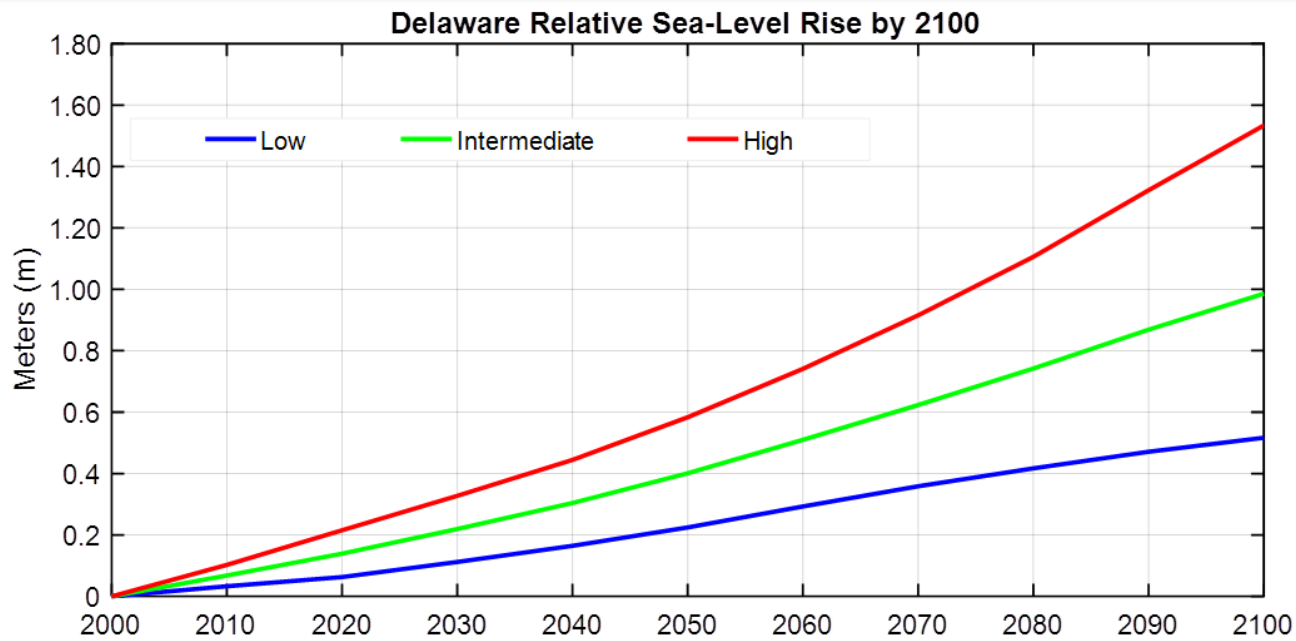




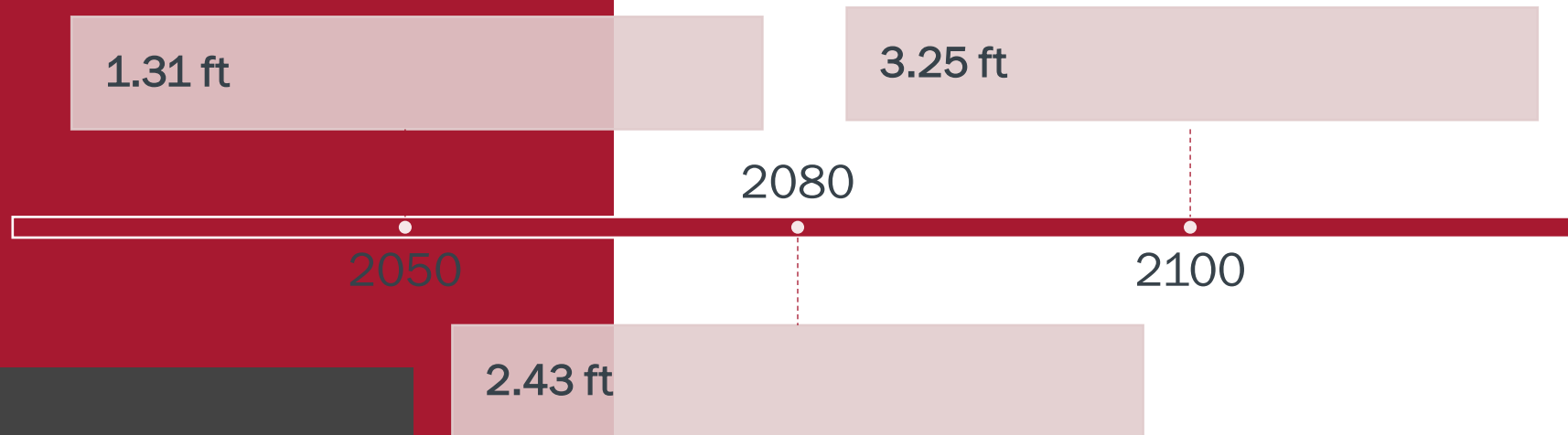
# Sea Level Rise Primer

“The nation behaves well if it treats the natural resources as assets which it must turn over to the next generation increased, and not impaired, in value.” Theodore Roosevelt, 1907



# Projected Sea Level Rise

- 2017 projections from University of Delaware



# What Causes Flooding and Sea Level Rise in Coastal Areas

- On-land ice melt
- Subsidence of land itself
- Slowing of the Gulf Stream; pulling less water off the coast
- More intense rainfall events
- Higher precipitation rates
- Increased storm intensities
- Increased runoff from contributing drainage area
- Full moon/King Tides

# How Much Flooding Has Been Experienced?

Station id: Lewes, DE   Station: 8557380   Local threshold: 0.56m over MHHW

Graph

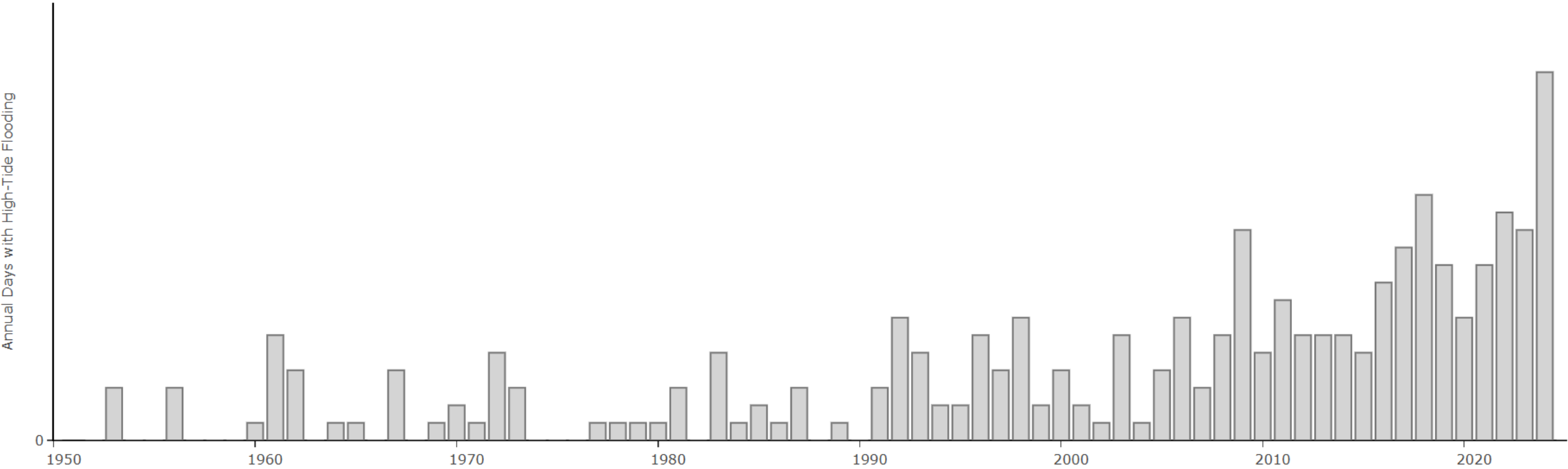
Map

Historical

Historical & Modeled

Downloads ▾

About

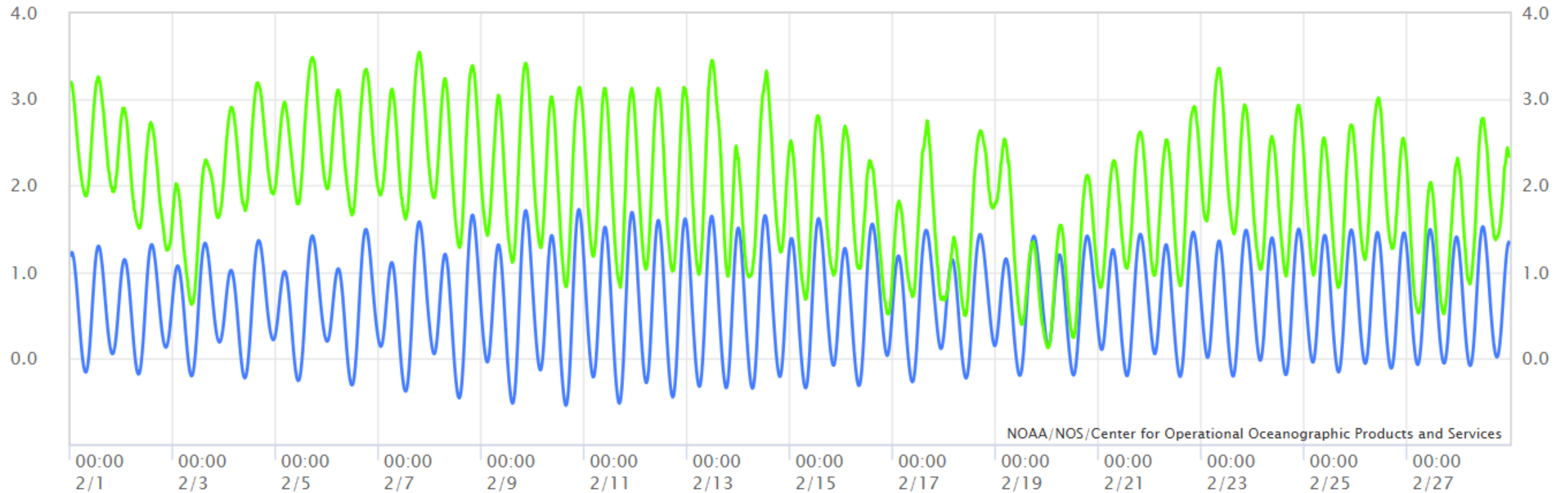


# How Much Flooding to Expect?

- Nuisance? Problem?

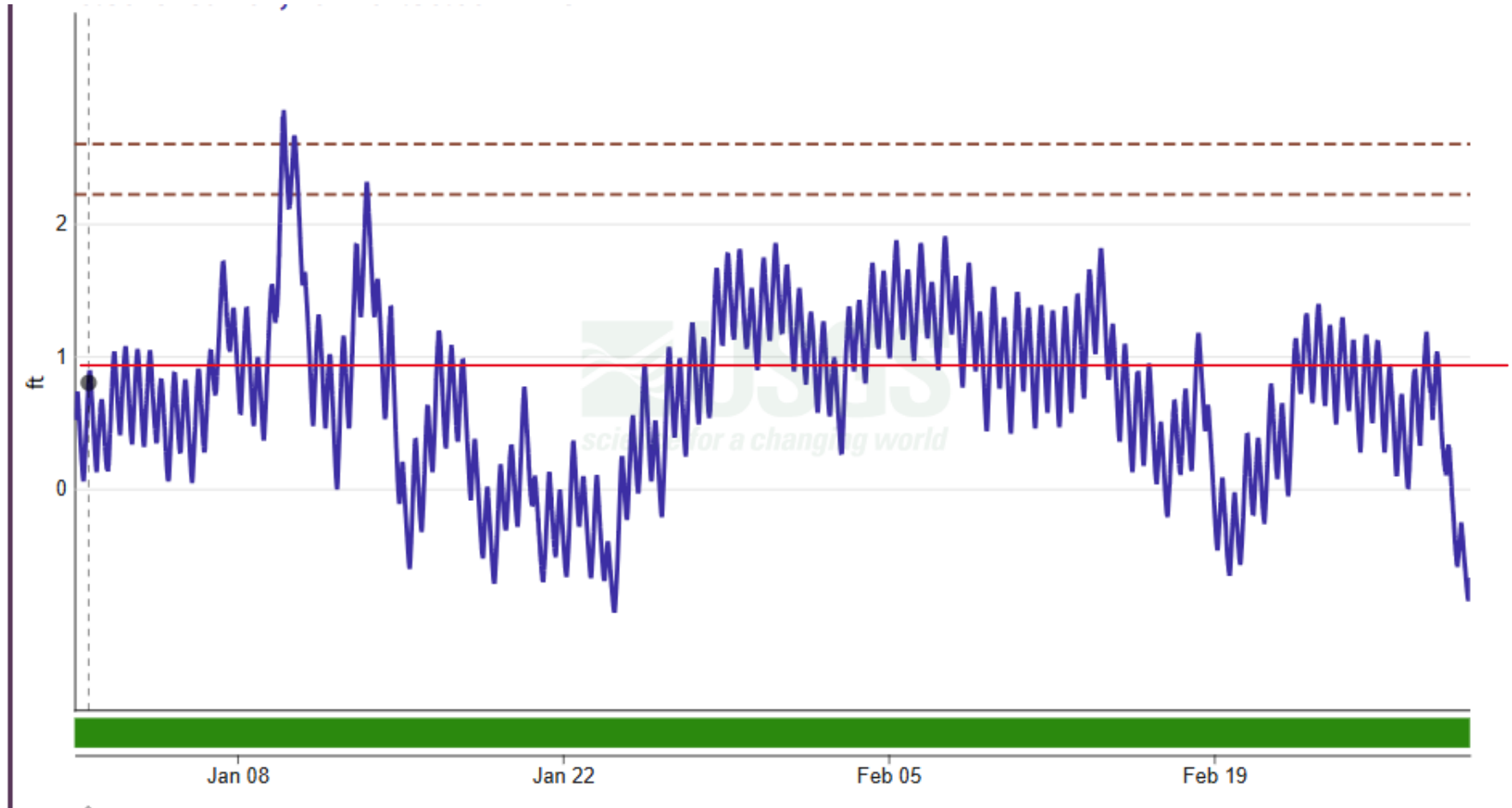
High Tide Flood Days	Number of Days
2000	4
2020	8
2024	21
2030 projected	15-30
2050 projected	50-135

# Dress Rehearsal For 2050?



Jan/Feb 2024 actual tides @ Lewes Station

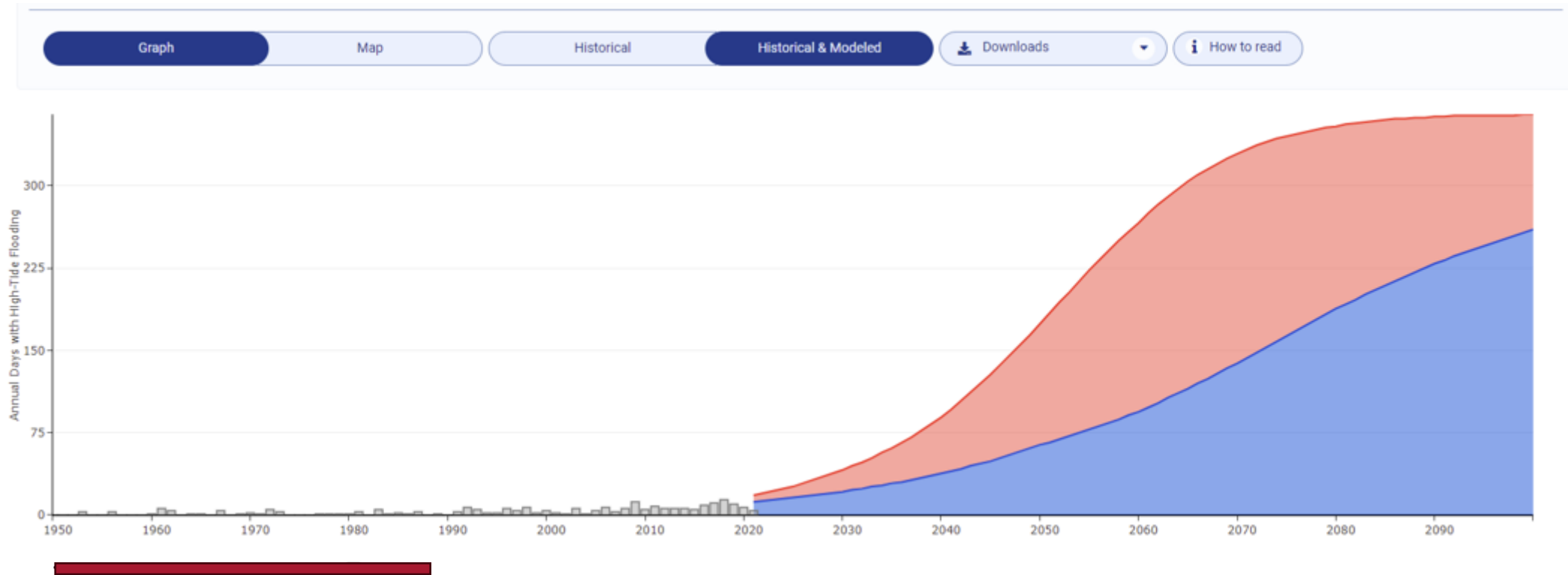
# Dress Rehearsal For 2050?



Jan/Feb 2024 actual tides @ Jefferson Creek

# How Much Flooding to Expect in the Future?

- Substantial increase in Flood Days





# What Effects Does SLR Have on South Bethany?

- Threat Multiplier
- Impacts our connection to nature
- Affects Insurance; rates, availability, coverages
- Saltwater intrusion to upland area
- Intense Rainfalls lead to standing water and temporary flooding

# Inundation in South Bethany and Surrounding Areas?

## Inundation



## Public Lands



# Lay of the Land...

- Delaware is #5 at-risk state to climate driven disasters by NOAA
  - hurricanes, floods, wildfires
- Delaware is #5 at-risk state by Climate Check
  - Precipitation, heat, fire, drought, flood
- Delaware is the lowest lying state in the Country.
- Sussex County is the lowest county in the state.
- Coastal Sussex is one the most vulnerable areas in the County to all climate impacts.
- Impacts affect all of South Bethany





QUESTIONS?