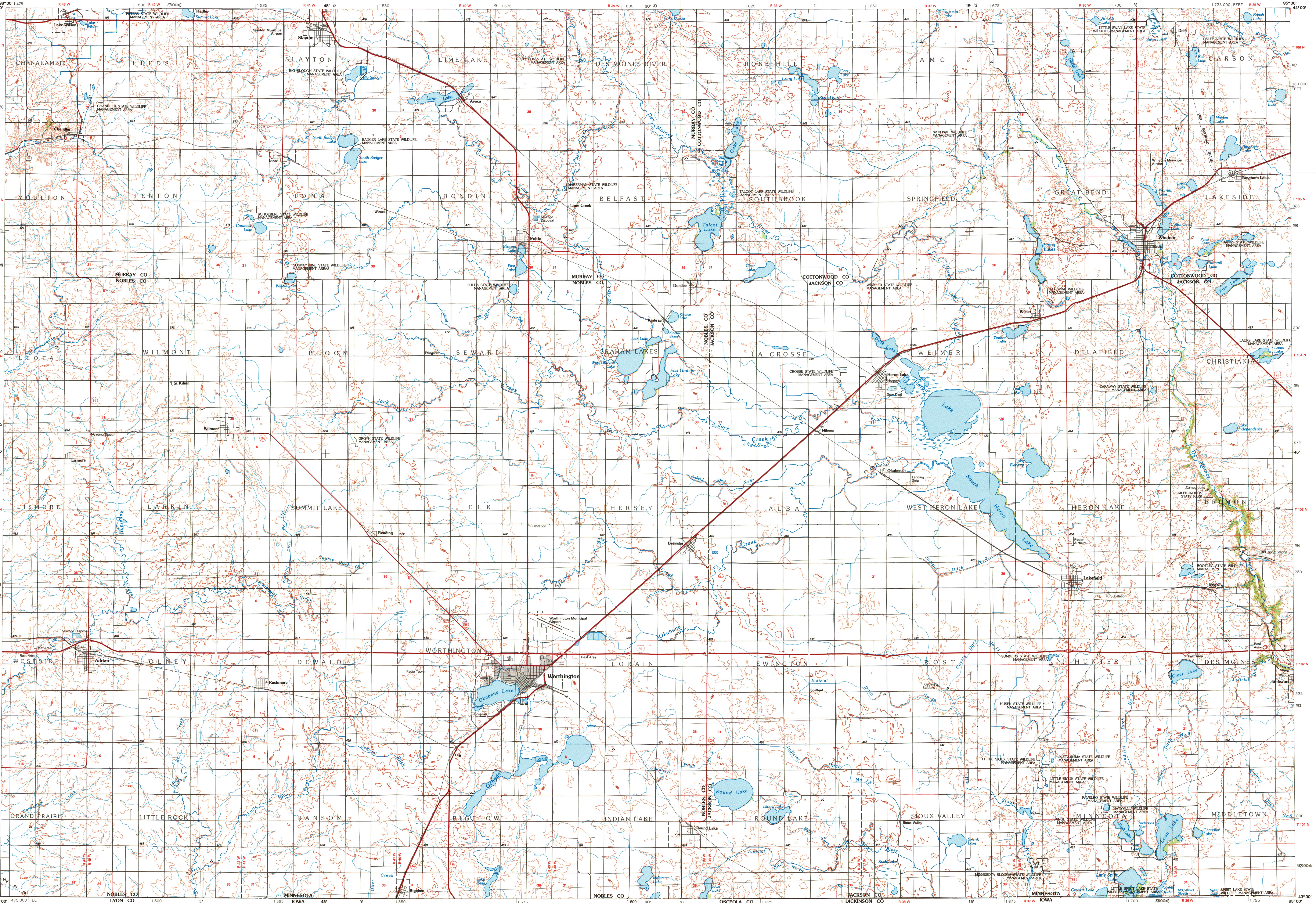


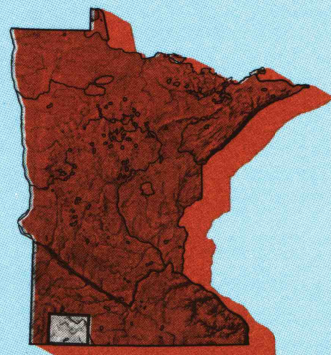
WORTHINGTON, MINNESOTA-IOWA

30 X 60 MINUTE SERIES (TOPOGRAPHIC)



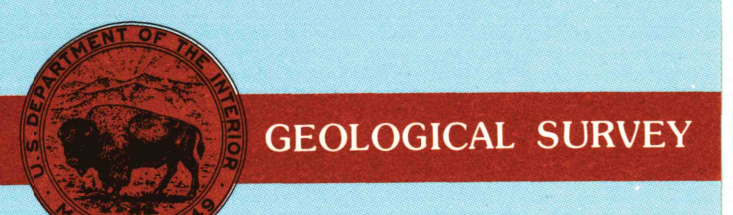
Worthington MINNESOTA-IOWA

1:100 000-scale metric topographic map



30 X 60 MINUTE QUADRANGLE SHOWING

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



1985 PHOTINSPECTED 1991

Produced by the United States Geological Survey
 Compiled from USGS 1:24 000-scale topographic maps dated 1960-1982. Planimetry revised from aerial photographs taken 1980 and other source data. Revised information not field checked. Map edited 1985
 1927 North American Datum (NAD 27). Projection and 10 000-meter grid: Universal Transverse Mercator, zone 15 25 000-foot ticks: Minnesota coordinate system, south zone
 The difference between NAD 27 and North American Datum of 1983 (NAD 83) is too small to show at this scale. The values of the shift between the datums for 7.5-minute intersections are given in USGS Bulletin 1875
 There may be private inholdings within the boundaries of the National or State reservations shown on this map
 Map photoinspired using 1991 photographs
 No major culture or drainage changes found

CONTOUR INTERVAL 10 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 | 31° 54' | | 1 | 2 | 3 |
| 2 | 6.5617 | 31° 54' | | 4 | 5 | 6 |
| 3 | 9.8425 | 31° 54' | | 7 | 8 | 9 |
| 4 | 13.1234 | 31° 54' | | 10 | 11 | 12 |
| 5 | 16.4042 | 31° 54' | | 13 | 14 | 15 |
| 6 | 19.6850 | 31° 54' | | 16 | 17 | 18 |
| 7 | 22.9659 | 31° 54' | | 19 | 20 | 21 |
| 8 | 26.2467 | 31° 54' | | 22 | 23 | 24 |
| 9 | 29.5275 | 31° 54' | | 25 | 26 | 27 |
| 10 | 32.8084 | 31° 54' | | 28 | 29 | 30 |

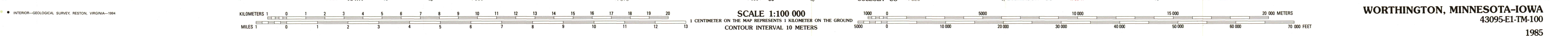
To convert meters to feet multiply by 3.2808
 To convert feet to meters multiply by 0.3048

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

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 gauge; narrow gauge
- Bridge: concrete; 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
- Windsail; 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
- Contour: 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
- Sand; mangrove
- Orchard; vineyard

A pamphlet describing topographic maps is available on request



WORTHINGTON, MINNESOTA-IOWA 43095-E1-TM-100

1985 PHOTINSPECTED 1991

RETURN TO USGS MAP HISTORICAL MAP ARCHIVES