

Governor Northam's Executive Order 45

COASTAL RESILIENCY COMMITTEE

DECEMBER 13, 2019

BENJAMIN J. MCFARLANE, AICP, CFM
SENIOR REGIONAL PLANNER



Background

Executive Order 24, issued in November 2018, directed the Commonwealth to develop new policies to address the risk of flooding to state buildings

New order issued November 15, 2019

EO Components

1. Development requirements for state development in special flood hazard areas
2. Variance process
3. Freeboard standards for state-owned buildings in flood-prone areas
4. Sea level rise planning standards
5. Guidance documentation

Development Requirements

State development must comply with local floodplain management ordinances and Virginia USBC

State development not in NFIP communities must comply with NFIP standards

No new state-owned buildings or buildings constructed on state-owned property shall be constructed, reconstructed, purchased, or acquired by the Commonwealth within a SFHA or Shaded X Zone in any community unless a variance is granted by the Director of DGS

Freeboard Standards

Riverine areas:

In SFHA: top of lowest floor 3' above BFE

In Shaded X: top of lowest floor 3' above WSE or BFE of adjacent SFHA, whichever is less

Coastal areas:

In SFHA: bottom of lowest horizontal structural member 3' above BFE

In Shade X:

Freeboard Standards

Riverine areas:

In SFHA: top of lowest floor 3' above BFE

In Shaded X: top of lowest floor 3' above WSE or BFE of adjacent SFHA, whichever is less

Coastal areas:

In SFHA: bottom of lowest horizontal structural member 3' above BFE

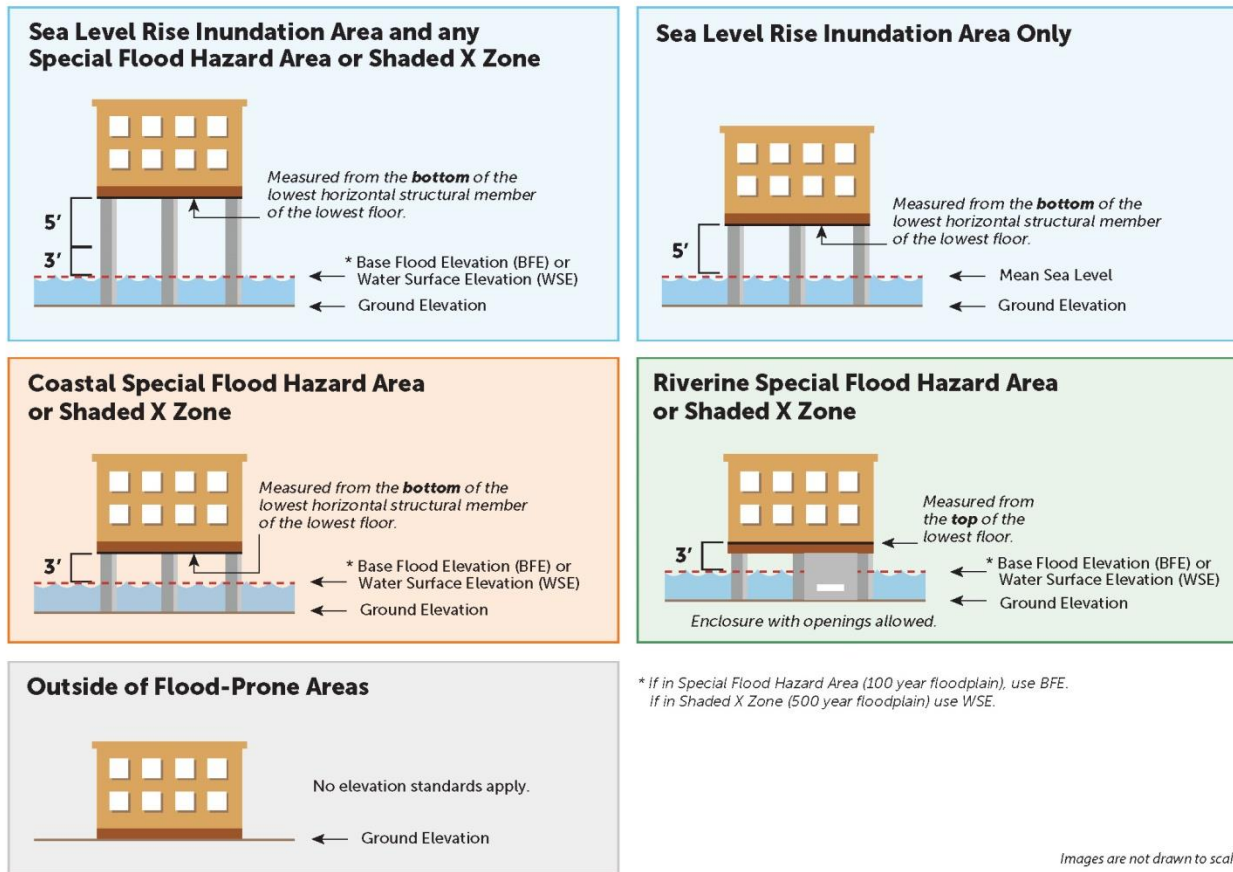
In Shade X:

Freeboard Standards

| Area | SFHA | Shaded X | SLR |
|----------|--|--|--|
| Riverine | Top of lowest floor – BFE + 3' | Top of lowest floor – WSE + 3' | N/A |
| Coastal | Bottom of lowest horizontal structural member – BFE + 3' | Bottom of lowest horizontal structural member – BFE + 3' | N/A |
| SLR | Bottom of lowest horizontal structural member – BFE + 3' plus 5' SLR | Bottom of lowest horizontal structural member – WSE + 3' plus 5' SLR | Bottom of lowest horizontal structural member – 5' above MSL |

Freeboard Standards

Virginia Flood Risk Management Standard Freeboard Standards for New State-Owned Buildings in Flood-Prone Areas



<https://www.naturalresources.virginia.gov/initiatives/resilience/floodstandard/>

SLR Planning Standards

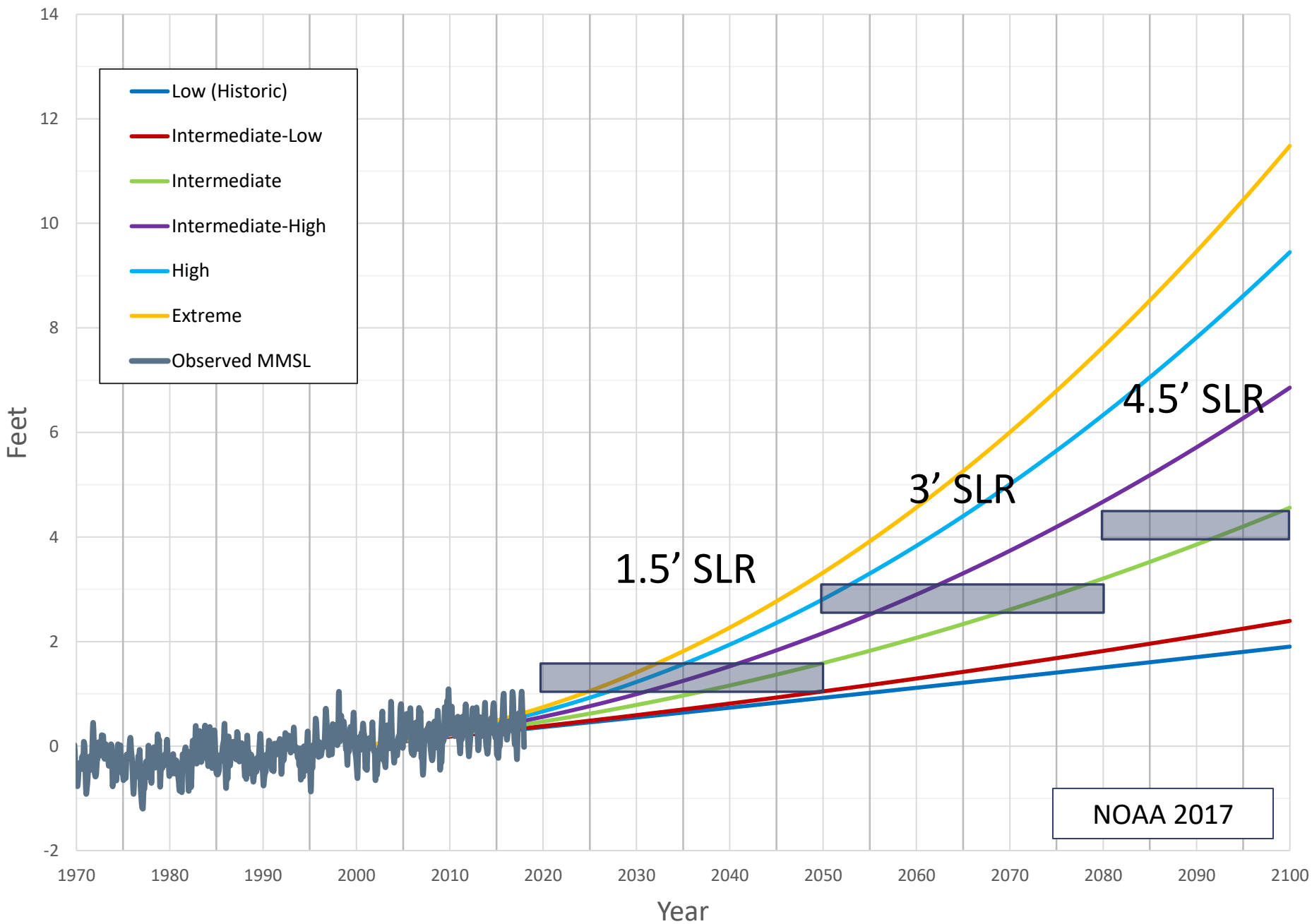
NOAA Intermediate-High Curve

50-year mid-life estimate for building longevity

- 4' of SLR
- 1' for high tide

Applies to all new state-owned buildings on or after January 1, 2021

Projected Relative Sea Level Change at Sewell's Point, Virginia - 2000-2100



State Working Group

Administration

Commerce and Trade

Education

Natural Resources

Agriculture and Forestry

Public Safety and Homeland Security

Transportation

Health and Human Resources

Special Assistant for Coastal Adaptation and Protection

Additional state officials designated by CRO