

Whales: ‘This is definitely a high mortality year for grays’

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Sunday morning. She said genetic analysis will determine within a few weeks if the baby was a member of the southern resident orca pods, critically endangered and so far with no successful pregnancies for the past three years.

The infant calf appears to have died from a trauma during birth, Huggins said.

As for the gray whale, it probably was healthy before it was struck by a ship, likely three to four weeks ago judging by the amount of healing that had occurred at the wound, where four vertebrae in its back were shattered, said Huggins, who also did a necropsy of that animal. But the whale after it was struck was not able to swim normally to feed and was badly emaciated when it washed ashore.

“I’m glad it was quick at that point, for the animal’s sake,” she said.

“This is definitely a high mortality year for grays,” said John Calambokidis, of the Cascadia Research Collective. But it is nothing like the losses in 1999-2000, when the population appeared to reach carrying capacity and 651 grays died from Mexico to Alaska.

The cause of the gray whales’ troubles this year is not yet understood, Calambokidis said. “The picture is still emerging.”

David Weller, who runs the gray-whale monitoring program for NOAA out of its Southwest Fisheries Science Center in La Jolla, California, said long-term data collected by the agency shows the big picture for grays is actually good.

“What is going on this year is not overly alarming to me,” Weller said. “It is of interest; we are keeping an eye on it. But based on what we have seen gray whales go through in the past, the ups and downs and changes over time, they do just carry on, and the population continues to grow.”

The agency’s long-term data over the past 25 years has also pointed to a correlation in gray-whale calf survival and the extent of sea ice in the Arctic. “These guys give us a way to peer into the arctic,” Weller said. “They

are a sentinel species.”

If the pregnant females can’t get at their food source in the Arctic, it shows in the decline of birthrates the following year.

A second issue plaguing grays and humpbacks this year is entanglement, which has been trending upward, said Kristin Wilkinson, regional stranding coordinator for Washington and Oregon for NOAA Fisheries Protected Resources Division West Coast Region in Seattle.

The average for Washington state and Oregon is about three to four whales entangled each year, and this year there have been seven already, Wilkinson said. The increase holds true along the West Coast, said Justin Viezbicke, NOAA’s stranding coordinator for California.

Between 2000 and 2013, the average was about 10 confirmed whale entanglements reported per year. In 2017, a total of 31 whales were confirmed entangled off the coasts of California, Oregon and Washington state. In 2016, there were 48 confirmed cases and 2015 saw 50 cases, the highest annual totals for the West Coast Region since NOAA Fisheries started keeping records in 1982.

The reasons could be whales following a changing food web closer to shore, as they chase bait fish. It also could be increased fishing pressure with more gear in the water, and even just more reporting of entanglements.

Humans have always been the biggest threat to whales, hunted for their oil, captured for aquariums, even shot for target practice. The protection provided for whales and all other marine mammals under the federal Marine Mammal Protection Act has allowed for the recovery of most species in the eastern North Pacific and Salish Sea.

Gray whales have rebounded so robustly they were taken off the Endangered Species Act list in 1994.

The major exception is southern resident killer whales, which remain critically endangered. The annual census reported to NOAA on Sunday by the Center for Whale Research tallies just 75 southern residents, the lowest number in decades.

Methane: Hydrophone detects bubbles

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During the day, researchers used an onboard submersible, the Hercules, to collect samples of the gas, hydrates, seep-water, plants, animals, sediments and rocks around the seeps. The robot is connected via a tether to Argus, a smaller submersible that buffers the Hercules from movement in the line, and can descend 2.5 miles underwater.

The Hercules includes two arms for sampling and an array of cameras and acoustic sensors, but is designed to be outfitted with different tools for each expedition. For the methane seep study, it was fitted to take airtight samples of both gas and hydrate crystals.

Studying the ratio of noble gases inside the methane can inform Baumberger whether they were once hydrates, and in turn what causes hydrates to turn into gases that contribute to global warming and ocean acidification, she said.

Hercules was also used to deploy a hydrophone — an underwater microphone that detects ocean sounds from all directions — to record the



Ocean Exploration Trust
Researchers onboard the Nautilus sampled for flora and fauna, including star brittle, around deepwater methane seeps along the Cascadia Subduction Zone between Northern California and Oregon.

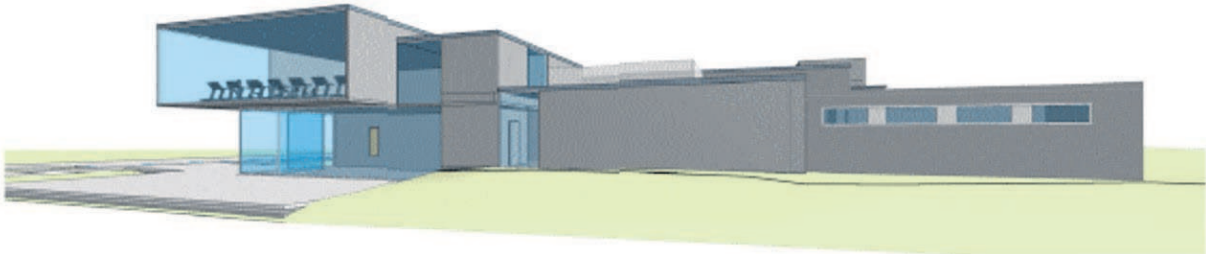
methane bubbles coming out of the earth’s crust.

Robert Dziak, an acoustics scientist with NOAA, recently authored a study about how the pitch of methane bubbles can help scientists estimate the amount of methane in an underwater reservoir.

“Our ultimate goal is to use sound to estimate the volume and rate of methane gas

exiting these seafloor fields,” Dziak said in a recent news release about the study.

The samples collected during the expedition were shipped back to the Hatfield Marine Science Center for analysis. The Nautilus left Sunday for the coast off the Olympic Peninsula, where it searched this week for fragments of a meteor that crashed



Opsis Architecture
The street view of a proposed Sunset Empire Park and Recreation District building expansion.

Bond: Will be decided by voters in November

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Demolition and site development add about \$1.2 million.

Soft costs, including fixtures, equipment and program materials, raise the estimate to \$16.5 million to \$19.2 million. Wages, tariffs and other costs could add to the project.

As a result, the total cost could range from \$18.6 million to \$21.5 million.

With a 20-year payoff period and an \$18 million expansion scenario, the tax impact to the owner of a \$200,000 property would be about \$126 per year. The impact for a \$400,000 property would be about double that.

The bond will be decided in November by voters of the independent taxing district, who include most residents of the Seaside School District, excluding Cannon Beach and Gearhart.

Board members sought to keep costs at or under \$20 million.

“People like round num-

bers,” Mills said. “People will see a clarity in that. It seems like a fit.”

Construction could start in “really late 2019 or early in 2020,” with about a year to a year and a half building period, Skyler Archibald, the district’s executive director, said.

During construction, pool facilities would continue to operate and fitness programs

and classes would move to other district facilities.

“Over 70 percent of our users are there to use the pool,” Archibald said. “The reason why this program makes a lot of sense is we don’t have to eliminate or reduce any of the pool operations. We can keep operating without the majority of the patrons seeing any consequences.”

Board members will formally consider adoption of the bond proposal at a meeting July 17.

The recreation center bond is among several bond requests that will go before voters in November. Bond financing will be sought for school improvements in Warrenton and Astoria and an expanded Clatsop County Jail.

Housing: Interactive map planned

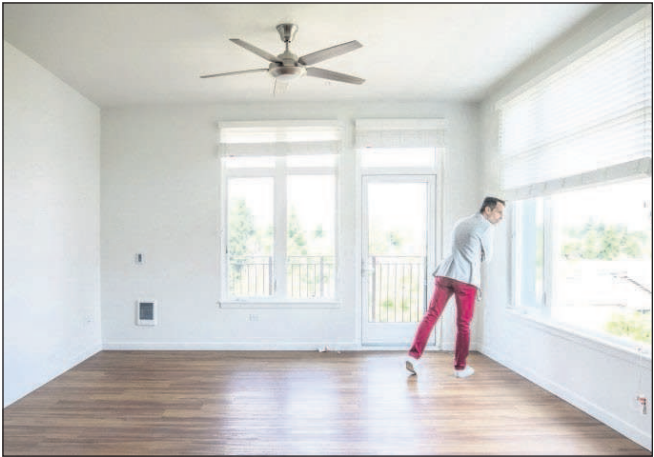
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more of their income on housing, according to the study.

The completed inventory, expected to be unveiled to the public later this month, is intended to help Oregon Housing and Community Services preserve existing subsidized housing with expiring affordable housing requirements and to help augment the supply. The inventory also gives policymakers a clearer picture of the need for affordable housing in the state and could help state lawmakers determine funding for the two-year state budget.

“It’s for preservation and tracking the existing inventory around the state,” said Ariel Nelson, a spokeswoman for Oregon Housing and Community Services. “We use this data when we are awarding new funding for affordable housing (to private developers). The data point is one that we look at amongst other scoring criteria.”

The inventory, with a list of addresses, was completed as a Microsoft Excel spreadsheet at the end of January and posted on the agency website. The comprehensive database, with addresses and expiration dates of affordability requirements, will be available to the public on the agency’s website by the



Michael Buonocore, executive director of Home Forward, Multnomah County’s housing authority, checks out the view from a new affordable housing unit in Portland in June.

end of the month.

Next year, the agency plans to have the inventory displayed on an interactive map on the website, Nelson said.

The inventory keeps track of local, state and federally subsidized housing, including those funded by the U.S. Department of Housing and Urban Development and the U.S. Department of Agriculture’s Office of Rural Development.

The housing is available to Oregonians through a local housing authority or community action agency, such as Home Forward in Multnomah County.

Home Forward has a waitlist of 3,000 households for

federal housing choice vouchers, which allows recipients to use the vouchers on market-price housing. The waitlist consists of about 23,000 households waiting for one of the 39 properties on Home Forward’s public housing portfolio, said Tim Collier, Home Forward’s communications director. That waitlist excludes affordable housing provided by the private sector through funding agreements. Each property manager has a separate waitlist for that respective property in Multnomah County, Collier said.

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