

## 2012 Program Highlights

- ISDA worked cooperatively with several local governments to establish and operate 15 mandatory inspection stations statewide during the 2012 boating season.
- The Idaho Invasive Species Program inspected boats from 43 states during the 2012 season.
- The State of Idaho has conducted approximately 154,000 mandatory watercraft inspections since July 4, 2009.
- A total of 93 mussel-fouled boats have been intercepted and decontaminated before they were allowed to launch into Pacific Northwest waters.
- Idaho is working successfully with other western states to share education and outreach messages on various invasive species, providing consistent messaging to the travelling public.
- More than 300 Idahoans have been trained to inspect watercraft for zebra and quagga mussels.
- To date, no zebra or quagga mussels have been detected in Idaho's waterbodies.

### **Idaho Invasive Species Fund Program Budget Breakout:**

Inspection Station Operations:	\$668,238.41
Monitoring:	\$98,739.81
Supplies:	\$37,336.28
Total:	<b>\$ 804,314.50</b>

## Background

The **Idaho Invasive Species Program** was initiated in 2005 to improve the coordination of activities within the State. The program coordinates efforts throughout Idaho by working with state agencies, federal agencies, local governments and non-governmental organizations to address the state recommendation to “ensure that a comprehensive invasive species program in Idaho is not diluted by competing efforts among various agencies.” In order to carry this out, a full-time “**Invasive Species Coordinator**” was budgeted within the Department of Agriculture in 2007.

The **Idaho Invasive Species Council** was established by Executive Order (E.O. 2001-11). Per this Executive Order (which was continued as E.O. 2006-28), the Director of the Idaho State Department of Agriculture (ISDA) chairs the Council. Membership includes a representative from the Office of the Governor and the directors (or their designee) of the Idaho Department of Environmental Quality, the Idaho Department of Parks and Recreation, the Idaho Department of Fish and Game, the Idaho Department of Lands, the Idaho Department of Water Resources, the Idaho Department of Commerce & Labor, the Idaho Department of Health and Welfare and the Idaho Transportation Department. Representatives and members of federal entities, local government organizations, tribal governments, Idaho universities and private and not-for-profit organizations with an interest in invasive species also participate.

The **Idaho Invasive Species Law** (Title 22 Chapter 19 Idaho Code) was enacted by the Legislature in 2008. The intent of this law is to address the increasing threat of invasive species in the State of Idaho by providing policy direction, planning and authority to combat invasive species and to prevent the introduction of new invasive species to the state. This law establishes the duties of the ISDA and the Director, authorizes the Director to promulgate rules and gives authority to conduct inspections as necessary. It also establishes the **Idaho Invasive Species Fund** (IISF).

The **Invasive Species Prevention Sticker Rules** (IDAPA 26.01.34) were enacted by the Legislature in 2009. They require motorized and non-motorized boats to have an Invasive Species Sticker to launch and operate on Idaho’s waters. The sticker program is administered by the Idaho Department of Parks and Recreation. Revenue generated by this program is deposited in the IISF. The IISF is administered by the Idaho State Department of Agriculture. While the sticker program and the invasive species programs are linked through the IISF, the programs are independent in nature.

Through revenue generated by the **Invasive Species Prevention Sticker Rules**, (and deposited in the IISF), ISDA developed a comprehensive statewide program designed to educate the public about invasive species, monitor Idaho water bodies for possible introduction of those species, and inspect and decontaminate watercraft that travel to and through Idaho.

## The 2012 Program

Idaho developed a comprehensive statewide prevention program to educate the public about invasive species, monitor Idaho water bodies, and inspect and decontaminate watercraft that travel into and through the state of Idaho beginning in 2009. In addition to the watercraft inspection program, the Idaho Invasive Species Council also worked cooperatively with the Oregon Invasive Species Council and the Washington Invasive Species Council to educate the public about other invasive species issues such as feral hogs and the dangers of moving firewood into the Pacific Northwest.

## 2012 Education and Outreach Activities

The State of Idaho ran printed advertisements in many newspapers and recreational guides during 2012. Utility stuffers, posters, brochures and other outreach materials were distributed statewide on a continual basis. Information was distributed at inspection stations and at Idaho campgrounds. ISDA also worked cooperatively with retailer such as Cabela's to educate the public.



In 2012, the state of Idaho launched a campaign, "Don't Let It Loose, Idaho." The goal of this campaign is to educate the public about responsible pet ownership and the dangers associated with releasing plants and animals into the wild. ISDA is working cooperatively with the Idaho Humane Society and retail pet stores to distribute materials and promote alternative solutions for abandoned and unwanted species.

The invasive species councils of Washington, Oregon, and Idaho joined forces in 2012 to launch the regional outreach project, "Squeal on Pigs." The purpose of this campaign is to prevent the establishment of feral pig populations in Idaho by educating people about wild pigs and encouraging them to report feral pig sightings on a toll-free, public hotline.

Idaho is working to eradicate the only known population of feral hogs in the state in the Bruneau River Valley of Owyhee County. Oregon officials estimate that as many as 5,000 wild pigs are roaming their state, most having migrated from California where there are estimated to be 70,000 pigs. There are no known established populations in Washington, though individual feral pigs have been reported over the years.



Once pigs are established, they are nearly impossible to eliminate, so rapid response is key to success. Eradicating small populations and minimizing the impacts of these invasive species are important to protect the economy and natural resources of the region. Feral pigs are highly destructive and

potentially dangerous animals. There are three types of feral pigs – the Eurasian wild boar, escaped domesticated pigs, and a hybrid between the two. It is the third variety that is spreading rampantly throughout the United States. Their spread is blamed for an estimated \$1.5 billion worth of damage to crops, wildlife, and the environment, and there is concern that major damage could be inflicted in rivers where salmon habitat restoration is underway. These pigs also carry diseases that pose a threat to livestock and humans, including swine brucellosis and pseudorabies.

The invasive species councils of Washington, Oregon and Idaho have been working closely to share materials, consistent messages, and content relative to invasive species. During the summers of 2010, 2011 and 2012, the three states implemented an awareness campaign to inform the public about the threat of firewood as a vector for invasive species in the Pacific Northwest. The three states worked together to develop consistent, shared messaging about the importance of buying and burning local firewood in the Pacific Northwest.



ISDA facilitated more than a dozen Watercraft Inspection Trainings (WIT) for more than 300 individuals in Boise, Caldwell, Glens Ferry, Redfish Lake, Bruneau, Twin Falls, Pocatello, Malad, Island Park, Lewiston, Sandpoint and Coeur d’Alene.



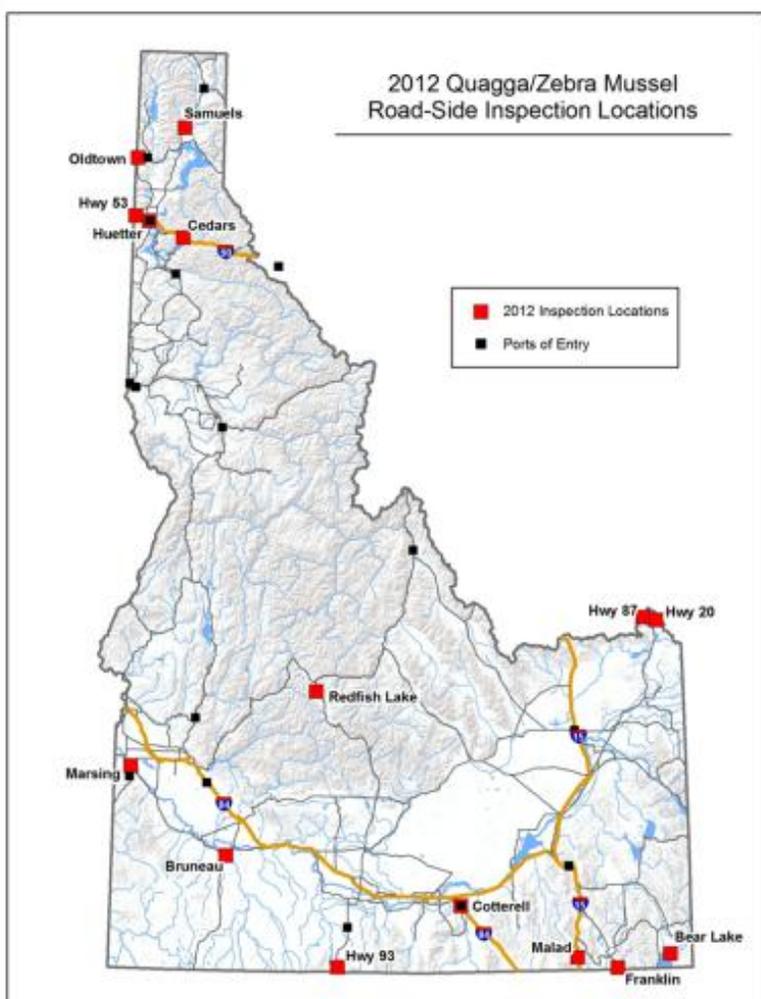
Idaho’s watercraft inspectors distributed outreach “packets” at all state inspection stations. The packets included “Zap the Zebra” brochures, Idaho-specific Invasive Species Prevention Sticker Rules information, stickers and other locally important invasive species related material. Posters targeting the travelling public were placed at highway Visitor’s Centers.

Commercially hauled boats are considered a high-risk pathway. More than half of the mussel-fouled boats intercepted in Idaho during 2012 were commercially-hauled. ISDA partnered with the Idaho Transportation Department (ITD) to initiate an education and outreach campaign for oversized load haulers that bring boats through (and to) Idaho. Through the oversized load permitting process, ITD notifies ISDA when an oversized watercraft is destined for Idaho. ISDA contacts the boat transporter directly to inform the hauler of state laws related to possessing and transporting invasive species in Idaho. Staff at Idaho’s Ports-of-Entry (POEs) were also trained to inspect oversized load boats when they scale through a POE. Fourteen mussel-fouled boats were intercepted at Idaho POEs during 2012.

## Operational Inspection Stations

Quagga and zebra mussels are native to eastern Europe and western Asia and were introduced into the Great Lakes in the 1980s via ships' ballast water. By the 1990s, the mussels had spread throughout all five of the Great Lakes and much of the Mississippi River Basin. Because zebra and quagga mussels can attach themselves to trailered boats and hitchhike between water bodies, there is great potential for them to continue to spread to uninfested waters, including the Columbia River Basin. It is by this vector that quagga mussels made the overland jump to Lake Mead (NV) in January 2007.

Following the Lake Mead invasion, quagga mussels have spread to connected lakes and reservoirs in Arizona and southern California waters (via the California Aqueduct and Central Arizona Project). Quagga and/or zebra mussels have also now invaded other water bodies in Nevada, Arizona, California, New Mexico, Colorado, and Utah.



The invasion of mussels to western water bodies has resulted in increased prevention efforts across the region by resource management agencies. At the state level, numerous western states have increased their efforts in mussel prevention through enhanced monitoring, public outreach and watercraft inspection programs.

It is notable that the western watercraft inspection programs are funded with few federal dollars, since nearly all states, including Idaho, fund the programs with state boater license fees, user fees or sticker fees. Of particular concern to many western states is the continued interception of mussel-fouled watercraft originating from federally-managed water bodies in the Lower Colorado River.

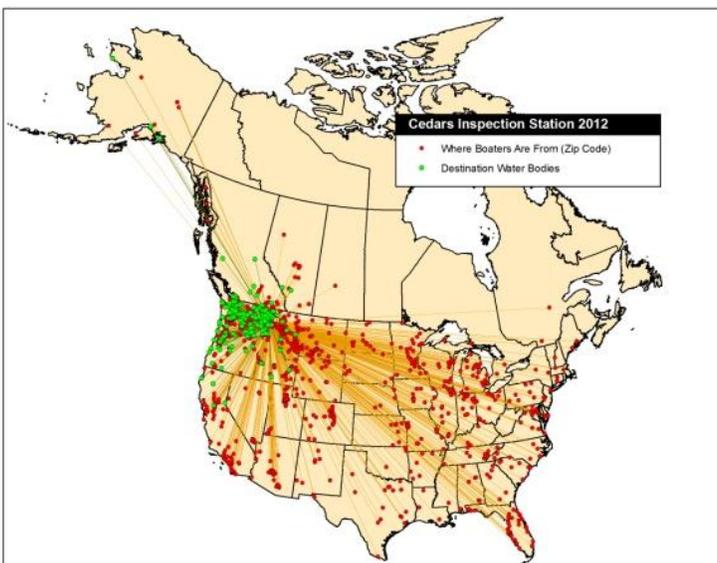
Idaho's resource managers have developed a proactive prevention program to minimize the risk of introduction to Idaho's waters via mussel-fouled watercraft. In 2012, ISDA operated 15 watercraft

inspection stations on highways and major roads. Many of these stations were run with the assistance of local governments and conservation districts. The data collected at the inspection stations during the previous (2009-2011) boating seasons allowed staff to prioritize routes into the state for the 2012 season. Some stations were moved or adjusted to strategically maximize contact with out-of-state and high-risk boats.



Idaho's inspection stations are placed on major highways at or near the Idaho state line. This strategy is taken to maximize contact with boats that are travelling into the state from impacted states. The inspection stations on the southern and eastern borders of the state intercepted the majority of the mussel-fouled boats.

Boats that have been in mussel-infested states recently (within the last 30 days), watercraft coming from another state (especially commercially hauled boats), boats that show a lot of dirt, grime, or slime below the waterline or boats that have standing water on board are considered "High-risk" to the state of Idaho. High-risk inspections are intense and include a thorough inspection of the exterior and interior parts of the boat. The inspection includes a thorough and complete visual and tactile inspection



of all portions of the boat, including compartments, bilge, trailer and any equipment, gear, ropes or anchors. If any biological material is found on the boat or equipment, the inspectors conduct a roadside "hotwash" of the watercraft. This is done to prevent the spread of other invasive species such as New Zealand mudsnail, Eurasian watermilfoil and hydrilla.

The map to the left shows where boats came from (red) and where they were going (green) when they were inspected on I-90 at the ID-MT state line.

More than 47,000 watercraft inspections were conducted between February and October, 2012. Fifty seven mussel-fouled boats were intercepted in Idaho during the 2012 season. More than 154,000 inspections have been conducted since July 2009. Ninety three mussel-fouled boats have been intercepted in Idaho since 2009.

## Stopping the Spread of Quagga Mussels at the Source

While states in the Pacific Northwest are doing their best to intercept contaminated boats coming into the region, inspection and decontamination at the source infested water bodies is lacking. As evidenced by the watercraft inspection data in Idaho, the majority of infested boats entering the Northwest region come from the lower Colorado River and Lake Mead in particular. A consortium of states have joined Idaho, as well as the Northwest Power and Conservation Council, The Nature Conservancy, the Pacific Northwest Economic Region, and Lake Tahoe to advocate for inspections and decontaminations of departing watercraft from federally managed quagga-infested waters. In particular, the group has asked the National Park Service and U.S. Department of Interior to implement a mandatory inspection and decontamination program for moored watercraft at the Lake Mead National Recreation Area.

To date, 93 mussel-fouled boats have been intercepted by the Idaho prevention program. The state plans to continue this important work, and encourages federal partners that manage mussel-infested waterbodies, such as Lakes Mead, Mojave, Havasu and Pleasant to institute mandatory inspections and decontaminations at the “point sources” on the Lower Colorado system.

## The Idaho Passport

In 2011, ISDA began issuing voluntary Invasive Species Passports to local boaters.

This system gives Idaho and Pacific Northwest boaters an expedited “fast pass” when they repeatedly come through Idaho’s stations. Boaters were issued a uniquely numbered passport booklet at the beginning of the season. They showed the assigned number to inspectors during subsequent inspections. Inspectors asked the boaters if they have left the Pacific Northwest in the last 30 days. If the answer was no, the boat received an expedited inspection, the passport was stamped with the inspection station location and the boater’s information is logged with a handheld data unit. This dramatically reduced field data collection time and allowed for tracking of repeat boaters.



Several stations (such as I-90 eastbound at Heutter) inspect a large volume of boats that travel between the Spokane (WA) area and the lakes of northern Idaho. This system allows inspectors to quickly screen boaters based on risk. This was especially critical during busy times when inspectors were able to give low risk boats an expedited inspection and spend additional time scrutinizing high-risk boats that have come into the region from elsewhere. The system was well received by the boating community.

## Monitoring

The early detection mussel monitoring program in Idaho waters uses several methods, including plankton tow sample collection for veliger detection and static substrate and shoreline monitoring for adult detection. Sampling is focused on high-use and high-risk waters that have been identified by the Idaho Waterbody Ranking Assessment.

Plankton tow samples for veliger detection are collected following the US Bureau of Reclamation (BOR) protocols. Sampling is conducted on waterbodies throughout the state, with the highest sampling frequency focused on high-use, “Critical” ranked waterbodies. Waterbody ranking also determines sampling frequency, varying from one sampling event per season in lower risk waters to sampling at three week intervals at multiple locations in “Critical” waterbodies.

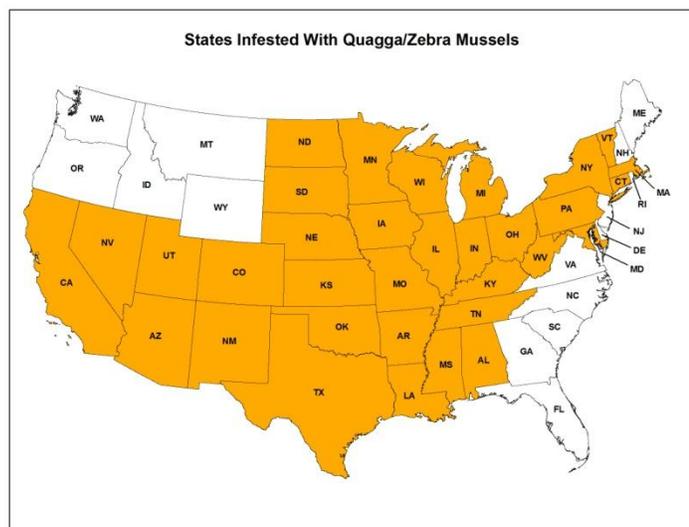
Sampling for settled adult mussels involves the use of static substrate samplers and shoreline surveys at high-use waterbodies throughout the state. Samplers are deployed on or adjacent to high watercraft use areas and they are inspected several times per season. The substrate sampling effort was led by the Idaho Department of Environmental Quality. Other partners, including state and federal agencies, lake associations, tribes and canal companies, also monitor substrate samplers throughout the season.

In the 2012 season, more than 500 plankton tow samples from 76 waterbodies were collected and analyzed for mussel veligers in Idaho. No evidence of mussels was found during the 2012 season.

## Contingency Planning

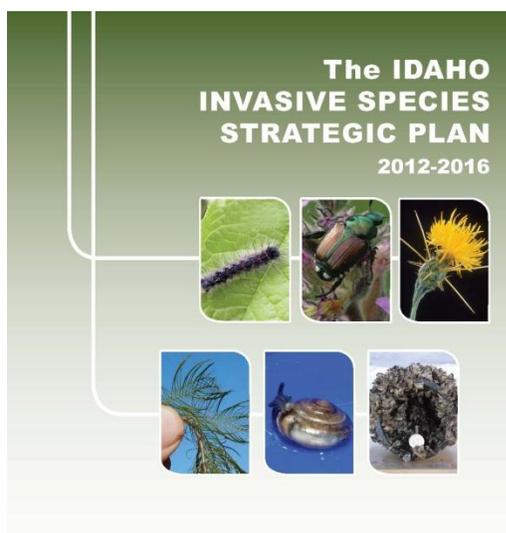
Although the chances of eradicating a new population of zebra or quagga mussels are small, those chances depend directly on the ability of the state to respond quickly and effectively once a population is detected. There is an urgent need to develop control technologies for zebra and quagga mussels in Idaho’s systems. Water managers in impacted western states (CA, NV, AZ, TX) have been forced to scramble to develop control technologies within water delivery infrastructure systems. This work began shortly after the discovery of the mussels in the Lake Mead National Recreation Area in 2007. Unfortunately, control options for lakes, rivers, and naturally flowing river systems are poorly-developed.

To date, there are no known control technologies available for use outside of closed (infrastructure-type) systems. Applied research is needed to find new tools to eradicate or contain these species in an Idaho field response situation. Waterbodies such as the Snake River have numerous private and public stakeholders that have access or management authorities. Diversion facilities for irrigation, hydroelectric power generation, municipal water systems, aquaculture and recreation are just a few of the uses and management influences on the river.



In order to initiate this work, the Idaho Invasive Species Council convened a roundtable of stakeholders to determine what steps should be taken to prepare the state for a zebra or quagga mussel outbreak. These stakeholders included conservation groups, water users, canal companies, irrigation districts, utilities, municipal water companies and germane state and federal agencies. The roundtable participants were asked to weigh options in the event these species are discovered in the state. Given the complexities of preventing and treating waterbodies in the event quagga or zebra mussels are discovered in Idaho, the group recommended that the state develop an “Exclusion Strategy and Contingency Plan.”

The goal of the “Exclusion Strategy and Contingency Plan” is to compile a summary of Idaho’s waterbody data, available control technology options and assess Idaho’s technical and regulatory gaps, including Endangered Species concerns. The “Exclusion Strategy and Contingency Plan” was completed in early 2012.



## The Idaho Invasive Species Strategic Plan (2012-2016)

Idaho’s first **Strategic Plan for Managing Noxious Weeds** (1999) was published as a result of the Governor’s Weed Summit held in 1998. This forward-thinking plan set into motion a wide variety of efforts to coordinate weed management in Idaho. This plan sparked the nationally-recognized Cooperative Weed Management Area (CWMA) concept and established the Idaho Weed Coordinating Committee (IWCC). The IWCC updated the **Strategic Plan for Managing Noxious Weeds** in 2005, and continues to strive to promote cooperation among participating agencies and entities.

In 2005, the newly-established Idaho Invasive Species Council (IISC) prepared **Idaho’s Action Plan for Invasive Species** for then-Governor Kempthorne. In the past 5 years, the Council and partners have completed many of the tasks laid out in the Action Plan. Idaho now has a comprehensive Invasive Species Law, a dedicated Invasive Species Fund and a progressive statewide prevention program.

The 2005 weed and invasive species strategies have successfully guided the two programs for the last five years. Idaho has surpassed most of the benchmarks these plans established. In addition, Idaho’s programs have become a model for many western states. This 2012 strategy aims to build off those successes and develop an “all taxa” blueprint for the next five years.

Two other related plans interconnect with this 2012 effort. Idaho’s 2007 Aquatic Nuisance Species (ANS) Plan identified 21 gaps in state programs needed to effectively prevent and control aquatic nuisance species. Idaho’s Strategic Plan for Biological Control of Noxious and Invasive Weeds (2008-2018) identifies five program goals developed by local, state, and federal partners.

Invasive species issues span geographic boundaries in Idaho; thus efforts to prevent and manage invasive species must be coordinated across taxa and jurisdictional boundaries. The 2012 Strategy is the first combined revision of the previous Noxious Weed and Invasive Species Plans. This

document will guide efforts (including overall cross-taxa strategies and objectives) to prevent, control, and minimize invasive species and their impacts in Idaho over the next five years. The IWCC, IISC, state, federal and local agencies, non-governmental organizations, private industry partners, industry stakeholders and other experts have provided input in drafting this revision.