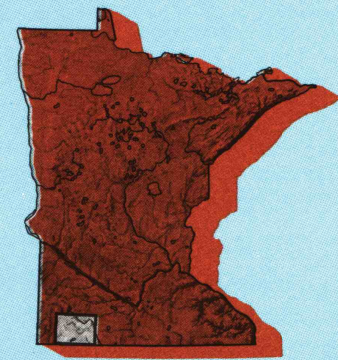


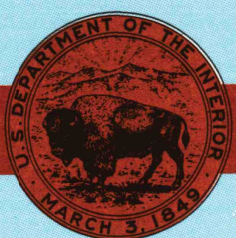
Worthington  
MINNESOTA-IOWA

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



GEOLOGICAL SURVEY


1985

PHOTOINSPECTED 1991/44

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 photoinspected 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			1	2	3
1	3.2808			1	2	3
2	6.5617			4	5	
3	9.8425					
4	13.1234					
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		UTM grid convergence (GN) and 1983 magnetic declination (MN) at center of map Diagram is approximate		1 Brookings 2 Tracy 3 New Ulm 4 Sioux Falls 5 Fairmont 6 Rock Rapids 7 Iowa Great Lakes 8 Estherville		
To convert feet to meters multiply by 0.3048						

Topographic Map Symbols

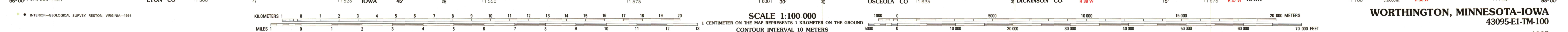
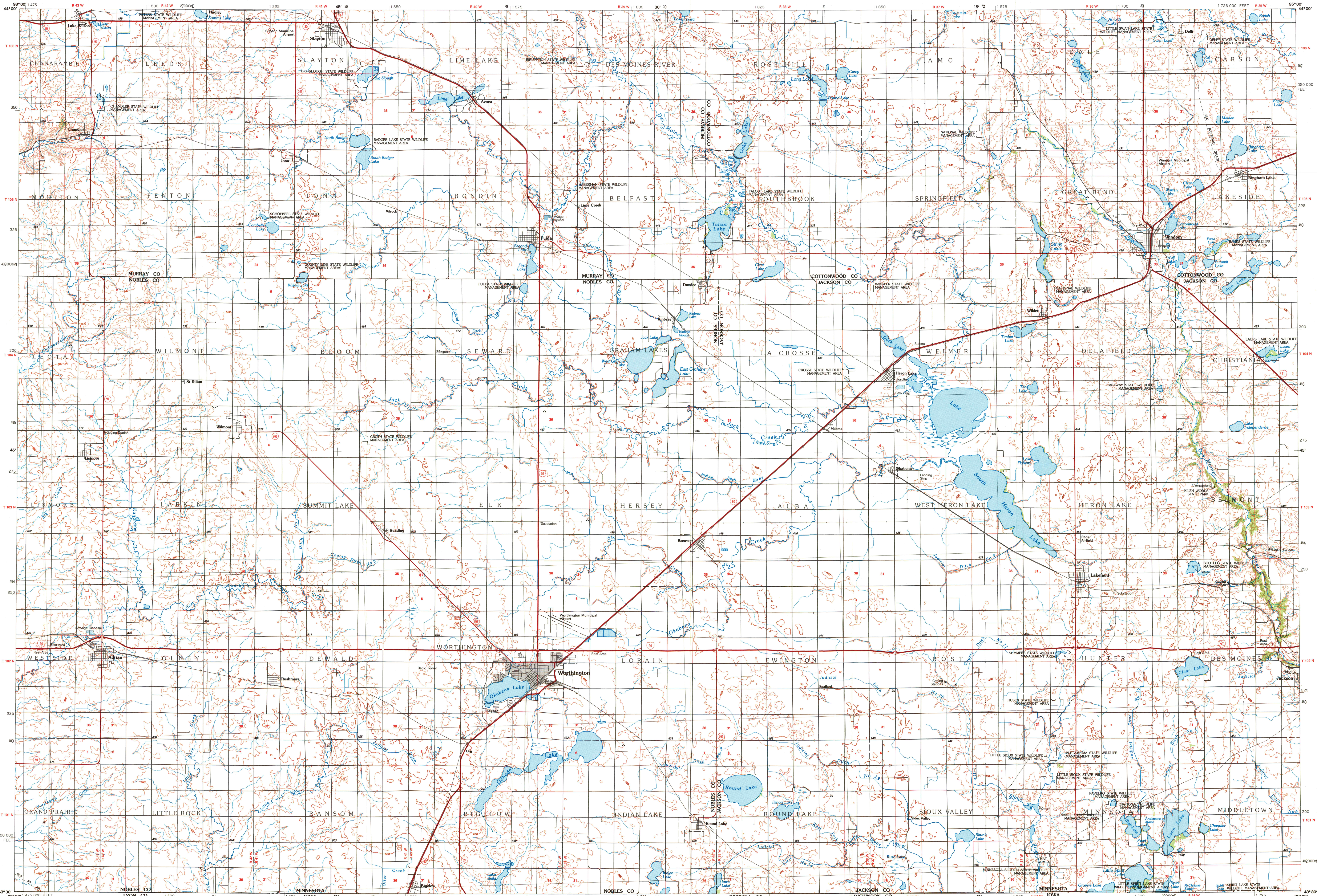
Primary highway, hard surface.....	
Secondary highway, hard surface.....	
Light duty road, principal street, hard or improved surface.....	
Other road or street; trail.....	
Route marker: Interstate; U.S. State.....	
Railroad: standard gauge; narrow gauge.....	
Bridges: overpass, underpass.....	
Tunnel: 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.....	
Windsail; water well; spring.....	
Mine shaft; adit or cave; mine, quarry; gravel pit.....	
Campground; picnic area; U.S. location monument.....	
Ruins; 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.....	
Salt; mangrove.....	
Orchard; vineyard.....	

A pamphlet describing topographic maps is available on request

RETURN TO:  
USGS MAP HISTORICAL MAP ARCHIVES

WORTHINGTON, MINNESOTA-IOWA

30 X 60 MINUTE SERIES (TOPOGRAPHIC)



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

1985

PHOTOINSPECTED 1991