Pepperell Municipal Kickoff - December 11, 2023

Attendees: Paula Terrasi, Bob Pine, Ken Kalinowski, Val Brock, Paul Brinkman, Andrew MacLean, Ralph Baker.

NRWA Staff: Paulina Torres, Will Collier, Jennifer Keegan.

NBS Sites Discussion:

Paulina asks attendees to identify NBS sites and solutions that would benefit the town, Paula and Ken begin the discussion informing the NRWA team of existing NBS lists.

- Lists made for the town's MVP Planning grant and other efforts (including their Hazard Mitigation Plan) have resulted in an extensive list of locations and NBS ideas for the town. There are approx. 40 sites listed, not all fully prioritized. They were to some degree filtered by cost and feasibility.

Specific Sites and Ideas mentioned:

Culvert conditions uncertain under rotary near the Fitzpatrick Collaborative Community Center, Ken states there exists an underground stream in this area. Tighe & Bond has done some work for the town on this issue.

Paul mentions that projects underway for sidewalk expansions could benefit from NBS to combat new pavement for said sidewalks.

- Paul suggests the idea of a raised walkway crossing wetlands to link up the village with the Nissitissit School, NBS to make more resilient wetlands.

Ken, Ralph mention that runoff and flooding issues stem from upstream in Fitchburg and Leominster, therefore aiding in those areas could help mitigate these issues

- Sucker brook an additional area to possibly look upstream, however upstream leads to New Hampshire, outside of our capabilities.

Paula points out that heat island effect is a prevalent issue in town during the summer

- Paul raised the point that NBS tree plantings will reduce effects of heat, providing shade.

Ken raises concerns over erosion along the Nissitissit river at its Oxbow as well as straight run, from increasing water flows.

- NBS to manage soil erosion.

Jennifer asks what the access to natural swimming areas is like in Pepperell.

Paula shares that two locations are used for swimming, Heald Pond and the Nissitissit R.

- Concerns of E.Coli and other runoff in the Nissitissit, especially during high water levels such as those of this 2023 summer.
- Heald Pond raises less concerns, which may be attributed to the fact that it is surrounded by mostly protected areas as opposed to Nissitissit with more development/residential areas.
- Jen asks whether NRWA could run more testing in these areas, Paula suggests that it would be beneficial.

Project Goals, Outcomes, Concerns:

Will asks attendees: How can we amplify your prior work during this process, Jen adds: How can NBS play a role within current town plans?

Ken raised that a main concern to NBS implementation comes from their cost and management.

- Concerns over permeable pavement, which can clog up with sand.
- General concerns of all NBS costs and management. Introducing a 'menu' list of NBS along with costs and feasibility would be beneficial to the town in implementation projects.

Paul suggests that enlisting this NBS menu to organize possible sites and projects would improve their ability to take action.

- Allowing the tasks to seem more feasible, make a more empowering impact, and could become an educational tool.
- Paul suggests that this would allow for a larger frequency of smaller projects to become possible in town.
- Paula indicated that having a rough idea of the costs of these projects would be very helpful.

Andrew points out that demonstrational projects such as that of the rain garden at town hall are an impactful and educational way to showcase NBS.

Community Involvement, EJ Communities:

Paulina asks attendees for their thoughts and observations on community involvement in Pepperell.

Paula details that prior to census data outlining the EJ community in southern Pepperell, vulnerable communities involved in environmental projects and presentations were the elderly and children.

- Programs run in the Senior Center providing presentations and food were well received and welcomed.
- Native planting programs in schools were received well.

- They have a very active Invasives Advisory Committee, whose Native Planting Guide is available and a great resource.
- Concerns with heat islands, with the affected community primarily being seniors.

Andrew mentions that he would love to see more collaboration with organizations and committees local to the area.

- NC4 (North Central Climate Coalition), regional climate advocacy group working in Massachusetts 3rd congressional district including Pepperell, Groton, Fitchburg, and Ashburnham. Carolyn Sellars is mentioned as a key point of contact for the group, along with Tony Beattie.
- Pepperell Climate Change Committee
- Northern Middlesex Stormwater Collaborative (NMSC) under NMCOG(North Middlesex Council of Governments) regional stormwater collaborative to undertake many of the public education, procurement, management and administrative tasks necessary for managing stormwater.
- Invasive Species Committee.

MVP Community Meeting 1
Pepperell Senior Center - February 7, 2024
5:30 - 7:30 pm

Focus Group 1

Heat island & shade tree study to see what we can preserve & where planting is needed - 15 acres forest nearby

Light pollution – disruption to people & wildlife – @ the bank, Dunkin Donuts, other businesses, residential spotlights => confused birds & insects

PFAS contamination "increasing": Pepperell approved $23M to connect to Dunstable & build treatment plant….had to close some wells too. Intermunicipal Agreement Process.
Littleton, Ayer, & Townsend have their own treatment plants

Jersey Street Well needs intervention

Pepperell Pond Dam - algae

Some drought years

Invasive species (water chestnuts)....any useful applications for all these chestnuts? Compost?

Lawn care - leaching pesticides into water bodies. Community education needed to address this issue. Could an ordinance from the City Council ban the use of pesticides on private & public properties?

Leaf blower pollution

Loss of tree species (white pines) - replace them with a more hardy species like gum trees & oak

Composting program + need to tie lands together through corridors

Bemis Well

Scholar / Rotary / Peter Fitz area is a "tragedy" => needs something like the landscaping that was done in Groton's Prescott Center

Nashoba Valley Voice – part of the Lowell Sun – should be used more for community engagement, they never cover Pepperell issues or stories

Let's try for a public-private partnership to deal with the **paper mill on Mill Street**

25 acres landlocked - former farmland
Town needs a way to access!

Next to the airport - litigated property, should be conserved! The owner was dumping carcinogenic materials there…court battle between him & the town. Another guy wants to build warehouses (for leasing to others) adjacent to the Nashua River. If this plan goes through, near Route 3, huge trucks will pass through constantly & emit diesel fumes.

Focus Group 2

"Behind Nissitissit River"

Focus Group 3

Dams & culverts
Which culvert are next in line for replacement? Replace with culverts that have passage
Dams can be removed along Sucker Brook & Robinson Brook
Repair eel laddar on Nashua Dam. Daylight Varnum Brook through the old mill.

Heat islands
Plant trees, **losing pines on Main Street**

Land protection
Protect land near Jersey Street and Bemis Wells from development

Purchase more conservation land, especially along stream corridors & rivers

Limit development - especially near streams & their floodplains (which can be exasperated by beavers)

Other Issues:
The solar farm on landfill
Junkyard on North Street, near a brook. Clean it up?
Low income homes should be **near** downtown, grocery stores, drugstores…..Currently not close enough.
Water withdrawals - new well on **Upswim Farm** – a concern?
Less lawn watering, more meadows
Protect wetlands and land near drinking water wells
Farmlands - particularly along rivers facilitate onsite composting
Chemicals (fertilizer, animal waste)

Protect wetlands & land near drinking water wells
Save **farmlands, particularly along rivers**

Facilitate on-site composting
Address chemical use (fertilizers, animal waste)
Invasive plant mgmt along streams
Tree retention
Roads/paving products should environmentally-friendly
Wildlife corridors
Connectivity along **Nashua River Road (Gardner Farm) near Nissitissit HIlls**
Connect **Niss Wildlife Mgmt with property near the transfer station**

<u>Focus Group 4</u>

Town Hall Rain Garden
Unkety/Reedy meadow - flooding culvert
Ivy's - flooding - land protection needed
3 Princeton Lane home - protect
Route 119 + Fitch's Bridge
Food security - impacts of flooding on agriculture
Leighton St. land protection needed
Heat Island - RR Square => Rotary ……..Zoning Overlay District

Protect floodplain for floodplain capacity, silviculture

MVP COMMUNITY MEETING 2 (Zoom)
February 13, 2024

#1 Nissitissit Hills Corridor Connection: The top of the hill is now privately owned. The top of the pond is maintained for farmland but is private property and they don't want people trespassing and won't sell. There is amazing wildlife. **(not a site visit)**

#2 Nissitissit Meadows Corridor Connection: Meadow is in conservation. It is maintained for nesting birds. We plan on adding a kestrel box and we only allow meadow if the hay isn't worth anything due to the farmer. **(not a site visit)**

#3 Bemis Wellhead Protection Zone 2: Gulf and steward brook are important. Private properties surround. The pink squares outlined to the right is the 21-lot subdivision proposed in zone 2 which is adjacent to the Bermis Rd Conservation Area. There are 5 town wells, and this is one of them with negligible PFAS. There are only 2 operating wells due to contamination. We don't want a 21 lot subdivision built. We'd like the project to help with stopping that due to proximity to zone 2 wellhead.

#4 River Road Corridor Connection: environmental justice community. Did not spend long on this site.

#5 Heald Orchard/Heald Pond: make orchard and pond more accessible to street. There is a trailer park nearby and it's not safe to walk to orchard/pond. Need better accessibility through creating sidewalks. The lower end where it comes into Heald street is a dam and if you let the dam out the lower land would become a wetland, but we may lose the pond. The orchard isn't being farmed and is full of invasives and there has been clear cuttings to open up habitat. Definitely worth a site visit!

#6 Unkety Brook: At Pepperell/Dunstable line there are beaver dams and there isn't much elevation change. The waters aren't flowing well under the roads. NHESP location. Just installed a culvert on Sucker brook and it was very expensive. Would need to raise Lowell Road.

Ready Meadow Brook also tends to flood the road and it's a cold-water fishery. There was a blow out here a few months ago and a gas main was exposed.

Laten and Lowell and Herbert drive have a lot of invasive species.

#7 Sucker Brook Dams: Dam has been removed. **(not a site visit location)**

#8 Nissitissit School Parking: (Not a site visit location)

#9 Townfield Rotary: see railroad square notes.

#10 Fitzpatrick School Parking: neighborhood around school is worth a walk. Also see railroad square notes.

#11 Covered Bridge Groton St.: built in 2010 and the river is strong in this location. Private property is exposed and if the dam broke then the community along the river would be under water. There is conservation land nearby. There is an old mill site nearby that is sectioned off.

#12 Bartleson Field: nearby cemetery could be more pollinator friendly. Less permeable surfaces. Bartleson field is tight and can't be expanded. Behind it is an aquifer. Groundwater from field and cemetery flows to Jersey Street well. Upland area around ready meadow brook is set to be developed. (not a site to visit)

#13 Wilkins Farm/Yapp Easement: Wilkins farm is across the street, but the flag is on yapp easement. Across the Nashua River is Groton. This area does flood, and we want to encourage no further development in this area. The meadow does flood, which is okay. The parking lots along south road near Wilkins farm used to be car lots and don't appear to be active anymore. They might be good for conservation acquisition. There is a sewer that is slowly getting exposed by the river.

#14 Lomar Park: Between Lomar park and Merrimac drive would be good for a conservation easement (where the gravel lot is). There isn't a way for the public to access riverside conservation area. The owner of the sandlot may provide an access road to the riverside conservation area. The flood plain along the Nashua River has expanded especially in this area, especially since there is the privately owned industrial park. There is a senior center next to it and the flood plain encircles the senior center. There is heat island mitigation with white roofs, but greening the area would make it better. They've been removing trees around Lomar park.

#15 Railroad Square: Inland heat island of the area downtown and railroad square, there is a lot of pavement. We could use some mature planting and street trees and along the ROW and properties in town. Pocket parks would be good along main street. From Peter Fitz (former school and is now town owned – it's a community center now) through main street. Utility companies come in and take down trees and they should be replaced. We could do a street tree survey to assess what trees should be protected starting in the downtown area. The heat island is the priority.

In the back of the Fitzpatrick school there is Greens Brook. The buffer zone between the school and brook is 65% invasives that should be addressed.

Varnum Brook – Tighe & Bond looked at the condition of the culvert and they think it will last a while but the brook is primarily underground and would be tough to daylight.

Behind Green's Brook (east of Kirin Xing) are now within FEMA flood zone and need to be careful excavating. Would be good to include educational programs and outreach about flooding. There will be a new flood bylaw next year.

#16 Mill Street: Public enhancement such as rain gardens. They looked at daylighting Varnum brook and drains into Nashua River but it's a steep drop down to the river. But it's on private property. They are developing the area north of the flag. And south is in a flood zone. This is a site worth checking on for habitat, flood issues, daylight river or culvert expansion.

#17 Jersey Street Well: Should be on the radar for conservation of surrounding area.

#18 The Ivys: Conservation as being acquiring lots as they become available. **(not a site visit)**

#19 Town Hall Main St.: see railroad square notes about heat island.

#20 Lakin Street Property: private owned property – owner not on site. He's been holding on to it. **(not a site visit)**