RESILIENT MEADOW STREET

PROJECT UPDATE







Project goal is to reduce flood risk in Meadow Street neighborhood above Amtrak embankment

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FEMA flood mapping shows substantial flood risk to neighborhood

41 structures now in FEMA floodplain upland of Amtrak embankment

Does not include future sea level rise, flood risk will worsen



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Existing physical conditions are a challenge

"Cattle Crossing" is primary flood pathway

Meadow Street low point is at elevation 2.62'

Mean Higher High Water at elevation 2.97'



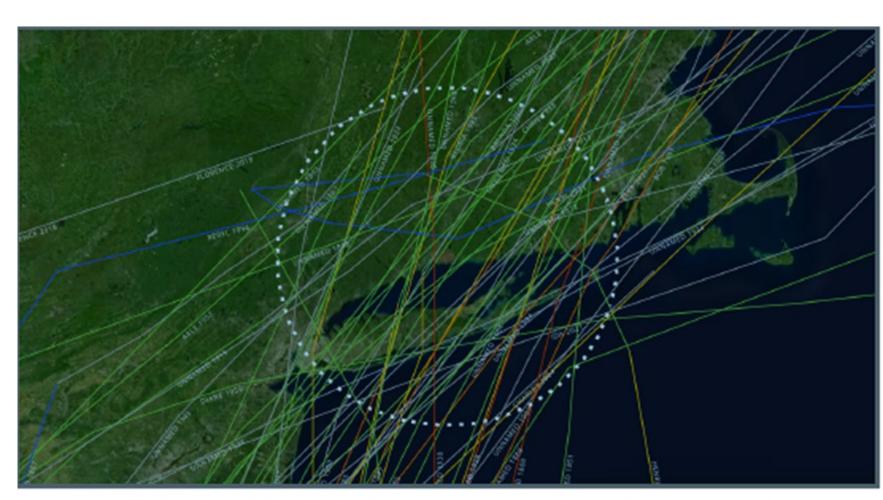
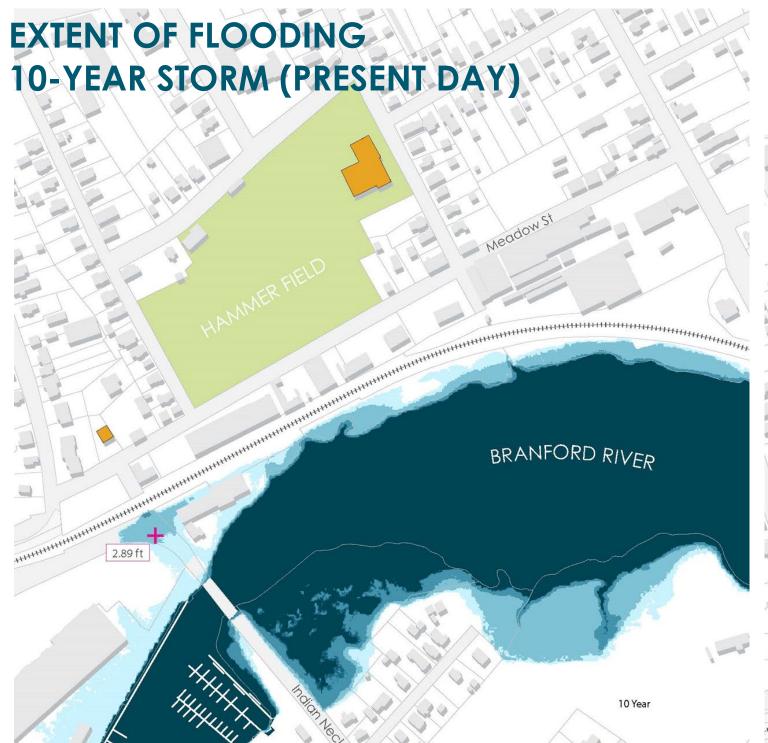


Figure 5: NOAA Storm Tracks for historical tropical storms and hurricanes within 60 miles of Branford.

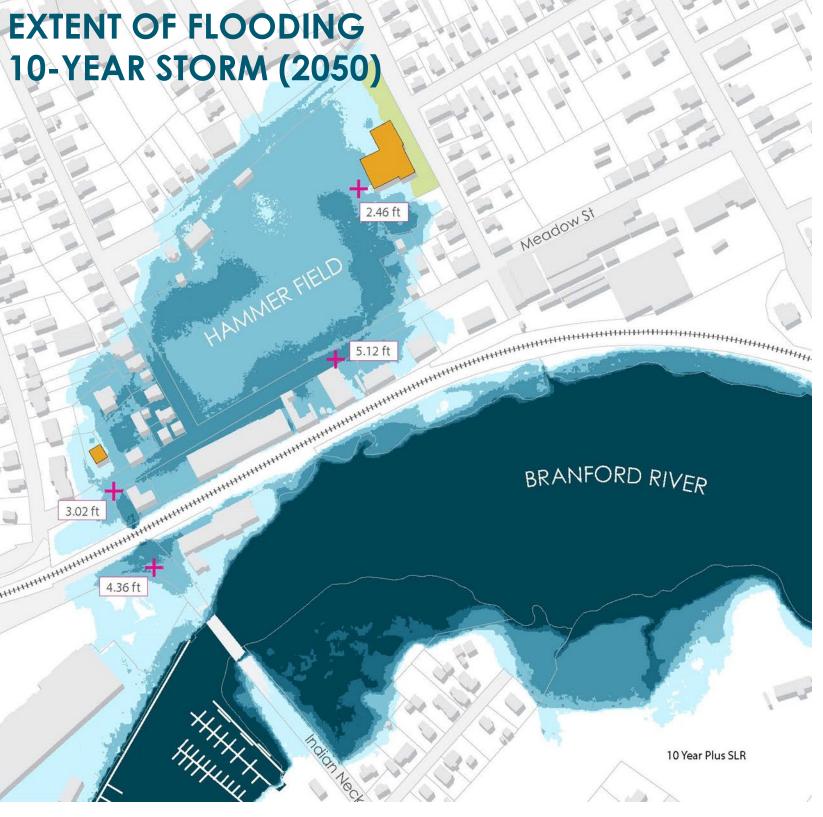
UCONN Connecticut Institute for Resilience & Climate Adaptation modeled current and future flooding

Future modeled conditions include 20-inches of sea level rise by 2050



10-YEAR RETURN STORM FLOOD MAPPING





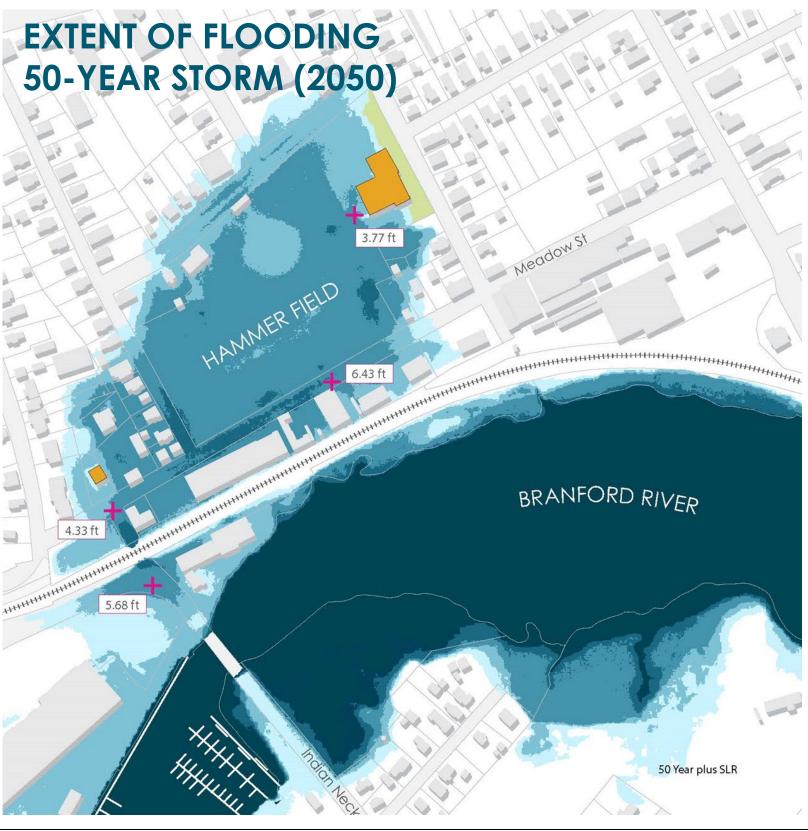




EXTENT OF FLOODING 50-YEAR STORM (PRESENT DAY) BRANFORD RIVER

50-YEAR RETURN STORM FLOOD MAPPING

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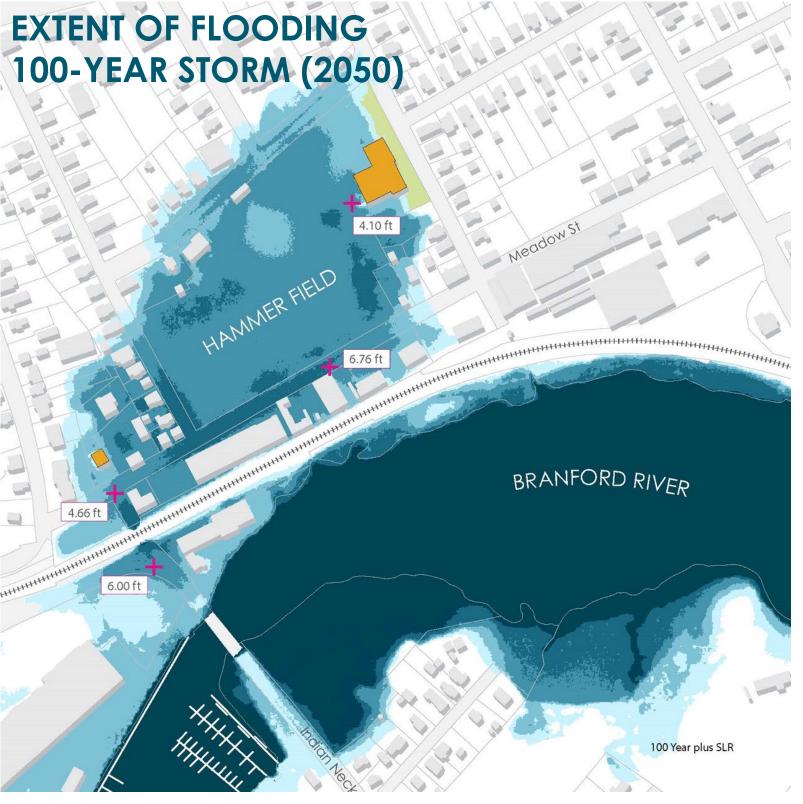




EXTENT OF FLOODING 100-YEAR STORM (PRESENT DAY) BRANFORD RIVER 100-YEAR RETURN STORM

FLOOD MAPPING







STORM EVENT	NUMBER OF STRUCTURES IMPACTED (NORTH OF TRAIN TRACKS)	
	Current Climate	Future Climate (2050)
10-year	0	34
50-year	29	40
100-year	35	42

Predicted that today's 100-year frequency flood will be equivalent to projected 10-year frequency flood in 2050

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2016 Public Meeting feedback to keep "Cattle Crossing" open

Two Options

1) Install gate-only to close "Cattle Crossing" during floods

2) Install gate and new floodwall to close "Cattle Crossing" and reinforce Amtrak embankment



OPTIONS	ADVANTAGES	DISADVANTAGES
Gate-Only	Relatively low cost	Likely not eligible for FEMA funding Requires human operation to be deployed (applies to both)
Gate with Flood Wall	Approvable by FEMA to remove upland structures from regulated floodplain	Multi-million dollar project Major visual impact Conflicts with existing building and Amtrak embankment, requires Amtrak approval



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QUESTIONS?



