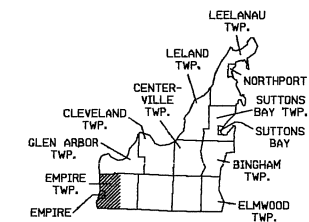


# EMPIRE TOWNSHIP

## HIGH RISK EROSION AREAS & CRITICAL DUNE AREAS

LEELANAU COUNTY

T28N,R14W



### HIGH RISK EROSION AREAS

THE NUMBER REPRESENTS, IN FEET, THE  
 $60^\circ$  30 YEAR PROJECTED RECESSION DISTANCE.  
 $105^\circ$  THE NUMBER REPRESENTS, IN FEET, THE  
 60 YEAR PROJECTED RECESSION DISTANCE.

HIGH RISK EROSION AREA  
 (shading alongshore)

THESE AREAS ARE LEGALLY DEFINED BY THE SHORELANDS PROTECTION AND MANAGEMENT ACT, 1978 P.A. 245, AS AMENDED, AS BEING GREAT LAKES SHORELAND AREAS DOCUMENTED TO REcede AN AVERAGE OF ONE FOOT OR MORE PER YEAR.

### CRITICAL DUNE AREAS

BARRIER DUNES  
 BARRIER DUNE FORMATIONS DESIGNATED PURSUANT TO 1976 P.A. 222

AREAS NOT INCLUDED IN DESIGNATED BARRIER DUNE FORMATIONS THAT ARE COMPOSED PRIMARILY OF DUNE SAND AND EXHIBIT SEVERAL DUNE-LIKE CHARACTERISTICS.

EXEMPLARY DUNE ASSOCIATED PLANT COMMUNITIES OUTSIDE DESIGNATED DUNE FORMATIONS. MICHIGAN NATURAL FEATURES INVENTORY REFERENCE CODE INDICATED.

### SOURCE

STATE OF MICHIGAN ACT 245 RECESSION RATE MAPS & ATLAS OF CRITICAL DUNE AREAS

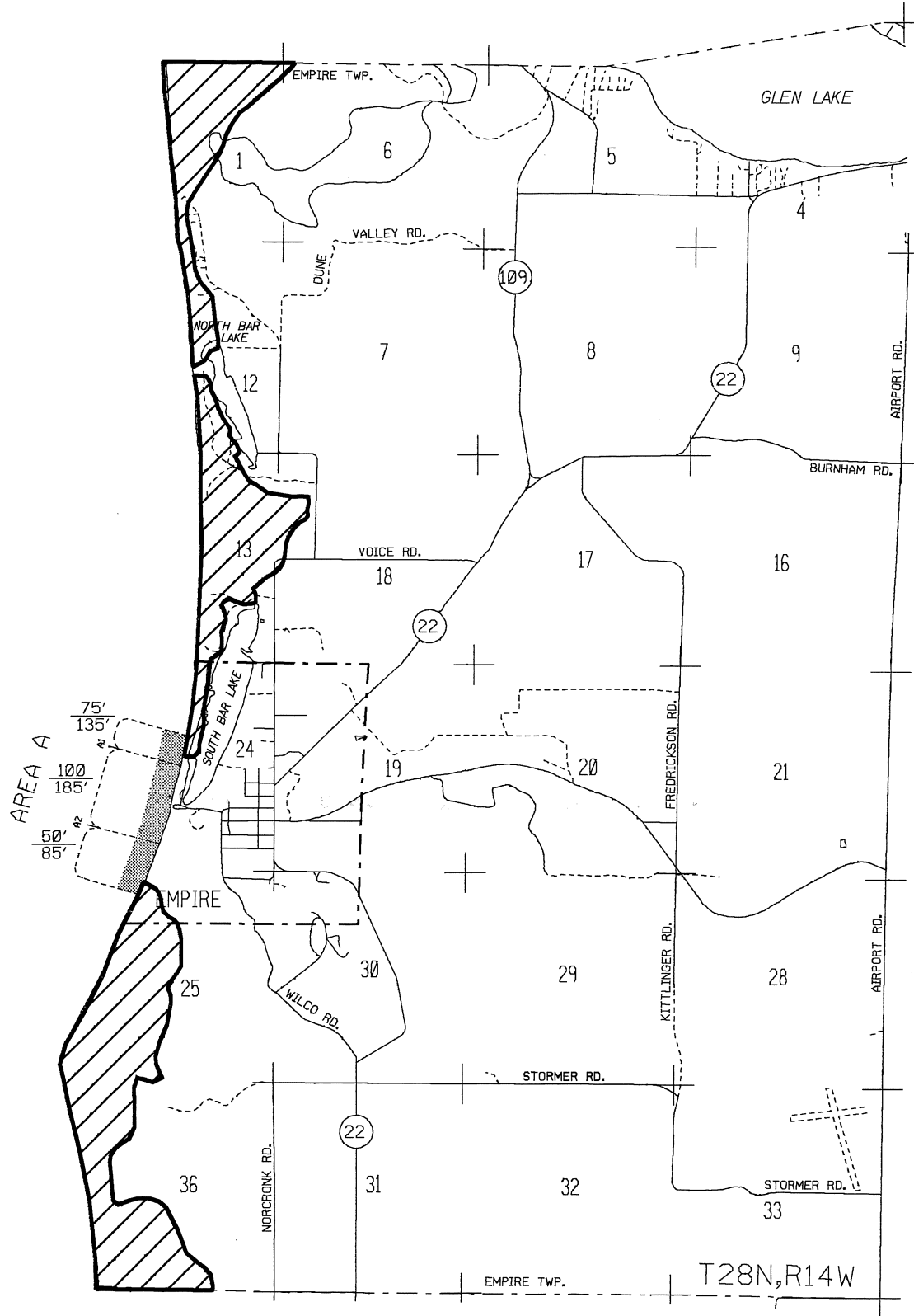
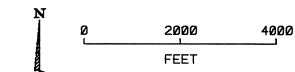
### INFORMATION

MICHIGAN DEPARTMENT OF NATURAL RESOURCES  
 LAND AND WATER MANAGEMENT DIVISION  
 P.O. BOX 30828  
 LANSING, MI 48909  
 (517) 373-1950

**Gis**

GREAT LAKES INFORMATION SYSTEM  
 MICHIGAN DEPARTMENT OF NATURAL RESOURCES  
 LAND AND WATER MANAGEMENT DIVISION

02-10-93





# Parcels in High Risk Erosion Areas of Village of Empire, Leelanau County

Date of Designation: March 11, 1993

Parcel Identification No.	Address	HREA*	Rate (feet/year)	30 yr PRD*	60 yr PRD*
45-041-824-082-10	11315 S Lake Michigan Drive	A1	2.0	75	135
45-041-824-082-00	11321 S Lake Michigan Drive	A1	2.0	75	135
45-041-824-080-00	11359 S Lake Michigan Drive	A1	2.0	75	135
45-041-824-081-00	11377 S Lake Michigan Drive	A1	2.0	75	135
45-041-824-079-00	11399 S Lake Michigan Drive	A1	2.0	75	135
45-041-824-023-00	11443 S Lake Michigan Drive	A1	2.0	75	135
45-041-824-022-00	11459 S Lake Michigan Drive	A1	2.0	75	135
45-041-824-078-00	11477 S Lake Michigan Drive	A1	2.0	75	135
45-041-824-021-00	11499 S Lake Michigan Drive	A2	2.8	100	185
45-041-824-020-00	11520 S Lake Michigan Drive	A2	2.8	100	185
45-041-824-059-00	10484 W Niagara Street	A2	2.8	100	185
45-041-450-900-00	S Storm Hill Drive	A2	2.8	100	185
45-041-450-001-00	S Storm Hill Drive	A2	2.8	100	185
45-041-450-002-00	11732 S Storm Hill Drive	A2	2.8	100	185
45-041-450-003-00	11740 S Storm Hill Drive	A2	2.8	100	185
45-041-450-004-00	11758 S Watch Hill Drive	A2	2.8	100	185
45-041-450-005-00	11766 S Watch Hill Drive	A2	2.8	100	185
45-041-450-006-00	11772 S Watch Hill Drive	A3	1.2	50	85
45-041-450-007-00	11788 S Watch Hill Drive	A3	1.2	50	85
45-041-450-008-00	11824 S Storm Hill Drive	A3	1.2	50	85

HREA\* - Some parcels may be in multiple HREAs due to their large size.

30 yr PRD\* is the Projected Recession Distance (feet) landward from the Erosion Hazard Line for readily moveable structures including those structures 3,500 square feet or less and built on a basement, crawlspace or pilings. Additional restrictions may apply per Administrative Rules 281.21-22.

60 yr PRD\* is the Projected Recession Distance (feet) landward from the Erosion Hazard Line for non-readily moveable structures such as large structures and septic systems.

**Designation runs with the land including subsequent splits. Absence of a property number does not guarantee the property is located outside of an HREA. Contact Great Lakes Shorelands staff, Water Resources Division, EGLE in Lansing or the local EGLE field office for assistance.**



# Parcels in High Risk Erosion Areas of Village of Empire, Leelanau County

Date of Designation: March 11, 1993

Parcel Identification No.	Address	HREA*	Rate (feet/year)	30 yr PRD*	60 yr PRD*
45-041-451-900-01	S Storm Hill Drive	A3	1.2	50	85
45-041-451-900-00	S Orchard Hill Drive	A3	1.2	50	85

HREA\* - Some parcels may be in multiple HREAs due to their large size.

30 yr PRD\* is the Projected Recession Distance (feet) landward from the Erosion Hazard Line for readily moveable structures including those structures 3,500 square feet or less and built on a basement, crawlspace or pilings. Additional restrictions may apply per Administrative Rules 281.21-22.

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