Safety programs help save lives, improve maritime operations and prevent $1.7M annually in gear losses and boat repairs

“We ran aground on the final day of a four-day run and within a half hour our boat was lost. We kept our cool, no one argued and we abandoned ship safely — our crew knew what to do because we had taken various safety classes from Washington Sea Grant.”

- Brad Jensen, Captain of the Al Debaran, Ketchikan, AK and Seattle, WA

Washington Sea Grant helps save lives through marine safety training, increase fishermen’s profits through classes on direct marketing and improved fish handling, and bring crabs and tug-and-barge operators together to negotiate safe, efficient sea lanes. From 2011 through 2015, 1,737 fishermen completed Washington Sea Grant sponsored courses on safety-at-sea and 668 commerical and tribal fishermen improved their seafood product safety and quality, which helped increase revenues by more than $1 million. In addition, a Washington Sea Grant negotiated plan delineating maritime transportation lanes from fishing grounds prevents crab pots from fouling tugboats and saves an estimated $1.7 million in annual losses for gear replacement and towboat repairs.

ws.g.washington.edu/community-outreach/fisheries
“Based on what I learned in a Washington Sea Grant funding workshop, I was able to identify and then secure a Boating Facility Improvement Grant for the Leschi Marina valued at $2.5 million.”
- Dwight Jones, Elliot Bay Marina Manager

Gallons of raw sewage diverted from coastal waters. Credit: Washington Sea Grant

**Sea Grant tools help recreational boaters keep millions of gallons of raw sewage out of vulnerable Washington waters**

Washington Sea Grant’s partnership with the state clean vessel program encourages boaters to pump their waste and keeps Washington waters clean for recreation, shellfish and wildlife. Sea Grant developed pump out kits with fittings to ensure sanitary transfer of waste, demonstrating and distributing about 10,000 kits to boat owners since 2010.

During that time, the percentage of marinas participating in Washington’s clean vessel program has doubled and today the program serves 60 percent of the state’s 276 marinas. Program partners have visited marinas throughout the state, assisting them to secure $3.3 million in federal grants for pumpout facilities, operations and maintenance. In 2016, boaters set a new state record, diverting 10 million gallons of raw sewage to shoreside pumpout stations and adding to the five-year cumulative total of 38 million gallons. [pumpoutwashington.org](http://pumpoutwashington.org)

**Stormwater filtration can mean life or death for salmon in Washington**

Up to 90 percent of adult salmon in urban creeks die before spawning, which can be devastating to the population. Stormwater runoff carrying pollution from roads and impervious surfaces seems to be the main reason for this mortality. Washington Sea Grant-funded researchers tested the effectiveness of bioretention materials, like raingardens, in removing toxicity from runoff.

Bioretention systems are often used to treat stormwater in low-impact development areas and can prevent hazardous materials from reaching salmon-bearing streams. Researchers found that all fish exposed to soil-filtered runoff survived, whereas all salmon exposed to untreated runoff died. These results inspired a Seattle software firm to redesign their new campus to filter runoff from a nearby highway. This not only helps salmon survive, but protects public health by mitigating pollution entering local water supplies. [wsg.washington.edu/saving-salmon-from-roadway-runoff](http://wsg.washington.edu/saving-salmon-from-roadway-runoff)

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