



30 X 60 MINUTE QUADRANGLE SHOWING

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

GEOLOGICAL SURVEY

1986

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 1981-1983 and other source data. Revised information not field checked. Map edited 1986.

Projection and 10 000-meter grid, zone 16.
 Universal Transverse Mercator
 25 000-foot grid ticks based on Ohio coordinate system, north and south zones and Indiana coordinate system, east zone 1927 North American Datum.
 To place on the predicted North American Datum 1983, move the projection lines 2 meters south and 5 meters west.
 There may be private inholdings within the boundaries of the National or State reservations shown on this map.

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	1983	1979	1	2	3
1	3.2808	1	1	1	2	3
2	6.5616	2	2	4	5	
3	9.8424	3	3	6	7	8
4	13.1232	4	4			
5	16.4040	5	5			
6	19.6848	6	6			
7	22.9656	7	7			
8	26.2464	8	8			
9	29.5272	9	9			
10	32.8080	10	10			

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.

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 RESTON, VIRGINIA 22092

USGS NMD HISTORICAL MAP
 SEP 22 1986
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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, projected
- Power transmission line, pipeline
- Dam, dam with lock
- Cemetery, building
- Windmill, water well, spring
- Man-made ditch or canal, 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
- Order, viewless

A pamphlet describing topographic maps is available on request

