

Mount Rainier National Park

Domain name: PNW NEON – Domain 16

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Web page: <http://www.nps.gov/mora/>

Location: 46.852 N; -121.76

Ecological Themes: This site suitable to address ecological research themes related to Climate, Land Use (pollution, land use change), Biodiversity and invasives (plants, animals, pests, and pathogens); Disturbances (wildfire, wind storms, volcano-related, and floods); and Aquatic (streams, rivers, lakes and wetlands).

Site History and Characteristics: Mount Rainier National Park was established in 1899 and provides a large protected area broadly representative of the geologic, topographic, climatic, and vegetational characteristics of the PNW Domain. Special attributes of the area include the presence of a large, glaciated volcano (4392 m) and extensive areas occupied by deep, winter snowpacks (true subalpine forest-meadow and alpine). Long term climatic and snowpack records exist for Paradise Valley and several other locations in the park. There is a long history of research in the park on geology, glaciology, climate, vegetation (especially forests and subalpine meadows), flora and fauna, and invasive species. Extensive representation of natural intact coniferous forests over a wide range of elevations and site conditions representing a variety of age classes but with old (>500 year) forests well represented.

Gradients and Themes: In a large and highly heterogeneous domain, Mount Rainier National Park provides an extreme climatic cross-section for the PNW Domain with elevations extending from 573 to 4392 m and presence of extensive areas of deep, persistent winter snowpacks. Hence, it is highly relevant to the **Climate** theme, including effects of climate change on snowpack and water supply and effects of intensified summer drought.

Existing facilities: Some logistical and other facilities may be available through a cooperative agreement with the National Park Service. Commercial facilities also exist within the national park and in adjacent communities. The University of Washington's Pack Forest is located about 40 km west of the Longmire entrance to the park and has extensive educational, computing, and lodging and dining facilities that could be made available for ecological research use.