

Graphic courtesy of Columbia Memorial Hospital Patients at the Knight Cancer Collaborative will receive infusion chemotherapy on the second floor, with views of the Columbia River.

Cancer center: Construction is estimated to cost \$16.5 million

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to centers in the region. "Nobody took any consideration of building a cancer center here" in Astoria, he said, until Mark O'Halloran, director of clinical outreach at OHSU, offered to come

"It's hard to believe that in 2010 we started with a two-day (-a-week) clinic,' Thorsen said, about the hospital's partnership with OHSU, that serves an estimated 300 patients per month.

John Warren Field had been coveted by the hospital for decades, he said, but the stars aligned in the last several

The hospital paid for the construction of the Astoria Sports Complex and CMH Field. In exchange, the Astoria School District vacated John Warren Field. The sports complex also helped the city of Astoria cap and decommission a long-unused landfill with a multisport turf field.

Timing is everything

World events also aligned to provide historically low interest rates that saved the hospital an estimated \$1.8 million over the 30-year life of the \$18.8 million worth of bonds to finance the cancer center and a renovation of the emergency department.

The hospital sold the bonds to investors June 22, one day before the British voted to leave the European Union and a day after Federal Reserve Chairwoman Janet Yellen gave a monetary policy speech to Congress stressing a slower recovery and a cautious approach to changing monetary policy.

When the hospital first started discussing the bond in October, he said, the estimated municipal market data for 30-year bond was 3.04 percent. By the time the hospital sold the bonds to investors in June, the interest rate had dipped to 2.19 percent, saving the hospital millions.

Thorsen said the exact effect of the Brexit vote is uncertain, but certainly contributed to the historically low interest rates at the time of the bond sale. He said the hospital was also helped by high investor demand for tax-exempt revenue bonds, issued by the Hospital Facilities Authority of the city of Astoria to help nonprofits get financing. The hospital's bonds have different maturities, with nearly \$7.5 million due in 25 years, \$2.1 million in 26 years and the final \$9.2 million in 30 years.

Of the total bonds, \$13 million will go toward the construction of the cancer center, estimated to cost \$16.5 million. The hospital is also looking at a \$5 million to \$7 million renovation of its emergency department.

Along with the bonds, the hospital has raised more than \$2 million of a \$3 million goal, with significant contributions from a host of locally prominent families, including the Armingtons, Nygaards, Rubidouxs, Teevins, Lums, Pohlads, Leinassars, Van Dusens, Parks, Phillips, Autios, Henningsgaards, Waisanens, Hellbergs, Englunds, Schnitzers, Allens, Johnsons, Ficks and others.

Tax plan: 'If passed, this tax increase would greatly raise the cost of living in Oregon'

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The tax would pour an estimated \$3 billion a year into state coffers but slow job growth and bump up consumer prices, according to the nonpartisan Legislative Revenue Office.

"Our state cannot move forward and meet Oregon's growing needs over the next decade without a stable revenue base," Brown said Thursday. "Measure 97 is an important step forward, and I will make sure the funds the measure yields go towards schools, health care, and seniors, as the voters expect.

"State leaders before me have repeatedly tried and failed to solve the problem of adequate and stable funding for schools and other state services. Every solution has had strengths and weaknesses in terms of fairness and economic impact. None has succeeded in bringing the business community, individual and family taxpayers, service providers, and advocates together."

Bud Pierce, Brown's Republican challenger in November's governor's race, said he was disappointed that Brown is supporting what would be the largest sales tax increase in Oregon's history.

'If passed, this tax increase would greatly raise the cost of living in Oregon," Pierce said in a statement. "Everyone, including low-income families would be paying on average more than \$1,800 (sic) per family more for goods and services. A tax increase like this will not help anyone. It will hurt low-income families in Oregon the most.'

The Legislative Revenue Office estimated that the tax would cause price increases that would cost a family earning median income more than \$600 more per year in the form of increased prices on daily needs, such as food, fuel and electricity.

Brown said that state leaders have repeatedly failed to come up with another solution to Oregon's unstable funding system for schools and other state services.

"Every solution has had strengths and weaknesses in terms of fairness and economic impact," she said.

Dinner: Event will return next year

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local potatoes and sour cream and barbecue carrots. Ball said part of the purpose was to vary preparation, incorporating baked, smoked, grilled, pickled and confit dishes. For dessert was a mixed berry custard cup with hazelnuts - Oregon leads the production of these nuts — along with marionberries, boysenberries and black raspberries.

Get cooking

Ginger Edwards, founded R-evolution Gardens eight years ago in the Nehalem Valley at the southern tip of Clatsop County, said the key to marketing specialty crops is in showing people how to use them.

"It's just a few skills that are missing" from previous generations, she said. "We've been really invested in getting people back into the kitchen and cooking again."

Edwards gets most of her business from farmers markets and community-supported agriculture, a farmer's Danny Miller/The Daily Astorian

Laurel Berblinger, center, sells garlic to a customer at the Gales Meadow Farm stand at the Crop Up Dinner Series on Thursday. More photos online at DailyAstorian.com

choice delivery of vegetables to enrolled members weekly. She also works with the Rinehart Clinic in Wheeler, providing low-income patients with cooking skills and local produce. Along with running her farm, Edwards is the executive director of North Fork 53, a farm-to-table bed and breakfast teaching people how to cook, can and otherwise preserve their produce to last through the winter.

Fish in school

More than 300 specialty crop producers this year have reached Oregon's students through the state Department of Agriculture's Farm to School program.

Chief among those was Bornstein Seafoods, a processor based in Bellingham, Washington, with a plant in Astoria. The company on Thursday won the Oregon State Schools Producer of the Year Award.

Christa Svensson, an export and marketing manager at Bornstein, said that when the company's efforts to get seafood into schools started, the average amount spent per student was \$1 per lunch, about one-fifth of it going to milk, and with no state support. In 2011, the state passed a law providing state money for schools to buy food from Oregon producers.

This past school year, Bornstein Seafoods provided seafood to six school districts, including Seaside. Svensson said the company hopes to expand the program to six more school districts in the coming year.

Turner said the crop-up market and dinner will return next year, hopefully in conjunction with the River People Farmers Market, which offers local produce from 3 to 7 p.m. Thursdays at 12th and Exchange streets.

Shrimp: Nisbet employs 95 Pacific County workers

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"We've got a bed up there at Cedar River, actually at this time it's our best fattening bed," said Nisbet, 65. "There's a lot of infestation all around that bed in the Tokeland area

So we're abandoning. We're in the process of moving all the oysters off the bed. It's 80 acres, so it's a big bed and it's going to be a big hit."

Collectively known as burrowing shrimp, the bay harbors two native species ghost shrimp and blue mud shrimp. Although they've been trying to expand their range for decades, they are especially prolific this year, thriving in unusually warm 70-degree bay water. The shrimp aren't edible by humans. In contrast, oysters generate an annual total of about \$35 million for the Pacific County economy.

Nisbet employs 95 Pacific County workers, who are paid \$2.7 million a year. These workers put 100 kids in schools in the South Bend, Naselle and Raymond districts. Loss of the Cedar River bed will cost his farm hundreds of thousands of dollars this year alone, resulting

Scene of the disaster

Traveling by boat across the Bay Center Channel of Willapa Bay, headed north from Nisbet's Goose Point Oysters, farm manager Francisco Meliton pilots his skiff slowly. The way can be tricky, especially when the tide is out. The route is shallow in parts and he lets off the throttle. After a few minutes the boat speeds up again and the houses that line the sea wall in Tokeland come into view as the boat approaches the port. At its entry, located on top of a navigational beacon, a pair of gulls have made a nest with babies inside. Meliton makes bird calls as he approaches, the adult birds chirping back.

As the boat pulls up to the shore of an expansive oyster bed, Goose Point biologist Brian Kingzett warns that when walking on the tidal flats it's best not to plant your heels when you walk, in order to avoid having your leg swallowed by the mud in the areas infested by burrowing shrimp.

The mud on the eastern side still has a fair amount of eelgrass, which creates a support system of roots under the surface that allows oysters to sit above the mud during high tide. However, the western portion of this particular plot looks more like the surface of the moon, porous and devoid of eelgrass, leaving oysters to sink in to the mud and die.

Meliton has to make his rounds, inspecting the stock throughout this bed. As he ventures into the shrimp-infested area he goes from sliding his feet along the surface to sinking up to his knees, as if he were caught in quick sand. Meliton comes back with a handful of seven or eight shrimp, with their oversized, mutant-looking claws sticking out in front of their tiny bodies.

You wouldn't think that something so small could do so much damage. But look-



Damian Mulinix/For EO Media Group

Burrowing shrimp continue to plague the oyster beds of Willapa Bay, as each hole that riddles the quick sand-like ground represents at least one of the creatures.

ing at the land where he found them — riddled with thousands of holes, no eelgrass or living oysters to be seen — it is very obvious that these tiny menaces are continuing to gain a claw-hold on the oyster mecca that is Willapa Bay.

How we got here

Last year, oyster and clam growers in Willapa Bay and Grays Harbor planned to spray up to 2,000 acres of tidelands with imidacloprid, a neonicotinoid pesticide, to control the shrimp. The Washington Department of Ecology issued a permit April 16, 2015, but Puget Sound-based Taylor Shellfish Farms said May 1 it would not spray its Willapa Bay beds following a negative reaction to spraying, largely generated by Seattle Times columnist Danny Westneat.

Two days later, the Willapa-Grays Harbor Oyster Growers Association told DOE it was suspending the permit. Later, growers learned DOE considered the action to be an outright surrender and cancellation of the permit, meaning the process had to start from scratch this year, with a goal of obtaining a new permit for shrimp control in 2017.

The alternative oyster growers eventually proposed is Imidacloprid. It is widely used on land crops, including Washington hops. The U.S. Environmental Protection Agency and Washington State Department of Agriculture approved using it specifically in the bay and harbor, even though it is controversial in other settings, being sometimes blamed for honeybee die-offs.

"The sad thing about this is that I don't think the public really understands that it was designed for aquatic use and is so benign that a good application doesn't even kill them, it just puts them to sleep," Nisbet said regarding Imidacloprid. After the shrimp are anesthetized, they stop filtering the surrounding sediment. Tidal action collapses their burrows on them and the chemical disappears.

Going back to carbaryl isn't an option. The EPA no longer registers it as an aquatic pesticide, and DOE has closed off any chance growers could revive their permit, DOE spokesman Chase Gallagher said.

A shrinking farm

Fattening beds like those off Cedar River are in short supply around Willapa Bay. Usually in places with lots of ocean tidal influence and other special characteristics, they bathe oysters in nutrients, allowing them to plump up and become delicious.

It has now been at least three years since there was any type of shrimp control on Nisbet's Cedar River fattening everywhere like dandelions in a neglected yard. The oysters are being

bed, and shrimp are popping up

moved to less nutritious beds Nisbet owns elsewhere in the bay. (Washington is somewhat unique in conferring private ownership rights on tidelands that are periodically underwater.)

Unless DOE re-grants the permit for Imidacloprid so it can be applied with hand-held spray wands in time for next year, "Those 80 acres will be a dead loss, there's nothing we can do with it," Nisbet said.

Ecological impacts

Beyond damage to their own business, Nisbet and Moncy said they fear consequences of out-of-control shrimp populations on the ecology of the bay. Most Willapa oystermen

raise oysters in a way that somewhat mimics the natural oyster beds that were found here when people first arrived. Moncy said the explosion

in shrimp numbers resembles the former takeover of the bay by invasive spartina grass, except that the shrimp are unnoticed from shore.

The continuing loss of oys ter lands will result in a biologically poorer place, Moncy said. The public doesn't "realize the devastation that's happening out there on such a large scale," she said.

Like spartina, which was eventually eliminated thanks to a concerted chemical control program, Moncy said the shrimp can be kept within reasonable bounds if farmers and agencies cooperate. There is no intention to try to eradicate the shrimp.

'This is a short-term issue that we actually have a solution for, and as oyster farmers we're never going to stop looking for other alternatives and other solutions for this issue, because this is our home," she said.

- Damian Mulinix and Don Jenkins contributed to this story.

