OPPORTUNITIES

Events current at time of publication. Have a virtual resource or event to share? Email us!

- February 1-28 – Central U.S. Earthquake Awareness Month
- February 23 – Why Social Infrastructure Matters in Crisis: COVID-19 and Beyond
- March 2 – Impacts in Financial Markets and Macroeconomy with Big Data
- April 6-7 – 2021 Partners in Emergency Preparedness Conference
- April 13-15 – 2021 Preparedness Summit
- May 17-19 – 2021 International Association of Chiefs of Police Technology Conference
- August 15-19 – Pacific NorthWest Economic Region Annual Summit

CONTACT

- Want to know more? Visit us at pnnl.gov/projects/nwrtc.
- Contact the NWRTC with questions and comments at nwrtc@pnnl.gov.

AROUND THE REGION IN HOMELAND SECURITY

NOTES FROM THE FIELD

The Northwest Regional Technology Center (NWRTC) is a virtual resource center, operated by Pacific Northwest National Laboratory (PNNL), to support regional preparedness, resilience, response, and recovery. The center enables homeland security solutions for emergency responder communities and federal, state, and local stakeholders in the Northwest.

URBAN RESPONSE, RESCUE TEAMS RESOURCE FOR RESPONSE

In recognition of Central U.S. Earthquake Awareness Month, our NWRTC team met with Thomas Richardson, Seattle Fire Department battalion chief and Washington Task Force 1 (WATF-1) Urban Search and Rescue (USAR) task force leader, to learn more about the role USAR teams play in the event of an earthquake or other disasters.

“These teams have become the Swiss Army knife of response—they are ready to do anything, anywhere, in any disaster,” Richardson said.

The USAR function was created by the Federal Emergency Management Agency (FEMA) to establish federal, state, and local partner emergency response teams as integrated federal disaster response task forces. Twenty-eight teams are in place across the nation that, according to FEMA, “can be deployed to a disaster area to provide assistance in structural collapse rescue, or they may be pre-positioned when a major disaster threatens a community.”

“When a disaster occurs and teams are deployed, we are essentially put on loan to serve where existing emergency resources may be otherwise overwhelmed. It is a cost-effective way to manage response and call on skilled resources when you need them,” Richardson said. “Our teams are highly trained, in addition to our day jobs, to jump in and help—within a matter of hours.”

The WA-TF1 was established in 1991 and counts over 210 members from more than 21 agencies from Seattle Fire, King County, and Pierce County, including staff from fire departments, hospitals, and law enforcement (including canines).

Richardson explained that USAR teams originally focused on recovering the entombed, or people trapped in deep debris. Today, teams are trained in a range of potential incidents that come with major disasters, including floods, hurricanes, tornadoes, wide-area searches, and weapons of mass destruction.

Richardson's team has been deployed to disasters across the nation, including the Oklahoma City bombings, Hurricane Katrina, the 9/11 terrorist attacks , the Oso Mudslide, and most recently, the Oregon wildfires.

"Every disaster is different and the skills we bring home from these experiences help us serve our own communities," he said. One of the key concerns for Richardson's region—the Pacific Northwest—is the potential for an earthquake along the Cascadia Subduction Zone. But what keeps him up at night is the challenge with the communications and technology needed to prepare for and address it. Fortunately, this is an area where partners like national laboratories can help.

"Every time we can leverage technology and science to do our job better—it saves time and lives," Richardson said. "The more we can get common, standardized platforms to answer our technology needs—the better."

Through relationships sustained by the NWRTC staff and programs like the U.S. Department of Homeland Security System Assessment and Validation for Emergency Responders, PNNL has partnered with Seattle-area first responders, including Richardson, on numerous occasions to evaluate a range of technologies, including in-suit communications technology, handheld detectors, and more.

"These are the things we need. We are getting vastly greater capability into the hands of users who need them, thanks to partnerships with national laboratories and others," Richardson said.

Looking forward, one of the lingering needs Richardson noted was the need to better understand a disaster's severity.

"When a disaster first hits, people have a hard time understanding the true scale of its impact. We always start behind the curve and those hours or days impact survivability. Whether it is an earthquake, flood, or even a pandemic, we need better tools to estimate and communicate the scope and scale of the disaster. We need a way of communicating with our leaders who are responsible for allocating resources, with those who are administering help, and with civilians in general so we can all appropriately respond," Richardson said.

To learn more about WATF-1, visit: piercecountywa.gov/2889/Urban-Search-Rescue.

RESEARCH FOR READINESS

PNNL has brought its disaster response and resilience expertise to a range of earthquake preparedness activities, such as serving as evaluators in the Cascadia Rising exercise in 2016 and visiting Japan's National Research Institute for Earth Science and Disaster Prevention to observe the institute's full-scale "E-Defense" earthquake testing facility. PNNL researchers are also advancing seismic capabilities to build trusted solutions and evaluations of seismic hazards for critical infrastructure. To learn more, see PNNL's Seismic Expertise and Capabilities brochure.

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PNNL-SA-159590