

## Summary of Mid-Atlantic Sea Level Rise visualization tools

Name	<b>Coastal Resilience: Future Scenarios Map</b>	<b>Delaware Sea Level Rise Inundation Maps</b>	<b>NJ Flood Mapper</b>
Geography	Coastal New York and Connecticut – Long Island Sound	Delaware	Delaware Bay, Atlantic and Cape May Counties, NJ
Description	The aim of this web mapping tool is to provide communities with easy access to information for their planning, zoning, acquisition, and permitting decisions. The information is intended to inform decisions in coastal development and conservation and to maximize opportunities to meet multiple management objectives while minimizing adverse impacts to human and natural communities.	Delaware Coastal Programs used a simple bathtub model to develop maps to show the possible impacts of inundation for Delaware’s waterways and the land that surrounds them. The maps represent a constant, watershed based, water level and do not include any changes in water level due to the distance from tidal forcing, downstream flow, or other factors that could possibly change water levels.	The NJFloodMapper is a user-friendly visualization tool that will help get information into the hands of local communities who need to make decisions concerning flooding hazards and sea level rise. This website should be used to promote enhanced preparedness and land use planning decisions with considerations for possible future conditions.
Products	SLR maps, socio-economic information, critical infrastructure, marsh protection analysis	SLR inundation maps	SLR inundation maps (with uncertainty), FEMA Q3 floodplain maps, coastal evacuation routes, state/municipal level infrastructure and socio-demographic information
SLR scenarios	Time-based (Present, 2020, 2050, 2080) IPCC scenarios, with Category 2 and 3 storm surge (SLOSH outputs); Superstorm Sandy	Water level based: 0, MHHW, 0.5, 1.0, 1.5 meters sea level rise	Water level based: 0-6 foot flooding in 1 foot increments from MHHW
Lead	The Nature Conservancy	Delaware Department of Natural Resources and Environmental Control	Jacques Cousteau NERR and Rutgers CRSSA
Link	<a href="http://lis.coastalresilience.org/lis.html">lis.coastalresilience.org/lis.html</a>	<a href="http://www.dnrec.delaware.gov/Pages/SLRMaps.aspx">www.dnrec.delaware.gov/Pages/SLRMaps.aspx</a>	<a href="http://slrviewer.rutgers.edu">slrviewer.rutgers.edu</a>

## Summary of Mid-Atlantic Sea Level Rise visualization tools

Name	<b>Future Coast Coastal Flooding and Sea Level Rise Impacts Viewer</b>	<b>Sea Level Rise Affecting Marshes Model (SLAMM) Viewer</b>	<b>Sea Level Rise and Coastal Flooding Impacts Viewer</b>
Geography	Anne Arundel County, MD	MD, VA, DE (Chesapeake and DE Bays 2007-2008, Chincoteague NWR 2009)	Mid-Atlantic coastal counties
Description	Provides projections of the potential impact of sea-level rise on inundation and coastal flooding at varying geographic scales. The presented map coverages of the flood and inundation scenarios reflect Maryland Climate Change Commission sea level projections analyzed against current topographic and building asset data using best practices. Reported probabilities of potential flooding and property damage are relative to today's condition and reflect exposure as determined from analysis of the Maryland Climate Change Commission scenarios against the base data. All projections account for both the projected increase in sea level and land subsidence.	SLAMM simulates the dominant processes involved in wetland conversions and shoreline modifications during long-term sea level rise. Map distributions of wetlands are predicted under conditions of accelerated sea level rise, and results are summarized in tabular and graphical form. The default elevation data is National Elevation Database with ~25% lidar coverage in Chesapeake.	Being able to visualize potential impacts from sea level rise is a powerful teaching and planning tool, and this Sea Level Rise Viewer brings this capability to coastal communities. A slider bar is used to show how various levels of sea level rise will impact coastal communities. Completed areas include most of the Gulf of Mexico, West Coast, GA, NJ, DE, and PA.
Products	SLR inundation mapping from county to building footprint level; statistics and values of affected properties	Map products of 20 land cover classifications and changes	SLR inundation maps (with uncertainty), flood frequency, marsh impacts, and socioeconomic vulnerability
SLR scenarios	Time based: (present, 2025, 2050, 2075, 2100); historical trends (3.4 mm/yr), low and moderate acceleration from USACE	Water level and time based: IPCC 0.4m, 0.7m, 1m SLR (base year, 2025, 2050, 2075, 2100)	Water level based: 0-6 foot flooding in 1 foot increments from MHHW
Lead	George Mason University, Mid-Atlantic SeaGrant	Warren Pinnacle Consulting	NOAA Coastal Services Center
Link	<a href="http://www.futurecoast.info/slr-visualization">www.futurecoast.info/slr-visualization</a>	<a href="http://www.warrenpinnacle.com/prof/SLAMM/">www.warrenpinnacle.com/prof/SLAMM/</a>	<a href="http://www.csc.noaa.gov/digitalcoast/tools/slrviewer">www.csc.noaa.gov/digitalcoast/tools/slrviewer</a>

## Summary of Mid-Atlantic Sea Level Rise visualization tools

Name	Surging Seas	Sea Level Rise Maps
Geography	Continental US coastline	Virginia, Maryland, Delaware, Washington D.C., New Jersey, New York
Description	Map pages show threats from sea level rise and storm surge to all 3000+ coastal towns, cities, counties and states in the lower 48. The maps show best estimates of land under different water levels, based upon the National Elevation Dataset	A collection of maps drawn from an EPA study (Titus and Wang, 2008), which developed the county-scale elevation maps to illustrate vulnerability to sea rise. The maps show elevations relative to spring high water (the average tide during new and full moons).  The elevation data source accuracy varies from 1m to 5 and 10 foot contours
Products	SLR inundation maps, some socio-economic flooding statistics	SLR inundation maps; 0.5m and 1m contours
SLR scenarios	Water level based; 0-10 foot flooding in 1 foot increments, with time probability estimates for 2020-2100	No scenarios, but current elevations relative to spring high water.
Lead	Climate Central	EPA, RisingSea.net
Link	<a href="http://Sealevel.climatecentral.org/surgingseas/">Sealevel.climatecentral.org/surgingseas/</a>	<a href="http://Maps.risingsea.net">Maps.risingsea.net</a>