

TAWAS CITY, MICHIGAN

30 X 60 MINUTE SERIES (TOPOGRAPHIC)

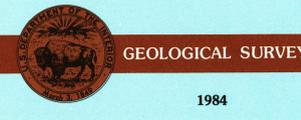
Tawas City MICHIGAN

1:100 000-scale metric topographic map



30 X 60 MINUTE QUADRANGLE SHOWING

- Contours and elevations in meters
- Highways, roads and other manmade structures
- Water features
- Woodland areas
- Geographic names



GEOLOGICAL SURVEY

1984

Produced by the United States Geological Survey
 Compiled from USGS 1:24 000 and 1:62 500-scale topographic maps dated 1959-1976. Planimetry revised from aerial photographs taken 1982 and other source data. Revised information not field checked. Map edited 1984.
 Projection and 10 000-meter grid, zone 17, Universal Transverse Mercator
 25 000-foot grid ticks based on Michigan coordinate system, central and south zones
 1927 North American Datum
 To place on the predicted North American Datum 1983, move the projection lines 1 meter north and 5 meters west
 There may be private inholdings within the boundaries of the National or State reservations shown on this map

CONTOUR INTERVAL 10 METERS
 SUPPLEMENTARY CONTOUR INTERVAL 5 METERS
 NATIONAL GEODETIC VERTICAL DATUM OF 1929
 ELEVATIONS SHOWN TO THE NEAREST METER

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

CONVERSION TABLE		DECLINATION DIAGRAM		ADJOINING MAPS		
Meters	Feet	MAGNETIC DECLINATION		1	2	3
1	3.2808	MAGNETIC DECLINATION		4	5	
2	6.5617	MAGNETIC DECLINATION		6	7	8
3	9.8425	MAGNETIC DECLINATION		1	2	3
4	13.1234	MAGNETIC DECLINATION		4	5	6
5	16.4042	MAGNETIC DECLINATION		7	8	
6	19.6850	MAGNETIC DECLINATION		1	2	3
7	22.9658	MAGNETIC DECLINATION		4	5	6
8	26.2467	MAGNETIC DECLINATION		7	8	
9	29.5275	MAGNETIC DECLINATION		1	2	3
10	32.8084	MAGNETIC DECLINATION		4	5	6

To convert meters to feet multiply by 3.2808
 To convert feet to meters multiply by 0.3048

UTM grid convergence (GN) and 1983 magnetic declination (MD) at center of map
 Diagram is approximate

1 Grayling
 2 Hubbard Lake
 3 Houghton Lake
 4 Pointe Aux Barques
 5 Midland
 6 Bay City
 7 Harbor Beach

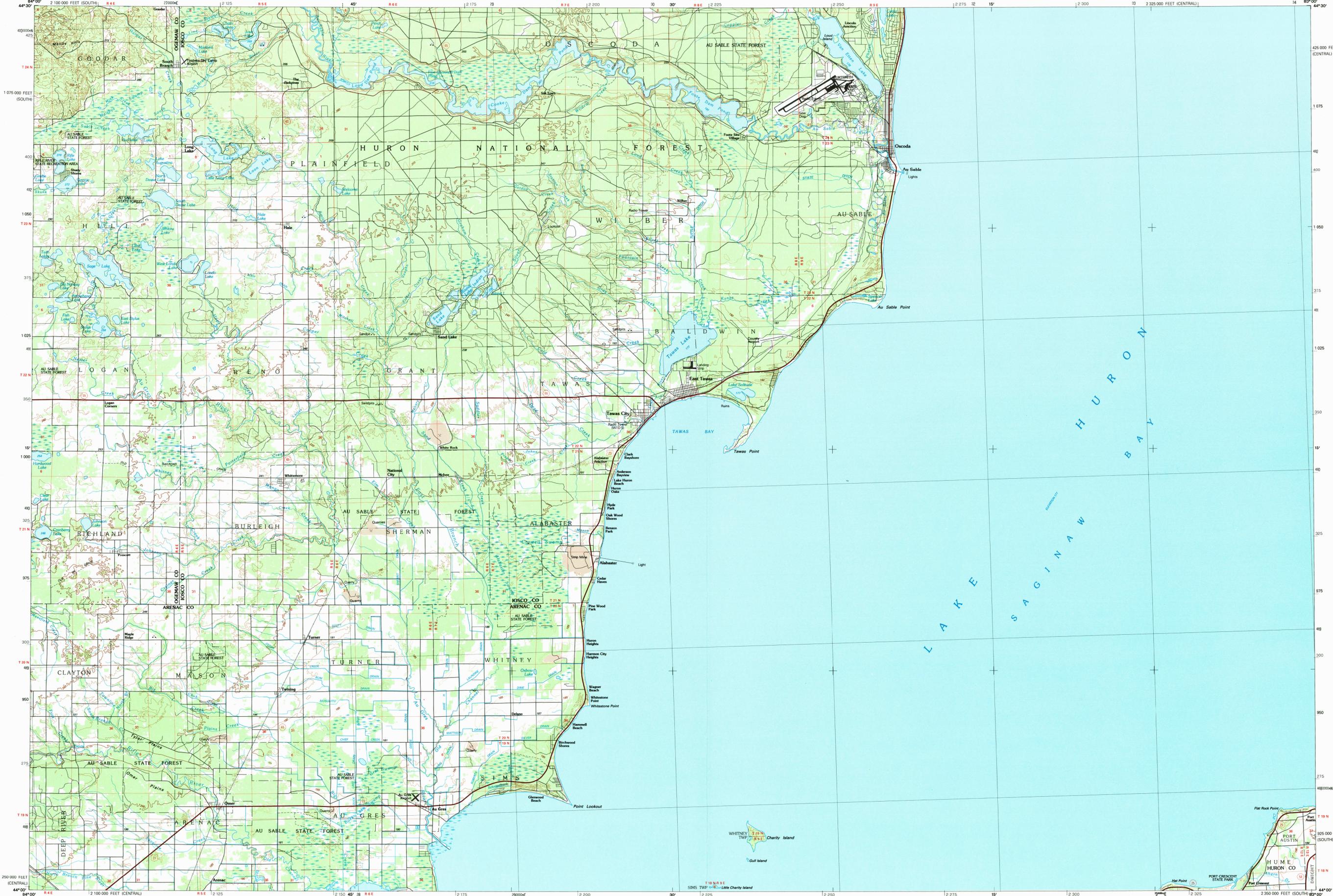
FOR SALE BY U.S. GEOLOGICAL SURVEY
 DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092



Topographic Map Symbols

- Primary highway, hard surface
- Secondary highway, hard surface
- Light duty road, principal street, hard or improved surface
- Other road or street; trail
- Route marker: Interstate, U.S., State
- Railroad: standard gage; narrow gage
- Bridge: overpass; underpass
- Tunnel: road; railroad
- Built up area, locality, elevation
- Airport; landing field; landing strip
- National boundary
- State boundary
- County boundary
- National or State reservation boundary
- Land grant boundary
- U.S. public lands survey: range, township; section
- Range, township; section line; protected
- Power transmission line; pipeline
- Dam; dam with lock
- Cemetery; building
- Wellhead; water well; spring
- Mine shaft; adit or cave; mine, quarry; gravel pit
- Campground; picnic area; U.S. location monument
- Ruin; cliff dwelling
- Distorted surface: strip mine, lava, sand
- Contours: index; intermediate; supplementary
- Bathymetric contours: index; intermediate
- Stream, lake, perennial; intermittent
- Rapids, large and small; falls, large and small
- Area to be submerged; marsh, swamp
- Land subject to controlled inundation, woodland
- Scrub; mangrove
- Orchard; vineyard

A pamphlet describing topographic maps is available on request



KILOMETERS 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

1 CENTIMETER ON THE MAP REPRESENTS 1 KILOMETER ON THE GROUND

SCALE 1:100 000

CONTOUR INTERVAL 10 METERS

SUPPLEMENTARY CONTOUR INTERVAL 5 METERS

MILES 1 2 3 4 5 6 7 8 9 10 11 12 13

5000 10000 15000 20000 30000 40000 50000 60000 70000 FEET

TAWAS CITY, MICHIGAN
 44083-A1-TM-100
 1984