



Arctic Network Central Alaska Network Southeast Alaska Network Southwest Alaska Network

Geologic Resources Inventory

Status: In Progress

Background

The Geologic Resources Inventory (GRI) is one of 12 baseline inventories determined by the Inventory and Monitoring Program of the National Park Service to be the minimum set of information needed to adequately manage park natural resources. The GRI aims to raise awareness of geology and the role it plays in the environment, and to provide natural resource managers and staff, park planners, interpreters, researchers, and other NPS personnel with information that can help them make informed management decisions.

Located in the Pacific Ring of Fire, volcanic and seismic activity in Alaska is a major factor in the shaping and changing the landscape and ecosystems here. Impacts from climate change, including changes to glaciers and permafrost, are also apparent in Alaska.

Products and Status

Upon completion, the GRI offers three products to park and natural resource managers.

Scoping meetings: These park-specific meetings bring together local geologic experts and park staff to inventory and review available geologic data and discuss geologic resource management issues. A summary document is prepared for each meeting that identifies a plan to provide digital map data for the park. All scoping meetings and summary reports are complete for Alaska park units.

Digital Geologic Maps: Existing bedrock, surficial, and special purpose maps—such as coastal or geologic hazard maps—may be used by the GRI to create digital data and meet park needs. These digital data allow geologic information to be easily viewed or analyzed in conjunction with a wide range of

other resource management information in park geographic information systems. The updated maps include attributes useful to all natural resource personnel. PDF copies of geologic maps that can be used without GIS software are also provided. About half of the park units in Alaska have completed maps.

Geologic Reports: Park-specific geologic reports identify geologic resource management issues as well as features and processes that are important to park ecosystems and park visitors. In addition, these reports present a brief geologic history of the park and address specific properties of geologic units present in the park. Reports are either awaiting maps or in the process of being written for all parks units in Alaska with the exception of Denali, which was completed in 2010.

	Bering Land Bridge	Cape Krusenstern	Kobuk Valley	Gates of the Arctic	Noatak	Denali	Yukon-Charley Rivers	Wrangell-St. Elias	Glacier Bay	Klondike Gold Rush	Sitka	Lake Clark	Kenai Fjords	Aniakchak	Alagnak	Katmai
Scoping Meeting	2007	2004	2004	2004	2009	2009	2009	2005								
Digital Geologic Maps	2014	2014	2013	2013	2012	2006	2014	2012	2012	2013	2013	2010	2010	2009	2010	2010
Geologic Reports	2015	2017	2016	2015	2014	2010	2017	2017	2016	2016	2018	2017	2015	2014	2014	2014

The table gives a summary of the status of the Geologic Resources Inventory in all Alaska national parks as well as the schedule for completion. The GRI is coordinated by the national Inventory and Monitoring program in Ft. Collins, Colorado with assistance from Colorado State University and local coordination from the Alaska Regional Office. An Anchorage-based USGS employee is supported by the GRI program to facilitate the completion of this inventory.