

Sage to Sea – Across the North Cascades Summer Session 2002

General trip route

This trip was run from Spokane, WA to Whidbey Island, WA via Route 2 west to Wilbur, WA; Route 174 north to Grand Coulee Dam; Route 155 north to Omak; Route 97 south to Okanogan; Route 20 west (North Cascades Highway) through Winthrop and Mazama and the North Cascades National Park. A side trip to the Mount Baker Recreation Area (south access to the area) from Sedro Woolly was included. Upon return to Route 20, the route continued west to Rosario Beach and Deception Pass and south to Whidbey Island. We returned to the mainland by taking the Mulkiteo Ferry and headed back to Spokane via Route 2 with additional stops along the way.

Physiographic provinces and areas covered

Columbia Plateau
North Cascades

Puget Sound Lowland
Cascade Mountains

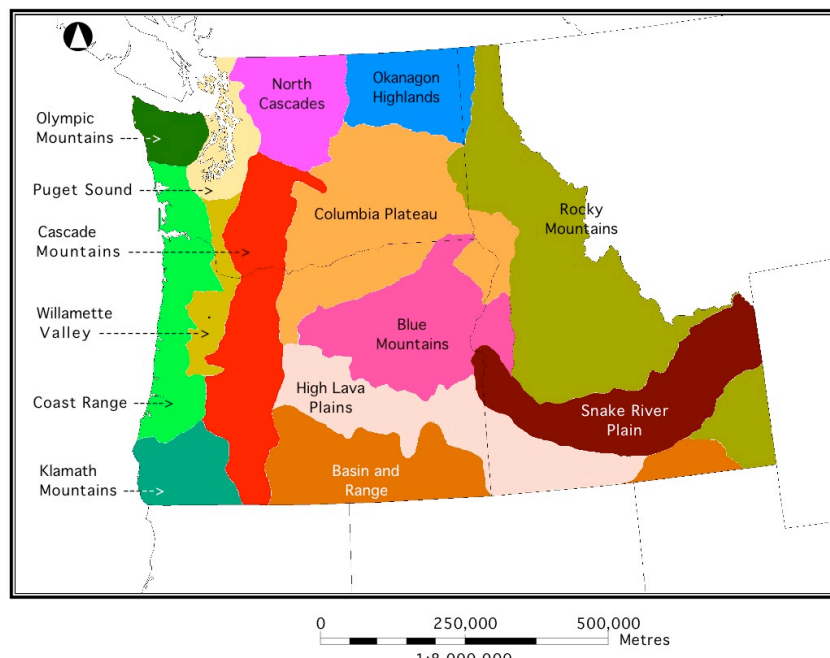
Geology of the Pacific Northwest Physiographic Provinces

Cartography by Frank D. Granshaw
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Note:
Boundaries are approximate

Reference

Rosenfeld, C., 1985, Landforms and Geology, in *Atlas of the Pacific Northwest*, Kimerling, A.J. and Jackson, P.L., p. 40



Suggested geology topics for discussion during trip

- Physiographic provinces of Washington State
- Columbia River flood basalts
- Channeled Scablands
- Grand Coulee Dam construction
- Construction of the North Cascades tectonic complex
- Alpine glaciation in the North Cascades
- Mass wasting processes
- Glaciation, volcanism and volcanic hazards at Mt. Baker
- Coastal and shoreline processes
- Seismic activity in western Washington

Columbia Plateau – Outcrops of columnar jointed basalt and pillow lavas are abundant in the area. A side trip to Banks Lake and Steamboat Rock can be included in the trip (located south of Grand Coulee Dam).

Grand Coulee Dam – The visitors center has good exhibits about the history of the dam and dam construction as well as videos including “The Great Floods, Cataclysms of the Ice Age” (14 minutes) and others.

North Cascades National Park – There are several locations within North Cascades National Park that are worth seeing (<http://www.nps.gov/noca/index.htm>). Tabor and Haugerud (1999) have presented a well-written field guidebook that provides locations and information about each area. Babcock and Carson (2004) provide trail descriptions.

- Methow Valley
- Harts Pass Road – Deadhorse Point – Slate Peak – short hike
- Golden Horn batholith (rapakivi granite)
- Washington Pass Overlook
- Ross Lake Overlook
- Diablo Lake Overlook and hike
- Cascade Pass and Sahale shoulder hike
- North Cascades National Park Visitor’s Center

Mount Baker Recreation Area – Mt. Baker – Schreiber Meadow hike for a fantastic view of the Easton Glacier and lateral moraine

Puget Lowlands – Rosario Beach and Deception Pass

Southern part of the Northern Cascades – Deception Falls hike, Dry Falls State Park