

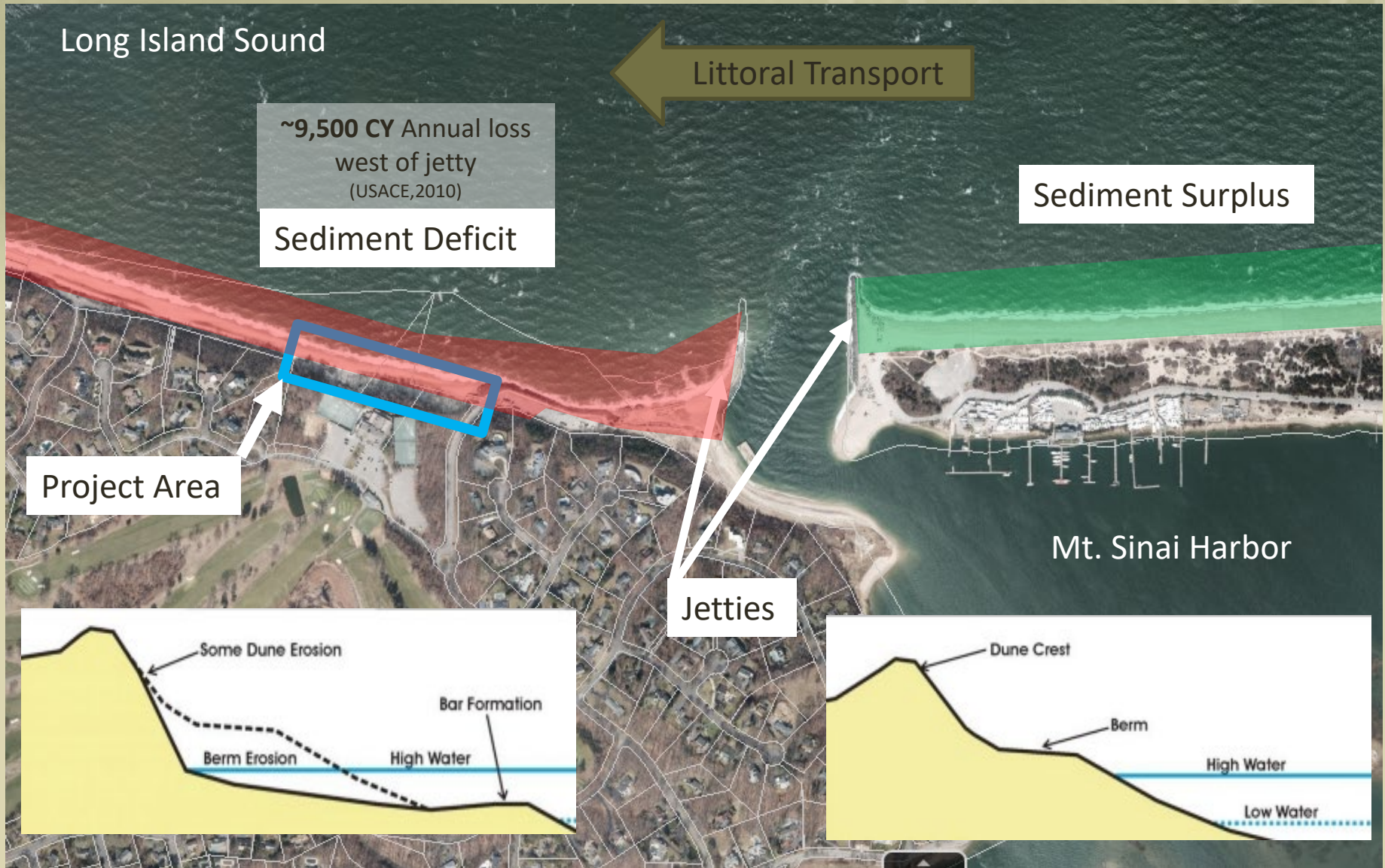


VILLAGE OF PORT JEFFERSON EAST BEACH BLUFF STABILIZATION

Village Trustee Meeting: February 22, 2022



How did we get here?

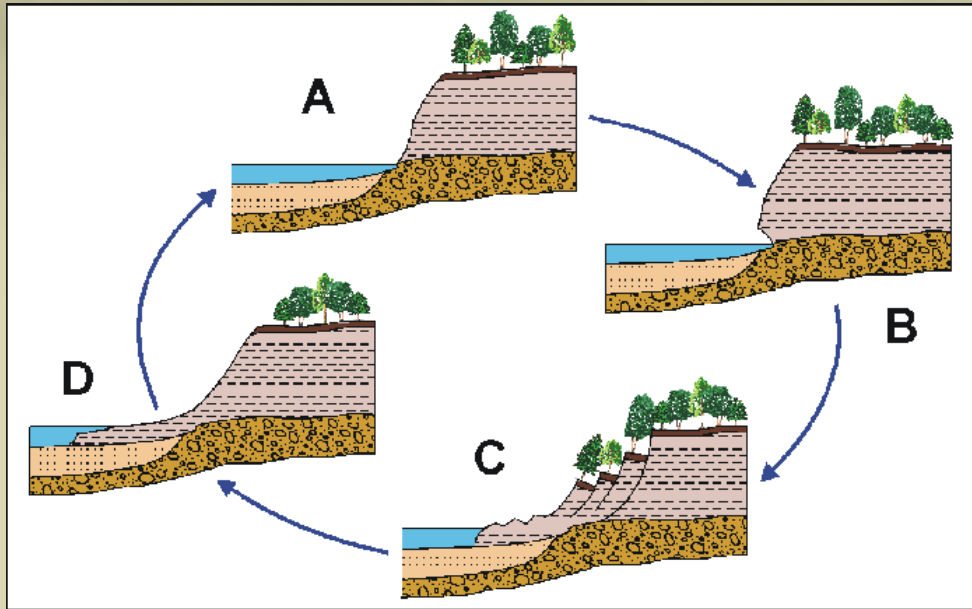


Historical Aerials

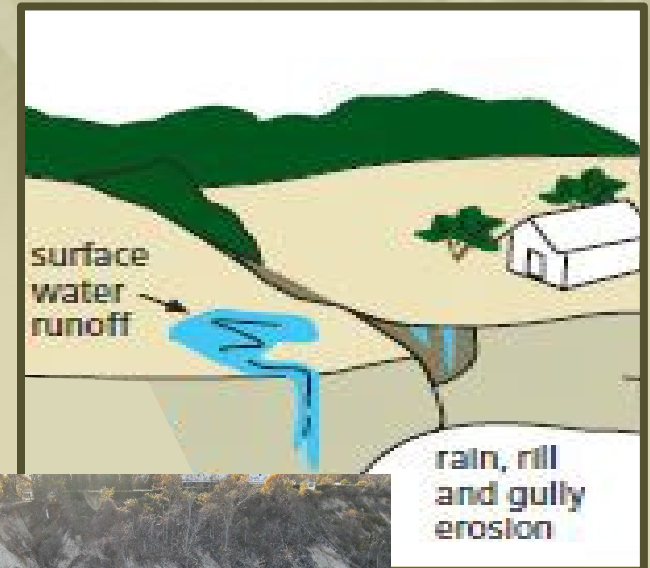


Forms of Bluff Erosion

Primary Form of Erosion:
Wave Action at Toe and Bluff Slumping



Secondary Form of Erosion:
Surface Runoff



Recent History of Bluff Recession Rate



Spring of 2015

Winter of 2017



February 2018-March 2021 Bluff Recession Rate Analysis

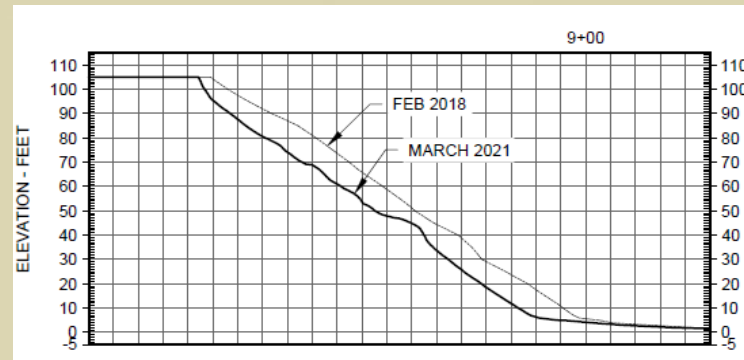
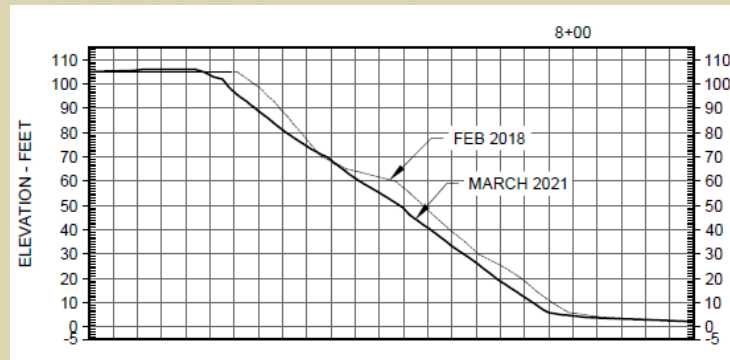
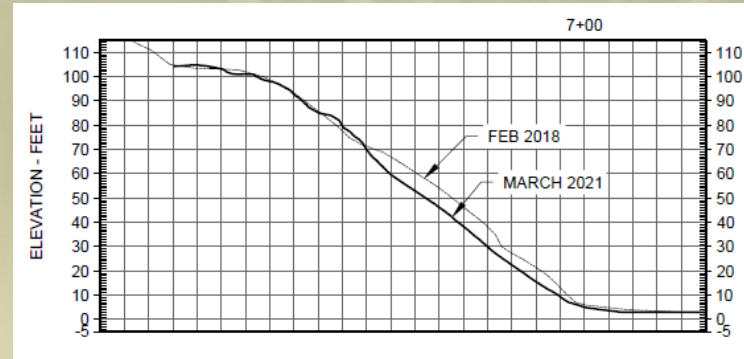
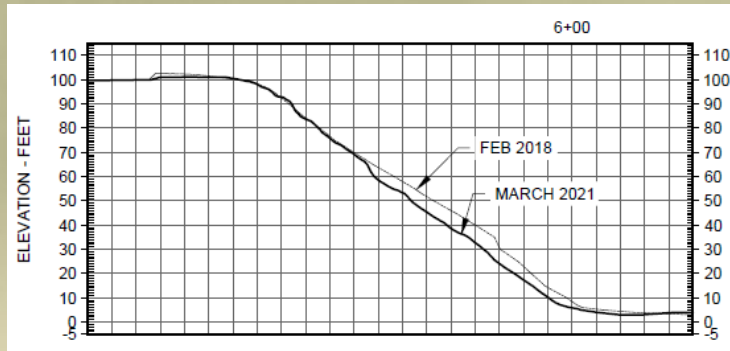
Profile Line	Bluff Crest Recession Between 2018 and 2021 (LF)
3+00	15
4+00	.5
5+00	0
6+00	0
7+00	0
8+00	16.5
9+00	5
10+00	6
11+00	0
12+00	0
Average	4.3

Profile Line	Bluff Toe Recession Between 2018 and 2021 (LF)
3+00	7.5
4+00	15.5
5+00	6.5
6+00	8.5
7+00	3
8+00	8.5
9+00	16.5
10+00	15.5
11+00	8.5
12+00	16.5
Average	10.65

- ~30,700 cubic yards lost from Buff (February 2018- March 2021)
- ~1,700 dump truck loads



February 2018-March 2021 Bluff Recession Rate Analysis



More Recent Bluff Loss

PRE- HURRICANE IDA



POST- HURRICANE IDA



More Recent Bluff Loss

PRE- HURRICANE IDA



POST- HURRICANE IDA



More Recent Bluff Loss

PRE- HURRICANE IDA



POST- HURRICANE IDA

