Coastal Erosion Hazard Mapping Task Force Meeting Notes

Zoom- November 18th, 2020 – 10:00 a.m.

Meeting Attendees: Ilena Hansel-Cook County SWCD, Clint Little-MN DNR Coastal Program, Melanie Perello-MN DNR Coastal Program, Neva Maxwell-Lake County, Margaret Watkins-Grand Portage, Tim Nelson-Cook County, Justin Otsea-ARDC, Charlie Moore-ARDC, John Swenson-UMD Derrick passe-Lake Co SWCD, Christine McCarthy-Lake County, Ross Hoffman—Lake County.

1. Welcome/Introductions

- a. All were welcomed and introduced themselves.
- b. Justin Provided a brief update on the status of the work is.

2. Methodology Discussion-

- a. Geological Information Integration- John Swenson of the University of Minnesota Duluth provided an interactive presentation outlining geologic considerations and impacts on the analysis work. He prefaced the presentation stating the information should be considered during phase III and beyond of the project, not as much phase II. John started by showcasing different soil and rock types along the shoreline and how erosion happens on the Minnesota shoreline of Lake Superior. One highlight included the importance of the location of the Bedrock/till on the shoreline. If its till at the water line, the area is extremely susceptible, if not, not so much and freeze/thaw cycles in the spring tend to drive most of the erosion in the calendar year. John followed by highlighting the importance of being able to verify in the field what the geologic makeup of shoreline areas are, and how drone work can help. While not looking to measure erosion rates, drones can provide more another layer of information to any sort of regulatory impacts of the data that would not be available solely from the mapping tool. Brief discussion followed.
- b. **Methodology Deep Dive review-** Melanie provided a deep dive presentation on erosion rate versus susceptibility to help make connections between the data being developed and how it can be utilized for regulatory purposes. The presentation also included highlights of other great lakes states and a summary of how they regulate erosion areas and the analysis tools with which they are determined. Discussion around the data error calculation was also held.
- c. Discussion around data presentation- Discussion followed outlining how we should present the analysis results. Summary of the discussion includes: 'how do we display the linear regression rate?' remain as precise as possible, since we do not have the susceptibility layer, but when we get it, it could be a more integrated approach for high medium erosion for regulatory purposes for the counties. Point vs Transect data-Initial visualization could be more point file and additional level of detail for the transects is still an option. It was determined that different applications will require different representations. Regulatory functions, showcasing via parcel line, but for the public it should likely be a larger scope for projects not contained to parcel boundaries. Further discussion on this topic will be needed in the future phases once the DSAS analysis is complete for the entire North Shore. Other topics included requesting an updated future scope for the project (i.e. next few years) as well as Lake County offering to hold a meeting with the Counties and SWCD's to discuss the outlook for the interim of the project in advance of the analysis being completed.
- d. Update on Pilot Site Analysis Results-Charlie and Melanie showcased the results of the analysis at the pilot sites and compared to the Carol Johnson work which had some consistencies and some irregularities. These results helped generate some of the above cited discussion topics.

Coastal Erosion Hazard Mapping Task Force Meeting Notes

Zoom- November 18th, 2020 – 10:00 a.m.

- e. **Update regarding Field Visit Survey Form-** Justin informed Ross that the group indicated to him there would be no issue with a single users credentials that could be shared across organizations from inputting data. Ross made that change and would follow up with Justin with the link and credentials. Once received, Justin will send out to the group.
- **3.** 'CHAOS' -Community of Practice Update -Melanie informed meeting attendees that the last CHAOS meeting of the year was held on November 5th, at 10:00 A.M. The agenda included presentations on a Coastal Resiliency Self-Assessment tool, Flood Resilience Scorecard, and 'Virtual Field Trip' to Grand Marais, MN among other items. A recorded version of the meeting is available here: https://www.youtube.com/watch?v=H_Kj6Yn9HdU. Melanie mentioned the self-assessment tool could be very applicable to some of our coastal communities, and provided a link to the Coastal Resilience Self-Assessment tool in the chat:

https://sewicoastalresilience.org/resilience-resources/planning-and-policy/

The next meeting is expected in late January, but a date has not been determined yet.

- **4. Phase III Funding Strategy** Justin and Charlie briefly outlined phase III of the project, which would include partnering with the University of Minnesota-Duluth U-Spatial lab to complete the digitization and analysis work along the Minnesota shoreline of Lake Superior. A budget has been developed and an application submitted to the MN Lake Superior Coastal Program. FEMA's BRIC program, among others have also been identified as potential funds to support phase III of the project. Justin then facilitated a conversation around what the future of the CHEM group would look like after the phase II grant period ends later in the month. After discussion, there was consensus that at least a meeting in December to discuss the item more thoroughly and some sort of meeting schedule moving into 2021 would be valuable, just maybe not monthly meetings.
- 5. Data Update-None
- 6. Other Partner Updates-None
- 7. Future Meeting Location
 - a. A Doodle poll would be sent out for a zoom meeting in December.
- 8. Next Steps
 - a. Collect Partner In-Kind Match Documentation
 - b. Finalize GIS layers
 - c. Develop Final Report and Submit Materials to Coastal Program