

Legislative Analysis



AQUATIC NUISANCE SPECIES

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House Bill 4603 (Substitute H-1)
Sponsor: Rep. David Palsrok

Senate Bill 332 (Substitute H-1)
Sponsor: Sen. Patricia L. Birkholz
House Committee: Natural Resources, Great Lakes, Land Use and Environment
Senate Committee: Natural Resources and Environmental Affairs

Revised First Analysis (5-4-05)

BRIEF SUMMARY: Senate Bill 332 would require oceangoing vessels to obtain a permit from the DEQ for the discharge of aquatic nuisance species, and would facilitate the formulation of an aquatic nuisance coalition with other Great Lakes states. House Bill 4603 specifies that the discharge of ballast water, except as otherwise authorized, would be prima facie evidence of a violation of Part 31 of NREPA.

FISCAL IMPACT: The proposed legislation would not have a significant potential fiscal impact on the Department of Environmental Quality and would have no fiscal impact on local governmental units. The Great Lakes Aquatic Nuisance Species Coalition can be supported within the department's existing budget, and the rule requirements added can be implemented with existing fiscal resources. Senate Bill 332 provides fee revenue. Annual revenue should be sufficient to cover department workload related expenses.

THE APPARENT PROBLEM:

The introduction of aquatic nuisance species into the Great Lakes is, by most accounts, the principal threat to the ecosystem of the Great Lakes. These species are waterborne, non-native organisms that threaten the diversity or abundance of existing native species and the ecological stability of impacted waters. They also adversely affect many commercial, agricultural, aquacultural, and recreational activities that rely heavily on a strong and stable ecosystem. Moreover, the Department of Environmental Quality notes that these species have the potential to cause significant ecological problems because they have been introduced into a habitat in which there are no natural controls, such as pathogens, parasites, and predators.

Since the 1800's, at least 160 known aquatic nuisance species have been introduced into the waters of the Great Lakes, irreversibly altering its ecological balance. In addition, the invasion rate of an aquatic nuisance species has markedly increased in recent years, and it is estimated that, on average, a new nuisance species invades the Great Lakes every six to eight months. Once introduced into the Great Lakes, many aquatic nuisance species can find their way into inland lakes, rivers, wetlands, and other waterways, thus greatly compounding the problems associated with nuisance species.

The single largest source of the unintentional introduction of aquatic nuisance species into the waters of the Great Lakes has been from oceangoing vessels. These vessels often originate in foreign areas, and aquatic nuisance species often attach themselves to the ship's hull or are carried in ballast water taken on by the ship. Ballast water is used by oceangoing vessels to redistribute the weight of the vessel while it is at sea, thereby maintaining its stability and maneuverability, and to offset increases and decreases in weight while the vessel is at port transferring its cargo. A cargo vessel operating in the Great Lakes can contain as much as 14 million gallons of ballast water, while oceangoing vessels can typically hold double that amount.

The problem is that vessels take in ballast water in one port, transporting a variety of aquatic organisms in its ballast tanks, and then discharge that ballast water while at port. When discharged, the ballast water also introduces these non-native species into the ecosystem. The zebra mussel, one of the most harmful aquatic nuisance species, is believed to have been introduced into the Great Lakes through ballast water discharges.

In recent years, a variety of federal laws have been enacted to help stem the introduction and further spread of aquatic nuisance species into the waters of the United States. However, many contend that federal administration and enforcement of these laws has thus far been inadequate and ineffective. As a result, legislation to strengthen existing state regulations regarding ballast water discharge and facilitate the formation of a Great Lakes coalition on aquatic nuisance species has been introduced.

THE CONTENT OF THE BILL:

House Bill 4603

The bill would amend Part 31 (Water Resources Protection) of the Natural Resources and Environmental Protection Act (MCL 324.3109) to specify that, except as authorized by the Department of Environmental Quality, the discharge of ballast water from an oceangoing vessel into the waters of the state would be considered prima facie evidence of a violation of Part 31. A violation would be subject to the penalties prescribed in Section 3115 of the act.

(Under Section 3115, the DEQ may request the Attorney General to commence a civil action for appropriate relief for a violation of the act or a provision of a permit or order issued or rule promulgated under the act. In addition to any other relief, the court must impose a civil fine of at least \$2,500 and may award reasonable attorney fees and costs to the prevailing party. The maximum fine the court may impose is \$25,000 per day of violation.

Additionally, a person who at the time of the violation knew or should have known that he or she discharged a substance contrary to the act, or contrary to a permit, order, or rule, is guilty of a felony and must be fined between \$2,500 and \$25,000 for each violation. The court may impose an additional fine of up to \$25,000 for each day the unlawful discharge occurred. For a subsequent conviction, the court must impose a fine

of between \$25,000 and \$50,000 per day of violation. The court also may sentence the defendant to imprisonment for up to two years or impose probation.

If the court finds that a civil defendant's actions pose or posed a substantial endangerment to the public health, safety, or welfare, the court must impose an additional fine of between \$500,000 and \$5.0 million. If the court finds that a criminal defendant's actions pose or posed a substantial endangerment to the public health, safety, or welfare, the court must impose an additional fine of at least \$1 million and a sentence of five years' imprisonment.)

MCL 324.3109

Senate Bill 332

The bill would amend Part 31 of the NREPA (MCL 324.3103 et al.) to require oceangoing vessels to obtain a permit from the Department of Environmental Quality, and would require the DEQ to facilitate the formation of a Great Lakes Aquatic Nuisance Species (ANS) Coalition.

Permit

The bill would require, beginning January 1, 2007, that all oceangoing vessels engaging in port operations in Michigan to obtain a permit from the DEQ. The permit would be issued only if the applicant demonstrates that the vessel will not discharge aquatic nuisance species or, if the vessel discharges ballast water or other waste or waste effluent, the vessel will use environmentally sound methods, as determined by the DEQ, to prevent the discharge of aquatic nuisance species. In establishing standards for protecting against the discharge of aquatic nuisance species, the DEQ would cooperate with other Great Lakes states and Canadian provinces, the Great Lakes Panel on Aquatic Nuisance Species, the Great Lakes Fishery Commission, the International Joint Commission, and the Great Lakes Commission

The fee schedule for the permit would be the same for certain NPDES permits established in Section 3120 of NREPA. For an individual permit, the application fee would be \$750 and the annual fee would be \$8,700. For a general permit, the application fee would be \$75 and the annual fee would be \$150.

Section 3120 imposes certain time requirements on the DEQ when reviewing the NPDES applications. These requirements would also be applied to applications for permits required by the bill. The DEQ would be required to either grant or deny a permit, within 180 days after receiving a complete application, or by September 30 of the year following the submittal of a complete application for the reissuance of a permit. If the DEQ does not make a decision within the time required, the application fee would be returned to the applicant and the annual permit fee would be discounted 15 percent. The DEQ could promulgate related administrative rules.

ANS Coalition

The bill would also require the DEQ to facilitate the formation of a Great Lakes Aquatic Nuisance Species Coalition with other Great Lakes States to enforce water pollution laws throughout the Great Lakes basin that prohibit the discharge of aquatic nuisance species into the Great Lakes from oceangoing vessels. The DEQ would have to seek to enter into an agreement that becomes effective not later than January 1, 2007, and would be required to consult with the Department of Natural Resources (DNR) before entering into the agreement. Upon entering into the agreement, the DEQ would be required to notify the Canadian Great Lakes provinces of the terms of the agreement. To implement the formation of the coalition, the DEQ would seek funding from the Great Lakes Protection Fund authorized under Part 331 of NREPA.

MCL 324.3103 et al.

BACKGROUND INFORMATION:

Clean Water Act

In 1972, the Federal Water Pollution Control Act, now commonly known as the Clean Water Act (CWA), was substantially amended to prohibit the discharge of any pollutant from a "point source" into the navigable waters of the U.S. without first obtaining a National Pollutant Discharge Elimination System Permit (NPDES). The majority of facilities with point-source discharges are industrial and commercial facilities and municipal treatment facilities that receive domestic sewage from residential and commercial customers. However, relevant to these bills, the CWA (33 U.S.C. 1362) defines "point source" to mean any discernible, confined, and discrete conveyance from which pollutants are or may be discharged including, among other things, a vessel or other floating craft. The CWA further defines "pollutant" to mean, among others, biological materials, though it does not mean sewage from vessels or a discharge incidental to the normal operation of a vessel of Armed Forces. Pursuant to its authority to administer the CWA, the federal Environmental Protection Agency implemented a regulation – 40 C.F.R. § 122.3(a) – which specifically exempts from the NPDES permit requirements "any discharge of sewage from vessels, effluent from properly function marine engines, laundry, shower, and galley sink wastes, *or any other discharge incidental to the normal operation of a vessel*" [emphasis added]. The EPA has used this regulation to exempt ballast water discharges from the NPDES permit requirements.

In 1999, several environmental organizations petitioned the EPA to repeal its regulation asserting that it is in direct conflict with the Clean Water Act. After the EPA denied the petition to repeal the regulation, the organizations filed a complaint with the federal District Court of the Northern District of California. On March 30, 2005 the court issued its opinion in the case, finding that the EPA clearly overstepped its authority under the CWA, noting that Congress has "directly spoken" on the CWA and specifically requires NPDES permits for vessels discharging pollutants into the nation's waters, including

discharges incidental to the operation of a vessel. The court also required the EPA to repeal its regulation.

No Ballast On Board (NOBOB)

In response to the introduction of the zebra mussel into the waters of the Great Lakes, Congress and the President enacted a variety of measures during the 1990's aimed at stemming the introduction and spread of aquatic nuisance species into the waters of the U.S. The Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 (NANPCA, Title I of P.L. 101-646) was established with five overarching purposes: (1) prevent the unintentional introduction of aquatic nuisance species; (2) coordinate research, control, and information dissemination; (3) develop and carry out environmentally sound control methods; (4) minimize the economic and ecological impact of aquatic nuisance species; and (5) establish a research and technology program to benefit state governments. Among other things, the act established a federal program to control the spread of aquatic nuisance species requiring the Coast Guard, EPA, the U.S. Fish and Wildlife Service, Army Corps of Engineers, and the National Oceanographic and Atmospheric Administration to, jointly, identify areas where ballast water exchange can occur without adversely impacting the environment and determine the need for controls on vessels entering U.S. waters other than the Great Lakes. The act also established a ballast water management program for the Great Lakes. Regulations pertaining to the program were first established by the U.S. Coast Guard in 1993. (See 33 C.F.R. 151)

The NANPCA was subsequently reauthorized and amended in 1996 with the enactment of the National Invasive Species Act (NISA, P.L. 104-332). That act established a national ballast water management program whereby all ships entering U.S. waters are required to undertake mid-ocean ballast water exchange or use alternative measures, pre-approved by the Coast Guard, that are at least equally as effective in treating ballast water.

The current Great Lakes federal ballast water management regulations only apply to vessels carrying pumpable ballast water that enter the Great Lakes after operating outside of the U.S. Exclusive Economic Zone (EEZ) – an area extending approximately 200 nautical miles from the U.S. coastline and over which the U.S. has claimed sovereign rights and jurisdiction. These vessels are required to undertake a ballast exchange in the waters beyond the EEZ, retain the ballast water on board throughout the vessel's voyage along the Great Lakes, or use an alternatively sound method of ballast water management that is approved by the Coast Guard.

The regulations do not apply, however, to vessels that report having "no ballast on board" (NOBOB). These vessels have the potential to transport aquatic nuisance species in residual ballast water or accumulated sediments in empty ballast tanks. Once these ships enter the waters of the Great Lakes, they take in and discharge ballast water that has mixed with the residual water or sediment as it loads and unloads cargo, creating another avenue for the further introduction of aquatic nuisance species into the waters of the

Great Lakes. The problem is that most of the ships entering the Great Lakes report having no ballast on board and much of the ballast water that is discharged is carried by those vessels. Federal regulations do not apply to most of the ship traffic in the Great Lakes.

In early January 2005, the Coast Guard published notice of a public meeting and request for comments regarding ballast water management strategies for vessels entering the Great Lakes reporting to have no ballast on board. According to the public notice (Federal Register - Volume 70, No.5) the Coast Guard will use information gathered from this notice to develop a comprehensive program to reduce the threat of introducing aquatic nuisance species into the Great Lakes through vessels reporting to have no ballast on board. The notice further states that "the identification of strategies to address invasion risks from residual ballast water and sediments must take into account vessel safety and stability, the full range of vessel types entering the Great Lakes, costs associated with implementing strategy options, and the need to evaluate the effectiveness of these strategies in actually preventing the introduction of [nonindigenous invasive species] into the Great Lakes." The public meeting is scheduled for May 9, 2005 at the Celebreeze Federal Building in Cleveland, Ohio.

ARGUMENTS:

For:

The bills are necessary to help prevent the introduction and spread of aquatic nuisance species into the waters of the Great Lakes. Once introduced, these species can have a devastating impact on the Great Lakes, both ecologically and economically. With no known natural controls, these species can live uninhibited, disrupting the food chain and irreversibly altering the habitat. The resulting damage, then, adversely impacts the many industries, such as fishing and tourism, that rely on the Great Lakes and a vibrant natural habitat. Additionally, the costs incurred by the state, local municipalities, and businesses to respond to the introduction of an aquatic nuisance species has been quite significant, and the cost alone to respond to the invasion of the zebra mussel has been several billion dollars.

The bills require oceangoing vessels with port operations in the state to first obtain a permit from the DEQ if it is shown that the vessel will not discharge aquatic nuisance species or, if the vessel discharges ballast water or other waste or waste effluent, the vessel will use environmentally sound methods, as determined by the DEQ, to prevent the discharge of aquatic nuisance species. These provisions are quite similar to what would be required under EPA and Coast Guard regulations, if federal administration of ballast water and aquatic nuisance species laws were not so clearly lacking. While the recent district court decision and the Coast Guard's notice of a public meeting indicate that federal administration of ballast water discharges into the Great Lakes may soon be required, it may be quite some time before the EPA and Coast Guard actually take the steps necessary to fully regulate ballast water discharges into the Great Lakes. The EPA may appeal the district court decision, thereby staying that decision and delaying the repeal of its ballast water exemption. In addition, the federal rule promulgation process

can be quite time consuming. However, in the time it takes for a court decision or agency rules to be finalized and rules, another two or three aquatic nuisance species will be introduced into the Great Lakes. Immediate action is necessary to prevent the introduction and spread of aquatic nuisance species. By enacting these bills, the state is taking an affirmative step toward ensuring that oceangoing vessels will not bring aquatic nuisance species into the waters of the Great Lakes, thus greatly reducing the principal method of transmission.

For:

The bill facilitates the formation of a Great Lakes basin-wide coalition, involving other Great Lakes states and, to the extent possible, Canadian provinces. This coalition will foster the development of a region-wide, cooperative effort among the states, to combat the spread of aquatic nuisance species into the waters of the Great Lakes, the protection of which each Great Lakes state and province has a vested interest. Michigan cannot successfully act alone to prevent the introduction and further spread of aquatic nuisance species into the Great Lakes.

Response:

It is not entirely clear how creating yet another entity will improve upon the work already being undertaken by other organizations. Since 1991, in response to the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990, the Great Lakes Commission has convened a panel on aquatic nuisance species. That panel includes representatives from U.S. and Canadian federal agencies, the eight Great Lakes states and the province of Ontario, regional agencies, user groups, local communities, tribal authorities, commercial interests, and the university/research community. That panel, convened under federal authority, includes a wide array of stakeholders, including numerous Canadian officials. How would the coalition envisioned by the bill be any different or more effective? In addition to the Great Lakes Commission panel, the Council of Great Lakes Governors established an aquatic invasive species task force in 2001.

POSITIONS:

The following organizations indicated support for the bills on 4-28-05: the Michigan Chamber of Commerce; the Michigan Manufacturers Association; the Michigan Townships Association; Consumers Energy; and DTE Energy.

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■ This analysis was prepared by nonpartisan House staff for use by House members in their deliberations, and does not constitute an official statement of legislative intent.