Naval Academy Increasingly Affected by Rising Tides, Superintendent Says

The U.S. Navy Flight Demonstration Squadron, the Blue Angels, fly over the U.S. Naval Academy commissioning ceremony May 20, 2020. The academy's waterfront is being affected by rising sea levels. Video still by U.S. Navy / Petty Officer 1st Class Jess Gray.

WASHINGTON – The waterfront of the U.S. Naval Academy is more frequently being affected by rising sea levels, the academy's superintendent said.

Vice Adm. Sean Buck, testifying March 2 before the House Appropriations Committee's Defense subcommittee, said that rising sea level is causing more high-tide flooding of the academy's campus.

The Naval Academy, in Annapolis, Maryland, is located at the estuary of the Severn River at the Chesapeake Bay.

"We're built on a lot of reclaimed land, Buck said. "We're at

the confluence of one of Maryland's major rivers and the Chesapeake Bay, and we're also affected throughout the entire day, 365 days of the year, by the prevailing winds that have existed for centuries, easterly and southeasterly winds which, when you combine that weather with sea-level rise, with subsidence, which is pretty significant in the Chesapeake Bay area … we are continuously experiencing negative effects of high tide almost on a regular basis."

Buck said in the entire decade of the 1990s the academy experienced 41 events of high-tide flooding.

"Now, we're experiencing 41 instances of high-tide flooding per year," he said. "As we look at all of the projections from all of the science, and those who are looking at this, especially on the East Coast looking at it for naval infrastructure, it is projected by 2050 that we will see this high-tide flooding negative effect every single day of the year."

Buck said some of the effects of the flooding are flooded-out roads – including commuting routes – parking lots, and entrances and exits to some of the campus buildings.

Buck said his predecessor formed the U.S. Naval Academy Sea-Level Rise Advisory Council in 2015, comprised of Naval Academy scientists and engineers and stakeholders in the Naval academy team, the city of Annapolis, and the state of Maryland. He said the council is informed by the Army Corps of Engineers and other experts who are working on a study expected to be completed by the end of 2021 "to help us create a military installation resiliency plan.

"They are going to present to us different courses of action – engineering solutions – that we can take around the yard," he said, noting the solutions might include building up sea walls, creating earthen berms, raising the level of roads and upgrading storm water drainage.