

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	10,306	8,581	1,268
Regularly Flooded (Low) Marsh	2,114	5,061	14,643
Tidal Fresh Marsh	710	667	514
Transitional Salt Marsh	1,476	1,622	2,317
Total Coastal Marsh	14,606	15,931	18,742
Swamp	8,531	8,423	8,166
Inland Open Water	4,523	4,479	4,384
Estuarine Beach	2,402	2,113	1,575
Inland Fresh Marsh	819	759	644
Freshwater Tidal Scrub/Shrub	629	499	245
Flooded Developed Dry Land	351	1,122	4,389
Tidal Flat	159	324	787
Rocky Intertidal	58	51	42

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

Coastal Marsh Class	CT Acres in 2010	Percent land-cover change 2010 to 2100 for alternative SLR		CT Acres in 2100 (1 meter)	CT Acres in in 2100 (RIMM)
		1 meter	RIMM*		
Irregularly Flooded (High) Marsh	10,306	-87.7	-97.4	1,268	268
Regularly Flooded (Low) Marsh	2,114	592.7	462.5	14,643	9,777
Tidal Fresh Marsh	710	-27.6	-85.6	514	102
Transitional Salt Marsh	1,476	57.0	57.3	2,317	2,315
Total Coastal Marsh	14,606	28.3	-14.7	18,742	12,462

* *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.nysenda.ny.gov/climaid>.