

Machias Revitalization Committee July 8th, 7:00 A.M. at Bluebird Restaurant

Present: Christine Therrien, Sandi Malagara, Angela Fochesato, Dan Gardner, Bill Kitchen, Tora Johnson, Lisa Schaefer, Jennifer Denton, and Gail Peters

The meeting was devoted to a presentation by Tora Johnson from the GIS lab at UMM and committee discussion:

A study including detailed maps was requested by the Washington County Council of Governments and the federal government as part of a countywide assessment of vulnerability to climate change. The study focuses on the analysis of the sea level rise and storm surges in our area. Machias has the greatest vulnerability to storm surge damage of the towns in Washington County. The Climate Vulnerability Analysis and the storm surge and sea level rise maps are available at www.gro-wa.org. This will allow you to click on "Quick link to on-line GIS" and then select the link to access storm surge and scenarios in Washington County.

Tora's summary of the study follows:

Very conservative, early estimates of sea level rise anticipated a 3' sea level rise in 100 years. It's more realistic to anticipate that rise in 50 years. What had previously been considered a 100-year storm is now occurring more frequently, and by the end of the century will likely be on average a 20-year storm. These storms flood the downtown, impact the water treatment plant and overrun the dike. This increase in frequency is due to warming temperatures and is made worse by sea level rise and does not take into account any rainfall.

The town of Machias has recently received new flood level maps from the federal government. The maps come from the Federal Emergency Management Agency. The public is invited to view these maps due to the effect on flood insurance. The FEMA maps set flood insurance rates, and rates can go up if there's a greater danger of flooding. They can also deny insurance for a building built in a place where they have decided it's too vulnerable. That doesn't mean someone can't build there, but they will not be insured for flooding if they do. On the other hand, the town can choose to deny building permits for buildings in flood prone areas, but it hasn't done that to date.

Tora has found that the maps from FEMA of 100 year floodplains are consistent with the maps of category 2 mean tide storm surge scenarios in her study. This will affect insurance rates. The economy of the area will be affected. This is true for the entire Maine coastline.

The replacement of the flapper valves on the dike has the potential of being part of the equation regarding effects of sea level rise. The DOT has asked for studies regarding the dike which is being undercut. The dike could be swept away if conditions remain as they are. When the dike is in place, this diverts water to the downtown river area. The construction of the new

rim bridge negated the use of the Machias River behind the downtown for shipping. Thus the river was no longer dredged and the piers and cribbing rotted and fell into the river.

If the dike were replaced with a bridge which is the less expensive option, the water would have an additional place to go and would help ameliorate the flooding. A member of the committee suggested that the river area could also be dredged and a retaining wall be erected. As one example of the future of building, Helen's Restaurant was required to raise the height of their building to obtain flood insurance.

Damariscotta is currently building a wall to protect their downtown area. It is being funded by loans, bonds and some federal money. There is money available to respond to problems due to climate change.

In addition to the bridge being the less expensive option, it was noted that the flapper valves have caused sediment to build up over time. The study that looked at the dike's vulnerability also determined that the sediment would no longer build up but would be swept away in the natural flow of the water. Could The Army Corps of Engineers dredge this area to hasten this process?

There is opposition to a bridge being constructed where the dike is currently located. The DOT would be funding this project. A decision appears to be imminent because the dike will eventually fail. It would be in the area's best interest to be prepared when it does occur and/or have a plan to prevent this from happening. If the bridge is the option selected, it would be best to design it to least impact the area behind it, and keep the water flowing away from the downtown area.

It may be in the interest of the town of Machias to hire a firm which would recommend the best options for the location, be aware of the environment impacts and the legality of the project. The town is a member of the Washington County Council of Governments and could seek help from them in finding funding for a study and hiring a firm. The sea level rise and storm surge report generated by the GIS lab is very pertinent information for the decision regarding the dike.

All were in agreement that is essential to do things in proper order to avoid duplication and a waste of money for the town, the area businesses and the Revitalization Committee.

Tentatively, there may be a meeting on Friday morning, July 15th to address the remainder of our agenda from today's meeting. Angela will send an e-mail to confirm this.

Respectfully,

Gail J. Peters for Sharon Mack