PUBLIC SUMMARY ON
MASSDEP PROPOSED REVISIONS TO WETLANDS REGULATIONS
TO ENSURE A RESILIENT COMMONWEALTH
December 13, 2023

MassDEP is proposing important wetlands-related resilience regulation updates that promote environmental protection and public safety as the Commonwealth adapts to climate change. Revisions are proposed to the Wetlands Protection Act (WPA) regulations (310 CMR 10.00) and the Water Quality Certification (WQC) regulations (314 CMR 9.00). Components of the regulation package are requirements of the 2018 State Hazard Mitigation and Climate Adaptation Plan. MassDEP engaged in robust stakeholder and technical expert consultation processes in developing the regulations. MassDEP is developing a user-friendly guide and trainings for Conservation Commissions to help implement the new regulations once they become final and take effect.

Why is MassDEP Proposing to Update its Regulations?
The proposed regulation revisions have two main objectives:

- Promote coastal resiliency against worsening impacts of storms, flooding, and sea level rise through
  - First-time standards to protect the coastal floodplain (Land Subject to Coastal Storm Flowage or "LSCSF") from damage, which will help to maintain its natural capacity to protect structures and properties from storm damage and sea level rise
  - Provisions to support resilient shorelines, roadways, and water dependent uses and to allow scientific test projects to study effects of climate change
- Promote resiliency against increasing flooding, storm damage, and runoff pollution through updated stormwater management standards that
  - Incorporate current science and data for better rainfall estimates into updated stormwater management rules and replace outdated (60-year-old) precipitation data
  - Improve consistency between state regulations and EPA stormwater permit
  - Encourage using nature in design ("environmental design") through seven cost-effective green design credits in lieu of built structures

New Coastal Floodplain Standards
The proposed new performance standards for development in the coastal floodplain (or LSCSF) will reduce damage to property, infrastructure, and the natural shoreline associated with sea level rise and coastal storms.

- In areas closest to the ocean where waves are 3 ft or more (the "Velocity Zone"), prohibit most *new* development and allow reconstruction on open pilings. Some water dependent uses (e.g., boatyards, work in a Designated Port Area related to water-dependent industrial uses) and minor work in the velocity zone would be permitted. This will prevent new construction in areas where storm damage is greatest and worsening. The majority of the Velocity Zone (approximately 90%) will not be affected by these new regulations since those areas are either already developed or overlap with other regulated wetlands resource areas (e.g., beach or dune).
- In areas where waves are equal to or greater than 1.5 ft but less than 3 ft (Moderate Wave Action zone ["MoWA"]), allow new and redevelopment provided structures are built on open pilings.
- Allowable activities in the Velocity and MoWA Zones include plantings, pedestrian walkways, boat launching facilities and open boat storage, docks, piers, and compliant septic systems.

- In areas where waves are less than 1.5 ft (Minimum Wave Action zone ["MiWA"]), permit new and redevelopment and other activities provided that projects use best available measures to minimize adverse effects and that structures are elevated on pilings or solid foundation.
- Allow redevelopment as long as projects improve existing conditions so as to improve degraded floodplain areas, which are particularly at risk.
- As a component of a flood control program, allow berms or height increases of existing seawalls where necessary to protect more highly developed urban areas.

Additional Resilience Provisions

- Allow road elevation (and associated widening of the road base in the wetland), and relocation of roads and water-dependent facilities (e.g., boatyards), for those threatened by sea level rise and coastal storms.
- Encourage nature-based shoreline protection such as "living shorelines" that provide flood control and storm damage prevention for properties threatened by sea level rise and coastal storms.
- Allow scientific test projects to gather information on the ability of wetland resource areas to respond to the effects of climate change.
- Streamline stormwater permitting for shared use paths on abandoned rail beds to support the state goal of reducing vehicle miles travelled to reduce greenhouse gas emissions.

Updated Stormwater Standards for Flood Protection and Water Quality Improvements

The updated stormwater design standards will improve resiliency against increasing flooding, storm damage, and runoff pollution.

- Replace outdated (60-year-old) precipitation data with up-to-date data (from the "NOAA 14 Atlas"). Storms have been increasing in intensity with climate change so today's "100-year storm" delivers more water than the 100-year storm of the 1960s. Using the older data to design stormwater systems results in pipes that are not large enough to carry the water. The water that is not captured in the systems can cause flooding, scouring of riverbanks, damage to buildings and bridges, and other problems. Using the up-to-date precipitation data to design stormwater systems will help to prevent stormwater from one property from causing damage to neighboring properties.
- Ensure resilience of wetlands resources and stormwater systems by requiring that systems are designed to handle extreme precipitation events. Rather than using the mid-point or "average" precipitation presented by NOAA Atlas 14, MassDEP is proposing to require that precipitation amounts be 90% of the upper end of the range of historical precipitation. This is called "NOAA 14 PLUS" and is proposed to ensure that stormwater from most (80%) storms will be adequately managed. This somewhat increased precipitation is based on actual events.
- Reduce flooding, reduce pollution, and replenish groundwater and streamflow by requiring that stormwater systems be designed to move more stormwater into the ground.
- Incentivize the use of nature and ecological processes to handle stormwater runoff and to prevent flooding and polluting nearby waters. This will reduce the amount of pavement and pipes and will be less costly for developers.
- Better align with the Environmental Protection Agency's requirements for stormwater management (through its General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems in MA) to protect Massachusetts waters from harmful stormwater pollutants.

Frequently Asked Questions

<u>1. What stakeholders did DEP consult in developing these proposed regulations?</u>

- Stormwater Advisory Committee

    - Convened February 2020, held six sessions concluding June 2021
    - Members included MassDOT, MA DCR, MACZM, EOEEA, MA Fish & Game, U.S. EPA, Homebuilders and Remodelers Association, NAIOP, Mass. Association of Conservation Commissions, Pioneer Valley Planning Commission, Central Massachusetts Regional Stormwater Coalition, Mass. Municipal Association, Mass. Audubon, Mass. Rivers Alliance, Boston Society of Civil Engineers, Association of MA Wetland Scientists, and other subject matter experts
- 18 additional presentations and 6 additional meetings with a variety of entities in 2021-22 including EBC, MACC, MSMCP, NEIWPCC, Homebuilders, NAIOP, MassDOT, Resilient Mystic Collaborative, MA Rivers Alliance, and others.
- LSCSF Technical Advisory Group
    - Convened / met in 2014, 2018, re-convened in 2021 to review draft regulations
    - Membership included MACZM, EOEEA, MACC, NAIOP, Homebuilders and Remodelers Assoc., Mass. Audubon, Association of MA Wetland Scientist, and other subject matter experts

2. How do the proposed LSCSF standards compare with the building code?

- DEP regulation focuses on wetlands resource protection; building code focuses on protecting building/structures. DEP, with EEA and DCR, has been working with Board of Building Regulations and Standards (BBRS) to promote consistency between the proposed standards and the forthcoming 10th edition of the state building code.
- BBRS is considering adopting similar provisions; MassDEP anticipates increased consistency once 10th edition is released. MassDEP expects the V Zone standards will be stricter for new development.

3. How much of the Massachusetts coast will be affected by the proposed prohibition on new development in the V Zone?

- Only ~10% of the V Zone (not submerged) has the potential to be affected. Some of these areas are on lots with existing development or are existing open space or subject to regular tidal flooding.
- Over 90% of the V Zone either overlaps other regulated wetland resource areas, like beach or dune (82%), or is already developed (8%) and is unlikely to be affected.

4. How will the proposed regulations affect housing development?

- The proposed stormwater standards may result in larger stormwater control measures for *new* development to control peak runoff and bring MA up to date with current rainfall and extreme events data. Redevelopment will only need to meet the standard to the extent possible.
- Some redevelopment will need to meet new standards for pollutant removal, which may result in larger stormwater controls.
- Potential cost increase of site development can be offset using proposed green design credits.

5. What is Green Site Design?

- Green site design (also called "Environmentally Sensitive Site Design" or ESSD") uses natural solutions - like trees and buffer zones - to manage stormwater instead of detention basins and other traditional infrastructure
- MassDEP proposes seven green site design credits
- Substantially reduces cost, minimal or no maintenance

6. How is DEP proposing to use current data to update rainfall projections?

- MassDEP proposes to replace outdated (60-year-old) rainfall data with current data (from "NOAA Atlas 14"). Storms have been increasing in intensity with climate change. Using older data for design results

in pipes not large enough to carry stormwater, which causes flooding, and damage to buildings, bridges, and other infrastructure.

- Rather than using average rainfall from NOAA Atlas 14, MassDEP proposes to use 90% of the upper end of the range of historical precipitation from actual storm events. This is called "NOAA 14 PLUS" and will ensure that stormwater from most (80%) storms will be adequately managed.

7. How will proposed changes to stormwater pollutant removal affect development?

- MassDEP proposes to align with EPA MS4 stormwater rules that apply to over 260 communities.
- New development proposal to remove 90% Total Suspended Solids (TSS) and 60% Total Phosphorus (P)
- Redevelopment proposal to remove 80% TSS and 50% P.
    - Exceptions, developed with stakeholder input, include single family houses, most subdivisions or multi-family developments less than ten lots/units, roadway maintenance, boatyards, and shared use paths.
    - Improved pollutant removal will decrease pollution in nearby wetlands/waterbodies and help meet the Clean Water Act.

8. Why is DEP requiring more stormwater runoff to be put into the ground?

- To better address rain events which cause flooding.
- MA is experiencing more drought and more intense rainfall. These rainfall events result in more runoff, flooding, storm damage, and pollution into our waters. Recharging rainfall into the ground will remove pollutants and replenish groundwater supplies and rivers.