

# COASTAL HAZARDS, CLIMATE CHANGE AND RESILIENCE



Department  
of State

## Understanding Coastal Hazards, Climate Change and Resilience

### *Coastal Hazards*

Coastal hazards, like flooding and erosion, are naturally occurring processes and events. Coastal hazards present risks when coastal communities do not acknowledge and address these hazards. Storms, extreme precipitation, sea level rise and hurricanes all can lead to flooding, which is the most common natural disaster in the United States.

### *Climate Change*

Climate change will have effects on the natural and built environment, with likely impacts to the landscape, water resources, infrastructure, public health and safety, and natural communities. These impacts can be positive or negative, with some systems better able to adapt to impacts than others. Climate change will likely intensify coastal hazards. Proactive planning to reduce risk can help communities be better prepared for the next hazardous event while also guiding more adaptive development in safer locations.

### *Resilience*

Resilience is the ability of a system to withstand shocks and stresses while still maintaining its essential functions. Planning to become more resilient is based on understanding and managing risk. Reducing risk is a shared responsibility across levels of government as well as neighborhoods and individuals.



*The impacts of severe coastal hazards.*

## The Department of State's Role

The Department of State (DOS) can provide guidance on risk assessment and preparing management and resilience plans. Coastal Resilience Plans can be a component of a Local Waterfront Revitalization Program (LWRP). DOS offers funding to address risk and undertake resilience planning efforts through its Environmental Protection Fund (EPF) LWRP solicitation. DOS encourages neighboring communities with shared coastlines to work together in preparing regional management plans.

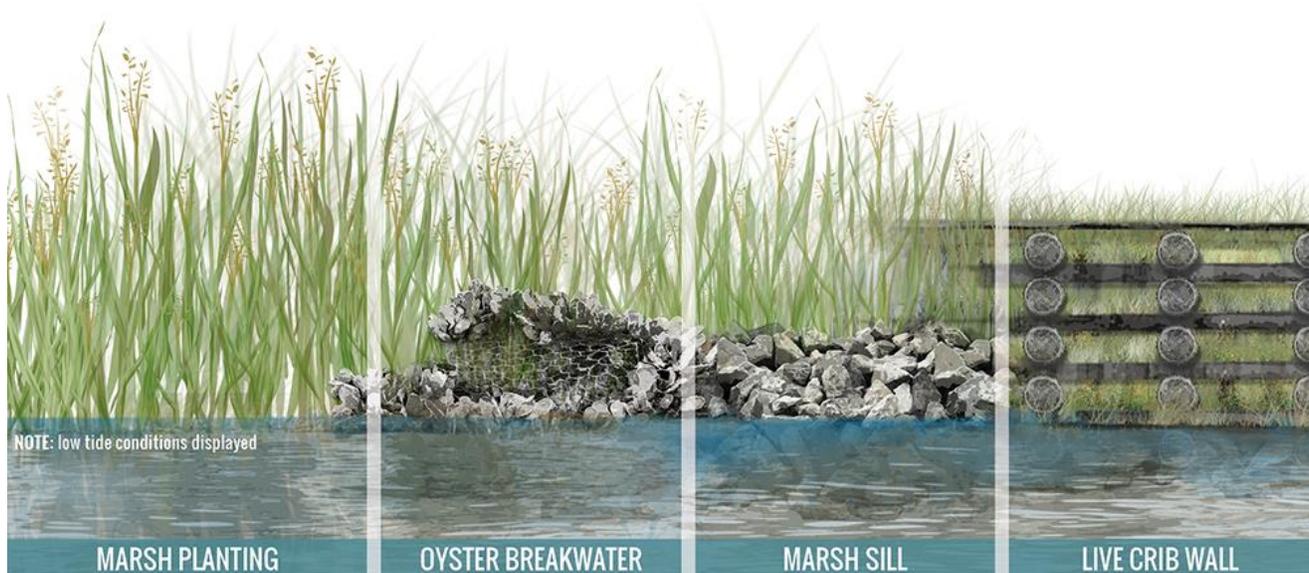
DOS works collaboratively with other state agencies to promote understanding of risk and resilience in New York. To that end, DOS played an active role in development of guidance for the Community Risk and Resiliency Act, signed into law by Governor Cuomo in 2014. The Act directs certain permitting and funding programs to consider the physical risk of climate change due to storm surge, sea level rise, and flooding.

## Unit Goals & Priorities

DOS's Climate Change and Resilience Unit provides technical assistance to waterfront communities as well as other agencies and organizations to facilitate a better understanding of coastal hazards, risk, and climate change impacts. Goals of the unit include:

- Offer alternative shoreline management solutions, such as living shorelines, as a more resilient and adaptable approach to shoreline stabilization
- Promote conservation of natural features and processes
- Bolster community understanding of risk on the landscape
- Encourage resilient land use
- Develop training, educational and outreach material

## LIVING SHORELINE EXAMPLES FOR NEW YORK COMMUNITIES



## Additional Information

NYS DOS OPDCI and Climate Change and Resilience:

<http://opdqig.dos.ny.gov/#/focus/resilience>

Coastal Hazards:

<https://www.dos.ny.gov/opd/programs/coastalHazards/>

Sources of Assistance:

<https://www.dos.ny.gov/opd/programs/coastalHazards/planning.html>

New York Climate Science Clearinghouse:

<https://nyclimatescience.org>

### Contact Information:

**New York State Department of State**

**Office of Planning, Development and Community Infrastructure**

99 Washington Avenue, Suite 1010, Albany, NY 12231

Office: (518) 474-6000

[www.dos.ny.gov](http://www.dos.ny.gov)