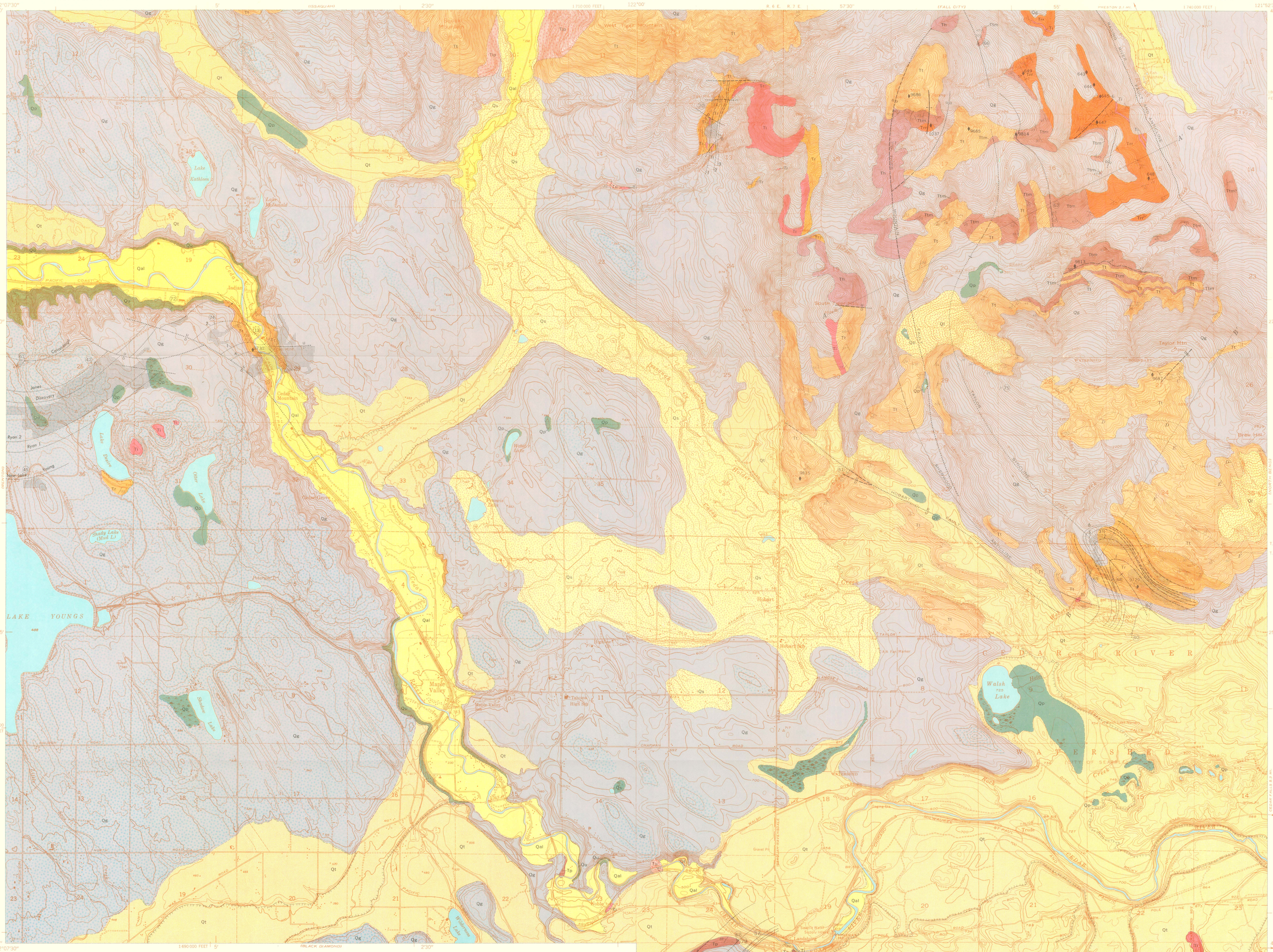


Base from U.S. Geological Survey
Cumberland and Hobart, 1953; and
Maple Valley, 1949
10,000-foot grid based on Washington
coordinate system, north zone

EXPLANATION

QUATERNARY

Holocene

Qal — Alluvium

Qp — Peat and swamp deposits
Chiefly sedimentary, fibrous, mixed locally with sphagnum or woody peat and extraneous inorganic detritus

Qc — Landslide debris
Disoriented blocks of bedrock and glacial deposits

Pleistocene

Vashon Drift

Qt — Terrace gravel and stratified drift
Pebbles, cobbles, and boulders as much as 6 feet long interstratified with sand and silt. Deposited chiefly as glacial outwash

Qs — Silt and sand
Unconsolidated silt and sand deposits locally stratified

Qg — Glacial drift
Consists chiefly of till composed of gray silty clay mixed with boulders and sand in the uplands, stratified outwash gravel adjacent to uplands, and ground moraine, chiefly till, in the lowlands. Pattern indicates drumlinized ground moraine, chiefly till. Deposited in the lowlands

Qu — Undifferentiated deposits
Chiefly sand in lower slopes of Cedar Valley

TERTIARY

Oligocene

Ts | Tsg — Sedimentary rocks
Ts, *gravel, sand, silt, and sandy clay locally derived from the Puget Group. Includes 1- to 2-foot-thick woody lignite bed*
Tsg, *gravel chiefly composed of mafic igneous rocks*

Tu — Unnamed volcanic rocks
Volcanic sandstone, conglomerate, breccia, tuff, and basaltic lava flows. Intertongue with upper part of Puget Group

Eocene

Tr — Renton Formation
Feldspathic and arkosic micaceous sandstone, carbonaceous claystone, and coal. Thickness as much as 4,000 feet

Tt — Tukwila Formation
Andesitic volcanic sandstone, tuffaceous siltstone, tuff breccia, volcanic conglomerate, and lava flows; interbedded locally with arkosic and chloritic sandstone beds designated C, D, E, and F. Lower part interstratified with Tiger Mountain Formation. Thickness locally as much as 6,800 feet

Ttm — Tiger Mountain Formation
Arkosic gray micaceous sandstone, carbonaceous siltstone, and coal. Upper part interstratified with Tukwila Formation. Thickness about 2,000 feet

Trr — Raging River Formation
Epiclastic volcanic sandstone and siltstone, locally conglomeratic. Contains abundant marine mollusks locally. Base not exposed. Thickness as much as 3,000 feet

Tpc | Tp — Puget Group, undifferentiated
Tp, *in Hobart and Maple Valley quadrangles consists of arkosic micaceous sandstone interbedded with volcanic sandstone and coal; in Cumberland quadrangle, of arkosic and feldspathic micaceous sandstone, siltstone, claystone, and coal*
Tpc, *conglomerate composed of mafic volcanic rocks*

Th — Hydrothermally altered rock
Consists chiefly of siliceous, argillaceous, and ferric minerals. Original rock undetermined

Ti — Intrusive rock
Igneous rock consisting chiefly of calcareous andesite in the Hobart and Maple Valley quadrangles, of porphyritic andesite in the Cumberland quadrangle

Tip — Porphyritic intrusive igneous rocks

Ryan 2 — Coal bed, approximately located
Showing outcrop or trace projected to surface from mine data. Short dashed where inferred; dotted where concealed; queried where existence uncertain. Name or number refers to coal beds

Clay bed, approximately located
High-alumina flint clay. Short dashed where inferred; dotted where concealed

Contact, approximately located
Dashed where inferred; dotted where concealed

Inferred fault
Dotted where concealed; queried where existence uncertain. U, upthrown side; D, downthrown side. Arrows show relative horizontal movement. On section: A, away from observer; T, toward observer

Anticline
Showing trace of axial plane and direction of plunge of axis. Dashed where approximately located; short dashed where inferred; dotted where concealed

Syncline
Showing trace of axial plane and direction of plunge of axis. Dashed where approximately located; short dashed where inferred; dotted where concealed

Inclined | Overturned | Vertical
Strike and dip of beds
Number on vertical beds shows direction of top where known

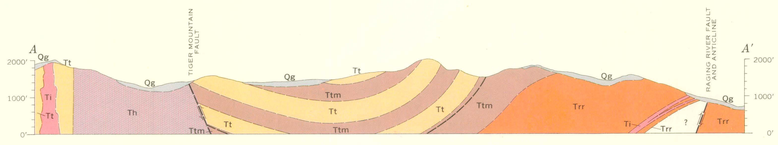
Scarp separating terraces

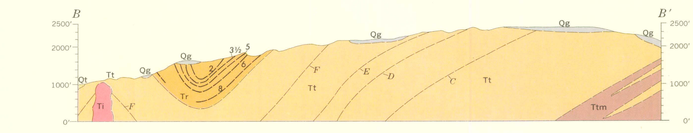
Hg — Mine, prospect, quarry, or gravel pit
Hg, *quicksilver mine or prospect*

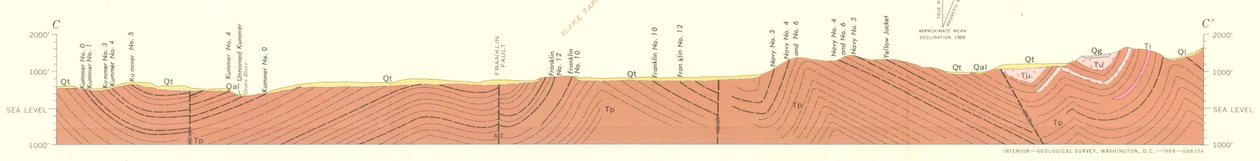
Mined-out coal areas
Showing entry or shaft and approximate area where coal bed is mined out as indicated on published maps, company reports, and reports of the State Mine Inspector

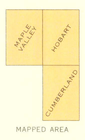
9731 — Fossil locality

78 — Coal mine or prospect reference number









MAPPED AREA

Geology by A. A. Wanek and J. D. Vine; assisted by P. J. Pattee, 1959; and by J. D. Vine and H. D. Gower, 1960–61, assisted by C. L. Rice, 1960

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D.C.—1969—G68374

GEOLOGIC MAP OF THE CUMBERLAND, HOBART, AND MAPLE VALLEY QUADRANGLES, KING COUNTY, WASHINGTON

SCALE 1:24 000

1 ½ 0 1 MILE

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 20 AND 25 FEET
DATUM IS MEAN SEA LEVEL