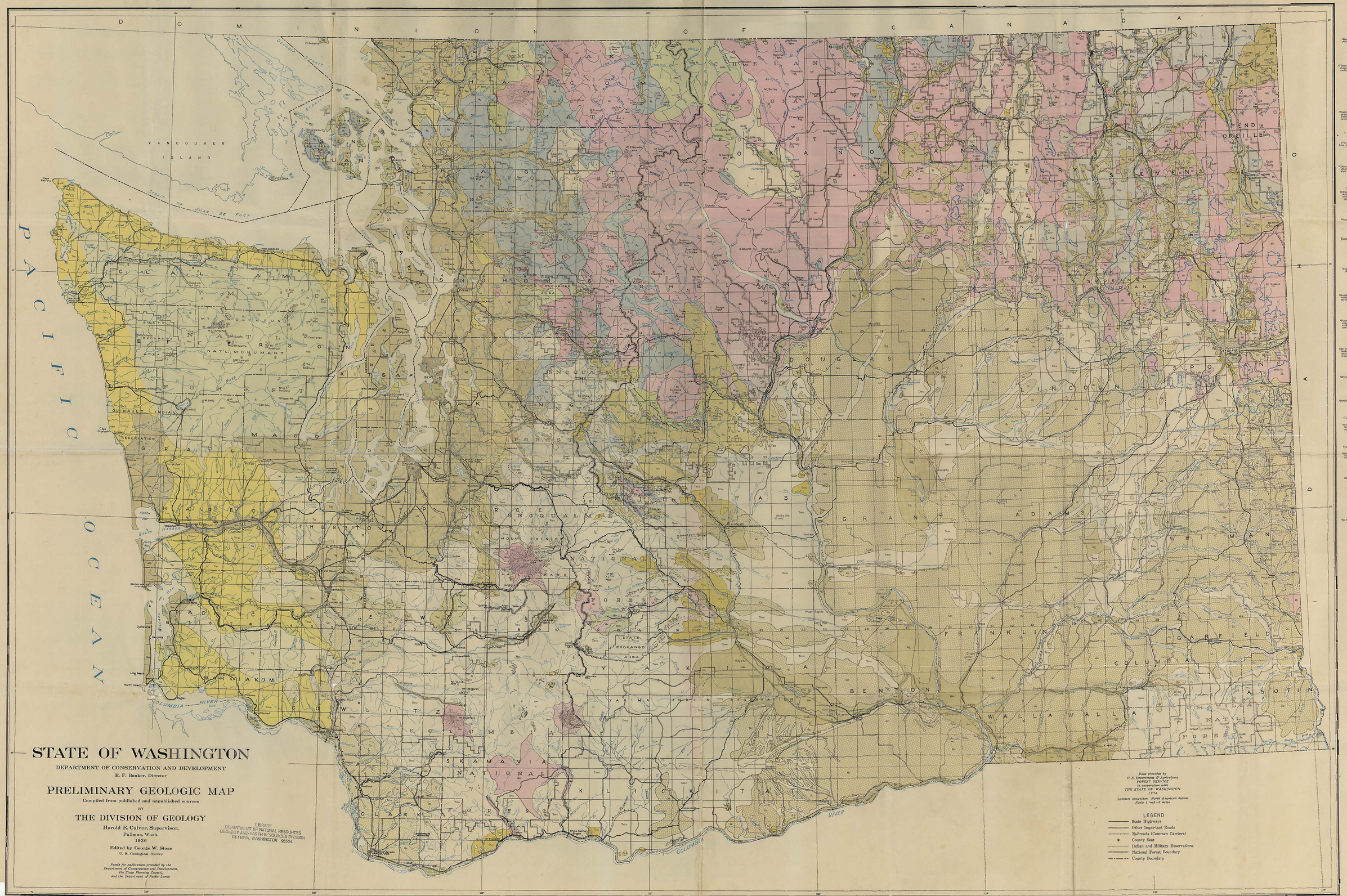

STATE OF WASHINGTON

DEPARTMENT OF CONSERVATION AND DEVELOPMENT
E. F. Banker, Director

PRELIMINARY GEOLOGIC MAP

Compiled from published and unpublished sources

BY

THE DIVISION OF GEOLOGY

Harold E. Culver, Supervisor,
Pullman, Wash.
1936

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U. S. Geological Survey

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Base provided by U. S. Department of Agriculture FOREST SERVICE in cooperation with THE STATE OF WASHINGTON 1934

Lambert projection North American datum Scale 1 inch=8 miles

LEGEND

- State Highways
- Other Important Roads
- Railroads (Common Carriers)
- County Seat
- Indian and Military Reservations
- National Forest Boundary
- County Boundary

EXPLANATION

CENOZOIC

Quaternary

Pleistocene

Qa — Alluvium
(Mostly made of Mazama and probably pre-glacial Wolf lake and other sediments (undivided))

Qv — Volcanic rocks
Pleistocene and Recent
(Flows andesitic, Mt. Rainier lahar, and other flows, Mt. Baker, Mt. Jefferson, Newberry volcanic, Indian Hill, Jones Flat, Mazama volcanic, undivided)

Qg — Glacial drift
(Some non-glacial fluts (undivided))

Qc — Continental sediments
(Hoodsport, Mt. Blizard formation, Cowlitz formation, Puyallup formation, Olympia formation, Palouse formation and miscellaneous deposits (undivided))

Pliocene

Tmt Tmm — Miocene and Oligocene
Intermediate and mafic rocks
(Tm, undifferentiated, Mt. Baker and Hoquiam, Eng., Columbia Tmm, Montesano, Tmt, Hoquiam)

Tmv — Miocene volcanics
(Columbia River lava, Keechelus andesite, and other Miocene volcanics. Some undifferentiated Pliocene may be included)

Tmu — Miocene continental deposits
(Ellensburg, Latah, and other nonmarine Miocene deposits. Some may be Pliocene, as at Ellensburg. "Ellensburg beds" may be partly Montesano (undivided))

Tertiary intrusives
(Hypersthene granodiorite and other intrusives of uncertainty Tertiary age)

Te — Eocene marine strata and intercalated basalt lavas
(Flow of Weaver, Crescent, and other Eocene rocks)

Tec — Eocene continental strata
(Puget, Skook and other Eocene beds. Tm, Roslyn (Hoquiam) and Tacoma beds)

Uv — Undifferentiated volcanics
Carboniferous to Tertiary
(Roslyn, Chilliwack, and miscellaneous volcanic rocks of uncertain age. Some may be Mesozoic, Paleozoic, or Cenozoic rocks (undivided))

MESOZOIC

Mu — Mesozoic marine strata
(Nanaimo group, Chuckanut, Tyee, and miscellaneous marine and intercalated volcanic rocks of probable Mesozoic age. Includes all such rocks in the Olympic Core)

Mc — Mesozoic (?) plutonic intrusives
(Mt. Stuart granodiorite, Chelan and Colville batholiths, Mt. Ruby, Mt. Spokane, and other intrusives mostly, probably and generally, Mesozoic in age. Probably some Post-Jurassic intrusives)

Mz — Mesozoic continental strata
(Ellensburg, Puget Group, and other nonmarine rocks of uncertain Mesozoic age)

Mbu — Mesozoic (?) basic intrusives
(Serpentinite, diabase, and gabbro (mostly pre-Tertiary))

PALEOZOIC

Pu — Carboniferous and older Paleozoic sedimentary rocks
(Metabolas, Mt. Eden series, and Chopaka Pink. Some metamorphosed sedimentary rocks of Mesozoic (?) age included)

Pzu — Cambrian, Ordovician, and younger Paleozoic sedimentary rocks
(Addy, Chopaka, Metaline, and miscellaneous Cambrian, Ordovician, and Silurian rocks. Mzu is Cambrian)

Pv — Paleozoic volcanics
(Nachoes formation and miscellaneous volcanics of Paleozoic age)

PRE-CAMBRIAN

pC — Highly metamorphosed rocks, undifferentiated
(Mostly pre-Cambrian rocks)

Limit of continental glaciers
(by E. F. Flint with permission of the Geological Society of America)

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