

FIGURE 3.—Vertical photograph of South Puyallup River showing location of sample areas, Tahoma Glacier moraines, and melt-water channels. When the glacier filled the valley marked by the dashed green lines, some melt water flowed to the south as shown by the green arrow. Runoff in these channels ceased or markedly declined in volume and later began to flow, until about 1910, in the area shown by the red arrow, Aug. 16, 1967.

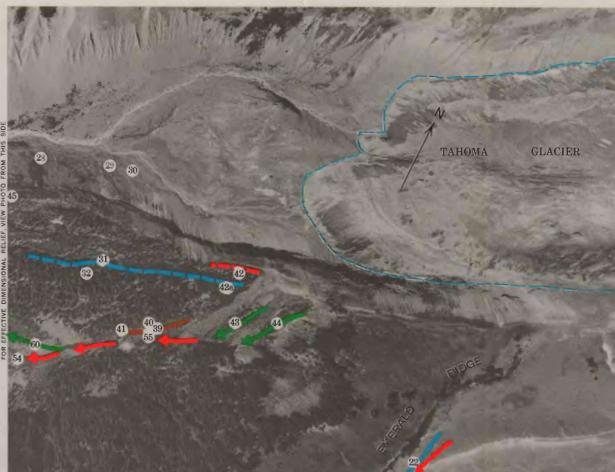


FIGURE 2.—Vertical photograph of South Puyallup River and terminus of Tahoma Glacier marked by thin blue dashed line. The red and green arrows mark a valley through which melt water flowed until about 1910. Aug. 16, 1967.

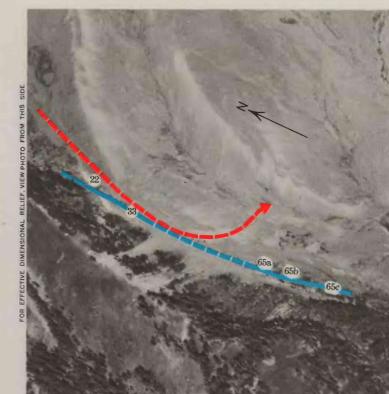


FIGURE 1.—Vertical photograph of Emerald Ridge showing moraines, sample areas, and a large abandoned multi-water channel (red arrow). The glacier started to recede from the moraine before 1850 at the time it started to recede from moraines southwestward in Tahoma Creek valley (map and fig. 6). Melt-water from the receding glacier cut a deep channel through the moraine sometime late in the last century. Aug. 16, 1967.



FIGURE 4.—Oblique view from the west of South Tahoma Glacier which 120 years ago filled the valley in the foreground within the area marked by the blue line. It was joined by the left arm of Tahoma Glacier, which occupied the barren valley extending left to right, and left moraines on the west side of the valley below the prominent hill (Glacier Island) in the foreground and on Emerald Ridge on the left. Aug. 29, 1969.



Compiled by photogrammetric methods from aerial photographs taken July 6, 1960. Field checked 1968.
Discrepancies in apparent locations of lines and sample areas on maps and corresponding photographs are the result of distortion in the photographic image. Photographs are not orthographically correct, whereas maps are.

0 100 200 300 400 500 600 METERS
0 500 1000 1500 2000 FEET

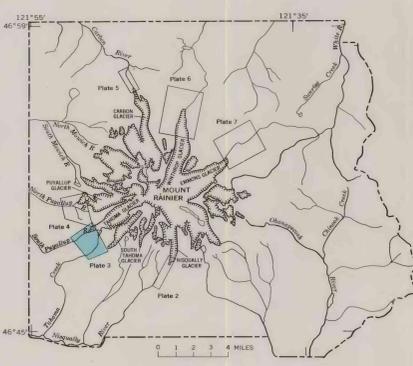
EXPLANATION
GEOHYDROLOGIC

- Sample area
- 1550
- 1625
- 1755-80
- 1835-40
- 1860
- 1910
- Moraines and probable ice margins
- Dashed where inferred. Approximate A. D. dates indicate start of recession
- 1860-75
- 1860-1915
- Melt-water channels
- Dashed where inferred. Arrowhead indicates end of flow

- Area covered by photograph
- Photographic site and direction of view
- TOPOGRAPHIC
- Contour line
- Altitude, in feet, above mean sea level
- Stream or channel bottom
- Timber edge
- Trees on left side of line
- Ridge
- Undated moraine crest
- Dated moraine crest
- Glacier terminus July 6, 1960
- Glacial crevasses
- Talus and alluvial cones
- Rock slides
- Escarpment or cliff
- Park road
- Trail and bridge



FIGURE 5.—Oblique view from the west of Tahoma Glacier which filled the valley in the center within the area marked by the blue line. It also flowed southward (blue arrow) to join South Tahoma Glacier. Aug. 29, 1969.



INDEX MAP OF MOUNT RAINIER SHOWING AREA OF THIS MAP SHADED



FIGURE 6.—Vertical photograph of South Tahoma Glacier valley showing location of sample areas and moraines. In the early 16th century South Tahoma Glacier was nearly as extensive as it was 130 years ago. A fragment of 1850 moraine lies at the junction of Tahoma Creek Trail and Wonderland Trail (area 10) and extends southward toward Tahoma Creek. Photograph taken Aug. 16, 1967.