

WASHINGTON INVASIVE SPECIES COUNCIL

2008

Annual Report



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Message from the Chair:

This report to the Legislature describes the recent progress of the Washington State Invasive Species Council, its three-year implementation plan and what it will achieve.

In 2006, the Washington Legislature recognized the need for more coordinated and strategic actions to prevent and combat the spread of invasive species that threaten our crops, our environment, and our health. The Legislature acknowledged that many tribal governments and local, state, and federal agencies are doing exemplary work to combat invasive species. The Legislature also found that this good work was compromised by lack of a fully coordinated approach in assessing threats, gathering and sharing data, setting state priorities for action and investment, and communicating with the public. To solve this problem, the Legislature created the Washington Invasive Species Council.

The council is composed of representatives from state and federal agencies, tribal governments, and citizen stakeholders. The council serves as a forum for identifying and understanding invasive species, facilitating joint planning and cooperation among those involved, educating the public, and providing policy advice to the Legislature.

The council has moved quickly to create the organizational infrastructure necessary for this work, and to craft a ground-breaking statewide strategic plan that represents the best thinking of a wide range of experts and stakeholders. The 20-year strategic plan, published in June, 2008, lays out five strategic goals:

1. To foster coordination among government agencies, stakeholders, land owners and managers, and tribes.
2. To prevent the introduction of new invasive species, and to reduce their impacts.
3. To improve our capacity to quickly identify, report, and respond to both new and existing invasive infestations.
4. To assist everyone who is involved in containment, control, and eradication efforts.
5. To support restoration of key ecosystems that have been harmed by invasive species.

Since the publication of the strategic plan in June, the council has continued to build momentum. We have added council members from the U. S. Forest Service, the U. S. Customs and Border Protection Agency, and the Washington State Parks and Recreation Commission. In August, we elected new officers. This fall, the council held two planning forums attended by more than 160 invasive species professionals and stakeholders. These forums laid the groundwork for implementation of the goals we've set for the next three years. This report to the Legislature describes the council's three-year implementation plan and what it will achieve.

Every member of the council recognizes the enormity of the threat to our state posed by invasive species, the wisdom and fiscal prudence of improving our ability to prevent and quickly contain the proliferation of new invasive species, and the complicating factor of global climate change. Our shared understanding of these challenges is a strong foundation for consensus, cooperative planning, and sustained commitment to the work ahead.

The cost of inaction on invasive species may well be catastrophic to our marine environments, our fish and shellfish, and our farms and orchards. The need for coordinated, effective action is urgent.

Sincerely,

A handwritten signature in black ink, appearing to read "Chris Christopher". The signature is fluid and cursive, with a long horizontal stroke extending from the end.

Chris Christopher,

Chair, Invasive Species Council

Washington Invasive Species Council

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Council Vision: The council envisions our state sustaining human, plant, and animal communities and our economy by preventing the introduction and spread of harmful invasive species.

Council Mission: The council's mission is to empower those engaged in the prevention, detection, and eradication of invasive species; to design a strategic plan built upon local, state, and regional efforts; and to serve as a forum for invasive species education and communication.

Invasive species and their impacts

Washington ranks among the top 15 states for diversity of native plants, animals, and birds. But our native species – and the beneficial species utilized in our farms and orchards – are at risk from the introduction of invasive species from across the globe. These risks include substantial to catastrophic economic, environmental, and human harm. Some invasive species are garden plants gone wild; some are aquatic plants and animals that hitchhike on ships and boats; some are insects that arrive on imported fruit or nursery plants; still others are the offspring of pets that escape or are released by their owners. While many introduced species never become a problem, others find conditions in which they are able to out-compete and overwhelm local species and disrupt whole ecosystems.

The economic consequences of invasive species can be devastating. They reduce the productivity of our farms, orchards, fisheries, and oyster-growing industries; degrade water quality in lakes; and further imperil threatened and endangered species such as salmon.

As international travel and trade accelerate and changes in ocean currents and other impacts of global climate change create more favorable conditions for invasive species to thrive – the threat to our ecosystems increases. However, it is just as important to remember that our state must increase its stewardship in preventing the spread of native and invasive species to our neighbor's lands or waters, both within state boundaries and globally. For example, our native Signal crayfish (*Pacifiastacus sp.*) has invaded rivers from California to the United Kingdom and has decimated their native crayfish species.

What is working well

Many states consider Washington a national leader in combating invasive pest organisms and plant species that affect agriculture, because of our well established pest programs, State Noxious Weed Control Board and local weed districts. Our state has also created Cooperative Weed Management Areas that mobilize multiple agencies when an invasive species crosses jurisdictional or political boundaries. In recent years, the State Noxious Weed Control Board and local weed districts also have shouldered responsibility for invasive plants that harm ecosystems but pose no threat to agriculture. These efforts are widely recognized for their innovative, effective, and collaborative work.

We can also count many other successful efforts, including the effective control of *Spartina* statewide, the collaborative Ballast Water Working Group, and public and private efforts to restore habitats with native species.

Citizen stakeholder groups also play an exemplary role in cooperative efforts. The Washington Invasive Species Coalition, which includes numerous environmental and citizen organizations, worked with the nursery industry and the Noxious Weed Control Board to create Garden Wise, a public campaign to promote alternatives to common invasive garden plants such as English Ivy.

Public utility districts, university research and extension programs, tribal governments, federal agencies, affected industries, and our neighbors in Oregon, Idaho, and British Columbia are also active in cooperative efforts to control invasive species

Gaps in prevention and control

Although the ethic of goodwill and cooperation is strong among all those engaged in combating invasive species, the organizational infrastructure to optimize cooperation has not been fully developed. The results are gaps in our knowledge, in prevention and rapid response, and in authority and funding. Perhaps most importantly, our state has lacked a coherent, long-term forum for joint strategic planning to set priorities, focus resources, build capacity for prevention and rapid response, and educate the public about the vital role citizens play in reducing the spread of invasive species.

Today, data about invasive species is scattered across many agencies and organizations. This limits our ability to assess the scale and urgency of the threats we face. On the whole, we are better at coordinating responses to invasive pest organisms and plants than to aquatic and terrestrial animals and organisms. However, agencies often lack clear lines of authority for rapid response to emerging threats, and flexible emergency funding that would help contain and eradicate new invaders before they spread.

Zebra Mussel

The Zebra mussel, which is native to the Caspian and Black Seas, was introduced to the United States in the mid-1980s through ballast water discharge. It kills off native mollusks and disrupts natural food webs in both freshwater and saltwater. It reproduces so prolifically that it can clog pipes and mechanical systems of industrial plants, water supply utilities, and dams causing devastating economic harm. Billions of dollars have been spent to control it, but it has nevertheless spread to 19 states, and significantly disrupted the Great Lakes. It has not been found in Washington waters yet.



Photo Courtesy of Washington Department of Fish and Wildlife

Most troubling is our reliance on after-the-fact regulation and response. We clearly need a greater focus on closing off the pathways through which invasive species enter our state. Improving our capacity to do this would save taxpayers, farmers, the fishing industry, forest owners, and many others millions of dollars over many years, and would more effectively protect our ecosystems.

Examples of emerging threats

Ballast water

Ships engaged in domestic and international trade often take on ballast water to provide stability during voyages, or to maintain the level where they sit in the water. Ballast water contains a variety of living organisms, and when ballast water taken on in one port is discharged in another port, these organisms – including potentially harmful invasive species – are set loose in a new environment.

To respond to this problem, the Washington Legislature passed Senate Bill 5923 in 2007. It requires that ballast water discharged in Washington ports be either water that has been exchanged in the open sea, or water that is treated to kill or remove organisms before it is released.

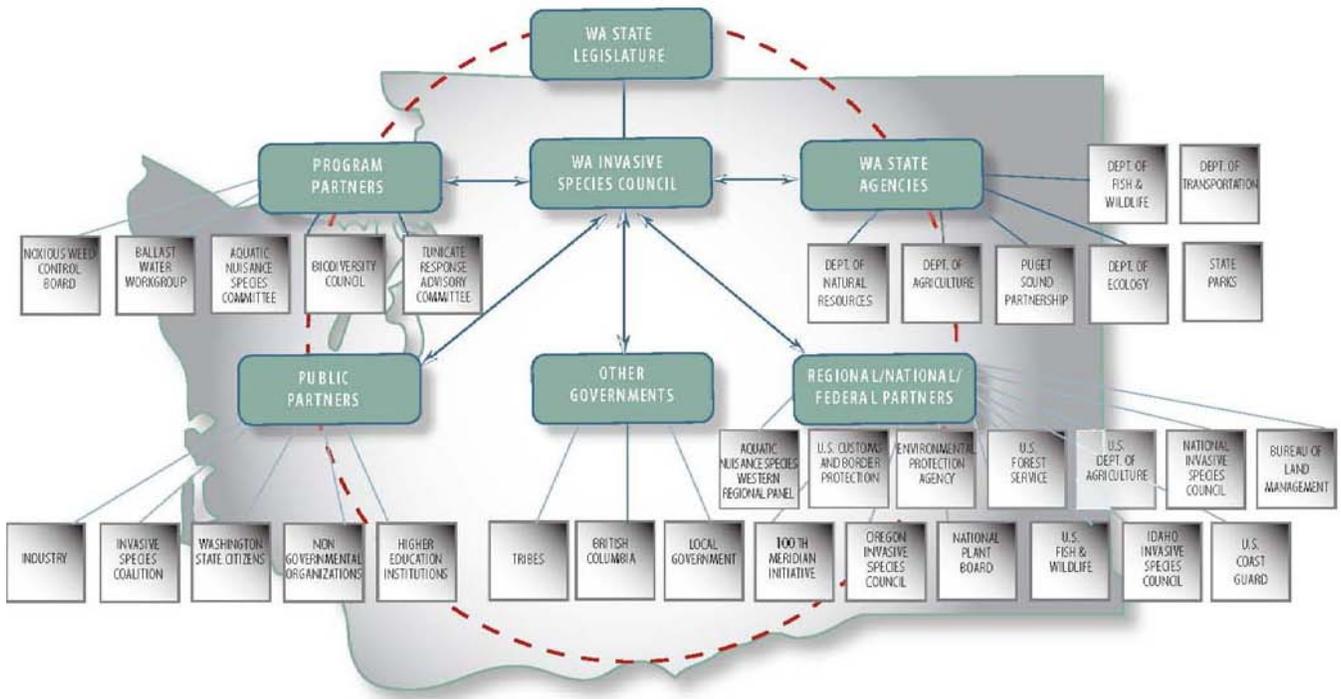
Climate change

Climate change complicates our efforts to control invasive species. Many species have already changed their distribution, migration, and reproduction patterns in response to rising temperatures and shifting ocean currents. As a result, our state may become more vulnerable to the spread of harmful invasive species. We need to know more about these changes to protect our ecosystems and our economy from these emerging threats.

We need to integrate the work of combating invasive species and protecting our ecosystems as we adapt to a changing climate. We must assess the vulnerability of various species, habitats, and ecosystems, and prepare ourselves to adaptively manage a changing landscape. The long-term viability of our agriculture and other natural resource industries may well depend on our ability to rise to this challenge.

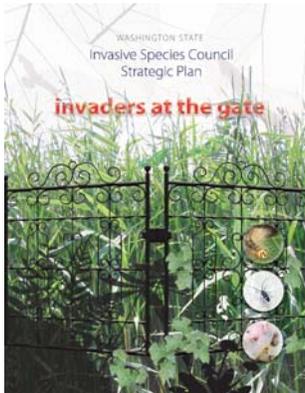
Council progress

In just over two years, with a small budget, the council has already made significant progress. It has taken on a leadership role and gathered together experts and stakeholders from across the state to write both a comprehensive strategic plan and an action-oriented implementation plan. Groups and individuals working on the ground to combat the spread of invasive species now look to the council for leadership.



Strategic Plan

The council's first task was to convene agencies, affected industries, and other stakeholders to craft a strategic plan aimed at achieving the council's vision of "a state sustaining human, plant, and animal communities and our economy by preventing the introduction and spread of harmful invasive species."



A wide-ranging group of national, state, and local experts and interest groups collaborated to create the strategic plan to ensure that it recognized and incorporated work that is already underway. Among those included were the council's "critical partners" - the Washington Biodiversity Council, the Aquatic Nuisance Species Committee, the Ballast Water Work Group, Puget Sound Partnership, and the Noxious Weed Control Board. Work groups were convened to address specific features of the plan, including coordination, technical issues, regulation, education, and funding.

The recommendations that came from these groups address the gaps in information and coordination, the funding issues, and the technical constraints that inhibit effective prevention and eradication of invasive species.

In addition, the council's draft strategic plan was reviewed by many agencies, citizen organizations, academic experts, industry representatives, and tribal and local governments.

The council's strategic plan was also designed to be a component of the strategic plan of its parent agency, the Recreation and Conservation Office. The core goals of that plan are:

- To manage the resources and responsibilities entrusted to us in an effective, efficient, and open way;
- To protect and improve ecosystems so that they sustain biodiversity: plants, wildlife, fish, and people; and
- To protect and improve outdoor recreation opportunities to improve the health and well-being of Washingtonians.

The council's strategic plan established five strategic goals:

1. To foster cooperation, coordination, and communication among government agencies, stakeholders, land-managing agencies, private landowners and tribes.
2. To prevent the introduction and establishment of invasive species and reduce their adverse impacts on Washington's environment, economy, and human health.
3. To refine and coordinate statewide capacity to identify, report, and respond to both newly discovered and existing invasive infestations.
4. To assist those who manage invasive species through containment, control, and eradication efforts.
5. To support restoration and rehabilitation of key ecosystems adversely impacted by invasive species.

Priorities for early action

Following from these five goals, the council developed a list of 22 recommendations and associated action items. From this list of recommendations, **the council ranked five as its highest priorities for early action** –to be tackled during the next three years:

1. Compile existing information and conduct a **baseline assessment** of invasive species information and programs in Washington. This baseline will serve as an initial step towards coordinating a statewide, strategic response to the threat of invasive species. The baseline will:
 - Provide analysis of the worst invasive species in the state, the locations of the areas most affected, pathways, and resources most at risk.
 - Identify public and private efforts to prevent, control, or eradicate invasive species.
 - Inform public and private entities as it improves the state’s ability to coordinate resources.
2. Develop a **web-based information clearinghouse** as the interchange for all existing invasive species information statewide.
3. Support targeted **outreach campaigns** to educate both public and private sectors on the damage caused by invasive species.
4. Increase and enhance **communication across all entities** to ensure **coordinated approaches** are supported and tools are accessible to address invasive species issues.
5. Enhance capacity to respond to invasive species by **improving agencies’ access to emergency funding** and building on existing efforts to develop an interagency **early detection and rapid response** network.

Beyond these early actions, the council’s strategic plan also lays out a 20-year agenda for work on the remaining recommendations. This work will lead to continuous improvement in the coordination, effectiveness, and evaluation of invasive species prevention, eradication, and ecosystem restoration. The council’s strategic plan is online at http://www.rco.wa.gov/invasive_species

Implementation Workdays

Following the completion of the strategic plan in June, the council began working on the five near-term (0-3 years) priorities for early action. Experts from public and private organizations gathered for two “work days” in Pasco and Parkland to develop the “who, what, and how” of implementation.



Participants divided into five work groups, and each tackled one of the five priorities for action. Each work group made recommendations that led to the creation of interrelated action plans to achieve the five near-term goals.

The five work groups that met during the work days have incorporated new members, and have now become standing committees that will work to implement the plan during the next three years.

1. Baseline assessment

The baseline assessment work group identified specific gaps in coordination, information, funding, and training. Its members noted regional disparities in data, a need for greater coordination between federal and local agencies, lack of data on invasive animals and marine organisms, and communication gaps between universities and between regions in the state. They noted that funding is needed to create a baseline assessment, and that there is a need for trained staff to collect and record data.

They noted that there are no common criteria for ranking priorities for addressing invasive species, or for protection of areas not currently affected by them. Nor is there a clear point of contact to report an invasive species, or to get information.

The work group concluded that there is a need to show the ecological and economic benefits of a baseline assessment, and the potential cost of *not* doing so. Members discussed the possibility of creating a revenue source for this purpose that might include vectors for invasive species such as ports, nurseries and transportation facilities.

2. Web-based information clearinghouse

Like the baseline assessment work group, the information clearinghouse work group noted gaps in coordination between federal and local groups, and between regions in the state. Workgroup members saw

a need for more information on invasive animals and marine organisms and for an inventory of research that could help identify gaps and overlapping projects.

They called for the creation of a clearinghouse first for those involved in combating invasive species, and second for the development of accessible information for the lay public. Thus, they recognized that the web-based clearinghouse is a tool that will serve the objectives of both the baseline assessment work group and the education and outreach work group. It was recommended that a work group be created to oversee development and quality of the information clearing house, and that it should be housed on the Recreation and Conservation Office Web site.

3. Public education

The education and outreach work group noted the need for coordination among public and private entities to raise public awareness about invasive species and how they affect our economy, environment, and health. The work group also cited the vital role informed citizens can play in helping to prevent the introduction and spread of invasive species, and in assisting with their control and eradication.

The work group called for development of common messages, geared to citizens, that could help inform and change popular understanding of the threats posed by invasive species, and the many ways in which citizens' daily actions – including choice of garden plants, boating practices, and travel routines – can help or hinder invasive species control. The members noted that there is not a unified reporting mechanism for the public to use when suspected invasive species are found.

The work group called for dedicated staff (one person on each side of the Cascades) to identify gaps, inventory and promote successful public education efforts, and develop new educational tools and initiatives. The tools needed for such a campaign include e-newsletters, public service announcements, displays, school curriculum, social marketing, online video, and newspaper columns that feature a “weed of the week.”

4. Communication and coordination

This work group tackled the complex issues that arise from the multiple levels and layers of agencies, citizen organizations, and private industries involved in combating invasive species. Like the other work groups, the members in this group recognized that the lack of a systemic approach means that authority and responsibility are often unclear, and funding is spotty and inflexible. They also observed that there is insufficient attention to healing ecosystems following the eradication of invasive species, and that the risks and unintended consequences of control and eradication methods must be carefully assessed.

They called for a map or matrix of all the agencies to identify opportunities for improved coordination. More broadly, they called for further clarity on jurisdiction, authority, and responsibility of involved agencies. They

proposed advance decisions on who will take responsibility for a given species, and designation of an agency that has the authority to assign lead responsibility when there is confusion.

They also identified a need for a master list of permits that may be required for invasive species control and eradication efforts, and for expedited permitting processes to facilitate timely and effective action.

5. Emergency funding, early detection, and rapid response

Like the other work groups gaps, in coordination and lack of clarity about authority were found for emergency funding, early detection, and rapid response. The group members also noted the absence of a clear guide to when and where rapid response should be mounted. This results in a de facto system of slow reaction to a potential disaster that is both more costly and less effective than prevention and early action.

Other barriers to prevention and rapid responses include the absence of permits to use biocides in aquatic environments where found necessary; decentralized early detection and rapid response infrastructure; the absence of funding for rapid response to invasive animal species; and the lack of taxonomic expertise that could help guide decision-making and response.

Regional collaboration

To increase regional communication and coordination on invasive species issues, the council participates in national and regional conference calls, meetings, and issue briefings with the invasive species councils of neighboring states.

The 100th Meridian Initiative is a cooperative effort between state, provincial, and federal agencies and other partners to prevent the spread of zebra mussels and other aquatic nuisance species into the western United States. The Initiative's Columbia Basin Team brought a bold new plan to the council for its consideration. The purpose of the plan is to coordinate a rapid, effective, and efficient interagency response to contain, and when feasible, eradicate zebra, quagga, and other non-native invasive mussel populations if they are introduced in Columbia River Basin waters. With the council's support, Governor Gregoire recognized the need for this milestone and signed the Columbia River Basin Interagency Invasive Species Response Plan.

2009 Projects

Based on the results of the two work days – and with the state’s current budget crisis in mind – the council identified specific actions that should be undertaken in the coming year.

Some of these actions can be taken within current budgets, and are being addressed immediately. However, the baseline assessment, which is the top priority of the council, cannot be created without new funding.

Projects that can begin within existing funding:

- **Create an invasive species priority list** based on clear criteria that would achieve the most effective protection of our environmental and economic assets.
- **Create an Emergency Response Flow Chart** to clarify the current distribution of responsibility and authority, and to improve our ability to act quickly and effectively to combat emerging threats.
- **Develop a common message** for public education and outreach.
- **Inventory authorities and identify gaps** as an initial step towards creating a coherent, coordinated response to invasive species.
- **Develop a statewide template/strategy for emergency funding** to guide the use of an emergency fund.

Top priority projects that require new funding:

- **Create an initial baseline analysis** of invasive species threats, distribution, and impacts of known invasive species, and efforts to prevent and combat them.
- **Information clearinghouse** to provide for managers and the public a centralized information hub that houses geospatial data, listings of known invasive species, potential funding sources, Web sites, risk assessment templates, and control methods.
- **Education and outreach campaign** to raise awareness of the public’s role in the spread of invasive species and inform on how they can help to protect the state’s economy, environment, and health.

Conclusion: An Ounce of Prevention

The council recognizes the state’s current fiscal crisis and continuing economic uncertainty. It also recognizes the potentially devastating consequences of our current patchwork of uncoordinated efforts, which could lead to the proliferation of new invasive species with enormous economic and environmental consequences for Washington. The modest investments we need to improve coordination, prevention, emergency response and public education are minuscule compared to the potential economic harm that even a single invasive species such as the zebra mussel can cause.

The people of Washington care about their natural environment, support local farmers, and want a healthy place to live. Invasive species threaten all of these. A new invasive species arriving in ballast water, for instance – could undercut our efforts to save Puget Sound. A new pest such as the Mediterranean snail, recently found at the Port of Tacoma, could devastate wheat farms. In a warming world, with increased travel and trade, it is just a matter of time before new invasive species arrive on our shores. We must improve our efforts to anticipate, combat, and manage invasive species lest they overwhelm our ability to protect ourselves and the world that sustains us.

The importance of preventing and combating invasive species may not be widely recognized by the public today, but that does not diminish government’s responsibility to protect our natural resources and our economy. Rising to this challenge now is the right thing to do. The public has a right to expect that we will act with foresight, careful coordination, and strategic investment to protect our natural resources, our economy, and our health. The state now has a plan that is a blueprint for living up to that expectation.