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Old Dominion University researchers hosted a bus tour for international researchers exploring the visible impacts of tidal and recurrent flooding, as well as efforts to build resilience.

"ODU is a national leader in the fields of risk, resilience and recovery," said Joshua Behr, associate professor at ODU's Virginia Modeling, Analysis and Simulation Center (VMASC). "This is clearly demonstrated by the growing relationship between ODU and the U.S. Environmental Protection Agency (EPA), which held its 2019 International Conference on Decontamination Research and Development in Downtown Norfolk."

Roughly 400 participants representing federal, state and local government agencies, academia, industry and non-governmental organizations from all over the world took part in the three-day conference at the Sheraton Norfolk Waterside Hotel, which was hosted by EPA's Office of Research and Development's Center for Environmental Solutions and Emergency Response.

The tour, led by Behr and George McLeod, assistant director of geospatial and visualization systems, took participants to the seawall protecting the downtown business district. Behr and McLeod illustrated the potential depth of storm surge by chalking lines on the seawall illustrating the surge experienced during the 1933 Chesapeake-Potomac storm.

"The 1933 storm is often referred to as the benchmark for storm surge in the Hampton Roads region," McLeod noted during the tour. "The construction of the seawall is intended to protect downtown from catastrophic flooding."

The group also visited the Hague area near the Chrysler Museum and showed the reach of projected high tide in the years 2050, 2080 and 2100, a project undertaken by Tom Allen, ODU professor of political science and geography. Next, the group toured the Surrey Crescent and Myrtle Park area where homes have been elevated.

"The elevation of the first-floor living space several feet above the estimated 100-year flood plain is one response to encroaching water and increased recurrent flooding," Behr said. "The risk reduction relative to the cost of elevation is one of the areas under study at the University."

The tour concluded with a visit to a shoreline restoration taking place along North Shore Road adjacent to the Hermitage Museum, an effort that will increase submerged aquatic vegetation and enhance water quality.

"This was a great opportunity to showcase much of our work, which has already yielded positive returns in terms of new partnerships and numerous collaborative, funded research projects," Behr said. "The group was very interested in our recently established Institute for Coastal Adaptation and Resilience (ICAR), which has been actively engaging local, state and federal officials to promote awareness of the quality research underway across the campus."