Surficial Geologic Map of Great Sand Dunes National Park and Preserve

Colorado

National Park Service
U.S. Department of the Interior

Geologic Resources Inventory
Natural Resource Stewardship and Science

NPS Boundary

Infrastructure
- Point of Interest
- Trails
- Roads
- Highways

Geologic Sample Localities
- radiometric age-date locality
- infrared stimulated luminescence age-date locality
- optically stimulated luminescence age-date locality
- accelerator mass spectrometer age-date locality

Paleochannels
- paleochannel, approximate

Hazard Feature Lines
- scarp of uncertain origin, known or certain

Faults
- thrust fault, known or certain
- normal fault, known or certain
- normal fault, concealed

Surficial Contacts
- known or certain
- approximate
- concealed
- quadrangle boundary
- map boundary
- water or shoreline

Surficial Units
- water
- Qafi — Artificial fill (latest Holocene)
- Qes1 — Eolian sand unit one (latest Holocene)
- Qea1 — Younger eolian sand and alluvium (latest Holocene)
- Qgsd — Great Sand Dunes (middle Pleistocene to latest Holocene)
- Qa1 — Younger alluvium (latest Holocene)
- Qa2 — Older alluvium (latest Holocene)
- Qau — Alluvium, undivided (Holocene and late Pleistocene)
- Qes2 — Eolian sand unit two (late Holocene)
- Qea2 — Older eolian sand and alluvium (late Holocene)
- Qai — Alluvium of groundwater discharge streams (late Holocene)
- Qw — Wet-meadow sediment (late Holocene)
- Qt1 — Lower terrace alluvium (late Holocene)
- Qes3 — Eolian sand unit three (late Holocene? and middle Holocene)
- Qdf — Debris-flow deposits (late Pleistocene? to late Holocene)
- Qbf — Basin-floor sediment (middle Pleistocene to late Holocene)
- Qaf — Alluvial-fan deposits (early Pleistocene? to late Holocene)
- Qpf — Piedmont-fan deposits (early Pleistocene? to late Holocene)
- Qps — Ponded sediment (Holocene)
- Qt2 — Middle terrace alluvium (latest Pleistocene? to middle and early Holocene)
- Qt3 — Upper terrace alluvium (middle Pleistocene)
- PNm — Minturn Formation (Middle Pennsylvanian)
- Xgn — Mixed gneiss (Paleoproterozoic)

Cottonwood Creek
Deadman Creek
Alpine Creek
Sand Creek
Big Spring Creek
Indian Spring
Little Spring Creek
Cold Creek
Medano Creek
Little Medano Creek
Sand Ramp Trail
Mosca Creek
Morris Gulch
National Preserve
National Park
STAR DUNE COMPLEX
DUNEFIELD
ESCAPE DUNES
SAN LUIS VALLEY
SAN LUIS LAKES STATE WILDLIFE AREA
RIO GRANDE NATIONAL FOREST
Star Dune • height: 755ft/230m (tallest dune in park)
High Dune • height: 699ft/213m
Visitor Center
Park Headquarters
San Luis Lake 7515ft 2308m
Dollar Lake
County Lane 6 North
150

North

0 2 4 Kilometers

0 2 4 Miles