2011
Program Summary

Idaho Invasive Species Program
Idaho State Department of Agriculture

## 2011 Program Highlights

- ISDA worked cooperatively with several local governments to establish and operate 15 mandatory inspection stations statewide during the 2011 boating season.
- The Idaho Invasive Species Program inspected boats from 49 states during the 2011 season.
- The State of Idaho has conducted approximately 100,000 mandatory watercraft inspections since July 4, 2009.
- A total of 36 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: | $490,083 (77%) |
| Monitoring: | $73,882 (12%) |
| Outreach: | $18,831 (3%) |
| Supplies: | $51,389 (8 %) |

# 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 2011 Program

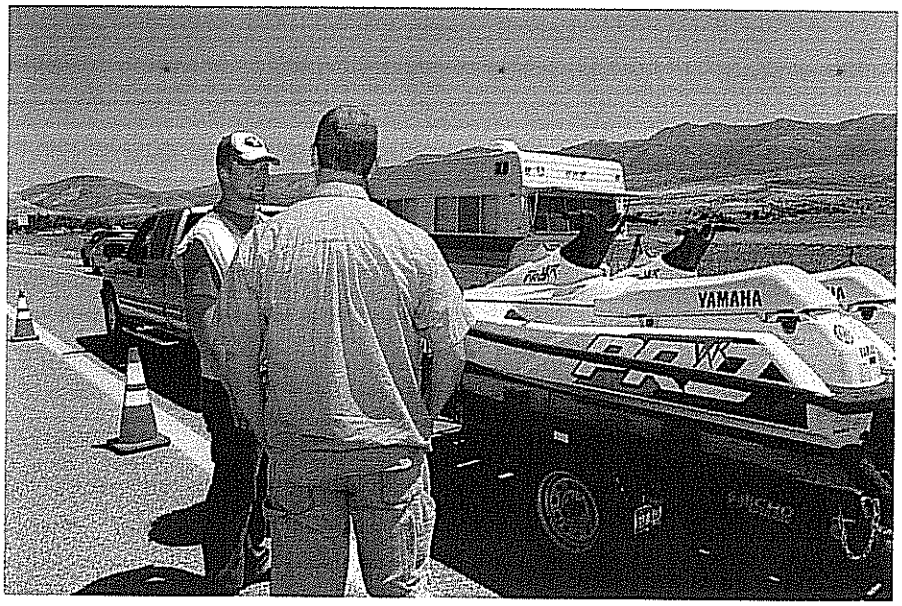
Idaho developeda comprehensive statewide prevention program to educate the public about invasive species, monitor Idaho water bodies, and inspect and decontaminate watercraft that travel into and through the state of Idaho in 2009.In addition to the watercraft inspection program, the Idaho Invasive Species Council also worked cooperatively with the Oregon Invasive Species Council and the Washington Invasive Species Council to educate the public about the dangers of movingfirewood into the Pacific Northwest.

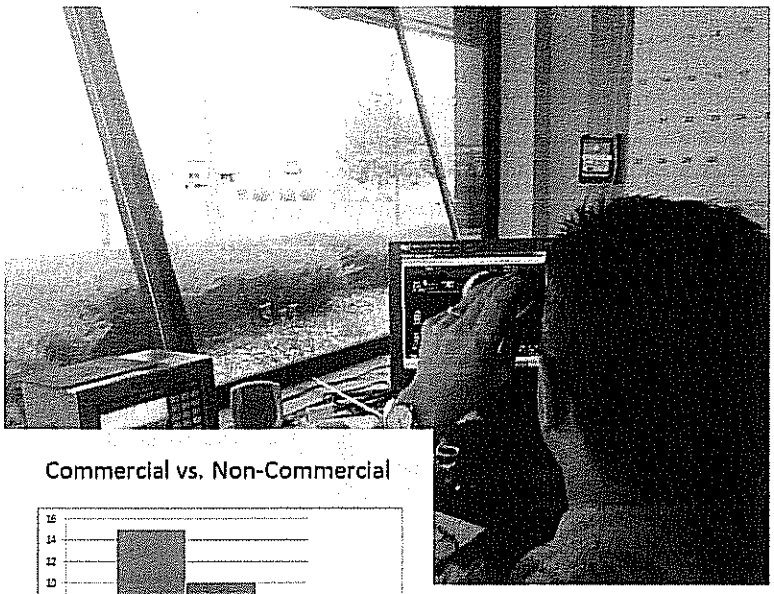
## 2011 Education and Outreach Activities


The State of Idaho ran printed advertisements in many newspapers and recreational guides during 2011. 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 facilitated more than a dozen Watercraft Inspection Trainings (WIT) for more than 300 individuals in Boise, Caldwell, Glenns Ferry, Redfish Lake, Bruneau, Twin Falls, Pocatello, Malad, Island Park, Lewiston, Sandpoint and Coeur d'Alene.

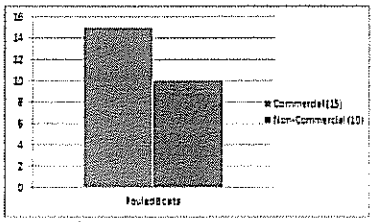
Idaho's watercraft inspectors distributed outreach "packets" at all state inspection stations. The packets included "Zap the Zebra" brochures, Idaho-specific Invasive Species Prevention StickerRules information, stickers and other locally important invasive species related material. Posters targeting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



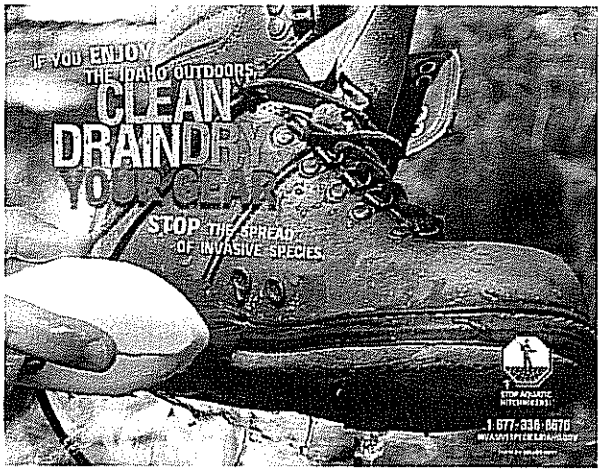


Commercially hauled boats are considered a high-risk pathway. More than half of the mussel-fouled boats intercepted in Idaho during 2011were commercially-hauled. ISDA partnered with the Idaho Transportation Department (ITD) to initiate an education and outreach campaign for oversized load haulers that 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. Two mussel-fouled boats were intercepted at Idaho POEs during 2011.

Commercial vs. Non-Commercial




In 2011, the Idaho Legislature passed a resolution (SCR101) that encourages individuals and industry to phase out the use of felt-soled wadersbecause they are a pathway for aquatic invasive species. Additionally, the resolution "*encourages recreationalists and anglers to make efforts to prevent the contamination of Idaho's public lakes, streams, rivers and creeks, and encourage industry and recreationalists around the world to be aware that Idaho takes the responsibility to protect and preserve its natural resources very seriously.*" A targeted "Clean, Drain, Dry Your Gear" campaign was launched to educate anglers and the non-boating public about the importance of decontaminating gear between uses.



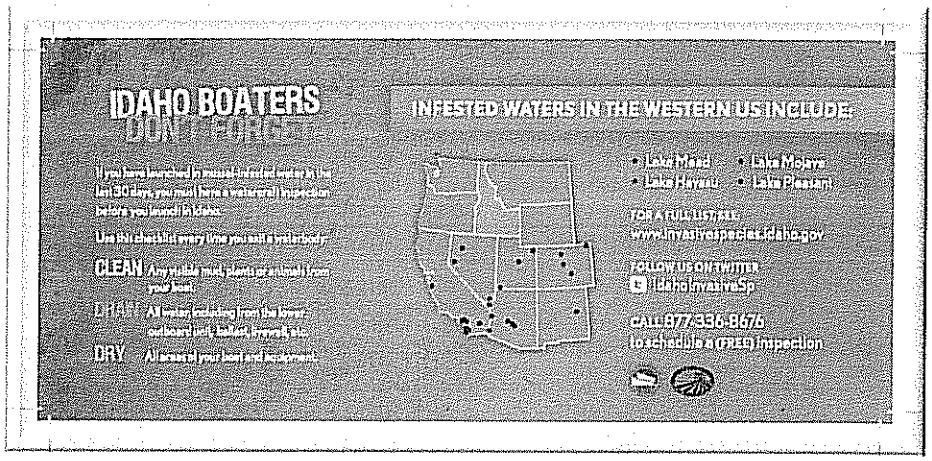


The invasive species councils ofWashington, Oregon and Idaho have been working closely to share materials, consistent messages, and content relative to invasive species. During the summers of 2010 and 2011, the three states implemented an awareness campaign to inform the public about the threat of firewood 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.

# Operational Inspection Stations

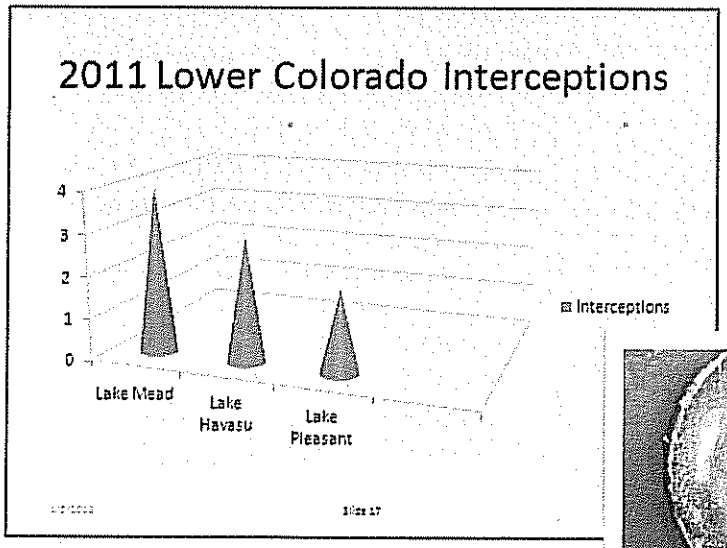
Quagga and zebra mussels are native to eastern Europe and western Asia and were introduced into the Great Lakes in the 1980s via ships' ballast water. By the 1990s, the mussels had spread throughout all five of the Great Lakes and much of the Mississippi River Basin. Because zebra and quagga mussels 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.

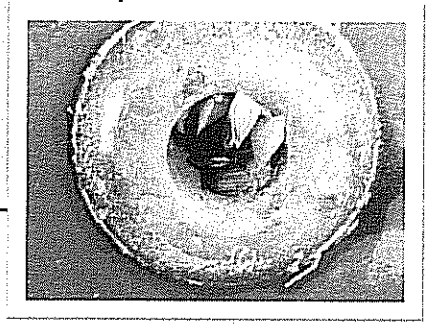


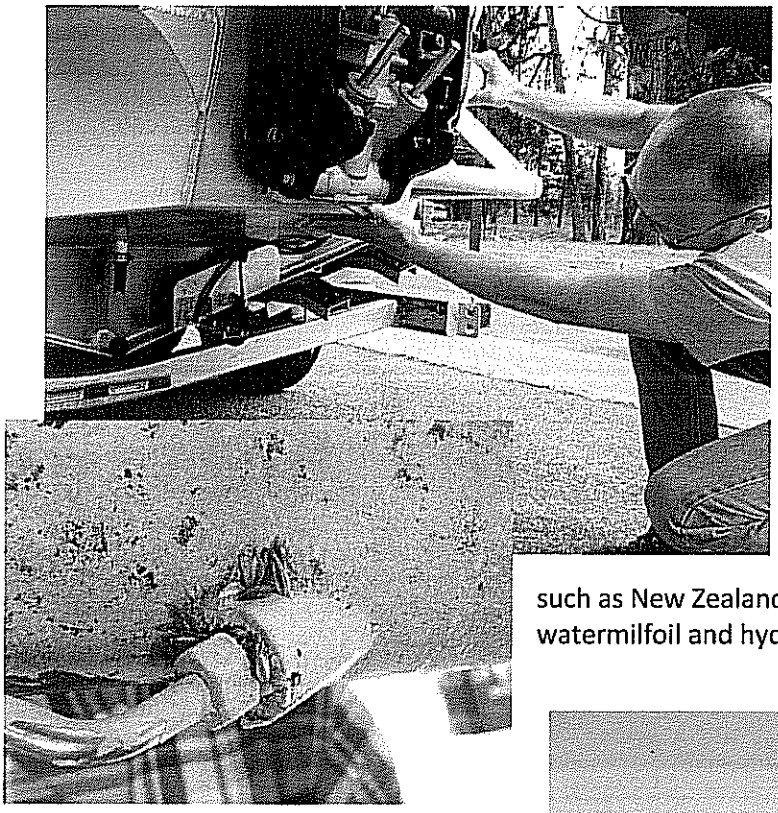

The invasion of mussels to western water bodies has resulted in increased prevention efforts across the region by resource management agencies. At the state level, numerous western states have increased their efforts in mussel prevention through enhanced monitoring, public outreach and watercraft inspection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

It is notable that the western watercraft inspection programs are funded with few federal dollars, since nearly all states, including Idaho, fund theprograms 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.

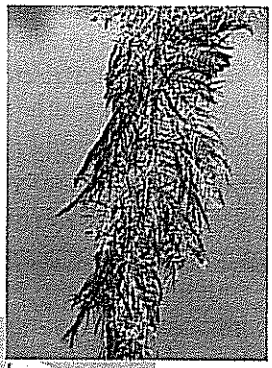



In 2011, Idaho intercepted nine mussel-fouled boats that came into the state from Lakes Mead, Havasu and Pleasant.

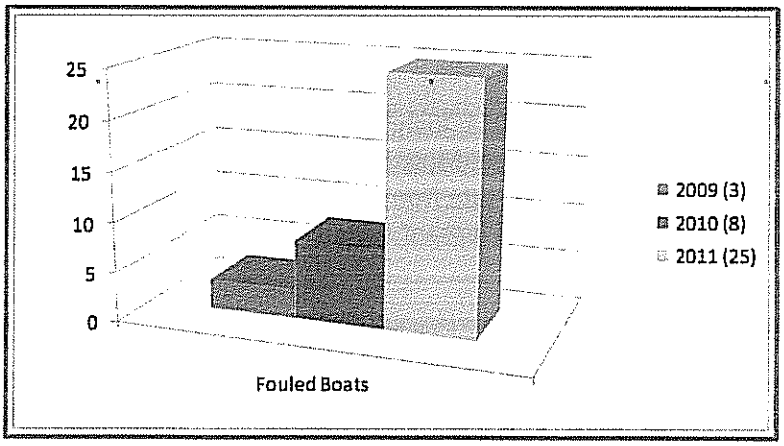




High-risk inspections are intense and include a thorough inspection of the exterior and interior parts of the boat. The inspection includes a thorough and complete visual and tactile inspection of all portions of the boat, including compartments, bilge, trailer and any equipment, gear, ropes or anchors. 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.



More than 47,000 inspections were conducted on boats from 49 different states between March 15th and September 2011. Twenty fivemussel-fouled boats were intercepted in Idaho during the 2011 season.More than 100,000 inspections have been conducted since July 2009.




To date, 36 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 institute mandatory inspections and decontaminations at the "point sources" on the Lower Colorado system.

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 2011, 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, 2010) boating seasons allowed staff to prioritize routes into the state for the 2011 season. Some stations were moved or adjusted to strategically maximize contact with out-of-state and high-risk boats.

## 2011 Interception Rates

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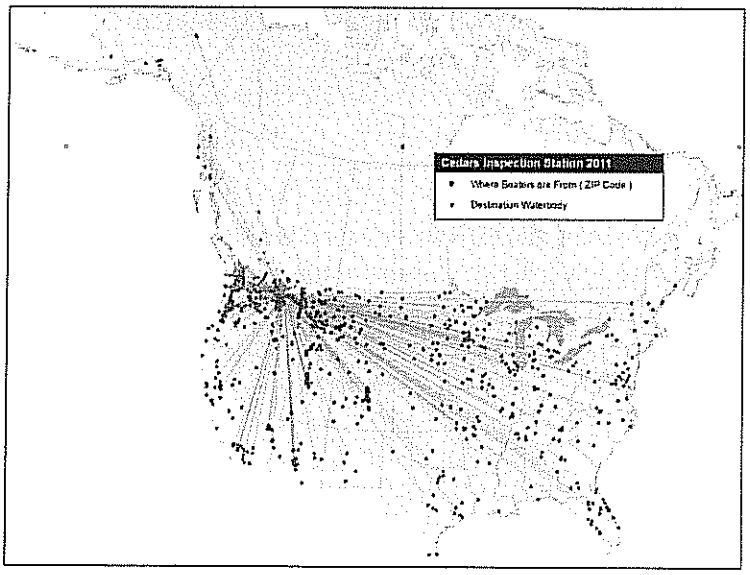
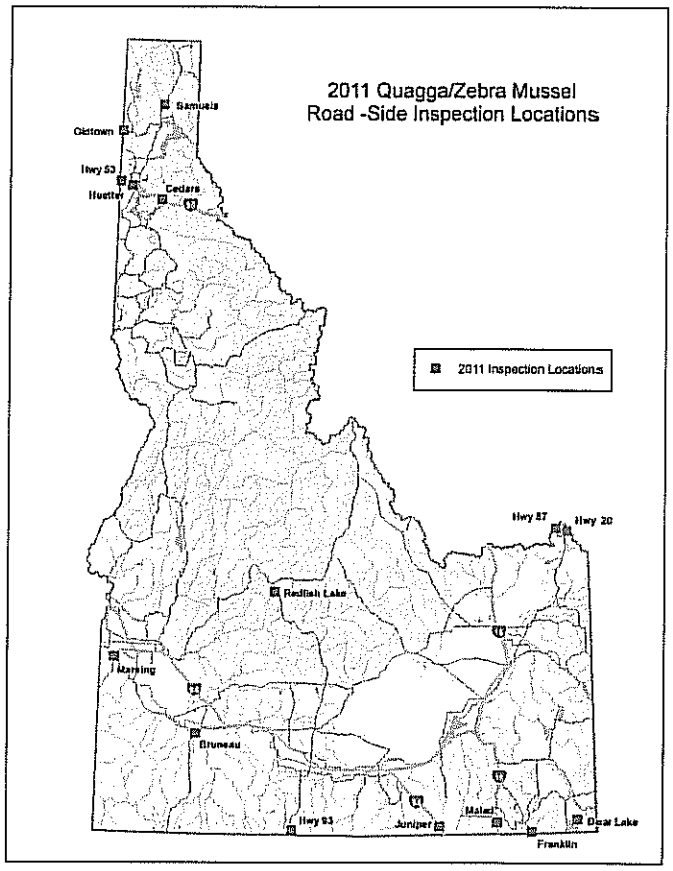
|---|---|
| Cedars (I-90) | 13/4,753 |
| Jackpot/Hwy 93 | 3/1,099 |
| Juniper (I-84) | 4/1,110 |
| Bruneau | 1/2,788 |
| Malad | 1/2,342 |
| Sandpoint Marine | 1/1 |
| POEs | 2 |



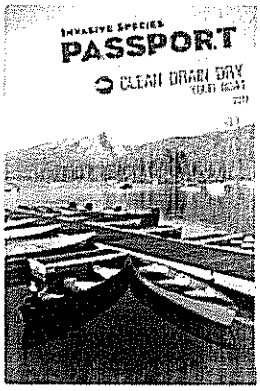



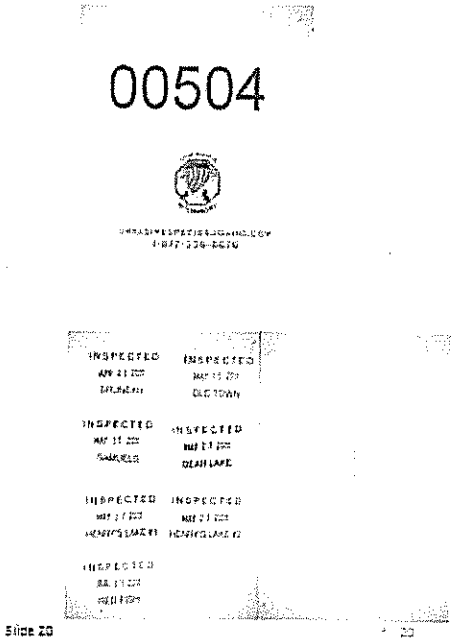

Idaho's inspection stations are placed on major highways at or near the Idaho state line. This strategy is taken to maximize contact with boats that are travelling into the state from impacted states. The inspection stations on the southern and eastern borders of the state intercepted the majority of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

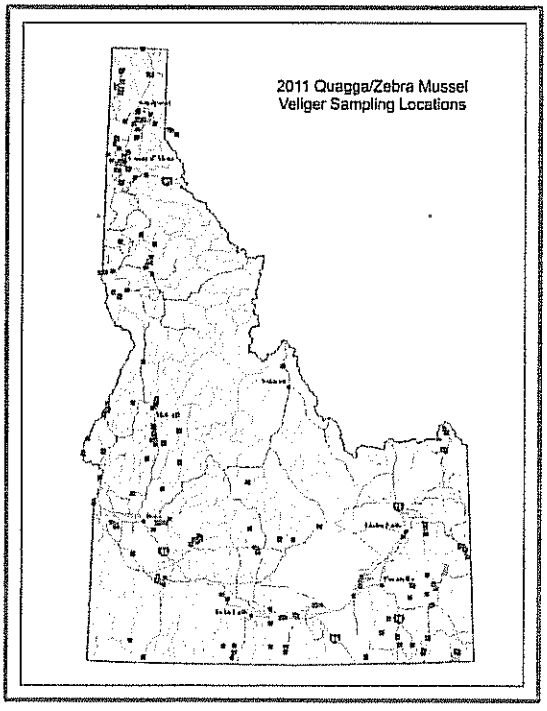
The map to the left shows where boats came from (red) and where they were going (green) when they were inspected on I-90 at the ID-MT state line.

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. Twenty five percent of the boaters that were inspected in 2011 made use of the local boater passport program.



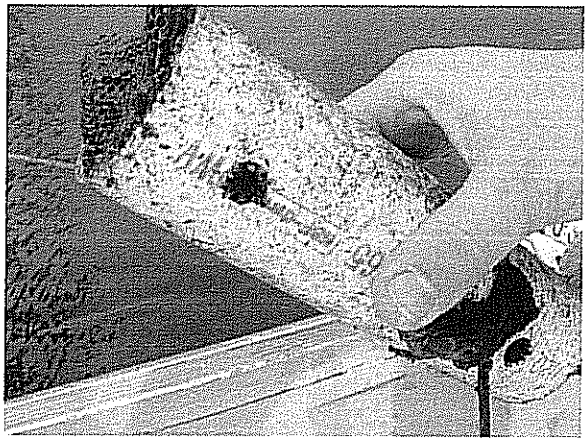

## Monitoring




The early detection mussel monitoring program in Idaho waters uses several methods, includingplankton 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-usewaterbodiesthroughout 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 in 2011. Other partners, including state and federal agencies, lake associations, tribes and canal companies, also monitor substrate samplers throughout the season.



In the 2011season, more than 530 plankton tow samples from 76 waterbodies were collected and analyzed for mussel veligers in Idaho. BOR provided all sample analysis services for the 2011 season. No evidence of mussels was found during the 2011season.

## 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" will be completed in early 2012.