

Newburyport Resiliency Committee (NRC) Meeting Notes
3:00 pm Nov 15, 2023

NRC Mission Statement

The Newburyport Resiliency Committee will analyze, coordinate, and develop a plan in conjunction with regional planning efforts to increase community resilience related to sea level rise, storm surge, flooding and extreme weather events throughout the city. Further, the committee will advocate for and oversee implementation of the plan's recommendations.

NRC Attendees: Jane Healey (chair), Julia Godtfredsen, Barry Connell, Jon-Eric White, Sarah Tappan (note taker), Kristen Grubbs (Newbury), Andy Port, Molly Ettenborough

Other Attendees: Rick Parker and Chip Wallace (West Newbury Climate Change Resiliency Committee)

Absent: Samantha Burke, Connie Preston, Joe Teixeira,

Future Agenda Topic - we discussed revisiting the hybrid format, at least until the owl equipment is replaced.

AGENDA

- Public Comments – None
- Approval of 10/18/23 mtg notes – Approved - Sarah will post tomorrow if there are no objections.
- Welcome: Chip Wallace and Rick Parker, West Newbury Climate Change Resiliency Committee. Elisa Grammer had reached out to ask about the MVP Community Action Grant and after meeting with her, Elisa invited Sarah to Jane to attend this month's West Newbury Resiliency Committee meeting to learn about their grant and also to encourage discussions across our two committees. Chip gave an overview of their committee.

West Newbury formed their Resiliency Committee in 2020. They have 7 members, including Christine Wallace (Newburyport Ward 4 Councillor). Priority issues the committee is working on include water supply development and protection, invasive Species management, land conservation and erosion on River Road. They work with West Newbury Wild and Native to promote native plants, support pollinators and eradicate invasives. Major project is River Road. In 2022 the town approved a \$50K match and in 2023 they applied for MVP Action Grant to consider vulnerabilities and solutions to flood risk. A \$150K grant was approved but with a 1 year timeline. Grant will cover analyzing vulnerabilities and solutions to flood risks for River Road and nearby areas. Analyzing River Road and nearby areas looking at existing conditions, shoreline survey, outreach, bank erosion, watershed delineation, culverts and storm water infrastructure. Results will include a report of Vulnerabilities for 2030, 2050, 2070 and options for stabilization (hopefully nature based). Have already held walking tours, boat tours. Last week's community forum with GEI Consultants, Inc. (GEI) and the Gulf of Maine Research Institute (GMRI). Coming events include a December drone survey, virtual meeting on sea level rise. Molly asked how the committee is engaging with residents? Last week 40 people attended, 10-12 people were residents who were not historically involved. Gulf of Maine Research institute is helping develop a communications plan. Utilizing social media, town web-site, may have direct mailing or two, using a sign board in town, signage on River Road.

There are two or three hot spots where there has been recurrent flooding during large storm events, tidal events and upstream significant precipitation. In Merrimac across the river from river road, there is a historic marker from the 1936 flood, and it is around 20 feet above the road. The consultant firm for the River Road study is GEI Consultants. GMRI is a subcontractor of GEI. First priority is to identify existing conditions and then consider short and long term mitigation strategies.

- Committee Updates
 - CommEdu
 - Storm Surge -
 - December 7th - Deep Rising - Free Community Screening Room sponsored by Institution for Savings
 - Sometime early next year - Inundation District, Screening Room
 - Cashman park - Earth Day SLR exhibit - The MA Department of Fish and Game has no objections to the chalk lines on the ground, but asked that we consider aluminum bands with decals on the boat launch pier rather than paint. Pursuing that option.
 - Infrastructure StoryMap - description updates
 - All page updates approved except Market Landing Park which Andy will review after the meeting.
 - Future-proofing Newburyport's downtown waterfront write-up -
 - We have a volunteer to take some drone footage/stills in January and April. Andy suggested we try to get some footage of the bulkhead now, because the before and after is visible. Andy or Geordie can recommend shots.
 - Molly suggested a future mtg agenda joint with EAC asking NGRID to speak to resiliency plans. After discussion we agreed to revisit this in the spring with a joint EAC/NRC meeting.
 - Jon-Eric raised a concern that other than National Grid, the outline does not address private property like residences, AYC, coast guard station business in tannery & market square, custom house and NAA. Jon-Eric suggested that we need a feasibility study to address the whole waterfront comprehensively, not just the pieces of city infrastructure. What we don't want is a piecemeal approach. Maybe interview property owners. Maybe do a survey of all the stakeholders to see what they are thinking. Engage chamber of commerce, waterfront property business and property owners.
 - Action Item: CommEdu committee will digest this feedback and suggest next steps.
 - Community Action Project
 - Progress since October meeting:
 - Hired Project Administrator and 2 Community Activists
 - Held meetings with 2 potential vendors for Community Forums (UMASS/UHI and CAI). Exploring a collaboration.
 - Have engaged volunteers to help with communication strategy
 - Met with Mayor's staff to discuss requirements for Leadership Dialogs
 - New story-map on grant and community action projects.
 - Updated SOW for Leadership dialogs based on input from NRC and Mayor's staff.

- Oct/Nov Newsletter published
- Regs Working Group
 - MC-FRM floodplain mapping/Resilience Questionnaire
 - MC-FRM/MMIP 9.4 feet line ready to be published. 2070 MHW + 1 ft. Still need to choose the colors for the map, Rick Taintor had previously made a suggestion. **ACTION ITEM:** Jane will drive, finishing through the reg group. Jane will resend Beta password to the Resiliency Committee.

Rick noted that West Newbury is working on a project to get 2030/2050/2070 contour lines to be added on mc-firm. Jon-Eric noted a risk that mc-firm doesn't account for river flooding. FEMA needs to redo a hydraulic study for merrimack river watersheds.

Ideally in the future MVPC would expand the 2070 MHW+ 1 ft line for the region.

Climate questionnaire - Dianne has started working on getting the climate questionnaire/checklist available when people look to apply for zoning changes (NOI, special permit etc) this checklist will be available. Julia separated out instructions and reference materials to keep the form simple. The instructions and examples will be available as a reference. Form will be uploaded to the website once completed by the applicant. Once the form is available Julia will send it out to the regs group for review.
- Finance & Funding
 - Grants Opportunities -FEMA BRIC - Jane attended the webinar. Looks like cannot fund zoning & regulation updates as was hoped. We don't have anything to apply for the BRIC grant at this point.
 - Next cycle MVP Action Grant: We aren't planning to submit an application. MVP 2.0 Waiver - we will discuss with Michelle Rowden but likely can't fill in the waiver paperwork by Jan 19 deadline. Will not be an issue since not planning to submit an action grant application for the next cycle. Kristen suggested potentially thinking about a regional approach for MVP 2.0 due to Plum Island. Would have to ask Michelle if it can be regional, Julia thinks MVP 2.0 is community based. May have better info after the pilot of MVP 2.0 is completed.
- City Project Updates
 - Lower Artichoke Dam Reconstruction Project (Jon-Eric) – The construction of stone Foundation to allow for the deployment of sandbags for Emergency Flood Protection, Contract signed. Target is to start in January. Newburyport/West Newbury Conservation Commission site walk will be scheduled after the erosion control is in place, likely in Jan.
 - Lower dam reconstruction project - The following summary of the discussion was provided after the meeting from Jon-Eric:

We discussed the 'current' design intent for the Lower Artichoke Reservoir Dam Replacement Conceptual Design Phase, as follows. This project will be vetted in the public so the design parameters may change.

- Minimum top of dam/berm elevation per my direction to the consultant: FEMA 100-year flood elevation + 6ft SLR = Elev. 18 NAVD88
- Conceptual Design Option 1: widen the base to accommodate a future top of berm @ Elev. 24 (FEMA + 12 ft)
- No change to reservoir water elevation (i.e. no increase in storage volumes) due to major legal and permitting hurdles
- Generally, the logic for FEMA + 6 feet is based on SLR, not from any recent modeling of upland/inland storm events due to future dates based on climate change rainfall intensity projections.
- We should at least permit and build a wider base to save on future permitting problems.

Rick Parker, WN Selectboard, was in attendance and updated us on their MVP-grant funded study on resiliency efforts regarding River Road. We discussed Woods Hole Group's effort with the State's official model called MC-FRM, and that WN may likely be using that for their Study, etc. I forewarned, just as an understanding, that FEMA needs to step up and re-model the Merrimack River watershed to come up with updated flood elevations for future climate scenarios because the MC-FRM is not based on a detailed inland/upland model for the entire Merrimack River watershed. It was primarily a coastal model that approximated upland conditions.

We talked about the infamous flood marker on the barn on the Merrimack, MA, attached, which was based on the infamous 1936 Flood. That flood reached about Elev. 19 NAVD88 based on me measuring the height of the sign off the road to contours we have available on the road. This is +/- one foot, slightly less, but good enough for basic discussions. My update here is: that flood, so I'm told, prompted the Army Corps to install a new dam(s) to control future flooding. This appears to be the main one, Franklin Falls Dam. I can't find another but was told more than one. So changes have been made to the River so we all need to know this when making comparisons of flood elevations. Simply put, don't bother comparing, in my opinion.

Regardless, current 2012 FEMA FIRMS for the Merrimack take into account these dams (I assume). FEMA places the 100-year at about Elev 13.5 at this barn's location, printscreen below. So what storm event would Elev 19 (flood marker on the barn) equate to? We'll never know!

- Indian Hill Raw Water Line and Pump Station (Jon-Eric) - no update
- Water Supply Protection and Treatment Projects: Amesbury Interconnect – emergency and permanent, WTP Upgrades, watershed management (Jon-Eric) Rick had noted that W. Newbury's conservation agent Michelle Green had identified Water Chestnut in Mill Pond. Rick was involved in pulling two canoe loads of the plants. Will have to monitor for the next few years. Do we have/need an invasive plant monitoring process for the Artichoke and Indian Hill Reservoirs? Could potentially be included in the watershed management plan(Woodward and Curran). The Water Dept likely does not do this currently. **Action Item:** The Resiliency committee should work with the conservation commission and figure out a plan. Potentially an Eagle Scout project?
- WWTP Flood Protection - sidewalks (Jon-Eric) - no update.
- PI Turnpike Feasibility Study (Jon-Eric/Julia) - FLAP funders have not issued the letter for approving funding. Kristen/Martha and Jon-Eric are working on drafting an RFP for the scope. **Action Item:** Kristen asked Rick if he would be able to share the RFP used for the River Road evaluation, Rick said they would

- Central Waterfront Bulkhead Renovations (Andy) – on track
- Central Waterfront Park (Andy) 40% of the culvert has been installed bypassing the old undersized culvert. The remaining 60% is a separate project. Almost all the drainage work is now in. Working on subgrade for the bike path and walkways, adding more fill for the grading. Next will add the final drainage connection at the waterfront trust lot. Will add utility connections for water in the next month. Rest of the work next year (brick paving). Electrical work will be done over the winter encapsulated contaminated soil. Barry asked how any contaminated soils had been handled, existing soils were backfilled, no cleanup costs expected.
- PI / Reservation Terrace status (Julia) - no update
- CSO monitoring and communication alert system/app (Mayor's office) - no update
- Other Business -Rebecca Tepper hosting a call on the Resilience Coast Plan tomorrow. Molly and Julia attended.

Next Meeting: ~~December 20th, 3-4:30pm~~ (will be canceled) Next meeting on January 17th 3-4:30 pm.