

Oregon's Aquatic Invasive Species Prevention Program 2018 Legislative Report



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Executive Summary

In 2009, the Oregon Legislature passed House Bill 2220 that created an Aquatic Invasive Species (AIS) Prevention Program and established a new user fee to boaters, (Aquatic Invasive Species Prevention Permit) which funds the AIS Prevention Program. The objective of the AIS Prevention Program is to keep Oregon's waters free of new aquatic invasive species and limit the spread of existing invasive species. The Oregon Department of Fish and Wildlife (ODFW) and Oregon State Marine Board (OSMB) are partners in managing the AIS Prevention Program. Watercraft inspection staff and AIS monitoring activities are managed by ODFW. Administration of the AIS Prevention Permit and law enforcement coordination are managed by OSMB.

The Oregon Department of Fish and Wildlife operated six watercraft inspection stations located near or at Oregon's southern, northern and eastern borders, and one station near Burns. Ashland and Ontario watercraft inspection stations are opened year-round. Watercraft inspection stations in Brookings, Klamath Falls and Umatilla opened in April and closed in September and October (Umatilla); however, the watercraft inspection station in Burns opened in June and closed in September. The six Watercraft Inspection Teams (WIT) conducted 28,190 watercraft inspections and watercraft decontaminations, including 11 for quagga or zebra mussels (*Dreissena rostriformis bugensis*, *D. polymorpha*).

In the 2018 fiscal year, revenue generated from AIS Prevention Permit totaled \$880,040. The AIS Prevention Program provided (either partial or full) funding for 4 full-time positions, and 17 seasonal or part-time positions. Additionally, these funds supported law enforcement activities such as checking boaters for a current AIS Prevention Permit and enforcing mandatory stops at watercraft inspection stations. State and county law enforcement officers issued 827 warnings; 190 citations for failure to possess an AIS Prevention Permit; 133 warnings and 89 citations for failure to stop at a watercraft inspection station.

We received additional funding from the US Army Corps of Engineers as part of the Water Resources Reform and Development Act (WRRDA) in the amount of \$460,425.

Background

In response to the growing threat of an infestation from dreissenid mussels, the 2009 Oregon Legislature approved an AIS Prevention Program. A new user fee (AIS Prevention Permit) was established to owners of watercraft ≥ 10 feet in length. Monies generated from the AIS Prevention Permit are used to fund ODFW and OSMB permanent staff, ODFW watercraft inspectors and supplies, outreach and education materials, and other AIS related activities. Watercraft inspections began in spring of 2010 and in 2011, with the passage of House Bill 3399, roadside watercraft inspections became mandatory. For more detailed information about the AIS Prevention Program, please refer to www.odfw.com or www.oregon.gov/OSMB.

The goal of the AIS Prevention Program is to prevent new introductions of aquatic invasive species and limit the spread of existing ones. Quagga and zebra mussels and hydrilla (*Hydrilla verticillata*) are among the top species of concern, due to their destructive nature and ease of translocation by watercraft. Quagga and zebra mussel populations have spread rapidly in the United States (Figure 1) due their adaptability, lack of natural predators and ease of physical

transport. Species like Eurasian watermilfoil (*Myriophyllum spicatum*) and New Zealand mudsnails (*Potamopyrgus antipodarum*) already contaminate some Oregon waterbodies. For more information about these and other aquatic invasive species, please visit: [USGS Non-Indigenous Aquatic Species](#).

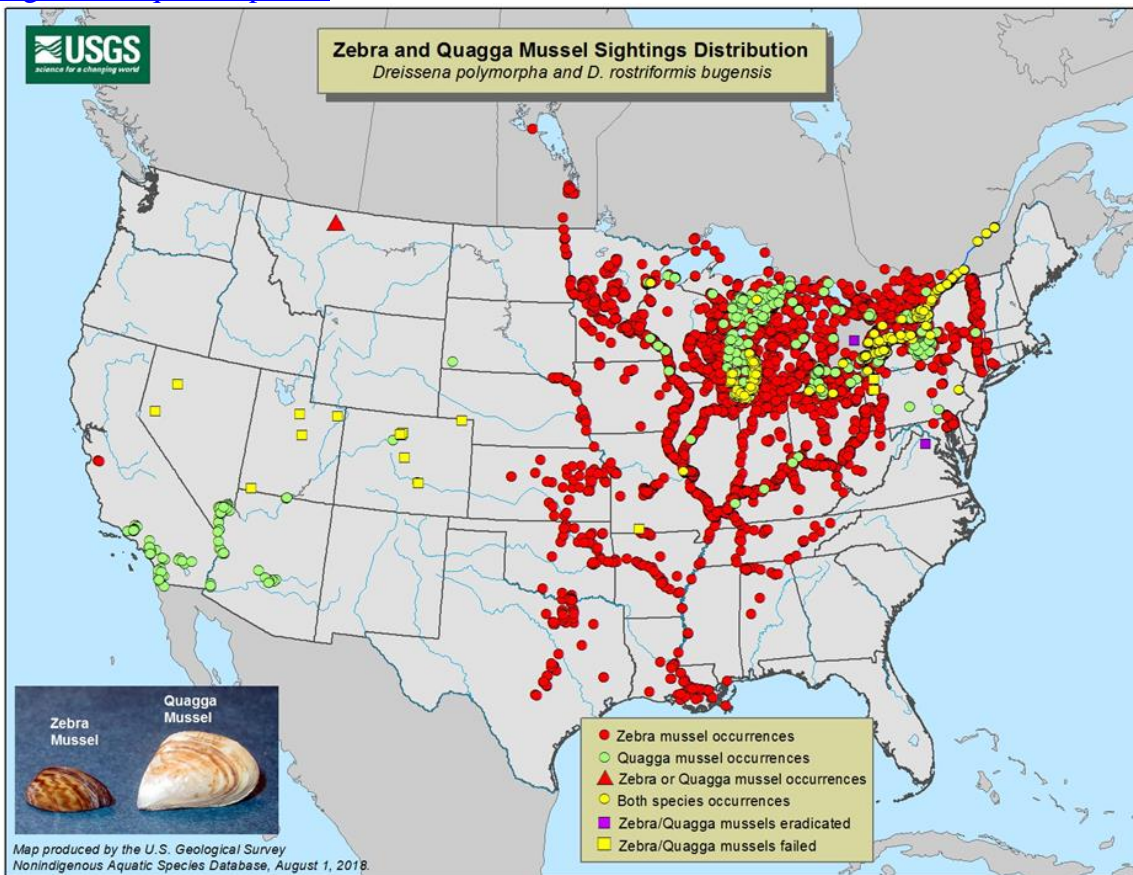


Figure 1. Current zebra and quagga mussel distribution in the United States, map provided by US Geological Survey Non-indigenous Species Database August 1, 2018.

Program Activities

The Oregon Department of Fish and Wildlife has the primary responsibility of operating watercraft inspection stations. All ODFW Technicians are trained inspection and decontamination protocols set by “[Uniform Minimum Protocols and Standards for Watercraft Inspection and Decontamination Programs for Dreissenid Mussels in the Western United States III](#)”; additionally, all technicians complete *Level 1 – Watercraft Inspection Training* and *Level II – Decontamination Training*. We divided 19 technicians between six stations (Table 1).

The AIS program coordinators (ODFW and OSMB) and the senior technician are stationed in Salem. These positions have a variety of duties, including:

- Training WIT on procedures and protocols (watercraft inspection and decontamination, data collection and entry and interpersonal communications)
- Providing AIS training opportunities to other agencies, schools, fishing groups, boating clubs, volunteers and concerned citizens

- Developing, purchasing and disseminating invasive species educational material (fact sheets, brochures, signs, risk assessments, etc.)
- Conducting watercraft inspections and decontaminations
- Providing assistance during eradication and control efforts
- Responding to public inquiries and sightings
- Surveying and collecting aquatic invasive species
- Staffing booths at public events
- Selling, processing and oversight of permit sales
- Providing updates to Oregon Legislature
- Contracting and managing interagency agreements
- Serving as members of:
 - [Oregon Invasive Species Council](#), [100th Meridian Columbia River Basin Team](#), [Western Regional Panel for Aquatic Invasive Species](#), [Ballast Water Task Force](#), [Building Consensus in the West](#), [American Boat and Yacht Council](#)

Inspections

In 2018, ODFW WIT completed 28,190 watercraft inspections (Table 1). Watercraft inspected included boats from nearly every US state and Canadian province, Mexico, China and South Africa (Figure 2). Salem staff performed three additional special inspections. In addition to watercraft inspections and decontaminations, our WIT track watercraft-inspection compliance. Inspectors record the number watercraft that bypass an inspection station, time of day, number of watercraft and watercraft type. We compared the number of bypassed watercraft to the number of inspections each day to get an estimate of watercraft-inspection compliance rate. Compliance rates varied between stations, the overall compliance rate was 80%, which was a 4% increase from 2017.

Table 1. Summary of Oregon Department of Fish & Wildlife’s Watercraft Inspection station information: station location, number of inspectors, dates of operation, total number of inspections, number of inspections from states with quagga or zebra mussel populations and watercraft inspection compliance rates, 2018.

Station	Number of inspectors	Inspection dates	Inspections (N)	Inspections from contaminated states (n)	Compliance rate (%)
Ashland	4	1/1 – 12/31/18	9,337	4,981	85
Brookings	3	4/15 – 9/4/18	3,006	1,130	65
Burns	1	6/16 – 9/3/18	52	12	83
Klamath Falls	3	4/18 – 9/5/18	2,551	1,979	73
Ontario	4	1/1 – 12/31/18	7,649	1,758	88
Umatilla	4	4/16 – 10/10/18	5,592	745	66

Decontaminations

Three hundred and sixty-five of the 28,190 watercraft inspected were contaminated with aquatic invasive species, when possible we removed those species by hand or a hot-water high-pressure decontamination was performed. Aquatic vegetation, marine and freshwater organisms or other

biofouling contaminated 354 watercraft that we inspected. Quagga or zebra mussels were present on 11 of the remaining watercraft; watercraft originated from Arizona, California, Michigan, Nevada, Pennsylvania and Texas. The presence of zebra or quagga mussels required a hot-water high-pressure decontamination, which we performed on-site at the watercraft inspection stations.

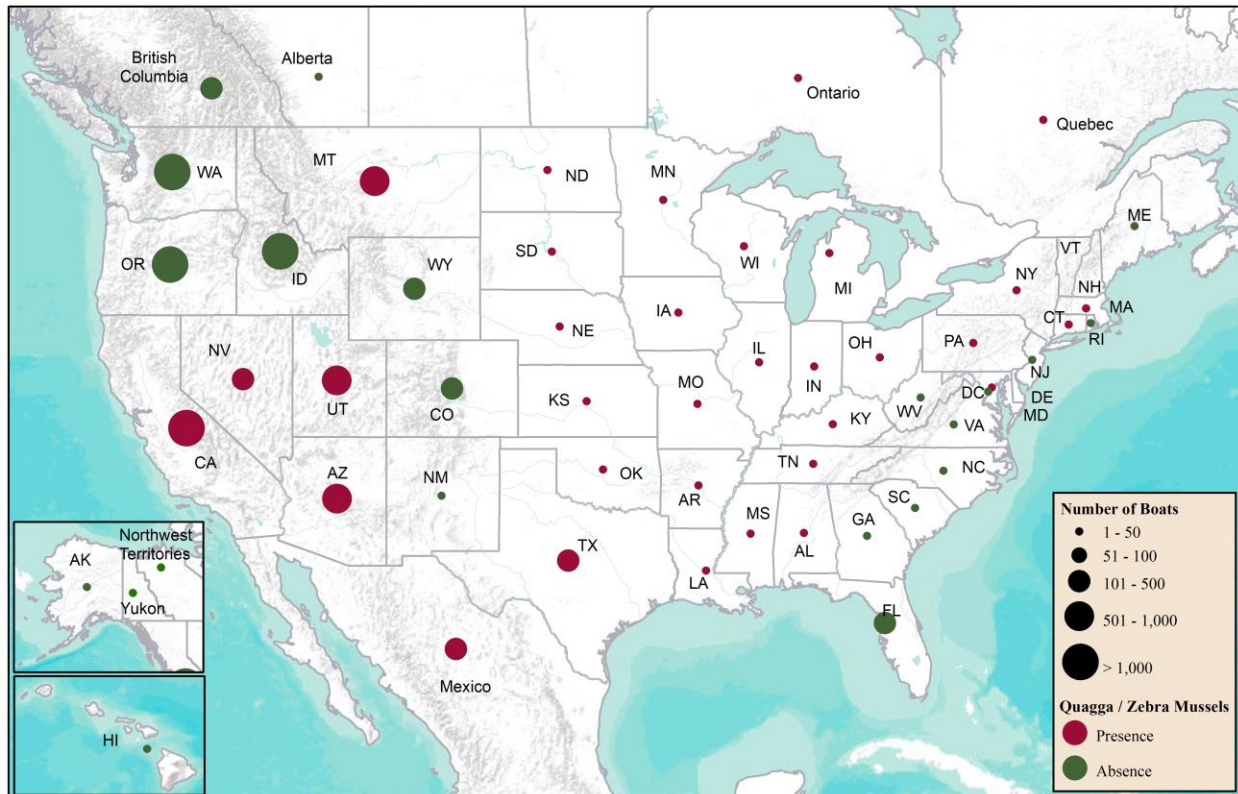


Figure 2. North American map of locations with quagga or zebra mussel presence, and the number of watercraft inspections from each location performed at Oregon Department of Fish and Wildlife's Watercraft Inspection Stations in 2018. Basemap provided by ESRI, NOAA, and USGS.

Outreach and Education

Education and outreach is a key component of the AIS Prevention Program. Outreach occurs at the inspection stations, special events and requested trainings. These contacts enable face-to-face opportunities to explain the program and its benefits and the impacts of invasive species in Oregon. Additionally, ODFW and OSMB provided printed materials at all inspection stations, AIS trainings, public meetings and special events.

Since 2009, the AIS Prevention Program has offered a special training course to the public and government agencies upon request. Level I – Watercraft Inspection Training is a half-day class based on the 100th Meridian Initiative curriculum. The Level I instructors teach basic AIS biology and behavior and explain Oregon laws and regulations associated with the AIS Prevention Program. All ODFW and OSMB Level I instructors have completed the 100th Meridian Initiative Level I and Level II – Watercraft Inspection trainings.

In 2018, the AIS Prevention Program provided information to a variety of Oregonians, including:

- Canyonville Fish Release and Education days

- Oregon Chapter of the American Fisheries Society Annual Meeting
- Portland Boat Show
- Pacific Northwest Sportsman's Show
- Oregon State Fair and Malheur County Fair
- Bureau of Land Management, other ODFW programs, US Forest Service
- Oregon Ocean Paddling Society Annual Meeting
- Marine Law Enforcement Training Academy
- Mt Hood Community College
- Lower Columbia Walleye Club
- The Oregon Chapter of the Wildlife Society
- North Marion, Siuslaw and Mapleton middle schools, Highland Elementary School (Reedsport)
- Florence Salmon and Trout Enhancement Program Meeting
- Oregon Aquaculture Association Annual Meeting
- Guest spot on Eugene's KPNW radio show Wake Up Call



Oregon Department of Fish and Wildlife technician performing watercraft inspections at the Ashland inspection station, July 2018.

Aquatic Invasive Species Prevention Permit

The Oregon State Marine Board has the lead role to implement the AIS Permit Program. This permit program is the funding mechanism that supports activities outlined in this annual report. Permit revenues are deposited into a dedicated AIS Prevention Fund. Operators of motorized watercraft and non-motorized watercraft are required to purchase and carry an AIS Prevention Permit when in Oregon waters. Oregon registered motorized watercraft owners (regardless of length) pay a \$5 fee every two years when they renew their registration. Current registration

decals serve as proof of payment into the AIS Prevention Program. Operators of non-motorized watercraft ≥ 10 feet in length (residents and non-residents) are required to purchase a permit and carry it onboard while boating (\$5 per year). Non-motorized permits are transferable between



Oregon Department of Fish and Wildlife preparing for watercraft decontaminations of quagga mussels at the Ontario watercraft inspection station, 2018.

watercraft within this category. Out-of-State motorized watercraft owners are required to purchase a permit (\$20 annually). These permits purchased by non-resident boaters (motorized) are also transferable to use within their respective category. Additionally, businesses that rent watercraft (liveries) or river guides using non-motorized watercraft are offered permits at a discounted price through the OSMB; the price varies with the number of watercraft owned.

Aquatic Invasive Species Prevention Permits are available for purchase at OSMB and ODFW offices, retailers selling hunting/fishing licenses and some boating retailers. Tyvek[®] and out-of-state permits are available for purchase at OSMB Headquarters, [online](#) and at [approved retailers](#) (\$5 for one year or \$10 for two years).

Law Enforcement Activities

One of the main avenues to interact with boaters when they are recreating is through the contacts made by law enforcement officers (County Marine Patrol Deputies and the Oregon State Police Fish and Wildlife Troopers). When officers contact boaters on the water or at boat access sites, they are able to enforce boating laws and act in an education and outreach capacity. They commonly answer questions and explain the AIS program details on a daily basis. The OSMB provides yearly trainings to these officers and program updates as they occur so they have the most up-to-date information to share with boaters. During 2018 officers documented contacts with 32,049 boaters.

Law enforcement officers are encouraged to focus on education and issue warnings to boaters that lack an AIS Prevention Permit rather than issuing citations. In 2018, 827 warnings were given and 190 citations were issued. Reports from officers indicated that while permit compliance has risen each year, they suspect there are a number of boaters that have not purchased AIS permits. Law enforcement will continue focusing on permit compliance, during target weekends.

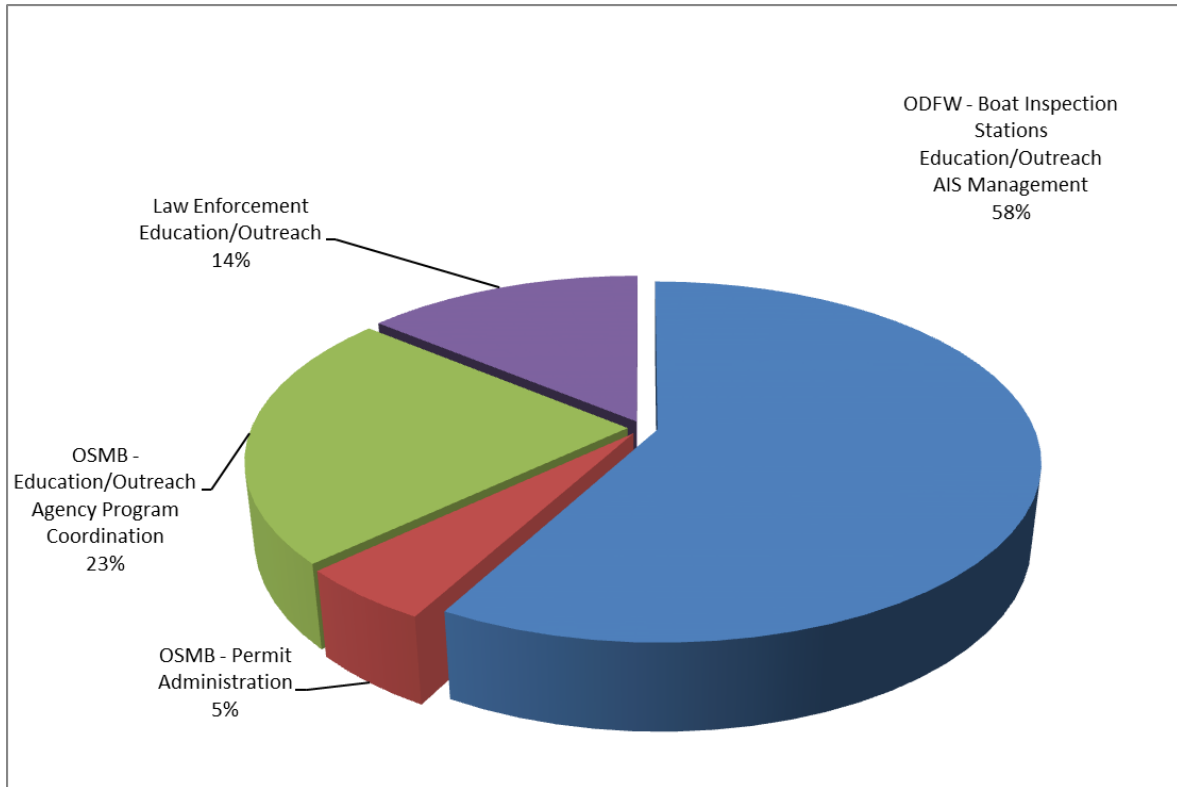


Figure 3. Allocation of Aquatic Invasive Species Prevention Program funds for fiscal year 2018, Oregon State Marine Board (OSMB) and Oregon Department of Fish & Wildlife (ODFW).

Program Financial Statement

The funds collected from the sale of permits are deposited directly into the AIS Prevention Program Fund established in the State Treasury, which is separate and distinct from the General Fund. These funds are only used for activities directly related to the program that are outlined within this report. The OSMB administers this fund and distributes monies to ODFW, law enforcement agencies and other partners via intergovernmental agreements and contracts for services (Figure 3).

During the 2018 fiscal year, (July 2017-June 2018) revenue collected from permit sales totaled \$880,040, which is the highest amount since the Program’s inception in 2010. Permit sales breakdown: Oregon motorized 75,095 Out-of-State motorized 6,390; Non-motorized (both one and two year) 60,758; Oregon liveries and guides 4,330.

WRRDA Funds

As part of the Water Resources Reform and Development Act, we received (\$460,425) federal funds from the US Army Corps of Engineers. These federal grant monies are designated for protection of the Columbia River Basin against aquatic invasive species and require matching funds; therefore, we used AIS Prevention Permit revenue as match. During 2017-2018, we used this grant money to fund additional watercraft inspector positions, increase hours of operation and open new watercraft inspection stations at the northern border in Umatilla, Oregon and on Highway 78 near Burns, Oregon. Grant monies are currently available for 2019 and we will continue operating at status quo. However, beyond 2019, funds are not secure and we may have to look for other grant monies or we may have to consider staff reductions.

Acknowledgements

The Oregon Department of Fish and Wildlife would like to thank many folks for a successful inspection season. First thank you to our AIS technicians for without them this work would not occur: **Ashland staff:** Tim Bower, Alex Loubere, Amy Olsen, Chris Shelton and Josh Walker; **Brookings staff:** Danny Cotton, Hannah Matich and Brian Young; **Burns staff:** Aaron Tietjen; **Klamath Falls staff:** Zach Leininger, Zachary McClelland and Sarah Richardson; **Ontario staff:** Morgan Johnson, Nathan Richey, Thomas Shenk and Rod Willet; **Umatilla staff:** Candace Autry, Eliza Blackburn, Logan Heitke and Nakiska Johnston. Thank you to ODFW district staff for providing guidance and assistance throughout the season. Thanks to ODOT (especially Dan Roberts, Kevin Pang and Lloyd Pratt and his amazing staff) for allowing us to have inspection stations at the Ashland, Brookings and Umatilla ports-of-entry. Thanks to Oregon Travel Experience Dave Patton and Sean Price for granting us permission to set up inspection stations at their rest areas (Ontario and Klamath Falls).

The Oregon State Marine Board would like to thank the Oregon Invasive Species Council and its members for their continued support and guidance for implementing this AIS Prevention Program.

Program Statutes and Rules

OSMB and ODFW program statutes and rules related to the AIS Prevention Program include:

[OSMB ORS 830.560 thru 830.999](#)

[OSMB OARs 250-010-0650 thru 250-010-0660](#)

[ODFW OARs 635-56-0050, 635-056-0070, 635-056-0075 & 635-059-0000 thru 0050.](#)



Oregon

Kate Brown, Governor

State Marine Board

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February 28, 2019

Joint Committee on Ways and Means Subcommittee on Natural Resources

Co-Chair Senator Kathleen Taylor
Co-Chair Representative Jeff Reardon
Senator Lew Frederick
Senator Fred Girod
Representative Cedric Hayden
Representative Paul Holvey
Representative Courtney Neron
Representative David Brock Smith

Dear Co-Chair Taylor, Co-Chair Reardon and Members of the Committee:

RE: Response to Questions from the SB 5521 Marine Board Budget Hearing

Clean Marina Program

There are currently 64 certified Clean Marinas (41 private and 23 public) in Oregon. Statewide, there are approximately 180 public and private marinas. With Marine Board assistance, any marina can pledge and become certified. A certified marina pledges to apply best clean management practices.

Boating Under the Influence of Intoxicants (BUII) Correlation to Recreational Boating Fatalities

The Oregon State Marine Board tracks and reports Oregon recreational boating fatalities. Marine patrol partners attempt to determine if alcohol or other drugs were contributing factors in boating fatalities. The chart illustrates the past 10-year statistics.

Boating under the Influence (BUII) deterrence education and outreach is a statewide year-round effort. More specifically, the Marine Board participates in a nationwide "Boat Sober" campaign on targeted waterbodies prior to the July Fourth holiday weekend.

Year	Cause of Accident (Alcohol/Drugs)	Fatality Total
2017	1	13
2016	1	19
2015	5	16
2014	1	7
2013	2	10
2012	2	19
2011	2	10
2010	0	12
2009	1	13
2008	1	13

If I may provide any additional information or clarification, I can be reached at (503) 378-2617.

Sincerely,

Larry Warren
Director



Current Inspection Station operations (2016)

	Jan	Feb	Mar	April	May	June	July	August	Sept
Highway 101, Port of Entry south of Brookings	closed	closed	closed	closed	5 days/ week	5 days/ week	5 days/ week	5 days/ week	5 days/ week
Interstate 5, Port of Entry north of Ashland	closed	closed	5 days/ week	5 days/ week	5 days/ week	7 days/ week	7 days/ week	7 days/ week	7 days/ week
Highway 97, Midland Rest Area near Klamath Falls	closed	closed	closed	closed	5 days/ week	5 days/ week	5 days/ week	5 days/ week	5 days/ week
Highway 395, Oregon/California border near Lakeview	closed	closed	closed	closed	5 days/ week	5 days/ week	5 days/ week	5 days/ week	5 days/ week
Interstate 84, Ontario Rest Area, Oregon/Idaho border	closed	closed	5 days/ week	5 days/ week	5 days/ week	7 days/ week	7 days/ week	7 days/ week	7 days/ week
Total # of staff per month			4	4	10	14	14	14	14

Current Inspection Station operations (2018)

	Jan	Feb	Mar	April	May	June	July	August	Sept
Highway 101, Port of Entry south of Brookings	closed	closed	closed	7 days/ week	7 days/ week	7 days/ week	7 days/ week	7 days/ week	7 days/ week
Interstate 5, Port of Entry north of Ashland	7 days/ week	7 days/ week	7 days/ week	7 days/ week	7 days/ week	7 days/ week	7 days/ week	7 days/ week	7 days/ week
Highway 97, Midland Rest Area near Klamath Falls	closed	closed	closed	7 days/ week	7 days/ week	7 days/ week	7 days/ week	7 days/ week	7 days/ week
*Highway 395, Oregon/California border near Lakeview	closed	closed	closed	closed	closed	closed	closed	closed	closed
Interstate 84, Ontario Rest Area, Oregon/Idaho border	7 days/ week	7 days/ week	7 days/ week	7 days/ week	7 days/ week	7 days/ week	7 days/ week	7 days/ week	7 days/ week
Interstate 82, Port of Entry at Umatilla/WA border	closed	closed	closed	7 days/ week	7 days/ week	7 days/ week	7 days/ week	7 days/ week	7 days/ week
**Total # of staff per month	4	4	4	18	18	18	18	18	18

*The Lakeview station didn't operate in 2018 due to no applicants for the position, its planned for operation in 2019 hopefully which would add approximately \$50,000 - \$75,000 to the operation costs depending on staffing numbers and months of operation

****Currently half of the budget for all field operations comes from the USACOE and is a year-to-year allocation. If Federal Funds go away then the program would go back to the 2016 operations schedule which significantly reduces the operational schedule throughout the year**

Scenario 1: Minimum staffing and cost to run the current stations 7 days per week during daylight hours, year round, one person on most shifts (not ideal)

	Jan	Feb	Mar	April	May	June	July	August	Sept
Highway 101, Port of Entry south of Brookings	2	2	3	3	4	4	4	4	4
Interstate 5, Port of Entry north of Ashland	2	2	3	3	4	4	4	4	4
Highway 97, Midland Rest Area near Klamath Falls	2	2	3	3	4	4	4	4	4
Highway 395, Oregon/California border near Lakeview	2	2	3	3	4	4	4	4	4
Interstate 84, Ontario Rest Area, Oregon/Idaho border	2	2	3	3	4	4	4	4	4
Total # of staff per month	10	10	15	15	20	20	20	20	20

Scenario 2: Staffing and cost to run the current stations 7 days per week during daylight hours, year round, two staff on most shifts (ideal)

	Jan	Feb	Mar	April	May	June	July	August	Sept
Highway 101, Port of Entry south of Brookings	3	3	4	4	5	5	5	5	5
Interstate 5, Port of Entry north of Ashland	3	3	4	4	5	5	5	5	5
Highway 97, Midland Rest Area near Klamath Falls	3	3	4	4	5	5	5	5	5
Highway 395, Oregon/California border near Lakeview	3	3	4	4	5	5	5	5	5
Interstate 84, Ontario Rest Area, Oregon/Idaho border	3	3	4	4	5	5	5	5	5
Total # of staff per month	15	15	20	20	25	25	25	25	25

Scenario 3: Staffing and cost to run the current stations 7 days per week 24 hours per day, year round, two staff on most shifts (ideal)

	Jan	Feb	Mar	April	May	June	July	August	Sept
Highway 101, Port of Entry south of Brookings	10	10	10	10	10	10	10	10	10
Interstate 5, Port of Entry north of Ashland	10	10	10	10	10	10	10	10	10
Highway 97, Midland Rest Area near Klamath Falls	10	10	10	10	10	10	10	10	10
Highway 395, Oregon/California border near Lakeview	10	10	10	10	10	10	10	10	10
Interstate 84, Ontario Rest Area, Oregon/Idaho border	10	10	10	10	10	10	10	10	10
Total # of staff per month	50	50	50	50	50	50	50	50	50

Scenario 4: Staffing and cost to run the current plus three new stations 7 days per week during daylight hours, year round, two staff on most shifts (ideal)

	Jan	Feb	Mar	April	May	June	July	August	Sept
Highway 101, Port of Entry south of Brookings	3	3	4	4	5	5	5	5	5
Hwy 199 (does not exist now)	3	3	4	4	5	5	5	5	5
Interstate 5, Port of Entry north of Ashland	3	3	4	4	5	5	5	5	5
Highway 97, Midland Rest Area near Klamath Falls	3	3	4	4	5	5	5	5	5
Highway 395, Oregon/California border near Lakeview	3	3	4	4	5	5	5	5	5
Hwy 95, Basque (does not exist now)	3	3	4	4	5	5	5	5	5
Interstate 82, Umatilla (does not exist now)	3	3	4	4	5	5	5	5	5
Interstate 84, Ontario Rest Area, Oregon/Idaho border	3	3	4	4	5	5	5	5	5
Total # of staff per month	24	24	32	32	40	40	40	40	40

*On Scenario 1-4 at certain staffing levels, additional leadership or program oversight positions may be needed. Those are not included in these figures.

Oct	Nov	Dec	Cost
5 days/ week	closed	closed	\$60,000
5 days/ week	closed	closed	\$125,000
closed	closed	closed	\$50,000
closed	closed	closed	\$50,000
5 days/ week	closed	closed	\$125,000
8			\$410,000

per year

Oct	Nov	Dec	Cost
closed	closed	closed	\$99,000
7 days/ week	7 days/ week	7 days/ week	\$198,000
closed	closed	closed	\$99,000
closed	closed	closed	\$0
7 days/ week	7 days/ week	7 days/ week	\$198,000
7 days/ week	closed	closed	\$154,000
6	4	4	\$748,000

per year

Oct	Nov	Dec	Cost
3	2	2	\$203,500
3	2	2	\$203,500
3	2	2	\$203,500
3	2	2	\$203,500
3	2	2	\$203,500
15	10	10	\$1,017,500

per year

Oct	Nov	Dec	Cost
4	3	3	\$269,500
4	3	3	\$269,500
4	3	3	\$269,500
4	3	3	\$269,500
4	3	3	\$269,500
20	15	15	\$1,347,500

per year

Oct	Nov	Dec	Cost
10	10	10	\$660,000
10	10	10	\$660,000
10	10	10	\$660,000
10	10	10	\$660,000
10	10	10	\$660,000
50	50	50	\$3,300,000

per year

Oct	Nov	Dec	Cost
4	3	3	\$269,500
4	3	3	\$269,500
4	3	3	\$269,500
4	3	3	\$269,500
4	3	3	\$269,500
4	3	3	\$269,500
4	3	3	\$269,500
4	3	3	\$269,500
32	24	24	\$2,156,000

per year