

Scientists discover hundreds more methane seep sites

One concern is climate change

By TOM BANSE
Northwest News Network

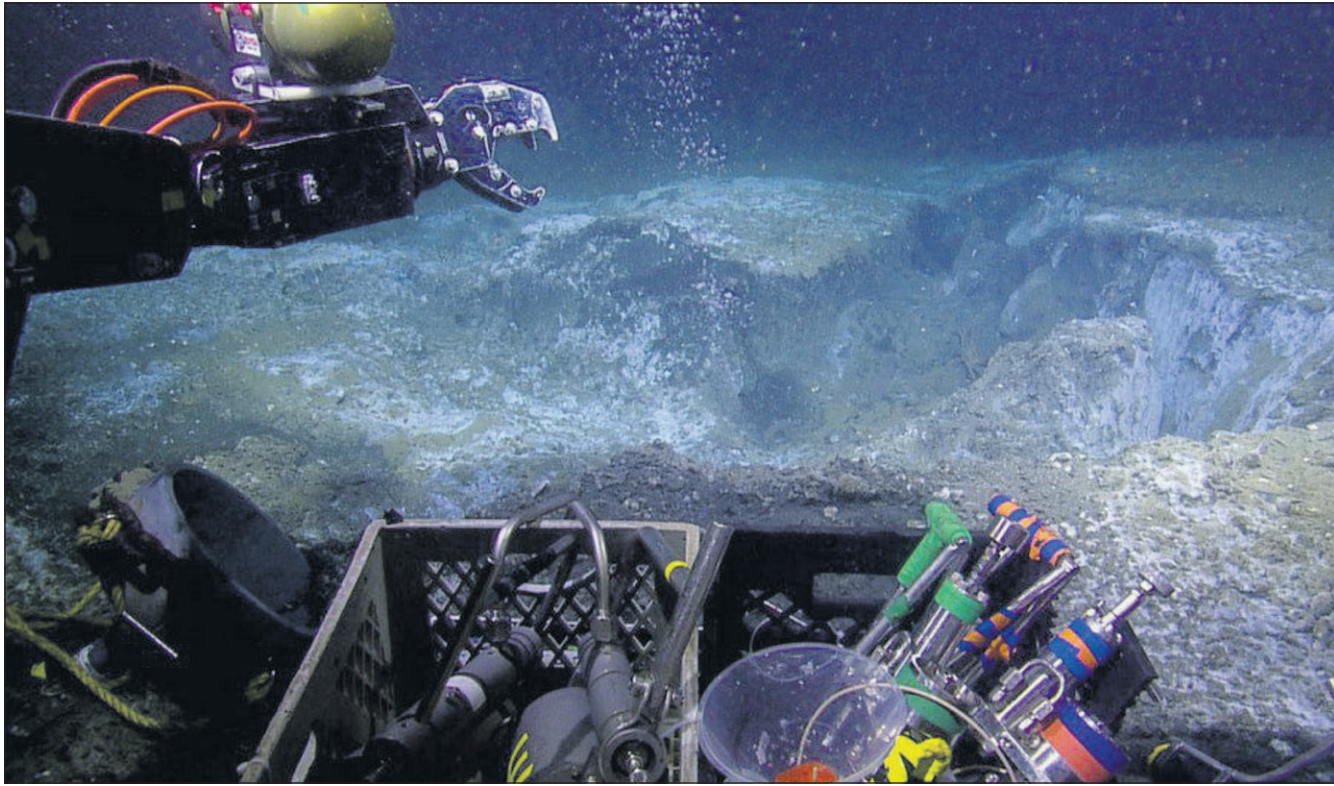
Ocean researchers have found nearly 1,000 methane seep sites along the continental shelf of the Pacific Northwest. The bubble streams could be a sign of offshore energy potential, represent a greenhouse gas threat — or be neither of those things at all.

Oregon State University geophysicist Bob Embley said the discovery is “eye-opening” on many levels. Until a few years ago, researchers had only documented 200 methane seeps off the Pacific Northwest coast.

“Methane is a greenhouse gas,” Embley said during an interview with members of the joint Oregon State/National Oceanic and Atmospheric Administration team in Newport. “We don’t know how much, if any, is getting to the surface and into the atmosphere from the ocean.”

So far, researchers are finding that most of the methane dissolves into the water column before it reaches the surface. Initial chemical analysis of the bubble streams points to organic matter that fell to the seabed and decayed, rather than a sign of possible oil and gas reserves deep below.

“I don’t think it’s anything



Oregon-based researchers deployed an ROV to sample methane vents off the Pacific Northwest coast this summer.

Ocean Exploration Trust

valuable,” the team’s chemistry expert, Tamara Baumberger, said when asked if the methane bubble streams could indicate offshore energy potential for the Pacific Northwest.

But one concern among scientists is that the seafloor could potentially release more methane as the ocean slowly warms due to climate change. Methane is a far more potent greenhouse gas than the better-known carbon dioxide.

First, the team wants to systematically map the seeps on the continental shelf to establish a baseline against which to compare future observations.

Advances in sonar technology made it possible to efficiently survey for bubble streams using instruments on ships that sweep the ocean floor.

The number of seep sites jumps after every survey cruise, now totaling 10 expe-

ditions over the past three years, senior research assistant Susan Merle said. Merle’s database is approaching 1,000 sites from the Canadian border to Northern California, encompassing more than 2,700 discrete methane bubble streams — a number bound to climb even higher.

“We’ve only mapped about 40 percent of the Cascadia Margin,” Merle said. “Most of that mapping has been in deeper water.”

Seafloor methane originally drew interest when submersibles photographed a solid, ice-like form called methane hydrate in deep, cold waters. There has been off-and-on commercial interest in seafloor methane since — mostly from Asian energy exploration companies as a potential gas resource. Still, the mining and extraction has proved to be extremely difficult.

The Oregon State/NOAA

team saw hydrate formations during ROV dives from the expedition ship R/V Nautilus in June and even retrieved a few samples from the seafloor. Primary funding for the project comes from the NOAA Ocean Exploration and Research Program. The researchers are based at a joint laboratory at the Hatfield Marine Science Center in Newport.

The video camera on the ROV also showed how some of the methane seeps create oases on the seafloor. There, methane-eating bacteria support the base of a food chain that includes sea worms, clams and fish in profusion.

On both a 2016 and a 2018 cruise, the researchers dropped a sensitive underwater microphone on the seabed next to a methane seep off the coast of Oregon.

NOAA acoustics scientist Bob Dziak said the hydrophone was deployed for short periods as a “proof of concept” to show how a passive acoustic tool could be used to monitor and quantify the gas flux. The rising bubbles made a distinct sound like “crackling bacon” or rain on a metal roof, he said.

“Ultimately, my goal is to use the records to make an estimate of the volume of gas coming out,” Dziak said.

Results of Dziak’s 2016 hydrophone experiment were published this spring in the journal Deep-Sea Research II.

Oregon’s only heart transplant program shuts down

Associated Press

PORTLAND — The only Oregon hospital to offer heart transplants abruptly shut down its program Friday, leaving nearly two dozen patients on its waitlist to seek out-of-state treatment and hundreds of others in limbo for post-operative care.

It came just two days after Oregon Health & Science University in Portland said it was putting its program on hold for two weeks as it sought to replace three heart failure transplant cardiologists who had left or would be gone by the end of September.

The decision by the leaders of the 32-year-old program is unusual. Nationwide, only a handful of other heart transplant programs have shut down because of staffing issues or poor success rates.

Baylor St. Luke’s Medical Center in Houston temporarily closed its world-renowned program in June after The Houston Chronicle and ProPublica investigated the departure of several key doctors and an unusual number of patient deaths in a few years.

Hospitals in Philadelphia, South Carolina and Nashville, Tennessee, also have halted their programs, but all have since reopened. The

Oregonian reported earlier this week.

In Oregon, the doctors are leaving for family and personal reasons, OHSU said.

The hospital initially said it would not accept donor hearts, do transplants or accept or evaluate new heart transplant patients for 14 days. It said, however, that the program’s remaining doctor could handle post-operative care for patients who have already had the surgery.

But Thursday, The Oregonian reported that the final doctor also was leaving.

The hospital said in a statement Friday that all 20 patients on its waitlist will

transfer to programs at other hospitals or have decided not to transfer but wait it out.

OHSU said it’s aggressively recruiting heart specialists, but it was unclear if or when the program would reopen.

The University of Washington said eight patients have already been accepted into its program in Seattle.

An additional 327 patients who have had the surgery are being evaluated to determine the best way forward, the Oregon hospital said. Five others who were being evaluated for possible inclusion on the heart transplant waitlist were meeting with staff to

decide what to do, it said.

The hospital also was encouraging patients who have left-ventricular assist devices, or LVADs, to seek care elsewhere. The devices keep the heart pumping as it weakens and are considered a bridge to a heart transplant.

The hospital’s other cardiac programs and its liver, kidney and pancreas transplant programs were not affected.

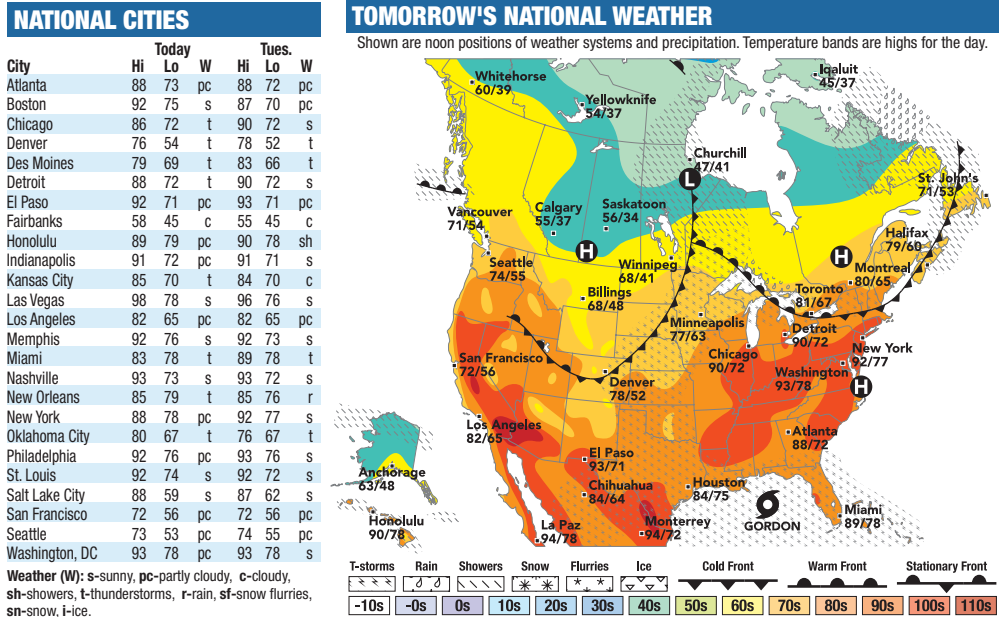
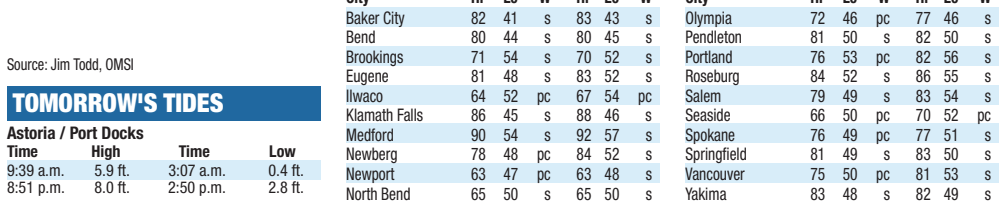
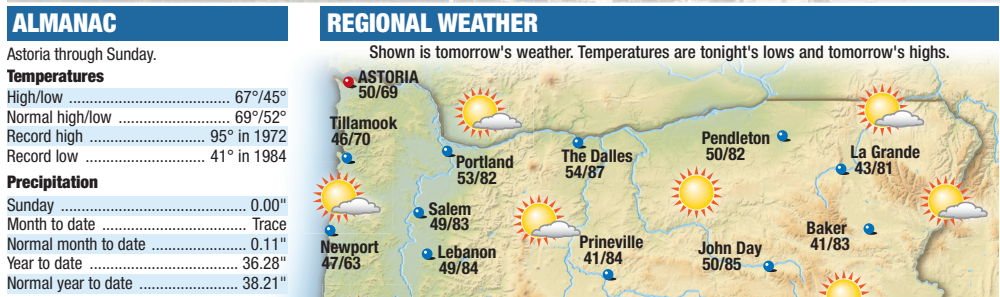
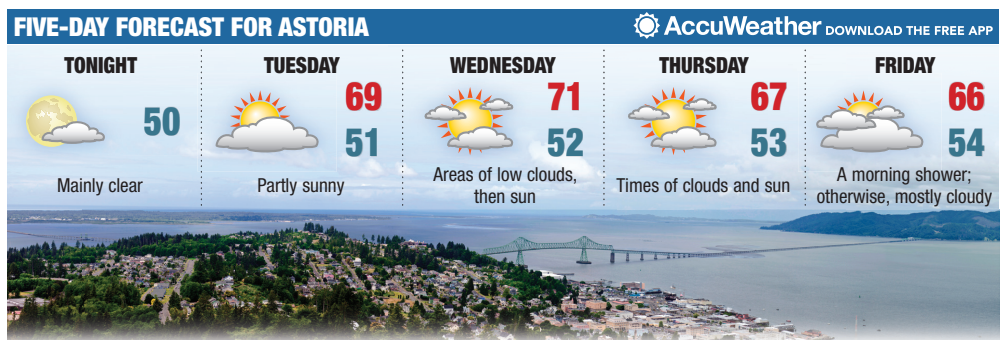
The Portland hospital performed 30 heart transplants last year, compared with 18 in 2016, according to federal data. There are 3,930 people awaiting new hearts on the national transplant list.

The facility is not the first to run into trouble with its heart transplant program.

In 2016, Thomas Jefferson University Hospital in Philadelphia paused its program for several months while it recruited new surgeons and cardiologists, the newspaper reported.

The Medical University of South Carolina halted its program in 2014 after a patient died and other transplant recipients had weak hearts. It resumed the following year.

St. Thomas Health in Nashville suspended its heart transplant program in 2011 when key staff left. It took five years to restart it.



Astoria police investigate armed robbery at Dairy Queen

The Daily Astorian

Astoria police are investigating an armed robbery at Dairy Queen on Friday night.

A man armed with a small pistol took an undisclosed

amount of money from the West Marine Drive restaurant just after 10 p.m., police said.

The suspect was described as a thin white male, about 5 feet 9 inches tall, possibly in his mid to late 30s, wearing

blue jeans with a blue hooded sweatshirt pulled over his face, police said.

People with information about the suspect or the robbery can call Detective Ken Hansen at 503-325-4411.

LOTTERIES

OREGON
Sunday's Pick 4:
1 p.m.: 1-6-6-5
4 p.m.: 3-6-8-7
7 p.m.: 0-7-8-6
10 p.m.: 2-3-4-8
Sunday's Lucky Lines: 02-07-10-14-FREE-19-22-28-29
 Estimated jackpot: \$12,000
Saturday's Pick 4:
1 p.m.: 1-1-3-9
4 p.m.: 2-7-3-3
7 p.m.: 8-1-5-9
10 p.m.: 2-1-6-7
Saturday's Lucky Lines: 01-08-12-13-FREE-20-21-26-30
 Estimated jackpot: \$12,000
Saturday's Megabucks: 14-17-27-42-44-47
 Estimated jackpot: \$6.4 million
Saturday's Powerball: 11-54-55-61-66, Powerball: 9, Power Play: 3
 Estimated jackpot: \$90 million
Friday's Pick 4:
1 p.m.: 3-8-3-1
4 p.m.: 7-9-9-7
7 p.m.: 2-5-0-6
10 p.m.: 8-1-8-0
Friday's Lucky Lines: 02-06-10-16-FREE-17-24-28-29
 Estimated jackpot: \$11,000
Friday's Mega Millions: 07-18-29-32-45, Mega Ball: 17, Megaplier: 3
 Estimated jackpot: \$152 million

WASHINGTON
Sunday's Daily Game: 2-2-3
Sunday's Keno: 02-08-09-13-18-20-27-34-36-37-40-47-54-64-65-69-70-73-78-79
Sunday's Match 4: 08-09-14-18
Saturday's Daily Game: 5-2-3
Saturday's Hit 5: 01-06-07-23-33
 Estimated jackpot: \$160,000
Saturday's Keno: 02-04-14-15-20-25-26-27-34-35-40-42-46-57-58-69-71-74-76-80
Saturday's Lotto: 04-05-17-21-31-33
Saturday's Match 4: 08-10-19-22
Friday's Daily Game: 6-7-1
Friday's Keno: 07-10-13-14-17-20-26-29-34-38-44-46-51-53-54-63-66-67-69-73
Friday's Match 4: 09-12-14-24

PUBLIC MEETINGS

TUESDAY
Seaside Community Center Commission, 10 a.m., Bob Chisholm Community Center, 1225 Avenue A.
Seaside Library Board, 4:30 p.m., Seaside Library, 1131 Broadway.
Miles Crossing Sanitary Sewer District Board, 6 p.m., 34583 U.S. Highway 101 Business.
Astoria City Council, 7 p.m., City Hall, 1095 Duane St.
Seaside Planning Commission, 7 p.m., City Hall, 989 Broadway.

CORRECTION

First name incorrect — Rod Zweber is the owner of property at the corner of U.S. Highway 30 and Hillcrest Loop Road in Knappa, the site of a proposed Dollar General. A 1A story on Aug. 27 incorrectly referred to him as Rob.

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