

IN BRIEF

Warrenton, Moberg agree to city manager contract

WARRENTON — The city has completed negotiations to hire Esther Moberg as city manager.

Moberg, the library director in Seaside, was selected for the role in July.

Moberg will start her new post on Sept. 19.

Grants available for child care providers

Current and aspiring child care providers are invited to apply for a grant through the new program to help stabilize funding.

The program has been developed in response to the scarcity of child care options throughout Clatsop County. Grant money has come from the county, Providence Seaside Hospital and Columbia Memorial Hospital.

The grants are available to center-based or in-home providers looking after children from 6 weeks to 12 years old.

For more information about the program online, visit nworegon.org/childcare-grants-program-in-clatsop-county

The deadline to submit an application is 5 p.m. on Aug. 26.

County seeks input on geologic hazards

People are invited to take a survey to help the Clatsop County Community Development Department better understand the geologic hazards in the county's unincorporated areas.

The survey is part of an update to the mapping and regulations of the county's Geologic Hazards Overlay, the county said in a statement.

The survey will be live on the county website until Sept. 5, the county said.

Columbia Senior Diners clarifies timeline for closure

Due to program revenue issues, Columbia Senior Diners is closing at the end of the month.

The sit-down dining service at the Astoria Senior Center will end on Aug. 19, and there will be a to-go option through Aug. 31.

The home delivery program will continue in September through a partnership with NorthWest Senior and Disability Services.

— *The Astorian*

DEATHS

Aug. 6, 2022

BREWER, Michael Rodney, 74, of Astoria, Oregon, died in Astoria. Caldwell's Luce-Layton Mortuary of Astoria is in charge of the arrangements.

Wallace, 58, of Hammond, died in Astoria. Caldwell's Luce-Layton Mortuary of Astoria is in charge of the arrangements.

Aug. 3, 2022

RAY, Harold Mark, 73, of Warrenton, died in Warrenton. Caldwell's Luce-Layton Mortuary of Astoria is in charge of the arrangements.

SMITH, Cheryl Elaine, 77, of Astoria, died in Longview, Washington. Steele Chapel at Longview Memorial Park in Longview is in charge of the arrangements.

Aug. 4, 2022

BUCHOLZ, Nathan

MEMORIALS

Saturday, Aug. 13

BUCKMAN, Yvonne — Celebration of life has been postponed until a later date.

N.W. Scotch Church Road in Hillsboro.

Monday, Aug. 15

SUNDAY, Aug. 14
DUNCAN, Duffy — Graveside service at 2 p.m., Old Scotch Church Cemetery, 30685

SCHEVE, Velvyn Joan — Memorial celebration at 12:30 p.m., Olney Grange, 89342 Oregon Highway 202. A service and sharing time is followed by a luncheon at 2 p.m.

ON THE RECORD

Theft

• John William Kelley, 43, of Astoria, was indicted on July 14 for first-degree theft. The crime is alleged to have taken place at Walmart in Warrenton ear-

lier that month.

• Anna Lee Hile, 32, of Lincoln City, was arrested on Monday at Walmart in Warrenton for second-degree theft and first-degree trespass.

PUBLIC MEETINGS

THURSDAY

Seaside Civic and Convention Center Commission,

5 p.m., 415 First Ave.

Astoria School District Board, 5:45 p.m., special meeting, (electronic meeting).

Gearhart Planning Commission, 6 p.m., City Hall, 698 Pacific Way.

the Astorian

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Photos by Lydia Ely/The Astorian

The Merrimac, a 45-foot yacht, docked at the West Mooring Basin on Monday. The yacht, built by the Astoria Marine Construction Co. and originally launched in 1938, is moving to a new home at the Columbia River Maritime Museum's secured boat storage hall.

Tribe creates higher ground by building tsunami tower

A first for the region

By TOM BANSE

Northwest News Network

There is a new option to escape a tsunami if you're on the southwest coast of Washington state when the "Big One" strikes.

The Shoalwater Bay Indian Tribe on Friday dedicated a 50-foot tall evacuation tower in Tokeland, Washington. Tribal leaders and the Federal Emergency Management Agency said the new tsunami refuge platform should be an example and inspiration for other vulnerable coastal communities.

When the next magnitude 9.0 rip of the offshore Cascadia Subduction Zone fault occurs, people on the Pacific Northwest coast will have about 15 to 35 minutes to get to high ground to escape a possible tsunami. Tokeland is on a long, flat peninsula with no high ground within walking or running distance for many of the people there.

"This tower will save our lives someday," said Shoalwater tribal council member Lynn Clark at the joyful dedication ceremony, which was followed by a salmon bake to thank the project's many partners.

The tribe's emergency management director, Ken Ufkin, said he can sleep better now that the high ground exists in the form of the sturdy, double-decker tsunami refuge tower. The tower stands close to the midpoint of the nearly 3-mile long Tokeland Peninsula.

"This allows folks even if it's 2:30 in the morning in your pajamas to scoop up your family and make it here in a very short amount of time — in under a 15-minute window for nearly everyone from Tokeland Point to the heart of the reservation," Ufkin said.

The tower will be open to all in a disaster. The tower platforms have a capacity of more than 400 people, which is considerably more than the tribal population of the small Shoalwater Bay reservation. So, a lot of the tribe's neighbors can escape the waves there, too.



Northwest News Network

The first free-standing tsunami refuge in North America is now open in Tokeland in Pacific County.

The Tokeland evacuation tower resembles free-standing tsunami towers previously built in Japan, but it is the first of its type in North America. The two other purpose-built tsunami refuges on the Northwest coast — in Newport and in Westport, Washington — are reinforced platforms on the roofs of a school or university building.

Design engineer Cale Ash, who worked on the Tokeland tower for Degenkolb Engineers, said tsunami experts modeled the maximum wave height at the location near the mouth of Willapa Bay as 16.3 feet. Ash said the design team rounded up to 20.2 feet to be safe. He said the floor of the lower platform is 33 feet above the ground and the floor of the upper platform is 43 feet high.

Ash told the audience at the dedication that the tower rests on concrete pilings that go 55 feet deep to withstand violent shaking of the soft, sandy soils of the peninsula. That means the supports go deeper than the tower is tall.

The tribe named the structure the Auntie Lee Vertical Evacuation Tower to honor retired tribal emergency management director Lee Shipman, who was the driving force behind it. Shipman's vision took more than five years to realize, including more than a year of construction delay attributed to the coronavirus pandemic.

"The very best experts in the USA helped with this project," Shipman said proudly. "It is with the help

from all the various agencies that we were able to build the very, very first FEMA-funded tower in the United States of America."

"We need about 50 more," followed up Maj. Gen. Bret Daugherty, the head of the Washington National Guard and state Military Department, which houses the Emergency Management Division. As he delivered that line, General Daugherty looked directly at FEMA Regional Administrator Willie Nunn, who was sitting in the front row at the dedication ceremony.

FEMA provided \$3.8 million toward the design and construction of the Tokeland tower. The Shoalwater Bay tribe contributed an additional \$1.2 million to complete the budget.

The most likely next place in the Northwest to build a tsunami evacuation tower is the town of Ocean Shores, Washington, which is working with Degenkolb on a design. The city administration has secured most of the needed construction funding from federal, state and local sources. All of Ocean Shores lies within the inundation zone of a tsunami spawned by a Cascadia megaquake.

Nearby Westport is also discussing whether to build an evacuation tower to serve residents who live or work too far away from Ocosta Elementary School, which has the reinforced roof over its gym as a tsunami refuge platform.

Some emergency planners have qualms about

relying on vertical evacuation structures because it entails leaving potentially large clusters of people in the midst of a disaster zone who will need to be rescued later. While those survivors wait, they will be exposed to the elements on a structure likely to be pummeled by coursing debris and possibly exposed to hazardous waste runoff.

Going to natural high ground outside the tsunami flood zone is therefore much better than vertical evacuation. But Ufkin and others point out that reaching safety quickly by driving is unlikely to be an option if the Big One buckles roads and topples power poles in low-lying places such as Tokeland — or in Ocean Shores and Long Beach, Washington, and parts of Seaside and Warrenton for example, too.

Geologists and emergency planners consider the Cascadia Subduction Zone fault among the most significant disaster threats in the U.S. The offshore fault last ruptured in January 1700, spawning a tsunami that reached all the way across the Pacific to Japan.

Researchers digging in coastal marshes and offshore canyon bottoms have also found evidence of earlier great earthquakes and tsunamis. The radiocarbon dating of those events makes it possible to estimate the recurrence interval of Cascadia megaquakes at between 250 to 800 years. That puts the present day well within the return window.