



**Community Rating System (CRS)
ACTIVITY 510
Floodplain Management Plan (FMP)
2019-2020 Annual Progress Report
Town of Fairfield, CT
Community #0900007**

Background and Purpose:

The Town of Fairfield was accepted into the FEMA CRS program effective in January of 2017. As a Class 8 community, flood insurance policies within the Town qualify for a 10% rate reduction. One of the requirements for annual recertification with FEMA is an evaluation report on progress toward implementation of recommendations in the Natural Hazard Mitigation Plan.

The Town of Fairfield is part of the Greater Bridgeport Planning region and is a member municipality of the Connecticut Metropolitan Council of Governments (MetroCOG). MetroCOG includes six- member communities including Bridgeport, Easton, Fairfield, Monroe, Stratford, and Trumbull. MetroCOG facilitated workshops, mapping, and analysis and produced the 2014 Multi-jurisdictional Hazard Mitigation Plan (HMP) that includes Fairfield. Fairfield actively participated in the planning process and continues to participate in ongoing meetings of the Conservation Technical Advisory Committee (CTAC) which continues to review potential projects. The project list has also been reviewed with town staff to evaluate progress as indicated below. MetroCOG completed an update to the Hazard Mitigation Plan in fall 2019 with an update to be completed by the end of summer 2024 presently in progress.

1. Name of the CRS Floodplain Management Plan (LMS or other):

Greater Bridgeport Regional Council 2019 Natural Hazard Mitigation Plan Update

2. Date Adopted:

September 23, 2019 (Fairfield)

3. Location where copies are available for review:

Town of Fairfield
Sullivan Independence Hall
Engineering Department – 1st Floor
Plan and Zoning Department – 2nd Floor
725 Old Post Road
Fairfield, CT 06824

Online at MetroCOG's website at <https://rebrand.ly/metrocog-floodprotection>

4. Summary of any floods that occurred during the year (if any):

Fairfield experienced two significant flooding events in addition to cyclical high tide limited flooding during the past year including:

- Fairfield experiences regular street flooding during lunar high tide, and limited surge experienced during high-sustained wind events in the Fairfield Beach Road area with increasing “sunny day flooding” particularly during periods of high tides and significant wind.
- Heavy rainstorms occurred in conjunction with thunderstorms in July 2023 and September 29, 2023 which caused inland and coastal flash flooding in Connecticut, including major roads and highways
- December 2023 had increased monthly rainfall totals exceeding 8 inches with minor flooding conditions.
- Back-to-back winter storms with significant rainfall occurred January 8-12, 2024 and caused significant riverine flooding.

5. What impact did floods have on the repetitive loss areas:

The flooding events did impact areas that have experienced repetitive flooding along the Rooster River corridor, coastal neighborhoods, and the Fairfield Beach Road area, including vehicles, vehicle parking areas, and pre-existing basements in low-lying areas.

6. List each element of the original plan and note how much was accomplished during the previous year.

The table reflects the action table items in the Greater Bridgeport Regional Council 2019 Natural Hazard Mitigation Plan this has an effective period of 2019-2024. An updated plan is currently in progress with a completed date of late summer 2024 and action table items will be updated for the next review. The “Carried Forward or New Action” item indicates whether the element was in the prior plan or whether the item is new.

Prevention:

ID	Action	CF or NA	Action Type	Responsible Department	Implementation Process	Time Frame	Cost	Funding
1	Secure funds and proceed with construction of the Riverside Drive tide gate system	CF	ST	Conservation and Engineering	Conservation and DPW are collaborating on this project. (Construction starting)	Construction April 2024-2025	Funding increased to 7.15 M	Capital improvement funds
2	Ensure that the current dam failure EAPs are filed with pertinent Town departments.	CF	ES	OEM	EMD to obtain copies and file them with departments such as DPW and Planning.	7/2019-6/2020	<\$100K	Operating budget; existing staff to coordinate (action is to obtain and distribute).
3	Advance the South Benson Road pumping station to final design/construction.	CF	ST	DPW and Engineering	DPW/Engineering is coordinating this project. (Conceptual only – Design TBD)	Delayed until 2030-33	\$37 Million	Capital improvement funds (BCA too low for FEMA grant funds)

ID	Action	CF or NA	Action Type	Responsible Department	Implementation Process	Time Frame	Cost	Funding
3a	Identify beach area stormwater drainage system areas for upgrade	NA	ST	DPW and Engineering	Minor increased capacity stormwater improvements installed on Rhoda Avenue and Carlynn Drive Need to identify other drainage improvement options in this area (FBR).	Done in 2020, Other analysis TBD	<\$100K	Capital Improvement Funds
4	Pursue an executable phase of the Riverside Drive/Ash Creek flood protection system by focusing on design of a segment that affects only Town-owned land.	CF	ST	Conservation, Engineering, and FECB	Conservation and DPW collaborated on the Riverside Drive/Ash Creek project in 2016-2017 and should collaborate on the design phase.	2023-2026	\$100K - \$500K	Grant funds for design CIRCA BCA review in 2022-23 showed BCA <1 Will be reviewed as part of Town Resilience Plan Update
4a	Ash Creek tidal marsh planting program to minimize erosion	CF	ST	Conservation, Engineering, and FECB	Partnered study with Bridgeport and a local non profit	Complete	\$26K for planting	Completed plantings & sand fence along Ash Creek sand spit
5	Secure funds for a microgrid at the WWTP to include adjacent and nearby municipal buildings.	CF	PP, ES	WPCA	The Town has been successful with the State's microgrid program. Leverage this experience to pursue a microgrid at the WWTP and nearby buildings.	7/2019-6/2022 In progress 6/2023	\$3 Million	State microgrid program
5a	Discuss a potential Resiliency Fund with the Board of Selectman	NA	PP	FECB, Finance Department	Requires review and Implementation with BOS – Still Pending. Review as part of Town Resilience Plan Update	2024-2025	TBD – initial fund with annual recurring contributions	General Fund
5b	Flood Protection Study for area Between Jennings and Penfield Beaches	NA	PP	Engineering	On Hold and will be reviewed as part of Town Resilience Plan Update	2024-2025	\$100K	Capital Non-recurring Funds
5c	Flood Protection Study for Penfield Beach area	CF	PP	Engineering and FECB	Determine additional neighborhood protection needs with Pavilion remediation project	In progress 2023-2024	\$100K	General Fund

ID	Action	CF or NA	Action Type	Responsible Department	Implementation Process	Time Frame	Cost	Funding
5d	Town Resilience Plan Update	NA	PP	FECB and Engineering	Development of Town-wide Resilience Plan that will address coastal and riverine flood and erosion	2024-2025	\$100K-\$375 TBD based on scope	ARPA

Property Protection:

ID	Action	CF or NA	Action Type	Responsible Department	Implementation Process	Time Frame	Cost	Funding
6	Address equipment in library basements to prepare for when flooding occurs. In progress	CF	PP	Library/DPW	Continue this project to completion.	7/2019-6/2022	\$100K - \$500K	Capital improvement funds

Structural:

ID	Action	CF or NA	Action Type	Responsible Department	Implementation Process	Time Frame	Cost	Funding
7	Coordinate with the Army Corps of Engineers to determine a feasible option for future improvements to the Pine Creek dike system.	CF	ST	FECB and Engineering	Army Corps of Engineers provided a comprehensive study of flood protection. Recently received ACOE study with reinforced Pine Creek Dike System (2/2021) New tidegates at Kiwanis Field	7/2019-6/2022 2023-LONG Term	Study: \$1 M Construction \$500K-600K \$150 M for this section	Operating budget; existing staff to coordinate. Construction funding if awarded is 35% town match
7a	Tidegate/Flood control inventory	NA	ST	Engineering	Develop 5-year maintenance & repair plan	2024-2029	\$2.5-3 M	Capital Funds/TBD
8	Secure funds for beach nourishment in accordance with the engineered beach study and design.	CF	NR	Conservation and Engineering	The Town has conducted beach nourishment in the past and will utilize similar procedures going forward. Proceed with ACOE/DEEP approvals once (Penfield NOV is complete)	7/2020-present	<\$100K	Operating budget; existing staff to coordinate (action is to secure funds only). Determine annual cost based on sand needs.

ID	Action	CF or NA	Action Type	Responsible Department	Implementation Process	Time Frame	Cost	Funding
9	Relocate/increase capacity for sanitary sewer trunk lines in areas of significant flood risk.	CF	ST	WPCA	This project scheduled 2024 (East Trunk)	4/2024-2025	\$11 Million	Capital improvement funds
10	Secure funds for implementation of a portion of the Downtown Green Infrastructure Study and Conceptual Plan.	CF	ST, NR	Engineering	Used ARPA funds to hire Consultant. In Design/ Part of 5-year Plan.	In progress	\$10 M	Operating budget; existing staff to coordinate. ARPA Funds
10a	Downtown Green Infrastructure Project: Train Parking Lot-Impervious Surface Area	NA	ST	Parking Authority and Engineering	Completed as part of Maintenance Project	Completed Summer 2019	Part of budgeted costs	Parking Authority Operating Budget/Capital Improvement Funds
10b	Downtown Green Infrastructure Project: Sherman Green Drainage and Sanford Street dry well	CF	ST	Engineering and DPW	Town applied for and was granted funds to complete drainage as well as sidewalk and tide gate flap work	Completed Summer 2019	\$200K	STEAP Grant
11	Allocate funds for replacements of culverts to alleviate flooding in the Rooster River, Royal Avenue, and Camden Street areas.	CF	ST	Engineering	Study and design has been completed for some areas. The Town will begin allocating funds through the CIP. Buying 3 Camden properties via FEMA funds pending	7/2022-6/2024	>\$1 Million	Capital improvement funds/potential funding through CT DOT for 1-95 Culverts
12	Determine whether the culvert at Merwins Lane can be replaced to increase capacity.	CF	ST	Engineering	Replacing culvert in kind with potential for increased capacity	2024	<\$100,000	Operating budget; existing staff to coordinate. Using FEMA funds to replace headwall. May elect to include knock out for potential culvert in future.
13	Identify the next steps to set aside land for detention/watershed storage in the Rooster River watershed.	CF	ST, NR	Engineering and DPW	Rooster River watershed flood detention/storage study completed in 2019. Project Implementation.	Permits Spring 2024 Construction 2024-2025	\$7-10 M	Operating budget. Bridgeport to contribute \$750 K for Fairchild Wheeler G.C. detention

ID	Action	CF or NA	Action Type	Responsible Department	Implementation Process	Time Frame	Cost	Funding
13a	Purchase 150 Villa Avenue parcel for open space and stormwater quality improvements which result in minor detention /conveyance improvements	CF	ST, NR	Engineering & DPW	Rooster River watershed flood detention/storage study completed in 2019. Project Implementation	Permits 2023 Construct 2024	\$400K	Town used ARPA funds to purchase parcel.
14	Conduct a feasibility study for elevating Fairfield Beach Road, including public outreach and incorporation of public input.	CF	ST, ES	Engineering, DPW, FECB, and OEM	On Hold – to be included in Town Resiliency Plan	6/2021 -	\$100K-\$500K	Operating budget for existing staff and/or consultant
15	Conduct a study to determine the feasibility of extending the dike in Southport along Harbor Road (Perry's Green Bulkhead Repair to elev. 5.8)	CF	ST	FECB and Engineering	DEEP Permitting obtained	Construction 2024	\$1.5 M	ARPA
16	Determine the feasibility of installing pumping stations beneath the railroad underpasses to remove floodwaters.	CF	ST	Engineering and DPW	CIRCA completing additional feasibility study for underpass areas.	2024	\$100K-\$500K	CIRCA Funds as a Pilot Program
16a	Secure funds to study feasibility of raising the bulkhead elevation along Pine Creek to protect against future Sea Level Rise	NA	ST	FECB and Engineering	Engineering should retain a consultant for this feasibility study if possible	2025-2030	\$150K	Capital/Non-recurring/Grant Funding

Natural Systems Protection:

ID	Action	CF or NA	Action Type	Responsible Department	Implementation Process	Time Frame	Cost	Funding
17	Select one action from the Rooster River Watershed Management Plan and secure funding for its execution. Focus on an action that has multiple hazard mitigation benefits. Detention Basins + 150	CF	ST, NR	Conservation	Conservation to identify and secure funds. Potential funds are NOAA, NFWF, and EPA Section 319 (state) grant programs. Harbor Watch to provide on-going water quality monitoring.	7/2020-6/2022 2023	<\$100K \$7-10 M 400K	Operating budget; existing staff to coordinate (action is to secure funds only).

ID	Action	CF or NA	Action Type	Responsible Department	Implementation Process	Time Frame	Cost	Funding
	Villa Ave purchase.				Town purchased Property, apply for grant for passive, environmental improvements			Some ARPA Funds State Urban Grant
18	Conduct outreach and feasibility study for the conceptual dune ridge design that addresses the Penfield/Shoal Point area. (CT DEEP issues?)	CF	ST, NR	Conservation, Engineering, and FECB	Conservation to identify and secure funds, working with the FECB and Engineering. Potential funds are NOAA, NFWF, and CIRCA (state) grant programs.	6/2022-6/2024	\$100K-\$500K	Operating budget for existing staff and/or consultant
18a	Continue to explore feasibility of off-shore methods to reduce wave impacts	NA	NS	FECB	On Hold – Part of Town Resilience Plan Study	2024-2025	\$400K	ARPA Funding
18b	Tidal Marsh Restoration	NA	NS	Conservation	Increase tidal marsh flushing between Reef and Rowland Roads	2024-2026	\$300K	TBD

Education and Awareness:

ID	Action	CF or NA	Action Type	Responsible Department	Implementation Process	Time Frame	Cost	Funding
19	Train and equip neighborhood storm response teams (i.e., CERT), for neighborhoods that have in the past been cut off from emergency services by floodwaters or downed trees, as well as to assist lower-income populations.	CF	ES	OEM and CERT	The EMD and CERTs will collaborate to accomplish this action. Spring 2023 training completed. CERT _ EMD	7/2019-6/2021	<\$100K	Operating budget; existing staff to coordinate.
20	Develop tree planting guidelines that are aligned with hazard mitigation goals.	CF	PP	DPW and Conservation	Conservation and DPW & FSTF will team to developing guidelines for native tree species on town properties.	7/2019-6/2021	<\$100K	Operating budget; existing staff to coordinate.
20a	Co-host Education Workshop and update on Rooster River Flood Mitigation study and projects with Fairfield and Bridgeport residents	NA	PP	Engineering	Engineering Dept. to work with City of Bridgeport staff and consultant Continue with Town updates. Seeking easements.	2021-2022 Ongoing	<\$100K	Operating budget; existing staff to coordinate Public meeting Sept/2023.

Emergency Services:

ID	Action	CF or NA	Action Type	Responsible Department	Implementation Process	Time Frame	Cost	Funding
21	Conduct a feasibility study for elevating Turney Road, including public outreach and incorporation of public input.	CF	ST, ES	Conservation, Engineering, FECB, and OEM	Elevating Turney Road was partly addressed during the public engagement associated with the Riverside Drive/Ash Creek flood protection study and conceptual plan, this past effort should be used to initiate the study. Consultant services may be secured for further evaluating the feasibility and engaging the public. However, unlike the Riverside Drive/Ash Creek study, this action should directly involve emergency management personnel.	3/2025	\$100K-\$500K	Operating budget for existing staff and/or consultant Seeking grant funding.
22	Provide and install generators to senior housing complexes and other complexes that serve vulnerable populations to allow them to shelter in place.	CF	ES, PP	OEM and DPW	Assigned staff should begin securing funds early in the lifespan of the plan update.	7/2021-6/2024	>\$1 Million	FEMA HMA, DHS preparedness grants
24	Enhance flood protection at the DPW (immediate and surrounding areas) garage or consider feasibility of moving garage to an alternate location.	CF	ST, PP	DPW	DPW will commence this action with a feasibility study that addresses flood protection vs. relocation. (Delayed)	2024-2029	\$100K-\$500K	Operating budget for existing staff and/or consultant
25	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	NA	PE	P&Z	Coordinate directly with CT DEEP on this statewide initiative.	2022-2023	<\$100K	Operating budget; existing staff to coordinate.
26	Secure funding from SHPO to conduct a historic resources survey focusing on potential historic resources in coastal flood risk areas.	NA	PP	P&Z	Coordinate directly with CT SHPO on this statewide initiative.	7/2021-6/2022	<\$100K	Operating budget; existing staff to coordinate (action is to

ID	Action	CF or NA	Action Type	Responsible Department	Implementation Process	Time Frame	Cost	Funding
								secure funds only).
27	Work with CT DEEP to complete a formal validation of the RL list and update the mitigation status of each listed property.	NA	PP	P&Z	Coordinate directly with CT DEEP. Conduct in connection with CRS participation.	7/2019-6/2020	<\$100K	Operating budget; existing staff to coordinate.
28	Contact the owners of Repetitive Loss Properties and nearby properties at risk to inquire about mitigation undertaken and suggest options for mitigating flooding in those areas. This should be accomplished with a letter directly mailed to each property owner. Coordinate with CRS participation.	NA	PP	P&Z	Conduct in connection with CRS participation.	7/2019-6/2020	<\$100K	Operating budget; existing staff to coordinate.
29	Contact the owners of properties that experience frequent flooding (which may not be RL properties) to suggest options for mitigating flooding. This should be accomplished with a letter directly mailed to each property owner.	NA	PP	P&Z	Conduct in connection with CRS participation.	7/2019-6/2020	<\$100K	Operating budget; existing staff to coordinate.
30	Achieve additional objectives associated with the Sustainable CT program, focusing on those aligned with hazard mitigation.	NA	PR, NR	Sustainable Fairfield	Encourage the existing volunteer committee to achieve additional actions, with direction to focus on those aligned with hazard mitigation. On going.	2024-2025	<\$100K	Operating budget; existing staff to coordinate.
31	Work with USGS or NOAA to establish a tide gauge in Long Island Sound to provide real-time water level data. The nearest USGS gauge is in Stamford and the nearest NOAA gauge is in Bridgeport.	NA	ES	Engineering and OEM	This action will require considerable coordination. Initial contacts should be made with NOAA and USGS, as both agencies host tide gauges in Long Island Sound. Tide gage markings installed in South Benson Marina area and FBR sewer pumpstation that are captured by	7/2020-6/2022	<\$100K	Operating budget; existing staff to coordinate. Funding for execution will be addressed in future updates.

ID	Action	CF or NA	Action Type	Responsible Department	Implementation Process	Time Frame	Cost	Funding
					CCTV that allow 24-hour remote monitoring that allows early warning to the OEM.			
32	Develop a written plan for inspection of Town-owned bridges that may experience scour during flood events. The plan should set a timeframe for inspections after floodwaters have receded.	NA	ST	DPW and Engineering	DPW and Engineering will collaborate on this action. Consultant services are not likely needed. (Process instituted after every 10-year+ rainfall storm event)	7/2019-6/2020 Action Plan Initiated 9/2021	<\$100K	Operating budget; existing staff to coordinate.
33	Provide suggested "code plus" strategies to make structures more resilient to wind when applications are processed for elevating buildings.	NA	PP	Building	The Building Department staff will commence this action in the next fiscal year and then make it common practice.	2024-2025	<\$100K	Operating budget; existing staff to coordinate.
34	Work with UCONN Climate Corps intern to map flood-compliant and non-flood-compliant structures in the flood zone	NA	PP, PR & ES	FECB w/TPZ and Engineering	14-week work intern work period with a presentation & mapping provided at the end	1/2023 thru 5/2023 – Partial Completed	No cost	N/A
35	Discussions with Aquarion Water to develop resident notification plans for properties that lie within the inundation zones from a dam failure.	NA	PP, PR ES	Fire Department/ Aquarion Water	Aquarion is working through their corporate process to approve messaging	2024	No cost	On-going/ Annual

Action Type abbreviation: PP=property protection; PR=prevention; NR=natural resources protection or restoration; ST=structural projects; ES=emergency services; and PE=public education

7. Were any objectives not reached or is implementation behind schedule? If so, state why:

Fairfield continues to make progress towards its resiliency efforts and action items listed in the Hazard Mitigation Plan. The Town continues to advance design for priority projects in order to be ready for available grants and funding. **ARPA funds have been helpful in moving some project forward. However, some delays have been caused by design delays (due to manpower) and permitting taking longer to obtain permits.**

8. Should new projects be started and should any of the recommendations or objectives be revised:

MetroCOG updated the Multi-town Hazard Mitigation Plan over the course of Spring/Summer 2019 with new recommendations and objectives. The recommendations and objectives from that plan are the most current. **However some modified action item refinements have been added where shown in red.** New design standards to higher flood protection standards as

well as incorporation of future sea level rise impacts should be added in order to ensure that mitigation projects are long-lasting.

9. Progress Report discussed and/or made publicly available.

The FMP update report was prepared by Fairfield's CRS Coordinator with coordination and input from multiple town staff including, Engineering and Conservation, the Fire Department's Emergency Management contacts and with the town's Flood Erosion Control Board members. Action Items are derived from the Hazard Mitigation plan adopted in Fall 2019. The Plan's storm information was reviewed with town staff and updated. **It was presented to the Board of Selectmen on February 13, 2024. The Town issued a press release following the meeting on February 14, 2024.**

A copy of this report can be obtained on Fairfield's Plan and Zoning Department website under the Forms and Documents tab. For more information please contact Emmeline Harrigan, AICP, CFM - CRS Coordinator at eharrigan@fairfieldct.org.