

LIS Sea Level Affecting Marshes Model Projected Land Cover Change

Mid- and long-term land cover change Moderate sea level rise scenario*

Land Cover Class (coastal marsh highlighted in blue)	2010 (acres)	2055 (acres)	2100 (acres)
Irregularly Flooded (High) Marsh	1,730	1,621	943
Regularly Flooded (Low) Marsh	1,148	1,611	3,207
Tidal Fresh Marsh	12	8	2
Transitional Salt Marsh	690	842	1,370
Total Coastal Marsh	3,580	4,082	5,522
Swamp	1,212	1,207	1,113
Inland Open Water	1,408	1,369	1,117
Estuarine Beach	2,098	1,844	1,341
Inland Fresh Marsh	301	281	222
Freshwater Tidal Scrub/Shrub	12	10	6
Flooded Developed Dry Land	66	255	964
Tidal Flat	946	1,026	574
Rocky Intertidal	99	82	59

Long-term change in coastal marsh Moderate* and Extreme (Rapid Ice Melt Maximum-RIMM)** scenarios

Coastal Marsh Class	NY Acres in 2010	Percent land-cover change 2010 to 2100 for alternative SLR			
		1 meter	RIMM*	CT Acres in 2100 (1 meter)	CT Acres in in 2100 (RIMM)
Irregularly Flooded (High) Marsh	1,730	-786	-1,615	943	115
Regularly Flooded (Low) Marsh	1,148	2,059	4,067	3,207	5,216
Tidal Fresh Marsh	12	-10	-11	2	1
Transitional Salt Marsh	690	679	658	1,370	1,349
Total Coastal Marsh	3,580	1,941	3,099	5,522	6,680

* *Moderate scenario = 1 meter sea level rise by year 2100.

**Extreme (RIMM) scenario = 1.72 meter sea level rise by year 2100.

Source for climate change projections:

New York State Energy and Research Development Authority, *Responding to Climate Change in New York State (ClimAID)*, chapter 5, 2011.

<http://www.nyserdera.ny.gov/climaid>.