



3 in 3 for the WIN:

Advancing 3 national invasive species initiatives in 3 years

(W)ildfire and Invasive Species,
(I)slands and Invasive Species, and a
(N)ational Early Detection and Rapid Response Framework

Accomplishment Highlights 2022-2024

Invasive species harm the American way of life. Invasive plants, animals, and pathogens can damage food supply; fuel devastating wildfires; degrade recreational pastimes like hunting, fishing, and boating; lead to native species extinctions; and put human health at risk, among other adverse impacts. Once established, invasive species infestations can be extremely difficult and costly to control. Economic impacts are estimated to be in the billions nationwide. Because of this, people may think that invasive species management is too challenging, too overwhelming, and hopeless. But, through collaboration, strategic action, and innovation, progress can be made in turning the tide on invasive species.

The Department of the Interior (DOI/Interior) plays a central role in the stewardship of public lands. In 2022, DOI focused strategic action on three national issues to achieve substantial outcomes in the near-term. Referred to as “3 in 3 for the WIN,” this effort prioritized advancing three initiatives in three years: (W)ildfire and Invasive Species, (I)slands and Invasive Species, and a (N)ational Early Detection and Rapid Response Framework. Each initiative represented an urgent issue. Each had strong federal-nonfederal partnerships in place. And each had imminent needs with opportunities for science-informed solutions. By identifying a set of national invasive species program priorities, DOI inspired collective action across its bureaus and offices and with partners. This unifying effort led to policy improvements, collaborative operations, programmatic efficiencies, and funding.

Each “3 in 3 for the WIN” initiative had diverse partnerships that leveraged capacity and resources to advance goals of mutual interest. Examples of accomplishments from 2022-2024 are described below.



(W)ildfire and Invasive Species. Extended wildfire seasons and catastrophic wildfires have become a national emergency. Managing invasive species helps to reduce the fuel of these catastrophic wildfires.

The intersection of invasive species and wildfire is fundamentally altering the size, intensity, and frequency of fires and creating opportunities for new invasions on the landscape. Managing these dual threats to protect communities and ecosystems is an immediate and collective priority for diverse and expanding coalitions that include federal, state, tribal, and local governments; nongovernmental organizations; and private landowners. Leveraging ongoing efforts, such as with spatial prioritization, provided a critical jump-start to coordinate and implement integrated fuels management and early aggressive invasive species treatments on both federal and non-federal lands.

Accomplishment Highlights

- **A call to action.** DOI signaled its support of coordination between the invasive species and wildland fire communities by signing and broadly disseminating a [federal memorandum](#) identifying 13 opportunities for action. Actions addressed pre-fire, fire response, post-fire, data management, research, and funding.
- **Training.** At training sessions, such as at the National Park Service’s Resource Advisors course, fire and invasive species specialists promoted information about actions to support fire risk mitigation through invasive species control.

- **Co-investment.** The Bureau of Land Management, National Park Service, US Fish and Wildlife Service, and US Geological Survey cooperated on co-planning and co-investment. They collectively identified priority projects in sagebrush collaborative landscapes to manage both fire and invasive species risks. This work was supported by partner-developed sagebrush conservation design science.
- **Programmatic collaboration.** The [National Invasive Species Council](#) and [Wildland Fire Leadership Council](#) provided essential leadership at national and regional levels on collaboration opportunities.
- **Innovative partnership projects.** DOI bureaus collaborated with innovative partner-led projects like the [Cheatgrass Challenge](#) in Idaho and [IMAGINE](#) (Institute for Management Annual Grasses Invading Natural Ecosystems) based in Wyoming that empowered land managers across the West. These projects catalyzed cooperation among federal, state, university, and private landowners on landscape scale actions to break the fire-invasives cycle.



(I)lands and Invasive Species. Islands are among the most vulnerable ecosystems to climate change and biological invasions and have some of the highest extinction rates. Fortunately, opportunities exist to reverse this trend.

Islands represent a disproportionate concentration of biodiversity relative to their size. They are often the site of species extinctions, primarily due to invasive species predation, competition, disease, and habitat degradation. Targeting strategic actions in island areas safeguarded native species, biological diversity, island cultural practices, human health, and livelihoods. Invasive species management on islands is not only urgent but achievable within a relatively short time frame. Successes are often able to be scaled up to inform restoration efforts in larger, more complex landscapes, including continents.

Accomplishment Highlights

- **Extinction prevention.** Bureaus and offices developed, and are actively implementing, the [DOI Strategy for Preventing the Extinction of Hawaiian Forest Birds](#). This strategy provides a comprehensive approach that applies innovative science, conservation techniques, and Native Hawaiian biocultural knowledge and practices to reduce avian malaria carried by invasive mosquitoes, the primary cause of Hawaiian forest bird mortality.
- **Eradication.** Bureaus and partners led numerous priority eradication projects for invasive mammals and plants on islands, such as on Nihoa Island in the Pacific and Culebra Island in the Caribbean. In addition, DOI offered an [Eradication Notice of Funding Opportunity](#) in 2024 that supported eradication projects in Hawaii, Alaska, California, and the US Virgin Islands to protect island biodiversity and ecosystem function.
- **Training and toolkits.** To provide access to best practices and other resources that strengthen prevention, detection, and response programs, the Office of Insular Affairs sponsored [regional and on-island trainings](#) in collaboration with the US Department of Agriculture, bureaus, and other partners. Lessons learned from robust biosecurity programs, such as at [Channel Islands](#) in California, are informing efforts across DOI-managed islands and beyond on critical elements for effective island invasive species programs.
- **Education and outreach.** Informational webinars that DOI and partners led helped to tell the story of the need for urgent actions on islands. In addition, the National Park Service, other bureaus, and partners initiated a project focused on island travelers to engage them in solutions to prevent the introduction and spread of invasive species on islands.
- **Partnerships.** The islands initiative emphasized strengthening existing and building new partnerships. Workshops, such as the Office of Insular Affairs Territorial Infrastructure Workshop, convened experts which helped to establish new networks from the Pacific to the Caribbean. Other efforts, like the [National Island Restoration Memorandum of Understanding](#), enhanced existing collaboratives. For example, the Office of Insular Affairs and US Geological Survey joined other federal and non-federal partners in this MOU led by the US Fish and Wildlife Service to enhance and promote island restoration initiatives.



(N)ational Early Detection and Rapid Response Framework. Newly arriving invasive species are outpacing managers’ capacities to respond. A coordinated National Early Detection and Rapid Response (EDRR) Framework better positions managers to successfully combat invasive species threats. An effective national EDRR framework—a coordinated set of actions to find and eradicate or contain initial invasive species infestations before they establish, spread, and cause harm—is an essential backstop to address new introductions

and avoid long-term harm and costs. Interior, other federal agencies, states, tribes, interagency coordinating bodies—such as the National Invasive Species Council and Aquatic Nuisance Species Task Force—and other partners took steps to comprehensively operationalize a strategic EDRR Framework. Efforts focused on building on national- and landscape-level approaches and interjurisdictional collaboration to support core components of a [national framework](#).

Accomplishment Highlights

- **Decision-support tools.** To boost preparedness, DOI prioritized decision-support tools that identified priority invasive species (watch lists) to search for in priority places (invasion hotspots). This work led by US Geological Survey and US Fish and Wildlife Service provided information on high priority vertebrates, invertebrates, and plants to help resource managers determine where to focus on the ground.
- **Innovative surveillance.** The use of novel sampling approaches, such as [environmental DNA](#), and innovative technology, such as [automated sampling](#) and [point of use tools](#), are creating surveillance efficiencies, especially when staff and time may be limited. This important investment in research and development and supporting services, such as science and lab support, complements traditional surveillance to maximize the likelihood of detecting invasive species early.
- **Rapid response funding.** To help expedite on the ground action, in 2023 DOI launched the [Rapid Response Fund for Aquatic Invasive Species](#), administered by the US Fish and Wildlife Service. As of 2024, this pilot program provided funding to eight states to aid rapid responses to high priority invasive species.
- **Capacity for surveillance and response.** DOI prioritized building surveillance capacity on and off DOI-managed lands and waters. The purpose was to increase collective action focused on surveying for the right species, at the right time, in the right place, with the right tools. Once species are detected, response capacity is equally important. The [DOI Interjurisdictional Invasive Species Rapid Response Team](#), a new pilot program, is envisioned to support lead management agencies on priority responses.
- **EDRR information.** Ready access to information is necessary for efficient and strategic decision-making. One of the central repositories for EDRR information is [Siren](#), the National EDRR Information System. Launched in 2024 and managed by the US Geological Survey, this web application was developed based on key input from end users so that it is as useful as possible to their work.
- **A national network.** DOI’s coordination across its bureaus and offices on EDRR has led to programmatic efficiencies on detection and response actions. In addition, collaboration through interagency bodies such as the National Invasive Species Council and Aquatic Nuisance Species Task Force has been instrumental in engaging other federal and non-federal partners. While more work is needed to formalize this interorganizational network, a solid foundation has been laid to connect and leverage expertise and resources across the nation on high priority EDRR efforts.

DOI embarked on “3 in 3 for the WIN” as a three-year endeavor (2022-2024) to marshal attention and resources on high priority national invasive species initiatives. DOI and partners advanced numerous accomplishments from national to local levels; some are featured here. These issues remain important, and partnerships and collaborative actions will continue. Additional efforts are now underway beyond Interior, extending across the federal government and with partners. This work will continue at multiple scales to make meaningful progress.

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