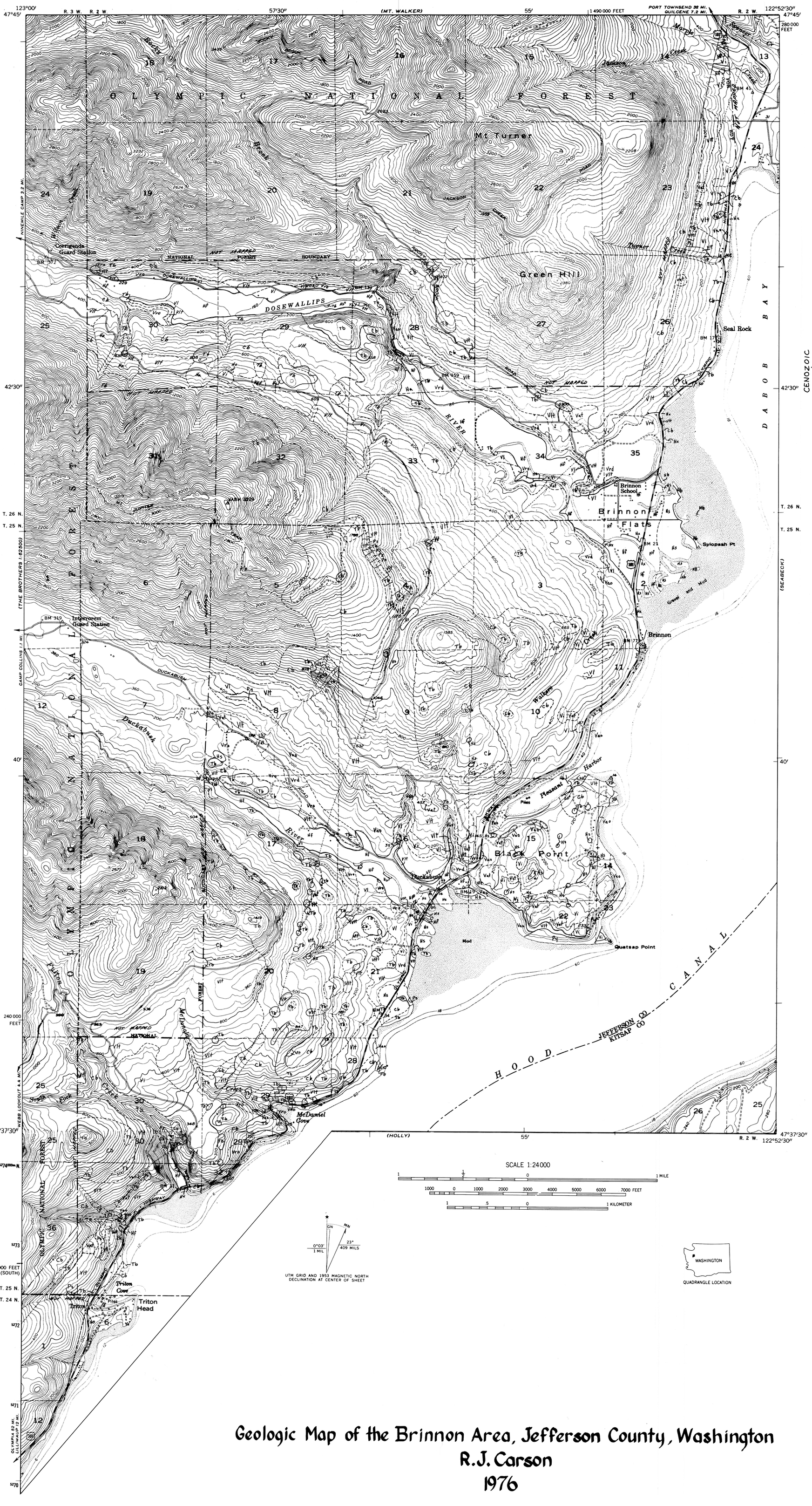
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGY AND EARTH RESOURCES



EXPLANATION

CENOZOIC	HOLOCENE	Hx	Artificial fill, including riprap
		Hb	Beach sand and gravel
		Hf	Flood-plain alluvium including some deltaic deposits: dominately sand and gravel, but includes local silt and clay
		Ha	Alluvial-fan deposits: dominantly sand and gravel, but includes some silt and clay
		Hs	Swamp, marsh, and bog deposits: dominantly fine-grained sediments and peat
	QUATERNARY, PLEISTOCENE	Vro	Recessional deltaic deposits: sand and gravel, generally greater than 6 m. thick
		Vrd	Recessional outwash: sand and gravel, approximately 1-5 m. thick
		Vl	Lacustrine deposits: dominantely silt, but partly sand and clay (mostly Vashon recessional, partly Vashon advance, rarely Salmon Springs?)
		Vi	Ice-contact stratified drift: dominantely sand and gravel, but includes local silt and clay
		Vat	Ablation till: dominantly loose boulders to sand, but includes some silt and clay (only mapped where known to be greater than 1.5 m thick)
		Vlt	Lodgment till: compact boulders to clay (generally overlain by 0.5-1.5 m ablation till)
		Vao	Advance outwash: dominantely sand and gravel, but includes some silt and clay
		Py	Undifferentiated stratified sediments older than Vashon lodgment till: dominantly sand and gravel
		Ps	Salmon Springs (?) till: dominantly oxidized compact boulders to clay
		Pz	Pre-Salmon Springs (?) extremely weathered sediments: clasts mostly rotten; dominantly clay
TERTIARY	EOCENE	Cb	Thin drift over Cresent basalt: drift (mostly till) generally less than 2 m. thick
		Tb	Crescent Formation: basalt flows and mudflow breccia, locally with pillows, columnar joints, and amygdules

Fraser Glaciation: dominantly Vashon drift deposited by the Puget lobe of the Cordilleran Ice sheet but partly local alpine drift deposited by valley glacier originating in the Olympic Mountains

Salmon Springs ? Glaciation

Contact line, dashed where inferred

20° Strike and dip

BASE MAP BY: U.S. GEOLOGICAL SURVEY

SCALE 1:24 000

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

GN MN 0°03′ 1 MIL 23° 409 MILS

UTM GRID AND 1953 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

WASHINGTON

QUADRANGLE LOCATION

Geologic Map of the Brinnon Area, Jefferson County, Washington

R.J. Carson

1976