State of Texas—Highlighting Low-Lying Areas Derived from USGS Digital Elevation Data

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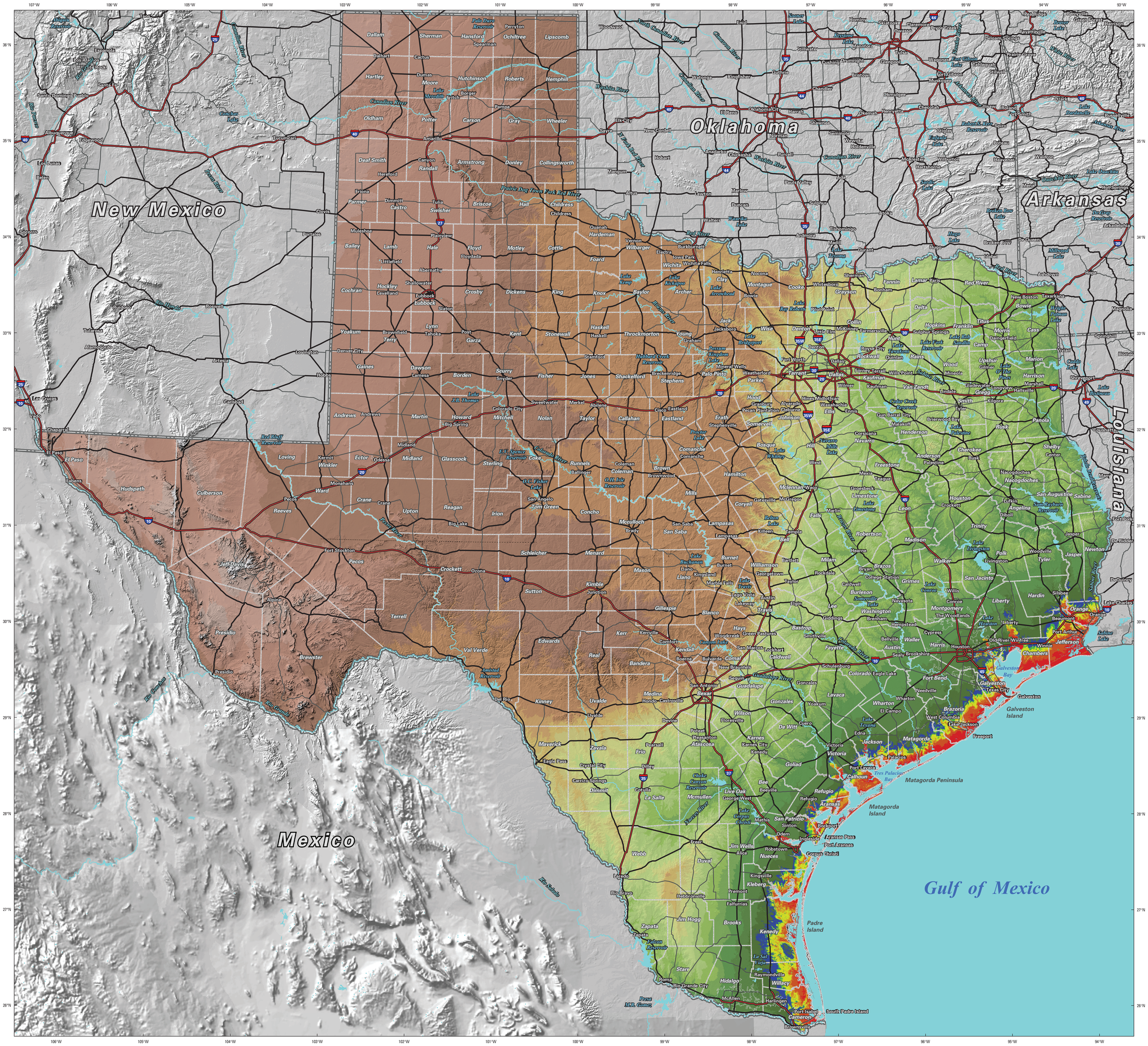
2008

Scientific Investigations Map 3050
Version 1.0



Explanation

- Limited access highway
- Principal highway
- Other through highway
- State boundary
- County boundary
- County name
- City or urban area
- River
- Water body

Elevation (feet)

- Above 6,000
- 5,000–6,000
- 4,000–5,000
- 3,000–4,000
- 2,000–3,000
- 1,000–2,000
- 900–1,000
- 800–900
- 700–800
- 600–700
- 500–600
- 400–500
- 300–400
- 200–300
- 100–200
- 50–100
- 30–50
- 25–30
- 20–25
- 15–20
- 10–15
- 5–10
- 0–5
- Sea level

Summary

In support of U.S. Geological Survey (USGS) disaster preparedness efforts, this map depicts a color shaded relief representation of Texas and a grayscale relief of the surrounding areas. The first 30 feet of relief above mean sea level are displayed as brightly colored 5-foot elevation bands, which highlight low-elevation areas at a coarse spatial resolution. Standard USGS National Elevation Dataset (NED) 1 arc-second (nominally 30-meter) digital elevation model (DEM) data are the basis for the map, which is designed to be used *at a broad scale and for informational purposes only.*

The NED data were derived from the original 1:24,000-scale USGS topographic map bare-earth contours, which were converted into gridded quadrangle-based DEM tiles at a constant post spacing (grid cell size) of either 30 meters (data before the mid-1990s) or 10 meters (mid-1990s and later data). These individual-quadrangle DEMs were then converted to spherical coordinates (latitude/longitude decimal degrees) and edge-matched to ensure seamlessness. The NED source data for this map consists of a mixture of 30-meter- and 10-meter-resolution DEMs.

State and county boundary, hydrography, city, and road layers were modified from USGS National Atlas data downloaded in 2003. The NED data were downloaded in 2002. Shaded relief over Mexico was obtained from the USGS National Atlas.

Data Sources

National Elevation Dataset (NED), 2002, USGS National Elevation Dataset: U.S. Geological Survey, *http://seamless.usgs.gov/*. (Last accessed Sept. 4, 2008).

The USGS National Atlas of the United States of America, 2003, National Atlas of the United States of America: U.S. Department of the Interior, *http://nationalatlas.gov/*. (Last accessed Sept. 5, 2008).

Base derived from U.S. Geological Survey National Elevation Dataset (NED), 2002
Base of Mexico from U.S. Geological Survey National Atlas data, 2003
Projection: Albers Conic Equal Area on North American Datum of 1983 (NAD83)

SCALE 1:1 700 000

25 0 25 50 75 100 125 150 175 MILES

25 0 25 50 75 100 125 150 175 200 225 250 300 KILOMETERS

MAP LOCATION

Map compiled by J.J. Kosovich in May, 2008

Publishing support provided by:
Denver Publishing Service Center
Manuscript approved for publication October 4, 2008.

For more information concerning this publication, contact:
USGS Central Region Geospatial Information Office
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Suggested Citation:
Kosovich, J.J., 2008, State of Texas—Highlighting low-lying areas derived from USGS digital elevation data: U.S. Geological Survey Scientific Investigations Map 3050, scale 1:1,700,000.