Geologic Map of Kenai Fjords National Park

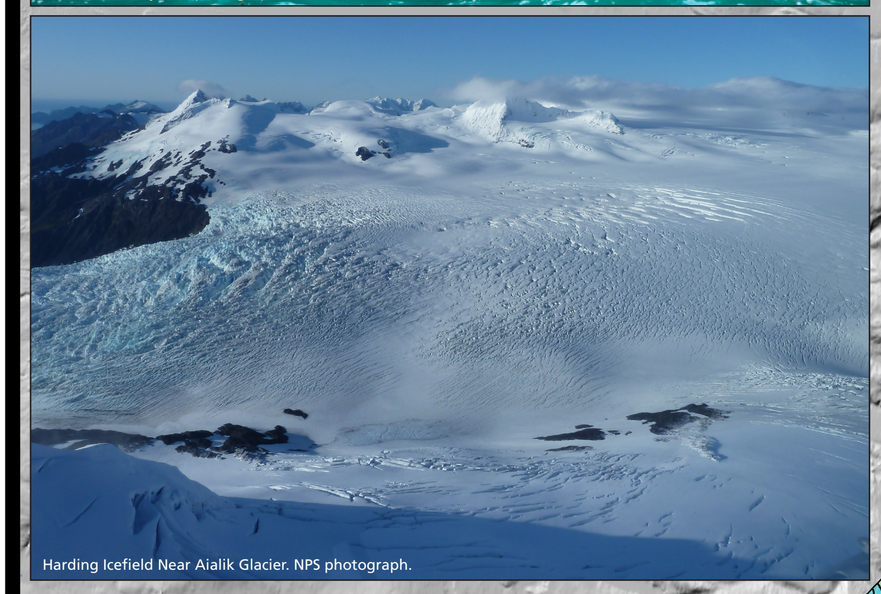
Alaska

National Park Service
U.S. Department of the Interior

Geologic Resources Inventory
Natural Resource Stewardship and Science



Cave in Nuka Bay. NPS photograph.



Harding Icefield Near Aialik Glacier. NPS photograph.

North
0 5 10 Kilometers
0 5 10 Miles

This map displays geologic map data compiled by the National Park Service Geologic Resources Inventory. It is not a substitute for site-specific investigations.

Source Map

Wilson, F.H., C.P. Hults, K.A. Labay, and N. Shew. 2008. Digital data for the Reconnaissance geologic map for Prince William Sound and the Kenai Peninsula, Alaska (scale 1:250,000). Open File Report 2008-1002. US Geological Survey, Anchorage, Alaska. Primary source maps for the compilation are listed in the accompanying GRI Report.

Source Scale 1:250,000

Poster Layout
Chase Winters and Georgia Hybels (Colorado State University)
Poster Date
September 2017
GRI Data Date
February 2010
Source Map Date
2008

All Geologic Resources Inventory geologic map data and publications are available at http://go.nps.gov/gripubs.

NPS Boundary

Infrastructure
- City
- Point of Interest
- Road

Geologic Lineament Line Features
- Lineament, known or certain

Linear Dikes
- TKd - dikes and sills (Early Cretaceous to Early Tertiary), known or certain
  Dacite, rhyolite, andesite, and minor basalt

Faults
- Thrust fault, known or certain, dashed where approximately located, dotted where concealed
- Normal fault, dashed where approximately located, dotted where concealed
- Uknown offset/displacement, known or certain, dashed where approximately located, dotted where concealed

Geologic Contacts
- Known or certain, dashed where approximately located, dotted where concealed
- Inferred and queried
- Water or shoreline, dashed where approximately located, dotted where inferred
- Ice or glacial, dashed where approximately located

Geologic Units
- Water - rivers, lakes, and Pacific Ocean (Quaternary)
- g — Ice fields or glaciers (Quaternary)
  Derived from glacial extents on 1950's USGS topographic maps.
- Qs — Unconsolidated surficial deposits (Quaternary)
- Qat — Alluvial and terrace deposits (Quaternary)
  Poorly to moderately-sorted gravel, cobbles, sand, and silt
- Qb — Beach deposits (Quaternary)
  Well-sorted gravel, sand, and cobbles
- Qm — Glacial deposits, undivided (Quaternary)
  Poorly-sorted gravel, sand, boulders, and clay
- Qao — Outwash of the Neoglacial age (Holocene)
  Poorly to moderately-sorted gravel, cobbles, sand, and silt
- Qgn — Glacial deposits of the Naptowne and Brooks Lake Glaciations (Pleistocene)
  Poorly-sorted gravel, sand, clay, and boulders
- Qogo — Outwash associated with older glacial deposits (Pleistocene)
  Poorly to moderately-sorted gravel, cobbles, sand, and silt
- Qch — Moraine of the Caribou Hills Glaciation (Pleistocene)
  Hummocky hills of poorly-sorted gravel, sand, boulders, and clay
- Tgh — Granitic rocks of Harding Icefield region (Eocene and Paleocene)
  Granite, granodiorite, and minor tonalite
- Top — Orca Group, pillow basalt (Eocene)
  Pale- to dark-green basalt, and minor pillow breccia and tuff
- Tod — Orca Group, sheeted basalt dikes (Eocene)
  Dark-green, gray, and brown basaltic, gabbroic, and dioritic dikes
- Togb — Orca Group, gabbro (Eocene)
  Medium- and dark-gray to green coarse-grained gabbro
- Kvs — Valdez Group, metasedimentary rocks, undivided (Upper Cretaceous)
  Gray, thin- to thick-bedded turbiditic sandstone, siltstone, and shale
- Kvvs — Valdez Group, interbedded metavolcanic and metasedimentary rocks (Upper Cretaceous)
  Semischistose volcanic breccia, tuff, sandstone, siltstone, and shale
- Kvt — Valdez Group, aquagene tuff (Upper Cretaceous)
  Green to dark-gray, fine-grained, and finely laminated tuff
- Kvm — Valdez Group, Melange of Iceworm Peak of Kusky and others (1997) (Upper Cretaceous)
  Blocks of graywacke in a phacoidally cleaved matrix of slate
- Kvgs — Valdez Group, schist (Upper Cretaceous)
  Schistose sandstone, siltstone, shale, and interbedded tuff
- KMm — McHugh Complex, undivided (Mississippian to Cretaceous)
  Mélange of metasedimentary and metavolcanic rocks
- KJms — McHugh Complex, graywacke and conglomerate (Early Jurassic to Early Cretaceous)
  Mélange of metamorphosed turbiditic conglomerate and graywacke
- KTRmc — McHugh Complex, basalt and chert (Middle Triassic to Early Cretaceous)
  Fault bounded blocks in mélange
- MZg — Gabbro (Mesozoic)
  Fault bounded blocks in mélange
- MZu — Ultramafic plutonic rocks (Mesozoic)
  Fault bounded blocks in mélange