

Montgomery Flood Resilience Study  
December 12, 2024 Meeting  
Jessica Louisos – SLR & Lauren Weston – Franklin County NRCD  
11 Attendees  
Montgomery Town Offices

Alternative 1: Floodplain and Wetland Restoration

- Preliminary design to dig out material to lower floodplain.
- Current constriction leads to some backwatering, which can slow things down in the main stem and tributary, removing constriction and creating floodplain access reduces water depth and can increase velocity in some areas
- In this alternative there is reduced overtopping on road, in terms of length of road and length of time road has water on it
- Cost estimate \$1,100,000
- Q: Will the lowered floodplain have water on it during annual spring flooding? And will sediment need to be removed from 5-acre floodplain to allow for continued floodplain connection?
  - Hard to say what the timeline would be here. Some areas accumulate sediments quickly, but this 5-acre area might look different. There might be some areas that have more targeted/regular maintenance and removal, and other areas that don't accumulate as much.
  - Functioning Floodplain project might have some more insights. Can use data from construction/completed work and monitor over time. (What is the level/elevation of the floodplain after construction vs 1, 2, 10 years out)
  - Likely won't need major annual maintenance
- C: If flood takes out road the repairs could cost more than \$1 million
- Q: If the project moves forward would the proposal be brought to select board?
  - Yes. Zoning permit application also needed.
- FEMA Project funding can be used to fund phases of the project. One phase for design and community feedback, then another phase for implementation.
- Q: Does FEMA require a town match?
  - Lauren will look into this.
  - Current grant does not require match, but other FEMA grants do typically require a match. That match can come from other grants.
  - VTRANS could also be a source for funding/match possibly

Alt 2: Sediment Management at West Hill Brook Bridge

- This has not been designed as much, but there are modelling results for the removal of accumulated sediment under Rt 118 Bridge
- Will take info from this model to VTRANS, to make case that VTRANS should fund/be involved
- FCNRCD, NRPC, SLR, and Montgomery will work together on this project moving forward to connect with VTRANS

#### Alt 7: Fuller Covered Bridge

- Overflow culvert with flood bench creation
- Prevents water from flooding out of channel on south side of brook at bridge
- Alone, not effective at reducing the overall extent of floodwaters in the Village
- There should be enough space for culvert outlet and not impact nearby house
- Some areas will be lined with riprap to keep channel in place
- Q: Would opening up space downstream help here?
  - Down below doesn't change much here. They are pretty disconnected. Opening up downstream does not affect capacity of bridge

#### Alt 9: Upper Black Falls Floodplain Restoration

- Prevents water from exiting channels and flowing along road into Village
- Substantial reduction in extent of floodwaters in Village
- This alt could happen in tandem with alt 7. They could be independent, but some compounding benefits when done together
- C: There is a home with nice rock wall that would be impacted by the combo of 7 & 9, near where the Fuller Bridge overflow culvert is sited.
- Combo 7 & 9 would result in reduced velocity of river in many areas.
- Alt 7 & 9 cost estimates (preliminary):
  - Cost \$1-1.5 million for culvert
  - Cost 2-3 million for floodplain
  - Would involve removal of a few buildings. Would need to connect with landowners to determine feasibility of mobile home/structure relocation.
  - Would likely be FEMA eligible

#### Alt 11:

- Will discuss more if this alt should be included. No reduction in extent of flooding – not recommended

Alt 12:

- Added northern floodplain since alternatives discussion meeting in November
- Floodplain lowering benefits nearby homes the most
- C: Town bought parcel, thinking about adding pump station.

Alt 15:

- South Main St Bridge upsized from 60 to 155'
- Snowmobile bridge upsized from 100 to 175'
- Flood bench created along the South side of Trout River would require buyouts or relocations of home. Some of these homes have been working with FEMA in past
- This might be a longer-term goal. Continue to gather information and think about longer term implementation timeline
- Combo of alt 12 & 15
  - Wider floodplain through bridge and through center.
  - If there is already work being done there for capital projects, there may be opportunities to fund a floodplain restoration component (WISPr program).
  - Cost estimate: 1.5 million Alt 12
  - Cost estimate: 4-5 million Alt 15
- Q: By widening the river through town center, that creates a bigger area for water for travel through. Could the same thing be achieved through dredging?
  - We see that dredging is rather temporary, and fills in. It can also increase velocity and risk of erosion and related damage. The depth that would be necessary to achieve flood storage would be immense and possibly infeasible. Also, ecological/habitat concerns.

Q: West Hill Bridge, is there info on how far to move material on each side of the bridge (upstream and downstream sides)? (Alt 2 Sediment Management)

SLR will share info with FCNRCD. Additional data should also be shared with VTRANS to make case that they should contribute funds.

Q: What is the sequence of events? Selectboard moves forward, then apply to FEMA, then move forward? Would work start in 2026?

Yes, that would be the process. 2026 is very ambitious deadline. FEMA moves slowly.

Q: Does the knotweed pose a challenge?

Knotweed will be considered in designs. In areas where work is being done it would be removed, buried.

Q: Would it be worth revisiting some of the other alternatives that were not focused on?

Another 30% design contract?

Could be worth it if there is interest. Might also be worth doing a feasibility study with landowners. There is good information to then be able to approach landowners and gauge willingness/interest, then based on that information decide which other alternatives might be feasible.