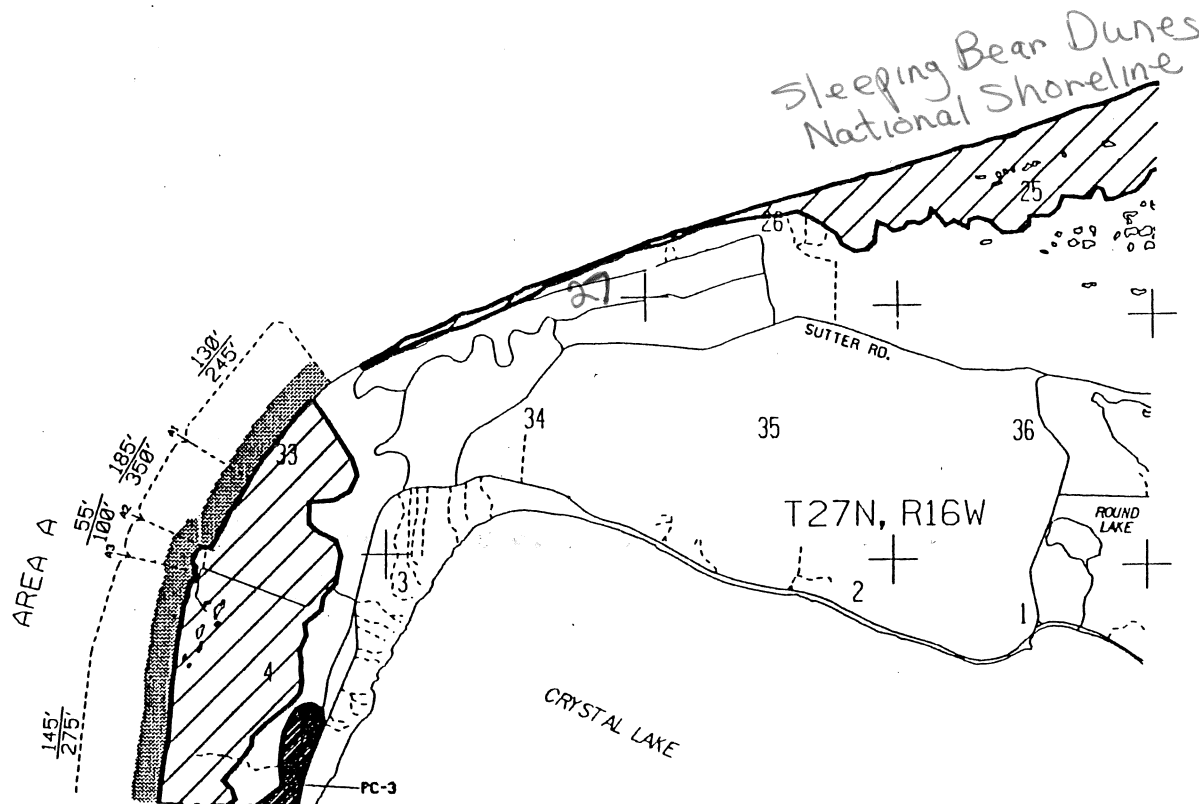
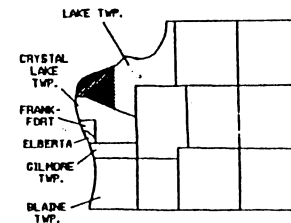


HIGH RISK EROSION AREAS &
CRITICAL DUNE AREAS

BENZIE COUNTY

T27N.R16W



HIGH RISK EROSION AREAS

THE NUMBER REPRESENTS, IN FEET, THE
30 YEAR PROJECTED RECESSION DISTANCE.
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 1978 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

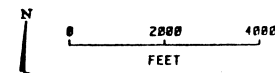
INFORMATION

MICHIGAN DEPARTMENT OF NATURAL RESOURCES
LAND AND WATER MANAGEMENT DIVISION
P.O. BOX 30928
LANSING, MI 48909
(313) 373-1408



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

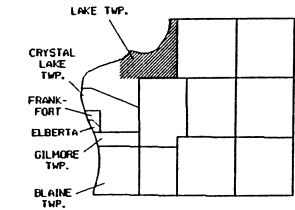
88-85-93
amended 88-17-93



LAKE TOWNSHIP EAST

HIGH RISK EROSION AREAS & CRITICAL DUNE AREAS

BENZIE COUNTY



HIGH RISK EROSION AREAS

THE NUMBER REPRESENTS, IN FEET, THE 30 YEAR PROJECTED RECESSION DISTANCE.
 60' 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, 1970 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

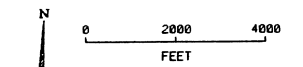
INFORMATION

MICHIGAN DEPARTMENT OF NATURAL RESOURCES
 LAND AND WATER MANAGEMENT DIVISION
 P.O. BOX 30028
 LANSING, MI 48909
 (517) 373-1960

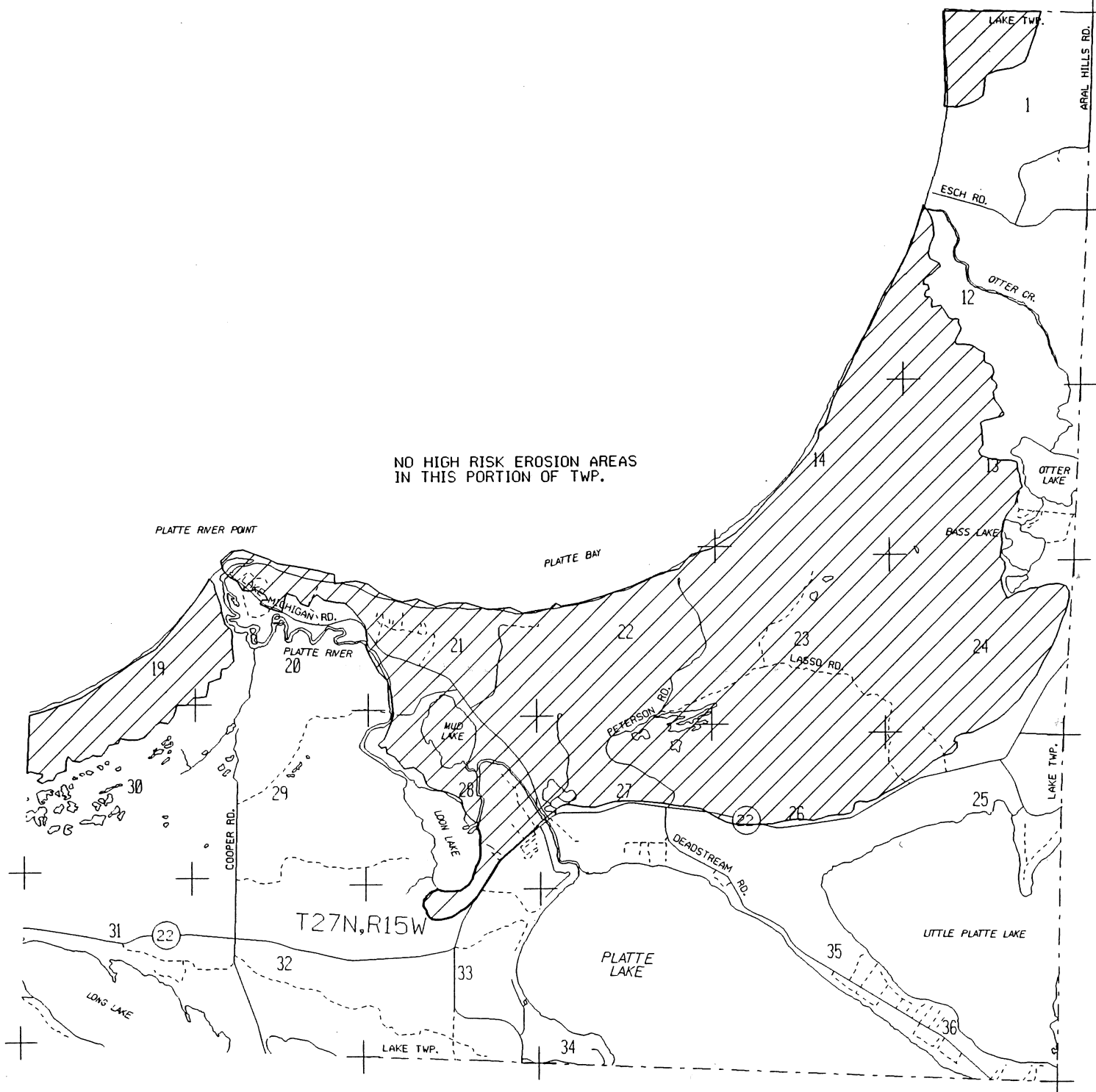


GREAT LAKES INFORMATION SYSTEM
 MICHIGAN DEPARTMENT OF NATURAL RESOURCES
 LAND AND WATER MANAGEMENT DIVISION

08-05-93



NO HIGH RISK EROSION AREAS
 IN THIS PORTION OF TWP.



Parcels in High Risk Erosion Areas of Lake Township, Benzie County

HREAs identified North to South Date of Designation: December 20, 1993

HREA*	Sequence No.	Parcel Identification Number	Rate (feet/year)	30 yr PRD*	60 yr PRD*
A1	1	10-10-075-034-00 Crystal Downs Country Club	3.8	130	245
A1	2	10-10-075-041-00	3.8	130	245
A1	3	10-10-075-040-00	3.8	130	245
A1	4	10-10-075-039-00	3.8	130	245
A1	5	10-10-075-036-00	3.8	130	245
A1	6	10-10-075-035-00	3.8	130	245
A1	7	10-10-075-037-00 northern 2,230 feet	3.8	130	245
A2	7.1	10-10-075-037-00 southern 405 feet	5.6	185	350
A2	8	10-10-034-002-00	5.6	185	350
A2	8.1	10-10-034-002-40	5.6	185	350
A2	8.11	10-10-034-002-30	5.6	185	350
A2	9	10-10-034-003-21	5.6	185	350
A2	10	10-10-034-003-01	5.6	185	350
A2	10.1	10-10-034-003-20	5.6	185	350
A2	10.2	10-10-034-003-10	5.6	185	350
A2	10.21	10-10-034-003-50	5.6	185	350
A2	10.3	10-10-034-003-00	5.6	185	350

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 Lake Township, Benzie County

HREAs identified North to South Date of Designation: December 20, 1993

HREA*	Sequence No.	Parcel Identification Number	Rate (feet/year)	30 yr PRD*	60 yr PRD*
A2	11	10-10-030-027-00 Point Betsie	5.6	185	350
A3	12	10-10-030-027-10 northern 700 feet	1.4	55	100
A4	12	10-10-030-027-10 southern 440 feet	4.3	145	275
A4	12.2	10-10-030-024-10	4.3	145	275
A4	13	10-10-030-025-00	4.3	145	275
A4	13.1	10-10-030-024-03	4.3	145	275
A4	14	10-10-030-024-00	4.3	145	275
A4	14.2	10-10-030-024-04	4.3	145	275
A4	15	10-10-030-029-00	4.3	145	275
A4	16	10-10-030-024-02	4.3	145	275
A4	17	10-10-030-031-00	4.3	145	275
A4	18	10-10-030-032-00	4.3	145	275
A4	19	10-10-030-030-00	4.3	145	275
A4	20	10-10-030-033-00	4.3	145	275
A4	21	10-10-030-034-00	4.3	145	275
A4	22	10-10-030-036-00	4.3	145	275
A4	23	10-10-030-037-00	4.3	145	275
A4	24	10-10-030-039-00	4.3	145	275

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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Parcels in High Risk Erosion Areas of Lake Township, Benzie County

HREAs identified North to South Date of Designation: December 20, 1993

HREA*	Sequence No.	Parcel Identification Number	Rate (feet/year)	30 yr PRD*	60 yr PRD*
A4	25	10-10-030-039-10	4.3	145	275
A4	26	10-10-030-035-00	4.3	145	275
A4	27	10-10-030-038-03	4.3	145	275
A4	27.1	10-10-030-038-13	4.3	145	275
A4	28	10-10-030-040-01	4.3	145	275
A4	29	10-10-030-038-01	4.3	145	275
A4	30	10-10-030-038-02	4.3	145	275

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

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