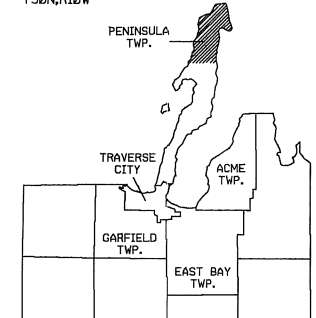


PENINSULA
TOWNSHIP NORTH

HIGH RISK EROSION AREAS &
CRITICAL DUNE AREAS

GRAND TRAVERSE COUNTY

T30N,R10W



HIGH RISK EROSION AREAS

THE NUMBER REPRESENTS, IN FEET, THE
60' 30 YEAR PROJECTED RECESSON DISTANCE.
105' 60 YEAR PROJECTED RECESSON 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 RECESSON
RATE MAPS & ATLAS OF CRITICAL DUNE AREAS

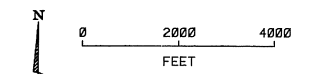
INFORMATION

MICHIGAN DEPARTMENT OF NATURAL RESOURCES
LAND AND WATER MANAGEMENT DIVISION
P.O. BOX 30028
LANSING, MI 48909
(517) 373-1950

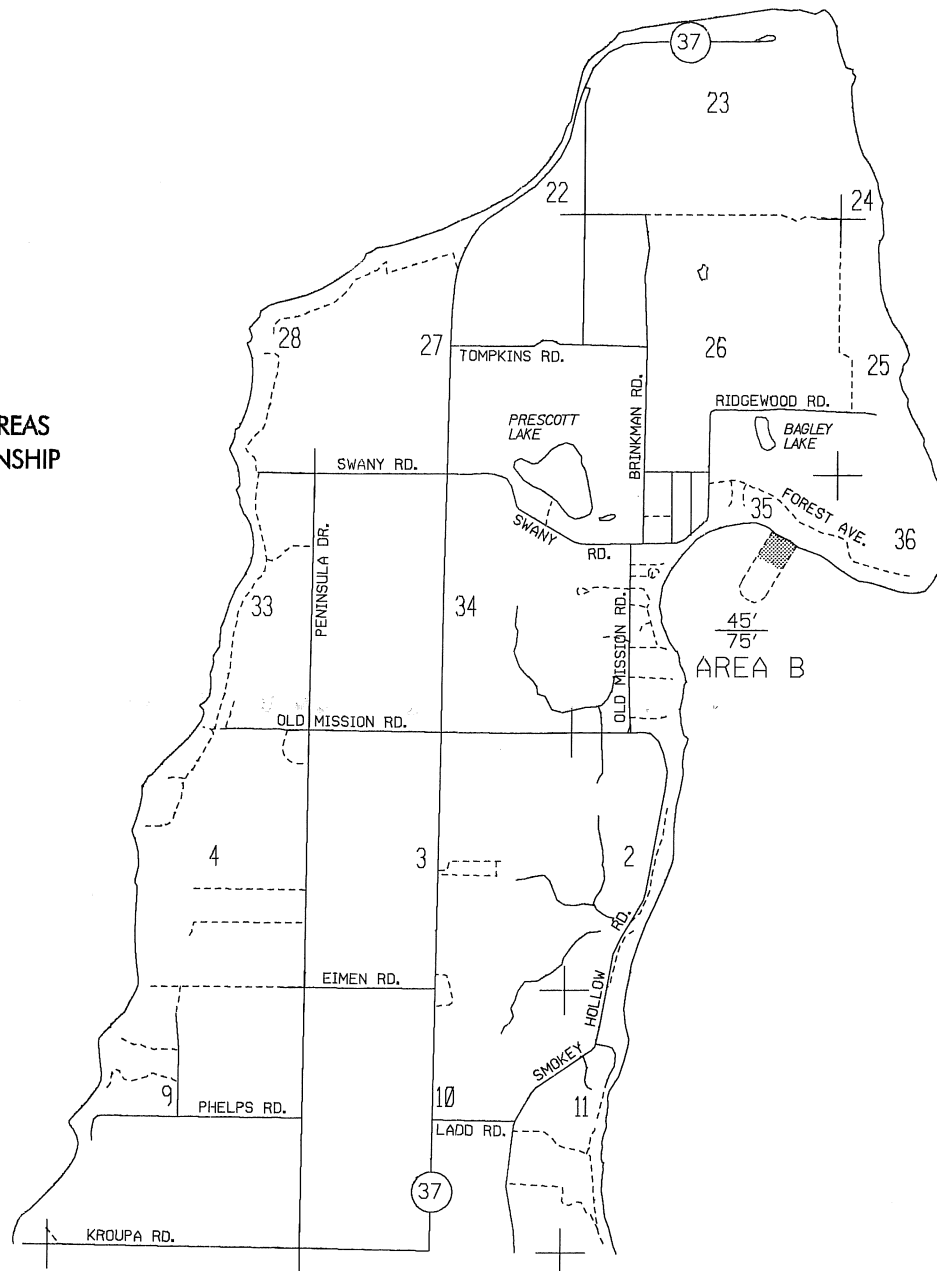
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GREAT LAKES INFORMATION SYSTEM
MICHIGAN DEPARTMENT OF NATURAL RESOURCES
LAND AND WATER MANAGEMENT DIVISION

02-12-93



NO CRITICAL DUNE AREAS
IN THIS PART OF TOWNSHIP

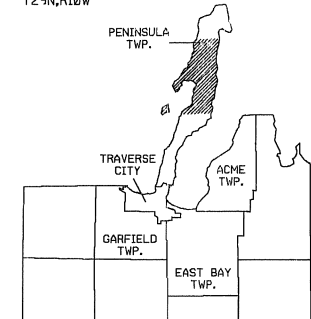


PENINSULA TOWNSHIP CENTER

HIGH RISK EROSION AREAS & CRITICAL DUNE AREAS

GRAND TRAVERSE COUNTY

T29N,R10W



HIGH RISK EROSION AREAS

THE NUMBER REPRESENTS, IN FEET, THE 30 YEAR PROJECTED RECESION DISTANCE.
 60'
 105'
 THE NUMBER REPRESENTS, IN FEET, THE 60 YEAR PROJECTED RECESION 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 RECESION RATE MAPS & ATLAS OF CRITICAL DUNE AREAS

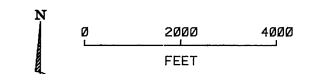
INFORMATION

MICHIGAN DEPARTMENT OF NATURAL RESOURCES
 LAND AND WATER MANAGEMENT DIVISION
 P.O. BOX 30028
 LANSING, MI 48909
 (517) 373-1958

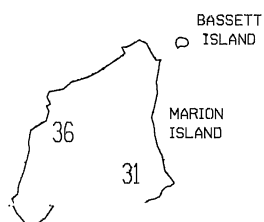
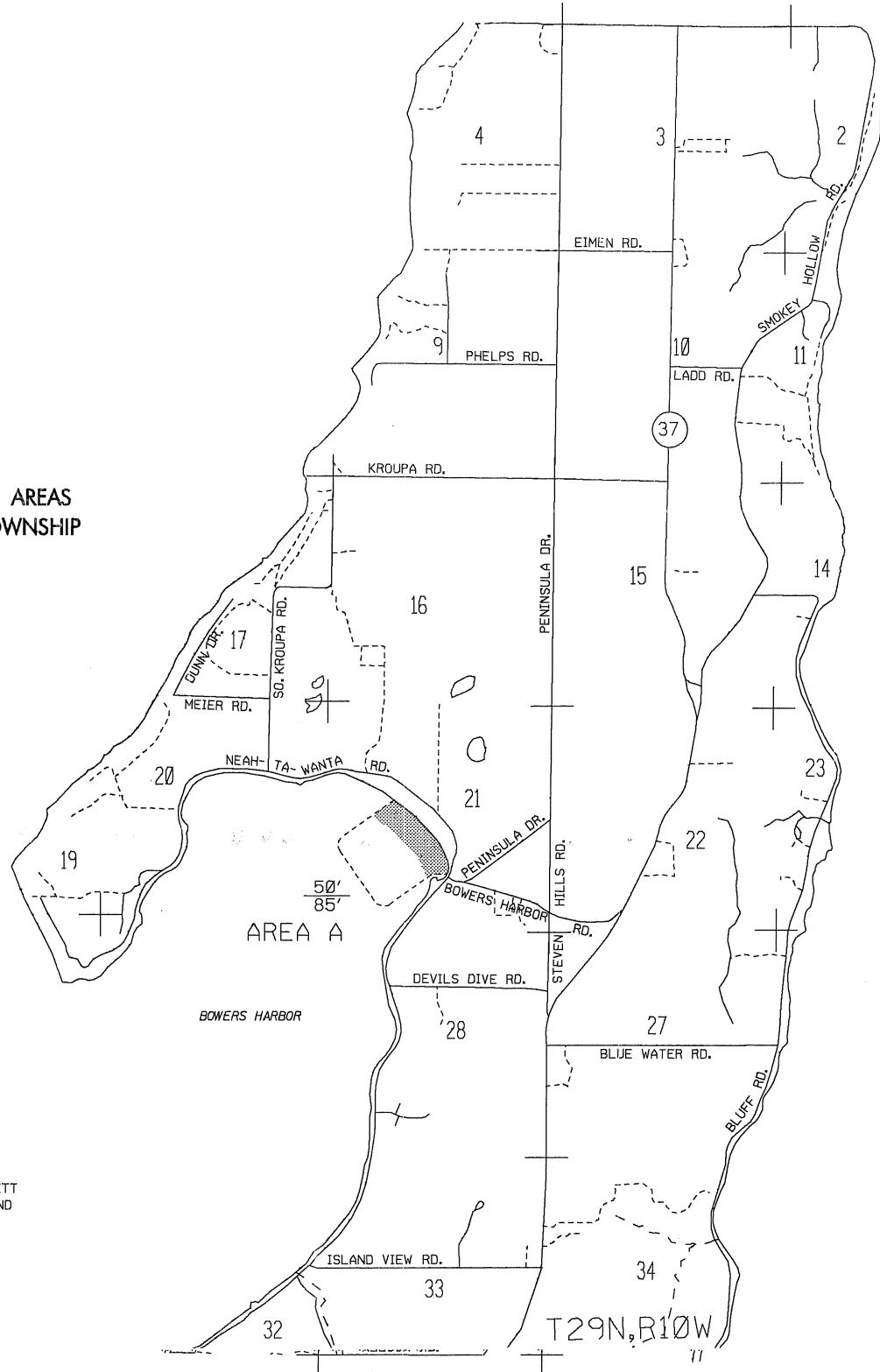


GREAT LAKES INFORMATION SYSTEM
 MICHIGAN DEPARTMENT OF NATURAL RESOURCES
 LAND AND WATER MANAGEMENT DIVISION

02-17-93



**NO CRITICAL DUNE AREAS
 IN THIS PART OF TOWNSHIP**

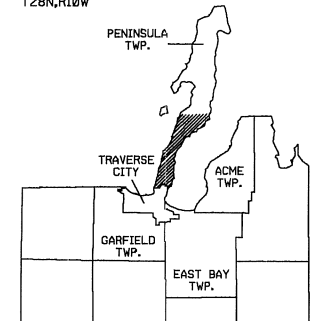


**PENINSULA
TOWNSHIP SOUTH**

**HIGH RISK EROSION AREAS &
CRITICAL DUNE AREAS**

GRAND TRAVERSE COUNTY

T28N,R10W




HIGH RISK EROSION AREAS


THE NUMBER REPRESENTS, IN FEET, THE
60' 30 YEAR PROJECTED RECESSION DISTANCE.
105' 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

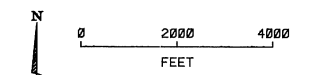
INFORMATION

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LAND AND WATER MANAGEMENT DIVISION
P.O. BOX 30028
LANSING, MI 48909
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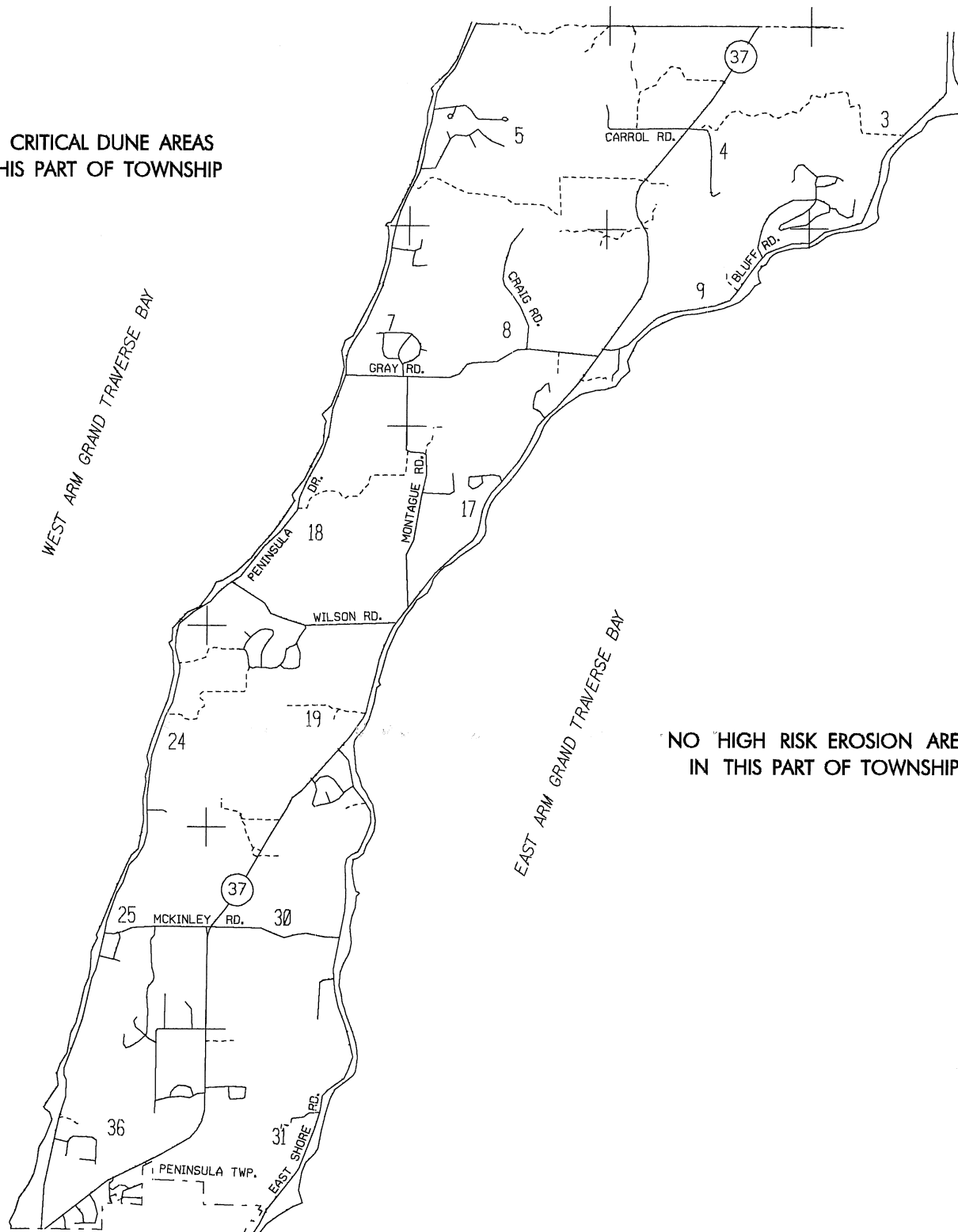


GREAT LAKES INFORMATION SYSTEM
MICHIGAN DEPARTMENT OF NATURAL RESOURCES
LAND AND WATER MANAGEMENT DIVISION

02-12-93



**NO CRITICAL DUNE AREAS
IN THIS PART OF TOWNSHIP**



**NO HIGH RISK EROSION AREAS
IN THIS PART OF TOWNSHIP**

Parcels in High Risk Erosion Areas of Peninsula Township, Grand Traverse County

HREAs identified North to South Date of Designation: March 11, 1993

HREA*	Sequence No.	Parcel Identification Number	Rate (feet/year)	30 yr PRD*	60 yr PRD*
B1	1	28-11-575-010-00	1.0	45	75
B1	2	28-11-575-906-00	1.0	45	75
B1	3	28-11-575-009-00	1.0	45	75
A1	4	28-11-121-018-00	1.2	50	85
A1	5	28-11-121-020-00	1.2	50	85
A1	6	28-11-121-019-00	1.2	50	85
A1	7	28-11-121-010-00	1.2	50	85
A1	8	28-11-121-009-00	1.2	50	85
A1	9	28-11-121-008-00	1.2	50	85
A1	10	28-11-121-012-00	1.2	50	85
A1	11	28-11-121-011-00	1.2	50	85
A1	12	28-11-121-044-55	1.2	50	85
A1	13	28-11-121-045-00	1.2	50	85
A1	14	28-11-121-050-00	1.2	50	85
A1	15	28-11-121-049-00	1.2	50	85
A1	16	28-11-121-036-00	1.2	50	85
A1	17	28-11-121-033-00	1.2	50	85
A1	18	28-11-121-035-00	1.2	50	85
A1	19	28-11-121-034-00	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 the Great Lakes Shorelands Unit, Water Resources Division, DEQ in Lansing or the local DEQ field office for assistance.

Parcels in High Risk Erosion Areas of Peninsula Township, Grand Traverse County

HREAs identified North to South Date of Designation: March 11, 1993

HREA*	Sequence No.	Parcel Identification Number	Rate (feet/year)	30 yr PRD*	60 yr PRD*
A1	20	28-11-121-051-00	1.2	50	85
A1	21	28-11-121-047-00	1.2	50	85
A1	22	28-11-121-048-10	1.2	50	85
A1	23	28-11-121-061-00	1.2	50	85
A1	24	28-11-121-059-00	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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