

Climate Initiatives of the Adaptation and Resiliency Working Group of the Maryland Commission on Climate Change

Urban Land Institute - Baltimore
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Vision

In a sustainable Maryland, we recognize that the health of our society and our economy are dependent on the health of our environment. Therefore, we choose to act both collectively and individually to preserve, protect, restore, and enhance our environment for this and future generations.

Mission

The Department of Natural Resources leads Maryland in securing a sustainable future for our environment, society, and economy by preserving, protecting, restoring, and enhancing the State's natural resources.

Adaptation in Maryland



- Commissions
- Planning
- Assessment
- Data and Tools
- Community Support
- Funding



Maryland Commission on Climate Change



Maryland Commission on Climate Change (MCCC)

Working Groups

Steering Committee



Mitigation

Adaptation &
Resiliency

Scientific &
Technical

Education,
Communication &
Outreach



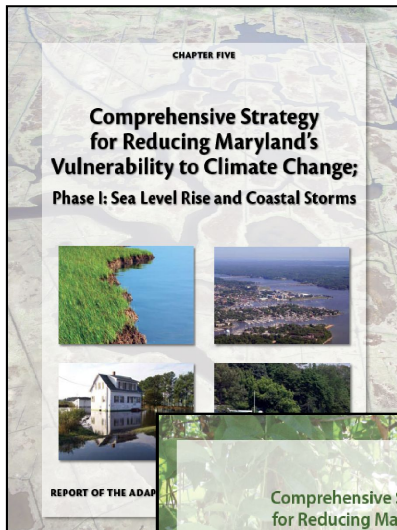
Adaptation & Resiliency Working Group



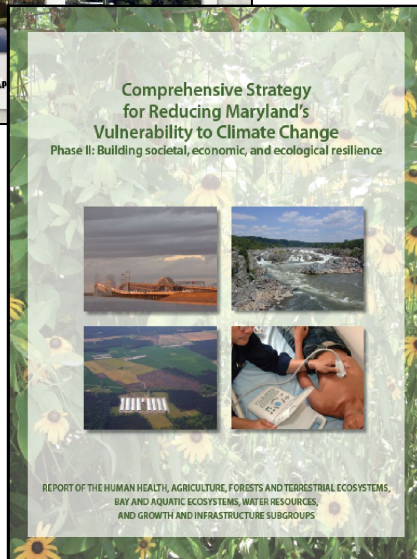
ARWG supports the charge of the Commission by developing a comprehensive strategy for reducing Maryland's climate change vulnerability, providing state and local governments with tools to plan for and adapt to the more extreme weather and rise in sea levels anticipated as a consequence of climate change.



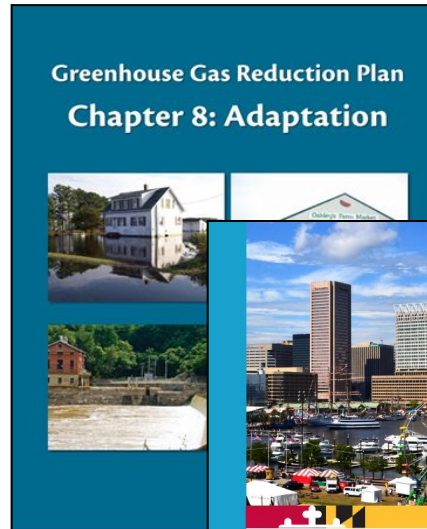
Adaptation Planning



2008



2011

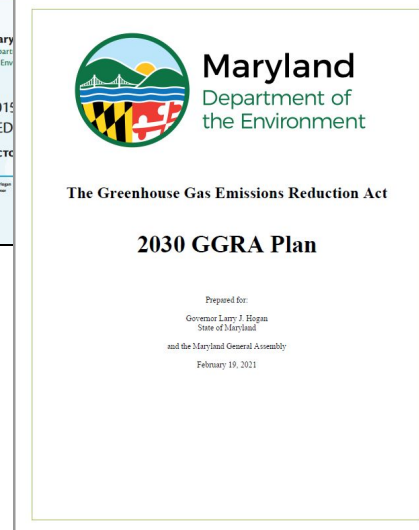


2012

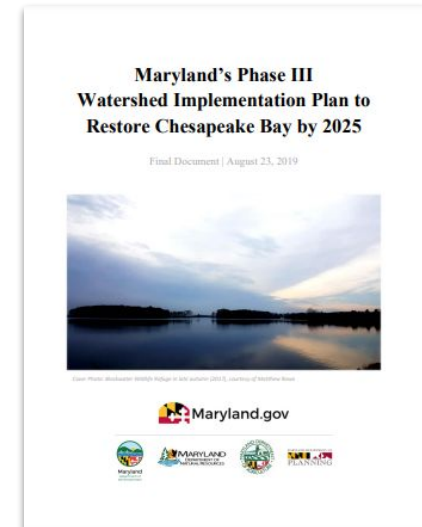


2015

2021



2019



2022 ARWG Priorities



1. Maryland Climate Adaptation and Resilience Framework
2. Advance Saltwater Intrusion Plan Recommendations
3. Building Capacity to Compete for Natural Infrastructure Resiliency Funds
4. Environmental and Climate Justice
5. Maryland Coastal Climate Adaptation Report Card

[2021 MCCC Annual Report](#)

Adaptation Framework

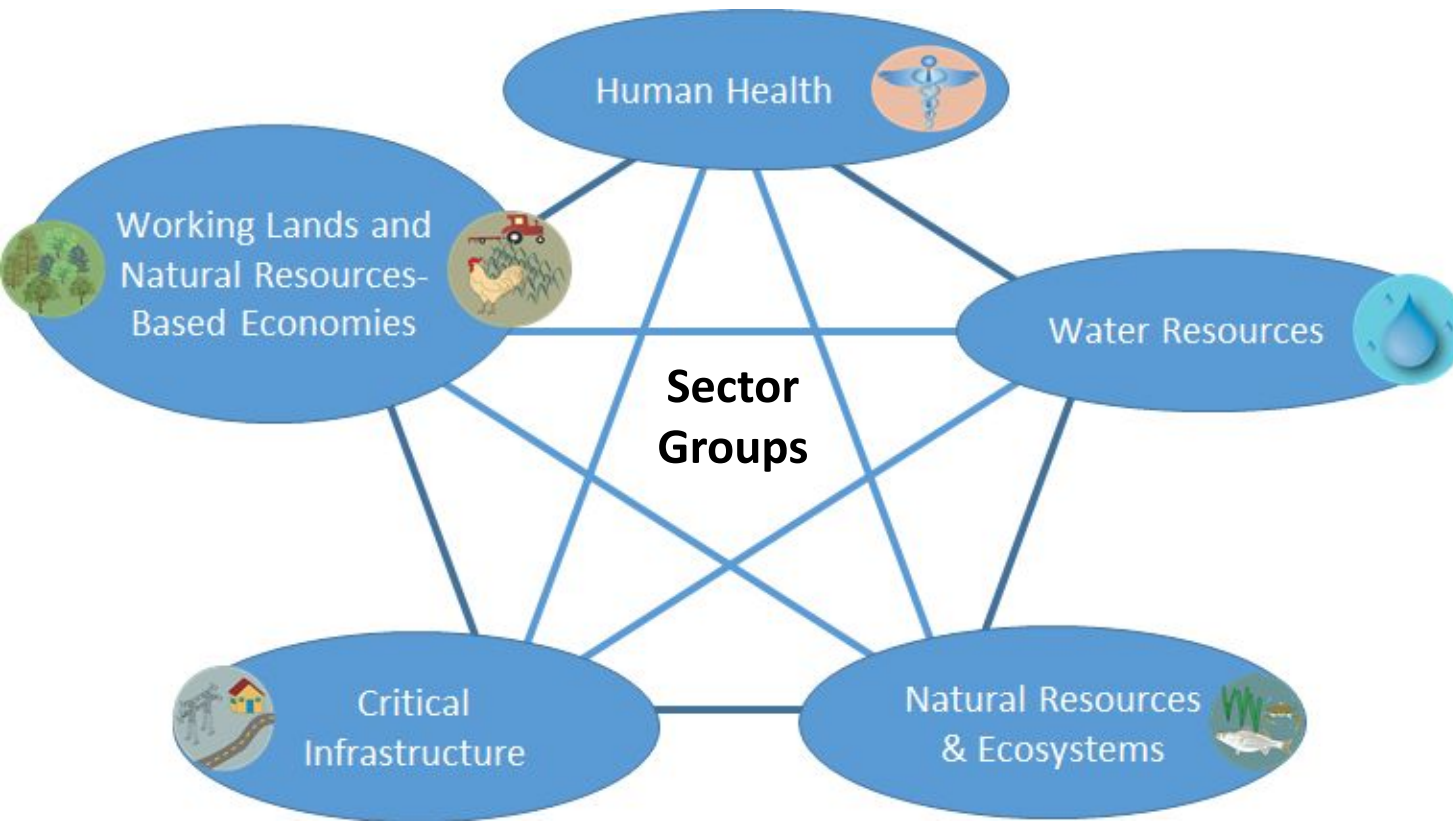


Overarching Focus Areas

Environmental Justice & Equity

Resilience-Building-Jobs & Funding

Local Government & State Service Delivery



Framework Focus Areas



1

Diversity and Inclusion

Ensures underserved communities are given the assistance needed to prepare for and adapt to the impacts of climate change.

2

Local Government

Identifying local government needs and capacity. Structuring state service delivery to meet local needs and support action.

3

Climate Jobs & Training

Identifying and investing in climate-related job and training needs.

Natural Resources



Developing adaptation strategies to protect natural diversity, ecosystems, and habitats to ensure continued vitality of the state's natural resources to provide recreational opportunity, sustenance, clean air and water, and cultural and community heritage.



- Understanding disturbance events to better prepare
- Enhancing adaptive capacity of resources to withstand long-term environmental changes
- Management and regulatory considerations
- System-wide integration of efforts



Working Lands



Working Lands and Natural
Resources-Based Economies
encompasses:

- *Forestry*
- *Agriculture*
- *Wetlands*
- *Fisheries*
- *Blue Carbon*
- *All resources-based
economies*





Human Health



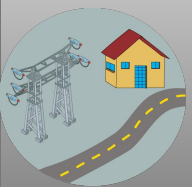
Addresses the direct and indirect impacts to human health through individual and systems level strategies.

MD DNR Park Equity Mapper

A decision-support tool to support the expansion of park space in Maryland.

“Parks provide opportunity for physical activity, stress reduction and social interaction and are fundamental components of healthy, vibrant communities. Promoting park equity is one way to ensure communities have equal opportunity to a healthy environment”



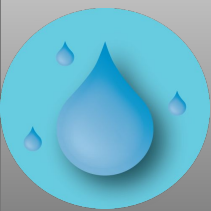


Critical Infrastructure



Addressing the needs of critical infrastructure to ensure continuity of operations while increasing affordability, accessibility and adaptive capacity in the face of climate impacts.





Water Resources



Addressing the needs of all water resources (quality and quantity) in Maryland. Through strategies aimed at increasing adaptive capacity, sustainability and management of the resource.

Approach highlights:

- Water Quality
- Water Supply
- Water Hazards



Advance Saltwater Intrusion Plan Recommendations



1. Develop a report that presents specifics for how to establish and implement conservation easements in Maryland that facilitate transitional land uses for salt-impacted farmland
2. Develop the first phase of a statewide wetland adaptation plan, which would include marsh migration, and in some cases, measures to protect high priority wetlands in place, in response to sea-level rise inundation and salinization



Increase Ability to Compete for Natural Infrastructure Funds



The Comprehensive Water Quality and Climate Resiliency Portfolio.

A suite of restoration and conservation projects that:

- **Works together** synergistically and avoids one-off projects
- **Optimizes** resiliency benefits and leverages important habitat, water quality and GHG mitigation gains.
- Allows longer budgeting timeframes, beyond a one-year cycle, providing **fiscal certainty**
- Generates **new funding and financing opportunities** with other partners (MDOT, MDE, MEMA, DHCD, Army Corps, USFWS, NOAA, Private SEctor, etc.)
- Provides opportunity to better **integrate green and grey infrastructure** approaches

Environmental and Climate Justice

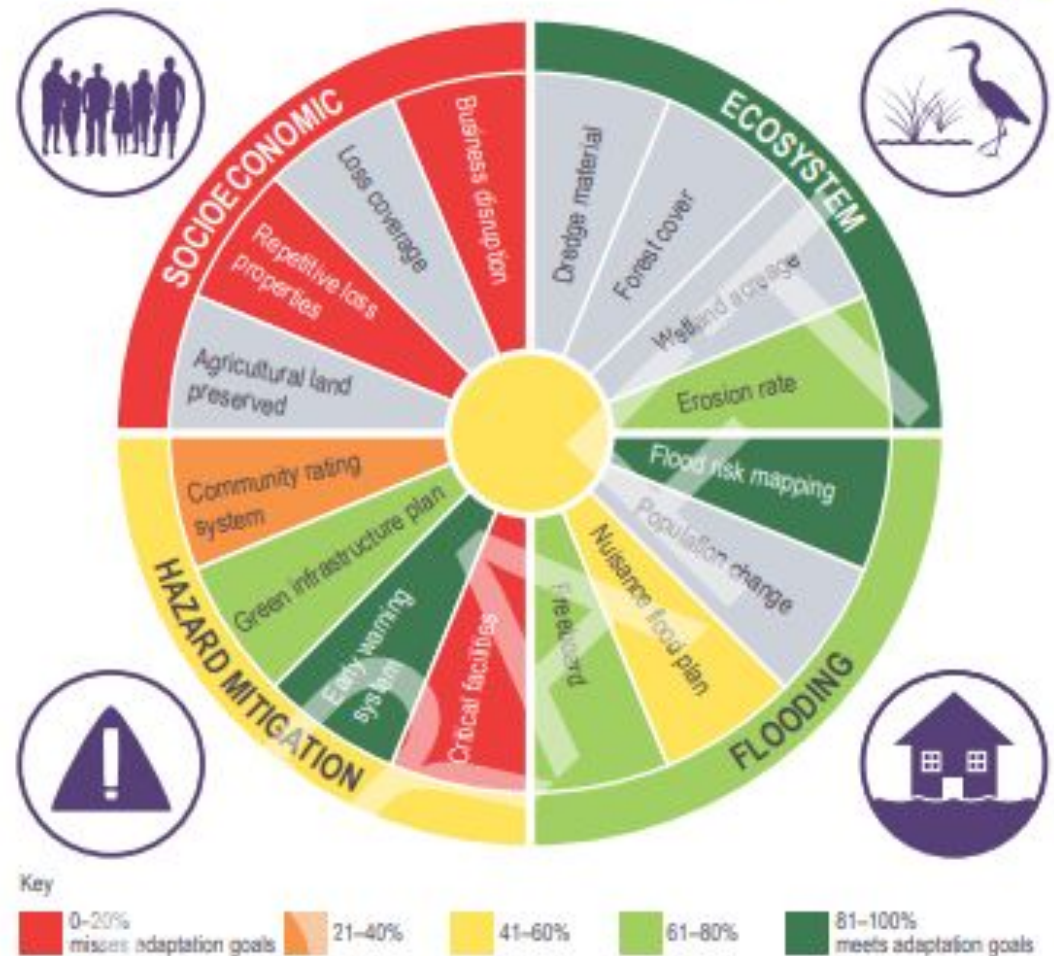


- Coordination with other MCCC working groups and engaging environmental justice partners, including the Commission on Environmental Justice and Sustainable Communities (CEJSC),
- Ensure thorough and meaningful integration of environmental justice, diversity and inclusion into all of our programming and initiatives.
- Ensure that vulnerable, underserved and under-resourced communities are given assistance and resources to prepare for and adapt to the impacts of climate change.

Adaptation Indicators

- MCCC asked for a way to measure progress on adaptation
- UMCES-IEN led the effort in partnership with DNR and ARWG
- Final Maryland Coastal Adaptation Report Card will be released by the end of 2021.

Maryland coastal adaptation progress is **good/fair**



Coast Smart Council



“Chapter 415 of the 2014 Laws of Maryland (HB615) established the Coast Smart Council within the Maryland Department of Natural Resources. It is comprised of private sector and state agency membership, established to develop the Coast Smart Siting and Design Criteria to address sea level rise and coastal flood impacts on state funded capital projects planned and built by units of state government.”

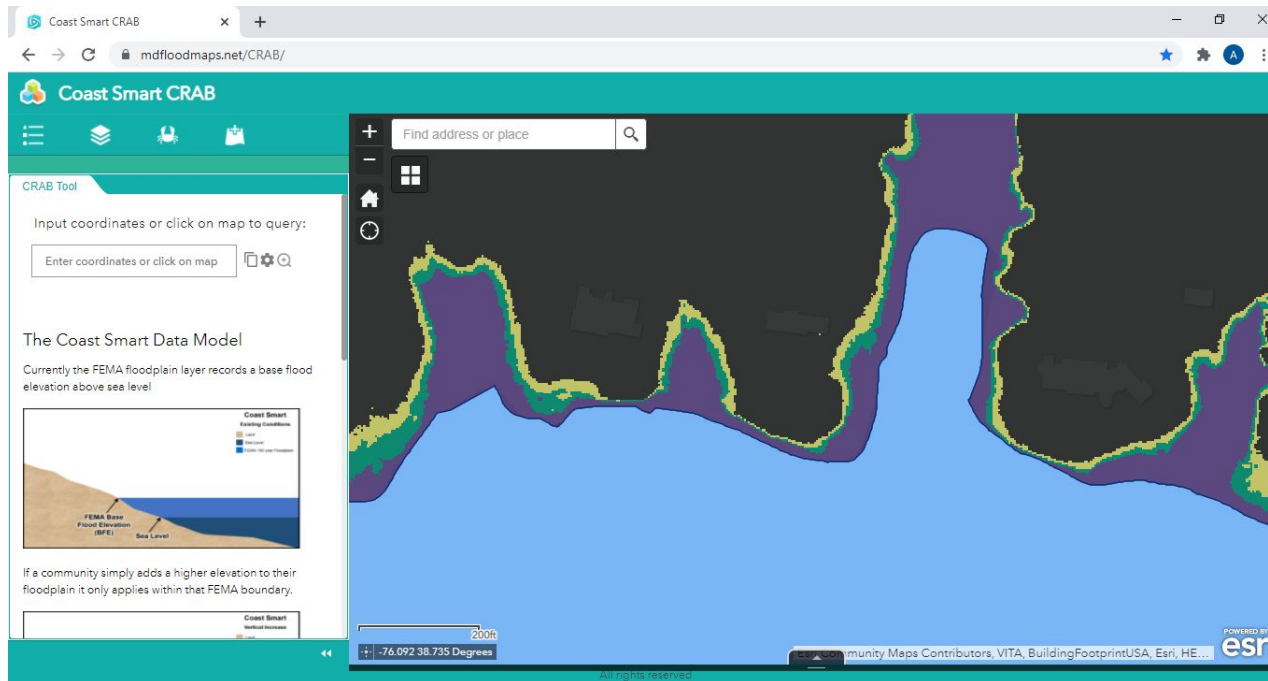
Current applicability criteria of the Coast Smart Construction Program

1. Project cost of \$500,000 or more
2. A state or local capital project
3. Construction or reconstruction of a structure
4. Construction of a highway facility
5. Located waterward of the Coast Smart Climate Ready Action Boundary (CS-CRAB)

CS-CRAB



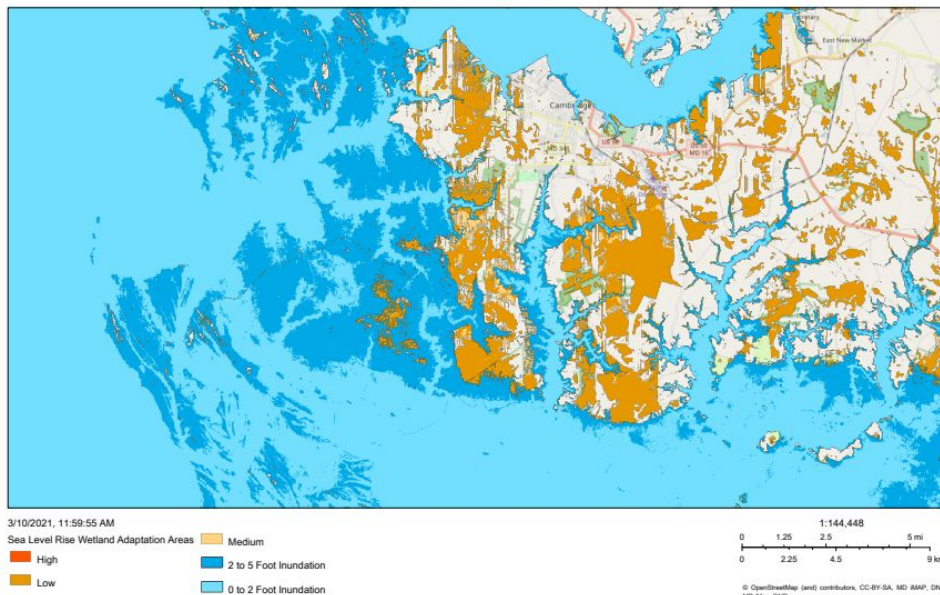
The Coast Smart Climate Ready Action Boundary (CS-CRAB) is a data and visualization tool developed for the CSCP to inform siting of state infrastructure projects. The data and visualization conveys resiliency by increasing the floodplain beyond the FEMA 100 year floodplain boundary.



Data and Tools

Maryland Coastal Atlas

Provides an easily accessible platform to view spatial information to inform planning processes and decision making.



Data Layers Available

- BUILD Beneficial Use - ID locations for Dredge
- Coastal Resiliency Assessment
- Floodplain
- Land Use Land Cover
- Ocean Shoals
- Recreational Uses
- Sea Level Rise Vulnerability
- SLR Vulnerable Wetlands
- SLR Wetland Adaptation Areas
- and many more

Questions?