

RESILIENT JEWETT CITY

Resilience Strategies for South Main Street
Borough of Jewett City, Town of Griswold,
Connecticut

NOVEMBER 20, 2025
Connecticut Association of Floodplain
Managers

FUSS &
O'NEILL

RESILIENT JEWETT CITY

INTRODUCTIONS



CONSULTANT TEAM: Fuss & O'Neill

Dean Audet: Senior Technical Consultant
Virgil Lloyd: Senior Vice President



Celicia Boyden
Project Manager



Rebecca Madsen
Project Engineer



Chelsea Zakas
Project Planner

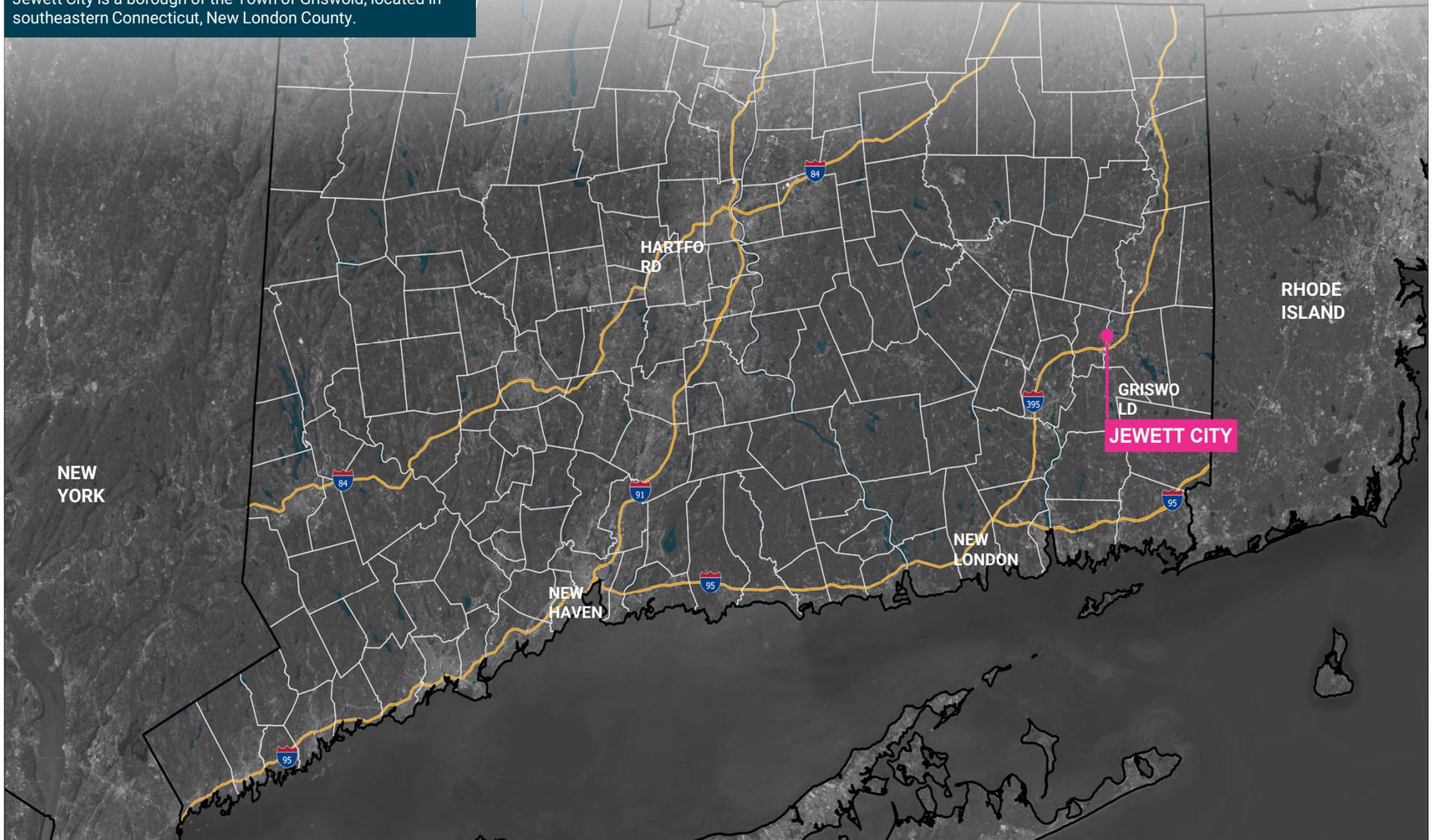


Walter Dylag
Project Sewer Engineer

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PROJECT LOCATION

Jewett City is a borough of the Town of Griswold, located in southeastern Connecticut, New London County.



RESILIENT JEWETT CITY PROJECT BACKGROUND

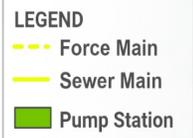
- The South Main Street Neighborhood is susceptible to both flood and heat risk
- Flooding of the Quinebaug River and Pachaug River caused inundation of the Neighborhood during the severe flood event of March 2010
- Approximately 35 condominium units on South Main Street were flooded
- The neighborhood's sewer pump station is also vulnerable to flooding



Flood event in Jewett City, March 2010, submerging a bridge that supported a major sewer main.

RESILIENT JEWETT CITY SEWER SYSTEM AND PUMP STATION

- Provides services to approximately 100 residential units, most in project area
- Uses electric powered pump
- Manholes are located throughout project area and are an entry point for floodwater
- Risk of sewage backflow into residential units during a flood event



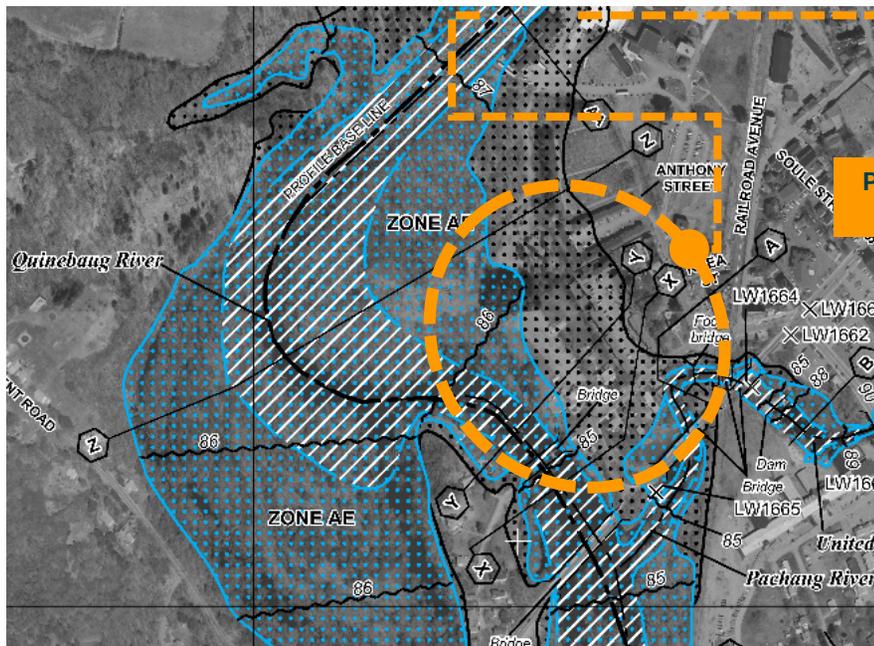
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FEMA FLOOD RISK MAPPING CHANGES

- FEMA updated the Neighborhood's flood risk mapping in 2023
- The new (2023) FEMA flood maps resulted in an increase in the "base flood elevation" (BFE), which expanded the width of the floodway and flood zones

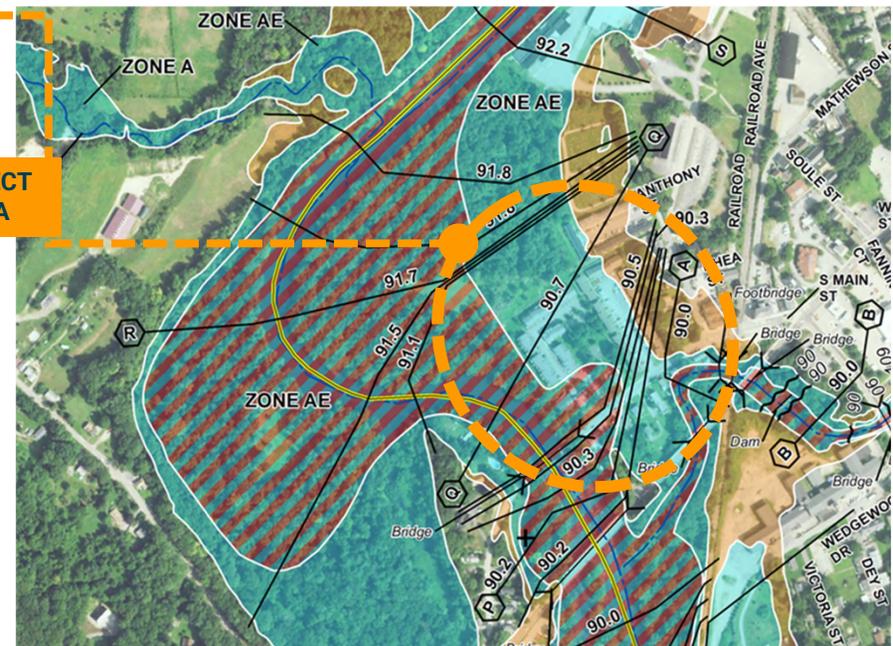
NUMBER OF BUILDINGS IN THE FEMA FLOOD HAZARD ZONE	2011	2023
FLOODWAY	0	5
1% ACF HAZARD ZONE	5	19
0.2% ACF HAZARD ZONE	22	29

*ACF – Annual Chance Flood



FEMA Flood Insurance Rate Map (FIRM) from July 18, 2011.

LEGEND	
	FEMA Floodway
	FEMA 1% Annual Chance Flood Hazard Zone
	FEMA 0.2% Annual Chance Flood Hazard Zone



FEMA Flood Insurance Rate Map (FIRM) from August 1, 2023.

LEGEND	
	FEMA Floodway
	FEMA 1% Annual Chance Flood Hazard Zone
	FEMA 0.2% Annual Chance Flood Hazard Zone



Increased Precipitation → Increase Riverine
Discharge (Flood Elevations) → Increase Damage
(Benefits)

RESILIENT JEWETT CITY PROJECT GOALS

- Assess + develop recommended strategies and implementable project concepts to mitigate flood and heat risks
- Work collaboratively with the community + stakeholders to select strategies and projects
- Develop scientifically-informed conceptual designs + implementation plan
- Position projects for implementation using federal and state funding



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RIVER RUN TOWNHOUSES - ILLUSTRATIVE FLOOD DEPTH (1% AEP)



RIVER RUN TOWNHOUSES

This illustration shows the approximate flood depth at the River Run Townhouses during a 1% Annual Chance Flood. There is potential for flood depths to reach first floor entry points (doors).

FOR ILLUSTRATIVE PURPOSES ONLY (NOT TO SCALE)

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JEWETT CITY RIVER RUN TOWNHOUSES - ILLUSTRATIVE FLOOD DEPTH (FUTURE 1% AEP)



RIVER RUN TOWNHOUSES

This illustration shows the approximate flood depth at the River Run Townhouses during a future 1% Annual Chance Flood according to the FEMA calculated future projected flood conditions.

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PACHAUG COMMONS - ILLUSTRATIVE FLOOD DEPTH (1% AEP)

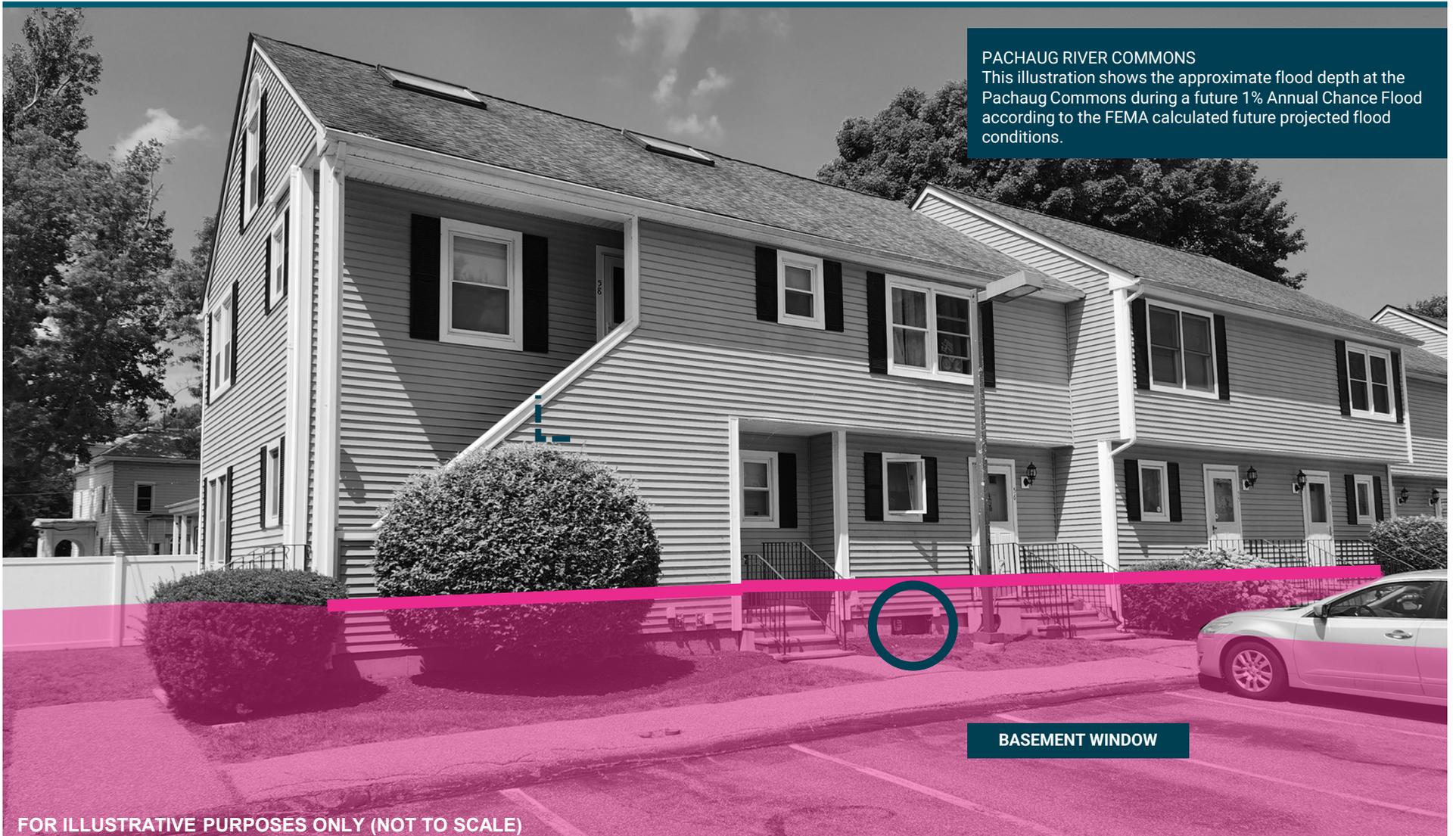


PACHAUG RIVER COMMONS
This illustration shows the approximate flood depth at the Pachaug Commons during a 1% Annual Chance Flood. There is potential for flood depths to enter basement spaces.

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JEWETT CITY PACHAUG COMMONS - ILLUSTRATIVE FLOOD DEPTH (FUTURE 1% AEP)



PACHAUG RIVER COMMONS
This illustration shows the approximate flood depth at the Pachaug Commons during a future 1% Annual Chance Flood according to the FEMA calculated future projected flood conditions.

BASEMENT WINDOW

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JEWETT CITY ANTHONY STREET - ILLUSTRATIVE FLOOD DEPTH (1% AEP)



ANTHONY STREET CONDOS

This illustration shows the approximate flood depth at the Anthony Street Condos during a 1% Annual Chance Flood. There is potential for flood depths to effect critical utility infrastructure.

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JEWETT CITY ANTHONY STREET - ILLUSTRATIVE FLOOD DEPTH (FUTURE 1% AEP)



ANTHONY STREET CONDOS

This illustration shows the approximate flood depth at the Anthony Street Condos during a future 1% Annual Chance Flood according to the FEMA calculated future projected flood conditions.

UTILITY METERS

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