



# Maryland

## Department of the Environment

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Boyd K. Rutherford, Lt. Governor

Ben Grumbles, Secretary  
Horacio Tablada, Deputy Secretary

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TO: All WSA Personnel

FROM: Lee Currey, Director, Water and Science Administration *N L C*

Cc: Ben Grumbles, Secretary, Maryland Department of the Environment  
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RE: Water and Science Administration (WSA) Climate Integration Policy and Guidance

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Climate change is water change. As an administration in a public regulatory agency that is responsible for water resources planning and issues water-related permits, we have a professional responsibility to ensure our decisions consider how a changing climate may impact activities that require WSA approval. Some of these climate change factors include sea level rise, storm surge, saltwater intrusion, increased precipitation, ocean acidification and extreme events including floods, heat waves, fires and drought. These can cause secondary impacts like erosion, landslides, harmful algal blooms, degradation of water sources prompting greater treatment needs, increased water demand, increased vulnerability of ecosystems and a decrease in the capacity of State waters to assimilate pollution loads.

Environment Article §2–1301 through 1306, which established the Maryland Climate Change Commission, compels each State agency to *“review its planning, regulatory, and fiscal programs to identify and recommend actions to more fully integrate the consideration of Maryland’s greenhouse gas reduction goal and the impacts of climate change”*. The statute specifically calls for consideration of *“sea level rise, storm surges and flooding, increased precipitation and temperature, and extreme weather events”*.

WSA's Strategic Plan also identifies Climate Resiliency and OneWater management as priority strategic goals across the Administration. The Director's Office is currently working with the Program Managers to account for climate change in WSA's approval processes. WSA's broad statutory authorities and strategic drivers empower and compel all WSA staff to recommend and help integrate climate considerations into program communications, procedures, policies, regulatory and funding decisions. The purpose of this policy memo is to provide general implementation guidance on how to achieve these objectives.

### Guidance for Communications, Policies and Procedures

WSA has many current communication, policy and procedural avenues where we can immediately begin integrating climate considerations into our processes. These include but are not limited to:

1. Planning Documents and Processes – WSA establishes annual work plans as well as longer-term project and restoration plans. Climate considerations should be incorporated into these planning processes to ensure that current and/or projected climate conditions are accounted for;
2. Standard Operating Procedures (SOPs) or Checklists - As part of succession planning, training and consistency in decision-making, Programs should have SOPs for their routine processes. These SOPs are expected to be revisited and updated to include climate considerations referenced above so they become a routine component of our internal processes;
3. Guidance Documents - Many Programs have guidance documents to inform the regulated community about how to effectively meet the intent of our regulations. These guidance documents should be reopened, as feasible, and refined to describe how to best factor climate change considerations into regulated activities;
4. MDE's Web page - Existing WSA web pages provide a critical platform and opportunity to communicate how climate change is being factored into WSA's decision-making and ways the regulated community and general public can be partners in adopting new practices to mitigate the impacts;
5. Program and Permit Fact sheets - WSA Programs and permits often have fact sheets where climate risks and appropriate adaptation responses could be communicated;
6. Correspondence - Routine correspondence, for example general correspondence and approval cover letters, to the public or regulated entities, can be revised to communicate climate change information relevant to the correspondence subject matter; and,
7. Public Meetings, Powerpoint Presentations and Outreach Events all provide opportunities for communicating about climate change.

### Guidance for Regulatory and Grant Decisions, Approvals, and Processes

WSA has many regulatory programs and instruments that can include climate considerations to protect public health, well-being and the environment. These include, but are not limited to:

1. Public Hearings Associated with Regulatory Processes - These provide another outreach avenue for staff to communicate relevant climate considerations associated with regulatory approvals;
2. Permits, Approvals, Licenses and Certifications - Permits assessed as having climate impacts should consider appropriate special conditions or reopeners. Permits and approvals for projects vulnerable to climate impacts should consider appropriate special conditions, reopeners, or caveats to protect public health and safety;
3. Design Standards and Specifications, or other Technical Manuals Incorporated by Reference - Current design standards, specifications and technical materials may have been developed based upon historical averages or other statistical measures that do not adequately capture changing conditions, like precipitation event frequencies or magnitude. These standards and specifications should be updated to ensure they account for more recent hydrologic changes;
4. Regulatory Proposals - As regulations are updated or proposed, staff should consider where reasonable and scientifically defensible climate considerations can be incorporated;
5. Inspections, Compliance and Enforcement Decisions - Including climate considerations into our regulatory procedures allows field staff to determine compliance and appropriate enforcement of those provisions. In addition, during the field inspection process, staff should be looking for evidence of onsite climate impacts or changing conditions, for example accelerated erosion or evidence of high water or flooding, that can be communicated to regulated entities in field inspection reports for awareness and appropriate remedy.
6. Board Licensing, Certification Standards and Guidelines - Licensed operators of various kinds are key assets that implement detailed elements of many WSA regulations. They function as an extension of WSA's resources. As such, WSA has an obligation to ensure they are knowledgeable about emerging best practices in their field pertaining to climate change.
7. Grant Funding Approvals, Guidance and Contracts – WSA provides grant funding to local governments, sister agencies, and other entities. During project selection or prioritization and while developing scopes of work and related contracts, WSA staff should work to incorporate or consider how those projects can help provide climate mitigation or resiliency benefits. Grant application guidelines should also be

updated, where possible, to encourage projects that provide climate cobenefits as part of or in addition to the core project function.

### Guidance for Legislative Proposals or Statutory Changes

Current statutes give the Department broad authority to incorporate climate considerations into regulatory decision-making, but there may be some instances where additional statutory authority is needed to further WSA climate change policy. In these cases, staff should identify and develop needed statutory language for submission through MDE's legislative process. By May of every year, WSA employees should be working through their chain of management to identify priority WSA climate-related legislative proposals for Executive Branch consideration.

### Current Screening Tools for Communicating Climate Change Risk

As permit applications or other approval requests are submitted by regulated entities, several tools are currently available for evaluating climate risks with those projects. For example, Coast Smart criteria utilizes Category II storm surge areas and this data is posted by the Department of Information Technology on their web site at <https://data.imap.maryland.gov/datasets/maryland-archived-storm-surge-hurricane-storm-surge>. Sea level rise inundation maps are also available in this location, which are useful for showing future predicted conditions. These data can be downloaded by the Department's GIS support staff and distributed as a data layer to any GIS user in the Department.

For those Programs that are not fully functioning in GIS, this data layer (Category II storm surge) is available for viewing on <https://mdfloodmaps.net/> using the floodplain tools. Note that the Coast Smart Council is considering replacing the Category II storm surge criteria with a 100 year + 3 foot layer that is under development by the State's National Flood Insurance Program Coordinating Office in WSA's Environmental Assessment and Standards Program. It is anticipated that the 100 year + 3 foot layer will be completed soon for the 17 Maryland Coastal counties, and presented to the Coast Smart Council for consideration. This data layer (100 year + 3 foot) will also be posted on the md floodmaps tool and be made available to GIS users in the Department.

Permit or approval applications screened using these layers provide a mechanism to notify the regulated community that their proposed projects contain climate risks and that appropriate measures should be taken to mitigate project-specific risks (for example, elevation or different siting of structures, alternatives analysis, purchasing of flood insurance). For proposed projects evaluated as having relatively higher climate-associated risks, WSA may consider appropriate special permit or other approval conditions. The Director's Office will help you navigate through these details as they arise, so please feel empowered to engage us in these efforts.