OSU researcher: Tsunami damage expected to arrive for decades

By Andy Glegerich Sustainable Business Oregon editor















An Oregon State University ocean researcher said debris from the 2011 Japanese tsunami will continue to bring invasive species onto U.S. shores.

"This could go on for years," said Dr. John Chapman, a researcher with OSU's Hatfield Marine Science Center and an invasive species expert. "We've not seen a decline in the debris."

Even without the Japanese debris - the most noted example being a 188-ton dock float that washed up last year in Newport - invasive species costs American \$128 billion yearly to clean up. But the 120 species alone counted on the Newport dock indicates that the tsunami will continue to affect the Pacific Ocean and its estuaries for decades.

The debris could even affect Oregon's fledgling wave energy industry, which has set up shop outside of Reedsport.



At least 120 invasive species alone arrived in Oregon's waters and on the state's beaches from a 165-ton dock that landed in Newport last year.

While it doesn't seem like the debris would cause "They're concerned about things that could grow on their containers," said Chapman, who was in Portland last week to speak at a Oregon Shores Conservation. Coalition meeting. "There are things that could crawl in there ... "

Invasive species such as those entering U.S. waters from Japan are as feared as much for what havoc they do create - the organisms could eat away at other parts of the Oregon Coast's ecosystem - as much as for the uncertainty about their prospective damage.

"When species invade, we can never predict what they're going to do," Chapman said. "We're playing (Russian) roulette, and there have been a lot of pulls on the trigger. We've had invaders from Asia that have absolutely altered our estuaries and we don't have to ask whether they're a serious problem. They are, and we want to anticipate as much as we can. We strive to be predictive."

That's because it's cheaper to address problems from invasive species on the front end, or, as Chapman puts it, "put out the fire when it's a small flame instead of (engulfing) the whole building."

Along with the massive dock that landed in Newport, the tsunami has delivered raw construction materials onto Oregon's beaches. Several organisms, including goose barnacles, have traveled across the Pacific on such materials.

Chapman and his team are working with Japanese counterparts to study the tsunami's effects. Such collaborations have made it possible to tell, for instance, precisely where materials that washed up in Newport have originated.

"We know, within an inch, where the dock came from," Chapman offered.

The Oregon Shores Conservation Coalition's CoastWatch program formed the Oregon Marine Debris Team with four other groups. The team will monitor Oregon's coastline for invasive species from tsunami debris.