

Coastal Erosion Hazard Mapping Task Force Meeting Notes

Zoom- May 27th, 2020 – 10:00 a.m.

Meeting Attendees: Clint Little-MN DNR Coastal Program, Ilena Hansel-Cook County SWCD, Melanie Perello-MN DNR Coastal Program, Derrick Passe-Lake Co. SWCD, Margaret Walkins-Grand Portage, John Swenson-UMD, , Tara Solem-Lake Co SWCD, Tim Nelson-Cook County, Ross Hoffman-Lake County, Neva Maxwell-Lake County, Julie McDonnel-MN DNR Coastal Program, Justin Otsea-ARDC, Charlie Moore-ARDC, Celia Johnson-ARDC

1. Welcome/Introductions

- a. All were welcomed and introduced themselves.

2. Methodology Discussion-

Charlie and Melanie facilitated a discussion regarding the analysis of a bluff edge and some of the issues related to defining where the analysis should take place as well as what attributes should be documented. Uncertainty levels is still something being determined and requires further guidance. One main issue is differences in resolutions between historical imagery, which limits the level of scale you can accurately measure. Reviewing the Carol Johnston work with the hardened shorelines and existing erosion issue areas was discussed but getting a level of certainty to the parcel-level is still unsure. Parcel level analysis would be desired, but may be difficult because of these issues, until future additional imagery is obtained. An additional technical meeting to discuss the intricacies of where and what to measure and other related issues was identified and would be hosted in advance of the next group meeting.

The discussion then turned to additional sites to be used for the analysis. As of now, the current sites being reviewed include: Park Point, Grand Portage (MN DNR Coastal Program), Silver Creek, Castle Danger, and a site near the Brule River in Cook County (ARDC). Discussion followed on what other sites we should consider, and what criteria should go into selecting the sites. Discussion items included: looking at high risk areas from Carols work, ensuring a diverse set of geologic features to help understanding when extrapolated throughout the shore, identifying areas between Castle Danger and Grand Marais, USGS work into ground water could be helpful among others. It was determined that this item would be an additional agenda topic for the upcoming technical group meeting. John offered to provide geologic maps to help with determination of sites and Justin offered to send out a doodle poll to the group to identify a date that works for many. Team members who have been on site of some other erosion areas were also encouraged to attend. Team members were encouraged to send other target site options to the team in advance of the technical meeting.

Additional discussion was held on what gets measured during a site visit. After brief conversation, Ilena with Cook SWCD agreed to send over a checklist of what they look at for a site visit, and Lake Co. SWCD would investigate if they have a form developed yet or not. Melanie agreed to review these items and compile them into one resource that could be utilized by all technicians who visit sites to compile additional data moving forward. A draft would be available at the next meeting.

3. 'CHAOS' -Community of Practice Update -

Melanie gave a brief update that the first meeting of the CHAOS group was held on April 29th from 2-3 p.m. The scheduled presenters included: Deanna Apps, US Army Corps of Engineers Detroit District, Great Lakes Water Level Updates and Dr. Joseph Moore, National Weather Service-Duluth Office, Improve Lakeshore Flood Forecasting.

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Deemed a success, the meeting had 83 participants and allowed for some good networking opportunities, even with a virtual format. The next meeting is to be held in July.

Additionally, Melanie presented her work and the project at the North Central Geological Society of America Conference, which was set to be in Duluth, but held virtually on May 18-19, 2020. Positive conversation and feedback followed the presentation related to the project.

4. Data Update

- a. *Brandon*- Hardened shoreline data is available to anyone on digital coast for web feature service or download. The link is provided below:

<https://coast.noaa.gov/digitalcoast/data/hardened-shorelines.html>

- b. *Ross*- Plats sent over to Charlie- older the plats were more difficult to georeferenced with accuracy to the parcel layer then hoped. Newer plats are helpful. However, he also found a Box of aerial photos from 1968 and could be at least geo-refenced. Not the entire county but Ross will follow up on what is available. It may take some time but could be available. Additional photos from 1997 were also discovered and could be helpful.

5. Other Partner Updates

- a. None

6. Future Meeting Location

- a. Next meeting was set for Wednesday, June 24th 10:00 a.m.- Virtual Format

7. Next Steps

- a. Technical meeting.
- b. Methodology finalization.
- c. Determine additional test sites
- d. Begin analysis at test sites.
- e. Develop field measurement and documentation guide draft.