

Maryland is Increasing Resilience to Climate Change

How the state is protecting you

Even as Maryland leaders and communities take action to limit climate change, we are already feeling its impacts, and they are likely to increase in the days ahead. We need strategies to help us address current impacts and prepare for the future effects of climate change, such as increased flooding and more frequent extreme temperatures and weather events.

The Adaptation and Response Working Group of the Maryland Commission on Climate Change (MCCC) recommends solutions to reduce Maryland's vulnerability to climate change, including short and long-term measures that both state and local governments can take to plan for climate change.

Maryland's balanced approach to climate change includes improvements to the economy, new and retained jobs and continued progress in reducing greenhouse gas emissions.

HOW DOES CLIMATE CHANGE IMPACT MARYLAND?

Climate change is already affecting Maryland in a variety of ways, including:

- More frequent extreme events such as heat waves, drought, storms, flooding and forest fires.
- Increased risk for human health impacts, such as heat-related stress, asthma and the spread of infections such as Salmonella and Lyme disease.
- Accelerated erosion and sea-level rise along the state's shoreline and coast.
- Soil quality, crops and agriculture affected by extreme rain events, droughts and exposure to saltwater.
- Impacts of increased temperature and extreme rain events on aquatic life in the Chesapeake Bay.

RECOMMENDED SOLUTIONS AND ACTIONS

CHALLENGE #1

THREATS TO GROWTH AND DAMAGE TO INFRASTRUCTURE FROM FLOODING OR SEA-LEVEL RISE

SOLUTIONS

Lessen impacts to existing built environments, as well as to future growth and development

Increase resilience of infrastructure and natural systems in communities

ACTIONS

Protect habitat and infrastructure. Example: The Maryland Department of Transportation conducted a vulnerability assessment to study and plan for the effects of severe weather on Maryland roads. The Maryland Transportation Authority, Maryland Transit Authority, Maryland Port Authority and Maryland Aviation Administration have all conducted similar assessments to identify risks, facilitate planning and protect infrastructure.

Consider the impacts of coastal threats when siting and designing state development projects. Example: The state continues to review regulations to minimize coastal impact and sea-level rise.

CHALLENGE #2 MULTIPLE PRESSURES ON NATURAL RESOURCES AND ECOSYSTEMS

SOLUTIONS

Restore and protect Maryland's natural resources and resource-based industries

Identify and work to restore habitats at risk

ACTIONS

Strengthen communications and share existing best management practices.

Example: Five Eastern Shore counties, three municipalities, four state agencies and four academic institutions teamed up with the Eastern Shore Land Conservancy to discuss data and share adaptation best practices and then developed planning and education tools.

Enhance resiliency of coastal habitats. Example: Maryland's Coastal Resiliency Assessment, which determines where natural habitats have the greatest potential to reduce risk for people, will be used to prioritize state conservation and restoration projects.

CHALLENGE #3 FINANCIAL AND ECONOMIC EFFECTS OF FLOODING, HEAT WAVES AND EXTREME WEATHER

SOLUTIONS

Shift to sustainable investments and avoid financial and economic impact

ACTIONS

Develop and put into place long-range plans to minimize the economic impacts of climate change.

Example: The Maryland Department of Natural Resources Working Waterfronts Program provides financial, planning and technical assistance to local governments in Maryland's coastal zone to identify needs, opportunities and constraints along the waterfront, while accounting for the impacts of coastal hazards such as flooding.

CHALLENGE #4 NEGATIVE CONSEQUENCES FOR HUMAN HEALTH FROM EXTREME WEATHER

SOLUTIONS

Enhance preparedness to protect human health, safety and welfare

ACTIONS

Conduct vulnerability assessments to gain a better understanding of risks and be proactive.

Example: The Maryland Department of Health and the MCCC are working closely with federal, state and local agencies to assess and prepare for the public health consequences of extreme heat and precipitation events, including heart attacks, asthma and infections.



Building a living shoreline in Maryland

WHAT CAN COMMUNITIES DO TO ADAPT TO CLIMATE CHANGE?



- Take action now to protect human habitat and infrastructure from future risks.
- Minimize risks and shift to sustainable economies and investments.
- Guarantee the safety and well-being of Maryland's citizens in times of foreseen and unforeseen risk.
- Retain and expand forests, wetlands and beaches to protect us from coastal flooding.
- Give state and local governments the right tools to anticipate and plan for sea-level rise and climate change.

For more information, including meeting calendars and contact information, please visit the Maryland Commission on Climate Change website at: www.mde.maryland.gov/mccc