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IN FOCUS

Updated July 10, 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. For example, 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.

The U.S. Army Corps of Engineers (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 resource projects nationwide. Nuisance species can affect USACE projects by outcompeting beneficial species, clogging water pipes, and affecting water quality and recreation. Congress has authorized various programs for 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

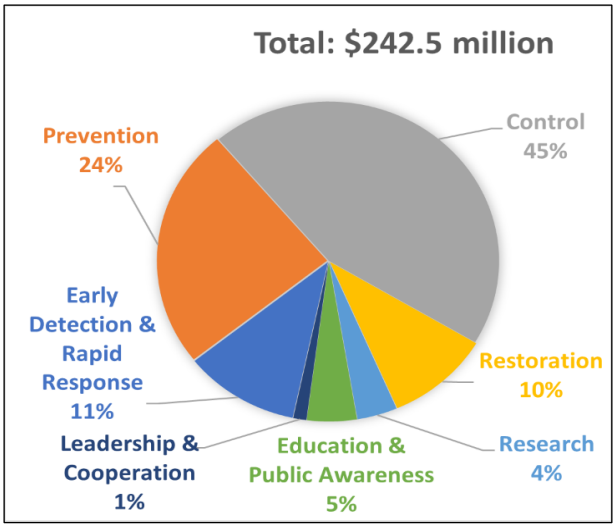
After introduction, invasive species may become established and spread; once established, it can be costly and difficult (or impossible, in some cases) to control or eradicate them. For more information, see CRS In Focus IF11011, *Invasive Species: A Brief Overview*. Invasive species affecting USACE projects include Asian carp, zebra and quagga mussels, feral hogs, and hydrilla (an aquatic plant species), among others. USACE projects also can serve as a vector for transporting nuisance species that damage other waterbodies.

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 concentrations of nutrients (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*. HABs have affected the aquatic systems where USACE projects exist.

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 its 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.

USACE Nuisance Species Policies

Following direction from the Water Resources Development Act of 2020 (WRDA 2020; Division AA of P.L. 116-260), USACE updated its invasive species policy in February 2023, which affirmed collaboratively managing with partners aquatic and terrestrial invasive species and HABs. Also, as mandated by the Fish and Wildlife Coordination Act (16 U.S.C. §§661 et seq.), as amended by P.L. 116-9, USACE finalized its Invasive Species Strategic Plan in December 2024. Section 1325 of WRDA 2024 (Division A of P.L. 118-272) further directed USACE to assess its invasive species efforts at its 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 has funded many of these programs annually.

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 nuisance 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 decontamination stations. USACE's work plan for FY2025 annual appropriations did not include funding for the program, and the FY2026 budget does not request any funding.

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. In addition, Section 128 of WRDA 2020, as amended, authorized $35 million for a HAB Demonstration Program. USACE published implementation guidance for the program in 2022 and requested proposal submissions in late 2024. USACE had awarded six projects as of June 2025. For 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. USACE's FY2025 work plan allocated $3.5 million to the Aquatic Nuisance Research Program for research and development related to HABs and invasive mussels. The FY2026 budget requests $4.3 million for the 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, with no nonfederal cost share. USACE's FY2025 work plan allocated $4.8 million, and the FY2026 budget requests $4.9 million.

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 Plant Control Program. USACE is working on a model project partnership agreement for the pilot and is engaging with potential nonfederal partners. 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 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, although they remained unfunded as of FY2025.

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 the USACE effort 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 methods to prevent aquatic invasive species transfer between the basins. In 2019, the USACE Chief of Engineers signed a report recommending construction of a 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 federal appropriations of $273.7 million total for FY2022 and FY2023, USACE and the states of Illinois and Michigan signed a project partnership agreement in July 2024 to begin construction of the project, then estimated to cost $1.15 billion. USACE awarded the project's first construction contract on April 25, 2025.

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