

A Local Government Guide to the Chesapeake Bay

PREPARING YOUR COMMUNITY FOR WATER EXTREMES

A Local Government Guide to the Chesapeake Bay is an eleven-module series created to support decision making by local officials. As a local leader, your decisions set the course for your community. Your actions determine the health and vitality of your jurisdiction, as well as that of local waterways and the Chesapeake Bay. You can achieve win-win outcomes by prioritizing local economic development, infrastructure resiliency, public health, and education while also protecting your environment. This fact sheet accompanies a module about climate resilience, including tools that you can use to prepare your community for flooding and drought.

CHANGING CONDITIONS

Flooding is not a new problem in the Chesapeake Bay watershed, but it is one that is intensifying. At the same time, drought is increasing across the region. As the climate changes, local decision makers need public support and resources to prepare for, manage, and reduce local flooding and drought impacts. This problem is accelerating and there is a cost to not taking action – now is the time to prepare your community.



The cost of drought events averages over **\$9 billion** per year in the United States¹. Flooding cost the agriculture industry **\$752.6 million** the watershed states from 1995-2020². Average annual flood insurance cost ranges from **\$629 to \$1390** in the watershed states³.



Drought increases the chances of wildfires with health complications from smoke inhalation. Drought also decreases access to clean water. Flooding endangers lives and can cause water contamination. Flood damage is also a costly burden for our community's most vulnerable populations.



Floodplains in the future will be larger than they are today, endangering more houses and infrastructure. Because rainfall is expected to increase, even new buildings will be vulnerable to flooding damage unless design specifications are updated.



Schools can be a partner in preparing your community for water extremes. They are potential implementation sites for practices like rain gardens as well as educating the next generation of environmental stewards.

¹[National Integrated Drought Information System](#)

²[Environmental Working Group](#)

³[Forbes](#)

CLIMATE RESILIENCE

Climate resilience is the ability to anticipate, prepare for, and respond to hazardous events, trends, or disturbances related to climate. Being resilient to changes in climate can include:



Understanding your community's exposure.



Assessing your vulnerability and risk.



Investigating your options.



Prioritizing and planning.



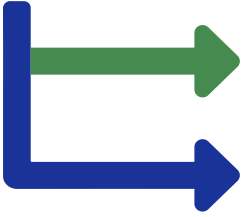
Taking action.



Photos by W. Parson (Chesapeake Bay Program)

PROTECT YOUR COMMUNITY

WHAT YOU CAN DO



Adopt a resilience plan in your community. View a [list of resources](#) compiled by the Chesapeake Bay Program Climate Resiliency Workgroup and read [this one-pager](#) on resilience strategies.



Consider resilience in all future planning. Make sure that comprehensive plan updates include resilience as a cornerstone.



Start safety and preparedness campaigns to encourage property owners to get flood insurance and explain the risks of flash flooding.

A FEW RESOURCES

Beyond this module, here are a few other resources you may find useful.

US Climate Resilience Toolkit

<https://toolkit.climate.gov/>

Find and use tools, information, and subject matter expertise to build climate resilience in your community.

FEMA Risk Rating 2.0

<https://www.fema.gov/flood-insurance/risk-rating>

Review the FEMA website for information on flooding and insurance, including the updated Risk Rating 2.0 system used to calculate flood insurance premiums.

EJ Screen Chesapeake

<https://gis.chesapeakebay.net/cbpejscreen/>

Discover which portions of your community are most vulnerable to climate impacts.

Wetlands Watch Sea Level Rise Adaptation Guide

<https://bit.ly/SLR-adaptation-guide>

View a Virginia-specific guide of existing programs and authorities that you can use to take action on flooding and sea level rise.

NOAA Data Snapshots

<https://www.climate.gov/maps-data/data-snapshots>

View and use an up-to-date archive of freely available climate maps – a great resource for websites or presentations.

American Flood Coalition's Resources

<https://floodcoalition.org/resources/>

Find and use resources like an adaptation guide, disaster handbook, and flood funding finder.