Notes from Comprehensive Plan Committee - Meeting #3 February 22, 2023

Present:

	Garret Barry, Public Works		John Kostek, Recreation Committee
	Mike Bartlett, Community Preservation Committee	Х	Luke Longstreeth, Conservation Commission
Х	Rebecca Bench, School Committee*	Х	John Pease, Agricultural Commission
	Angelica Dewey, Open Space Committee	Х	Shawn Robinson, Council on Aging
Х	Julia Frisby, At Large	Х	Micki Sanderson, Historical Commission
	Jahlil Johnson, At Large	Х	Stephanie Slysz, Planning Board
	David Keir, At Large	Х	Christopher Smith, Redevelopment Committee

Also attending: Marlene Michonski, Town Administrator; Rich Niles, Joe Kirby*, and Carly Quinn*, Woodard & Curran; Ken Comia and Patty Gambarini, Pioneer Valley Planning Commission.

Next steps:

- Use project timeline to summarize how project is progressing at CPC meetings Patty, PVPC
- Update logo silhouette to integrate elements discussed below Ken, PVPC
- Update web page to integrate elements discussed below Ken, PVPC
- Address schools as topic within work of Facilities, Services, and Social Resilience Chapter (and possibly make a stand-alone chapter in the plan)
- Share flood photos with Rich Niles Marlene
- Prepare and circulate draft meeting notes Patty and Marlene
- Prepare cross sections, and particularly a third cross section in area of Maple Street and Maple
 Street bridge Woodard & Curran

Topics for further discussion (possibly within subcommittee):

- Creating location for people to send questions, messages on the project web page.
- Engaging students with Health and Social Environment chapter and bringing students more fully into the project fold (see yellow highlights below).

^{* =} attended meeting through video link rather than in person

Discussion notes:

Welcome and introductions

Marlene welcomed everyone at 6:15 and described purpose of comprehensive plan and invited a round robin of introductions.

Project overview

Through a series of 6 slides slightly modified from the 1st Comprehensive Planning Committee, Patty provided a summary of the MVP grant-funded project. The intent was to ensure that those members who may have missed the first meeting understood context for committee meetings.

Members asked several questions following Patty's summary:

Luke asked what happens if we don't meet the milestones and deadlines of this grant? Patty noted that it is important to give the MVP program adequate notice if any project element needs adjusting. She noted that Marlene has already been in touch with the regional MVP coordinator Andrew Smith to make some adjustments, including moving the farmers workshop to Year 2 of the project. Shawn said that it would be helpful for each future CPC meeting to show where we are in the project timeline.

Julia recommended including students within the Health and Social Environment chapter of the Comprehensive Plan

Chris' question about where it is that schools will be addressed in the plan, elicited some conversation. Patty indicated that schools can be addressed broadly in the community setting chapter and then in more detail within the Facilities, Services, and Social Resilience chapter. Becca, Chris, and Julia, all spoke to the importance of the issue of schools. Becca asked if there could be a separate chapter. Ken noted that schools could be addressed under the work that will occur for the Facilities, Services, and Social Resilience chapter, but then be pulled out to stand on its own. Julia said there is lots of misunderstanding of budgets and how things work so this will be a good opportunity to address this.

Meeting #2 review

Shawn reviewed key points from the Woodard & Curran presentation from meeting #2, including how the Hatfield levy was not built to protect critical infrastructure, and what was shared in terms of the updated FEMA flood map, overlay of the updated flood map on the critical facilities map, and the color coding that gives idea of flood flow and how impacts center of town. He recalled that the future conditions projection worked with the worst-case scenario, the recent study on flows from UMass, and global climate data.

Shawn also noted that there was discussion of upcoming project work related to flood information, the need for flood photos.

Part of the meeting also included discussion of the project logo with committee members providing input.

VOTE: Motion by Shawn to approve the January 26 meeting notes, seconded by Micki provided that the changes from Woodard & Curran be included, and unanimously approved.

Project logo

Micki introduced the topic, noting just how important branding can be in building recognition for the project, engaging community, especially when sending out flyers and surveys.

All agreed that they liked the words:



Hatfield 2040: A Vision to Protect, Prepare, and Prosper

On the silhouette, members had the following comments:

- Geese are not great; hot air balloon would be better.
- Basketball looks like house falling down. *Keeping recreation important, two players might help to clarify.*
- Question of whether tobacco barn representative. Members deliberated on idea of tobacco with one member arguing that tobacco represents the history of where town has been versus potatoes which is a development of the last 20-30 years. *Best to switch out with silhouette of a tractor*.
- Remove skirt on person walking on left by tree. Just two larger people and two smaller people.
- Concern about berm on which people walking as representing the dike. Better to *slightly lower* grade so that appears more like just any land perhaps with some grass, not the dike specifically.
- Add some fir trees on right side to address forested areas in West Hatfield.

Patty noted that with a re-do on the silhouette, this could cause delay in getting webpage up and functional as depository for documents. Shawn recommended that the website go up without the silhouette for now and just Hatfield 2040 logo.

Micki made a motion to approve Hatfield 2040, but then withdrew to allow for more discussion.

Stephanie asked why 2040? Ken noted that 2040 is a target timeframe for planning to add to the branding. Likely cover page of plan will have words "Comprehensive Plan."

When I envision moving this forward and engaging students seems there could be Twitter, Tic Toc as well. How do we make sure we are getting student engagement? Does this committee have a student representative. He noted that if they are participating in our work, they might be more invested in the 2040. Stephanie explained that there was some earlier discussion about this idea, but it became clear that such a level of effort on the branding had not been included in the budget. Julia asked whether students have required volunteer hours and that may be way to involve them.

Stephanie noted that there should be more discussion about engaging with students.

Web page

Micki asked to remove photo of mill from website, which is private property.

Luke suggested a tab to include a place for people to privately message or comment on what they might like to see. But should not be a public forum, which could become a mess. Ken indicated that the website could enable the ability for people to drop an e-mail to a specific address.

Shawn suggested that should just post information. Really not get into back and forth.

Stephanie suggested putting it on agenda for discussion because might need a subcommittee to make this happen.

Micki noted that the description of what is a comprehensive plan needs to describe the planning process in laymen's terms. Really make it about bite size chunks of what we are doing.

Shawn – Talk about information in terms of three different groups: average person, interested person, and then those who want to get into the details and material. The front page should just get the average person interested. Then if they want, they can get into the documents.

VOTE: Micki turned it over to the committee members, asking for a motion to approve the Hatfield 2040 logo, with a visual to be adopted later, and to at least launch a web page. Luke made a motion, seconded by John, and unanimously approved.

John noted that the url is a subdomain under PVPC. Is there any way to change that? Micki said if it needed to go through GoDaddy, that "Hatfield 2040" is likely available. On the issue of domain, Ken said he will research what options are available.

Flood risk and introduction to cross-sectional analysis

Rich summarized what his team spoke about at the January 26 meeting and members had several questions in the course of Rich's recap.

With reference to **flow**, Chris said he had lunch at the Council on Aging and could not answer a question put to him about how cubic feet per seconds gets measured. How is cubic feet per second determined, how is that done?

Joe explained that the gauge typically measures elevation of the water surface. That is sometimes done at a bridge, but that is only good at lower flows. Most of these gauges are done where they stick a pipe in the ground and out to river (so its open to the river) and on the embankment they measure the depth of water. With that depth of water, they will go out on a sunny low flow day and survey the channel and the overbanks and develop a rating curve. They do a model and it calculates how much water can flow through that area based on the topography they've surveyed. Have rating curve that gives elevation and flow. So they can capture the flow elevation on a given day and then look at table to understand the flow. USGS puts up many of these gauges across the country. Same methodology used at all.

Chris noted that there was a rather technical story in the Reminder that did not explain.

Rich and Micki talked about the easy availability of flow data on the USGS website.

Joe said the other important thing to note is for that 1936 flow event, that may not have been measured by the gauge. But they knew how high that flow was so when the gauge was installed, they could figure out the level of flow. You can back into flows. Joe noted that the most he has seen is 150 years of record. So late in the 1800s have data in some places. This is a very good gauge in Montague good period of record. Back to 1904.

Shawn said it would be great to do presentation on this at Council on Aging. Julia said it would be a great way to get kids involved too and she remarked on how involved kids get when they go to Arcadia Sanctuary and see how high water has reached. Shawn said that maybe there is a way to work with the school kids to see can get involved along these lines. Julia noted that it also seems important to understand the reverse: What does it look like when there is drought?

On the **levy**, Julia asked if we raise the levy to meet FEMA expectations, is there a chance that flood insurance would not go up? She noted this will likely come up in the course of public conversations. She noted that when she first heard of the FEMA remapping, she wanted to understand whether she is in the flood plain now.

Micki noted that this question about the levy is an 8-level question. Historically it has not been the CT River as our nemesis, but rather the backflow due to the CT River as evidenced by flood of 1984.

Rich noted that it is important to understand the FEMA regulatory context because there is a difference between what FEMA establishes for mapping, which has implications for the national flood insurance program, which you need for federally backed mortgages. That insurance ties to flood recovery and because you need insurance, you already know you have risk. We are also trying to frame risk. Rich continued by saying, there are implications of being in the flood zone, but to meet FEMA criteria is challenging. You need to ask: What is it going to cost to protect what needs protecting and is that worthwhile?

Julia asked if that was going to get played out. Rich responded by saying that his team's gut feeling is that it is not economically feasible as it is a likely multi-million dollar project to upgrade the levy. It would require building a massive pump station, raising the levy at least 3 to 4 feet, and dealing with interior drainage issues. It is a high bar for a reason, he noted. The Mill River is also still the issue and a pump station of that size has a really big price tag. It also has a huge associated

environmental impact so probably 10 years before you break ground. Then you would also have to figure out the resources for operating the system, he added.

Stephanie, asked if a benefits costs analysis could be put into recommendations? Rich indicated yes and that a BCA is a very involved analysis and not part of the current scope of work. He observed, that his team did a detailed assessment in Hadley and it is 10s of millions of dollars to upgrade their levy. The LAMP presentation for Hatfield outlines what the Town would need in meeting FEMA criteria, including a pump station and closure structures. If you want to explore something like a BCA for the levy, then we would need to contemplate that.

Luke said that it is important to remember that in us doing this analysis to date we are using FEMA data. FEMA is doing the remapping and this information here is based on that.

Rich noted that back of the envelope, his team's sense Is there are other alternatives that might make more sense. Our focus has been more on adaptation measures. At a minimum, these should be your priorities for the short term, he said.

Micki observed that it is deep and intense work to deal with what we have on both sides of Hatfield center. Everything is here in this zone, Capawonk, the schools. Look ahead and do some problem solving, that is what we are charged with here.

Rich said it is important to understand risk tolerance. Already have risk even if outside of the base flood mapped zone. If think Town needs further evaluation could pursue cost benefit analysis, but in meantime could think about adaptation ideas. Those are things that are lower cost and could be implemented over the short term. Can't put a cost on the levy upgrade or the benefit.

Chris recalled the group's discussion that the purpose of the levy is to buy time. Raising of levy does not address Mill River backing up South Street. Objective might be to figure out how to evacuate. Deal with way out, which then was Maple Street and Maple Street bridge up to the Legion. Do we need to raise that elevation of that road to make sure people can escape.

Joe noted that if you look at the map, is that the levy does keep a foot or two of water out of town. It likely removes any of the rises caused by the levy across the river to keep it out of your town. But the backwater that goes up the Mill River could not do anything about that. Gives clue as to why did what they did. Does not keep water out, but not all.

Slide - CPC Input on Project work

What are best cross sections for critical areas to illustrate flood scenarios?

Rich explained that a cross section helps to understand what a landscape looks like through a corridor. He showed a slide that provides example cross section with three different flood elevations and noted that it gives you a sense of flood depth at road, at first floor or the building.

Rich noted that you can do this roughly by measuring ground surface versus relative height to first floor elevation. His team is thinking of possible cross sections at three locations shown in slide below.

- What are best cross-sections for critical areas to illustrate flood scenarios?
- ► Some ideas:
 - Chestnut St to School St to Town Hall/Main St to Levee to CT River
 - Bridge St to Elementary
 School to Main St to Levee to
 CT River
 - Elm St to Mill River to Levee to CT River



Luke recommended thinking about a cross section of where Maple Street and Maple Street bridge are located. Micki noted that the bridge is not in great shape. Stephanie said that that is where a lot of people live so it would make sense to move the cross section shown currently as #3 to Maple Street.

Chris noted that if we dealt with Maple Street that would be far more affordable than dealing with the levy. Need to have that evacuation for the schools and the Chestnut Street route is not going to do it. Only way out in 1960 was Maple Street and the bridge.

John noted that it is important to capture the pump station in the Maple Street cross section. He also suggested idea of marking evacuation routes. Good Eagle Scout project.

Slide - CPC Input on Project work
What are best images and illustrations to consider?

- Planned upgrades that are already underway at wastewater treatment plant. At 30% design.
 Engineer designing to 1978 flood map. What do at the plant for the future? Updated FEMA BFE
 EL 130
- Image that shows changes in flood vertical profiles likely better than maps.
- Image old Smith Academy. Right next to Town Hall. Likely 1936 flood.
- Marlene has some photos she took of photos from Historical Society. She can share with Rich. Need good scans of flood photos. Will need to go through proper channels.
- Between maps images and photos should provide good idea of mapping implications.

Slide - CPC Input on Project work
Examples of mitigation and adaptation strategies

With the meeting time short, Micki asked Rich to move through his last two slides quickly.

Rich highlighted certain elements in the list of mitigation and adaptation strategies in slide shown below.

Micki said that there are lots of issues, illegal dumping, plowing of fields into the water, on Mill River that making the area more flood prone. Rich noted that he sees that as something for the enforcement category, enforcing standards of existing regulations.

CPC Input on Project Work



- Examples of mitigation and adaptation strategies
 - Adaptation of buildings, facilities, and roads to withstand flood flows (flood proofing)
 - · Elevate critical components
 - · Elevate roads to improve access and response
 - · Install barriers for what can't be elevated
 - · Raise ground around buildings (if first floor is above BFE)
 - · Relocation of certain critical facilities
 - · Retreat and move structure
 - · Build a secondary structure to support operations during flood events
 - Improvements to or replacement of levee or berm
 - Property-specific
 - Add to existing system
 - Updated zoning that requires new flood mitigation standards in any new development or redevelopment
 - Opportunities for storage in upper reaches, specifically the Mill River (likely not feasible without a closure structure and pump facility)



As an example of adaptation, Rich shared a project from the Kennebunk Sewer District, where a levee was built around the plant to provide protection from rising waters. See slide below.

CPC Input on Project Work



- Examples of mitigation and adaptation strategies
 - · Kennebunk Sewer District Levee, Kennebunk, Maine



VOTE: Given that the time had come to 8 p.m., Micki made a motion to table the "Project planning" elements of the agenda until the March meeting, seconded by Shawn, and unanimously approved.

VOTE: Micki made a motion to adjourn the meeting, seconded by Luke, and unanimously approved.