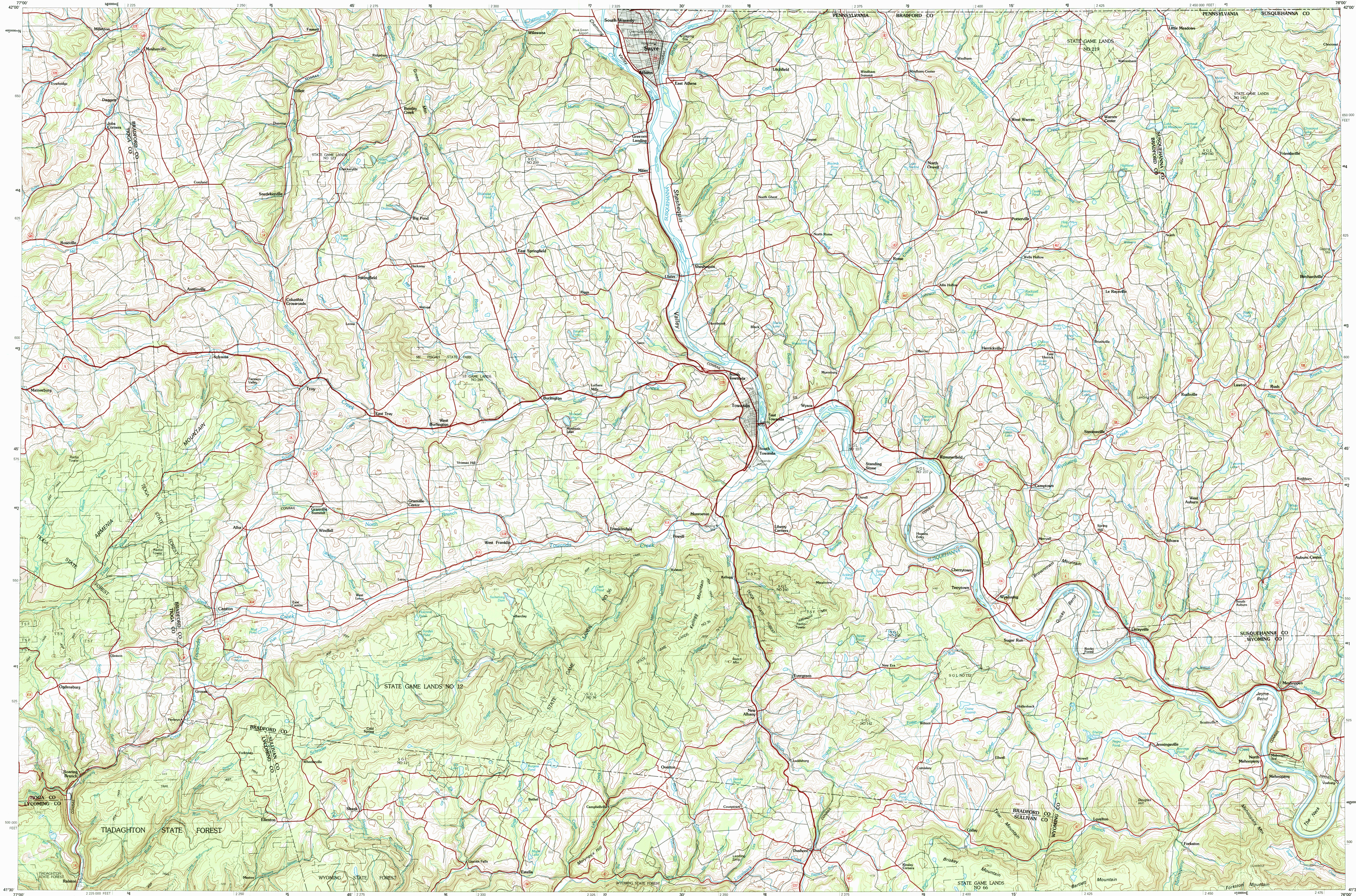
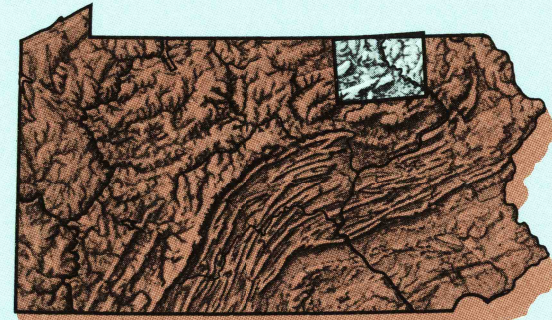


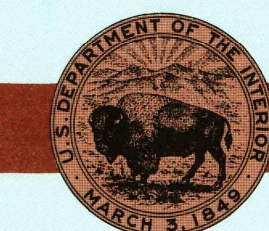


1:100 000-scale *metric*  
topographic map of  
**Towanda**  
PENNSYLVANIA-NEW YORK



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

1981

Produced by the United States Geological Survey  
Compiled from USGS 1:24 000-scale topographic maps dated 1945-1978. Planimetry revised from aerial photographs taken 1977 and other source data. Revised information not field checked. Map edited 1981.  
Projection and 10 000-meter grid, zone 18: Universal Transverse Mercator  
25 000-foot grid ticks based on Pennsylvania coordinate system, north zone  
1927 North American Datum  
To place on the predicted North American Datum 1983 move the projection lines 4 meters south and 28 meters west  
There may be private inholdings within the boundaries of the National or State reservations shown on this map

CONTOUR INTERVAL 20 METERS  
NATIONAL GEODETIC VERTICAL DATUM OF 1929  
ELEVATION 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  |                                                                                                     | 4              | 5 |   |
| 2                                            | 6.5617  |                                                                                                     | 6              | 7 | 8 |
| 3                                            | 9.8425  |                                                                                                     |                |   |   |
| 4                                            | 13.1234 |                                                                                                     |                |   |   |
| 5                                            | 16.4042 |                                                                                                     |                |   |   |
| 6                                            | 19.6850 |                                                                                                     |                |   |   |
| 7                                            | 22.9659 |                                                                                                     |                |   |   |
| 8                                            | 26.2467 |                                                                                                     |                |   |   |
| 9                                            | 29.5276 |                                                                                                     |                |   |   |
| 10                                           | 32.8084 |                                                                                                     |                |   |   |
| To convert meters to feet multiply by 3.2808 |         | UTM grid convergence (G) and 1981 magnetic declination (M) at center of map. Diagram is approximate |                |   |   |
| To convert feet to meters multiply by 0.3048 |         |                                                                                                     |                |   |   |

FOR SALE BY U. S. GEOLOGICAL SURVEY  
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: 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            |  |
| Runes; cliff dwelling                                       |  |
| Distorted surface: strip mine, lava, sand                   |  |
| Contours: index; intermediate; supplementary                |  |
| Bathymetric contours: index; intermediate                   |  |
| Stream, lake; perennial; intermittent                       |  |
| Rapids; large and small; tide, 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