

Express Terms

Part 490, Projected Sea Level Rise

490.1 Purpose

This Part establishes science-based projections of sea level rise for New York State's tidal coast, including the marine coasts of Nassau, Suffolk and Westchester counties and the five boroughs of New York City, and the main stem of the Hudson River, north from New York City to the federal dam at Troy.

490.2 Applicability

This Part applies to consideration of sea level rise by the Department, other State agencies, and applicants for relevant permits, approvals, and funding in the context of programs specified in the Community Risk and Resiliency Act.

490.3 Definitions

For the purposes of this Part, the following definitions apply:

- (a) '2030s'. The years 2030 through 2039.
- (b) '2050s'. The years 2050 through 2059.
- (c) '2080s'. The years 2080 through 2089.
- (d) 'Baseline level'. The average level of the surface of marine or tidal water over the years 1995 through 2014.
- (e) 'Community Risk and Resiliency Act'. Chapter 355 of the Laws of 2014.
- (f) 'Department'. The New York State Department of Environmental Conservation.
- (g) 'High-medium projection'. The amount of sea level rise that is unlikely (the 75th percentile of New York State Climate Impacts Assessment projections) to be exceeded by the specified time interval.

- (h) 'High projection'. The amount of sea level rise that is associated with high rates of melt of land-based ice and is very unlikely (the 90th percentile of New York State Climate Impacts Assessment projections) to be exceeded by the specified time interval.
- (i) 'Long Island Region'. The marine coast of Nassau and Suffolk counties.
- (j) 'Lower Hudson-New York City Region'. The main stem of the Hudson River, south from the mouth of Rondout Creek at Kingston, New York, and the marine coast of the five boroughs of New York City and the Long Island Sound in Westchester County.
- (k) 'Low-medium projection'. The amount of sea level rise that is likely (the 25th percentile of New York State Climate Impacts Assessment projections) to be exceeded by the specified time interval.
- (l) 'Low projection'. The amount of sea level rise that is very likely (the 10th percentile of New York State Climate Impacts Assessment projections) to be exceeded by the specified time interval.
- (m) 'Medium projection'. The amount of [sea level rise that is about as likely as not (the mean of the 25th- and 75th- percentile New York State Climate Impacts Assessment projections) to be exceeded by the specified time interval.
- (n) 'Mid-Hudson Region'. The main stem of the Hudson River, from the federal dam at Troy to the mouth of Rondout Creek at Kingston, New York.
- (o) 'New York State Climate Impacts Assessment projections'. Projections based on the outputs of global climate models, downscaled to New York, and additional information, including information to account for anticipated changes in the rates of ice melt that cannot yet be more rigorously included in quantitative models.
- (p) 'Rapid Ice Melt Projection'. The amount of sea level rise that is plausible in a scenario characterized by rapid melt of land-based ice, and instability of ice shelves and marine ice cliffs.

(q) 'Sea level rise'. The increase in the average level of the surface of marine or tidal water for the specified geographic region.

490.4 Projections

The tables in subdivisions (a), (b), and (c) of this section establish projected sea level rise for the specified geographic region relative to the baseline level.

(a) Mid-Hudson Region

Time Interval	Low Projection	Low-Medium Projection	Medium Projection	High-Medium Projection	High Projection	Rapid Ice Melt Projection
2030s	5 inches	7 inches	8 inches	10 inches	12 inches	NA
2050s	11 inches	12 inches	14 inches	17 inches	21 inches	NA
2080s	18 inches	21 inches	26 inches	35 inches	41 inches	83 inches
2100	21 inches	25 inches	32 inches	46 inches	60 inches	114 inches
2150	32 inches	41 inches	52 inches	82 inches	171 inches	NA

(b) Lower Hudson-New York City Region

Time Interval	Low Projection	Low-Medium Projection	Medium Projection	High-Medium Projection	High Projection	Rapid Ice Melt Projection

2030s	6 inches	7 inches	9 inches	11 inches	13 inches	NA
2050s	12 inches	14 inches	16 inches	19 inches	23 inches	NA
2080s	21 inches	25 inches	30 inches	39 inches	45 inches	83 inches
2100	25 inches	30 inches	36 inches	50 inches	65 inches	114 inches
2150	38 inches	47 inches	59 inches	89 inches	177 inches	NA

(c) Long Island Region

Time Interval	Low Projection	Low- Medium Projection	Medium Projection	High- Medium Projection	High Projection	Rapid Ice Melt Projection
2030s	7 inches	8 inches	10 inches	12 inches	14 inches	NA
2050s	13 inches	15 inches	18 inches	21 inches	25 inches	NA
2080s	23 inches	26 inches	32 inches	41 inches	48 inches	83 inches
2100	27 inches	32 inches	39 inches	54 inches	69 inches	114 inches
2150	42 inches	50 inches	63 inches	94 inches	185 inches	NA