#### **IN BRIEF**

### State reports 134 virus cases for county

The Oregon Health Authority reported 134 new coronavirus cases for Clatsop County over the Martin Luther King Jr. holiday weekend.

Since the pandemic began, the county had recorded 3,514 virus cases and 37 deaths as of Tuesday.

#### National Guard personnel to help at local hospitals during virus surge

The Oregon National Guard is sending personnel to Clatsop County hospitals to take pressure off staff during a spike in coronavirus cases.

Five service members will be posted at Columbia Memorial Hospital in Astoria, where they will help in housekeeping and laundry services.

"This is where we have the greatest need," Nancee Long, the hospital's director of communications, said in an email.

Another five will be posted at Providence Seaside

"They will help as extra hands in a variety of nonclinical settings, such as housekeeping, food and nutrition services, materials management and access monitors," Mike Antrim, the senior manager of communications at Providence, said in an email.

#### Astoria man dies in crash in Brownsmead

An Astoria man died Sunday in a crash in Brownsmead. Douglas Graham, 57, of Astoria, went off the road in his car and into a slough at the intersection of Brownsmead Dike Lane and Leino Road. He was pronounced dead at the scene, the Clatsop County Sheriff's Office said.

#### **Retired corrections officer** to run for state House

Glenn Gaither, of Seaside, has filed to run in the Republican primary for state House District 32

Gaither is a retired corrections officer with the Washington State Department of Corrections.

State Rep. Suzanne Weber, R-Tillamook, is giving up the North Coast seat to campaign for Senate District 16. — The Astorian

#### **Omicron onslaught continues** in Pacific County

LONG BEACH, Wash. — Omicron has arrived with a vengeance in Pacific County, as local health officials reported nearly 300 confirmed cases of COVID-19 over just the past week, along with a handful of hospitalizations and two more deaths.

According to the county health department, 296 new cases of the virus were reported locally over the past week as of Monday, for a total of 2,836 cases. Five more county residents were hospitalized over the past week, bringing the total to 136.

Two more people died away due to complications from COVID-19, bringing the county's pandemic death toll to 42. Both individuals were in their 60s.

Chinook Observer

# **DEATHS**

Jan. 16, 2022

Doug-GRAHAM, ton Mortuary of Astoria is in charge of the arrangements.

arrangements.

RUSSELL, Betty las Alan Sr., 57, of Asto- Lou, 93, of Astoria, died ria, died in Astoria. in Astoria. Caldwell's Caldwell's Luce-Lay- Luce-Layton Mortuary of Astoria is in charge of the

# ON THE RECORD

# Sexual abuse

• Loren Christopher Tarabochia, 48, of Pendleton, was indicted last week for using a child in a display of sexually explicit conduct, failure to report as a sex offender, unlawful contact with a child, attempted sodomy in the third degree and sexual abuse in the third degree. The crimes are alleged to have occurred in Clatsop County between July and January.

# Assault

Mark Allan Spurlock, 41, of Astoria, was indicted on Tuesday on charges of unlawful use of a weapon, strangulation, assault in the fourth degree and menacing.

have occurred earlier this month.

# Theft

Meyer in Warrenton.

# **DUII**

lock device.



 Samuel Joe Johnson, Jr., 32, of Clatsop County, was arrested on Monday for theft in the second degree and criminal trespass in the first degree. The alleged crimes occurred at Fred

 Dylan Robert Rabell, 27, of Warrenton, was arrested on Tuesday on S. Main Avenue in Warrenton for driving under the influence of intoxicants, driving on a revoked license, driving uninsured and failing to install an ignition inter-



Luke Whittaker/Chinook Observer

A wave crashed into the cliffs at Waikiki Beach on the Long Beach Peninsula on Saturday morning during a tsunami advisory.

# Volcanic tsunami tests emergency systems

By JAMIE HALE The Oregonian

The tsunami that rippled across the Pacific Ocean on Saturday may have been a good test run for the Pacific Northwest's emergency alert systems, but it's not yet clear how useful the experience will be in preparing Oregonians for a major disaster.

Caused not by an earthquake but a massive eruption of an undersea volcano near the Pacific nation of Tonga, the explosion sent larger-then-normal swells up the Oregon, Washington state and California coastline in a rare event that researchers and emergency management officials are still trying to wrap their heads around.

Stephanie Ross, a geophysicist with the U.S. Geological Survey and a tsunami scenarios coordinator with the Pacific Coastal and Marine Science Center in Santa Cruz, California, said the volcanic tsunami was unprecedented in the modern era and the first time the U.S. Tsunami Warning Centers have issued an alert based on a volcanic source.

"We know they're possible but it's just not something that we deal with very often, Ross said. "There's just a lot of uncertainty around a complicated event like this."

What researchers do know is that there are a lot of differences between a volcanic tsunami far off in the Pacific Ocean and a tsunami triggered by an earthquake, especially a Cascadia Subduction Zone earthquake that Oregonians are most concerned about.

One of the biggest differences is time — as in, how much time it takes for a tsunami to reach shore and how

long people have to escape. Harold Tobin, the director of the Pacific Northwest Seismic Network and a professor of seismology at the University of Washington, said coastal communities would have only five to 10 minutes to flee a tsunami caused by a major earthquake just offshore. People on the coast should evacuate immediately if they feel an earthquake, he Some people went to the beach in Seaside on Saturday to catch a glimpse of the ocean after a tsunami advisory.

In contrast, communities had several hours to prepare Saturday, and most didn't bother with evacuations, which proved to be unnecessary.

said, and not wait for an offi-

cial alert.

"Yesterday's events are a really good test run and reminder that we need to have tsunami preparedness at the top of our minds," Tobin said on Sunday. People should have heeded

the alerts, he said, even though scientists didn't have the usual playbook at hand with the volcanic tsunami. For instance, he said, earth-

quakes are so baked into tsunami alerts that when the U.S. Tsunami Warning System issues a warning, it has to include the magnitude of the event. The volcanic eruption that caused Saturday's tsunami didn't have a magnitude, so officials simply input "0.1," he said, a figure that initially befuddled some researchers.

The unprecedented nature of the volcanic tsunami off Tonga also left officials uncertain about how long it would last, though they were able to predict how soon it would arrive. By the time waves began to swell along the Pacific coast, word had already spread across the region, aided by social media and media reports, as well as state and local alert systems.

But that time also gave people time to drive out to the coast and see the tsunami for themselves — an activity that researchers and emergency officials all adamantly

condemn.

Ana Santilli, who sells soda and beer at the Turnaround Market in Seaside, woke up to a mobile alert from the city about the tsunami advisory, but went to work anyway, only to find an early crowd of onlookers at the beach, she told The Oregonian on Saturday. It was a similar scene at

towns up and down the Oregon Coast, where people flocked to viewpoints and beaches in coastal communities — despite explicit warnings from officials to stay away — to catch a glimpse at the incoming waves.

Contrary to their depiction in some blockbuster movies, tsunamis don't show up as towering, crashing waves, but as larger-than-normal swells. Shaky YouTube videos of the 2004 tsunami in the Indian Ocean, for example, offer a much better depiction of the disaster than the dramatization of the event in the 2010 movie "Hereafter."

An inaccurate perception could lead to misplaced excitement about seeing a tsunami in person and might result in people making dangerous decisions like walking out to the beach and along jetties, or even paddling out to surf the incoming waves, Tobin said. Most people don't have a good grasp on what a 3-foot wave actually looks like, let alone a 100-foot wave, and that might make them misjudge the danger.

Most waves in Oregon reached only about a foot or less, with the largest reported swell cresting at 1.5 feet near Port Orford, according to the

Mark Graves/The Oregonian

National Weather Service. But Tobin noted: "Just because (tsunamis) are traveling across the ocean from far away, and it's not being predicted to be a massive wave, doesn't mean there's not danger."

The 2011 tsunami caused by a 9.1-magnitude earthquake off the coast of Japan is a prime example. While not nearly as damaging in the Pacific Northwest as it was in Japan, the event still sent waves up to 6 feet high to U.S. shores, destroying docks and causing other damage up and down the Oregon Coast. Rescuers in Gold Beach struggled against the waves to save a woman who was pulled out

Ross said while recent events should instill more caution, some people will always be drawn to the allure of tsunamis, either unaware of or apathetic to the dangers they

"Sadly, it's fairly normal," she said. "We've seen enough tsunamis that we know it happens and sometimes people die because of it."

From the public's reaction to actions taken by state and local officials, she said it's still too soon to do a proper postmortem on what happened Saturday and the public's response.

"There's a lot we have to learn from this, and I think it's going to take a while to really work it all out," Ross said. "I think we have our work cut out for us."

# **PUBLIC MEETINGS**

# **THURSDAY**

Seaside Transportation Advisory Commission, 6 p.m., City Hall, 989 Broadway.

# the Astorian

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#### Ecosystem: Growing evidence on the shore is notable responding." clear that these are probably the growing evidence on the related directly or indirectly The researchers said shore is notable.

Continued from Page A1

not be anywhere near as colorful or as interesting as it is now," Menge said.

Throughout the study, the team measured environmental factors, and found a strong association between changes to temperature and the weakening recovery rate.

"With climate change, the biggest thing that's changing — at least in the immediate sense — is temperature. So I think it's fairly to warming," Menge said.

They believe the findings apply to the North Coast and beyond. Though results varied depending on local wildlife populations, signs of declining resilience and increasing variation were found at all sites.

Though more visible signs of climate change occur offshore, such as the movement of fish populations to deeper water, Gravem said

"I think, in the subtidal, we're seeing these changes. They're slapping us in the

face. So if anything, they're stronger there," she said. Menge said the findings

are startling because, since the 1980s, data from the intertidal zone had depicted a stress-resistant ecosystem despite climate change. For decades, the species had stable populations that looked unaffected. 'What that means is there

can be some pretty stark changes that are going on that are hidden," Menge said. "And to us they were hidden until we analyzed these experimental data and saw: 'Whoa, the system is that a large-scale effort to address climate change will be needed to address the

"This is a big mess," Gravem said. "And without really addressing all these emissions, and changing our electric grid to renewable energy, we're not going to stop seeing this stuff. And we need national legislation and international legislation."

"It needs to have teeth," Menge added. "The science has been clear for decades. And scientists have been warning the public and politicians for as long as that, and it's been largely ignored because it's inconvenient to change how you live."



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