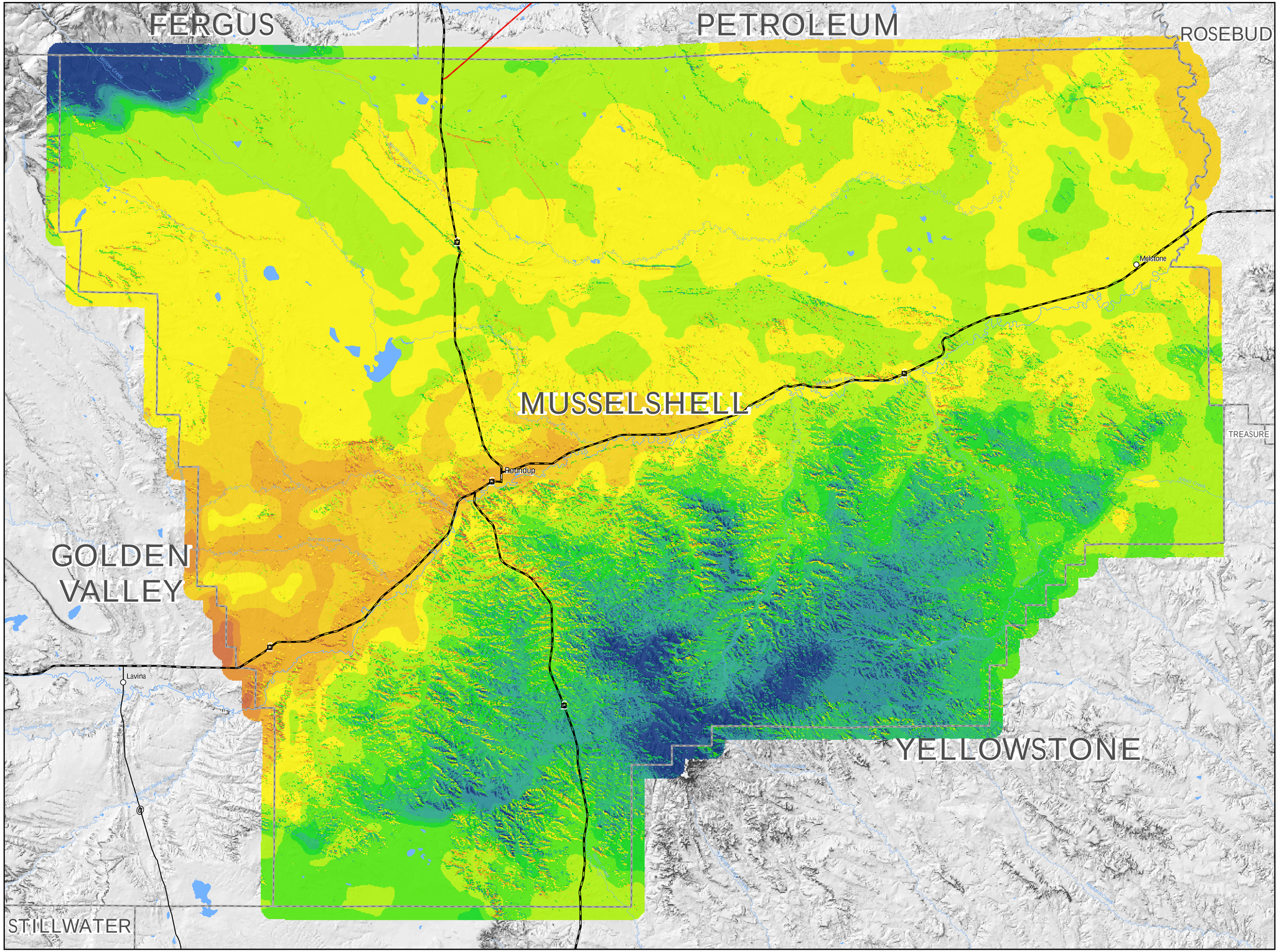


RELATIVE EFFECTIVE PRECIPITATION MUSSELSHELL COUNTY

Legend
Relative Effective Precipitation
Musselshell County
Centimeters

High : 54
Mean : 36
Low : 28

Relative Effective Annual Precipitation (REAP):
REAP values were developed for each Montana county by the Natural Resources Conservation Service (NRCS) using a process that included:

1) Adjusting the DAYMET precipitation data using available TAPS and other precipitation station data to accommodate the official 30 year data set used by NRCS. DAYMET is based on a more recent 18 year timeframe.
2) Re-sampling the adjusted and verified 1 km DAYMET to the 10 or 30 meter DEMs.
3) Sensitizing the adjusted data to the landscape to represent relative effective precipitation. Depending upon the geographic location within Montana and varying with degree of slope, actual precipitation for southerly aspects may be adjusted downward and northerly aspects may be adjusted upward, also varying on degree of slope. Neutral aspects (all slopes less than 15 percent as well as neutral compass points regardless of slope) were not adjusted up or down.
4) Calibration and refinement of the REAP data using the expert knowledge of field soil scientists and results from mining the SSURGO soils dataset for elevations associated with the cryic/frigid soil temperature regimes within a county.

DAYMET is a model that generates daily surfaces of temperature, precipitation, humidity, and radiation over large regions of complex terrain. DAYMET was developed at the University of Montana, Numerical Terradynamic Simulation Group (NTSG).

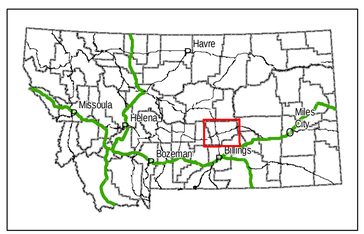
TAPS - Temperature and Precipitation Summary tables developed by the NWCC (National Water and Climate Center)

Map Scale
1:150,000

0 1.5 3 6
Miles

DISCLAIMER:
This map is to be used as a primary reference source and is not intended for use in site-specific planning. This is public information and may be interpreted by organizations, agencies, units of government , or others, based on needs; however, they are responsible for the appropriate application. Federal, State, or local regulatroy bodies are not to reassign to the Natural Resources Conservation Service any authority for the decisions they make.

Location within Montana



NRCS Natural Resources Conservation Service

Montana State Library
Natural Resource Information System

NRIS Map Number 08NRIS0034REAP_V2, ANSI-D April 2008