COASTAL FORESTS: VULNERABILITY TO SEA LEVEL RISE

<u>Based on:</u> Lathrop, R.G. and Allen, B, (2023). Northeast USA Region-Wide Assessment of the Vulnerability of Coastal Forests to Sea Level Rise. Rutgers, The State University of New Jersey, New Brunswick, NJ. 15 p.

<u>For the full report:</u> doi:10.7282/t3-6e1v-5n63

This report is an assessment of forest vulnerability to SLR in these mid-Atlantic and southern New England states: **VA, MD, DE, NJ, NY, CT, and MA**

Under a low-emissions scenario, coastal areas are likely to see SLR between 1.7 to 4.0 feet from the years 2000 to 2100. Under a high-emissions scenario, coastal areas are likely to see sea-level rise between 2.3 to 6.3 feet from 2000 to 2100. Based on this information, the researchers chose to model between 1 and 6 feet of SLR.

Nearly 260,000 acres

(almost equivalent to the size of Rocky Mountain National Park) of existing forest land in these southern New England and mid-Atlantic states are potentially vulnerable to the effects of 1' of sea level rise (SLR)

An additional 81,000 acres are vulnerable after 2' of SLR by the year 2100.

States With Coastal Forests Most at Risk After 6' of SLR

Maryland & Virginia: 200,000+ acres of forest at risk

New Jersey: 100,000+ acres of forest at risk

Check to see how many forested acres are vulnerable to sea level rise in your state!

41,684 acres at 1'
99,222 acres at 1'
88,958 acres at 1'

	1' of SLR
Virginia	88,958
Maryland	99,222
New Jersey	41,684
Delaware	16,822
New York	4,552
Massachusetts	4,062
Connecticut	1,965
Pennsylvania	736
Rhode Island	191
Total (acres)	258,192

Area of forest land (in acres) in the potential future SLR inundation zone of 1'

Management considerations will differ depending on whether forests are publicly or privately owned. For example, 66% of at-risk forest in Virginia is *privately* owned. In contrast, 60% of at-risk forest in Delaware is under *public* conservation.



Forest in Cape May County, NJ affected by SLR. Courtesy of Christopher F. Miller





