

Coastal flooding research funded

December 1, 2019



An Oregon State University anthropologist has been awarded \$750,000 by the National Science Foundation to research issues facing coastal communities exposed to repetitive flooding, and the effectiveness of federal disaster response policies.

“Communities are facing relocation, yet current disaster-response relocation policies favor solutions that focus on nuclear families and individual households, Elizabeth Marino, an assistant professor in the OSU College of Liberal Arts, said. “These policies and solutions ignore the distinct needs of tight-knit and interdependent indigenous communities, such as those in rural Alaska, or other communities with a strong sense of social cohesion.”

Marino will lead a three-year study to investigate options for communities and individuals in Alaska and throughout the U.S. that face repetitive flooding. The work will also examine how communities have used relocation as an adaptation to increasing risks from frequent natural disasters.

Over the past five years, disaster costs nationally have doubled, largely due to severe storms and flooding. Rising coastal waters are especially challenging for the 31 Native American communities in Alaska that depend on the ocean as an economic and cultural resource.

As a result of rising sea levels, these communities face the increasing possibility that they must relocate to protect themselves from inundation, Marino said. Twelve of these communities have requested relocation assistance from the federal government, but Marino said have not yet been relocated.

Across the U.S., repetitive flooding of private properties makes up 2% of claims made through the National Flood Insurance Program. Yet such flooding comprises more than 25% of the total claims made.

Marino said she hopes that by mapping political and economic costs, and incorporating historical examples and policy analysis, her team will find solutions that can be applied both in Alaska and to communities throughout the country that face flooding.