

**Sponsored by the Ecology &
Evolution Department @ SBU**

**“Lessons from
Venice Lagoon
on addressing
coastal climate
change
vulnerability”**

Dr. Elizabeth Watson

LIVING WORLD

LECTURE SERIES

• **FREE PARKING**



**Stony Brook
University**



**Monday, September 11th @ 5:00 pm
Student Activities Center, Rm 302**

Abstract: Low-lying coastal areas in the US Northeast are vulnerable to climate change due to increasing frequency and intensity of storms in combination with accelerated sea level rise. This vulnerability is in some cases exacerbated by coastal development which increases climate change exposure and sensitivity in combination with losses of natural ecosystems which might attenuate impacts of storm surge or flooding. In light of these pressures, many in North America are looking towards lessons from other low-lying areas, such as Venice or the Netherlands, in order to understand how to live sustainably with water. In this lecture, we will focus on how Venice can act both as a living laboratory and cautionary tale. The history of the Venetian lagoon reflects continual modification over both historic and recent times, from the development on marshlands, a reduction in the number of tidal inlets from eight to three, the diversion of tributary rivers from the Venice lagoon, and more recently subsidence linked to groundwater overdraft and the construction of mobile barriers at its inlets to constrain flooding. These actions have created the current landscape in Venice as it experienced today, as a World Heritage site, which proudly continues the history of the Venetian republic, but which is also experiencing depopulation, and an uncertain future in light of climate change. We consider the tradeoffs that exist between flooding, the sustainability of coastal ecosystems and human habitation, and explore what parallels might exist between Venice and coastal New York.

Bio: Dr. Beth Watson is a new faculty member in the Department of Ecology and Evolution at Stony Brook University. Watson's work focuses coastal ecosystem restoration and climate change adaptation, especially related to salt marshes. Watson received a master's and PhD in geography from UC Berkeley, and prior to coming to Stony Brook, worked as a research scientist for the US EPA, and as a faculty member at Drexel University in Philadelphia where she held a joint position at the Academy of Natural Sciences, a natural history museum. Watson was a post-doctoral researcher (2007-2008) and Fulbright Scholar (2019) at CICESE, a research institute in Baja California, México, and cares about preparing students to confront the challenges brought by climate change, through activities that span research, teaching, and service.