

Coastal Erosion Hazard Mapping Task Force Meeting Notes

ARDC Conference Room- August 28th, 2019 – 10:30 a.m.

Meeting Attendees: Neva Maxwell-Lake County, Clint Little-MN DNR Coastal Program, Ilena Hansel-Cook County SWCD (Phone), Stacey Stark-UMD, Charlie Moore-ARDC, Justin Otsea- ARDC, Ross Hoffmann-Lake County, Tim Nelson-Cook County, Brandon Krumwiede-NOAA

1. Welcome/Introductions
2. **Overview of meetings/work done to date** (Charlie)
3. **Phase 1 Update** (Charlie, full group)
 - a. Data review
 - b. Deliverable Demonstration.
 - i. Link: <https://arcg.is/bb9ve>
 - ii. Comments/Edits
 - Update metadata for Carol Johnston work (report was created by the Great Lakes Commission from 2000, data was created in 1989)
 - Update parcels from Lake County (Ross will send to Charlie)
 - Update ownership from Lake & Cook County
 - Suggestion to limit zoom extents (similar to NOAA) to prevent data interpretation inaccuracies – NOAA uses 1:9000 as their limit
 - Color code public vs. private parcel ownership
 - Terms of use should be included in splash screen and all data included in the app
 - Add disclaimer to bottom of map if possible, to indicate accuracy of map, legal disclaimers
 - Add contact email address for users to send feedback/data inaccuracies
 - Connect to NOAA WMS servers for lake level data (will save on cloud storage, and improve metadata)
 - Document structure setbacks? Structure setbacks from ordinary high-water level for lake co (maybe cook too) so that information would be valuable.
 - Add Lake County erosion layer (can be used for accuracy comparison)
 - a. Differences could be ground-truthed by staff as a possible starting point for Phase 2 site assessments
 - Include current and past WMS imagery layers that cover the full extent of the study (Statewide)
 - Keep wetland data, but maybe drop land cover
 - Clay soils info is available. Maybe add in.
 - BWSR wetland data- new wetland inventory is going to be incorporated.
 - Ross will connect with Boris about if there's a way to host data from Lake Co.
 - iii. **Do we want to make the Phase 1 deliverable public or password protected?**
 - Clint-opens opportunity for having a phone call with someone else looking at the same data set.

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- Ross-people didn't use the mapping tool until credentials were dropped.
 - Parcel data inaccuracy opens up for public criticism / just open an e-mail address where complaints can be filed. (ross)
 - Brandon- there's a way to Share a link that will show exactly what you are looking at with someone else.
 - Leaning with having it public, good disclaimer, and a separate e-mail for complaints to be lodged.
 - Melanie can use it for community of practices
- iv. Imagery Discussion
- Lake county study has original polaroid images. Lake county expects their new aerial photos should be available at the end of September and eventually through WMS.
 - Resource assessment lab-all DNR images are scanned and on their server but unknown on how far they go back.
 - Army Corps is currently collecting updated topobathy. Potential to compare for Phase 2 of the project to identify differences.
 - a. Brandon expects that it could be close to a year from when they get the data collected. Once data is publicly available, can generate DEM's to compare to the others that are existing.
 - b. NOAA – first draft of the data is ready. Should be available end of January 2020.
 - New MN LIDAR could be flown soon unsure but wheels in motion. Targeting QL2 data (2 points per square meter)
 - Best aerial imagery layer? Google time-lapse has good satellite imagery. You can see sentiment change happening over time in certain areas. UMN map library has images but not georeferenced.
 - Address 1788 Highway 61 is a great resource test site that shows historic erosion over the last 10 years. Google Earth slider can showcase.
 - Northpoint GIS – did a land use type in the coastal area for NSMB. Has building footprints and driveways digitized. Impervious surface for the entire NSMB boundary is digitized.
 - Lake Co also has all structures outlined in their imagery. Also could help with QA/QC
 - NGS oblique Imagery scene viewer provides lat/long high detail scene viewer for all oblique imagery 2016 and 2018 available. Make a resource on the landing page as it would be difficult to integrate.
- v. Additional Discussion
- Planning for freeze/thaw cycles due to the higher lake levels and the impacts.

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- Showing current setbacks and proposed setbacks could be a good way of showcasing to the public on what the impacts are going to be. simple buffer can do that.
- Duluth news tribune article on access sites.

4. Phase 2 Discussion (full group)

a. Project match for Coastal grant

North Shore Management Board Coastal Erosion Hazard Mapping Task 2 Match		
Entity	Match Type	Amount
Cook County Environmental Services	In-kind	\$ 31,635.00
Lake County Environmental Services	In-kind	\$ 5,121.00
Cook County GIS	In-kind	\$ 3,030.00
Lake County IT	In-kind	\$ 4,160.00
ARDC	Cash	\$ 15,000.00
	Total	\$ 58,946.00
	Match needed	\$ 5,999.00
	Required Match:	\$ 64,945.00

Coastal mgmt. program section 309 is non match money that could get funding through a couple of different mechanisms to update the ordinances based on the work done here.

Illinois beach / coastal example of using that funding. (project of special merit' is the term for the match free mechanism)

b. City of Duluth support

- Multiple email requests were sent to Jim Filby-Williams
- Discussed alternate contacts for getting the City on board to cover the final match
- Stacey will reach out to Diane with environmental services
- Justin will contact City planning department (Tom Johnson?)
- Email Mayor? An option if no traction soon.

c. Outline Project Scope

- Need more definition for methodology (historic imagery, LIDAR, etc.)
 - Developing a method for determining the best analysis technique to use for the unique North shore
- Next meeting should discuss past/present methodologies that have been used in other areas
 - Clint and Coastal Fellow will research this topic and report back
 - Look at thunder bay on what they're doing. Coastal flooding warning happening up there
 - Compile a list of existing available coastal erosion tools that are out there and report back
 - Ohio has a good example of ordinance updates

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5. Coastal Fellow update (Clint, full group)

a. Visit Update

- i. Fellowship- Melanie starts on Friday. Community of practice development over 2 years which will be helpful. Clint views this is something that we'll continuously be updating and funding long term.
- ii. She's tasked with developing training materials (i.e. a pdf on how to use the tool).

Next steps

- Work up phase 1 deliverable edits outlined above. (Charlie)
- Reach out to City of Duluth with one final request for participation – potentially meet with them before the next meeting (Clint, Stacey, Charlie, Justin)
- Meeting date will be determined by doodle poll with small group targeting Sept 30/Oct 1.
 - o Kicks off task 2, discusses match documentation for Coastal Grant
- Add coastal fellow to email list (Justin)
- Compile a list of coastal erosion tools/studies that have been done for next meeting (Clint & Coastal Fellow)

Other Conference/Meeting opportunities

- Lake level conference with sea grant is being planned. Winter
- Wisconsin is having a coastal erosion meeting in Ashland at northland college- September 19th
- State conference on the 24th of Sept?