

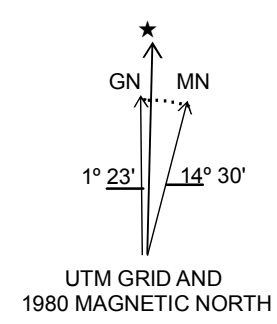
There is a wide range of erosional susceptibility associated with different geologic units on the Ute Quadrangle that might be considered when planning cross-country motor vehicle events, which are common in this valley. Tracks from motor races that can be seen in 1976 photography were hard to find in 2011 if they were on the harder petrocalcic surfaces, but caused long-lasting disruption of softer geologic units and surfaces with desert pavements on them. When more easily erodible units are disrupted, there is enhanced erosion from water runoff and significantly more dust is generated until the surface is stabilized with a new pavement, vegetation, or erodes down to a resistant layer. Using the distribution of the geologic units and their general erosional susceptibility, this Preliminary Erosional Impact potential Map of the Ute Quadrangle was created. This map can be used to plan race routes with the least erosional impact.

There are three general categories on the map:

- 1) more resistant units with lower erosional impact
- 2) softer units that can be disrupted and eroded relatively easily
- 3) stream channels that have their surfaces refreshed when the channel flows with water.

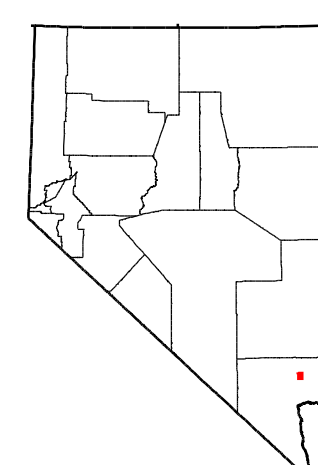
The more resistant units include petrocalcic surfaces and pre-Tertiary limestones. Softer units include Tertiary basin sediments and Quaternary surfaces with pavements and an underlying loose silty layer. Stream channels are areas that have water flow annually to every decade or so and have the ability to refresh themselves and the effects of vehicle traffic. The map is experimental and is a simple derivative map from the Geologic Map of the Ute quadrangle (NBMG Map 177, in press).

- Lower erosional impact
- Minimize vehicle crossing to minimize erosional impact
- Surface refreshed with streamflow

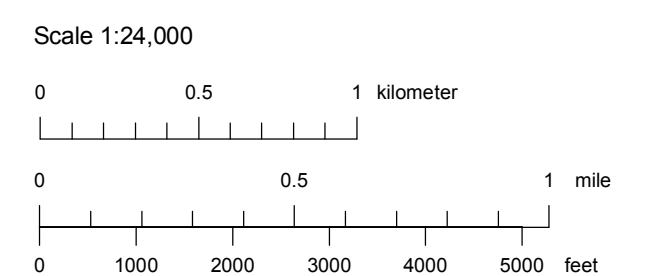


1	2	3
4	5	6
7	8	9

- 1 Arrow Canyon
- 2 Moapa West
- 3 Moapa East
- 4 Arrow Canyon SE
- 5 Ute
- 6 Weiser Ridge
- 7 Dry Lake
- 8 Plute Point
- 9 Valley of Fire West



**Suggested citation:**  
dePolo, C.M. and Seelye, I.M., 2012. Preliminary Erosional Impact Potential Map of the Ute Quadrangle, Clark County, Nevada: Nevada Bureau of Mines and Geology OF 12-4, 1:24,000 scale.



CONTOUR INTERVAL 10 METER

Projection: Universal Transverse Mercator, Zone 11, North American Datum 1927 (m)

Base map: U.S. Geological Survey Ute 7.5' quadrangle (1983)

# PRELIMINARY EROSIONAL IMPACT POTENTIAL MAP OF THE UTE QUADRANGLE, CLARK COUNTY, NEVADA

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Nevada Bureau of Mines and Geology  
2012

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University of Nevada, Reno

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**DRAFT**  
Preliminary geologic map  
Has not undergone office, field, or editorial review

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Cartography and map production in ESRI ArcGIS v9.3 (ArcGeology v1.3)  
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