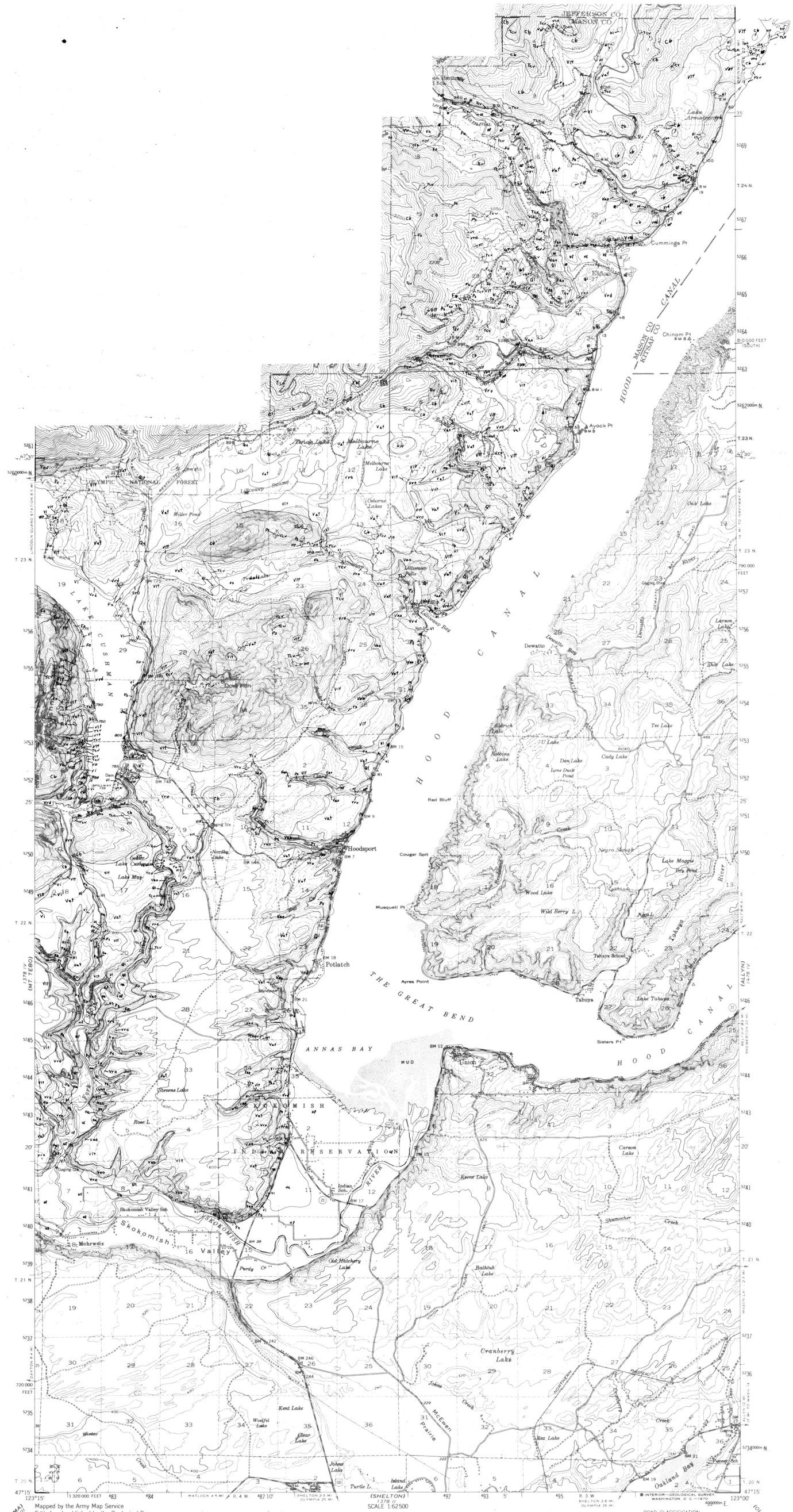
# GEOLOGIC MAP OF NORTH CENTRAL MASON COUNTY, WASHINGTON

R. J. CARSON

1976




## HOLOCENE

| | |
|---|---|
| Hf | Flood plain alluvium: mostly sand and gravel except for fine-grained sediment in deltas and filled oxbow lakes |
| Hs | Swamp, marsh, and bog deposits: mostly fine-grained sediment and peat but includes some sand and gravel (small filled lakes not indicated) |
| Ht | Terrace alluvium: sand and gravel |
| Ha | Alluvial-fan deposits: mostly sand and gravel |
| Hl | Young landslides: mostly less than 50 years old |
| Ql | Old landslides: age range from deglaciation of the area to about 50 years old |
| Qu | Puget and Olympic outwash and young alluvium in floodplains, deltas, and alluvial fans: mostly sand and gravel |

## CENOZOIC — QUATERNARY — PLEISTOCENE

### VASHON STADE

| | |
|---|---|
| Vrd | Deltas-alluvial fans of recessional outwash; in part young alluvial fans: sand and gravel |
| Vro | Recessional outwash in meltwater channels and outwash plains: sand and gravel |
| Vi | Ice-contact stratified drift in kame terraces, eskers, kames and kettles: mostly sand and gravel but some silt and clay |
| Vat | Ablation till: mostly sand and gravel (only mapped where known to be greater than 1.5m thick) |
| Vlt | Lodgement till: compact boulders to clay (generally overlain by 0.5-1.5m ablation till) |
| Vao | Advance outwash: mostly sand and gravel; locally contains fine-grained sediment |
| Vl | Lacustrine sediments: dominantly silt, but partly sand and clay (mostly Vashon recessional and advance, rarely Salmon Springs?) |
| Fo | Drift deposited by Olympic alpine glaciers: mostly lodgement till and recessional outwash, but partly advance outwash and ablation till |

### FRASER GLACIATION

### SALMON SPRINGS (?) GLACIATION

| | |
|---|---|
| Ps | Salmon Springs(?) drift: mostly till and outwash deposited by the Puget Lobe and Olympic alpine glaciers; partly nonglacial (mostly oxidized) |
| Pr | Pre-Salmon Springs(?) sediments: glacial and nonglacial strongly weathered sediments (clasts mostly rotten) |

## TERTIARY — EOCENE — OLIGOCENE(?)

| | |
|---|---|
| Cb | Thin drift over bedrock: mostly till over Crescent basalt; includes colluvium in places (regolith generally less than 2m thick) |
| Ts | Twin River (?) Formation: sedimentary rocks, dominantly volcaniclastic (overlain by thin drift in places) |
| Tcs | Sedimentary rocks of the Crescent Formation: dominantly fine-grained volcaniclastic rocks |
| Tcv | Volcanic rocks of the Crescent Formation: dominantly basalt flows and mudflow breccia, locally with pillows, columns, and amygdules |

Mapped by the Army Map Service
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Topography from aerial photographs by photogrammetric methods
Aerial photographs taken 1937. Field check & culture revision 1952
Hydrography compiled from USC&GS chart 6460

Polyconic projection. 1927 North American datum
10,000-foot grid based on Washington coordinate system, south zone

Dashed land lines indicate approximate locations

1000-meter Universal Transverse Mercator grid ticks, zone 10, shown in blue

UTM GRID AND 1952 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

(SHELTON) 1378 II
SCALE 1:62500

CONTOUR INTERVAL 40 FEET
DATUM IS MEAN SEA LEVEL
DEPTH CURVES IN FEET—DATUM IS MEAN LOWER LOW WATER
SHORELINE SHOWN REPRESENTS THE APPROXIMATE LINE OF MEAN HIGH WATER
THE AVERAGE RANGE OF TIDE IS APPROXIMATELY 8 FEET

ROAD CLASSIFICATION 1964
Medium duty — Light duty
Unimproved dirt
U. S. Route — State Route

QUADRANGLE LOCATION

POTLATCH, WASH.
N4715—W12300/15

1952

AMS 1378 I—SERIES V791

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