

Cannon Beach emergency committee reconsiders escape plan

Assembly areas to be outfitted

By **NANCY MCCARTHY**
For EO Media Group

CANNON BEACH — When a tsunami washes over Cannon Beach, where will the nearly 7,000 estimated survivors go?

They first will head to 10 assembly areas plotted out by the city's emergency preparedness committee. But, while those assembly areas are in places that should be safe from high water, they aren't outfitted with the supplies necessary to ensure survival.

Although city officials originally planned to immediately move survivors from the assembly areas to three cache sites where barrels containing residents' personal supplies have been stored, that plan is being reconsidered.

Instead, the assembly sites will have the temporary shelters, food, water and communications gear necessary to help people for a few days until the initial crisis has subsided.

Roads likely closed by debris

A map distributed by Les Wierson, a member of the emergency committee, during the committee's work session earlier this month, shows that the roads leading to the cache sites, as well as U.S. Highway 101, will be closed due to debris. The debris — fallen trees from the Cascadia Subduction Zone earthquake that will trigger the tsunami and buildings, cars and other objects deposited by the tsunami — will prevent easy access to the barrels.

"Less than 20 percent of the survivors can reach a cache site in a reasonable or safe time," Wierson said in a letter to the committee.

"The highway will have a tremendous amount of debris," he told the committee during the meeting. "It's going to have to be taken out, and it will take a tremendous amount of time."

The highway overpass at Sunset Boulevard may collapse, and some substations might be destroyed, he added. For awhile, only experienced hikers might be able to reach the caches on the north side, at Elk Creek Road in midtown and at South Wind in Tolovana, where an emergency shelter is planned eventually.

In a 2011 study, it was determined that if a tsunami



A tsunami evacuation map presents the downtown pedestrian route. Will people be able to reach assembly sites?

hit Cannon Beach on a summer day, 6,729 people might reach the 10 assembly sites.

The study was conducted by Harry Yeh, an Oregon State University professor of civil and construction engineering with a specialty in tsunami-related hazards. Yeh reached his conclusions by using a computer model of where residents and visitors might be when the tsunami arrives and how long it would take to reach the nearest assembly area.

Yeh estimated that the three most populated assembly areas would be at the Cannon Beach Bible Church on Hills Lane along with nearby Spruce Street Arbor Lane, reached by a combined total of 1,980 people; mid-Tolovana at Surfcrest Street east of the highway (1,582 people); and Eighth Street and Ecola

Park Road on the north end (1,015 people).

Other assembly areas are at Yukon Street and milepost 30 (880 people), the highway at Tolovana Mainline Road (549), east Sixth Street and Old Cannon Beach Road (357), Haystack Heights and East Chinook Street (357), Elk Creek Road east of the highway (200) and Sunset Boulevard at the highway (100).

'Super site'

The committee is considering establishing an assembly "super site" just south of the Bible Church on state Department of Transportation property between the church and Arbor Lane.

The committee decided to focus initially on preparing the first three assembly areas to make sure they are safe and that temporary shelters, water,

food and communications are available.

But committee members said an overall plan is needed that shows how the cache sites and the assembly areas are to be used and what supplies are needed. More people also should be recruited to fill vacancies on the committee and to help out in local neighborhoods, they said.

"I've been getting a little frustrated; we seem to be going in circles," said committee member Paula Vetter.

The group discussed how difficult it was to coordinate the emergency preparedness committee efforts with other groups in the city that also are preparing for disasters.

"Somehow, we need to get the city, the committees and the volunteers all on board," City Manager Brant Kucera told the group.



Katherine Lacaze/EO Media Group
Climatologist and researcher John Stevenson speaks on "Climate Change and the Coast" at the Listening to the Land presentation at Seaside Public Library.

Climatologist discusses effects of climate change on coastal communities

Research shows policy strategies can offset exposure

By **KATHERINE LACAZE**
EO Media Group

Policy decisions made today regarding land use can help communities adapt and mitigate the negative impacts of climate change, according to climatologist John Stevenson.

Stevenson kicked-off the Listening to the Land series this year with his presentation, "Climate Change and the Coast," at Seaside Public Library on Wednesday. The monthly speaker series, presented by the North Coast Land Conservancy and the Necanicum Watershed Council, is offered through May.

Stevenson, a regional extension climate specialist with Oregon Sea Grant and the Climate Impacts Research Consortium, helps communities respond to climate-driven changes in coastal hazards, water resources and forest disturbance. He examined how the warming climate is affecting life on the coast and what the future might look like if current trends continue.

Addressing climate change

Many rapid climate changes can be contributed to human activity and the emission of greenhouse gases, which play a critical role in determining the global temperature, Stevenson said.

The National Oceanic and Atmospheric Administration and the National Aeronautics and Space Administration recently reported 2015 was the warmest year on earth since record-keeping began in 1880. The temperature along the Oregon Coast has changed during the past century, as well, and is steadily increasing.

Climate change affects a lot of the earth's systems, such as fresh water sources, vegetation, wildfire occurrence and wetlands.

In fresh water systems, climate change leads to decreased summer flow, increased water temperature and flooding after extreme precipitation events. For vegetation, the coast may experience species shifts and low elevations may become unsuitable for Douglas fir by the mid- to late century.

Fire disturbance also is likely to increase, although there is limited historical activity on which to base assessments, Stevenson said. Wetlands also will be affected by rising sea levels, a byproduct of climate change, with a predicted loss or mitigation of estuarine habitat and tidal swamps.

Responding with policy

Stevenson was involved in a case study called the Tillamook County Coastal Futures Project, designed to prepare for the threat of coastal flooding and erosion in Oregon's coastal counties.

During the project, which took place over a year and a half, researchers took into account three climate controls that affect coastal flooding and erosion: variability of wave heights; El Niño and La Niña patterns and range; and global rising sea levels. Another aspect of the project looked at how communities can deal with these factors.

One objective of the project was to answer the question, "How much will we expose ourselves to those risks?"

During the project, researchers studied various policy scenarios, such as what would happen if warming continues. Researchers studied the potential effects of environmental policies, as well as what sort of risk homeowners would be exposed to over time and beach accessibility with evolving climate scenarios, Stevenson said.

"That's the nice thing about doing these alternative scenarios, is we can start to compare these things," he said. "As we move forward in time, the decisions we make today about planning have more influence than even the most extreme climate scenario on our exposure, in this case, to flooded homes."

Clinic serves primary, addiction needs

By **EDWARD STRATTON**
The Daily Astorian

When she was chief operations officer of Seaside's Awakenings by the Sea, a drug and alcohol treatment center for women, Wendy Hemsley said a thought kept occurring to her.

"I kept saying that someone should open a clinic that provides primary care and ancillary support for people with substance abuse," Hemsley said.

Hemsley, who had already founded her own medical billing company in 2013 and been the CEO of Free By the Sea's treatment facility in Ocean Park, Washington, turned her thought into reality in 2014, founding North Coast Medical Clinic.

The clinic, a hybrid offering primary care, substance abuse and mental health care services, opened in earnest last year in downtown Astoria's Spexarth Building. It recently expanded into 441 30th St. in the Mill Pond neighborhood, where it will hold an open house from 5 to 7 p.m. Friday.

Variety of services

The clinic offers a wide variety of primary care services, including checkups, physicals, nutrition, digestive, hormonal, sexual health and weight loss, along with management of medication, chronic disease, stress and anger.

Visiting from his clinic in Hillsboro once a week to see patients is Dr. Joe McCarthy, the former part-time center physician at Tongue Point Job Corps Center and the medical director of the North Coast Medical Clinic. The clinic also employs a nurse and a nurse's assistant. Hemsley said she is close to hiring two nurse practitioners.

Hemsley said she found a dearth of primary care providers for patients on the North Coast. The only other primary clinic she found taking patients, Columbia Memorial Hospital Primary Care Clinic in Warrenton, had a wait list approaching 11 months.

"I think a lot of the medical needs are being served in these (emergency rooms), because they can't find people taking new patients," she said.

The clinic aims to provide primary medical needs, McCarthy said, along with

immediate walk-in care and drug treatment.

Drug treatment

North Coast Medical Clinic provides Suboxone and Vivitrol, medications to help mitigate the painful effects of opiate withdrawal that lead to a high rate of relapse.

Hemsley said she has spent much of her career in substance abuse treatment, and has made the mistake of dropping a loved one at a treatment center and expecting them to get fixed, just to see them relapse.

"We're not just giving you pills and hoping you're fixed," she said. "It's the whole community."

Patients seeking treatment at the North Coast Medical Clinic need to be screened and sign a treatment contract, she said. The clinic partners with local outpatient treatment centers, counselors, sobriety

clubs and other specialists for a holistic approach, while providing medication to help.

"Addiction is like diabetes," Hemsley said. "It's something you need to manage your whole life. Addiction is a disease. People shouldn't be disgraced."

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