



The State of Maryland

Executive Department

EXECUTIVE ORDER

01.01.2012.29

Climate Change and “Coast Smart” Construction

- WHEREAS, The State of Maryland has the fourth longest tidal coastline in the continental United States and is one of the States most vulnerable to sea level rise – one of the major consequences of climate change;
- WHEREAS, Climate forecasters have predicted that the extreme weather events experienced in recent years are indicative of the likely impacts of climate change that the State of Maryland will face in the coming decades;
- WHEREAS, The State of Maryland has experienced more than one foot of sea level rise over the last century due to the combined forces of regional land subsidence and global sea level rise;
- WHEREAS, The State of Maryland is currently losing approximately 580 acres every year to shore erosion and, alarmingly, thirteen Chesapeake Bay islands once mapped on nautical charts have been lost;
- WHEREAS, In July 2012, the U.S. Geological Survey published research in the journal *Nature Climate Change* documenting that over the last 20 years, sea levels along the 1,000 kilometer stretch of coast running north from Cape Hatteras to north of Boston, which includes the State of Maryland, have risen at an annual rate three times to four times faster than the global average;
- WHEREAS, Future changes in sea level threaten to increase the State of Maryland’s vulnerability to storm events, causing more shore erosion and severe coastal flooding, inundating low-lying lands, submerging tidal wetlands and marshes, and resulting in additional salt-water intrusion and higher water tables;
- WHEREAS, The State of Maryland has approximately 450 existing State-owned facilities and 400 miles of roadways within areas likely to be impacted by sea level rise over the next 100 years;
- WHEREAS, Billions of dollars of investments in public infrastructure will be threatened if the State of Maryland fails to prepare adequately for climate change;

WHEREAS, The State of Maryland must lead by example by implementing sound planning strategies to avoid or mitigate against the most damaging and likely effects of climate change; and

WHEREAS, The State of Maryland must take action now to ensure that State infrastructure investments in vulnerable coastal areas are “Coast Smart” – fiscally wise and structurally sound.

NOW, THEREFORE, I, MARTIN O’MALLEY, GOVERNOR OF THE STATE OF MARYLAND, BY VIRTUE OF THE AUTHORITY VESTED IN ME BY THE CONSTITUTION AND THE LAWS OF MARYLAND, HEREBY PROCLAIM THE FOLLOWING EXECUTIVE ORDER, EFFECTIVE IMMEDIATELY:

A. Definitions. In this Executive Order the following words have the meanings indicated:

(1) “Base flood” is a flood having a one-percent chance of being equaled or exceeded in any given year; the base flood also is referred to as the 1-percent annual chance (100-year) flood.

(2) “Base flood elevation” is the water surface elevation of the base flood in relation to the datum specified on Flood Insurance Rate Maps. In areas of shallow flooding, the base flood elevation is the highest adjacent natural grade plus the depth number specified in feet on the Flood Insurance Rate Map, or at least four (4) feet if the depth number is not specified.

(3) “Freeboard” is a factor of safety that compensates for uncertainty in factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, obstructed bridge openings, debris and ice jams, climate change, and the hydrologic effect of urbanization in a watershed.

(4) “Permanent structure” is a structure installed, used, or erected for a period of greater than 180 days.

(5) “Sea Level Rise Vulnerability” is the susceptibility of a coastal area to seasonally high-tides or prolonged or permanent inundation or submergence due to a future rise in water level.

(6) “Special Flood Hazard Areas” refers to land in the floodplain subject to a one-percent or greater chance of flooding in any given year and are designated by the Federal Emergency Management Agency in Flood Insurance Studies and on Flood Insurance Rate Maps as Zones A, AE, AH, AO, A1-30, and A99, and Zones VE and V1-30.

(7) “State structures” are structures planned and built by State agencies that are partially or fully funded with State monies.

(8) “Structure” means that which is built or constructed; specifically, a walled or roofed building, including a gas or liquid storage tank that is principally above ground, as well as a manufactured home.

(9) “Substantial damage” means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

B. State agencies that propose capital projects for new State structures or the reconstruction or rehabilitation of substantially damaged State structures for inclusion in the State capital budget on or after July 1, 2013, shall consider the risk of coastal flooding and sea level rise to the project and should site and design State structures to avoid or minimize associated impacts.

C. Consistent with applicable law, the Department of General Services shall update its Policies and Procedures Manual for Architecture and Engineering to include guidelines providing that State agencies shall plan construction of all new permanent State structures and the reconstruction or rehabilitation of substantially damaged State structures located in Special Flood Hazard Areas with a minimum of two (2) feet of freeboard above the 100-year base flood elevation, unless the Department of General Services, after consultation with the Department of Natural Resources and the Department of the Environment, determines that a variance from the guidelines is warranted after consideration of the following factors:

(1) The danger that materials may be swept onto other lands to the injury of others;

(2) The danger to life and property due to flooding or erosion damage;

(3) The susceptibility of the proposed structure and its contents to flood damage and the effect of such damage to the State of Maryland;

(4) The importance of the services to the State of Maryland provided by the proposed structure;

(5) The availability of suitable alternative locations that are subject to a lower risk of flooding or erosion damage;

(6) The necessity or benefits of a waterfront location;

(7) The compatibility of the proposed use of the structure with existing and anticipated development;

(8) The need to maintain eligibility or designation as a historic structure as defined by the U.S. Department of the Interior and/or the Maryland Historic Trust;

(9) The safety of access to the structure by passenger and emergency vehicles during a flood;

(10) The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters and the effects of any wave action expected at the site;

(11) The costs of providing government services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges; and

(12) The comments provided by the Maryland Department of Environment and the National Flood Insurance Plan State Coordinator.

D. The Department of Natural Resources, in consultation with the Maryland Commission on Climate Change and/or other relevant parties as necessary, shall develop additional proposed guidelines concerning Climate Change and “Coast Smart” Construction.

(1) Timing. The Department of Natural Resources shall convene a meeting to discuss implementation and recommendations within 45 days of the effective date of this Executive Order and provide an initial report to the Governor within nine months.

(2) Report. The report shall include:

(a) Recommendations for additional “Coast Smart” criteria for the siting and design of new, reconstructed, or rehabilitated State structures, as well as other infrastructure improvements such as roads, bridges, sewer and water systems, drainage systems, and essential public utilities.

(b) Recommendations concerning the potential application of “Coast Smart” guidelines to non-state infrastructure projects that are partially or fully funded by State agencies.

(c) Other recommendations for executive and/or legislative action.

E. The Critical Area Commission for the Chesapeake and Atlantic Coastal Bays should evaluate existing regulations and policies for State Agency Actions Resulting in Development on State-Owned Lands and consider the adoption of new or revised provisions that address climate change and the risk of sea level rise and other extreme weather-related impacts.

F. The Scientific and Technical Working Group of the Maryland Commission on Climate Change shall review the sea level rise projections established by the Maryland Commission on Climate Change published in the Maryland Climate Action Plan (2008) and shall provide, within 180 days of the effective date of this Executive Order, updated projections based on an assessment of the latest climate change science and federal guidance.

G. This Executive Order shall be implemented in a manner consistent with any review or permitting processes that are required by law. This Executive Order does not apply to any federal or local permits or approval processes.

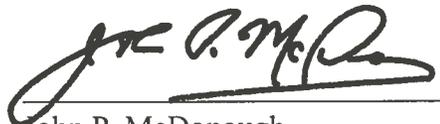
Given Under My Hand and the Great Seal of the State of Maryland in the City of Annapolis, this 28th day of December, 2012.



Martin O'Malley
Governor



ATTEST:



John P. McDonough
Secretary of State