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OUR VIEW

Online privacy takes a wallop from Congress

Congress did American consumers a great disservice last week when it dismantled an online privacy regulation that would have prevented internet service providers such as Comcast, AT&T and Verizon from selling the browsing habits and other information about their customers.

The move came in a bill sent to President Donald Trump that will kill a Federal Communications Commission rule that was issued in October and was designed to give consumers greater control over how internet service providers share information. The rule was scheduled to go into effect later this year, and the decision essentially reverts to the status quo rather than giving consumers additional protections that the Obama administration sought before leaving office.

The decision was decried by consumer groups and Democrats but lauded by most Republicans and telecom companies. The 215-205 vote in the House, though, was closer than many expected with 15 Republicans siding with the Democrats in the failed effort to keep the rule in place. The Senate had already voted to repeal it and Trump is expected to sign the bill despite the American Civil Liberties Union’s populist appeals for a presidential veto.

Opponents of the rule argued that ISPs like Comcast and AT&T should not face more stringent privacy rules than online companies such as Facebook and Google, which collect user information and generate billions of dollars selling it.

**Privacy experts recommend consumers thoroughly familiarize themselves with the privacy policy of their ISP and specifically try opt out of data collection.**

Privacy proponents, however, countered that ISPs are far different because they have access to users’ full web browsing habits, what devices and applications they use, their online locations along with their physical addresses, their financial information and even whom they exchange emails with. That robust amount of information is particularly useful for marketers to craft highly-targeted ads, which is part of the fundamental business model of many online companies.

With the repeal, Internet providers won’t be required to notify customers they collect data about or even ask permission beyond a user’s initial approval of the terms of service agreement. As a result, many people may not even realize their patterns and profiles are being brokered.

So what steps should online users and consumers take?

Privacy experts recommend consumers thoroughly familiarize themselves with the privacy policy of their ISP and specifically try opt out of data collection.

Another potential option is to use a Virtual Private Network, which provides private end-to-end internet connections and are typically used to keep out snoops when using public Wi-Fi. There are free and paid-for VPN providers, but they are also in a position to track online activities. Choosing a trustworthy provider, as Wired.com points out, can be a “tricky thing to confirm.” Additionally, VPN privacy protections are limited because once a user logs into a website like Netflix or Amazon, those sites track users’ activities so they can suggest tailored products and services.

According to Nuala O’Connor, president and CEO of the Center for Democracy & Technology, a non-profit digital rights group, the best course of action for those concerned about what’s collected about them is to practice “digital privacy hygiene” by giving as little information as possible when doing things online, to minimize the digital footprint available to companies.

Importantly, if there was any question before, consumers should now know that Congress isn’t on the side of their online privacy protection.

WHERE TO WRITE

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• U.S. Sen. Ron Wyden (D): 221 Dirksen Senate Office Building, Washington, D.C., 20510. Phone: 202-224-5244. Web: www.wyden.senate.gov



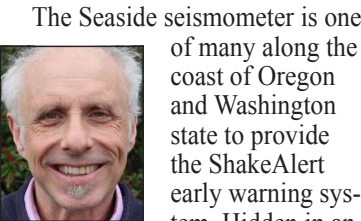
SOUTHERN EXPOSURE

Seismometer gives early warning of ground motion

By R.J. MARX  
The Daily Astorian

Who do you call when you need to upgrade a seismometer?

That’s easy: the Pacific Northwest Seismic Network, a partner of the U.S. Geological Survey, the University of Washington and the University of Oregon among others.



The Seaside seismometer is one of many along the coast of Oregon and Washington state to provide the ShakeAlert early warning system. Hidden in an equipment room in the back of the Seaside Museum and Historical Society, the seismometer may have a crucial role in history of its own in the not-so-distant future.

“A seismometer is an instrument that detects ground motion in the form of acceleration of the ground itself,” the University of Oregon’s field technician and ShakeAlert Project Manager Leland O’Driscoll said.

Is it a predictor?

“Not at all,” O’Driscoll said.

“Prediction is not currently feasible by science, so it is strictly an observational tool.”

Can seismologists draw deductions from the measurements?

“Yes, that’s the point,” he said. “When we see energy arise that looks like an earthquake, first we confirm that it is. Then we look at nearby sensors to have cross-verification. Once we have that, we measure the size and location of the earthquake’s epicenter.”



Leland O’Driscoll

Early warning

The ShakeAlert program began in 2006 and first sent alerts to test users in 2012.

When ShakeAlert detects a quake, a map pops up on a user’s screen to show the location of the epicenter and of waves moving toward the user. Also shown is the time remaining until waves reach the user’s location and an estimate of the intensity of shaking.

“We can provide an advance warning that earthquake will be arriving at a remote location during an event,” O’Driscoll said. “What this will facilitate is a warning to a user that they can have tens of seconds or minutes before ground motion actually starts.”

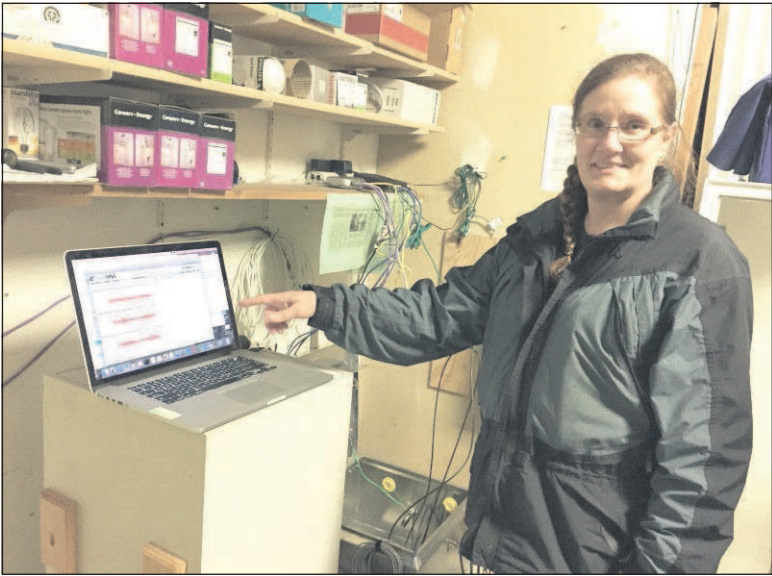
If it happened here, we wouldn’t have much time. But if it happened in the northern California region, O’Driscoll said, we’d have roughly 1 1/2 to 2 minutes to react.

This early warning — although hardly enough time to make a run for it — could be life-saving if broadcast to hospitals, building operations teams and other critical personnel.

“The concept of 10 seconds of advance ground motion is daunting when thinking what can I do,” O’Driscoll said. “But when you think of multiple minutes, you have more options. Hospitals can say ‘stop surgery.’ An elevator can open its doors before ground motion.”

Upgrade

O’Driscoll and his team arrived



R.J. Marx/The Daily Astorian  
Lynn Simmons of the U.S. Geological Survey works with the Pacific Northwest Seismic Network to install this seismometer in the Seaside Museum.

in Seaside in March equipped with tools, wires and equipment to upgrade the original seismometer at the museum, installed in 2004. All were affiliated with the Pacific Northwest Seismic Network, with headquarters at the University of Washington and has operations support at the University of Oregon in Eugene.

In a rear room behind the museum library, geophysicist Lynn Simmons, research engineer Marc Biundo and field technician Brendan Pratt upgraded the strong motion accelerometer, a sensor that measures acceleration like a speedometer measures speed. This information is fed by the seismometer to a live data feed.

Outside, standing on a ladder near the back of the museum building, field technician Sara Meyer worked with outreach coordinator Lindsey Walsh to upgrade the unit’s global positioning satellite.

Data is filtered by sensors that compare results of other seismometers to determine if shaking is due to an earthquake or some other factor, like a jackhammer or truck.

If sensors respond all along the coast, “We know we have an earthquake,” O’Driscoll said.

Network growth

The network started at University of Washington in the 1970s. After the Mount St. Helens eruption in 1980, the network “dramatically expanded,” O’Driscoll said. Now there’s a seismometer every 20 miles from southern Oregon to the northern Washington border. In Cannon Beach, a seismometer is stored in an IT room at the firehouse.

Locations are “very tricky,” Biundo said. “Where’s the power? Where’s the signal? How do you get the electrical energy to power it?”

In case of a power outage, a four-day battery accompanies the installation.

For decades now the network has tracked seismicity, including tectonic earthquakes generated by faults and Cascadia Subduction Zone quakes where the fault zone is offshore.

Seismometers charted the 1993 Salem “Spring Break Quake” and the 6.8 magnitude Nisqually Quake of 2001 in the southern Puget Sound region.

The Seaside site was chosen by the University of Washington. The



R.J. Marx/The Daily Astorian  
Members of the Pacific Northwest Seismic Network adjust a GPS antenna outside the Seaside Museum and Historical Society.

original communications director knew Seaside’s city planner at the time, O’Driscoll said. “It was chosen because there’s internet access on site, there’s a quiet room on the side of the building, and there’s a need to have a sensor in Seaside.”

Costs to complete the earthquake early warning system are estimated at \$36 million, O’Driscoll said, and an additional \$16 million for ongoing operations.

If sensors are to be installed on the ocean bottom or offshore, “we’re looking at the order of \$200 million to \$300 million,” he said.

“I’d like the public to know we’re building out a system that will build out the resiliency to lead to earthquake preparedness in the state,” O’Driscoll said. “As soon as we learn what to do with this advance warning for a quake, we can take effective actions to reduce the loss of life and reduce the loss of property and damage.”

While we live in a hazardous region, the programs offer steps to living in a safer and more resilient region.

Meanwhile, the team is looking to expand the network.

“We go as fast as we can,” O’Driscoll said. “There’s a series of stages. Finding good viable locations, permits, going through the avenues, all the prep — we can put in a dozen new sensors a year. We have a goal of 15 to 20 sensors this year to reach our final goal of density.”

R.J. Marx is The Daily Astorian’s South County reporter and editor of the Seaside Signal and Cannon Beach Gazette.