Virginia Islanders Could Be U.S. First Climate Change Refugees

Flooding and erosion may not allow island to stay above water

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(revised version)

As flooding and erosion have become more common on the Chesapeake Bay island in recent decades, the tour director avoids certain roads at least 15 times in the spring and fall during tidal events on her regular work route. When she was a child, those same roads rarely flooded or just had small puddles. While it may seem like a minor inconvenience to some, tidal events keep her from driving past some of the most beautiful parts of the island, which affects income from tourism. Flooding has also affected the daily life of Tangier residents with, for example, many homes now being closer to the ocean because of erosion.

Moreover, a new study has suggested that the entire Tangier Islands group might simply disappear within 100 years if sea levels continue to rise at their current rate. Tangier Island—the only offshore island in Virginia’s waters with residents—may need to be abandoned within about 50 years, it says. The Tangier Islands “are running out of time, and if no action is taken, the citizens of Tangier may become among the first climate change refugees in the continental USA,” the paper states.

The 1.2-square-mile island relies on the crab industry and is small enough to walk around in one day. The island is a popular tourist destination, too, lying just 20km from Virginia. Due to the island’s isolation, the residents speak a unique English dialect held over from European settlers in the 1700s: “Yards” is pronounced yar-ards, for example.

**Help on the Way (Maybe)**

By examining old maps from the 19th century and more recent aerial photographs, the researchers determined that more than 66 percent of the islands’ area has disappeared since 1850. The two main factors behind the loss of land—erosion and sea-level rise—are related to climate change or are expected to worsen from it. In addition, groundwater pumping makes the situation worse as the land slowly sinks.

Against this worsening situation, however, various plans exist. Tangier currently has a 1-mile sea wall along its western shore that has been effective, and the sea wall might be extended. Building sand dunes and an offshore breakwater system might also be effective, as would a floodgate to protect areas hit the hardest. Another option is the construction of a jetty at the entrance of Tangier Island’s harbor to protect it from waves.

There are many such plans, but like many federal water projects, they are awaiting money.

**The Local People**

Tangier residents are concerned, of course, and very willing to accept federal help to combat the issue. One such option is a proposed law called the “Virginia Coastal Protection Act” that would help affected areas like Tangier. It would generate more than $100 million a year for flood protection, along with supporting energy efficiency and clean energy programs. The bill has strong support in the Virginia government and will likely become a law.

For now, residents of Tangier tend to be “concerned” about the land loss but not extensively worried. “A lot of Tangiermen are ‘today thinkers.’ Sometimes people say, ‘Well, it’s not going to affect my life,’” she said. Instead, many people talk about flooding in practical terms, noting inconveniences such as flooded roads to the grocery store and their shrinking yards.







