

Upper Machias Bay Master Plan Public Meeting #1
Breakout Discussion Summaries - July 22, 2025
Brief Summary (full notes are included below)

1. Machias Dike Replacement

Questions

- What is the cost to continue letting the ocean out/in with tide gates?
- Does DOT have a specific amount to replace the dike for all scenarios? Source of funds?
- What are the costs to indefinitely repair the dike against further storm surges versus replacing it with one of our other options?
- What sea level do we plan for over what time frame? To what height do we raise the dike?
- What are the pros and cons of dredging?
- What is the time line for change to saltmarsh if dike is opened?
- What happens at each scenario, mapped?
- What happened to prior decisions to fix the dike as it is?
- What will compensation for land owners look like? Where would the money come from?
- What else can landowners gain if property is flooded?

Concerns

- Sea level rise
- Inundation of the landfill and tidal waters, especially impact on clam flats
- Fish passage and habitat loss
- Funding for dike replacement
- Transportation impacts of the dike: Route 1 closing, access to hospital and other services
- Compensation for land owners
- Worries about smell above dike if it is opened to salt water
- Salt marsh restoration takes a long time
- Concerns about impacts closures on local businesses including vendors and farmer's market
- Impacts on the Sunrise Trail
- There is not enough data

Opinions/Ideas

- We need transparency about the impacts of each scenario and what their effects will be
- Selective diking to protect against upland flooding
- Raising the dike is an absolute necessity
- The dike needs to be fixed as it is
- All roads should stay connected
- We need to minimize the closing of Route 1
- Possible middleground: opening gates on dike to allow some saltwater/ fish passage
- Safety is a major consideration for transportation and accessibility if the dike is closed
- Businesses lose if the dike is closed
- A bridge is more robust – gates have been proven to fail
- Need to preserve market spaces on the dike- protect the farmer's market and other vendors
- Protect the Sunrise Trail
- There is no perfect solution
- We should look at other communities for ideas
- We should consider updating shoreland zoning in Machias

2. Downtown Flooding

Questions

- What are all ideas for dealing with flooding? Rim bridge barrier?
- What does planning look like in the short and long terms?
- How does construction happen?
- Where do we get funding?
- What is most important to the community (might not be money)?
- What about raising buildings' base elevations in flood zones?
- How will flooding in the downtown affect surrounding communities?
- Instead of a full redesign of the entire downtown area, what about pursuing other options?
- Were past storms assessed? How much water did they bring? How much financial damage?
- What impact will dredging have?
- What methods will be used to stabilize banks?
- What are the conditions of the town's sewer drains?
- What plans are there to add storage to wastewater?
- How much sediment buildup is there now and for future situations?
- What amount of chemicals are leaching due to flooding and what are future concerns?

Concerns

- Flood insurance pressure on businesses
- Businesses that can't locate downtown due to flooding concerns (?)
- It will happen again (especially town office)
- Lack of permeable surfaces downtown
- Seawall- worries about blocking view of the town
- Stormwater infrastructure needs repair
- Flooding upstream further on Middle River
- Saltwater infiltration to Middle River wells
- Ability to reach the hospital due to flooding impacts
- Impact of detours
- Funding in general
- Data gaps

Opinions/Ideas

- The impact of flooding on businesses is variable
- "We know it's going to happen again"
- Need to fix storm drains and catch basins regardless of other decisions
- Dredge to make more room in Machias River
- Tide gate/inflatable barrier at Rim Bridge
- In Wickford, RI in order to purchase property you must lift house (idea?)
- Need to discuss seawall and walking path with stakeholders
- Living shoreline
- (Protect?) boat access to Middle River, Sunrise Trail, and Schoppee Marsh
- Too much pavement downtown – turn into permeable surfaces
- The downtown is our greatest asset
- Parking lots take space from businesses that could pay taxes
- Need to attract more businesses and more people/tourists
- We need more info to make a decision
- We need an emergency notification system for extreme events
- We need to raise businesses and divert the water
- Machias needs to create a plan for business and flood growth

3. Water quality

Questions

- What are the water quality conditions? Current levels of contamination?
- How do the different dike options affect the water quality and the levels of contamination?
- What has happened before on the river?
- What is happening with PFAs? What are their impacts? How can we fix this?
- How many and where are the septic failures?
- Where are the sewage overflows? Mapped? How much overflow?
- What are the storm drain issues?
- How could we capture pollutants in stormwater runoff- ex. bioswales?
- Impacts of saltwater intrusion?

Concerns

- PFAS
- Landfill leachate
- Worries if dike is opened it will impact landfill
- Data gaps
- Effect of contamination on Machiasport clam flats
- Sewer plant runs at less than full capacity
- CSOs
- Pipe and storage issues
- Stormwater runoff picking up pollutants
- Vulnerability of Sunrise Trail
- Drinking water concerns
- Impacts of saltwater intrusion
- Problems with monthly fire hydrant flushing causing drinking water problems

Opinions/Ideas

- Water quality is central to all discussions
- Address landfill regardless of dike decision
- Need more data and visuals to help with understanding
- Consider landowners, the old junkyard by the river, and spreading at the airport
- Eliminate CSOs
- New pump station with larger pipes
- Pipes are too small for the drains in town
- Crucial to minimize impact on commercial fishing because of water quality issues
- Drinking water tastes rusty and chlorinated
- Prioritize working infrastructure

4. Natural Resources

Questions

- Data on fish passage?
- Wildlife habitat on the land now and historically?
- Can we have a fishway and have the dike?
- Possibility of bringing sea-run fish back up Middle River?
- What is the extent of loss of land and habitat (in each scenario?)
- Ecosystem services of the different dike options? Values?
- Will the marsh grass die and no longer be there for wildlife if the tide comes in?
- What are the benefits and tradeoffs with a saltmarsh, including economic benefit?
- What is the timeline to move from freshwater to saltwater marsh?
- What's going to happen 50 years from now?
- Do farmers in the town's affected area have irrigation?

Concerns

- Landfill PFAS and other leachate
- Sewer treatment plant and what is flowing out
- Data gaps on fish passage
- Lack of regulations
- Compensation for the loss of private property
- Loss of wildlife habitat
- Farming and grazing concerns with every scenario
- How long is this going to take for marsh land to change?
- What happens if water overtops the dike
- Worries about saltwater in freshwater ecosystems/freshwater marsh
- Loss of use of Schopee Marsh
- Impacts on Sunrise Trail
- Impacts on existing fish passage

Opinions/Ideas

- We are in between options and need to find a sweet spot
- We need to fix the clappers now
- Flapper gates don't matter if water overtops the dike
- We need to regulate water flow to minimize impact
- The landscape is already changing- there is higher water above the dike
- Regardless of dike, prioritize healthy ecosystems
- Middle river is a major wildlife habitat
- Don't want Middle river to become a mud flat
- Freshwater marsh is important for habitat
- Restoration is important even if it takes time
- There is a great opportunity to restore Schopee Marsh
- Remediate dump to protect natural resources
- People are the natural resource-- their livelihoods need to be protected
- More people are going to come and will want to build
- Interest in improving Machias mudflats for clamming
- We could add a trail on the west side of Middle River if the dike closed
- Shoreland zoning needs updating (1990s)- need official map

Upper Machias Bay Master Plan
Full Notes: 1st Public Meeting at the Pellon Center- July 22, 2025

Table ?

Dike

- Surprises
 - Landward Impact
 - How fast the roadway gave in
- What do you want to know?
 - Cost to continue letting ocean out/in with tide gate
- Cost
 - Alternative routes
 - “Solutions to keep water out of Machias Bay”
 - Selective diking
 - Building protection elsewhere- ie. Rim Bridge
 - All roads stay connected

Flooding

- Conditions of the towns sewer drains
- Surprised the dike overflowed x3
- Alternative to redesigning the entire downtown (costs)
- Some businesses had no impact from the floods

Water Quality

- Lacking data- need more!
 - Water quality conditions?
- Recommend: Better + more data
 - Address landfill regardless of dike decision

Natural Resources

- Landfill-PFAS
- Sewer treatment plant + what is flowing out
- Lacking data on fish passage
- Lacking actual regulations
- Wildlife habitat on land now?

Table ?

Dike

- Lifetime of structures
 - dike, seawall, tide gates, etc.
- What sea level do we plan for?
 - Height of the dike?
- Raising the dike is an absolute necessity
- Inundation of the landfill and tidal waters
- Pros/Cons of dredging

Flooding

- How to address downtown flooding?
 - Short term and long term planning
- What to protect downtown?
 - Denser development in floodplain
- Tide gate/ Inflatable barrier @Rim Bridge
- Flood insurance pressure on businesses
- Bridge is more robust; gates etc. proven to fail
- Boat access to Middle River
- How does construction happen?
- Saltwater infiltration to Middle River wells
- Is there a possible economic benefit + creating saltwater marsh for landowners and for the town

Water Quality

Natural Resources

Table ?

Dike

- What everyone says is incredibly reasonable
- Past ideas
 - Sea wall (13' tall?)
 - Inflatable wall, boardwalk, knee wall, dredging
- Heritage- river, salt marsh hay
- Preservation of market spaces on the dike and of the Sunrise Trail
- Suggestion- power generation turbines inside the gates
 - Who would fund these?

Flooding

- Funding in general (concerns?)
- Mapping storm drains/catch basins
- Concerns- businesses that can't locate in downtown
 - Fear of flooding
 - "More than solving the dike problem. Changing the dynamic of the town. Turning our backs on our greatest asset" (referring to the downtown?)
- Storm drains are ancient
 - Trying to figure it out

Water Quality

- Important things to consider
 - Landowners
 - What has happened before
 - PFAS- bring water up? Impacts? What is happening?
 - Old junkyard by the river
 - Spreading at airport-in the past there has been sludge

- How much passage do fish need?
- Contamination flowing down-stream
 - Effecting Machiasport clam flats
- Sewer plant runs at less than full capacity
 - Storage is an issue
 - Eliminate CSOs
 - New pump station (large pipe)
- Pipes too small for the drains in towns
- Underground stream
 - RMA to the river

Natural Resources

- Flooding-how much is too much?
- Straightening the river (dredge out a curve?)
- Ways to protect the landowners
- Compromise coming?
 - In between options- need to find sweetspot
- A fishway and have the dike?
- Fixing the clappers now- working properly
- A gate-maintaining it if it generating power

Table 4

Dike

- How far into the future is the current tracking of tide
- What was the historical habitat above the dike and what is the outcome for all scenarios?
- What is the reality of fish passage for each scenario and what is it now?
- What do the changes look like in each scenario?
- Does DOT have a specific amount to replace the dike- for all scenarios?
 - What percentage of these funds come from where?
- Machias has always flooded?
- Transportation impacts of dike + pedestrian

Flooding

- Concerns about reaching hospital in flooding
- What plans are there to add storage to wastewater?
- What about raising buildings base elevations in flood zones
- What methods will be used to stabilize banks
- More information of how it will affect surrounding communities
- For leadership committee- more public meetings
- How much sediment buildup is there now and for future situations
- What amount of chemicals are currently leaching due to flooding and what are future concerns
- What impact will dredging have

Water Quality

- We'd like more information about levels of contamination
- Leadership committees need to let press attend without badges

- Different dike option + levels of contamination
- How many and where are the septic failures?

Natural Resources

- People are the natural resource- their livelihoods and themselves need to be protected
- Concerns about compensation for loss of private property- if so where does that \$ come from
- Concern about loss and habitat, what is the extent?
- Do farmers in the town's affected area have irrigation
- Farming and grazing concerns w/ every option

Table 5

Dike

- \$\$\$- costs to indefinitely repair dike against further storm surges vs other options
- Enviro concerns
 - Potential impact on river→Fisheries
- Landfill leachate- must deal with landfill
- Waste Water Treatment Plant
 - PFAS
- Sunrise Trail
- Minimize closing of Route 1
- Saltmarsh as a carbon sink
 - Could we create a value system that would include the benefits of ecosystem service

Flooding

- Stormwater- need to fix regardless
 - Current system issues
 - Catchbasins not maintained
 - Undersized pipes
- Rim bridge barrier?
- Sunrise trail/ Shoppe Marsh
- Wall/pump station
- Too much pavement downtown
 - Turn pavement downtown in permeable services

Water Quality

- Central to all discussions!
- PFAS
 - Impact on clam flats
- Crucial to minimize impact on commercial fishing because of water quality issues
- Stormwater runoff picking up pollutants
 - Capture in bioswales?

Natural Resources

- Smelt brook
 - Possibility of bringing sea run fish back up middle river

- Remediate dump to protect natural resources
- Regardless of dike, prioritize healthy ecosystems!

Table 6

- Cutler (1)
- E. Machias (2)
- Roque Bluffs (3)
- Jonesboro (1)
- Marshfield (1)
- Whitneyville (2)
- Pembroke (1)

Dike

- Sunrise trail very important
- What to know what happens at each scenario-mapped
- Transparency
- Need more data- to show what the effects will be
- Safety is a major consideration- too long of a distance if dike is closed
- Businesses lose if dike closed
- Families- some people lose land and some want other things
- Compensation for land owners?
- No perfect solution
- Look at other communities

Flooding

- Need more info to make a decision
- "We know it's going to happen again"
- Were these storms assessed? Amount of water/ Amount of \$
- Machias is built on fill
- Dredge to make more room in Machias River
- Wickford, Rhode Island- to purchase property must lift house (to mitigate flooding)
- Market the UMBMP website
 - What are all ideas- ex. Levy?
 - What is most important to the community?
 - Variety of perspectives
 - Money may not be most important factor

Water Quality

- Landfill leachate- PFAS
- Where are the sewage overflows?
 - Should they be marked on the map?
 - How much?
- Need more visuals to help with understanding
- Need to see the data as well
- Stormdrain issues- need to know more
- Are we getting UMBMP info out to community members
- Vulnerability of trail

Natural Resources

- Middle river fish, fowl, habitat
 - Major wildlife habitat
 - Will the marsh grass die + no longer be there for wildlife?
 - Don't want it to become a mud flat
- Landscape already changing- higher water above dike
- Need emergency notification for extreme events
- Regulate water flow to minimize impact
- What can landowners gain if property is flooded? More birds?
- Freshwater marsh important for habitat
- Time to move from freshwater to saltwater marsh
 - Can it be accelerated?
- What's going to happen 50 years from now?
- Raise businesses and divert water
- More people are going to come and will want to build
- Flapper gates don't matter if water overtops the dike
- Machias needs to create plan for business and flood growth

Table 7

Dike

- Worries about smell if opened to salt water
- What about decisions prior to fix it as is
- Long time, lots of money already-should've fixed it already
- Takes a long time for salt marsh restoration
- Care about transportation, accessibility
- Native plants
- Zoning needs + changes
- What does "restore" mean
- What is included in "keeping the roadway open"?
 - Adding
- What does "protecting historic sites" mean? Race track, etc.
- Interest in more natural areas/ permeability downtown
 - Need to expedite this
- Desires for it to be fixed as is...as a taxpayer + property owner
- Salt already changing ecosystem- if dike fixed it will go back to the way it was

Flooding

- Downtown built on mud flats
- Important to improve stormwater system
- Currently mapping stormwater system (100 year old)
- Seawall: need to discuss with stakeholder landowners
- Adding permeable surfaces, native plants, green space
- Seawall with walking path + living shoreline- would like, adds great value, tourism ↑
- Worries about height of seawall/view from town
- Parking lots taking up space for businesses that could pay taxes
- Need to attract more businesses + more people/tourists (there are new businesses coming in)

Water Quality

- Landfill leaching issues
- Worries if dike is opened it will impact landfill
- Possible middleground: opening gates on dike to allow some saltwater/ fish passage

Natural Resources

- Interest in improving mudflats, clamming
- Restoration is important even if it takes time
- Could add a trail on west side of Middle River if dike closed
- Shoreline zoning needs updating (1990s)- need official map
- Worries about saltwater in freshwater ecosystems/ freshwater marsh
- Great opportunity to restore Schopee Marsh

Table 8

Dike

- Concern about future of landfill
 - Increased risk with tide
 - Impact on clam flats
- Road that works (Route 1?) + other infrastructure
- Need to understand land use changes
- Farmer's market + other vendors
 - Impact on growers + customers

Flooding

- Effect on businesses
 - Varies a lot
- Impact of storm drains
- Will happen again (especially town office)
- Dredging as an option
- Impact of detours
- Flooding upstream further on Middle River

Water Quality

- Drinking water taste
 - Rusty and chlorinated
- Impact of salt water intrusion
- Fire hydrants
 - Problem of monthly hydrant flushing
- Prioritize working infrastructure

Natural Resources

- Want to understand about benefits/tradeoffs- especially with saltmarsh
- Loss of use of Shoppe Marsh
 - Historical Sunrise Trail
 - Fear that same effect on Middle River
 - Existing Fish passage

