

## **IN FOCUS**

### Updated January 14, 2025

# **U.S. Army Corps of Engineers Nuisance Species Efforts**

### Introduction

*Nuisance species* are species that cause, or are likely to cause, economic or environmental harm or harm to human health. Nuisance species impact both terrestrial and aquatic ecosystems. As human societies have become more connected, opportunities for the spread of non-native nuisance species (i.e., *invasive species*) have increased (e.g., navigation activities can transport species and introduce them to multiple different watersheds and waterbodies). Many federal and nonfederal agencies managing land and water undertake efforts to prevent the introduction and spread of invasive species. Upon detection of nuisance species, agencies may devote resources to control and/or eradication efforts.

Congress has authorized various programs for U.S. Army Corps of Engineers (USACE) nuisance species activities and has expanded the scope of the authorizations as well as the appropriations for these activities. This In Focus discusses USACE nuisance species control efforts, including selected authorities, programs, and funding.

### **Effects of Nuisance Species**

After introduction, invasive species may become established and spread; once established, it can be costly and difficult (or impossible, in some cases) to control or eradicate them. For more information, see CRS In Focus IF11011, *Invasive Species: A Brief Overview*.

Harmful algal blooms (HABs) also can affect aquatic systems and their uses. Algal communities are naturally occurring components of healthy aquatic ecosystems. However, under certain environmental conditions—such as increased temperatures and nutrient concentrations (e.g., nitrogen and phosphorus)—colonies of algae can grow excessively (or *bloom*) and produce toxins, becoming nuisance species. For more information, see CRS In Focus IF10690, *Freshwater Harmful Algal Blooms: An Overview*.

USACE, part of the Department of Defense, develops and maintains civil works projects in the United States, principally to improve navigation, reduce flood and storm damage, and restore aquatic ecosystems. USACE is the steward of approximately 12 million acres of public lands and waters associated with hundreds of water resources projects nationwide. Nuisance species can affect USACE projects by outcompeting beneficial species, clogging water pipes, and affecting water quality and recreation. Invasive species affecting USACE projects include Asian carp, zebra and quagga mussels, feral hogs, and hydrilla (an aquatic plant species), among others. In addition, HABs have affected the aquatic systems where USACE projects exist. USACE projects can also serve as a vector for transporting nuisance species that damage other waterbodies.

## **USACE Nuisance Species Activities**

USACE generally undertakes efforts to prevent or reduce the introduction and establishment of invasive species and the proliferation of HABs at its projects, pursuant to its project and programmatic authorizations (some of which authorize specific activities), nationwide Invasive Species Policy Guidance, and engineering regulations. USACE typically funds nuisance species work for individual projects through project funding lines in the Operation and Maintenance (O&M) account; project planning documents address the nature of work at the project level. USACE also pursues nuisance species research that may involve field studies at USACE projects. As part of its regulatory responsibilities, USACE also may require permit applicants to consider nuisance species control. In FY2024, appropriations for USACE nuisance species activities were \$242.5 million; Figure 1 specifies this funding by activity.

# Figure 1. Appropriations for USACE Nuisance Species Efforts by Response Activity, FY2024



**Source:** CRS, using National Invasive Species Council Crosscut Budget – FY2024, https://www.doi.gov/invasivespecies/crosscut-budget.

### **Updating USACE Nuisance Species Policies**

The John D. Dingell, Jr. Conservation, Management, and Recreation Act (P.L. 116-9) and America's Conservation Enhancement Act (P.L. 116-188) amended the Fish and Wildlife Coordination Act (16 U.S.C. §§661 et seq.) to direct the Secretary of the Army to develop and implement a strategic plan for an invasive species program to achieve an annual net reduction of invasive species populations on land or water managed by USACE. The Water Resources Development Act of 2020 (WRDA 2020; Division AA of P.L. 116-260) further directed USACE to periodically update its Invasive Species Policy Guidance. USACE published an updated guidance document in February 2023, which affirmed collaboratively managing with partners aquatic and terrestrial invasive species and HABs. The document also stated that USACE had drafted the strategic plan mandated by the Fish and Wildlife Coordination Act, which is to be used when finalized. Section 1325 of WRDA 2024 (Division A of P.L. 118-272) further directed USACE to assess its invasive species efforts at USACE projects and report the results to Congress by January 4, 2026.

### **USACE Nuisance Species Programs**

USACE has several programs that address nuisance species activities. Congress has amended the authorized activities under some of these programs and authorized pilot programs. Congress funds these programs annually, often at a level higher than the Administration requested.

Aquatic Plant Control Program. Section 104 of the River and Harbor Act of 1958, as amended (33 U.S.C. §610), authorizes the Aquatic Plant Control Program, a program for the prevention, control, and progressive eradication of noxious aquatic plant growths and aquatic invasive species in U.S. waters. The program supports research and development of management solutions for invasive aquatic plants that affect USACE missions.

The Water Resources Reform and Development Act of 2014 (P.L. 113-121) and subsequent WRDAs have amended this authority to also require USACE to establish and operate watercraft inspection and decontamination stations in selected river basins to prevent the spread of aquatic invasive species (such as quagga and zebra mussels) at USACE reservoirs. The construction, operation, and maintenance of these stations are to be cost shared (WRDA 2024 reduced the nonfederal cost share from 50% to 35%). Appropriations are authorized at \$130.0 million annually for these stations. For FY2024, Congress appropriated \$20.5 million for the Aquatic Plant Control Program under USACE's Construction account, including \$9.0 million for watercraft inspection and decontaminations.

#### Aquatic Nuisance Research Program. The

Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990, as amended (16 U.S.C. §4722), authorized the Aquatic Nuisance Species Research Program. An expansion of the former Zebra Mussel Research Program, the program supports research on new methods for preventing, detecting, monitoring, and controlling invasive aquatic species, as well as HABs, that impact navigable waters, infrastructure, and associated water resources. USACE disseminates this information to its field offices. Program activities do not require a nonfederal cost share.

Congress has authorized and funded HAB activities under this program. Section 1109 of WRDA 2018 (Title I of P.L. 115-270) directed USACE's Engineer Research and Development Center to implement a five-year HAB technology development demonstration program. Section 128 of WRDA 2020, as amended, authorized \$35 million for a HAB Demonstration Program. After publishing implementation guidance for the program in 2022, USACE requested in late 2024 proposal submissions for projects by January 27, 2025. In FY2024, Congress appropriated \$17.8 million for the Aquatic Nuisance Research Program under USACE's O&M account, including \$5.0 million for the HAB Demonstration Program.

**Removal of Aquatic Growth Program.** The Removal of Aquatic Growth Program is a navigation O&M authority as provided in several public laws to control nuisance plants that are negatively impacting USACE navigation projects in Gulf Coast states, Georgia, and South Carolina. In FY2024, Congress provided \$3.9 million for USACE to remove aquatic growth in Louisiana and Florida at federal expense.

Pilot Programs. WRDA 2020 authorized several USACE pilot programs related to nuisance species. Section 509 directed USACE to carry out a pilot program to manage and prevent the spread of Asian carp in the Cumberland and Tennessee River watersheds using innovative methods. The pilot program received \$650,000 total from FY2022 and FY2023 appropriations for the Aquatic Nuisance Research Program. USACE has stated it is developing a plan for the pilot program and had no capacity for additional funding in FY2024. Section 503 directed USACE to carry out a pilot program to identify and develop strategies for terrestrial noxious weed control on USACE-managed land. USACE has used Stewardship Support Program funding from its O&M account to report on such strategies across USACE projects and to implement two control projects. WRDA 2020 also amended 33 U.S.C. §610 to authorize USACE to enter into partnerships to control or eradicate invasive species in certain river basins and to authorize a pilot program to manage invasive species at public facilities associated with USACE reservoirs in the Upper Missouri River Basin. WRDA 2024 extended the authorization of appropriations for these provisions through FY2029, yet they remained unfunded as of FY2024.

### **Example USACE Nuisance Species Project**

In some cases, Congress has authorized USACE to undertake nuisance species control efforts at specific water resource projects. An example is USACE efforts in the Chicago area to control the transfer of aquatic invasive species, including Asian carp, from the Mississippi River basins to the Great Lakes. Congress has funded USACE's construction and operation of underwater electric barriers in the Chicago Sanitary and Ship Canal, which is a hydrologic link between the Great Lakes and the Mississippi River. Congress further authorized the Great Lakes and Mississippi River Interbasin Study to evaluate potential methods to prevent aquatic invasive species transfer between the basins. In 2019, the USACE Chief of Engineers signed a report recommending construction of a \$830.8 million (FY2019 levels) project at Brandon Road Lock and Dam consisting of nonstructural measures, an acoustic fish deterrent, an air bubble curtain, an engineered channel, an electric barrier, and a flushing lock. Following WRDA 2020 construction authorization, WRDA 2022 and WRDA 2024 amended the construction and initial O&M cost shares to 90% federal. After receiving appropriations of \$273.7 million total in FY2022 and FY2023, USACE and the states of Illinois and Michigan signed a project partnership agreement in July 2024 to begin construction on the project.

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