CSA Lake Michigan Dune Bluff and Beach Committee (DBB) Fact Sheet

Problem:

Since the 1980s and until recently we have enjoyed wide beaches and lower dunes which protected our bluff and provided easy access. Erosion over the past few years caused primarily by near record high water levels and waves from intense storms removed the lower dune. The waves relentlessly attacked the base, or toe of the bluffs, causing them to collapse. This presents two problems to the CSA community. Our stairway and easy access to the beach is all but gone. Owners of cottages perched at the top of the bluffs are threatened with their loss.

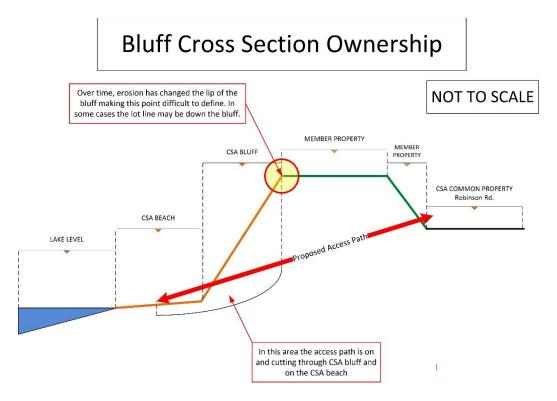
Goals:

- Save cottages
- Maintain and improve access for CSA members to the beach
- Limit erosion and environmental damage to the Critical Dune Area

Things we know:

- 1. There has been severe and continuous erosion of the CSA bluff on Lake Michigan for the past few years and the bluff and dunes as we knew them for the last 30 years are gone.
 - a. Great Lakes water levels have historically been cyclical.
 - b. The effects of climate change have caused increased rainfall and the intensity of storms.
 - c. No one can predict exactly what Lake Michigan will do over the next few years.
 - d. High water levels and intense storms have severely eroded our shoreline.
 - e. With the stairs gone, and the lower dune swept away by waves, people climbing down the steep exposed bluff to get to the beach have increased the damage.
- 2. There is consensus among scientists and conservation/ecology experts that shoreline hardening (sea walls, boulders etc.) is not good for the lake shore and beach. Hardening is not encouraged unless you are trying to save structures. Moreover, shoreline hardening is known to increase erosion to neighboring properties
 - a. <u>CLICK THIS LINK HERE</u>
 - b. The link will download a 2 MB PDF file which can be opened, saved, or printed out as a reference.
- 3. Our Wildewood and Golf Ln. neighbors and community members to the south of the CSA beach constructed a sea wall in 2020 in hopes of saving their cottages.
- 4. Some CSA Members are in danger of losing their cottages due to the eroding bluff. The first three cottage owners (The Owners) to the north are asking to put in a sea wall. There are eight cottages on the CSA Grounds along the bluff. The Miller cottage (8th cottage to the north) is being removed because it could not be saved. They ran out of time and the bluff collapsed.
- 5. CSA Members have temporarily lost safe access to the Lake Michigan Beach. The DBB Committee and Board are working to find the best solution for a permanent path.

6. The CSA owns common property including beach and most of the bluff from the Wildewood sea wall on the south to the far north end of the CSA plat (the extension of Marquette Trail). CSA also owns the top of the bluff between Wildewood up to the southern boundary of the Smolik property where we enjoy access to and sunset views of Lake Michigan. For the most part, CSA owns the lake facing bluff up to the bluff lip and the cottage owners own from the lip of the bluff to across the bluff and back down to the road (Robinson Rd). However, in some places, erosion of the bluff lip means the CSA does not own the entire bluff face and it is private property.



- a. A survey requested by the DBB Committee will show the property line between the south end of the Smolik property and CSA Property.
- b. The proposed construction access path begins on Robinson Rd., crosses the south end of Smolik lot 174 and goes down the CSA bluff to the beach
- 7. Experts agree that in periods of highwater levels, unprotected shoreline adjacent to the end of a sea wall, or between 2 sea walls, can expect additional erosion. It is difficult to quantify how much more that erosion may be.
- 8. The CSA Board has authorized the hiring of an Engineering firm to do a study to help us understand the erosion we face and propose solutions for mitigation of the erosion. This may include adding rock near the end of the sea wall or modifying the shape of the end of the sea wall itself. We have had \$35,000 made available for this purpose, the Land Survey and some follow-up engineering assistance.

- 9. Dunes are not easily restored. The Owners will pay thousands of dollars to remediate the damage done by heavy equipment that will be used to build the sea wall.
- 10. The Owners have agreed to allow the use of their construction access path for any mitigation that the CSA may do following the recommendation of our engineering firm. They have agreed to hold it open through September 30th for our use. This makes ecological and economic sense because it limits construction damage to a single area.
- 11. The CSA Board has also authorized the Engineering Study to help us understand the best option to create permanent access across our common property. It appears that there are multiple potential options. These include potential access
 - 1) to the south near the Wildewood sea wall
 - 2) in the middle near the boardwalk and our destroyed stairs
 - 3) to the north near or on a part of the proposed construction access pathway.
- 12. The potential for using the construction access pathway for future beach access by the CSA was proposed by the Dune Beach and Bluff Committee to the Board of Trustees for their consideration. This proposal was based on the observation that the owners have a great need (a sea wall), and the CSA community has a great need (beach access) and that both groups could help each other in addressing these needs.
- 13. Because the proposal made the sea wall contingent on future use of private property, the Board did not agree with the committee's proposal. However, the Board is very interested in pursuing solutions that are mutually beneficial to all parties.
- 14. Some people believe strongly that the approval of the building of a sea wall on the CSA beach be contingent on an agreement with one owner to grant an easement that would allow the construction path to become the permanent CSA access path to the beach.
- 15. There are differing points of view in our community and everyone will have the opportunity to raise them at the special meeting.