

# Physical Geography of New Mexico



## The Size of NM

- NM is the 5<sup>th</sup> largest state in the US it stretches 391 miles north to south and 352 miles east to west.
- What states are bigger?  
-----Alaska, Texas, California, and Montana

New Mexico is divided into 4 major provinces.



# Provinces of NM

Colorado Plateau

Rocky Mountain

Great Plains

Basin and Range



## Rocky Mountain Province



- Is in the north and central part of the state and stops just south of Santa Fe. While there are over 50 mountain ranges in New Mexico the largest concentration takes place in this area. The Mountains in NM were formed from volcanoes, glaciers, wind, water, and plate tectonics
- Wheeler Peak is the Highest Point in New Mexico 13,161ft.
- Major Mountain Ranges include- Sandia, Manzano, Jemez, Sacramento, Mogollon and Sangre de Cristo Mountains





# Rocky Mountain Province



## Great Plains Province

- This is an extension of the Great Plains; and consists of lowlands that are flat and treeless. It covers 1/3 of eastern New Mexico and is known as Llano Estacado or the Staked Plains. The majority of the plains sits on top of one of the largest mesas in the world and some of the earth's flattest land is located between the Canadian River and the Pecos River.
- *Interesting fact: the lowest point in the Plains is around 2,800 ft. which is still relatively high in elevation.*

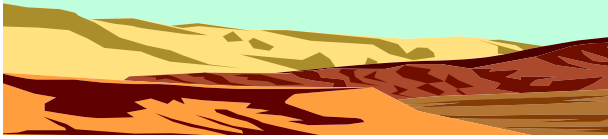




# Great Plains Province



## Colorado Plateau Province



- Is made up of elevated tablelands or mesas formed by lava flows, and erosion. The Colorado Plateau is a huge mass of sedimentary rock which were formed by an ancient ocean over 250 million years ago. The large amounts of water cut arroyos and canyons into the area.
- The region extends across the northwestern part of the state.





*Colorado Plateau*

# Colorado Plateau Province





## Basin and Range Province

- Is in the south central part of the state and is defined by the mountains on the exterior with plains/valleys in-between which collect water.
- In general, only 10 percent, of all rain water is absorbed into the ground. Once the ground is saturated it then becomes surface water and due to gravity the water will always travel from high to low. Making the basin a water collection province.

*The basin and range province is the largest in the state.*



*Think of this province as a toilet... with the rim being mountains and the drain being the basin*





# Basin and Range Province



# Climate

- Climate is the day to day weather conditions over a period of time. Climate results from a variety of factors including elevation, precipitation, and temperature.
- New Mexico`s climate ranges from arid to semi-arid which basically means dry to kind of dry.
- New Mexico temperatures vary greatly.

## *Interesting fact:*

- *Highest temperature ever recorded: 122 F July 27, 1994 at Lakewood*
- *Lowest temperature ever recorded: -50 F February 1, 1951 at Gavilan*



## Water in NM



- Water is New Mexico's most precious commodity. We do not have an abundance of water and conservation is very important.
- Most major cities and farmers rely on surface water in order to meet their water needs.
- Average annual precipitation in New Mexico ranges from 9.5 inches in the desert to 20 inches in the mountains. Our annual average is 35 inches below the national average.



# Rivers

- New Mexico has a dry climate and rivers are extremely important. The rivers supply water to plants, animals, and people. Some dry up in the summer months and others flow year round.
- There are six major rivers: San Juan, Chama, Canadian, Rio Grande, Pecos, and the Gila. The two largest rivers are the Rio Grande and the Pecos. Both of their headwaters start from melting snow in the Rockies.
- The Rio Grande is the most significant river in the state by far. It flows from southern Colorado, through NM and through Texas and out into the Gulf of Mexico.



Rio Chama



San Juan River

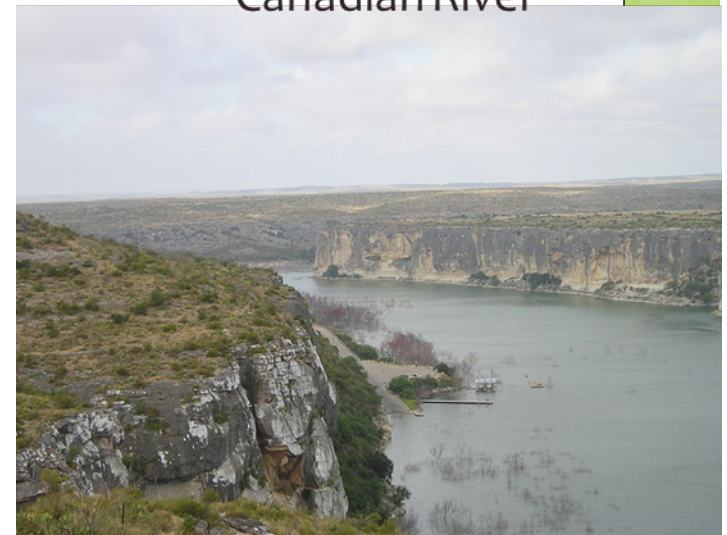


Rio Grande

# Rivers



Canadian River



Pecos River

# Lakes

- There is only one natural lake in New Mexico which are the Bottomless Lakes. The rest are man made as a result of dams being built.
- Some of the other lakes include: Navajo, Heron, Elephant Butte, Brantley, Conchas, Abiquiu, and Bluewater.
- The lakes provide water to local communities and help stimulate tourism in the area.

*Only two of the dams provide electricity*

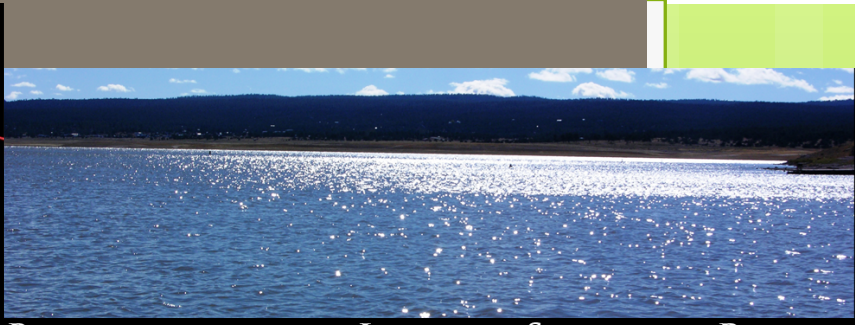


Dam building in New Mexico has provided many jobs for people living in the state!





ELEPHANT BUTTE LAKE STATE PARK



BLUEWATER LAKE STATE PARK



# Lakes Around NM



BRANTLEY LAKE STATE PARK



NAVAJO LAKE STATE PARK



CONCHAS LAKE STATE PARK

