

INTRODUCTION

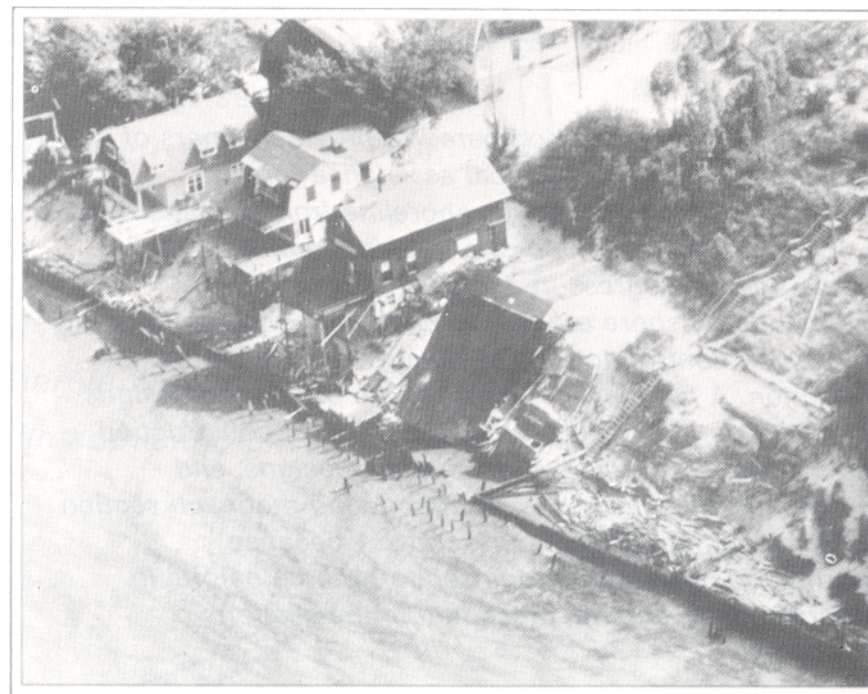
Shore erosion is a major water resource problem on the Great Lakes. Erosion is caused principally by storm induced wave action and associated alongshore currents. Shore erosion problems become critical when high lake levels have submerged the beaches which protect the adjoining highly erodible upland areas. Raised above the beaches, wave forces can work directly on the toe of the bluffs and dunes, resulting in rapid erosion.

The Corps of Engineers, as one of the Federal agencies concerned with beach erosion problems, has constructed many beach erosion control projects along the shores of the Oceans and Great Lakes. The Corps may undertake investigations of beach erosion problems under specific authorizations by Congress, or, for smaller studies, under special continuing authority given by Congress. Under present law, the Corps can provide assistance for protection of public shores, but has no authority to construct erosion control projects aimed solely at protecting private property.

The problem which must be resolved is: How to protect an eroding property? This pamphlet is intended to help private owners evaluate their situation and decide on which course of action should be taken.

In addition to the structural alternatives discussed in the pamphlet, "no action" and relocation should be considered. The benefits associated with no action are saving money and avoiding accelerated erosion on adjacent property with its potential liability problem; however, no protection from damages is provided by this alternative. If property is of sufficient width, homes may be moved back from the eroding shoreline. Long-term expense may be lower with relocation than installing several unsuccessful shore protection structures.

CAUTION. This pamphlet is not intended as a substitute for professional engineering services that are needed to properly design shore protection works. The design of shore protection measures is complex and good engineering principles must be followed. A qualified engineer can help reduce the risk of failure by designing protection for the conditions at a specific problem area.



Severe Erosion at Stickney Ridge, MI., in 1973.