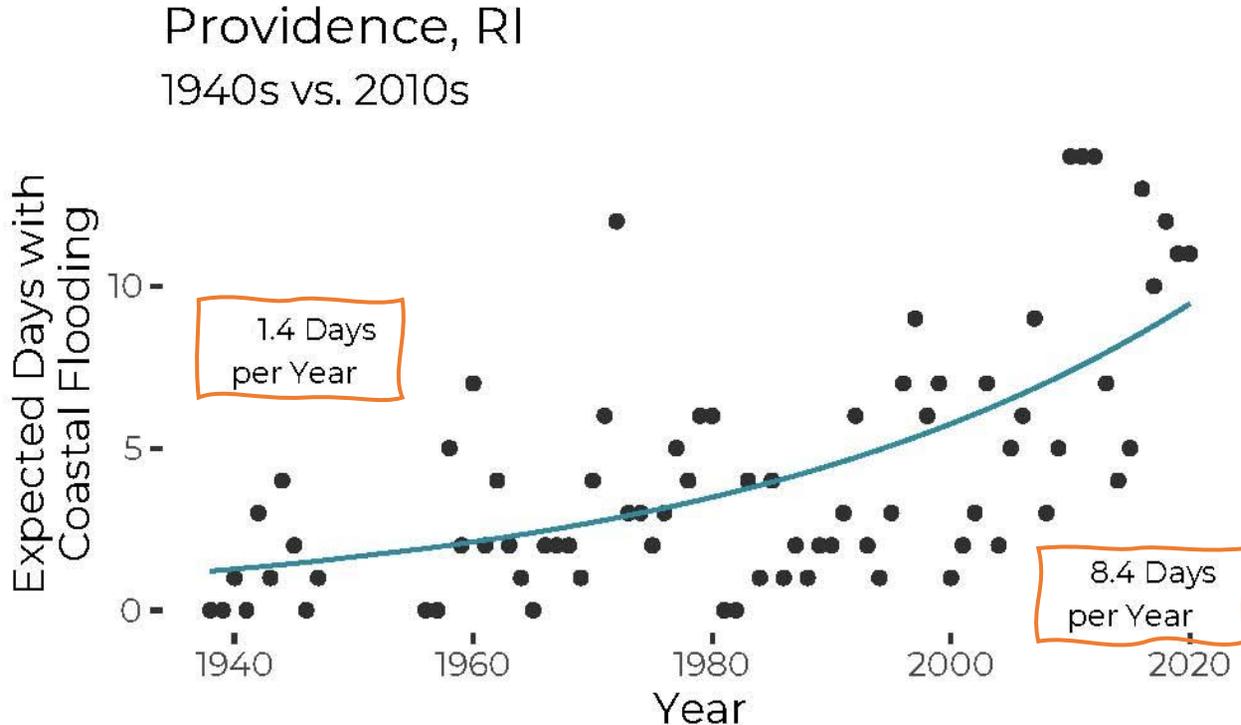


# WATER, WATER EVERYWHERE!



Nuisance flooding occurs without a storm, caused by extremely high tides. As sea level rises, nuisance flooding will occur more frequently

## NUISANCE FLOODING



Courtesy of Curtis Bohlen, Ph.D., Casco Bay Estuary Partnership

### Overall Findings

- Since the 1940s, Nuisance Flooding increased **six-fold** (from 1.4 days to 8.4 days per year)
- Since 1938 sea level has risen **8 inches**

### Why it matters....

Flooding damages infrastructure — overwhelming stormwater systems and closing roads even on sunny days. Residential basements flood and businesses are damaged through lost income and repair costs.

These floods are becoming more frequent as Rhode Island and Massachusetts lose 1-2 feet of coastline annually due to sea level rise. Sea level is projected to rise **9 to 11 feet by 2100**.

## Causes

Nuisance flooding is caused by extremely high tides:

- Spring tides (1-2 ft above an average high tide) or
- King tides (greater than 2 ft above an average high tide)

Rising seas cause high tides to reach farther inland and flood more often. Seawalls and hardened shorelines exacerbate flooding risk.



Providence River Seawall (NBEP)

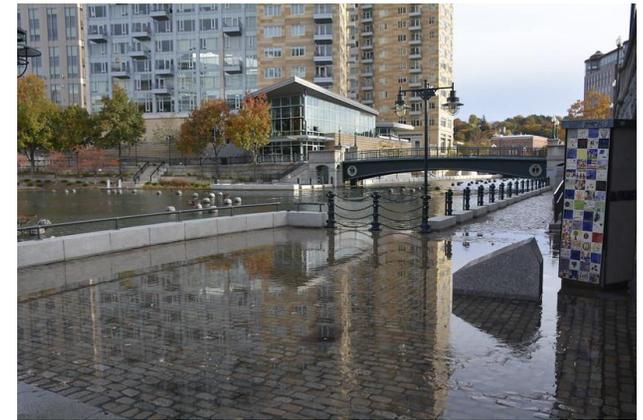
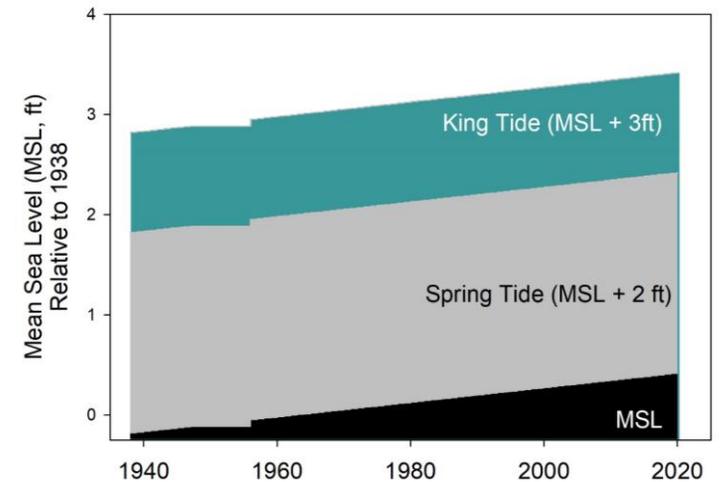
## Impacts and our Future

Flooding impacts daily life. Roads and sidewalks are impassable, storm drains are overwhelmed, basements are flooded, businesses lose income, and unsafe conditions are created.

Sea level rise coupled with hardened shorelines can make nuisance flooding even more widespread and common in the region.

## Areas For Further Study

- How can communities identify where and when nuisance flooding occurs in their neighborhoods (e.g., expand use of [MyCoast](#) or similar apps)?
- What steps can communities take to respond to nuisance flooding in their neighborhoods?
- What steps can municipalities or states take to respond to nuisance flooding?



**Above:** Providence, RI Waterplace Park during King tide;  
**Left:** Matunuck, RI during high tide (NBEP)

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