Geologic Resource Evaluation Program

Types of Maps Bedrock and Surficial Geology

Geologic maps convey information about local and regional geologic setting and are produced to depict surficial or bedrock materials. GIS-based geologic maps allow parks to integrate geologic information with other spatial data, facilitating science-based decision making in

units of the National Park System.

Mount Rainier National Pa

National Park Service U.S. Department of the Inter

Bedrock Geologic Map

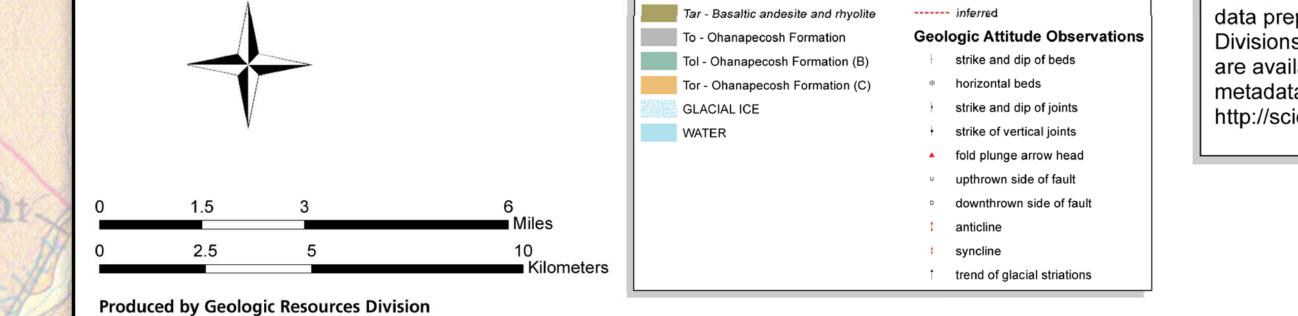
Í	NPS	Units	Geologic Contacts
		Mount Rainier NP	known or certain
	Geol	ogic Units	approximate
		Qs - Surficial deposits	concealed
		Qls - Landslides	inferred
		Qra - Andesite of Mount Rainier volcano	quadrangle/map boundar
		Qrao - Olivine andesite flows	shoreline
		Qrp - Mount Rainier plugs and dikes	ice, approximate
		Tha - Andesite of Bee Flat	Faults
		Tw - Welded tuff of The Palisades	known or certain
		Tg - Granodiorite and quartz monzonite	approximate
		Tdi - Diorite	Folds
		Td - Diabase and basalt	known or certain
	· · · · ·	Tf - Fifes Peak Formation	approximate
		Ts - Stevens Ridge Formation	concealed
		Tar - Basaltic andesite and rhyolite	inferred

The original map digitized by NPS staff to create this product was:

Fiske, R.S., Hopson, C.A., and Waters, A.C., 1964, Geologic map and section of Mount Rainier National Park, Washington, USGS, I-432, 1:62,500 scale

Digital geologic data and cross sections for Mount Rainier National Park, and all other digital geologic Bedrock geologic maps depict the distribution of solid rock formations where exposed on the land surface or buried by younger surficial deposits. Bedrock units are identified on the basis of their rock type (igneous - sedimentary metamorphic), age, or composition. Bedrock maps are useful for understanding the geologic setting and history of an area. Park managers use bedrock geologic maps in decision

making on topics such as infrastructure development and geologic hazards.



data prepared as part of the Geologic Resources Divisions Geologic Resource Evaluation program, are available through the Natural Resource – GIS metadata and data store: http://science.nature.nps.gov/nrdata/

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Surficial geologic maps show unconsolidated materials including stream, lake, glacial, coastal, wind blown, and slope deposits. Surficial geologic maps are critical to understanding the recent geologic history of an area, such as interpreting frequency and magnitude of local geologic events. These maps are particularly useful to resource managers who would like to examine relationships between geology and vegetation, soils, or past human land use patterns. The GRE Program provides these maps to parks when they are available.

Kmfa

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