RESILIENCE OF PORTS AND THE MARINE TRANSPORTATION SYSTEM

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Abstract
In the past several years, the U.S. Marine Transportation System (MTS) has been tested like never before and the discussion of resilience as a necessary management paradigm has moved from theoretical to pragmatic. The U.S. Army Corps of Engineers (USACE) has always been on the forefront of ensuring that our nation's coasts and waterways remains intact, and the Engineer Research and Development Center (ERDC) has supported that effort through a diverse set of research projects. These civil works projects span multiple missions including flood risk management, environmental restoration, emergency management, and navigation. In her presentation, Ms. Chambers will discuss an overview of the USACE missions and the ERDC research that supports the USACE missions (related to resilience), an overview of how the USACE approaches the concepts of resilience, and some specific examples of how ERDC is using both analytical and collaborative approaches to learn from past disruptions to the MTS and improve its resilience in the future.

Katherine Chambers is a research scientist with expertise in analytical approaches to resilience and the marine transportation system. For the past 6 years, she has focused on studying the concepts of resilience as they pertain to the marine transportation and emergency response business lines of the U.S. Army Corps of Engineers. She is an active member of PIANC Working Group 195 focused on Ecosystem Goods and Services, and the chair of PIANC Working Group 193 on Marine and Inland Waterways Resilience. She is a Young Member of the Transportation Research Board (TRB) Ports and Harbors Committee, and co-leads an interagency team entitled the Resilience Integrated Action Team as a part of the U.S. Committee on the Marine Transportation System. Katherine has an MS from Purdue University’s Ecological Science and Engineering Interdisciplinary Program. Katherine Chambers lives in Washington, D.C. where she can be found on a hiking trail or in a museum.