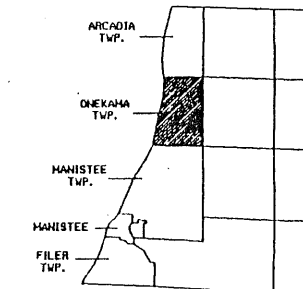


ONEKAMA TOWNSHIP

HIGH RISK EROSION AREAS & CRITICAL DUNE AREAS

MANISTEE COUNTY



HIGH RISK EROSION AREAS

THE NUMBER REPRESENTS, IN FEET, THE 50 YEAR PROJECTED RECESSION DISTANCE.
 60' THE NUMBER REPRESENTS, IN FEET, THE 105' YEAR PROJECTED RECESSION DISTANCE.
 105' THE NUMBER REPRESENTS, IN FEET, THE 60 YEAR PROJECTED RECESSION DISTANCE.

HIGH RISK EROSION AREA (hatching 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 RECEIVE 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

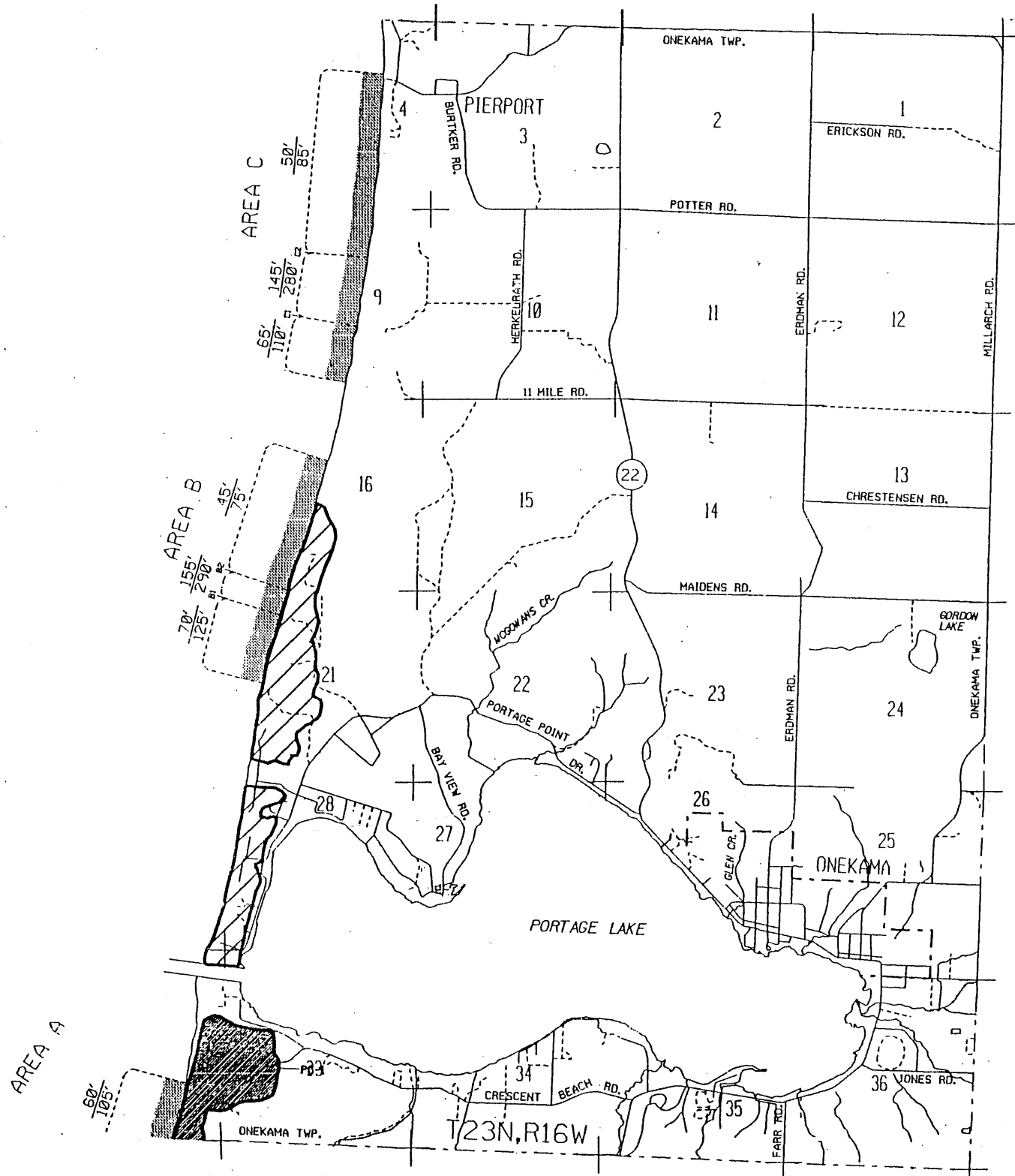
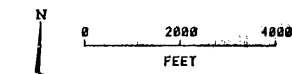
INFORMATION

MICHIGAN DEPARTMENT OF NATURAL RESOURCES
 LAND AND WATER MANAGEMENT DIVISION
 P.O. BOX 30829
 LANSING, MI 48909
 (517) 373-1958



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

08-02-93
 amended 12-16-93



Parcels in High Risk Erosion Areas of Onekama Township, Manistee 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*
C3	1	51-11-570-052-00	1.2	50	85
C3	2	51-11-570-051-00	1.2	50	85
C3	3	51-11-570-050-00	1.2	50	85
C3	4	51-11-570-049-00	1.2	50	85
C3	5	51-11-570-048-00	1.2	50	85
C3	6	51-11-570-046-00	1.2	50	85
C3	7	51-11-570-045-00	1.2	50	85
C3	8	51-11-570-044-00	1.2	50	85
C3	9	51-11-570-043-00	1.2	50	85
C3	10	51-11-004-001-00	1.2	50	85
C3	11	51-11-004-003-00	1.2	50	85
C3	11.9	51-11-004-002-05	1.2	50	85
C3	12	51-11-004-002-00	1.2	50	85
C3	12.1	51-11-004-002-01	1.2	50	85
C3	13	51-11-004-004-10	1.2	50	85
C3	14	51-11-004-004-00	1.2	50	85
C3	15	51-11-004-005-40	1.2	50	85
C3	16	51-11-004-006-00	1.2	50	85
C3	17	51-11-004-007-00	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 Onekama Township, Manistee 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*
C3	17.1	51-11-004-007-02	1.2	50	85
C3	17.11	51-11-004-007-03	1.2	50	85
C3	17.12	51-11-004-007-04	1.2	50	85
C3	17.2	51-11-004-007-05	1.2	50	85
C3	18	51-11-004-009-00	1.2	50	85
C3	18.1	51-11-004-009-10	1.2	50	85
C3	18.11	51-11-004-009-15	1.2	50	85
C3	19	51-11-009-001-03	1.2	50	85
C3	19.1	51-11-009-001-10	1.2	50	85
C3	19.11	51-11-009-001-15	1.2	50	85
C3	21	51-11-009-003-00 northern 725 feet	4.4	145	280
C3	22	51-11-009-004-10	1.6	65	110
C3	23	51-11-009-004-20	1.6	65	110
C3	24	51-11-009-004-30	1.6	65	110
C3	25	51-11-009-004-40	1.6	65	110
C3	26	51-11-009-004-00	1.6	65	110
C3	27	51-11-009-004-50	1.6	65	110
C2	19.12	51-11-009-001-50	4.4	145	280
C2	20	51-11-009-002-00	4.4	145	280

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Parcels in High Risk Erosion Areas of Onekama Township, Manistee 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*
C2	21.1	51-11-009-003-00 southern 675 feet	1.6	65	110
B3	28	51-11-016-003-00	1.0	45	75
B3	29	51-11-016-004-20	1.0	45	75
B3	30	51-11-016-004-00	1.0	45	75
B3	31	51-11-090-014-00	1.0	45	75
B3	32	51-11-090-013-00	1.0	45	75
B3	33	51-11-090-012-00	1.0	45	75
B3	34	51-11-090-011-00	1.0	45	75
B3	35	51-11-090-010-00	1.0	45	75
B3	36	51-11-090-009-00	1.0	45	75
B3	37	51-11-090-008-00	1.0	45	75
B3	38	51-11-090-007-00	1.0	45	75
B3	39	51-11-090-006-00	1.0	45	75
B3	40	51-11-090-005-00	1.0	45	75
B3	41	51-11-090-003-00	1.0	45	75
B3	42	51-11-090-002-00	1.0	45	75
B3	43	51-11-090-001-00	1.0	45	75
B3	44.1	51-11-330-007-00 southern 300 feet	4.6	155	290

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Parcels in High Risk Erosion Areas of Onekama Township, Manistee 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*
B3	45	51-11-330-008-00	4.6	155	290
B2	44	51-11-330-007-00 northern 100 feet	1.0	45	75
B1	46	51-11-330-005-10	1.8	70	125
B1	47	51-11-330-006-10	1.8	70	125
B1	48	51-11-330-004-00	1.8	70	125
B1	49	51-11-330-003-10	1.8	70	125
B1	50	51-11-330-002-00	1.8	70	125
B1	51	51-11-330-074-00	1.8	70	125
B1	52	51-11-290-354-00	1.8	70	125
A1	73	51-11-210-006-00	1.5	60	105
A1	74	51-11-210-004-00	1.5	60	105
A1	75	51-11-210-003-00	1.5	60	105
A1	76	51-11-210-002-00	1.5	60	105
A1	77	51-11-210-001-00	1.5	60	105
A1	78	51-11-032-012-00	1.5	60	105
A1	79	51-11-032-013-00	1.5	60	105
A1	80	51-11-032-011-00	1.5	60	105
A1	81	51-11-032-010-00	1.5	60	105
A1	82	51-11-032-010-10	1.5	60	105

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