

# Climate: Effects from 2015's warm water still being felt

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For local fishermen, 2015 was the year when a massive harmful algal bloom, exacerbated by warm water conditions, shut down Washington state's commercial and recreational Dungeness crab fisheries. Domoic acid also closed razor clam digs, while high temperatures drew subtropical species up the Oregon Coast.

The effects of warm water in 2015 are still being felt in this year's low salmon returns — what remained of a generation of fish who entered the ocean at a time when waters were unusually warm and their chances of survival were poor. In September, Oregon and Washington state fishery managers closed the Columbia River to all salmon fishing after salmon runs came in well below preseason predictions.

Researchers predict the Northwest's natural resource sectors will suffer as climate change conditions become more marked. The North Coast has built its economy around logging and fishing, and, in recent years, around tourists who are drawn to the outdoors and the area's natural beauty.

Already, fisheries scientists have seen shifts in fish populations and examples of how salmon might change where they spawn if water conditions are poor. In 2015, there was little or no snowpack to feed streams and rivers in Oregon and Washington state. Climate models predict even more warm, snow-free winters in the future.

Areas already prone to erosion or where landslides are common will likely deteriorate further under the more



Dungeness crab are sorted before being transported to a processing facility.

severe weather expected with climate change. Both erosion and landslides have already changed the face of the popular Ecola State Park near Cannon Beach many times over the years. Winter landslides cut a trail between Ecola Point and Indian Beach in half in 2016.

And there are other considerations.

Water is not something the North Coast ever feels like it lacks, but water supply and quality could become an even greater concern in light of climate change. Larger communities like Portland or Corval-

lis have two or more nearly independent water supplies.

"A lot of coastal communities rely on very local sources," said Philip Mote, director of the Oregon Climate Change Research Institute at Oregon State University, and a co-author on the national assessment's Pacific Northwest chapter. "They can have real difficulty in a dry summer."

Clatsop County has yet to see a big, aggressive forest fire like the blazes that have plagued other communities in recent years.

"But it's not out of the realm of possibility," Mote said.

The coast's forests are not accustomed to seasonal burning — they are not "fire adapted" — and underbrush abounds. In these wet forests, when a fire gets going, it's not a low-intensity burn as may occur more regularly elsewhere in Oregon. Instead, it is devastating.

Mote pointed to the human-caused Eagle Creek Fire in the scenic Columbia River Gorge, which burned more than 48,000 acres last year.

"A place where it rains 100 inches a year yet it went up like a tinderbox," Mote said.

Mote recently reviewed

a report on the impacts of global warming that he'd been involved in writing nearly 19 years ago.

"We spent maybe a paragraph or two on how forest fires might even become a problem," he said. "And now they're one of the leading ways we think about climate change in the West."

## Regional authors

The national assessment is the fourth such report under the U.S. Global Change Research program and the first since 2014. The Northwest chapter included authors from across



A salmon is caught in a gillnet on board Tim Becken's boat.

Oregon, Washington state and Idaho representing universities, state and federal agencies, Native American tribes and private industry.

As communities in the Northwest struggle to figure out how to address climate-related impacts before or as they occur, report authors noted that not all groups are on equal footing.

Mote and others in Oregon hope to refine the information presented in the national assessment, looking for gaps and for ways to provide even more detailed guidance to distinct areas across the state.

Over and over, Mote has seen the push to address climate change locally come from pockets, small groups, or motivated community leaders.

Groups like the Portland Water Bureau started thinking about how climate change could affect supply and demand 20 years ago. These groups have the resources, capacity and community support to start figuring that out, Mote said.

But the question remains, he said: "How do you help communities that don't have all that going for them to tackle these same questions?"

# Toll plan: Tolling supporters face a number of political hurdles

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An advisory group came up with the proposal that now appears headed toward the federal highway authorities. It calls for tolls on I-5 from the North Going Street/North Alberta Avenue off-ramps to Southwest Multnomah Boulevard, 7 miles away. Secondly, it proposes tolls "in and around the Abernethy Bridge" over I-205 that goes over the Willamette River at

Oregon City and West Linn.

Both tolling areas are connected with major freeway projects sought in the transportation package passed by the Legislature.

The I-5 project calls for adding new lanes in the Rose Quarter area while the I-205 project seeks to add a third lane in each direction from the Abernethy Bridge to the Stafford Road exit.

Transportation officials said the tolling could help

pay for each of these freeway projects.

Baney and Alando Simpson, another transportation commissioner, said they recognize there are a number of concerns with tolling they will try to mitigate. They include providing better transit alternatives for drivers and making accommodations for lower-income motorists.

However, tolling supporters face a number of potential political hurdles. Two

Republican legislators, state Reps. Mike Nearman of Independence and Julie Parrish of West Linn, have already filed a proposed ballot measure requiring voter approval before any tolling of current infrastructure.

Parrish said she thought state transportation officials are trying to open widespread use of tolling, and she said she'd urge the federal government to reject the proposal.

"Let's be clear," she said, "their goal is to toll the entire metropolitan transportation system."

U.S. Rep. Jaime Herrera Beutler, R-Wash., expressed a similar concern. In a statement, her spokesperson, Angeline Riesterer, called the tolling proposal a "Trojan horse" for its ultimate plan to toll all lanes of I-5 and I-205 at the state line, a move that will disproportionately

impact working-class southwest Washington commuters."

In addition, U.S. Rep. Peter DeFazio, a Democratic congressman from Lane County, will take over the chairmanship of the House Transportation Committee in January. He has said he wants to take a careful look at tolls because he's concerned about new financial burdens on working people.

# Food cart: Astoria has become a haven for mobile eateries

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restaurants in California and Utah. He has lived on the North Coast since 2007, working at local staples such as the Bridgewater Bistro in Astoria, The Cove in Long Beach, Washington, and Maggie's on the Prom in Seaside and competing in local cooking competition Iron Chef Goes Coastal.

"I think there's a push for talented chefs to work on trucks, because it's their own thing," he said. "They get to control it. You don't have to have a lot of employees. The overhead is kind of low. It gives you a chance to play around without having a million things to pay for."

Astoria has become a haven for food carts and other miniature and mobile eateries.

Ramen and sushi cart Roll & Bowl recently opened outside the Art Garden, following hot dog cart Baby Boomer's All-American and the recently relocated bAKos taco and burger cart. North on 11th Street, Ken Booth recently opened a Japanese-inspired walk-up window Būsu.

Mai Tong Thai Food, The Hot Box BBQ and Asian infusion cart Hong Kong Taco have all taken up residency outside Reach Break Brewing and Reveille Ciderworks at the Astoria Station east on Duane Street. Outside the Astoria Eco Wash near the Roundabout, pasty cart Bucket Bites recently joined the stalwart El Azadero Mexican food truck.

Local property owner Sean Fitzpatrick and Baked Alaska owner and chef Chris Holen are planning a food court and tap house inside the former J.C. Penney across Duane Street from Astoria Station. Lancaster, who has long had an affinity for Asian food, is planning to open Black Fern Noodle Bar there once the project gets off the ground, offering a diverse array of noodle dishes.

"I wouldn't say it's going to be a traditional noodle house," he said. "It's going to be a fusion. But I'm really stoked with that J.C. Penney's thing. I think Astoria's ready to embrace that."

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