

## **The Watch Hill Conservancy**



## Welcome & Thanks Deborah Lamm

Students
URI Faculty

#### **Our Team**

Jocelyn Lahey ED
Janice Sassi, Napatree Manager
Pete August, Science Advisor, Board Member
Stakeholder Committee
Science Advisors



## **LANPHEAR LIVERY**













## The Watch Hill Conservancy



- 20 Years Old
- Mission
  - Preserve Community Character
  - Manage Napatree Point
  - Support a Vibrant Bay Street
  - Inform the Community









## PLANNING FOR A RESILIENT WATCH HILL



What are Climate Change Impacts to Watch Hill? Why are They Happening – the Science? What is at Risk? How Can We Adapt?







#### RESOLUTION BY THE COMMUNITY OF WATCH HILL, RHODE ISLAND

On Adapting to Sea Level Rise and Storm Surge Approved April 9, 2019

WHEREAS, the village of Watch Hill, by nature of its low elevation and proximity to the sea is extremely vulnerable to rising seas and surge caused by storms and

WHEREAS, sea level rise is an undeniable fact in Rhode Island as evidenced by longterm trends recorded by NOAA tide gauge stations in the region, and

WHEREAS, NOAA predicts sea levels to rise approximately 3 feet by 2050 and possibly over 9 feet by 2100, and

WHEREAS, even a modest storm that has a 10% chance of occurring at any time will bring a surge of 6 to 9 feet and will be devastating to Watch Hill; and

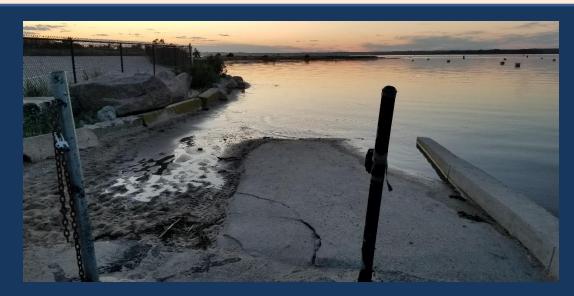
WHEREAS, nuisance tides now occur on a regular basis and cause flooding of our





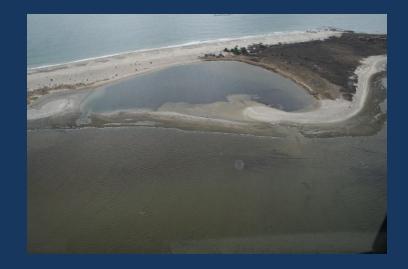
# MAJOR CONCERNS NAPATREE













## MAJOR CONCERNS FIRE DISTRICT PROPERTIES

















# MAJOR CONCERNS COMMERCIAL DISTRICT















## MAJOR CONCERNS FORT ROAD FLOODING









### **PRIORITIES**



#### **IMMEDIATE CONCERN**

Fort Road Flooding
Yacht Club, Napatree, Beach Club,
Cabanas

#### **OTHER CHALLENGES**

Septic System Failures
Transportation
One Bay Street Parking Flooding

#### **ADAPT TO 3 FOOT SLR SCENARIO**

Bay Street Commercial Area
Transportation
Parking
Utilities

#### **AFTER THE NEXT BIG STORM**

Rebuild?

Retreat?

Elevate?

Buy-outs?

Financing?



### What Do We Know?











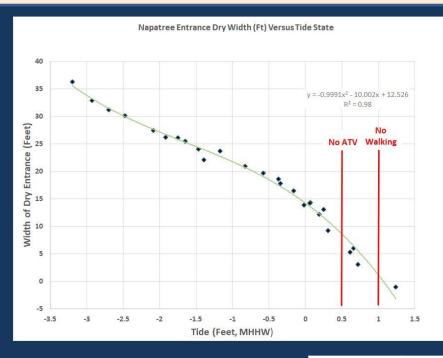
#### **STROMTOOLS MODELS**

They are accurate We are at risk



### What Do We Know?





### **Risk Thresholds**

## Frequency of Nuisance Tides

	Days That Exceed This Tide Per Year				
	Feet Above MHHW	2019	2018	2017	2016
No Dry					
Access					
Napatree	>=1.0' MHHW	37	45	50	24
Yacht Club	>= 0.8' MHHW	74	71	73	37
No ATV on					
Napatree	>= 0.5' MHHW	121	136	143	86



### WHAT DO WE KNOW?







RTK GPS Elevations on Fort Road & Napatree