



# Preliminary Map of Potential Windblown Deposits in Wyoming

Compiled by  
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 October, 2013

From  
 Case, J.C., Arneson, C.S., and Hallberg, L.L., 1996, Preliminary  
 1:500,000-scale digital surficial geology map of Wyoming:  
 Wyoming State Geological Survey, Geologic Hazards Section  
 Digital Map HSDM 98-1, scale 1:500,000.

## EXPLANATION

**Windblown deposits**—Wyoming has some of the most significant windblown deposits in the U.S. Strong winds can mobilize and significantly move sand or silt grains in much of Wyoming. Many of the mapped deposits in Wyoming are somewhat stabilized, but a significant number are still active.

The Killpecker Dune Field in northern Sweetwater County is over 50 miles long and up to 10 miles wide at its widest point. The Seminoe Dune Fields extend from the Seminoe Reservoir to the west for approximately 30 miles, and is approximately 15 miles wide at its widest point. The Casper Dune Field is a part of a much larger series of dune fields that extend from eastern Fremont County to the Casper area.

There is not a well-documented history of problems associated with windblown deposits in Wyoming. If stabilizing vegetation has been stripped from the surface due to development, previously stable dunes may mobilize and encroach on human development. There are accounts of such problems in the Casper area and near Seminoe Reservoir. Dunes have moved onto subdivisions, temporarily closed roads, and impinged on homes. The problems however can easily be mitigated, and there have been no significant dollar losses associated with windblown deposits.

## BASE MAP SYMBOLS

- ★ Capital
- ☆ County seat
- Town
- Interstate highway
- US highway
- State highway
- County or other road
- County boundary
- Wind River Reservation boundary
- Yellowstone National Park boundary
- State boundary

## BASE MAP REFERENCES

Bureau of Indian Affairs, 2005. Boundaries—Indian Lands, Raw Data Release, December, 2005: National Atlas of the United States, at <http://nationalatlas.gov/>.  
 National Oceanic and Atmospheric Administration, 1985. Digital magnetic declination: National Geophysical Data Center, at <http://www.ngdc.noaa.gov/geomagmodels/struts/calcDeclination>.  
 Stoesser, D.B., and others, 2005. Preliminary integrated geologic map databases for the United States—Central states—Montana, Wyoming, Colorado, New Mexico, North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, Texas, Iowa, Missouri, Arkansas, and Louisiana: U.S. Geological Survey Open-File Report 2005-1351, 18 p.  
 U.S. Census Bureau, 1996. Cities, towns, census designated places of Wyoming at 1:100,000, at <http://wyglib.wygis.org/wygeolib/catalog/main/home.page>.  
 U.S. Census Bureau, 1997. Wyoming roads at 1:100,000, at <http://pincey.wygis.org/wygeo/lib/catalog/transportation/road/100k.zip>.  
 U.S. Geological Survey, 2002. The National Elevation Dataset: Photogrammetric Engineering and Remote Sensing, v. 68, no. 1, at <http://ned.usgs.gov>.  
 Wyoming Geographic Information Science Center, 1997. Internet mapping service—Basemap data for Wyoming: Spatial Data and Visualization Center, at <http://wyglib.wygis.org/wygeolib/catalog/main/home.page>.

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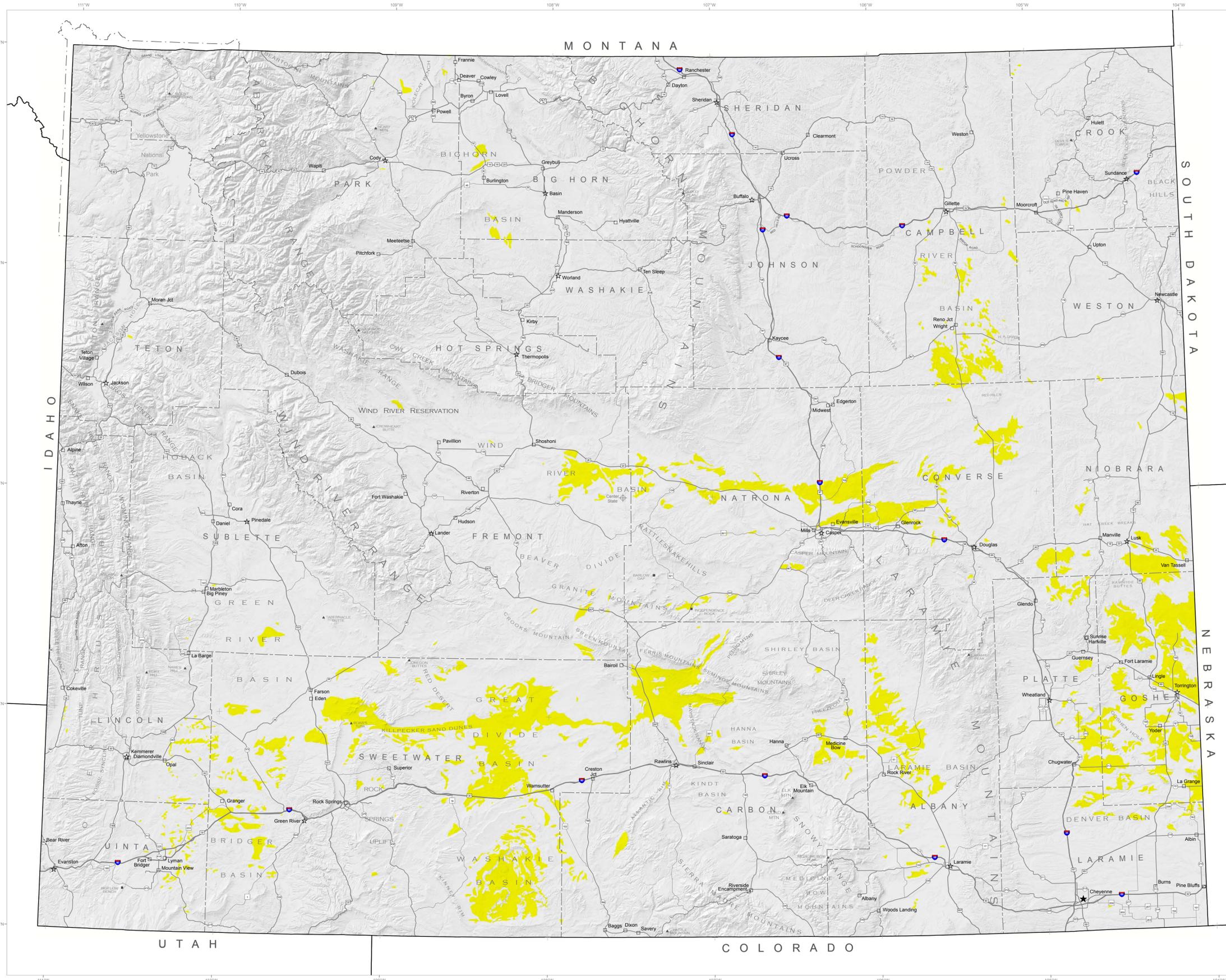
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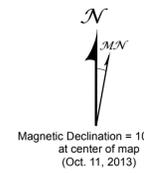
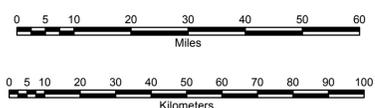
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Map Projection: Wyoming Lambert Conformal Conic  
 False Easting: 500000, False Northing: 200000  
 Central Meridian: 107.5 degrees West  
 Standard Parallel 1: 41 degrees North  
 Standard Parallel 2: 45 degrees North  
 Latitude of Origin: 41 degrees North  
 Linear Unit: Meter  
 Horizontal Datum: North American Datum of 1983 (NAD 83)  
 Ellipsoid: Geodetic Reference System 80  
 Base hillshade derived from USDA/NRCS - National Cartography & Geospatial Center 10-meter Digital Elevation Model (DEM), 2000; azimuth 125°, sun angle 45°, vertical exaggeration 2

Scale 1:1,000,000



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