



# Battle Lake MINNESOTA

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**

1986

Produced by the United States Geological Survey  
 Compiled from USGS 1:24 000 and 1:62 500-scale topographic maps dated 1969-1973. Planimetry revised from aerial photographs taken 1984 and other source data. Revised information not field checked. Map edited 1986.  
 Projection and 10 000-meter grid, zone 15, Universal Transverse Mercator  
 To place on the predicted North American Datum 1983, move the projection lines 7 meters north and 24 meters east  
 There may be private inholdings within the boundaries of the National or State reservations shown on this map.

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	1°E	1°W	1	2	3
1	3.2808			1	2	3
2	6.5617			4	5	
3	9.8425			6	7	
4	13.1234			8	9	
5	16.4042					
6	19.6850					
7	22.9659					
8	26.2467					
9	29.5275					
10	32.8084					

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

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

1 Fargo  
 2 Bemis Lakes  
 3 Pine River  
 4 Wahpeton  
 5 Brainerd  
 6 Wadena  
 7 Lake Minnesota  
 8 Saint Cloud

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
- Road 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, protracted
- Power transmission line, pipeline
- Dam, dam with lock
- Cemetery, building
- Windmill, water well, spring
- Mine shaft, adit or cave, mine, quarry, gravel pit
- Campground, picnic area, U.S. location monument
- Ruins, cliff dwelling
- Dispersed 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, meadows
- Orchard, vineyard

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A pamphlet describing topographic maps is available on request

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