numerous recent, cost-effective advances in treatment technology."

103 *Id*.

¹⁰⁴ *Id*.

¹⁰⁵ *Id.* at 149-150.

¹⁰⁶ Jacquelyn M. Aaron, Adopting Technology-Forcing Ballast Water Discharge Standards, Loyola L. Rev. 188, 205 (2009).

However, New York put an end to implementing regulations because of concerns over detrimental economic implications.¹⁰⁷

In 2012, "the National Wildlife Federation sued New York officials" because they failed to appropriate stricter water discharge standards. The Northern District of New York court found in favor of the New York DEC. ¹⁰⁸ In 2013, the DEC issued a condition that the DEC discharge standard will violate state water quality standards if they are less restrictive. ¹⁰⁹ Concerning international regulation, the New York ballast water law does not appear to violate the Ballast Water Convention. Article 2 of the general obligations of the convention parties can create "more stringent measures with respect to the prevention, reduction or elimination of the transfer of harmful aquatic organisms and pathogens through the control and management of ships' ballast water[.]" Additionally, another condition requires ships to perform ballast water exchange before entering New York state waters, and ballast water treatment must meet New York standards. ¹¹¹ Therefore, states such as New York can create stricter ballast water management standards, and not be in violation of international regulation.

¹⁰⁷ *Id*.

¹⁰⁸ *Id*.

¹⁰⁹ Great Lakes Commission, Status of Ballast Water Discharge Regulations in the Great Lakes Region, (2013), *New York State Dept. of Envtl. Conservation v. U.S. Dept. of Energy*, 89-CV-194, 1997 WL 797523 (N.D.N.Y. Dec. 24, 1997).

International Convention for the Control and Management of Ships' Ballast Water and Sediments (2004).

http://www.imo.org/blast/blastDataHelper.asp?data_id=30766&filename=207(62).

http://www.imo.org/blast/blastDataHelper.asp?data_id=30766&filename=207(62)_pdf

¹¹¹ Great Lakes Commission, Status of Ballast Water Discharge Regulations in the Great Lakes Region, (2013).

Michigan, another state bordering on the Great Lakes, passed ballast water regulation in 2005 in its Great Lakes Aquatic Nuisance Species Coalition Act (GLANSCA). Under GLANSCA, Michigan's Department of Environmental Quality issues a permit that authorizes vessels to use one of four treatments of ballast water. Another one of GLANSCA's provisions provides that the Michigan Department of Environmental Quality should promote the "Great Lakes Aquatic Nuisance Coalition" amidst other lake bordering states to prevent invasive species. In Ohio, discharge of seawater within the break walls of its Lake Eire Port is illegal. In Ohio, discharge of Minnesota t recently passed its own invasive species management program. It requires an inspection of vessels on any of the states' waters. If someone refuses inspection, then an inspector may ban the person from operating their ship in Minnesota waters.

Some members of Congress are calling for consolidated laws regarding ballast water¹¹⁷ because it would make it easier when ships change jurisdiction. Under the CWA, states have the capacity to protect their waters without disrupting federal guidelines.¹¹⁸ The NPDES permit includes the water quality standard (WQS); this allows states to

 $^{^{112}\,\}mbox{See}$ Constitutional Challenges, 2 (2007).

¹¹³ Kyle H. Landis-Marinello, 106 Mich. L. Rev. 135, 140 (2007).

¹¹⁴ See Constitutional Challanges, 6 (2007).

¹¹⁵ Cory Hebert, 37 S.U.L. Rev. 315, 329-330 (2010).

¹¹⁶ Minn. Stat. Ann. § 84D.02, 84D.105 (West).

¹¹⁷ Julie Palakovich Carr, *Turning the Tide on Aquatic Invaders*, AIBS Washington Watch, (2009). http://www.aibs.org/washington-watch/washington_watch_2009_11.html.

¹¹⁸ See supra note 1, at 122.

determine the use for the particular body of water hence, making special protection manageable. 119

Presently, the Coast Guard's only restriction is open ocean exchange, which is inadequate for bodies of water with special designation. This is insufficient because the restriction ignores costal trade. Vessels that partake in costal trade do not go out into the ocean, however a threat of invasion is still possible. This is the rationale behind some state BWM laws. Under the CWA's anti-degradation policy, states can restrict NPDES discharge in certain bodies of water because of the WQS designation. However, under 40 C.F.R § 123.44, the EPA can review permits issued by states in order to determine if they are applicable with federal law.

In *Arkansas v. Oklahoma*, the Supreme Court dealt with the issue of state water quality guidelines in the context of interstate pollution. ¹²⁵ The Court held that 40 C.F.R \$122.4(d) incorporates state laws that are applicable to federal law. ¹²⁶ The Court also stated "the Clean Water Act vests in the EPA and the States broad authority to develop

¹¹⁹ *Id*.

¹²⁰ *Id*.

¹²¹ *Id.* stating "For example, under the Coast Guard's program a ship leaving Oregon will not have to conduct any BWM procedures before it can discharge ballast water into the waters of California[.]"

¹²² *Id*.

¹²³ See *id*.

¹²⁴ See 40 C.F.R. § 123.44

¹²⁵ See *Arkansas v. Oklahoma*, 503 U.S. 91 (1992), see also supra note 4, at 795.

¹²⁶ *Id.* at 109.

long-range, area-wide programs to alleviate and eliminate existing pollution."¹²⁷ Therefore, although states have "broad authority" under the CWA, the EPA can overrule their guidelines because Congress has "entrusted such decisions" to the EPA. ¹²⁸ And when a state's water quality standard is incorporated into the NPDES permit, it effectively transforms into federal law. ¹²⁹

D. Conclusion #4: U.S. public vessels or military vessels are required to comply with state ballast water regulation because Congress intended for states to create their own ballast water laws. These laws apply to all vessels through the National Pollutant Elimination Discharge System permit system.

1. Conclusion #4 part a: Vessel compliance, and enforcement

The enforcement of state ballast water laws through the EPA is explained in *N.W. Envtl. Advocates v. U.S. E.P.A* Northwest Environmental Advocates. In this case, San Francisco Baykeeper, and The Ocean Conservancy, plaintiffs-intervenors, and the States of Illinois, Michigan, Minnesota, New York, Pennsylvania, and Wisconsin filed suit against the EPA to challenge its regulation under the CWA. The plaintiffs argued that the EPA exceeded its authority under 40 C.F.R. § 122.3(a) because it exempted certain "marine discharges," which included ballast water by not requiring a permit to enter the navigational waters of the U.S. 131

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¹²⁷ *Id.* at 108.

¹²⁸ *Id.* at 108, 114.

¹²⁹ See supra note 4, at 796.

¹³⁰ See N.W. Envtl. Advocates v. U.S. E.P.A., 537 F.3d 1006, 1010 (9th Cir. 2008).

¹³¹ *Id*.

Previously, the plaintiffs had sought to have the EPA repeal 40 C.F.R. § 122.3(a). When the EPA denied the petition, the plaintiffs filed suit. 132 The Ninth Circuit looked at the language of 33 U.S.C. § 1362(12)(A) which defined a point source, and a pollutant 133; it held that "Congress's intent was clear: "[T]he EPA administrator does not have authority to exempt categories of point sources from the permit requirements of § 402." And it concluded that Congress expressed a plain ... intent to require permits in any situation of pollution from point sources." The Ninth Circuit agreed with the district court's conclusion that NISA incorporated a savings clause which, was not intended for the CWA to limit regulation to aquatic nuisance, and not pollutants found in ballast water. Therefore, this case gave the EPA the duty to regulate ballast water through the CWA. There are at least three benefits from this ruling. First, the CWA and NPDES together will lead technological advancements because there is currently a "lack of feasible technology" that "is a significant barrier to effective BVM." Second, governmental delays will decrease because of the accessibility of private citizen suits

¹³² *Id.* at 1013.

¹³³ See N.W. Envtl. Advocates at 1010.

¹³⁴ Id. at 1022.

¹³⁵ *Id*.

¹³⁶ See Aquino, 1 Pitt. J. Envtl Pub. Health L. 101, 114 (2006).

¹³⁷ Julie Palakovich Carr, *Turning the Tide on Aquatic Invaders*, AIBS Washington Watch, (2009).

¹³⁸ *Id*.

through the CWA.¹³⁹ Lastly, states will be able to protect their bodies of water while working inside federal structure.¹⁴⁰

One argument against EPA jurisdiction over ballast water is that it could result in a patchwork system.¹⁴¹ Yet, states have already created their own ballast water laws in addition to the Coast Guard authority. In addition, state regulation proves that the federal system is not consistent.¹⁴²

2. Conclusion #4 part b: State's recourse when vessels refuse to apply with their ballast standards.

When vessels refuse to comply with state law they are also violating federal guidelines. In *Chevron U.S.A., Inc. v. Hammond* the Ninth Circuit court stated that the Alaskan ballast water statute was "converted into a federal standard" (through the NPDES system), and the "EPA [was] required to enforce [the statute]." Therefore, one can assume that the EPA is required to enforce state ballast water laws. Further, Congress intended for state ballast water regulation to work "in conjunction with Coast Guard regulation of deballasting within the territorial seas." Even when a state's ballast water law is stricter than federal law, the federal environmental protection mechanism is

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¹³⁹ *Id*.

¹⁴⁰ *Id*.

¹⁴¹ See *id*. at 115.

¹⁴² *Id.* at 116.

¹⁴³ See *Chevron*, 726 F.2d at 490.

¹⁴⁴ *Id.* at 495.

enforced on state territorial waters through the CWA.¹⁴⁵ Therefore states can enforce their own ballast water laws, and if a vessel refuses to comply (because they are state laws), then the EPA can enforce those through the Coast Guard. At this time, the courts have not addressed military vessels. It can be assumed that the CWA is intended for all vessels including military vessels because it states that is applies to all "non recreational" vessels in the territory of the United States. ¹⁴⁶

IV. CONCLUSION

Although state ballast water regulation has its potentially challenges the supremacy clause, and the dormant commerce clause of the U.S. Constitution, these types of laws would most likely be upheld in the courts. Congress (through the CWA) left it up to states to create their own standards. The EPA through the NPDES permit system enforces the state ballast water standards.

¹⁴⁵ *Id*.

¹⁴⁶ 33 C.F.R. § 151.2010.

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