



**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 has started the HMP Update process with an update to the Hazard Mitigation Plan anticipated in mid-summer 2019.

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
<http://www.ctmetro.org/projects/environment-sustainability-2/nhmp/#.WkPKIVWGNEZ>

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

Fairfield experienced several limited flooding events during the past year including:

- On October 2, 2019 there was unseasonably hot weather in the 80s pushed out by a rapid cold front accompanied by heavy thunderstorms that caused a 30 degree drop in temperature. The rainfall event in the Rooster River watershed that caused riverine flooding and limited lower lying roadway flooding in the beach neighborhoods.
- Summer into fall 2019 had several very quick and intense rainfall events of approximately 2 inches that caused minor coastal flooding including 8/19/2019, 10/16/2019, and 10/31/2019.
- Fairfield experiences modest street flooding in the past calendar year (2019) during high rainfall events, during lunar high tide, and limited surge experienced during high-sustained wind events.

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

The flooding events required moving vehicles due to street flooding, but overall property damage was limited.

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

The table reflects the new action table items in the newly adopted Greater Bridgeport Regional Council 2019 Natural Hazard Mitigation Plan and is for the new plan effective period of 2019-2024. The “Carried Forward or New Action” item indicates whether the elements 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. | 7/2019-6/2020 | >\$1 Million | 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 | <\$100,000 | 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. | 7/2019-6/2022 | >\$1 Million | Capital improvement funds |
| 4 | Pursue an executable phase of the Riverside Drive/Ash Creek flood protection system by focusing on design of a | CF | ST | Conservation, Engineering, and FECB | Conservation and DPW collaborated on the Riverside Drive/Ash Creek project in 2016- | 7/2020-6/2022 | \$100,000-\$500,000 | Grant funds for design |

| ID | Action | CF or NA | Action Type | Responsible Department | Implementation Process | Time Frame | Cost | Funding |
|----|--|----------|-------------|------------------------|---|---------------|--------------|-------------------------|
| | segment that affects only Town-owned land. | | | | 2017 and should collaborate on the design phase. | | | |
| 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 | >\$1 Million | State microgrid program |

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. | CF | PP | Library/DPW | Continue this project to completion. | 7/2019-6/2020 | \$100,000-\$500,000 | 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 | Although the Town's FECB has been discussing and promoting various means of improving the dike system, the Army Corps of Engineers is proceeding with a study of flood protection. The Town should try to participate more directly, either through CT DEEP or with the Corps. | 7/2019-6/2022 | <\$100,000 | Operating budget; existing staff to coordinate. |
| 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. | 7/2020-6/2022 | <\$100,000 | Operating budget; existing staff to coordinate (action is to secure funds only). |
| 9 | Relocate the sanitary sewer transmission truck lines from areas of significant flood risk. | CF | ST | WPCA | This project is underway. Carry forward for completion. | 7/2019-6/2022 | >\$1 Million | Capital improvement funds |

| ID | Action | CF or NA | Action Type | Responsible Department | Implementation Process | Time Frame | Cost | Funding |
|----|--|----------|-------------|---------------------------|---|---------------|---------------------|--|
| 10 | Secure funds for execution of a portion of the Downtown Green Infrastructure Study and Conceptual Plan. | CF | ST, NR | Engineering | The Town applied for a grant from NFWF in 2018 but was not successful. Additional funding opportunities will be pursued. | 7/2019-6/2022 | <\$100,000 | Operating budget; existing staff to coordinate (action is to secure funds only). |
| 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. | 7/2022-6/2024 | >\$1 Million | Capital improvement funds |
| 12 | Determine whether the culvert at Merwins Lane can be replaced to increase capacity. | CF | ST | Engineering | Due to neighbor opposition, the action should focus on determining whether the project is feasible, whether it can achieve the desired result, and whether issues with the neighbor can be resolved. If one of these is not favorable, this project should be retired from consideration. | 7/2020-6/2021 | <\$100,000 | Operating budget; existing staff to coordinate. |
| 13 | Identify the next steps to set aside land for detention/watershed storage in the Rooster River watershed. | CF | ST, NR | Engineering and DPW | A flood detention/storage study was completed in 2019 to augment previous studies in the Rooster River watershed. Utilize the momentum surrounding this issue to define the next steps to further explore feasibility. | 7/2020-6/2021 | <\$100,000 | Operating budget for existing staff and/or consultant |
| 14 | Conduct a feasibility study for elevating Fairfield Beach Road, including public outreach and incorporation of public input. | CF | ST, ES | Engineering, DPW, and OEM | Due to the dual needs of this project (engineering feasibility and public buy-in), a formal feasibility study will be conducted that directly incorporates public input. | 7/2020-6/2021 | \$100,000-\$500,000 | 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. | CF | ST | FECB and Engineering | This feasibility study can proceed in a manner similar to the Ash Creek/Riverside Drive study and conceptual plan. Public input should be directly incorporated. | 7/2021-6/2022 | \$100,000-\$500,000 | Operating budget for existing staff and/or consultant |

| ID | Action | CF or NA | Action Type | Responsible Department | Implementation Process | Time Frame | Cost | Funding |
|----|--|----------|-------------|------------------------|--|---------------|---------------------|---|
| 16 | Determine the feasibility of installing pumping stations beneath the railroad underpasses to remove floodwaters. | CF | ST | Engineering and DPW | Engineering should retain a consultant for this feasibility study if possible, but may be able to complete in-house if time permits. | 7/2021-6/2022 | \$100,000-\$500,000 | Operating budget for existing staff and/or consultant |

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. | CF | ST, NR | Conservation | Conservation to identify and secure funds. Potential funds are NOAA, NFWF, and EPA Section 319 (state) grant programs. | 7/2020-6/2022 | <\$100,000 | Operating budget; existing staff to coordinate (action is to secure funds only). |
| 18 | Conduct outreach and feasibility study for the conceptual dune ridge design that addresses the Penfield/Shoal Point area. | 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. | 7/2021-6/2022 | \$100,000-\$500,000 | Operating budget for existing staff and/or consultant |

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), especially in 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. | 7/2019-6/2021 | <\$100,000 | 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 will team to develop guidelines. | 7/2019-6/2021 | <\$100,000 | Operating budget; existing staff to coordinate. |

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 | Because 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. | 7/2022-6/2023 | \$100,000-500,000 | Operating budget for existing staff and/or consultant |
| 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. | 7/2022-6/2023 | \$100,000-500,000 | 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. | N | PE | P&Z | Coordinate directly with CT DEEP on this statewide initiative. | 7/2020-6/2021 | <\$100,000 | 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. | N | PP | P&Z | Coordinate directly with CT SHPO on this statewide initiative. | 7/2021-6/2022 | <\$100,000 | 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 |
|----|---|----------|-------------|------------------------------|---|---------------|------------|--|
| 27 | Work with CT DEEP to complete a formal validation of the RL list and update the mitigation status of each listed property. 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. | N | PP | P&Z | Coordinate directly with CT DEEP. Conduct in connection with CRS participation. | 7/2019-6/2020 | <\$100,000 | Operating budget; existing staff to coordinate. Operating budget; existing staff to coordinate. |
| 28 | Work with CT DEEP to complete a formal validation of the RL list and update the mitigation status of each listed property. 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. | N | PP | P&Z | Conduct in connection with CRS participation. | 7/2019-6/2020 | <\$100,000 | Operating budget; existing staff to coordinate. 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. | N | PP | P&Z | Conduct in connection with CRS participation. | 7/2019-6/2020 | <\$100,000 | Operating budget; existing staff to coordinate. |
| 30 | Achieve additional objectives associated with the Sustainable CT program, focusing on those aligned with hazard mitigation. | N | PR, NR | Existing volunteer committee | Encourage the existing volunteer committee to achieve additional actions, with direction to focus on those aligned with hazard mitigation. | 7/2019-6/2020 | <\$100,000 | 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. | N | 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. | 7/2020-6/2022 | <\$100,000 | Operating budget; existing staff to coordinate. Funding for execution will be addressed in future updates. |
| 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. | N | ST | DPW and Engineering | DPW and Engineering will collaborate on this action. Consultant services are not likely needed. | 7/2019-6/2020 | <\$100,000 | Operating budget; existing staff to coordinate. |

| ID | Action | CF or NA | Action Type | Responsible Department | Implementation Process | Time Frame | Cost | Funding |
|----|---|----------|-------------|------------------------|---|---------------|------------|---|
| 33 | Provide suggested "code plus" strategies to make structures more resilient to wind when applications are processed for elevating buildings. | N | PP | Building | The Building Department staff will commence this action in the next fiscal year and then make it common practice. | 7/2019-6/2020 | <\$100,000 | Operating budget; existing staff to coordinate. |

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 has made good progress on many of the action items listed in the prior Hazard Mitigation Plan. The new objectives were recently adopted and will show more progress as part of next year's review.

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 and do not need to be revised yet. Next year's review should New design standards to higher 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 and is derived from the recently adopted Hazard Mitigation plan. The Plan's storm information was reviewed with town staff and updated. It was presented to the Board of Selectmen on January 6, 2020. The Town issued a press release following the meeting on January 6, 2020.

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.