Marsh Elevation Monitoring
The Nature Conservancy,
Long Island NY

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1 Summary

The following is a quick compilation of the trends that have been measured at sites being monitored by TNC across Long Island. Note that data is not complete and still needs to be verified fully. The rate of the overall change in elevation is calcuated by finding the average change in each of 9 pins from the start of the monitoring period to the present. More directly, a linear regression is fit to the height of the pins through time. These lines are then averaged across stations for each site.

Tables:

	ID	Mean Annual Elevation Change	SET SE
1	AH	3.1	0.2
2	BC	4.9	0.3
3	CB	3.5	1.2
4	HC	3.1	0.5
5	II	2.5	0.2
6	MP	5.2	0.3
7	PN	6.1	0.5

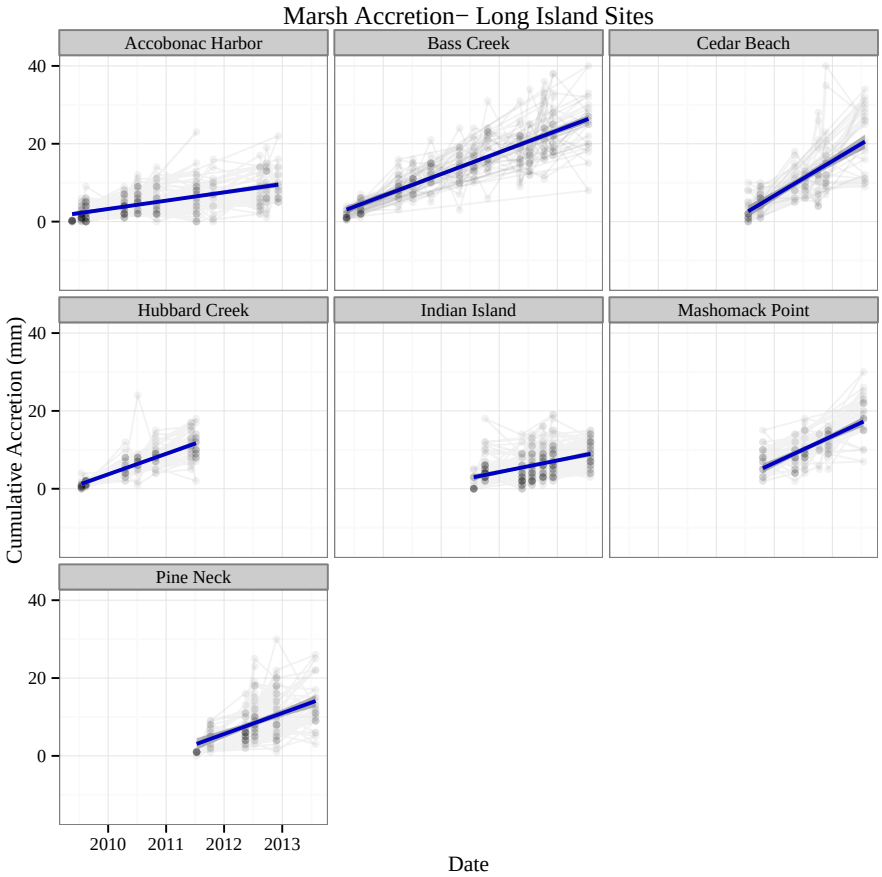
Table 1: SET Monitoring sites average elevation change (mm/year +/- SE)

2 Visuals

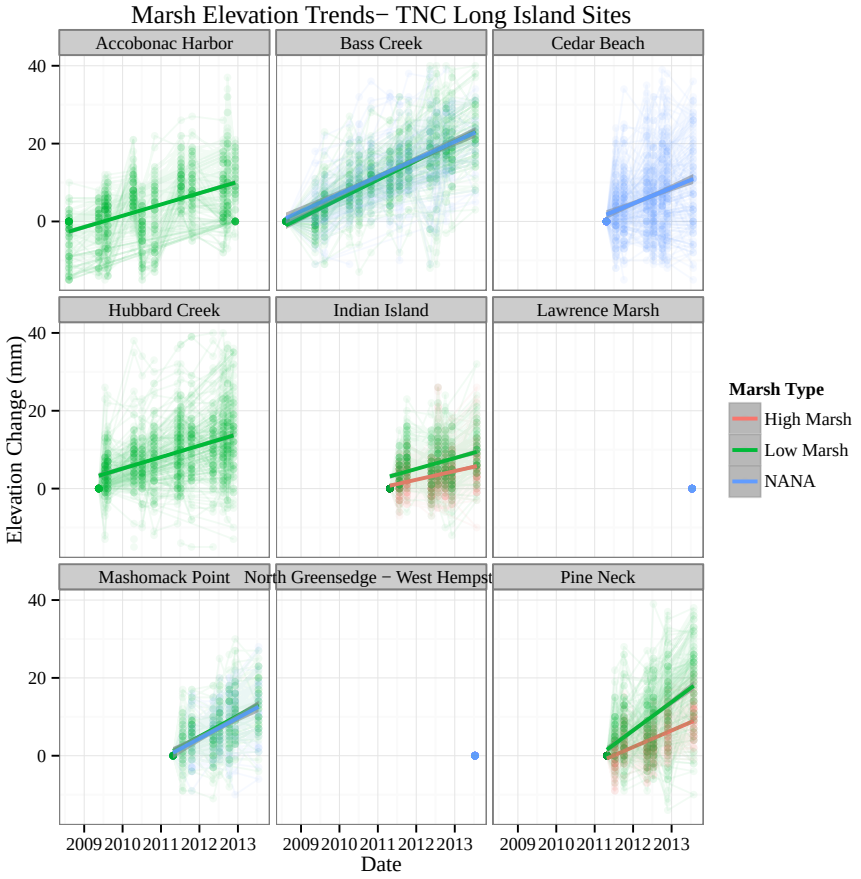
What follows is a quick visual of the changes that have been measured along the marsh surfaces. The rate of the overall change in elevation is calcuated by finding the average change in each of 9 pins from the start of the monitoring period to the present. More directly, a linear regression is fit to the height of the pins through time. These lines are then averaged across stations for each site.

	ID	Mean Annual Accretion Rate	SA SE
1	AH	2.65	0.42
2	BC	5.82	0.45
3	CB	9.53	1.32
4	HC	5.35	0.71
5	II	3.52	0.60
6	MP	7.03	0.28
7	PN	13.05	3.74

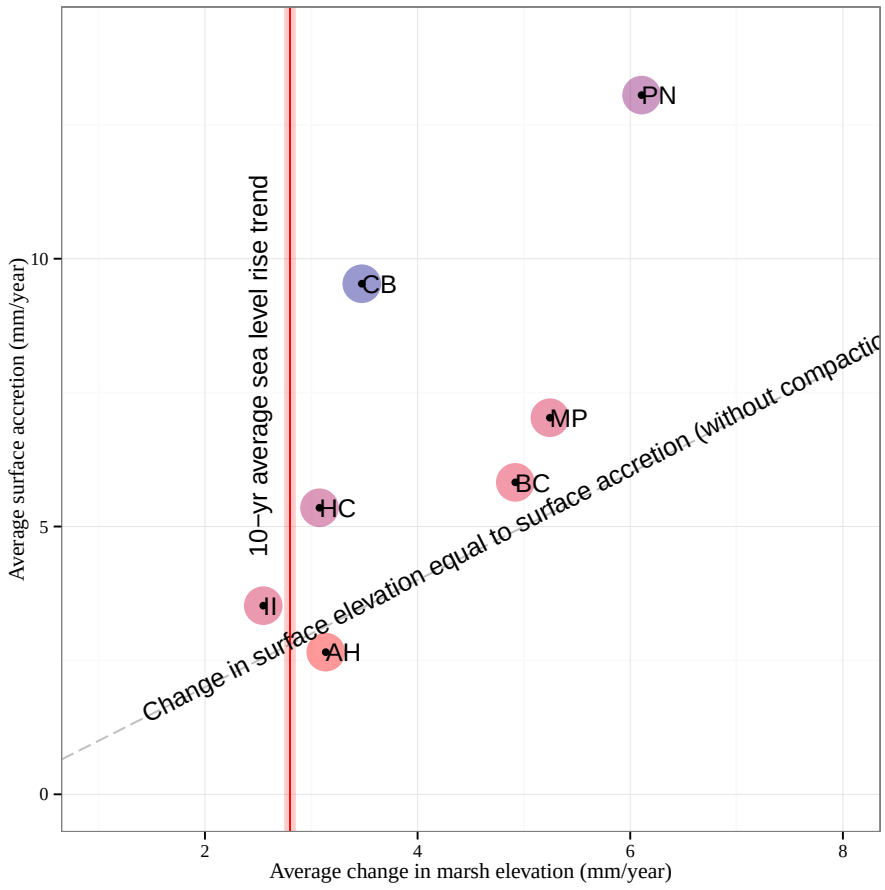
Table 2: Average Surface Acrretion (mm/year) for sites monitored by TNC



Plot 1: Surface Accretion trends through time at 7 of 9 study sites.



plot2: Elevation trends summary by marsh type -'NANA' have not been defined in database


PN
CB
MP
BC
HC
I
AH
10−yr average sea level rise trend
Change in surface elevation equal to surface accretion (without compactio
Average surface accretion (mm/year)
Average change in marsh elevation (mm/year)
0
5
10
2
4
6
8