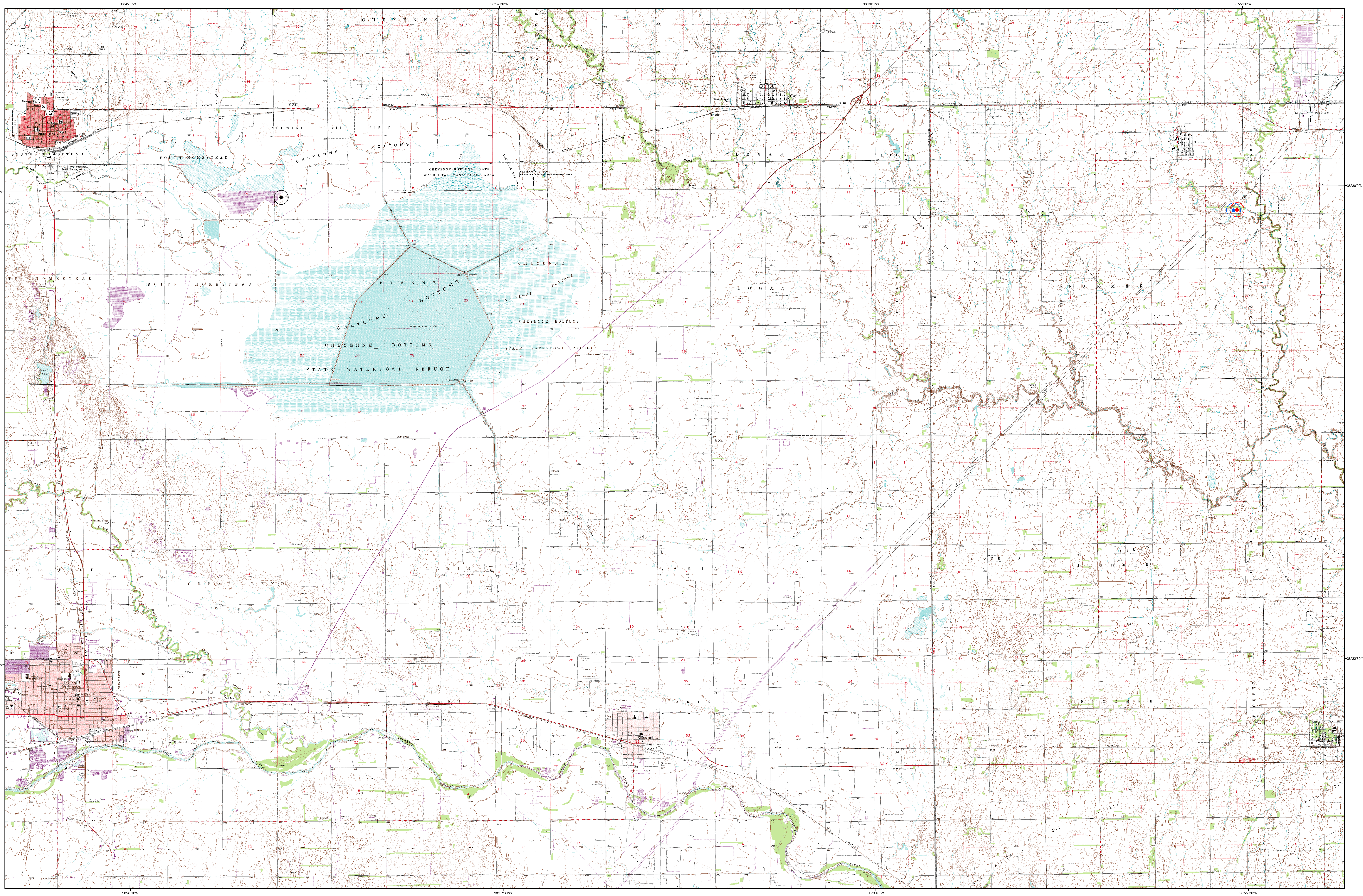


Comparison of Calculated State Center Points for Kansas

2006

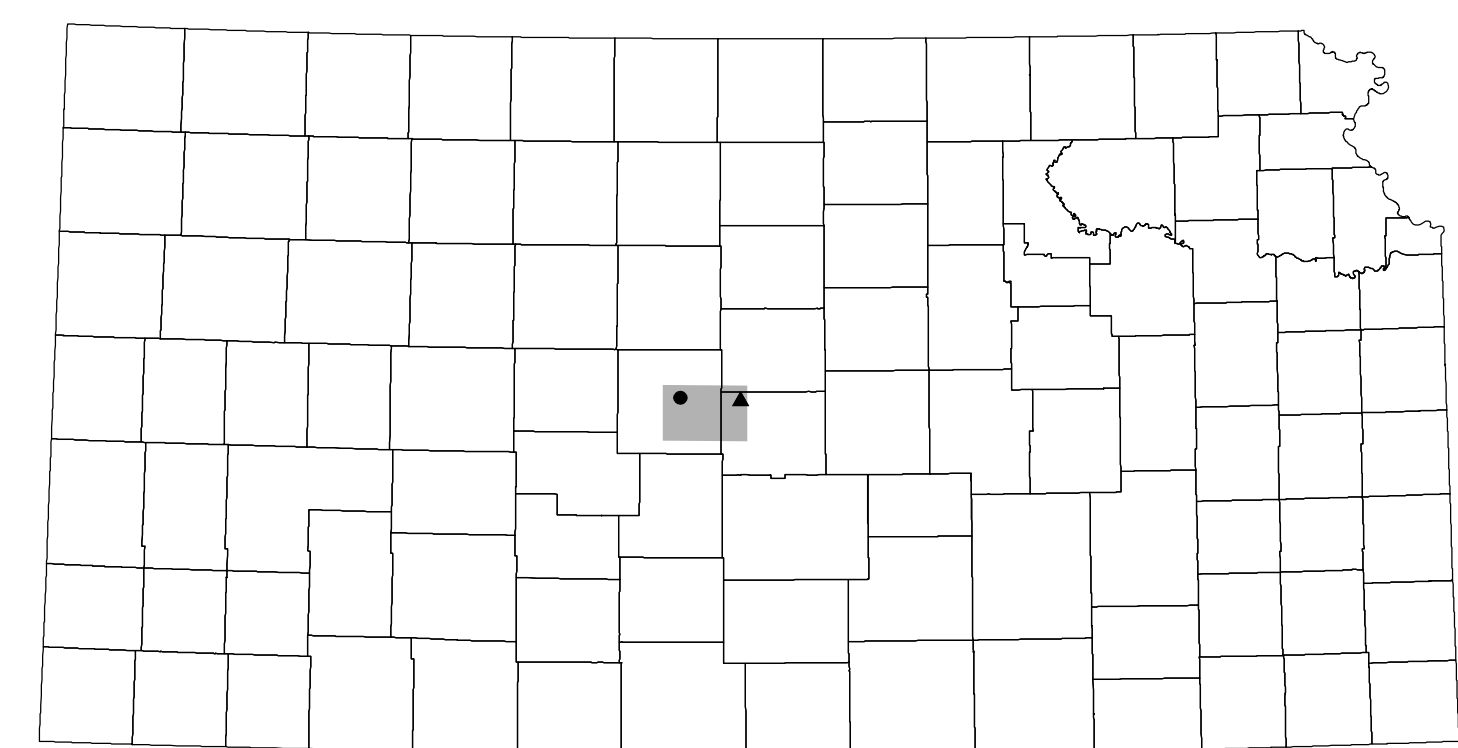
John W. Dunham and Jeremy D. Bartley



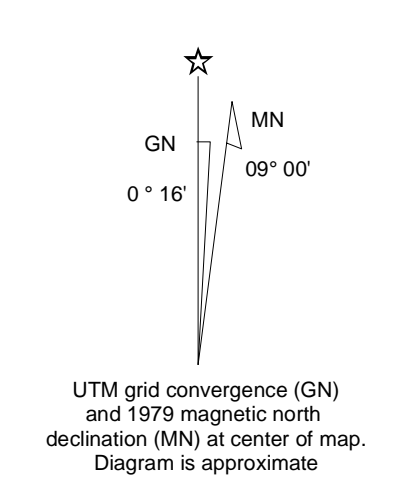
Scale 1:36,000
0 0.5 1 2 3 4 5 Miles

Universal Transverse Mercator Projection, Zone 14
North American Datum of 1983

- Center points**
- USGS
 - McCauley-Ross, KGS (2 measurements)
 - Bartley, KGS (2 measurements)
- Other features**
- County boundary



Location of mapped area
Circle = USGS center point, triangle = KGS center points



USGS point coordinates (98°41'54"W, 38°29'54"N) are from USGS Bulletin 617, "Boundaries, areas, geographic centers, and altitudes of the United States and the several states, with a brief record of important changes in their territory and government," by Edward Morehouse Douglas (1930).

KGS McCauley-Ross and Bartley center point locations were calculated independently. McCauley and Ross used different center-of-mass methods to derive points at the same approximate location, 98°22'42"W, 38°29'37"N. Bartley derived two points, located at 98°22'38"W, 38°29'38"N with a center-of-mass method and an envelope method using the state's minimum and maximum x- and y-coordinates in ESRI ArcGIS software. All points should be interpreted as only approximate locations.

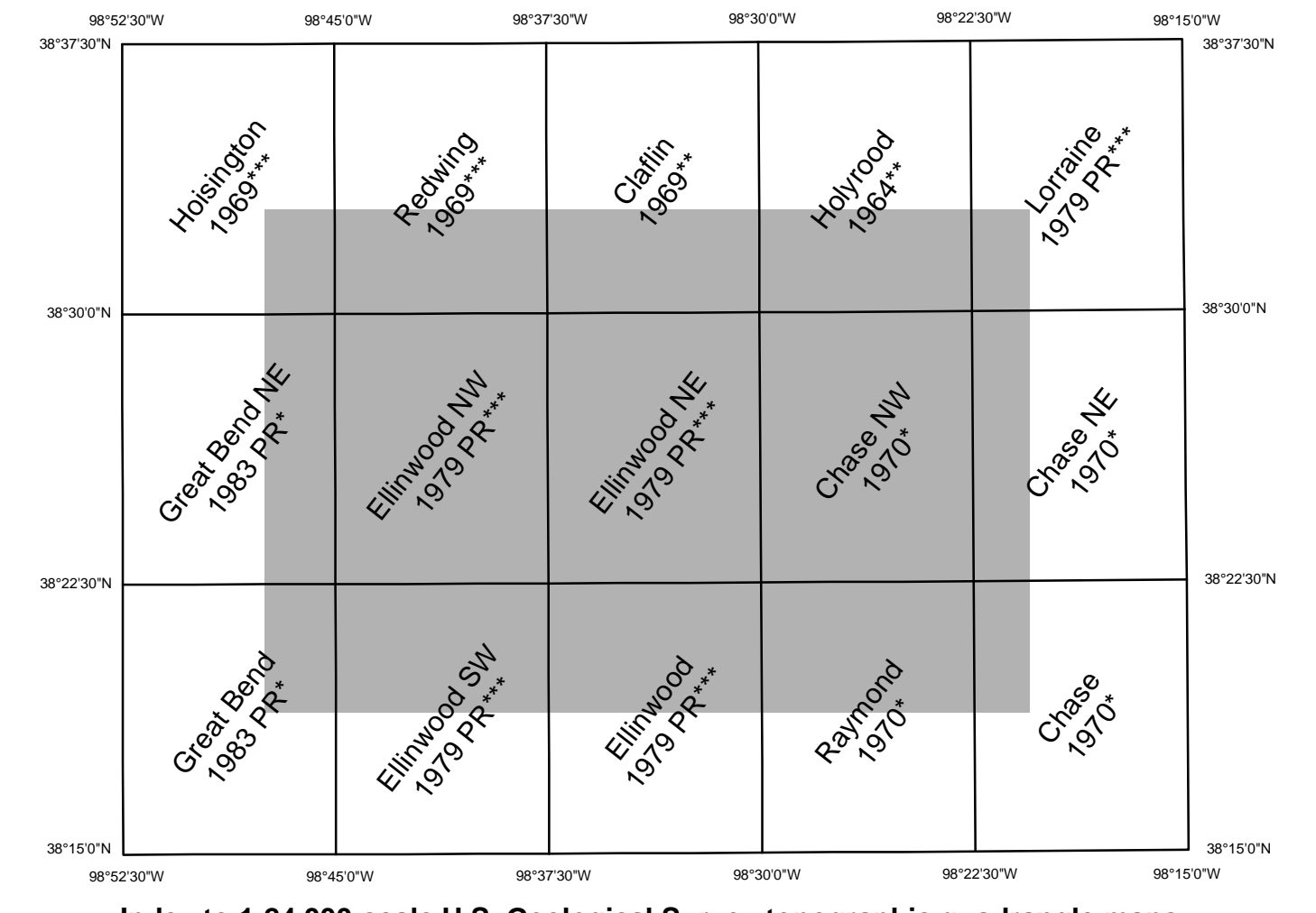
The topographic map base is from USGS Digital Raster Graphic (DRG) images. The DRG is a raster image of a scanned 7.5-min 1:24,000-scale USGS topographic map, including marginal and legend information, which has been removed. The map sheets have been georeferenced to the UTM grid and mosaicked together.

Differences in color or symbolization of features spanning adjacent maps reflect differences between the original maps, not characteristics of the features.

Map symbols and conventions are those used by the U.S. Geological Survey and are explained in the USGS brochure "Topographic Map Symbols," available without charge from the Kansas Geological Survey.

The Kansas Geological Survey does not guarantee this map to be free from errors or inaccuracies and disclaims any responsibility or liability for interpretations made from the map or decisions based thereon.

April, 2006



Index to 1:24,000-scale U.S. Geological Survey topographic quadrangle maps
Contour interval 5 feet
Contour interval 10 feet
Contour interval 10 feet, dashed lines represent 5-foot contours