

Mount Rainier National Park Science Brief



Glacier Monitoring in the National Parks of Washington State: A virtual field experience.

Increasing public awareness of Glacial resources in the
North Coast / Cascades National Parks

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Glaciers are a principle asset in the largest national parks of the North Coast / Cascades. In addition to their scenic and ecological value, they are key components of watersheds that extend far beyond park boundaries, and sites of important climate change research. Yet despite their significance they are generally inaccessible to all but the hardest and most skilled back country travelers. Given this state of affairs, a critical challenge is providing the average visitor and the general public with an experience of park glaciers that will enhance their understanding of and appreciation for them, as well as the research taking place on them.

Since providing easy access to many of the park glaciers is neither feasible nor desirable, using

readily available virtual reality is being investigated as a means of addressing this dilemma. The first and current stage of this effort is to build a series of virtual field environments that enable web users to explore regularly monitored glaciers in Mt. Rainier, Olympics, and North Cascades National Parks in ways that resemble "being there". Upcoming stages include making these environments available to park visitors, secondary and college students, and the general public via park web sites and other Internet conduits. These latter stages will be accompanied by educational research procedures to ascertain the impact of these environments on user understanding of park glaciers and glacier research.

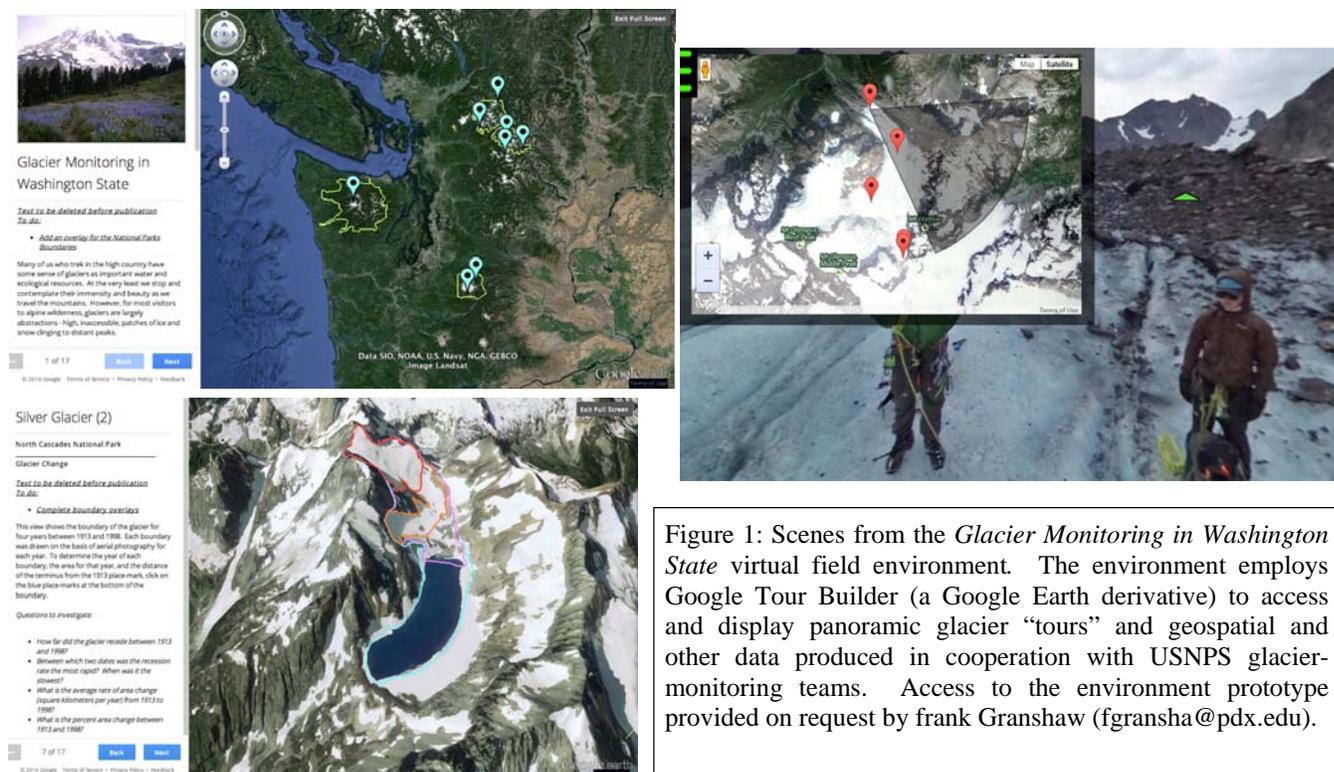


Figure 1: Scenes from the *Glacier Monitoring in Washington State* virtual field environment. The environment employs Google Tour Builder (a Google Earth derivative) to access and display panoramic glacier "tours" and geospatial and other data produced in cooperation with USNPS glacier-monitoring teams. Access to the environment prototype provided on request by frank Granshaw (fgransha@pdx.edu).