

# Geologic Map of Grand Staircase - Escalante National Monument, Utah

Formation name - environment of deposition

## Quaternary

- Surficial deposits - river, stream, sand dune, landslide
- Basalt flow - volcanic

## Cretaceous

- Kaiparowits Formation - river, floodplain, lake
- Wahweap Sandstone - river, floodplain, lake
- Straight Cliffs Fm - river, floodplain, swamp, beach
- Tropic Shale - marine
- Dakota Sandstone - river, swamp, delta, beach

## Jurassic

- Morrison, Henrieville, Romana Mesa, Summerville Fms - river, lake, sand dune
- Entrada and Carmel Fms - marine, tidal flat, beach
- Navajo, Kayenta, Moenave, Wingate Fms - sand dune, river, playa, tidal flat

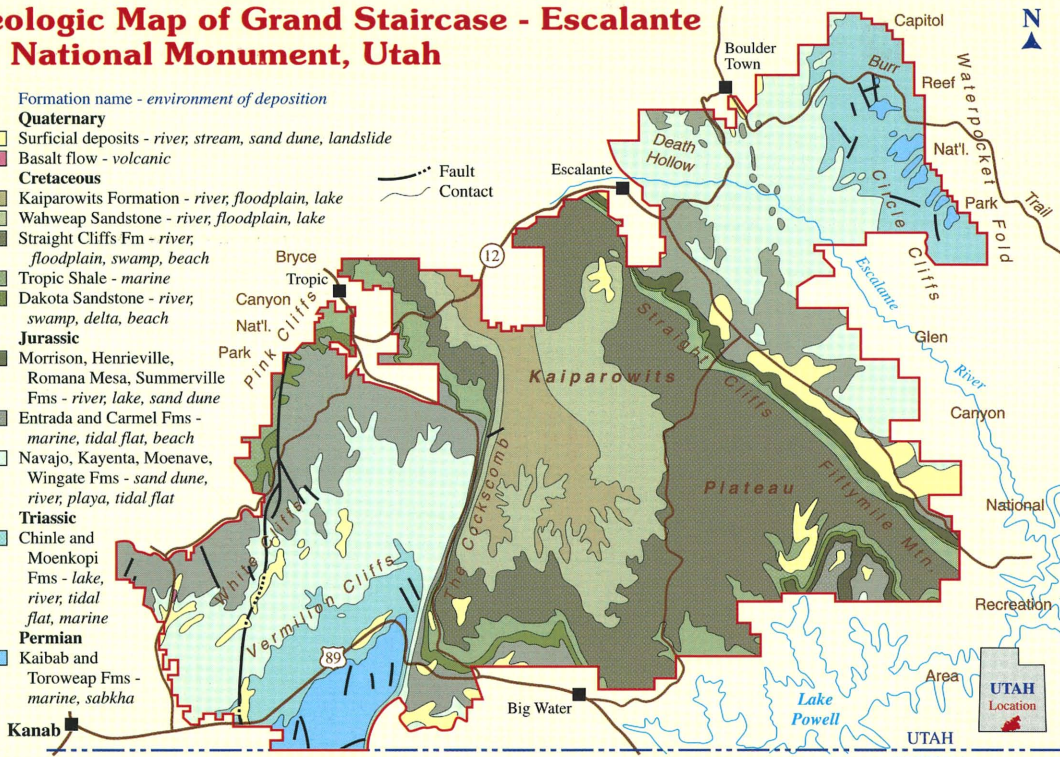
## Triassic

- Chinle and Moenkopi Fms - lake, river, tidal flat, marine

## Permian

- Kaibab and Toroweap Fms - marine, sabkha

--- Fault  
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0 40 miles

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Grand Staircase - Escalante National Monument covers 1.7 million acres between Bryce Canyon and Capitol Reef National Parks. The geology consists of 6,000 feet of well-exposed, layered sedimentary rocks that are between about 65 and 200 million years old, a basalt flow about one million years old, and thin surficial "cover." Alternating layers of resistant (cliff-forming) and nonresistant (valley-forming) rock create the "staircase" -- each "riser" is a cliff as much as 2,000 feet high, and each "tread" is a valley or plateau as much as 15 miles wide.

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