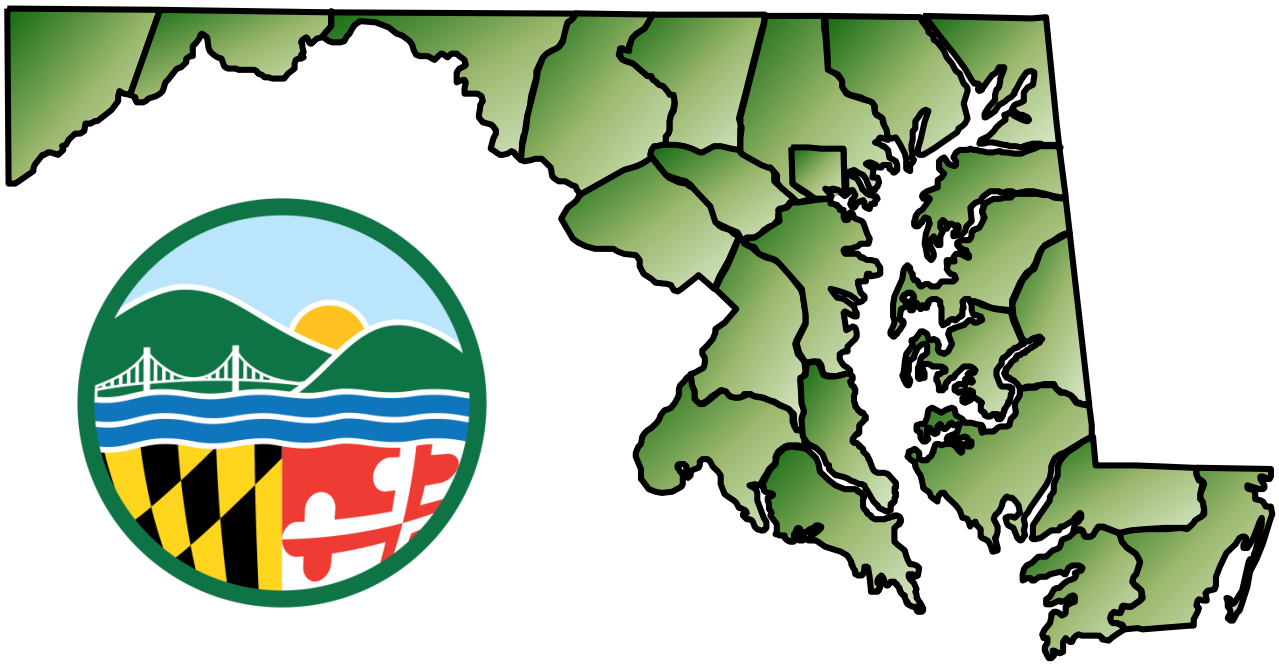
Maryland
Department of
the Environment



MARYLAND DEPARTMENT OF THE ENVIRONMENT

WATERWAY CONSTRUCTION STATUTE

- *Environment Article - Title 5, Subtitle 5*
  - *Regulates changes to the course, current or cross-section of a waterway*
  - *Activities in a waterway or its 100-year floodplain are regulated to:*
    - *Prevent flooding on upstream or downstream property*
    - *Maintain fish habitat and migration*
    - *Protect waterways from erosion*

WATERWAY CONSTRUCTION STATUTE

- *Authorization is required for construction or repair of the following types of projects in a waterway or a 100-year floodplain:*
  - *Dams and reservoirs*
  - *Bridges and culverts*
  - *Excavation, filling or construction*
  - *Channelization*
  - *Changes to the course, current or cross-section of any stream*
  - *Temporary construction (e.g. utility lines)*
  - *Other similar projects*

CLIMATE CHANGE CONSIDERATIONS FOR STATE AGENCIES

➢ *DEFINITIONS*

- *Climate*
- *Climate Resilient Practice*
- *Coastal Hazard*
- *Design Life*
- *Freeboard*
- *Nontidal Wetland Migration Area*
- *Sea Level Rise*
- *Special Flood Hazard Area*
- *State Project*
- *Substantial Damage*

CLIMATE CHANGE CONSIDERATIONS FOR STATE AGENCIES

- *Design and construct new permanent State structures or the reconstruction or rehabilitation of substantially damaged State structures located in Special Flood Hazard Areas with a minimum of two feet of freeboard above the 100-year base flood elevation or document that the Department of General Services has issued a variance from this requirement*

- *Assess other climate resilient practices that address flood hazards, coastal hazards, extreme weather events, sea level rise, and other impacts*

CLIMATE CHANGE CONSIDERATIONS FOR STATE AGENCIES

- *Adhere, to the fullest extent practicable, to the following specifications:*
  - *Avoid construction within areas likely to be inundated by sea level rise or its potential backwater effects on the riverine flooding within the next 50 years*
  - *Avoid locating critical or essential facilities within Special Hazard Areas and protect those facilities from damage and loss of access as a result of the 500-year flood*

CLIMATE CHANGE CONSIDERATIONS FOR STATE AGENCIES

- *A State agency may locate a project on a site where the project would cross or impact a stream or its floodplain, if:*
  - *No practicable alternative exists for the location of the project*
  - *The project is designed, built, and maintained so as to:*
    - *Prevent or accommodate an increase in flood frequency and severity that is attributable to the project*

CLIMATE CHANGE CONSIDERATIONS FOR STATE AGENCIES

- *Accommodate foreseeable changes in hydrologic conditions, including an increase in inundation as a result of weather events and sea level rise*
- *Retain tree canopy to maintain stream water temperature within normal variation;*
- *Provide a natural substrate for the streambed*
- *Minimize adverse impacts on water quality and quantity from stormwater*

CLIMATE CHANGE CONSIDERATIONS FOR STATE AGENCIES

- *Identify, protect and maintain ecological features that buffer a project from the impacts of flood hazards, coastal hazards, extreme weather events, sea level rise or storm surge*
- *Support general climate adaptation practices*
- *Select on-site mitigation measures that enhance, restore, or create ecological features that provide additional protection against flood hazards, coastal hazards, extreme weather events, sea level rise, storm surge or other impacts*

CLIMATE CHANGE CONSIDERATIONS FOR STATE AGENCIES

- *To the maximum extent practicable, preserve, protect, and maintain a potential nontidal wetland migration area within and adjacent to the State project*

- *Consider the likelihood of inundation by sea level rise and its potential backwater effects on riverine flooding over the course of the design life of the State project*

- *Identify and incorporate climate resilient practices in order to avoid or, in the alternative, minimize environmental and structural damage associated with flood hazards, coastal hazards, extreme weather events, sea level rise, and other impacts*

CLIMATE CHANGE CONSIDERATIONS FOR STATE AGENCIES

- *Identify and incorporate climate resilient practices in order to avoid or, in the alternative, minimize environmental and structural damage associated with flood hazards, coastal hazards, extreme weather events, sea level rise, and other impacts*

  - *If a detrimental impact to a potential nontidal wetland migration is unavoidable, demonstrate why that impact is unavoidable*

  - *Provide an assessment of the ecological features on site that could be enhanced, restored, or created to provide additional protection*