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Re: Invasive Species as Pollutants under the CWA (NSGLC-11-04-05)

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Dear Chuck:

Below is the summary of research of the National Sea Grant Law Center regarding the question you posed to us about whether invasive species are considered pollutants under the Clean Water Act (CWA). The following information is intended as advisory research only and does not constitute legal representation of Michigan Sea Grant or its constituents by the National Sea Grant Law Center. It represents our interpretation of the relevant laws and cases.

The Clean Water Act and Pollutants
The CWA's main goal is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." In assuring compliance, the statute mandates that any discharge of a pollutant into navigable waters constitutes a violation. "Discharge of a pollutant" is defined by the CWA as "any addition of any pollutant to navigable waters from any point source." A pollutant is defined as "dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical waste, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt

1 33 U.S.C. § 1251(a).
2 Id. § 1362(12)(A).
and industrial, municipal and agricultural waste discharged into water.” As will be discussed in more
detail below, courts have categorized invasive species as pollutants because they are “biological materials.”

To be subject to the CWA, the discharge of a pollutant must originate from a point source. A point
source is “any discernable, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal
feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged.”

The Environmental Protection Agency (EPA) regulates discharges of pollutants from point sources
through the issuance of permits under the National Pollution Discharge Elimination System (NPDES). Permits may be issued for individual discharges – those occurring at a specific time and place – or
general discharges – whole classes of discharges for which entities need only to file a “notice of intent.”

**Biological Materials**

**Native Fish**

In *National Wildlife Federation v. Consumers Power Co.*, the EPA had charged a hydroelectric plant with a
CWA violation for re-dispersing live and dead fish (referred to collectively as “entrained fish”) from its
turbine system back into Lake Michigan. The Sixth Circuit Court of Appeals agreed with the EPA that
the entrained fish were biological material and thus a pollutant under the CWA. The Court, however,
disagreed that there was a CWA violation because Consumers Power did not *add* any pollutants to Lake
Michigan – the fish came from Lake Michigan originally. As mentioned above, for there to be a CWA-
regulated discharge there must be an “addition of any pollutant to navigable waters.” At the time of the
*Consumers Powers* litigation, EPA regulations define “addition” as the introduction of pollutants “from
the outside world.” Since Consumers Power’s turbines did not add anything to the water that was not
already present, they did not add anything from the outside world. Therefore, there was no CWA
violation.

**Non-native Fish**

Fish that escape from aquaculture operations are also considered pollutants. In *United States Public
Interest Research Group v. Atlantic Salmon of Maine, LLC*, the First Circuit Court of Appeals determined
that non-native salmon which escape from net pens were biological materials and therefore “pollutants”
under the CWA. The Maine salmon farms which were the subject of the lawsuit raised non-native
salmon in various net pens for eighteen months before being harvested. At times, either damage to the
pen itself or mishaps in delivery caused the fish to escape.

The court classified the escaped non-native salmon as pollutants. Escaped fish were named a threat to
the endangered native strain of the North Atlantic salmon because they create further competition, as
well as causing gene dilution through interbreeding. Instead of disputing the court’s finding that the

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3 Id. §1362(6).
4 Id. §1362(14). Nonpoint sources are regulated by states in accordance with state laws.
5 Id. § 1342(b).
6 Id.
7 862 F.2d 580 (6th Cir. 1988).
8 339 F.3d 23 (1st Cir. 2003).
non-native species constituted pollutants or that their farms violated the statute, the defendants argued the non-native strains did not harm native salmon. However, the court declared the plaintiff’s expert testimony showed “beyond a reasonable doubt that use of [non-native salmon] stocks imperils the survival of wild salmon.”

**Invasive Species**

In 2008, the Ninth Circuit Court of Appeals addressed the question of invasive species as pollutants under the CWA directly. In *Northwest Environmental Advocates v. U.S. EPA*, the Ninth Circuit ruled that invasive species are biological material and thus potentially pollutants that could only be discharged from a point source into navigable waters pursuant to a NDPES permit. In *Northwest Environmental*, the plaintiffs challenged the EPA’s NPDES exemption of three categories of discharges, including ballast water discharges, from regulation under the CWA. Plaintiffs argued ballast water discharges should not be exempt, because ballast water can contain organisms that may survive to populate the area where they are eventually discharged.

The Ninth Circuit found that the term “biological material” includes invasive species. The EPA, therefore, could not exempt ballast water discharges from CWA regulation since there was a discharge of pollutant (invasive species) from a point source (vessel) into navigable waters (ocean, coastal, and Great Lakes waters). The Ninth Circuit agreed with the plaintiffs, stating that “The text of the [CWA] clearly covers the discharges at issue here.” In response to the Ninth Circuit’s decision, the EPA began regulating ballast water discharges pursuant to new regulations issued on December 19, 2008.

**Conclusion**

Invasive species are considered biological materials and thus are considered pollutants when discharged from point sources into U.S. navigable waters. It is important, however, to keep in mind that many invasive species are released directly by humans, either intentionally or accidentally. Humans are not considered “point sources” under the CWA. That means that the fisherman dumping his bait bucket and thereby releasing invasive species into the environment would not be in violation of the CWA (although the release would likely violate state law).

I hope you find this information helpful. Please let me know if you have follow-up questions or would like additional information.

Sincerely,

Stephanie Showalter Otts
Director, National Sea Grant Law Center

Valuable research assistance provided by Ellen Burgin, second-year law student at the University of Mississippi School of Law.

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9 *Id.* at 33.
10 537 F.3d 1006 (9th Cir. 2008).
11 *Id.* at 1021.