

# EXETER STORMWATER RESILIENCE

## ECONOMIC BENEFITS OF FLOOD AVOIDANCE

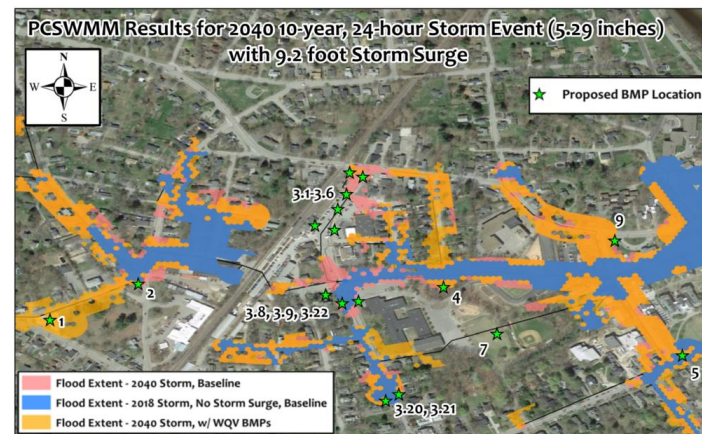


Photo: Flooding at Exeter Town Landing March 2018 Nor'easter

### Green Infrastructure and Climate Adaptation

1. New Hampshire coastal communities have experienced rising populations resulting in an increase in impervious surfaces, stormwater runoff, and associated flooding.
2. At the same time, communities are faced with a changing climate including extreme rainfall events and sea-level rise.
3. Green infrastructure is an important form of climate adaptation which can have significant economic benefits for flood damage avoidance.
4. The Exeter Resilience project conducted a cost impact analysis to evaluate the potential for flood damage avoidance with implementation of green infrastructure.

### Green Infrastructure Flood Reduction



### Flood Damage Avoidance

1. The cost impact analysis graphic at right shows the potential for flood damage avoidance with implementation of green infrastructure.
2. The estimated flood loss from a current 10-year storm is \$6.11 million or \$3.43 million with green infrastructure, a 51% reduction.
3. The total estimated cost to implement green infrastructure at 14 sites is \$689,000.
4. The greatest benefit is from small sized Best Management Practices that provide water quality and flood protection for a 0.5" storm, the most frequent annual rainfall event.

