



Senate Fiscal Agency
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**BILL ANALYSIS**

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House Bill 4603 (Substitute H-1 as reported without amendment)

Sponsor: Representative David Palsrok

House Committee: Natural Resources, Great Lakes, Land Use and Environment

Senate Committee: Natural Resources and Environmental Affairs

Date Completed: 5-12-05

RATIONALE

Aquatic nuisance species (ANS) are waterborne, non-native organisms that can threaten the diversity or abundance of native species; damage the ecological stability of affected waters; and jeopardize commercial, agricultural, aquacultural, and recreational activity. These species have the potential to cause significant environmental, economic, and public health problems because they have been introduced to a habitat in which there are not natural controls, such as predators, parasites, pathogens, and competitors. They can crowd out native species, alter habitats, change predator/prey relationships, and transmit foreign disease or parasites. They also can cause such problems as food chain disruption, reduced biodiversity, clogging of water intakes, and increased weed growth. Furthermore, measures to eliminate ANS from an ecosystem are costly and sometimes result in more harm.

Ballast water discharge by ships is the most significant source of unintentional introduction of ANS to the Great Lakes. Ships take on ballast water for stability when they are not filled with cargo. When drawing in ballast water in one port, ships may pick up live organisms. As the ships are loaded with cargo in the Great Lakes ports, ballast water is discharged, releasing the live organisms into the lakes. It has been reported that non-native species currently are being introduced at the rate of one new species every eight months.

In light of the adverse effects of non-native invasive species in the Great Lakes Basin, it has been suggested that a person

responsible for an illegal or unauthorized discharge of ballast water should be subject to penalties prescribed in the Natural Resources and Environmental Protection Act for discharging pollutants into the State's waters.

CONTENT

The bill would amend Part 31 (Water Resources Protection) of the Natural Resources and Environmental Protection Act to provide that, unless the discharge were authorized by a permit, order, or rule of the Department of Environmental Quality (DEQ), a discharge into the State's waters from an oceangoing vessel of any ballast water would be prima facie evidence of a violation of Part 31 and would subject the responsible person to the penalties prescribed in Section 3115 of the Act. (Prima facie evidence is evidence sufficient to establish a given fact unless it is rebutted or contradicted.)

(Under Section 3115, the DEQ may request the Attorney General to commence a civil action for appropriate relief for a violation of Part 31 or a provision of a permit or order issued or rule promulgated under Part 31. 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 Part 31, 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 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 in a civil action, or an additional fine of at least \$1.0 million and a sentence of five years' imprisonment in a criminal action.)

The bill is tie-barred to Senate Bill 332, which would amend Part 31 to do the following:

- Require the DEQ to facilitate the formation of an interstate "Great Lakes Aquatic Nuisance Species Coalition" to implement water pollution laws that prohibit the discharge of aquatic nuisance species into the Great Lakes.
- Require all oceangoing vessels engaging in port operations to obtain a permit from the DEQ beginning January 1, 2007, and prescribe a permit fee.
- Require a permit applicant to demonstrate that the vessel would not discharge ANS, or, if the vessel would discharge ballast water or other waste or waste effluent, that the vessel operator would use environmentally sound technology and methods to prevent the discharge of ANS.

MCL 324.3109

BACKGROUND

In 1972, the U.S. Congress amended the Clean Water Act (CWA) to prohibit the discharge of any pollutant from a point source into navigable waters of the United States without a National Pollutant Discharge Elimination System (NPDES) permit. Under the CWA, the term "point source" includes a vessel or other floating craft, and the term "pollutant" includes biological materials. The CWA exempts from the definition of "pollutant" any sewage from

vessels or a discharge incidental to the normal operation of a vessel of the Armed Forces.

The CWA grants the Environmental Protection Agency (EPA) primary authority to implement and enforce the statute. Using this authority, the EPA issued a regulation (40 CFR 122.3(a)) exempting 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* from the NPDES permit requirement. Under this regulation, the discharge of ballast water does not require an NPDES permit.

In January 1999, Northwest Environmental Advocates, the Ocean Conservancy, and Waterkeepers Northern California and its projects, Center for Marine Conservation and San Francisco Baykeeper and Deltakeeper, filed a petition with the EPA requesting the Agency to repeal the regulation on the ground that it conflicted with the CWA, which does not specify that a "discharge incidental to the normal operation of a vessel" is exempt from the NPDES permit requirement. The EPA denied the petition in 2003, and the organizations filed a complaint in the United States District Court for the Northern District of California. The plaintiffs claimed that the EPA overstepped the authority granted to it under the CWA in implementing the regulation, and that its denial of the petition was "arbitrary, capricious, and an abuse of discretion given the CWA...".

The Court agreed with the plaintiffs that the plain language of the CWA explicitly directs the EPA to form permit requirements for discharges incidental to the normal operation of a vessel, which includes ballast water. The Court determined that the two exemptions specified in the statute do not apply to ballast water discharges from nonmilitary vessels into the nation's navigable waters, and that it was the clear intent of Congress to require an NPDES permit before a vessel may discharge pollutants.

The Court disagreed with the EPA's argument that because Congress repeatedly had addressed vessel discharges in the approximately 30 years since the regulation was issued, but did not revise or repeal it,

Congress acquiesced to the Agency's interpretation and agreed with the construction of the regulation. According to the Court's reasoning, the other statutes enacted to address vessel discharges specifically prevented preemption of the CWA. Additionally, Congress did not discuss the issue of incidental discharges when it made amendments to the CWA, nor did it reject legislation overturning the EPA's regulation. The Court concluded that the EPA did not demonstrate the necessary "overwhelming evidence of acquiescence" by Congress regarding the permit exemption.

The Court's opinion, issued March 30, 2005, states that, since Congress has "directly spoken" in the CWA and unambiguously requires vessels discharging pollutants to obtain NPDES permits, and Congress did not acquiesce to the EPA's regulation, the EPA acted in excess of the authority granted to it under the CWA. The Court granted the plaintiffs' motion for summary judgment and ordered the EPA to repeal the regulation. To date, the EPA has not done so.

ARGUMENTS

(Please note: The arguments contained in this analysis originate from sources outside the Senate Fiscal Agency. The Senate Fiscal Agency neither supports nor opposes legislation.)

Supporting Argument

The negative impact of aquatic nuisance species on the health and economy of the Great Lakes is considered by many experts to be the most serious threat to the quality of the Great Lakes ecosystem. Once introduced into the Great Lakes, where they have no effective natural predators, ANS are impossible to eradicate and difficult to control. They often can flourish in a broad range of environmental conditions and have a high reproductive capacity. Through competition with and predation of native species, feeding habits, and the release of foreign pathogens, aquatic invaders have upset the environmental balance of the Great Lakes and caused unprecedented, potentially devastating change.

The environmental changes and food web disruptions caused by ANS threaten Michigan's water-based recreational and tourist activity, a critical component of the State's economy. Michigan has more registered boats than any other state, and, as the home of 20% of the world's

freshwater, provides excellent fishing opportunities to many people, both residents and nonresidents, every year. The effects of ANS, however, are threatening the State's \$4.5 billion fishing industry. Additionally, the sight and odor of decaying organisms on the State's beaches, or toxic algae blooms resulting from the presence of an invasive species, can deter people from visiting, and in some cases even result in beach closures.

An invasive species of particular concern in the Great Lakes region is the zebra mussel. In Great Lakes Basin states, the cost to address problems caused by zebra mussels was \$3.0 billion from 1993 to 2003. Adult zebra mussels can anchor themselves to various firm surfaces, such as lakebeds, rocks, native mussel colonies, boat hulls, buoys, and facilities of municipal water systems, utilities, and manufacturing operations. It is estimated that municipalities and large industries in the Great Lakes region each pay an average of \$360,000 per year to control zebra mussels.

Zebra mussels also are thought to be responsible for the dramatic decline of the *Diporeia* population. This species of tiny shrimp-like creatures constitutes 80% of the Great Lakes food web. Since 1990, the *Diporeia* population has plummeted, in many areas, from 10,000 per square meter to almost none. The other three species that account for the majority of the rest of the food web also are at risk due to exotic invaders. In turn, native fish populations, such as lake trout, walleye, yellow perch, and whitefish, are threatened. Since zebra mussels were first discovered in Lake St. Clair in the 1980s, they have spread to other parts of the United States, down the Mississippi River and into an estimated 350 lakes and ponds. The seriousness of the consequences of a zebra mussel presence is magnified when one considers that the zebra mussel is just one of the approximately 170 non-native species that have been introduced into the Great Lakes and Michigan's inland lakes.

Clearly, ANS can have devastating environmental, aesthetic, and economic effects on the State. Therefore, ballast water should be considered a biological pollutant, and those responsible for unauthorized discharges should be penalized accordingly. Furthermore, once a non-native invasive species has entered the State's waters, it is

nearly impossible to eliminate. For this reason, the State must take action to stop new species from entering the Great Lakes ecosystem. The penalties could deter ship operators from dumping their ballast water in Michigan, and, together with the permit provisions of Senate Bill 332, represent a prudent, preventative approach that would be inexpensive compared with the long-term costs of new invasive species.

Supporting Argument

The current Federal regulations and enforcement measures are inadequate to regulate ballast water and to stop the introduction of ANS. If the EPA appeals the U.S. District Court's decision ordering the Agency to repeal the permit exemption for ballast water discharges, it could be years before the case finally is resolved. If the EPA does begin to implement the regulation of ballast water discharges, either in response to the recent court order or due to an order of a higher court in the future, the rule-making process also could take years. In the absence of national regulation of ballast water discharges, strong penalties should be enacted at the State level to protect Michigan's waters.

Legislative Analyst: Julie Koval

FISCAL IMPACT

The bill would have an indeterminate fiscal impact on State and local government.

There are no data available to indicate how many people would be subject to the penalties under Section 3115 for discharging the ballast water of an oceangoing vessel into the waters of the State. Additional civil fine revenue collected from civil defendants would benefit the State's General Fund. Additional penal fine revenue collected from criminal defendants would benefit public libraries. Local governments would incur any additional costs, which vary by county, for offenders sentenced to serve time in local facilities. The State would incur the costs of felony probation at an average annual cost of \$2,000 per offender, and the cost of incarceration in a State facility at an average annual cost of \$28,000 per offender.

Fiscal Analyst: Bethany Wicksall

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This analysis was prepared by nonpartisan Senate staff for use by the Senate in its deliberations and does not constitute an official statement of legislative intent.